



GD  
DEC 18 1995













THE  
BOTANICAL EXCHANGE CLUB  
AND SOCIETY OF THE BRITISH ISLES.

VOL. II. 1901-10.

Secretary and Treasurer for years 1901 and 1902 :

CHARLES BAILEY, M.Sc., F.L.S., Atherstone House, North Drive,  
St. Anne's-on-the-Sea.

Secretary and Treasurer for years 1903-10 :

G. CLARIDGE DRUCE, M.A., J.P., F.L.S., Yardley Lodge, Oxford.

Distributors and Editors of Reports, as under :—

<i>Report.</i>	<i>Published.</i>	
	Manchester.	
1901	1902, Aug. 2.	Rev. E. S. MARSHALL, M.A., F.L.S.
1902	1903, Dec. 10.	ARTHUR BENNETT, F.L.S.
	Oxford.	
1903	1904, Mar. 28.	G. CLARIDGE DRUCE, M.A., F.L.S.
1904	1905, Aug.	JAMES GROVES, F.L.S.
1905	1906, April.	J. WALTER WHITE, F.L.S.
1906	1907, April.	Rev. W. R. LINTON, M.A.
1907	1908, May.	Rev. H. J. RIDDELSDELL, M.A.
1908	1909, Sept.	WILLIAM BELL.
1909	1910, May.	SPENCER H. BICKHAM, J.P., F.L.S.
1910	1911.	C. E. MOSS, B.A., D.Sc.

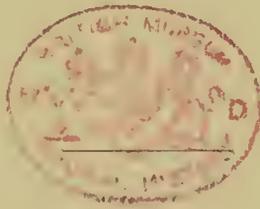
---

Price 10 Reports, £1 5s. (To Members, 14s.)



THE  
BOTANICAL EXCHANGE CLUB  
OF THE BRITISH ISLES.

VOLUME II.



*REPORT FOR 1901.*

---

(ISSUED 2nd AUGUST 1902.)

PRINTED BY JAMES COLLINS & KINGSTON LIMITED, SOUTHGATE,  
MANCHESTER.

1902.

1396  

---

24

PREFACE TO VOLUME II.  
OF THE  
REPORTS OF THE BOTANICAL EXCHANGE CLUB.

---

ON the completion of the second volume, I thought it would be interesting to our Members to have some details of the Club and its history. For help in obtaining these, I have warmly to thank our Corresponding Member, Mr. J. Gilbert Baker, who has supplied the data from 1838 to 1866. Our esteemed Member and former Secretary, Mr. Charles Bailey, kindly supplied the details from 1866 to 1900. I have endeavoured to add the dates of the actual publication of the "Reports" when possible.

I must also thank our Members for their kind and loyal support during the past years.

With an enlarged membership roll we have been able to issue fuller Reports; and it is hoped that in time we may adopt in some respects the original objects of the Botanical Society of London.

G. CLARIDGE DRUCE.

YARDLEY LODGE,  
OXFORD, 1911.

# HISTORY OF THE CLUB.

---

## Botanical Society of London,

FOUNDED IN 1838.

*With rooms at Bedford Street, Covent Garden, London.*

---

*President*—Dr. J. E. GRAY, F.R.S., British Museum.

*Acting Secretary*—G. E. DENNES.

*Curator*—DANIEL COOPER, Author of "Flora Metropolitana."

*Treasurer*—JOHN REYNOLDS.

---

THIS Society formed a library and herbarium, and held monthly meetings. The "Phytologist" was started in 1841, and in the early volumes are accounts of the Society's meetings. The first Edinburgh "Catalogue of British Plants" was published in 1841. The first annual distribution of plants was probably initiated by Mr. H. C. Watson when he joined the Society some years after its foundation. He drew up the first "London Catalogue" in 1844. Boswell Syme came from Edinburgh to London in 1851, bringing with him a large quantity of plants from the Scottish Highlands. Mr. J. Gilbert Baker joined the Society in 1851. About 1852 it was found that the funds of the Society were not large enough to pay a Curator and keep up rooms in the centre of London. The Society was accordingly dissolved, and its possessions were sold by auction. The herbarium was in part bought by Mr. F. Y. Brocas and Mr. John Hardy. Mr. J. Gilbert Baker volunteered to carry on the distribution at Thirsk till the Society could be reconstituted on a new basis, but this never came to pass. Mr. Baker continued the distribution from Thirsk from 1857 to 1866, and then for a short time in London assisted by H. Trimen. The Rev. Mr. T. R. A. Briggs, the author of the "Flora of Plymouth" undertook the task.

LONDON BOTANICAL SOCIETY.

- 1838—1857 - - *President*—Dr. J. E. GRAY, F.R.S.  
*Curator*—DANIEL COOPER.  
*Acting Secretary*—G. E. DENNES.  
? 1844—1851 - - *Distributor*—H. COTTRELL WATSON.  
1851-7 - . - *Curator*—J. T. BOSWELL SYME.

At its dissolution the Exchange Club was carried on at Thirsk.

# THIRSK NATURAL HISTORY SOCIETY.

---

## Botanical Exchange Club

*(Established 2 November, 1857, at the Annual Meeting of the Thirsk Natural History Society.)*

		Published at Thirsk.		
1858.	Report.	„	1859.	Curator for flowering plants and ferns : J. G. Baker, Thirsk. Curator for mosses : J. H. Davies, Lisburn. Secretary : R. D. Carter, Thirsk.
1859.	„	„	1860.	Officers as above. [This I have not seen.]
1860.	„	„		
1861.	„	„	1862.	Curator for flowering plants and ferns : J. G. Baker, Thirsk. Secretary : R. D. Carter, Thirsk.
1862.	„	„	1863.	Officers as for 1861 Report.
1863.	„	„	1864.	„ „ (In consequence of a fire on the premises of the Messrs. Baker on the 9th May, 1864, Mr. W. Foggitt, Thirsk, performed the duties of Curator from 23 May, 1864.)
1864.	„	„	1865.	Curators for flowering plants and ferns : J. G. Baker, Thirsk, and W. Foggitt, Thirsk. Secretary : R. D. Carter, Thirsk.
1865.	„	„	1866.	Officers as for 1864 Report. (Note in Report: Owing to the dissolution of the Thirsk Natural History Society, the Club would be conducted by Mr. J. G. Baker, 25 Sidney Villas, Richmond, Surrey.)

## The London Botanical Exchange Club.

	Published in London.	
1866. Report.	„	1867. Curators : J. G. Baker, F.L.S. Dr. Henry Trimen, F.L.S.
1867. „	„	1868. Curators as in 1866 Report.
1868. „	„	1869. Curator : J. Boswell-Syme, F.L.S. Secretaries : J. G. Baker, F.L.S. H. Trimen, M.B., F.L.S.

---

## The Botanical Exchange Club.

	Published in London.	
1869. Report.	„	1870. Curator and Secretaries as in Report for 1868.
1870. „	„	1871. „ „ „
1871. „	„	1872. „ „ „
1872-4 } in one.)	„	1875. Curators : John T. Boswell, LL.D., F.L.S. J. F. Duthie, B.A., F.L.S. Secretary : J. G. Baker, F.L.S.
1875. „	„	1876. Curator : T.R.Archer Briggs, F.L.S. Secretary : J. G. Baker, F.L.S. Local Secretaries : John T. B. Bos- well, LL.D., F.L.S. Charles Bailey.
1876. „	„	1877. Curator, 1878 : Reginald A. Pryor. Secretary, 1878 : J. G. Baker, F.L.S. Local Secretaries, 1878 : John T. B. Boswell, LL.D., F.L.S. T. R. Archer Briggs, F.L.S. Charles Bailey.
1877-8 } in one.)	„	1879. Local Secretaries, 1879 : J. G. Baker, F.R.S., F.L.S. J. T. B. Boswell, LL.D., F.L.S. T. R. Archer Briggs, F.L.S. General Secretary : Charles Bailey.

# The Botanical Exchange Club of the British Isles.

VOL. I. 1879—1900.

*Secretary and Treasurer for years 1879—1900.*

Charles Bailey, F.L.S., Ashfield, College Road, Whalley Range,  
Manchester.

Editors of Reports, as under :—

		Published at Manchester.		
1879.	Report.	„	1880.	The Secretary.
1880.	„	„	1881.	James Groves.
1881.	„	„	1882.	F. Arnold Lees, M.R.C.S., L.R.C.P., F.L.S.
1882.	„	„	1884.	William H. Beeby, F.L.S.
1883.	„	„	1885.	George Nicholson, A.L.S.
1884.	„	„	1885.	Arthur Bennett, F.L.S.
1885.	„	„	1886.	James Groves, F.L.S.
1886.	„	„	1887.	Rev. Edward F. Linton, M.A.
1887.	„	„	1888.	George Nicholson, A.L.S.
1888.	„	„	1889.	George Claridge Druce, M.A., F.L.S.
1889.	„	„	1890.	James Groves, F.L.S.
1890.	„	„	1891.	Rev. Edward F. Linton, M.A.
1891.	„	„	1892.	Arthur Bennett, F.L.S.
1892.	„	„	1893.	George Claridge Druce, M.A., F.L.S.
1893.	„	„	1894.	James Groves, F.L.S.
1894.	„	„	1895.	Rev. William R. Linton, M.A. (15th Oct.)
1895.	„	„	1897.	William H. Beeby, F.L.S.
1896.	„	„	1898.	The Secretary and the Referees. (31st Aug.)
1897.	„	„	1898.	George Claridge Druce, M.A., F.L.S. (20th Sept.)
1898.	„	„	1900.	James Groves, F.L.S. (18th May.)
1899.	„	„	1901.	Rev. William R. Linton, M.A. (28th Mar.)
1900.	„	„	1901.	J. Walter White, F.L.S. (8th Aug.)

# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

## REPORT OF THE DISTRIBUTOR FOR 1901.

The number of plants sent in is much smaller than last year, mainly owing to a welcome diminution in *Rubus* and *Hieracium*. Mr. Rogers has named all the brambles, and Mr. Ley (whose parcel is, as usual, the *pièce de résistance*) most of the hawkweeds. Many members send first-class specimens; but a few still contribute material only fit for the fire. A closer attention to the rules is desirable; these, however, might well be somewhat amended. The practice of affixing plants to the papers by strips of gummed paper makes them awkward to handle, and is very injurious to delicate specimens.

Owing to some delay in receiving critical opinions I have not been able to write the report very early.

EDWARD S. MARSHALL.

*Lavington Rectory, Petworth,*  
*May 26th, 1902.*

### LIST OF THE PARCELS RECEIVED.

	No. of Specimens.		No. of Specimens.
Bailey, Charles, <i>F.L.S.</i> .. .. .	127	Murray, Rev. R. P., <i>M.A., F.L.S.</i> ..	20
Bennett, Arthur, <i>F.L.S.</i> .. .. .	47	Painter, Rev. W. H. .. .. .	73
Druce, G. C., <i>M.A., F.L.S.</i> .. .. .	79	Palmer, Miss C. E. .. .. .	20
Gasking, Rev. S., <i>B.A., F.L.S., F.G.S.</i>	110	Riddelsdell, Rev. H. J., <i>M.A.</i> .. ..	305
Griffith, J. E., <i>F.L.S., F.R.A.S.</i> .. ..	26	Rogers, Rev. W. Moyle, <i>F.L.S.</i> .. ..	84
Groves, J., <i>F.L.S.</i> .. .. .	98	Shoolbred, W. A., <i>M.R.C.S., F.L.S.</i> ..	116
Jackson, A. B. .. .. .	51	Waddell, Rev. C. H., <i>M.A.</i> .. .. .	31
Lester, L. V., <i>M.A., F.L.S.</i> .. .. .	49	Wheldon, J. A. .. .. .	167
Ley, Rev. A., <i>M.A.</i> .. .. .	620	White, J. W., <i>F.L.S.</i> .. .. .	97
Linton, Rev. E. F., <i>M.A.</i> .. .. .	68	Wilson, Albert .. .. .	42
Linton, Rev. W. R., <i>M.A.</i> .. .. .	229	Wolley-Dod, Major A. H. .. .. .	121
Marshall, Rev. E. S., <i>M.A., F.L.S.</i> ..	121		
Melvill, J. Cosmo, <i>M.A., F.L.S.</i> ..	33	Total .. .. .	2743
Mott, F. T., <i>F.R.G.S.</i> .. .. .	16		

*Ranunculus Drouetii*, Godron. Pool, Southfields, Wimbledon, Surrey, 21st June 1901.—J. GROVES.

*R. peltatus*, Schrank. Mill dam on the south side of Stonehaven, East Kincardineshire, 6th July 1901. Not recorded for county 91 in 'Topographical Botany,' ed. ii. (1883), p. 6.—CHARLES BAILEY. "Rather undeveloped; but probably correct."—Ed. "Recorded by Trail in 'Ann. Scott. Nat. Hist.'"—Ar. Bennett.

*R. peltatus* × *trichophyllus*. Pond, Mitcham Common, Surrey, 15th May 1897. Occurring in considerable quantity with both of its assumed parents.—H. and J. GROVES.

*R. Baudotii* × *Drouetii*. Pool, Southfields, Wimbledon, Surrey, 21st June 1901.—J. GROVES. "Mr. H. W. Pugsley, who found this some years ago, kindly directed us to the locality. It was growing in some quantity in company with *R. Baudotii* and *R. Drouetii*, specimens of which are also sent. It is unusual to find *R. Drouetii* so far from salt water; but *Scirpus maritimus* also occurs in the same neighbourhood."—H. and J. Groves.

*R. Baudotii*, Godr. Pool, Southfields, Wimbledon, Surrey, 21st June 1901.—J. GROVES. "N. C. R."—Ar. Bennett.\*

*R. parviflorus*, L. Langness, Isle of Man, August 1899.—S. GASKING. "N. C. R."—Ar. Bennett.

*Helleborus viridis*, L. Near the Cove, Silverdale, West Lancashire, alt. 50 feet, on limestone, April 1901. Sent as a confirmation of record for v.-c. 60. I think native here, as also in the adjacent part of Westmoreland, v.-c. 66.—ALBERT WILSON.

*H. fatidus*, L. Gatebarrow Woods, near Silverdale, West Lancashire, alt. 100 feet, on limestone, April 1901. Sent as a new county [record] for v.-c. 60. Native? No sign of introduction.—ALBERT WILSON. "N. C. R. Yes, as a denizen. Native only in the south."—Ar. Bennett. "I see no real reason against its being truly indigenous; it certainly is so as far north as Herefordshire."—Ed.

*Fumaria Borœi*, Jord. In a farm road near Sweeno's Stone, between the Findhorn Road and the Elgin Road, near Forres, north-west Elginshire, 1st July 1901. Not recorded for county 95 in 'Topographical Botany,' p. 25.—CHARLES BAILEY. "N. C. R. Yes. But is this *Borœi*? Why not *officinalis* form?"—Ar. Bennett. "Only two specimens were sent, and I have not retained either; but the plant appeared to me to be the same as my Orkney one sent last year, which Mr. Pugsley mentions in his recent paper ('Journ. Bot.')

as being true *Borœi*."—Ed. "Both *Borœi* and *officinalis* occurred."—Charles Bailey.

\* "By 'N. C. R.,' I mean a new county record [additional] to 'Top. Bot.,' ed. ii.; it may be in 'J. Bot.,' 'A. S. N. Hist.,' etc."—Ar. Bennett *in litt.*

*Arabis petraea*, Lam. Stony hillside, Larig Pass, Easternness, at about 2750 feet, 29th August 1901.—H. GROVES. "Sent to show the range of variation in this locality from the very nearly glabrous form to the var. *hispida*, DC."—H. and J. Groves. "I should refer most of the specimens to var. *hispida*, which is the prevailing plant on the Cairngorms."—Ed.

*Sisymbrium polyceratium*, L. Birkenhead, Cheshire, 2nd October 1901. This grows abundantly on waste land by the Great Float, Birkenhead. The clay on which it seems to spread so rapidly was excavated from the Old Wallasey Pool when they deepened it for dock purposes. I noticed it first last year; but I should think, from the way in which it has extended itself, it must have been there for some time.—S. GASKING. "Yes."—E. F. Linton. "The preparation of these specimens leaves much to be desired."—Ed.

*S. pannonicum*, Jacq. On the slopes of the railway bridge, St. Thomas's Road, and the corner of Links Road, St. Anne's-on-the-Sea, West Lancashire, v.-c. 60, 31st August 1901; mature fruit, 3rd September 1901.—CHARLES BAILEY. "Correct."—Ed.

*Lepidium ruderales*, L. On waste ground off St. David's Road, near the railway line, St. Anne's-on-the-Sea, West Lancashire, 31st August 1901. Not recorded for v.-c. 60 in 'Topographical Botany,' p. 95.—CHARLES BAILEY. "N. C. R."—Ar. Bennett. "Evidently a mere casual here."—Ed.

*Viola Riviniana* × *silvestris*. Under beech trees at foot of the Downs, Graffham, v.-c. 13, W. Sussex, 6th May 1901. Growing with abundance of both parents; a good intermediate. Spur coloured, hardly furrowed.—EDWARD S. MARSHALL.

*V. carpatica*, Borbas. Simmonswood, v.-c. 59, South Lancashire, July 1901. Although less robust than the original plants collected on Cockerham Moss by Mr. Alfred Wilson and myself, and referred here by Prof. Borbas and Mr. E. G. Baker, I believe they are identical. All these are from one large root. The plant is at least biennial. It is common in the vicinity of most of our Lancashire mosses.—J. A. WHELDON. "Unfortunately, only two sheets were actually sent."—Ed.

*V.* ———. Llwydcoed, v.-c. 41, Glamorgan, 1901. This *Viola* is a large, straggling, branched, prostrate plant (or nearly prostrate), and is to be found chiefly on a piece of cultivated ground at Llwydcoed, though it also occurs on waste ground near Aberdare occasionally. Another form, of quite different habit, occurs in the grounds of this house (Abernant House, Aberdare).—H. J. RIDDELSDELL. "*V. arvensis*, Murr."—Ed.

*Dianthus prolifer*, L. (1) Pagham, v.-c. 13, W. Sussex, June 24th and July 29th, 1901; native.—EDWARD S. MARSHALL. (2) The Quenvais, Jersey, July 14th, 1901.—L. V. LESTER.

*Silene maritima* × *inflata*. Hort., Shooter's Hill; orig., Woolwich Arsenal, v.-c. 16, W. Kent, 1st July and 10th October 1901. This plant may, after all, be only a very luxuriant form of the type. The flowers and the barren shoots at the base are entirely those of *maritima*; but the considerably branched panicle is unlike anything I have seen in that species. This is seen best in the July gathering; the October branches hardly represent the plant properly, and might well be put to *maritima* pure and simple. A strong point in favour of hybridity is that the capsules are quite barren and undeveloped, while good *maritima* growing alongside of it in the Arsenal produces seed in abundance. The plant in its natural station has now succumbed to new buildings for the production of war material, and *S. maritima*, for West Kent, has gone with it.—A. H. WOLLEY-DOD. "The two species are so closely allied that the occurrence of a hybrid between them is quite probable; and these specimens are just about what might be expected to result. The sterility decidedly favours this view."—Ed.

*Arenaria serpyllifolia*, L., var. *leptoclados* (Guss.). Growing in profusion upon railway ballast, Farley Dingle, Much Wenlock, Salop, August 19th, 1901.—W. H. PAINTER. "Typical *A. leptoclados*, which Mr. F. N. Williams (I believe rightly) retains as a distinct species."—Ed.

*A. serpyllifolia*, L., var. *Lloydii* (Jord.). Sandy waste, Llandudno, Carnarvon, 18th June 1901. Substantially the same plant as that sent abounded on the dry limestone of the Great and Little Orme's Heads, in small forms often not more than one inch high. The specimens sent were from sandy flats south of the town.—AUGUSTIN LEY. "Correct."—Ed.

*Malva pusilla*, Sm. Aberdare, v.-c. 41. Glamorganshire, 1901.—H. J. RIDDELSDELL. "= *M. borealis*, Wallr. Seems correct."—Ar. Bennett. "Right."—E. F. Linton.

*Genista anglica*, L. Bog, near Docker, West Lancashire, May 1901. Sent as a confirmation of record for v.-c. 60.—ALBERT WILSON.

*Lotus corniculatus*, L. Starved form. Longstone Edge, Derbyshire, 22nd July 1898. Grows with the type for nearly a mile along the south face of a dry limestone declivity. At first sight I took it for a good variety; but now consider it rather a local form due to want of nourishment in the soil and drought. I have also seen it near Baslow, along a dry cart-track. It differs from the type in the much smaller flowers, the standard not being reflexed, and nicked rather than apiculate, pale yellow; the wings narrow oblong, the exiguous erect habit and small pale green foliage, and seeming inability to produce fruit.—W. R. LINTON.

*Coronilla varia*, L. Apparently naturalised and growing freely by the Cheshire Lines Railway on the bank between Otterspool and

Mersey Road, Aigburth, S. Lancashire, 25th September 1901. First observed there by the late Mr. R. Brown. It generally flowers in the early summer and late autumn, being cut down by the labourers with the grass in June or July.—S. GASKING.

*Rubus integrifolius*, P. J. Muell. Alum Chine, Bournemouth, S. Hants, July 29th, 1901.—W. MOYLE ROGERS.

*R. Scheutzii*, Lindeb. Between Five Lane Ends and Abbeystead, v.-c. 60, W. Lancashire, August 1901. Very early in the season, before the fruit ripens, this plant becomes suffused with a rich but pale vinous-brown colour, especially the stem and petioles.—J. A. WHELDON. "Probably *R. Scheutzii*."—W. M. ROGERS.

*R. mercicus*, Bagnall, var. *bracteatus*, Bagnall. (1) Hedges at Kingswood, near Kington, Herefordshire, 15th August 1901. Confirmed by Rev. W. M. Rogers, 1899 and 1901.—AUGUSTIN LEY. (2) Cabus, near Garstang, v.-c. 60, West Lancashire, 20th July 1901.—ALBERT WILSON and J. A. WHELDON.

*R. mercicus*, var. *chrysoxylon*, Rogers. Hedges at Kingswood, near Kington, Herefordshire, 15th August 1901. Confirmed by Rev. W. M. Rogers, 1901.—AUGUSTIN LEY.

*R. mollissimus*, Rogers. Welsh Newton, Herefordshire, 15th September 1901. Named for me by Rev. W. M. Rogers, 1901. The plant is abundant in this neighbourhood, both in Herefordshire and Monmouthshire.—AUGUSTIN LEY.

*R. mollissimus*, var. Trilloescourt Wood, Bolston, Herefordshire, 15th August 1901. Named for me "glandular *mollissimus*" by Rev. W. M. Rogers in 1901.—AUGUSTIN LEY. "This and *R. danicus*, Focke, are now reduced by Mr. Rogers to varieties of *R. hirtifolius*, Muell. and Wirtg."—Ed.

*R. mucronatus*, Blox. Near Knott End, West Lancashire, July 1901.—J. A. WHELDON. "Leaves somewhat intermediate between my *R. cinerosus* and *R. mucronatus*; but, I suppose, going best under the latter, which is very variable. If so, would be new for v.-c. 60."—W. M. ROGERS.

*R. mucronatus*, var. *nudicaulis*, Rogers, 'Handb. Brit. Rubi,' p. 56. Fruiting specimens, to supplement the flowering ones sent last year. West Cliff, Bournemouth, S. Hants, July 31st, 1901.—W. MOYLE ROGERS.

*R. Lettii*, Rogers, 'Journ. Bot.,' 1901, p. 381. (1) Aghaderg, Co. Down, Ireland, 1901. Coll. H. W. LETT and W. MOYLE ROGERS, July 12th; H. W. Lett, July 23rd and 27th. Comm. W. MOYLE ROGERS. (2) Side of a field at Saintfield Vicarage, Co. Down, August 1898 (*vide* Rev. W. Moyle Rogers).—C. H. WADDELL.

*R.* ———. "Near *Lettii*," *teste* Rogers. Bolston Wood, Herefordshire, 24th August 1901; same plant from same locality, 23rd August

1900. On this plant Rev. W. M. Rogers sends me the following interesting note:—"The Bolston Wood plant seems nearer to *R. Lettii* than to *R. criniger*, being on the whole perhaps nearest to *R. Gelertii*, with *R. Lettii* between it and *R. criniger*. From the very constant Irish plant of Co. Down and Armagh it differs (? constantly) by closer pubescence on stem (in that one character most like *criniger*), the clothing of the stem of *R. Lettii* consisting of longer, looser, more conspicuously white hairs, . . . by leaf more open and wide-spread, with felt on underside surface whitish instead of greenish-grey, and the terminal leaflet with longer, more gradually acuminate point and narrower base, the tothing also being deeper and more finely pointed; and by the much longer ultra-axillary panicle top. These characters, though taken one by one not very distinctive, when combined give a considerably different look to the two plants; and each form seems constant to a remarkable degree." The plant is abundant over a pretty large area in Bolston Wood.—AUGUSTIN LEVY.

*Rubus melanoxyylon*, Muell. and Wirtg. Roadside, Bexley Wood: also Crown Wood, Shooter's Hill, W. Kent, 29th July 1901.—A. H. WOLLEY-DOD. "A particularly interesting discovery; it was previously known in Britain only from Scotland, Wales, and Herefordshire."—Ed.

*R. infestus*, Weihe ("with abnormally narrow leaflets."—W. M. Rogers). Near Abbeystead and Dolphinholme, v.-c. 60, West Lancashire, August 1901.—J. A. WHELDON.

*R. Drejeri*, G. Jensen, var. *hibernicus*, Rogers, 'Handbook,' p. 62. By the side of a lane, Tonaghmore, 27th June 1896; and roadside by an old mill, Saintfield, Co. Down, June and August 1898.—C. H. WADDELL. "Named by Mr. Rogers, who considers it to be a subspecies, not a variety."—Ed.

*R. dunensis*, Rogers, 'Journ. Bot.,' 1901, p. 382. Aghaderg Glebe, Co. Down, July 23rd and 27th, 1901. Coll. H. W. LETT; comm. W. MOYLE ROGERS.

*R. radula*, Weihe, var. *anglicanus*, Rogers. The usual form about Bournemouth, S. Hants, July 26th, 1898; the same as represented in the set of 'British Rubi.'—E. F. LINTON. "A subspecies, according to Mr. Rogers."—Ed.

*R. melanodermis*, Focke. Branksome Park, Dorset, August 6th, 1901.—W. MOYLE ROGERS.

*R. rudis*, Weihe. Puddledock Wood, W. Kent, 16th July 1901.—A. H. WOLLEY-DOD.

*R. praeceptorum*, Boul. Wood borders, Upper Sapey, Herefordshire, 16th August 1901. Named for me by Dr. Focke in 1899, "*R. Griffithianus*, Rog."; by Rev. W. M. Rogers in 1901, "*R. praeceptorum*, Boul." Mr. Rogers had the advantage of seeing a large series of this plant, and, judging from a comparison of Carnarvonshire speci-

mens of *R. Griffithianus*, I believe his decision to be nearer the fact. This, if really identical with the Dorset plant named *R. præruptorum*, Boul., should be an interesting additional record. It is abundant at Upper Sapey Common in woods and hedges, in company with the plant called below *R. dumetorum*, W., var. *triangularis*; and, as the locality is close to the borders of Worcestershire, it should be found also in that county.—AUGUSTIN LEY.

*Rubus scaber*, W. and N. Woods, Whitfield, Herefordshire, 28th August 1899. Passed in 1899 by Rev. W. M. Rogers.—AUGUSTIN LEY.

*R. obscurus*, Kalt. Belmont Wood, Hereford, 25th August 1900. A few fruiting specimens sent from the locality from which the 'Sets of British *Rubi*' were supplied. It will be observed that they exhibit a good deal of uncertainty in the *direction* of the fruiting sepals.—AUGUSTIN LEY. "Identical with the Irish plant which Dr. Focke named for me as a typical *obscurus*. One of our most beautiful brambles when in flower, and (to my mind) among the best-marked glandular forms, though now reduced by Mr. Rogers to a subspecies under *R. fuscus*."—Ed.

*R. rosaceus*, W. and N., var. *Purchasianus*, Rogers. Woods, Great Doward, Herefordshire, 22nd August 1901. This is the variety or state of *Purchasianus* mentioned in 'Herefordshire *Rubi*' (see 'Journ. Bot.,' vol. 34, 1896, p. 220) as 'forma pseudo-hirta.' It grows usually in company with the type; but its characters, so far as they go, seem to be constant, and I do not think that it is a hybrid.—AUGUSTIN LEY. "Now reckoned as a subspecies of *rosaceus*."—Ed.

*R. rosaceus*, var., near *infecundus*, Rogers. Open wood near Altcar, v.-c. 59, South Lancashire, 6th July 1901.—J. A. WHELDON. "Yes; *R. rosaceus*, W. and N., aggreg. I believe the subsp. *infecundus*, though not looking quite typical for that."—W. M. Rogers.

*R. Koehleri*, Wh. and N., subsp. *dasyphyllus*, Rogers, Heaton, Bolton, South Lancashire, July 26th, 1901. Record for v.-c. 59. Coll. W. Moss; comm. W. MOYLE ROGERS.

*R. Koehleri*, var. *cognatus* (N. E. Br.). Trilloescourt Wood, Bolston, Herefordshire, 24th August 1901. This form, which is abundant through a great part of Herefordshire, differs apparently but slightly from the type. The armature varies greatly in amount. It is predominately a woodland plant in Herefordshire.—AUGUSTIN LEY. "In W. Surrey, *cognatus* is not unfrequent in hedges, and even on open heaths, but seldom far away from woods; I have always thought it a rather well-marked and easily recognisable plant."—Ed.

*R. dumetorum*, W. and N., var. *ferox*, Weihe. Walton Junction, v.-c. 59, S. Lancashire, August 1901.—J. A. WHELDON. "Yes, *R. dumetorum*; I suppose, weak *ferox*."—W. M. Rogers. "Should not the 'a. *ferox*' of 'Lond. Cat.,' ed. ix., stand as the type?"—Ed.

*Rubus dumetorum*, var. *triangularis*, A. Ley. Hedges, Upper Sapey, Herefordshire, 16th August 1901. For description of and remarks upon this variety, see 'Journ. Bot.,' vol. xl. (1902), p. 69. I am only able to send a few sheets this year, and shall hope to send a further supply next season.—AUGUSTIN LEY.

*Rosa tomentosa*, Sm., var. *sylvestris* (Lindl.). Thornbury, Herefordshire, 16th August 1901. I do not know whether this is rightly named; but it bears numerous glands on the under surface of the leaf.—AUGUSTIN LEY. "I should say, *R. tomentosa*, Sm., *sp. collect.* The leaves seem to me not nearly green or bare enough for var. *sylvestris*."—W. M. ROGERS.

*R. tomentosa* × *canina* (agg.). Hedge, near Gallantry Bank, Cheshire, 15th August 1901. This curious and interesting plant was not in good condition when I gathered it, having already lost many of its leaves; but some of its flowers were still open or even in bud. The universally barren fruit on so large and well-grown a bush suggested hybridity, while its slender, straightish prickles (at least on most of the branches), very compound-serrate leaves, hairy on both sides, very pubescent and glandular peduncles, pointed to *tomentosa* as one parent. For the other I can only say *canina* (sp. agg.), all the characters by which the segregates can be determined being absorbed by the *tomentosa* influence. Mr. Moyle Rogers, who has seen specimens, agrees as to the first parent, but suggests *arvensis* as the second, basing his suggestion, he tells me, on its long exserted style column, the long pedicels, peculiar prickles, and leaves. Though I cannot confidently dissent from this, I can only say that the exsertion of the styles is less prominent than in several of my authenticated gatherings of *R. tomentella*, *R. dumalis*, and other *canina* segregates, and is much less than I should have expected in a plant with *arvensis* parentage, especially in fruits so shrivelled; whereas the above-mentioned difficulty in recognising leaf and prickle characters applies equally to *arvensis* as to *canina* segregates. The habit of the bush was not in the least trailing nor suggestive of *arvensis*. I hope to study the plant further, and to get better specimens next year.—A. H. WOLLEY-DOD. "I, too, fail to see any sign of *arvensis* here: this would surely have been traceable in the two buds on my specimen. From the crowded, rather short leaflets, and the small globose fruit, I incline to believe it an offspring of *tomentosa* and either *tomentella* or *obtusifolia*; the former, for choice."—Ed.

*R. Crépiniana*, Déségl. Hedge, Chelsfield, West Kent, 14th September 1901.—J. GROVES. "Specimens of this plant were originally so named by Déséglise. It grows in fair quantity, and always retains the distinctive character of the erect subpersistent sepals. Its occurrence is interesting, as the suberistate section of *R. canina* is found principally in our northern and midland counties."—H. and J. GROVES. "This appeared to be identical with a rose pointed out to me at Graffham, Sussex, last summer by Mr. Rogers, who writes: 'I agree with you. It

seems just the plant that I am calling *subcanina*. In Baker's 'Monograph' *R. Crépiniana*, Déségl., appears as a synonym of *R. glauca*; but this, in habit, tint, etc., looks too near to *R. canina* for that.' In both the Kent and the Sussex plants the styles are woolly, as in *glauca*, and the name *R. glauca*, var. *subcanina*, Christ, fits them well."—Ed.

*Pyrus scandica*, Asch. Limestone cliffs, Cefn Fedw, Denbigh, 24th June 1901. I believe this to be identical with the plant named for me "typical *Aria suecica*, Koehne," by Prof. Koehne, from limestone cliffs near Merthyr Tydfil, Breconshire. See 'Journ. Bot.,' vol. 37, 1897, p. 99. Notice in the plant now sent, that the corymb, as the fruit grows, is not flat-topped, as in *P. Aria*, but higher in the centre, as in *P. Aucuparia*; also that the fruits soon become glabrous. Abundant in the Cefn Fedw cliffs.—AUGUSTIN LEY. "*P. scandica*, Asch. I agree."—E. F. LINTON.

*Callitriche obtusangula*, Le Gall. Ken Moor, N. Somerset, 15th June 1901. Somerset records for this plant are very few.—J. W. WHITE.

*Carum Bulbocastanum*, Koch. Cherry Hinton, Cambridgeshire, 19th July 1901.—A. B. JACKSON.

*Fœniculum vulgare*, Mill. On made ground off the sandhills of the North Promenade, St. Anne's-on-the-Sea, West Lancashire, 21st September 1901. Associated with it were *Cenothera biennis*, L., *Diploaxis tenuifolia*, DC., etc. Not recorded for v.-c. 60 in 'Topographical Botany,' p. 199.—CHARLES BAILEY. "N. C. R."—Ar. Bennett. "Should such casual occurrences be taken seriously into account?"—Ed.

*Apium graveolens*, L. On shingle on the seashore at Bervie, between the railway and the sea, south-east Kincardineshire, 8th July 1901. Not recorded for county 91 in 'Topographical Botany,' p. 189. In its immediate locality were a few plants of *Pneumaria maritima*, Hill.—CHARLES BAILEY. "This is fine *Ligusticum scoticum*, L. Mr. Bennett points out that his specimen is odd in having leafy involucre. Celery could hardly exist in such a situation."—Ed.

*Heracleum Sphondylium*, L., var. *angustifolium*, Huds. Colby Glen, Isle of Man, August 1899.—S. GASKING. "Surely a monstrous growth only?"—Ar. Bennett. "Simply stunted; I saw dozens of such plants last year in the meadows adjoining my house. The variety is very different."—Ed.

*Caucalis daucoides*, L. Waste ground, St. Philips, Bristol, 27th June 1901. A rare plant in the West of England.—J. W. WHITE.

*Galium boreale*, L. Llyn-y-fan-fach, v.-c. 44, Carmarthen, 1901. N.C.R. Cf. 'Journ. Bot.' October 1901, p. 344.—H. J. RIDDELSDELL.

*Solidago Virgaurea*, L., var. *cambrica* (Huds.). Llanwrtyd Wells, Breconshire, June 1901. Growing upon rocks in good quantity by

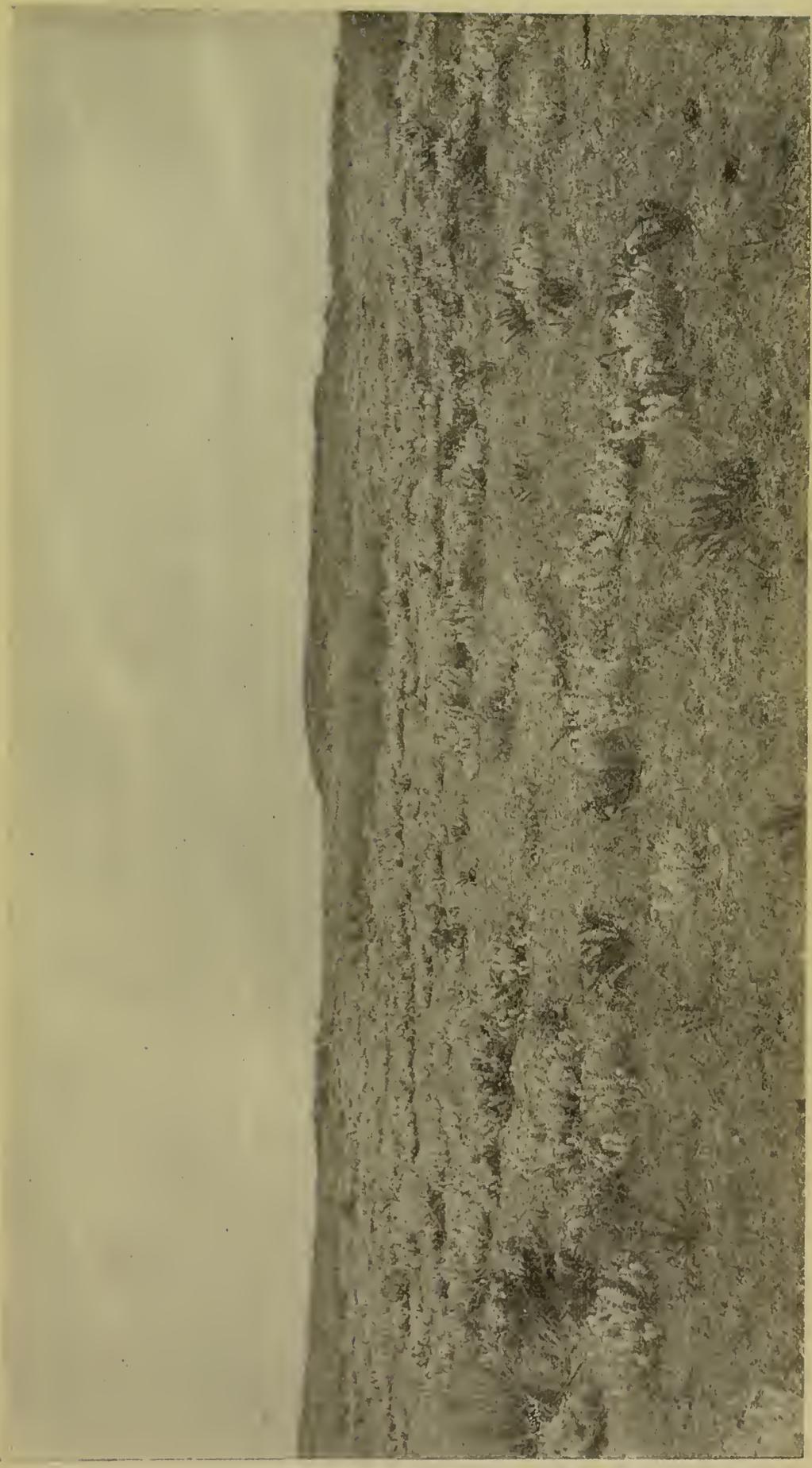
the side of the River Irthon.—W. H. PAINTER. “A few specimens shew some resemblance to *cambrica*, but the bulk is merely small type, and the whole gathering a series of depauperate states, not a true variety.”—Ed.

*Antennaria dioica*, R. Br. Down, near Pitchcombe, v.-c. 33, E. Gloucestershire, June 14th, 1901.—W. A. SHOOLBRED.

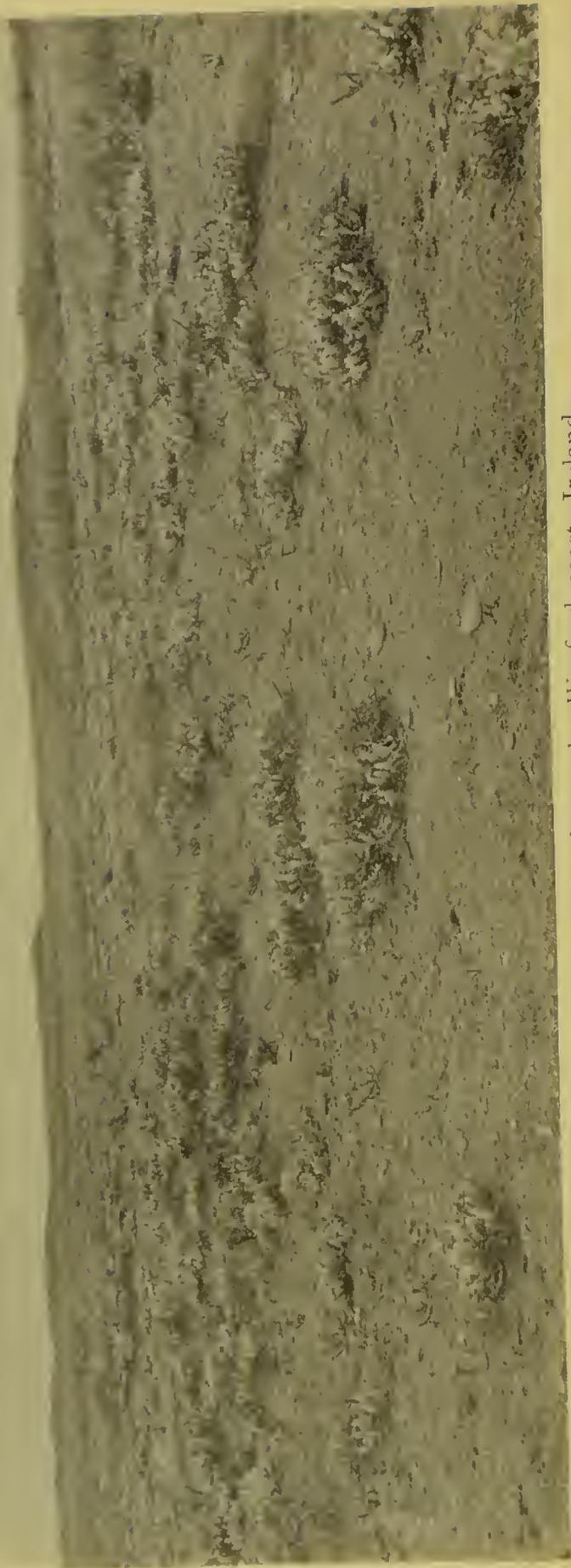
*Inula britannica*, L. Cropston Reservoir, August 1901.—T. A. Preston and A. B. JACKSON. “I send a further supply of this, to shew that it still exists in the locality where it was discovered in 1894 by Mr. Preston. Since that year it has increased considerably in luxuriance, and now occupies a considerable patch of ground on the shore of the reservoir, and has evidently come to stay. It is probable that some waterfowl is responsible for its introduction here.”—A. B. JACKSON.

*Ambrosia trifida*, L. Birkenhead, Cheshire, 27th September 1901.—S. GASKING. “Stem and leaf characters quite agree with the description in ‘DC. *Prodromus*,’ v. 527; no fruit is present. A native of North American river banks from Canada to Georgia.”—Ed.

*Diotis candidissima*, Desf. Abundant on the sandy bar which separates Lady’s Island Lake from the sea, south-east Wexford, Ireland, county-division 12 of ‘Irish Topographical Botany,’ 11th September 1901. These specimens were collected for the Exchange Club by Mr. Cecil P. Hurst, whose interesting paper on ‘The Range of *Diotis candidissima*, Desf., in England and Wales, and in Ireland,’ reprinted from the ‘Memoirs of the Manchester Literary and Philosophical Society,’ No. 1, vol. xlvi., pp. 1 to 8, is posted with this Report to each member. By the courtesy of the Lit. and Phil. Society I reproduce the two plates, from photographs of the locality in which the *Diotis* occurs. Both photographs were taken at the western extremity of the bar at Lady’s Island Lake on 15th October 1901. The first plate is a view looking southward across the bar. Mr. Hurst points out that there are a few plants of *Euphorbia Paralias* in the foreground, recognisable by their dark colour in the photograph. The sandy, gravel-strewn nature of the soil affected by *Diotis* is better shown in Plate II. The young plants of *Diotis* approximate so much in colour to the grey pebbles among which they grow as sometimes to be with difficulty distinguished from them. The second plate is a view looking westward along the bar. The plants in the foreground are rather more weather-beaten than those in Plate I. The way in which *Diotis* monopolises the ground in this locality, stretching far away into the distance, is well shown in this photograph. The shrubby nature of the more luxuriant plants is also noticeable.—CHARLES BAILEY. Also sent by Mr. DRUCE. “The thanks of the Club are due to all three gentlemen for these beautiful specimens of a very rare and interesting species.”—Ed.



*Diotis candidissima*, Desf., on the Wexford coast, Ireland.



*Diotis candidissima*, Desf., on the Wexford coast, Ireland.

*Artemisia Stelleriana*, Bess. In considerable plenty on the coast of the North Bull, Co. Dublin, August 1901, where it was first discovered by Mr. C. Moffat. I subsequently found it on the coast between Marazion and Penzance; and in 1900 I found a single specimen on the shore of Lunan Bay, Forfar. For further information see 'Journ. Bot.,' 1894, pp. 22, 70-75, and 104-106; 'Botan. Notiser,' 1892, p. 197; 'Bot. Soc. Edin.,' 1900, pp. 307-313; and 'Ann. Scot. Nat. Hist.,' 1900, pp. 104-105.—G. CLARIDGE DRUCE. Also sent by Mr. RIDDELSDELL from the same station.

*Senecio squalidus* × *vulgaris*. Originally from Cork, 1897; Cambridge Botanical Gardens, July 1901. Comm. A. B. JACKSON. See 'Irish Naturalist,' 1897.—A. B. JACKSON. "In this I can see nothing but *S. vulgaris*, L.; and Mr. Bennett writes: 'I agree with you.'"—Ed.

*S. spathulifolius*, DC. Cliffs near Holyhead, June 20th, 1901.—J. E. GRIFFITH.

*Carduus arvensis* (Curt.), var. *mitis*, Koch (*teste* Ar. Bennett). Casual on ballast by the canal, Aintree, v.-c. 59, S. Lancashire, 28th July 1901.—J. A. WHELDON. "This plant, with leaves quite flat, is very unlike our common Lancashire form. Mr. Williams states that *Cirsium arvense*, Scop.,  $\alpha$ , *normale*, Williams (= var. *genuinus*, Syme), corresponds with var.  $\beta$ , *mitis* of Koch. I should consider the spinose undulate-leaved plant (? var. *horridum*, Wimm.) to be our commonest form. I only recollect seeing this flat-leaved plant on two or three occasions, and then mostly as a casual. A few plants in the vicinity had practically entire leaves, and were probably var. *setosum*, C. A. Mey. They flowered later (September is given by Babington for his *setosus*), and were cut down before they were in a condition to gather."—J. A. Wheldon. "*Cnicus arvensis*, var. *mitis*, Koch. So I name it."—E. F. Linton.

*Cnicus arvensis*, Hoffm., var. *setosus* (Bess.). Canal bank, Aintree, S. Lancashire, 12th September 1901.—S. GASKING. "Looks abnormal; abnormally ill-dried."—E. F. Linton. "Well, I give it up; plant guessing is too unsafe."—Ar. Bennett.

*Hieracium aurantiacum*, L. Railway bank, near Melsey Road, Aigburth, S. Lancashire, 10th June 1901.—S. GASKING. Only four specimens were sent.

*H. lingulatum*, Backh. Fersit Forest, v.-c. 97, W. Inverness, 24th July 1896.—W. A. SHOOLBRED. "Right."—Ed.

*H. anglicum*, Fr. Rocks on Penyghent, West Yorkshire. On the limestone ranges this and other hawkweeds were abundant, the sandstone ranges close beside being bare, 26th July 1901. Confirmed by Mr. F. J. Hanbury.—AUGUSTIN LEV. "Typical."—Ed.

*H. lima*, F. J. Hanb. Cheddar Gorge, N. Somerset, 17th September 1901. In abundant flower at this date. The early-flowering

species of hawkweed in 1901 suffered extremely from the drought and searching winds of May and June, and flowered very poorly. At Cheddar, *H. lima*, *Schmidtii*, and *stenolepis* were flowering abundantly in September, I suppose on this account.—AUGUSTIN LEY. “Lovely specimens of this characteristic plant.”—Ed.

*Hieracium Leyi*, F. J. Hanb. Carnedd Dafydd and Cwm Ffynnon Lloir, Carnarvonshire, July and August 1892; Unich Water, Forfar, wild specimens, July 1889 and 1890, cultivated, 1891; Glen Callater, S. Aberdeen, 13th August 1884.—W. R. LINTON. “*H. Leyi*, F. J. Hanb., forma. Origin, Unich Water, Forfar; cult. June 20th, 1891. This plant, grown from seedlings supplied by Rev. E. S. Marshall, has proved a puzzling one; it has been placed under *H. lasiophyllum*, and again assigned (by Dahlstedt) to *H. Schmidtii*, var. *superbum*, Strömfelt. I am disposed to place it as a form or var. of *H. Leyi*, which, there is reason to think, is very near the above var. *superbum*.”—W. R. Linton. “I gathered two allied forms in 1888 by the Unich Water and on Craig Maskeldie, close by, which remained distinct in cultivation up to my change of abode in 1900. One of these was named by Mr. Hanbury *H. lasiophyllum*, var. *euryodon*, and some of Mr. Linton’s specimens appear to be just what he so determined. My acquaintance with *H. Leyi* in a living state is but slight; in some respects it seems to come between *Schmidtii* and *lasiophyllum*, though nearer to the second. I do not believe that either of my gatherings can properly be placed under *Schmidtii*.”—Ed.

*H. Schmidtii*, Tausch. (1) Betty Hill, W. Sutherland, wild, 1886 and 1888; cultivated, 1891 and 1896. (2) Cultivated, from coast cliffs at Berriedale, Caithness, June 1894, 1896-8.—W. R. LINTON.

*H. lasiophyllum*, Koch. Granite of Craig Breidden, Montgomery, 27th June 1901; also granite of Moel-y-golfa, Montgomery, same date. Name confirmed by Mr. Hanbury. Moel-y-golfa is the name of the south-west extension of the same range of hill of which Craig Breidden forms the precipitous northern face.—AUGUSTIN LEY.

*H. caledonicum*, F. J. Hanb. Taren-yr-Esgob, Breconshire and Monmouthshire, 4th July 1901. Confirmed by Mr. Hanbury.—AUGUSTIN LEY.

*H. rubicundum*, F. J. Hanb. Cwm Idwal, Carnarvon, 16th August 1900.—W. R. LINTON.

*H. argenteum*, Fr., var. *septentrionale*, F. J. Hanb. Coast cliffs, Scullomie, W. Sutherland, July 21st, 1900.—W. A. SHOOLBRED. “Right.”—Ed.

*H. Somerfeltii*, Lindb. Granite of Craig Breidden, Montgomery, 27th June 1901. First named for me from this station by Mr. Hanbury, upon garden specimens, some years ago, and confirmed by him upon the wild specimens, 1901. I am sorry not to be able to

send more, but the plant has a very restricted range upon Craig Breidden, and is much less abundant than *H. lasiophyllum*, Koch.—AUGUSTIN LEY.

*Hieracium Somerfeltii*, var. *splendens*, F. J. Hanb. Origin, Nant Francon, Carnarvonshire; cultivated, 1893-8.—W. R. LINTON.

*H. orimeles*, W. R. Linton. Nant Francon and Cwm Idwal, Carnarvonshire, 15th and 16th August 1900.—W. R. LINTON.

*H. hypocharoides*, Gibs. Cefn-fedw, near Llangollen, Denbighshire, 25th June 1901. Seen by Mr. Hanbury.—AUGUSTIN LEY. "Beautifully prepared; exactly like the Settle plant."—Ed.

*H. Pictorum*, Linton. Luib and Killin, Mid-Perth, July 1894, and cultivated (from Craig Magriannich, Killin), June 1897.—W. R. LINTON.

*H. britannicum*, F. J. Hanb. Great Orme's Head, Carnarvon, 22nd June 1901. Exceptionally robust on the sea-cliffs. Name confirmed by Mr. Hanbury.—AUGUSTIN LEY. "This is, I think, the plant that has been colloquially known as 'cabbagey *H. caesium*,' which was placed with doubt under that species. It has somewhat similar foliage to *H. britannicum*, but its phyllaries are not so attenuate as in that species, nor nearly so hairy; and, whereas *H. britannicum* has very hairy phyllaries with few setæ buried among the white-tipped hairs, and also hairy peduncles with setæ, this plant has chiefly setæ on both peduncles and phyllaries, with very few sparse hairs."—E. F. Linton. "*H. caesium*, as understood by Elfstrand, has root-leaves narrowed into the petiole; in the present plant they are abruptly truncate and very broad-based, recalling those of *H. stenolepis*. Would not the situation modify the clothing of the heads?"—Ed.

*H. rivale*, F. J. Hanb. From two stations near Killin, Mid-Perth, July 1894; and cultivated from a third, June 1896-7.—W. R. LINTON.

*H. murorum*, L., var. *pulcherrimum*, F. J. Hanb.? Taren-yr-Esgob, Breconshire, 4th July 1901. This is not exactly Mr. Hanbury's variety, as represented by the Carnarvonshire plants from which it was originally described, but may be placed under it more conveniently than under any other named variety. See his note on the same plant in 'Bot. Exch. Club Rep.,' 1897, p. 554 (specimens from Crickhowell, Brecon).—AUGUSTIN LEY. "Rev. E. F. Linton expresses doubt, but gives no other name for it."—Ed.

*H. murorum*, var. *microcladium*, Dahlst. (*vide* F. J. Hanbury). Rocks by the river, Tollymore Park, Co. Down, June 18th, 1901. Styles livid.—C. H. WADDELL. "Exactly like the N. Scotch form; excellent material."—Ed.

*H. murorum*, var. *pellucidum*, Læst. (*teste* Ley). Near Stroud, v.-c. 33, E. Gloucestershire; Llwydcoed, Abernant, Aberdare, v.-c. 41,

Glamorgan; Nant Hir, and River Hepste, v.-c. 42, Brecon, May to July 1901.—H. J. RIDDELSDELL. “All correct, I believe.”—Ed.

*Hieracium murorum*, var. *lepidodes*, Johannis. Ashwood Dale, Derbyshire, 13th July 1898. From the well-known station whence ‘Set of British *Hieracia*,’ Fasc. ii., No. 38, was supplied.—E. F. LINTON.

*H. murorum*, var. *pachyphyllum* (Purchas). Great Doward, v.-c. 36, Hereford, June 12th, 1901.—W. H. SHOOLBRED.

*H. cambricum*, F. J. Hanb. Great Orme’s Head, Carnarvon, 18th June 1901. Seen by Mr. Hanbury.—AUGUSTIN LEY. “A very well-marked species, which I cultivated for twelve years, and found absolutely constant.”—Ed.

*H. holophyllum*, W. R. Linton. Deep Dale, Buxton, Derbyshire, 2nd August 1901. In great plenty at this station, but the specimens were small on account of the drought of the summer. Seen by Mr. Hanbury.—AUGUSTIN LEY.

*H. vagense*, A. Ley. Lime rocks near Gloddaeth, Llandudno, Carnarvonshire, 19th June 1901. Also the same plant in the débris of old lime quarries near Llandudno Junction, 21st June 1901. This is a notable extension of this species, which had been previously found only on the banks of the Wye in Brecon and Radnor. It is, I believe, substantially identical with the Wye plant. Seen by Mr. Hanbury.—AUGUSTIN LEY.

*H. vulgatum*, Fr., var. *ravusculum*, Dahlst. Railway banks and wall tops at Berwyn, Denbighshire, 26th June 1901. After careful comparison with Dahlstedt’s plant in ‘Herb. Hanbury,’ I believe this Berwyn plant to be exactly similar. Seen by Mr. Hanbury.—AUGUSTIN LEY. “The characteristic grey clothing of the involucre from which the variety takes its name is well shown here.”—Ed.

*H. vulgatum*, var. *dedalolepium*, Dahlst. (*teste* Ley). Hirwain, Ynyseyron, and Aberdare, v.-c. 41, Glamorgan, June 1901.—H. J. RIDDELSDELL. “Well-marked but indifferently dried specimens.”—Ed.

*H. vulgatum*, var. *amplifolium*, Ley (*teste* Ley). (1) Limestone bank, Wyndcliffe, v.-c. 35, Monmouth, June 5th, 1901.—W. A. SHOOLBRED. (2) Near Aberdare and at Hirwain, v.-c. 41, Glamorgan, 1900-1; Nant Hir, Lwdcoed, v.-c. 42, Brecon, 1901.—H. J. RIDDELSDELL.

*H. vulgatum*, var. *mutabile*, Ley (*teste* Ley). Near Llanwrtyd Church, v.-c. 42, Brecon, June 1901.—W. H. PAINTER. “Such miserable material is useless.”—Ed.

*H. vulgatum*, var. *glaucovirrens*, Dahlst.? Banks near Llangollen, Denbighshire, 25th July 1901. After further comparison, I do not

think this to be rightly named as above, and would rather refer it to *H. diaphanum*, Fr., with West Yorkshire specimens of which in 'Herb. Hanb.' it agrees well.—AUGUSTIN LEY.

*Hieracium diaphanum*, Fr. Deep Dale, Derbyshire, 2nd August 1901. This is certainly wrongly named *diaphanum*, Fr., and must fall under the small form of *H. sciaphilum*, Uechtr. Named *H. sciaphilum* by Mr. Hanbury.—AUGUSTIN LEY. "I see nothing to take it off from typical *sciaphilum*."—Ed.

*H. rigidum*, Hartman, forma? Old limestone quarry, Tuttsill, v.-c. 34, W. Gloucester, 16th July 1901.—W. A. SHOOLBRED. "Good *H. sciaphilum*, of which it has the normal foliage, involucre, and pilose-tipped ligules. Mr. Shoolbred concurs in this correction."—Ed.

*H. rigidum*, near var. *strigosum*, A. Ley. Chapel-le-Dale, West Yorkshire, 24th July 1901. This, I now see, is not referable to my Breconshire *H. strigosum*, but it agrees exactly with plants in 'Herb. Hanb.,' which are declared by Dr. Elfstrand to be *H. sparsifolium*, var. *placerophyllum*, Dahlst.—AUGUSTIN LEY.

*H. rigidum*, var. *acrifolium*, Dahlst. Fortingal, Perthshire, 1st August 1891; and cult. June-July 1896-9. Specimens of this were submitted to the author of the variety, and so named by him—W. R. LINTON. "Practically identical with what we have been so calling in the south of England; but here the leaves are, as a rule, still more sharply toothed."—Ed.

*H. strictum*, Fr., forma. Dunphail Glen, Morayshire, August 12th, 1897.—W. A. SHOOLBRED. "My own specimens of this were named *strictum* by Mr. Hanbury."—Ed.

*Statice Limonium* × *rariflora*. Marshy margins of Bosham Channel, W. Sussex, 1st August 1901.—E. F. LINTON and E. S. MARSHALL. Same neighbourhood, 16th September 1901.—AR. BENNETT. "Gathered in company with the Rev. E. S. Marshall, and suspected on the spot, at two localities half a mile distant, to be a hybrid between *S. Limonium*, L., and *S. rariflora*, Drej. After careful examination and due discussion, we were both of us convinced that sundry gatherings, with slight variations *inter se*, were this interesting hybrid. See 'Journ. Bot.,' 1902, p. 41."—E. F. Linton. "As I rather thought, this is substantially *S. bahusiensis*, var. *danica*, Fr., according to specimens gathered by Gelert and Möller (their plant, however, is much smaller); but, in 'Sum. Veg. Scand.,' p. 200, Fries says, '*Danica* = *S. rariflora*, Drej.,' which is exactly what we should not say. You see that there is need for this to be carefully compared at Kew and B. Mus. before you make any note on it. I doubted the hybridity, and do now, but cannot contradict it; still, it needs careful comparison."—Ar. Bennett. "It is only fair to state that Mr. Bennett's gathering was from a point south of Bosham village (and, I believe, from one plant or group of plants); the original stations, to the north, being submerged when we

arrived there. No one would place my extreme specimens of the alleged hybrid under any one type. I have practically no doubt that they are all either primary or secondary hybrids between two very distinct species; being only present where these grow together, and forming nearly a complete series between them. The same phenomena are likely to occur in Sweden. Unfortunately, I have hitherto been unable to consult the national Herbaria as recommended."—Ed.

*Primula scotica*, Hooker. Coast near Black Craig, Mainland, Orkney, July 18th, 1900.—W. A. SHOOLBRED.

*Anchusa officinalis*, L. Waste ground, where limestone from Plymouth is often deposited for the kiln, Longfleet, towards Parkstone, Dorset, 31st August 1901. I saw only one large, fine plant, and, as the species has not caught my attention in the cottage gardens (of which none are close, but there are plenty about), I cannot say how it came there. I have not seen it growing *sponte* before.—E. F. LINTON.

*A. officinalis*, L. Aberdare, v.-c. 41, Glamorgan, 1901.—H. J. RIDDELSDELL. "*A. italica*, L., not *A. officinalis*, which has broader leaves and calyx less deeply divided, with shorter segments."—E. F. Linton.

*Myosotis versicolor*, Reichb. Near Hirwain, June 1901. Seems to be a new record for v.-c. 41, Glamorgan.—H. J. RIDDELSDELL. "Yes; N. C. R."—Ar. Bennett.

*Linaria purpurea*, L. On dry banks on the cross-road between the Rafford Road and the Elgin Road, Forres, north-west Elginshire, 28th June 1901.—CHARLES BAILEY. "Surely not that species? Were it in the south, I should suggest *vulgaris* × *repens*."—Ar. Bennett. "*L. repens*, Mill., a form with rather a shorter spur than the usual form: exactly like specimens gathered on old ballast heaps near the docks, Swansea. . . . The flowers are not too large for a *L. repens* × *vulgaris*—I have them larger, *i.e.*, nearer *vulgaris*—but the spur in the hybrid is long-acuminate, always borrowing largely from *L. vulgaris*, whereas in the plant in question the spur is of the bluntest description permissible in *L. repens*; usually it is more acute or acuminate."—E. F. Linton.

*L. repens* × *vulgaris* (*teste* Ar. Bennett). In good quantity on the wall of Llandovery Churchyard, Carmarthenshire, June 1901.—W. H. PAINTER.

*Limosella tenuifolia*, Hoffm. Wet, sandy shore of Kenfig Pool, v.-c. 41, Glamorgan; in profusion for two or three hundred yards, June 7th and July 12th, 1901.—EDWARD S. MARSHALL and W. A. SHOOLBRED. "A very minute and delicate plant, which I believe to be specifically distinct from *L. aquatica*, L."—Ed.

*Veronica Tournefortii*, C. Gmel. Rough land on the road from the shore at Stonehaven northwards to Netherley, north-east Kincardine-

shire, 6th July 1901. Not recorded for v.-c. 91 in 'Topographical Botany,' p. 292.—CHARLES BAILEY. "Recorded in 'Journ. Bot.,' 1884, p. 241."—Ar. Bennett.

*Euphrasia brevipila*, Burn. and Greml. All thus named by Mr. Townsend:—(1) Near Rothesay, Bute, June 27th. "Very young state."—F. T. (2) Kirn, Argyleshire, June 28th. (3) Ashton-by-the-Clyde, Renfrew, July 1st. "Forma *eglandulosa*."—F. T. (4) Sandbank near Kirn, Argyle, July 1st. "A poor soil form."—F. T. (5) Ashton, Renfrew, June 26th. "Young, and in favourable soil and situation."—F. T. Nos. 1 to 5 were all found in damp, grassy slopes. (6) Colmonell, Ayrshire; dry hilly pasture, July 2nd. "Young, but fairly typical form in Scotland."—F. T. (7) Colmoncll, Ayrshire; rather bare and stony fields, July 4th. "Young, and probably in an exposed and dry spot."—F. T.—W. MOYLE ROGERS.

*E. brevipila*, eglandular? (1) Back Dale, near Hindlow, Derbyshire, 2nd August 1901. (2) Near Ladyhole, Ashbourne, Derbyshire, 9th August 1901.—W. R. LINTON. "*E. brevipila*, var. *eglandulosa*, or forma *eglandulosa*, I have only seen in one station, and Wettstein in his Monograph does not notice an eglandular form, and in a letter to me he says he has never seen it. I conclude, therefore, it must be a rare form. Where I noticed it, the usual glandular form was abundant throughout the neighbourhood, and was growing with the eglandular form. Mr. Linton makes no comment about his plant, whether it occurs frequently or otherwise; also whether the normal form occurs in the same spot or neighbourhood."—F. Townsend. "One specimen of No. 1 is *E. Rostkoviana*, Haync, bearing stalked glands; I believe that the bulk of both gatherings would be named *E. curta*, Fr., var. *glabrescens*, Wettst., by Prof. Wettstein."—Ed.

*E. Rostkoviana*, Haync (*teste* Townsend). By the side of an arable field, Llanwrtyd Wells, v.-c. 42, Breconshire, June 1901.—W. H. PAINTER. "Certainly; but small and poor."—Ed.

*E. borealis*, Towns. (*teste* Townsend). Pebbly shore of Bassenthwaite Lake, Cumberland, towards the northern end, June 1901.—J. COSMO MELVILL. "I should have thought this to be *E. curta*, Fr., var. *glabrescens*, Wettst., of which it has the foliage, though the flowers are rather large for *curta*."—Ed.

*E. nemorosa*, Pcrs. Linley, near Bridgnorth, Salop, 2nd September 1900.—W. H. PAINTER. "Sent as '*E. curta*, Fr.?' I fully concur in Mr. Townsend's correction."—Ed.

*Rhinanthus minor*, Ehrh., 'Beitr.,' vi., 144, sens. restr. (*Alectorolophus minor*, Wimm.; Dumort., 'Fl. Belg.,' p. 33). In grassy meadows by Llyn Padarn, Llanberis, Carnarvonshire, June 1900. I send these specimens, which have been passed as true *R. minor* by Dr. J. von Sterneck, who has made a close study of the various forms of the corn rattle. He has described several new species; but he puts them

under the name *Alectorolophus*, a genus which Haller described in the 'Enumeratio Stirp. Helv.,' ii., 623 (1742), and which was also adopted by Mœnch in the 'Methodus' of 1794. *R. minor* is our common British plant, and at Llanberis I collected it from the lake margin to about 1000 feet above sea-level; but I did not then see it above 2000 feet. The plant which I described as *R. Crista-galli*, var. *angustifolius*, Gren. and Godr., in my 'Berkshire Flora,' is to a great extent, if not entirely; the plant which Schur, in the 'Enum. Plant. Transs.,' 512, called *R. stenophyllus*; and this has a wide range in Great Britain, from West Ross south to Berkshire, and in Ireland from Westmeath, whence the Rev. W. R. Linton and Mr. H. C. Levinge distributed it as var. *fallax*, to Co. Cork, where I gathered it in 1890. This is the plant which was distributed by Mr. F. J. Hanbury from Tain, East Ross, in 1890, under the name *R. major*, but he was afterwards inclined to refer it to a variety of *R. Crista-galli*. I have not seen Grenier and Godron's type of *angustifolius*, but it is not unlikely that it is synonymous with *R. stenophyllus*. See 'Ann. Scot. Nat. Hist.,' 1901, 177.—G. CLARIDGE DRUCE. "Dr. von Sterneck's determination on the label is '*Alectorolophus minor* (Ehrh.) Wimm.' In his 'Monograph' (p. 12) he gives 1747 as the date of Haller's name; this, however, would be antedated by *Fistularia*, L. (1735) if the year 1753 were not adopted as a starting-point. Allioni was the first to revive *Alectorolophus* (1785); which is adopted by Sterneck in preference to *Rhinanthus*, L. (1753), on the ground that the latter is an aggregate genus; here, I feel sure, our British authorities will not follow him."—Ed.

*Rhinanthus Crista-galli*, L., var. *stenophyllus*, Schur? Downs above Sutton, v.-c. 13, W. Sussex, 3rd August 1901.—E. F. LINTON. Also sent, without a name, from the same station, by E. S. MARSHALL (No. 2584). "Determined by Dr. von Sterneck as '*Al. stenophyllus* (Schur), Sterneck.' This is the plant referred to above by Mr. Druce: Schur, however, described it as *R. minor*, var. *stenophyllus* (1866), not as a species. Older varietal names are *R. minor*,  $\gamma$ , *angustifolius*, Koch (1844), and  $\beta$ , *angustifolius*, Gren. and Godr. (1850); but these will fall, as there is a species named *R. angustifolius* by Gmelin in 1806. The plant so abundant on heaths near Tain, now placed here by Sterneck, was thought by Mr. Hanbury and myself to be a distinct species when we found it in 1890; Prof. Haussknecht wrongly determined it as *R. major*, and Prof. Lange afterwards named it *R. minor*, Ehrh., var. *angustifolius*, Koch, which turns out to be correct."—Ed.

*Mentha rubra*, Sm.? September 1901, in some quantity, distributed over a mile of bank of the River Cynon, in v.-c. 42, Breconshire, within three or four miles of Aberdare. It attains considerable size, and shews the two forms which correspond to the *rivalis* and *paludosa* forms of *M. sativa*, as per specimens herewith. The breadth of the upper bracts, in comparison with their length, is very marked. It seems to agree fairly well with specimens of *M. rubra*, but expert opinion must decide its identity. Its origin is doubtful. It may have

come down from houses above, but it bears a settled appearance now which forbids a decision without further investigation. The greater proportion of it is on the Breconshire side, but a few plants have strayed to the Glamorganshire side (v.-c. 41), and indeed in one place I found the plant on the top of a high wooded rock some 50 feet above river level, and further down stream than any other place where I could find it either in v.-c. 41 or v.-c. 42. This makes it look more like an indigenous plant. I found precisely the same plant at Burry Port, in Caermarthenshire (v.-c. 44), in September 1900—but on a rubbish heap!—H. J. RIDDELSDELL. “I think a small form of *rubra*, rather than *sativa*.”—Ar. Bennett. “Rightly named.”—E. F. Linton.

*Salvia verticillata*, L. By the Docks, Garston, S. Lancashire, June 1900.—S. GASKING. “Confirmed by Messrs. Bennett and Linton; of course, a casual alien. Very badly prepared.”—Ed.

*S. verticillata*, L.? Aberdare, v.-c. 41, Glamorgan; established in some quantity over a piece of waste ground, 1901.—H. J. RIDDELSDELL. “*S. clandestina*, L.”—E. F. Linton.

*Nepeta Cataria*, L. Canal bank, Aintree, v.-c. 59, S. Lancashire, 8th August 1901.—S. GASKING. “N. C. R.”—Ar. Bennett. “Material scrappy.”—Ed.

*Stachys alpina*, L. Open woodland near Nibley Knoll, West Gloucestershire, July 10th, 1899.—J. W. WHITE. “Admirable specimens.”—Ed.

*Galeopsis dubia*, Leers. Near Vodol, Bangor, v.-c. 45, Carnarvon, August 30th, 1901.—J. E. GRIFFITH. “This name, which, according to Nyman, dates from 1775, supersedes the *G. ochroleuca*, Lam. (1786), of ‘Lond. Cat.,’ ed. 9.”—Ed.

*Leonorus Cardiaca*, L. Poolvash, Isle of Man, 23rd August 1890.—S. GASKING. “Shocking specimens.”—Ed.

*Ballota ruderalis*, Sw. In two places at Studland Bay, Dorset, June 1901. Having gathered *B. ruderalis* for the first time at Studland, I am satisfied as to its specific distinctness from *B. alba* (L.), auct. plur. The soft, velvety appearance of the whole plant, and pleasant odour when bruised, contrasts sharply with the common black horehound. Nyman, ‘Consp. Fl. Eur.,’ p. 581, admits the two species—*B. alba* (L.), with synonym *fatida*, Lam., the common species, and *B. nigra*, L., with synonym *ruderalis*, Sw., the species with more restricted distribution. Babington (‘Man.,’ ed. viii., p. 284) distinguishes the two species, while Hooker (‘Student’s Flora,’ p. 330) unites them. Of course, Bentham does likewise.—J. COSMO MELVILL. “Correct.”—Ed.

*Teucrium Scordium*, L. District 6 of Babington’s ‘Flora of Cambridgeshire,’ p. 185 (1860), 3rd August 1901; coll. J. and A. Bennett. Sent because it is probable that few members possess

Cambridgeshire specimens. The species is becoming very rare in the county, and it is probable that the spot where these were gathered is the only one at present existing. In the 'Journal of Botany,' 255-6, 1898, Mr. W. West, jun., remarks: "This is extinct in all the localities recorded in Dist. 4. Such marshy places as still remain by the Histon Road and near King's Hedges are very limited in extent, and quite unproductive. In Dist. 6 I have looked for this at Mepal, and repeatedly at Roswell Pits, Ely,<sup>x</sup> but always in vain. Mr. Bennett informed me that he had a specimen gathered some years ago by Mr. Fryer in the Chatteris district, but in what I (rightly) believed to be the spot there was no trace of the plant in 1895, and I find in Herb. Brit. Mus. a specimen labelled 'Pits by Vermuyden's Drain at Horseway, now destroyed, Sept. 17, 1879, A. Fryer.'" In still another station known to Mr. Fryer we sought it in 1901 unsuccessfully, but in the station whence the present specimens are sent hundreds might have been gathered without injuring the locality. For the present distribution of this decreasing species see a paper read before the Norfolk and Norwich Nat. Hist. Society in January 1902.—AR. BENNETT.

*Plantago Coronopus*, L., var. *pygmæa*, Lange. Whitchurch Heath, Salop, 23rd July 1900 and 20th August 1901. I have not seen a description nor specimens of Lange's variety, but Mr. E. G. Baker, to whom I submitted my 1900 gathering, wrote: "Your *Plantago* is, I think, nearer to var. *pygmæa* than to any of the other named varieties of *Coronopus*." The flowers on the gathering of that year vary up to eight in a head in the largest specimens; but by a more careful selection in 1901, none exceed five, and mostly they are two to three in a head. Plants were fairly plentifully mixed with those gathered, which had more numerous flowers, perhaps up to twelve or fifteen, but the leaf characters remained unaltered.—A. H. WOLLEY-DOD. "Agrees fairly well with types I possess from Lange."—AR. BENNETT.

*P. Coronopus*, var. Great Orme's Head, Carnarvon, 21st June 1901. What is the name of this variety? Leaves thick, short, fleshy.—AUGUSTIN LEY. "Departs from the type in the direction of var. *maritima*, Gren. and Godr., but is not that."—AR. BENNETT. "I gathered just the same form on low sandstone cliffs near Dunnet, Caithness, in 1900, but could get no name for it."—ED.

*Chenopodium polyspermum*, L., var. *cymsosum*, Moq. V.c. 55, Leicester (town; garden weed), August 1900. Rare in this county. Three years ago I sent a few specimens from a large plant which appeared as a weed in my town garden at Crescent House. Two years afterwards, in 1900, a similar plant appeared in nearly the same spot, and I prepared these specimens for the Club; but as I was removing to my present address they were overlooked.—F. T. MORT. "Rightly named."—ED.

<sup>x</sup> It was found (along the pits) by W. Bennett.

*Atriplex deltoidea*, Bab. On an old manure heap, Aintree, v.-c. 59, S. Lancashire, August 1901. Mr. Bennett, who has seen fresh specimens, so names it, and says he thinks it is new to v.-c. 59. Most of the local records refer to a littoral form of quite different habit and appearance, referred by Herr Freyn to *A. prostrata*, Bouch., frequent on the shores of both South and West Lancashire.—J. A. WHELDON.

*Salicornia appressa*, Dum. Near Bosham, v.-c. 13, W. Sussex, September 4th, 1901.—EDWARD S. MARSHALL.

*S. lignosa*, Woods. Gravelly shores near Bosham, W. Sussex, in plenty, September 16th, 1901.—AR. BENNETT and E. S. MARSHALL. Mr. Bennett's valuable remarks are appended:—“*Salicornia radicans*, Smith in ‘Engl. Bot.,’ t. 1691 (1807). *S. fruticosa*, Sm., ‘Engl. Bot.,’ 2467, non L. *Sarcathria radicans*, Rafin., ‘Fl. Tellur.,’ iii., p. 47 (1836)—this I have not seen. *S. fruticosa*, L.,  $\beta$ , *radicans*, Gren. and Godr., ‘Fl. Francc.,’ iii., p. 28 (1855). ? *S. sarmentosa*, Duv. Jouve, ‘Bull. Sc. Fr.,’ tome 15, 174 (1868), according to Lloyd, ‘Flore de l’Ouest de la France,’ ed. 4, 292 (1886); but I am inclined to think, from the name, it may really be Woods’ *lignosa*, but I have seen no specimens. Hooker and Arnott, ‘Brit. Fl.,’ ed. 8, 366 (1860), remark: ‘Although we see no reason to admit more than two British species, even these two Mr. Bentham combines.’ It is true Mr. Bentham does so, but he did not understand *radicans*, or had not seen it growing; if he had he certainly would not have done so, the whole habit, growth, and aspect of the two plants are so totally different in *radicans* and *herbacea*. A. G. More, in ‘Supp. Fl. Vect.,’ ‘Journ. Bot.,’ 170, 1871, observes that he considers the *S. lignosa* of Woods to equal *S. fruticosa*, L., and says: ‘I think we may safely claim *S. fruticosa*, L., as an Isle of Wight plant.’ In this I cannot concur, as the seeds of the Bosham specimens are not tubercled! as those of the plant of Linnæus are. Mr. More suggests that the soft mud in which he finds the true *radicans* of Smith allows it to creep and root; but this is not my experience on the Sussex coast near Shoreham. I have there found *radicans* on hard mud—so hard that it was very difficult to get characteristic specimens. Though *lignosa* does not as a rule root, yet I found on one Bosham specimen roots about three inches away from the centre. Our *radicans* does not seem (or did not) to be well known on the Continent. There seems to be in Scandinavia a biennial var. of *herbacea*, = *S. biennis*, Afz., and a semi-perennial form, = *S. perennans*, Willd., ‘Sp. Plant., i., 24 (1797; I wonder what this is?) Koch, ‘Syn. Fl. Germ. et Helv.,’ ed. 2, ii., 693 (1844), says: ‘*S. herbacea*,  $\beta$ , *pachystachya*, spicis duplo crassioribus: *S. radicans*, Sm., ‘Engl. Bot.,’ no. 1691, saltem ex specimine a Woodsio ad Sonderum missa. Hanc ad mare balticum legit Detharding.’ Now Detharding, in his ‘Consp. Fl. Megal.,’ p. 4 (1828), remarks: ‘A notable form occurs on the island of Poehl! The stems are robust and perennial?—*lignosus*’; and quotes ‘Rœmer and Sch. ‘Sys.,’ i., 39 and 40, *Sal. prostrata* et *S. perennans*.’ I doubt Koch’s opinion; the

mere fact of thick spikes does not make *radicans*. Nolte, 'Nov. Fl. Holst.,' 1 (1826), may have meant the true plant as *radicans*, as he says, 'vere perennis,' etc. The true plant seems to be found in France. Lange says, 'N. Spain.' *S. fruticosa*,  $\delta$ , *radicans*, Willk. and Lange, 'Prodr. Fl. Hisp.,' vol. 1, 308: 'Ad littora oceani pr. Cobus Galliciae, Lange.' And Richter accepts 'Angl. Gall. Hisp.' I much doubt the Denmark record. I now believe that we must consider Woods' plant as a subspecies. *S. lignosa*, Woods, in 'Proceed. Linn. Soc.,' ii., 109-113 (Ap. 15, 1851), = *S. radicans*, Sm.,  $\beta$ , *lignosa*, Townsend, in 'Fl. Hants,' 287 (1883). What we have to do is to find out how Woods' forms are represented on the Continent; surely we are better able to do this than the Germans." "Mr. Bennett's specimen noticed above is the only rooting one that I have seen out of a large number examined. At Thorney, near Emsworth, where *S. lignosa* abounds on the shingly west and south shores, I found several plants growing in soft mud, but displaying no tendency to root—just the converse of his experience at Shoreham with *S. radicans*."—Ed.

*Sueda fruticosa*, Forsk., var. *procumbens*, Syme. Sandy spit opposite Mudford, S. Hants; rather plentiful, and chiefly if not entirely this form, on the exposed and flatter side of this spit, August 19th, 1901.—E. F. LINTON. "Not uncommon on the south coast; I have seen it as far north as E. Ross."—Ed.

*Polygonum Convolvulus*, L. On waste ground off St. David's Road, St. Anne's-on-the-Sea, West Lancashire, 31st August 1901. Not recorded for v.c. 60 in 'Topographical Botany,' p. 356; one of three English counties for which a record is lacking.—CHARLES BAILEY. "Recorded in 'Record Club Report,' 1884-6."—Ar. Bennett. "I have seen it in v.c. 60."—Ed.

*P. Raii*, Bab. Mudford, S. Hants, 19th August 1901. Very plentiful this year, with a few plants of *P. maritimum*, L., scattered about amongst it. The two species were so distinct to sight that my boy soon understood the difference, and brought me in three specimens of the rarer species without a mistake. I only saw one ambiguous plant, which was nearest *P. maritimum*; the fruit typical and well developed.—E. F. LINTON. "The older name, *P. Roberti*, Loisel., appears to cover seaside forms of *P. aviculare*, L. as well—so Prof. Babington wrote to me in 1888."—Ed.

*Rumex crispus*, L., var. *trigranulatus*, Syme (confirmed by Mr. Ar. Bennett). Margin of salt marsh, Fleetwood, July 1901.—J. A. WHELDON.

*Euphorbia stricta*, L. Orig. Tintern, v.c., 35; hort. Thureaston, Leicester, 1901. Coll. T. A. Preston; comm. A. B. JACKSON.

*E. exigua*, L., var. A compact form, growing in limestone crevices—not in arable land—between Rhôs-on-Sea and the Little Orme's Head, borders of Denbigh and Carnarvon, September 1901. I send this compact, stout form to shew its condition when growing in limestone crevices near the shore.—J. COSMO-MELVILL. "I do not see

anything off type in this. It occurs on the Oolite of the Isle of Purbeck, in an extremely stunted form, yet without any characters to make a variety."—E. F. LINTON. "I agree; the real interest of this gathering consists in its proving that the species is a true native of Britain."—Ed.

*Euphorbia exigua*, var. *retusa* (DC.). Yeldersley, S. Derbyshire, 2nd August 1901. This was fairly abundant in crops, and the prevalent form, none of the type being seen.—W. R. LINTON. "Very well marked."—Ed.

*Urtica dioica*, L., var. *angustifolia*, A. Blytt. Wooded gully near Dolphinholme, v.-c. 60, W. Lancashire, August 1901.—J. A. WHELDON. "Right."—Ed.

*U. dioica*, L., var. *microphylla*? Near Ross, Herefordshire, 27th August 1901. I do not know whether this is correctly named.—AUGUSTIN LEY. "The name would fit this pretty form admirably, but I cannot find such a plant described among the numerous varieties in DC. 'Prodromus'; nor is it mentioned in any of the reference books in my possession."—Ed.

*Salix herbacea* × *Lapponum*. (1) No. 331, Glen Fiagh, Forfar, 24th July 1894; and cult. 23rd May, 28th June 1898. (2) No. 332, orig. Glen Fiagh; cult. 1898, 1901.—W. R. LINTON. "Correct."—Ed.

*Narcissus Pseudo-narcissus*, L. Sellack and Eardisley, Herefordshire, April 20th and 24th, 1901. A few specimens of the common form, sent for comparison with the next.—AUGUSTIN LEY.

*N. Pseudo-narcissus*, var. *lobularis*, Haw.? Pasture at Eardisley, Herefordshire, 17th April 1901. The plant sent under this name occurs scattered in tolerably large quantity, in company with many thousands of plants of type *N. Pseudo-narcissus*, over pastures some fifteen to twenty acres in extent at Eardisley. There is no question, in my judgment, of its being planted. In this plant the lobes and corona of the perianth are both full golden yellow, the lobes often, but not always, as deep as the corona; the corona obscurely six-lobed, irregularly laciniate between the lobes; edges erect or a little spreading. I could not find any plants agreeing exactly with Haworth's description of *N. lobularis* as given by Mr. J. G. Baker, 'Journ. Bot.,' vol. xiii. (1884), p. 193, nor with the plate there given. Many intermediates occurred between the plant with full golden yellow lobes to the perianth and ordinary *N. Pseudo-narcissus*, which might be the result of crossing. Lobes of the perianth varying much in breadth, and not as a rule broader than in *N. Pseudo-narcissus*.—AUGUSTIN LEY.

*Juncus Gerardi*, Lois., forma. Salt marsh, Fleetwood, West Lancashire, July 1901. Growing with our ordinary form. The present plant is much taller and grows in denser clumps. Mr. Bennett states that he has seen the same form from Scotland.—J. A. WHELDON. "Luxuriant state, probably due to soil and situation. There are parts of the Fleetwood marshes where the herbage is very coarse."—E. F. LINTON. "I agree; just the same state grows on the tidal banks of the Thurso river, Caithness."—Ed.

*Juncus filiformis*, L. Shores of Derwentwater, near Friar's Crag, Cumberland, June 1901.—J. COSMO MELVILL.

*J. obtusiflorus*, Ehrh., var. *confertus*, Döll, 'Rhen. Fl.,' 180 (1843). St. Ouen's Pond, Jersey, July 25th, 1900. Plentiful on the south side of the pond, with the type. I owe the name and reference to Mr. Arthur Bennett, who remarks: "I have not seen this form for England before. None of my specimens are anything like this."—L. V. LESTER. "Apparently a good variety."—Ed.

*Cyperus fuscus*, L. Ditches in the Walton Valley, North Somerset, 12th September 1901.—J. W. WHITE and R. P. MURRAY. "It is certainly native in Somerset. A man who was cleaning out the ditches said he had known it there for 40 years."—R. P. MURRAY.

*Scirpus cernuus*, Vahl. Moor ditch near Clevedon, Somerset, September 12th, 1901.—R. P. MURRAY. "This is the small-spiked variety which we have erroneously—according to Mr. C. B. Clarke—been calling var. *pygmaeus* (Kunth). I believe that he gives var. *monostachys*, Hook. fil., as the proper name, but cannot lay my hand upon the reference."—Ed.

*S. sylvaticus*, L. Abundant in the Altyre Woods, south of Forres, north-west Elginshire. 29th June 1901. Not included in 'Topographical Botany,' p. 441, for v.-c. 95.—CHARLES BAILEY. "I suspect that this may be var. *dissitiflorus*, Sonder; of which, however, I possess no named specimen."—Ed.

*S. Caricis*, Retz. Bank of the river Greeta, at Wrayton, v.-c. 60, West Lancashire, at 100 feet, August 1901. Sent as a new record for v.-c. 60.—ALBERT WILSON. "N. C. R."—Ar. Bennett. "A very fine growth! The tallest specimen sent me is 16 inches, an inch more than the largest specimen I have yet seen, and four inches more than Syme's extreme measurement."—E. F. LINTON. "I have it quite as luxuriant from Miller's Dale, Derbyshire, collected by Mr. Bailey. There is a sheet of *S. Caricis* (labelled *Blysmus rufus*) from damp sands between Lytham and St. Anne's, v.-c. 60, in my herbarium; gathered August 16th, 1891, by Mr. Melvill."—Ed.

*Carex teretiusscula*, Good. Bog near Docker, v.-c. 60, W. Lancashire, June 1901. New to v.-c. 60.—ALBERT WILSON and J. A. WHELDON. "N. C. R."—Ar. Bennett.

*C. paniculata*, L. (1) Near Llwydcoed, v.-c. 41, Glamorgan, June 1901, N. C. R.—H. J. RIDDELSDELL. "E. F. Linton, 1885."—Ar. Bennett. (2) Near Hirwaun, v.-c. 42, Brecon, June 1901. N. C. R.—H. J. RIDDELSDELL. "I had this from Newbould in 1884."—Ar. Bennett.

*C. Leersii*, F. Schultz (*C. muricata*, var. *pseudo-divulsa*, Syme). See 'Journ. Bot.,' 1898, p. 74. Near the Avon under Sneyd Park, below Bristol, v.-c. 34, 26th May 1901. These are considered to be typical specimens of a rare sedge that is apparently unknown in Somersetshire, but which occurs abundantly in parts of West Gloucester.—J.

W. WHITE. "No doubt correct; but too young to show the fruit-character well. Pfarrer Kükenthal considers it to be a distinct species."—Ed.

*Carex Goodenowii*, J. Gay, var. *elatiior*, Lang. Cors Bodeilio, Anglesey, July 1900. In this interesting marsh the forms of *Carex Goodenowii* are very numerous. This variety occurs as a broad-leaved and as a narrow-leaved form, and in a melanic condition; and also with shorter glumes (*chlorostachya*).—G. CLARIDGE DRUCE. "*C. vulgaris*,  $\beta$ , *elatiior*. Duplo fere major; gracilior, spicis femineis elongatis: hujus forma tenuissima cum foliis subconvolutis-filiformibus et spicis distantibus gracilioribus est *C. vulgaris juncella*, Fr.!" Lang in 'Linnæa,' vol. 24, pp. 556-7 (1851).—Ar. Bennett.

*C. pallescens*, L. Near Llwydcoed, Glamorgan, June 1901. N. C. R.—J. H. RIDDELSDELL. "I have a record for v.-c. 41 from E. F. Linton, 1892."—Ar. Bennett.

*C. ventricosa*, Curtis. Originally from a British locality. Hort. Thurcaston, 1901; coll. T. A. Preston.—A. B. JACKSON. "No doubt from Godalming, Surrey. Hardly worth sending."—Ed.

*Spartina stricta*, Roth. Yar Marsh, Yarmouth, Isle of Wight, August 1899.—C. E. PALMER.

*S. Townsendi*, H. and J. Groves. (1) Yar Marsh, Yarmouth, Isle of Wight, August 1899.—C. E. PALMER. (2) Bosham, v.-c. 13, West Sussex, August 1st, 1901.—E. S. MARSHALL.

*Agrostis palustris*, Huds., wood form. Walton Wood, Derbyshire, 10th August 1899.—W. R. LINTON. "Is this *A. palustris*, Huds., var. *sylvatica*, Huds., 'Fl. Angl.,' p. 28 (1762)? I do not know the plant. Richter gives it as endemic to Anglia, as '*A. alba*, L., 'Sp. Plant.,' ed. i., 63 (1753), k. *sylvatica*, Huds. 'Pl. Eur.,' vol. i., 43 (1890)."—Ar. Bennett. "Hudson's description in his second edition (1778) is under the name *A. polymorpha*,  $\eta$ , *sylvatica*:—'*Agrostis panicula coarctata mutica*, calycibus æqualibus corolla ante inflorescentiam calyce brevior, postea duplolongiore, *Fl. Angl.*, 28'; the original stations being given as *in sylvis humidiusculis* in Bishop's Wood, Hampstead. Mr. Buddle. *R. syn. in sylvula* Hornsey Wood dicta.' The present plant does not agree well, as it has a somewhat spreading panicle; I have seen it on the lower greensand in various places under trees about Witley and Godalming, Surrey, but considered it merely a state due to shade and drought."—Ed.

*A. palustris*, var. Salt marsh, and near the Warren, Fleetwood, v.-c. 60, W. Lancashire, 7th August 1901.—J. A. WHELDON. "Both gatherings are well-marked var. *coarctata* (Hoffm.)."—Ed.

*Ammophila arundinacea*, Host. Sandy shores of Holy Island, August 1901. A form with rather longer and more slender inflorescence than the type.—G. CLARIDGE DRUCE. "I do not think that this can be named; I believe I have seen it at Palling, in Norfolk."—

Ar. Bennett. "Fine spikes are not unfrequently a little lax below."—  
E. F. Linton. "Impossible to separate from type, I think."—Ed.

*Weingartneria canescens*, Bernh. Sand dunes, the Quenvais,  
Jersey, 14th July 1901.—L. V. LESTER.

*Catabrosa aquatica*, Beauv. Langness, Isle of Man, 23rd August  
1899.—S. GASKING. "N. C. R."—Ar. Bennett. "Dreadful speci-  
mens."—Ed.

*Bromus racemosus*, L. Canal banks, Aintree, S. Lancashire,  
July and August 1901.—J. A. WHELDON. "New county record for  
South Lancashire."—Ar. Bennett.

*B. interruptus*, Druce in 'Pharm. Journ. Suppl.' (October 5th,  
1895), 'Journ. Bot.' (December 1895), and in 'Linn. Soc. Journ.'  
(1896), pp. 426-430. In a field of vetches in the parish of Brightwell  
Salome, Oxon., June 1901. Exception has been taken to the citation  
of the species from 'Pharm. Journ. Suppl.,' because the species is not  
diagnosed there; but the plant itself had been previously diagnosed by  
Prof. Hackel *in litt.*, and published by me in 'B. E. C. Report' (1888),  
p. 240, as a variety of *Bromus mollis* under the name *interruptus*.  
Subsequent study, however, revealed that it possessed claims for  
specific distinction, and I accordingly named it as a species in the  
above periodical; and this has priority over either the 'Journal of  
Botany,' where a brief diagnosis was given, or the 'Journal of the  
Linnean Society,' where a full account and description are pub-  
lished.—G. CLARIDGE DRUCE. "The two specimens in my parcel  
striking me as rather poor examples led to my examining them, and  
finding all the flowers opened on one plant with the palea entire, and all  
I opened on the other with the palea split to the base. It then became  
evident that the specimen with the entire palea had all the appearance  
of being *B. mollis*, L., and not *B. interruptus*, Druce; it is, in fact,  
*B. mollis*, var. *glabratus*, Doell. The full account of *B. interruptus*  
occurs in 'B. E. C. Report,' 1895, pp. 503-4, where Mr. Druce  
raises it to a species. Mr. W. H. Beeby questions whether it is not a  
monstrosity rather than a species; Prof. Hackel hesitates between a  
species and an anomalous form, believing the split palea to have  
originated from some abnormal state; and the editors of the 'Report'  
(Messrs. Groves) report that 'Dr. Stapf and Mr. Rendle considered  
this (plant) a monstrosity rather than a species.' It would be inter-  
esting to learn what is Prof. Hackel's matured opinion. From the  
time when I first found it, near Thetford, Norfolk, June 1882, and  
tried through Mr. Arthur Bennett to get a name, but in vain, and so  
let it be, I have always regarded it as a *B. mollis* variety, and do not  
see reason to alter this view."—E. F. Linton. "I also think this too  
closely allied to *B. mollis*. The 'Pharmaceutical Journal' is not a  
strictly botanical publication; new species would be more fitly pro-  
posed in some more representative organ."—Ed.

*B. arvensis*, L. (*teste* Ar. Bennett). Canal bank, Aintree, v.-c. 59,  
South Lancashire, July 1901.—J. A. WHELDON.

*Lolium perenne*, L. Dry beech wood, near Pitchcombe, v.-c. 33, E. Gloucestershire, June 14th, 1901. This agrees with Babington's description of var. *tenue*, L.; but it may only be a state, due to the shallowness of soil over limestone.—EDWARD S. MARSHALL. "Near to var. *tenue*, I think, but perhaps only a wood form of type."—Ar. Bennett, in 'Watson B. E. C. Report,' 1901-2, p. 25.

*Agropyron junceum*, Beauv. Growing with *Elymus arenarius*, L., on the sandy beach of Findhorn village, near Forres, north Elginshire, July 1901. Not recorded in 'Topographical Botany,' p. 504, for v.-c. 95, only four Scotch counties being given for the species.—CHARLES BAILEY. "Recorded from Findhorn and Lossicmouth by Marshall and Shoolbred in 'Journ. Bot.,' 1899, p. 389. I have seen it in seven Scottish vice-counties, including Caithness and W. Sutherland."—Ed.

*A.* ———. Sent as '*Triticum acutum* × *repens*?' Amongst blown sand, within reach of high tides, to the west of Flcetwood, v.-c. 60, W. Lancashire, July 1901. The name and query suggested by Mr. Druce. There was only *T. junceum* growing in the immediate vicinity so far as I observed.—J. A. WHELDON. "There is certainly a look of *Agropyron acutum*, auct. brit., about these specimens, in regard to the spike at least; but after careful examination I cannot find any details that justify that view. The leaves are purely *A. repens* leaves; and in the spike itself the characters are so entirely those of *A. repens* that I can only suppose it has acquired a look of *A. acutum* from growing in seaside sand. I believe it, therefore, to be *A. repens*, maritime form, and not the hybrid that is suggested."—E. F. LINTON.

*Lastræa spinulosa*, Presl, var. *glandulosa* (Moore). Boggy wood, Pont Esgob, Herefordshire, 28th August 1901. In the character of the scales, and the glandular development of the under surface of the frond, this seems to me to represent Moore's plant very well.—AUGUSTIN LEY. "I cannot name this so. I have an original specimen of it from Doubleday (Epping Forest); and that has not only the stipes densely covered with glands, but the pinnæ are so densely glandular as actually to seem to add to their thickness! I do not consider Mr. Ley's [plant from] Haugh Wood, Herefordshire, 3rd September 1891, as *glandulosa* either. On Mr. Ley's [plant from] Treven Glen, near Defyog, Brecon, 31st July 1899, Mr. J. G. Baker has noted: 'This is not exactly Newman's original *glandulosa*, which has sharper teeth and is more densely glandular.' And why does he quote Moore? Newman described it in 'Phytologist,' iv., p. 256 (1851): 'Attempt to characterise another apparently undescribed species of *Lastræa*, by Edward Newman.' In his 'British Ferns,' ed. 3, 154 (1854), he names it '*Lopodium glandulosum*.' In this book he had the genera-splitting craze on, of which Watson said: 'I shall declare war against it.' It is *L. dilatata*, var. *glandulosa*, Moore ('ex parte,' teste Syme), 'Handb. Brit. Ferns,' ed. 2, 124, ed. 3, 127; *Nephrodium dilatatum*, var. *glandulosum*, Hooker, 'Stud. Fl.,' 466. Syme in 'Eng. Bot.,' ed. 3, vol. 12, p. 82 (1886), says: 'I cannot help suspecting that *L. glandulosa* is a hybrid between *L. spinulosa*

and *L. dilatata*. Were it as abundant as either of the two, instead of being very scarce, we might consider it as a form from which *L. spinulosa* on one side, and *L. dilatata* on the other, were diverging; and the same might be said of *L. uliginosa*, from which *L. cristata* diverges in one direction and *L. spinulosa* in the other; and, lastly, we have *L. remota*, which connects *L. spinulosa*, or (as seems to me more probable) *dilatata*, with *L. Filix-mas*."—Ar. Bennett. "Mr. Ley has evidently taken the nomenclature of 'Lond. Cat.,' ed. 9, p. 46, for granted."—Ed.

*Lastrea dilatata*, Presl., var. *tanacetifolia*, Moore. Pont Esgob, Herefordshire, 28th August 1901. Glandular form, with the thin lamina and small sori of var. *tanacetifolia*.—AUGUSTIN LEY. "Misprinted 'tenaectifolia' in 'Lond. Cat.,' l.c."—Ed.

*Equisetum sylvaticum*, L., var. *capillare* (Hoffm.). Harthill, Cheshire, 15th August 1901. This is the only form of *E. sylvaticum* I have seen in Cheshire; in the Broxton Hundred of which, at any rate, it is a rare species.—A. H. WOLLEY-DOD. "The form we call *E. capillare*, Hoffm.; but a doubtful variety, probably the product of soil and situation."—E. F. Linton. "Hoffmann, 'Deutschlands Flora,' pars ii., p. 3 (1795), adds under *E. sylvaticum*: '(Equis. *capillare*, frondibus tenuissimus compositis sterilibus),' apparently meaning to express doubt of their specific distinctness. It seems to me a well-marked plant, as good as varieties usually are in the genus—which, perhaps, is not saying very much. In Scotland I have frequently seen typical *sylvaticum* growing in situations similar to those which produce *capillare*."—Ed.

*E. hyemale*, L. Sandy field near Weston-super-Mare, North Somerset, 13th September 1901.—R. P. MURRAY and JAMES W. WHITE. "Probably unknown in the county until observed, as I understand, by Mr. Corder, of Taunton. It is most remarkable that two *Equiseta*, both practically unknown to Somerset botanists, should be growing together in considerable quantity and should have escaped observation until the present year."—J. W. White. "Probably a N. C. R., though on record for the county in 'Fl. Bath Supp.' It is a rare plant in the south, but I have it from Surrey and have seen it from East Kent."—Ar. Bennett.

*E. variegatum*, Schleich., a. *arenarium*, Newman. Sandy field, Weston-super-Mare, N. Somerset, 13th September 1901.—R. P. MURRAY and J. W. WHITE. "New to the county. It grows together with *E. hyemale* in some abundance."—J. W. White. "Confirmation of v.-c. 6. I am not sure as to the source of that doubtful record, but think it was Newman in 'Phytologist,' circa 1845-6."—Ar. Bennett.

*Isoetes lacustris*, L. Llynfach, Vale of Neath, v.-c. 41, Glamorgan, 1901. See 'Journ. Bot.,' 1901, p. 344. Also discovered in Breconshire (42) and Caermarthenshire (44) in July 1901.—H. J. RIDDELSDELL.

THE  
BOTANICAL EXCHANGE CLUB  
OF THE BRITISH ISLES.

VOLUME II.

---

*REPORT FOR 1902.*



(ISSUED 10th DECEMBER 1903.)

PRINTED BY JAMES COLLINS & KINGSTON LIMITED, SOUTHGATE,  
MANCHESTER.

—  
1903.



# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

---

## REPORT OF THE DISTRIBUTOR FOR 1902.

---

As in the last Report, the inattention of some of the members to the rules causes much trouble and is unfair. The largest contributor's parcel is a model of "how to do it," while some of the smaller ones are just the opposite.

The thanks of the Club are due to Prof. Hackel, Mr. Groves, Mr. Pugsley, Mr. Hanbury, Mr. E. G. Baker, and the Rev. W. M. Rogers for kindly looking over many of the plants.

ARTHUR BENNETT.

*Croydon, 19th October 1903.*

---

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.		No. of Specimen
Bailey, Charles, <i>M.Sc., F.L.S.</i> , .. ..	160	Riddelsdell, Rev. H. J., <i>M.A.</i> .. ..	259
Bennett, Arthur, <i>F.L.S.</i> .. ..	110	Rogers, Rev. W. Moyle, <i>F.L.S.</i> .. ..	66
Druce, G. Claridge, <i>M.A., F.L.S.</i> .. ..	209	Shoolbred, W.A., <i>M.R.C.S., F.L.S.</i> .. ..	226
Groves, James, <i>F.L.S.</i> .. ..	36	Stewart, S. A., <i>F.B.S.E.</i> .. ..	50
Jackson, A. B. .. ..	56	Townsend, Frederick, <i>M.A., F.L.S.</i> .. ..	73
Johnston, Major H. H., <i>D.Sc., M.D.</i> , etc. ..	18	Waddell, Rev. C. H., <i>M.A.</i> .. ..	62
Lester, L. V., <i>M.A., F.L.S.</i> .. ..	55	Wheldon, J. A. .. ..	60
Ley, Rev. A., <i>M.A.</i> .. ..	834	White, J. W., <i>F.L.S.</i> .. ..	146
Linton, Rev. E. F., <i>M.A.</i> .. ..	49	Wilson, A., <i>F.L.S.</i> .. ..	50
Linton, Rev. W. R., <i>M.A.</i> .. ..	195	Wolley-Dod, Major A. H. .. ..	159
Marshall, Rev. E. S., <i>M.A., F.L.S.</i> .. ..	110		
Painter, Rev. W. Hunt .. ..	88		
Palmer, Miss C. E. .. ..	50		
			<u>3121</u>

*Ranunculus*, sp. This Batrachian grew in the Wye, near Symond's Yat, West Gloucestershire and Herefordshire, in September 1900, and was remarkable from the fact that it was freely rooting at the stem joints; these roots I have endeavoured to show in the flowerless specimens sent, which were the best I could obtain. It grew in the shallows and where the water was flowing rapidly with *Potamogeton angustifolius*, Presl. A new county record.—G. CLARIDGE DRUCE. "Impossible to name these specimens."—Ed.

*R. heterophyllus*, Web., c. *submersus*, Hiern. Portbury Marshes, North Somerset, 27th May 1901.—J. W. WHITE. "Judging from this specimen we think this may be a hybrid, with *heterophyllus* as one parent, the thick stem, ascending peduncles, and undeveloped fruits pointing in that direction."—H. and J. Groves.

*R. peltatus*, Schrank. Pool on Potter's Hill, 600 feet, North Somerset, 15th June 1902.—J. W. WHITE. "Yes, a small form."—H. and J. Groves.

*Helleborus fatidus*, L. Farley Dingle, near Much Wenlock, May 1902. Undoubtedly originally planted, but it is now well established in this habitat and has spread very much.—W. HUNT PAINTER.

*Fumaria purpurea*, Pugsley (?). On a hedge bank at Lyonshall railway station, Herefordshire, 19th June 1902. I am not quite satisfied that my determination is right, but if so this will be a new county record, I suppose.—AUGUSTIN LEV. "Not *F. purpurea*: sepals much too small for that species. A rampant state of *F. Boraei*, Jord."—H. W. Pugsley.

*Arabis ciliata*, R. Br., var. *hispida*, Syme. Ref. No. 2650. This grew plentifully (24th June 1902) on sandhills about a mile north of Castlegregory, Kerry, Ireland, associated with a fair amount of the type and a small quantity of *A. hirsuta* (probably var. *glabrata*, Syme), which was remarkably distinct-looking from both. The only difference that we could detect between type and variety was in the latter having the leaf-surfaces hispid, instead of glabrous; it was also usually rather more robust. After seeing the true plant, I am doubtful about specimens formerly distributed by me as *A. ciliata*, var. *hispida*.—EDWARD S. MARSHALL. "See 'Journal of Botany,' 1903, p. 278."—Ed.

*Erophila*, sp. Ref. No. 2676. Downs above Rackham and Amberley, West Sussex, v.-c. 13, 10th May 1902. Petals about two and a half times as long as the sepals. Stems usually depressed, except the short, erect, central one. It seems to approach *E. majuscula*, Jordan; though that is described as having veined petals, which I failed to observe in the fresh specimens. Plants often large for the genus.—EDWARD S. MARSHALL. "Cannot get this named."—Ed.

*Sisymbrium polyceratium*, L. Alien. Birkenhead Docks, Cheshire (58), 2nd August 1902. Although this plant appears for the first time in the 'Flora of Liverpool' in 1902, it must have been established at Birkenhead and known to local botanists for over 30 years, as I have a specimen from this locality collected by Mr. H. S. Fisher in 1872.—J. A. WHELDON. "I have an earlier specimen of Mr. Fisher's collected at Egremont, Cheshire, in August 1871."—Charles Bailey.

*Camelina sativa*, Cr. In a clover field near Salford, Bedfordshire, June 1902. I do not know the variety.—G. CLARIDGE DRUCE. "*C. eu-sativa*, Syme, I believe."—Ed.

*Subularia aquatica*, Linn. Llyn-y-fan-fach, Carmarthenshire, vice-county 44. Very small plants, but quite characteristic and in good flower, with fruit well developed on the more forward specimens, 21st July 1902. Apparently a new record for South Wales province of H. C. Watson. The Carmarthenshire Fan is a lofty hill reaching the height of 2300 feet, with a long northward face of almost inaccessible cliff, curving round a small lake (Llyn-y-fan-fach), and the whole flora bears quite a northern character; e.g., *Hieracium rivale*, *Galium boreale*, *Sedum Rhodiola*, on the rocks; *Isoetes*, *Subularia*, etc., in the lake. Cf. 'Journal of Botany,' October 1901, p. 344.—H. J. RIDDELSDELL.

*Reseda lutea*, Linn. On the sandhills opposite St. Thomas's Church, St. Anne's-on-the-Sea, West Lancashire, 12th July, 30th August, and 20th September 1902. Not mentioned for vice-county 60 in 'Topographical Botany,' ed. ii., p. 52, but doubtless recorded by some previous observer for this well-worked vice-county. The like remark applies to the other plants from this vice-county which I send up for this 'Report.'—CHARLES BAILEY.

*Viola Riviniana*, var. *nemorosa*, Neum., W., et Murb. Plentiful in Comber Wood, near Houghton, West Sussex, vice-county 13, 3rd May 1902. Flowers large and handsome; spur coloured, scarcely furrowed. Unfortunately the colour is very fugitive, I have never yet succeeded in permanently preserving it.—EDWARD S. MARSHALL. "Rightly named."—W. H. Beeby.

*V. Paillouxi*, Jordan. Near Denham, Buckinghamshire, June 1902.—G. CLARIDGE DRUCE. "Yes, this is very closely allied to a specimen named *V. Paillouxi* by M. Déséglise in the 'Herb. Mus. Brit.' The difference seems to be in the lateral lobes of the stipules (in the Déséglise plant) being rather longer, and the peduncles longer, and the flowers rather larger."—E. G. Baker.

*V.*, near *V. carpatica*, Borbas (?). Near Pilling Station, West Lancashire, vice-county 60, August 1902. J. A. WHELDON. "A form of *V. carpatica*, Borbas."—E. G. Baker.

*Viola* sp. Cockerham Moss, West Lancashire, 25th August 1902.—D. A. JONES and J. A. WHELDON. "A member of the '*arvensis*' series, closely allied to *V. mentita*, Jordan."—E. G. Baker.

*V.* sp. Odiham, North Hants, 18th July 1902.—C. E. PALMER. "A member of the '*arvensis*' series, allied to *V. mentita*, Jordan."—E. G. Baker.

*V.* sp. Sandy railway bank, Selham, West Sussex, vice-county 13, 10th May 1902.—E. S. MARSHALL. "A member of the '*arvensis*' series, perhaps *V. obtusifolia*, Jordan."—E. G. Baker.

*Cerastium semidecandrum*, L., forma. This plant grows rather plentifully on the greensand formation at Bow Brickhill, Buckinghamshire, June 1902. It has a very different facies from the ordinary plant of the Midlands, but I have been unable to match it with any named form.—G. CLARIDGE DRUCE.

*Sagina Reuteri*, Bois., glandular form. Birkenhead Docks, Cheshire (58), 31st July 1902. This has been referred to three different species by as many well-known botanists. I cannot agree that it belongs to any of our British forms. Mr. Williams says: "I have little doubt that it is *S. Reuteri*. You will notice that the valves of the capsules are emarginate truncate at the tip. In *S. apetala* the outer sepals have a small mucro, and in fruit all the sepals are patent. In your specimens all the sepals are much shorter than the capsule; in *S. ciliata* they are about the same length as the capsule. *S. Reuteri* is a small plant compared with other species of the genus. That it is a British plant is very doubtful, and if found near Liverpool I would suggest that it was imported with ballast from a Spanish port. I have seen Spanish specimens under this name quite as glandular as yours; but I suspect that such a character depends upon the station where it is found. That a plant introduced from the south of Europe would develop some modification in its glandular covering is quite likely. I think your specimens are quite distinct from the British members of the genus recognised as indigenous." Mr. Bennett, to whom also I submitted specimens, sent me *S. Reuteri* for comparison with my plants, and I could see no difference, except in the relative length of the internodes and the denser glandular pedicels of my plant. It is new to county 58.—J. A. WHELDON.

*Geranium pusillum*, L., forma *pallidiflora*. In a dry sandy piece of ground recently reclaimed from heathland, and now going back to its former condition, on the greensand at Bow Brickhill, Buckinghamshire, June 1902. The flowers were uniformly paler than in the type, and in some instances were nearly white.—G. CLARIDGE DRUCE.

*Trifolium scabrum*, L. I send this as a new county record for vice-county 35. The Rev. E. S. Marshall and I found it this summer growing in great plenty in an old disused quarry at Portskewett, together with *T. striatum*.—W. A. SHOOLBRED.

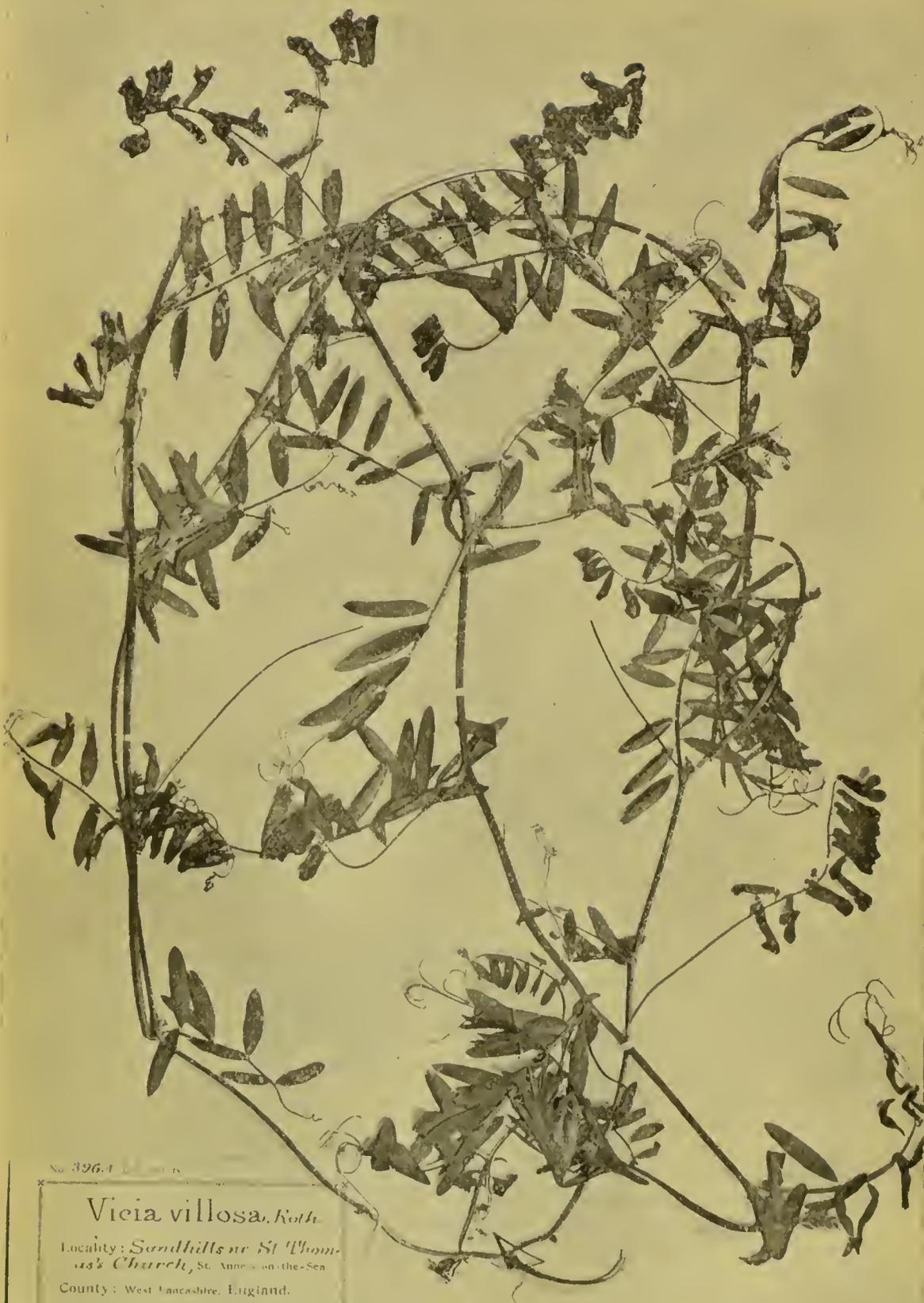
*Lotus angustissimus*, L., var. *Seringianus*, Bab., 'Fl. Sarn,' p. 28 (1839). Grand Val, Jersey, 27th June 1901. The specimens sent (I am afraid that they are very few) seem to answer to Babington's description: "Pedunculo semper folium subsequente, foliolis obovato-oblongis stipulisque ovatis acutis, caulibus ascendentibus—*L. angustissimus*, Ser., in DC. Prodr." Whether such a form deserves a varietal name is a matter of opinion.—L. V. LESTER.

*Vicia villosa*, Roth. Alien. Bank of the Wyre, near Fleetwood Docks, West Lancashire (60), July 1902. I first found this plant in this locality in 1901 (*vide* 'Journ. Bot.,' 1901, p. 24), but had previously met with it in South Lancashire, near Aintree, and in Cheshire, near Birkenhead. Of specimens submitted to Mr. Bennett, he said: "Yes, the true plant of Roth, and not the more common glabrescent form."—J. A. WHELDON.

*V. villosa*, Roth. Sandhills opposite St. Thomas's Church, St. Anne's-on-the-Sea, West Lancashire, 6th and 20th September 1902. See remarks under *Ambrosia artemisiifolia*, L., on page 46 of this 'Report.' This is one of several aliens occurring at this station, but in limited quantity, only three or four flowering examples being met with. I take the plant to be *V. villosa*, Roth, probably Koch's variety *glabrescens* of that species, = *V. dasycarpa*, Ten. It is allied to *V. Cracca*, L., but with fewer flowers in the spike, all open about the same time, but more separated from each other and much less pendant. The accompanying Plate III., lent by the Manchester Literary and Philosophical Society, is photographed from a herbarium specimen two and a half times larger than the plate. In the examples sent to the Club the flower spikes have assumed a dark royal blue colour, but in their living state on the sandhills they are of a rich claret colour, unlike that of any of our native vetches. The flower spikes do not show up very well on the plate compared with their appearance on the herbarium sheet to which they are affixed, but they may be identified from the leaves by their much longer stalks and by the absence of the prehensile tendrils which are so characteristic of the upper part of the leaves. The handsome flowers are gathered almost as soon as they are produced, as the locality is a favourite resort for children; certainly none of the flowers reached the fruiting stage in 1902. In the wind-storms of the early spring of 1903 the drifting sand covered the station to a depth of a foot or a foot and a half, and the species was not observed during 1903.—CHARLES BAILEY.

*V. lathyroides*, Linn. On the sea-embankment at Fairhaven, near St. Anne's-on-the-Sea, West Lancashire, 24th May 1902. Not recorded for vice-county 60 in 'Top. Bot.,' p. 122.—CHARLES BAILEY. 'See 'Journal of Botany,' 1900, p. 43.'—Ed.

*Rubus plicatus*, W. & N., var. *Bertramii*, G. Braun. Stony ground and open woods at Llanwrtyd, Breconshire, 22nd July 1902. This form is more common than the type in South and Central Wales,



No. 396.1

*Vicia villosa*, Roth.Locality: Sandhills ne St Thom-  
as's Church, St. Anne's-on-the-Sea

County: West Lancashire, England.

Top. Botany: Vice Co 60 West Lancast.

Coll: Charles Bailey 23rd August 1907.

so far as I have botanised. These specimens have not been seen by Rev. W. M. Rogers. N.B.—Unless otherwise stated, all the brambles I send have been submitted to Rev. W. M. Rogers.—AUGUSTIN LEY.

*Rubus holerythros*, Foeke, variety. Moorland ditches and plantation sides on Mitcheldean Meend, West Gloucester; altitude, about 830 feet; 20th August 1902. This plant was seen in situ by Rev. W. M. Rogers in 1896. On taking these specimens to him in the present year, Mr. Rogers made the following remarks on them: "On the whole, this plant is nearest to *R. holerythros*, Foeke; but receding towards *R. latifolius*, Bab., in the shape of the leaves. Panicle laxer than in typical *R. holerythros*, and flowers smaller." The stem in the growing plant is burnished; petals pink.—AUGUSTIN LEY.

*R. affinis*, W. & M. Very abundant on a common, Sarnesfield, Herefordshire, 13th August 1902. Very rare in Herefordshire, and previously to this year only a single bush had been known in the county.—AUGUSTIN LEY.

*R. Bakeri*, F. A. Lees. On high banks by the sea, Killough, Co. Down, 30th July 1902.—C. H. WADDELL. "Yes."—W. M. R.

*R. Bakeri*, F. A. Lees. In great quantity on Barnes Common, Surrey, 20th August 1902. One of our most easily recognised brambles, and from its local abundance characteristic of several of the Surrey heaths and commons near London, as e.g., Wimbledon, Putney, Barnes, and Wandsworth. I have also seen it at Walton and Oxshott in the same county, and at Chislehurst Common, West Kent; while I have herbarium specimens from Hayes Common, West Kent, and Ham Common, Surrey. Elsewhere in Great Britain (as in Ireland) it seems more thinly scattered.—W. MOYLE ROGERS.

*R. nemoralis*, P. J. Muell. Branksome Park, Dorset, 8th September 1902. In the case of this species some late-gathered pieces (such as I now send) are exceptionally desirable for the herbarium, as illustrating the remarkable lengthening of the strongly-ascending lower panicle branches, so characteristic of *R. nemoralis*, in comparison with its near allies, *R. pulcherrimus* and *R. rhamnifolius*.—W. MOYLE ROGERS.

*R. pubescens*, W., var. *subinermis*, Rog. Coekshot and Harechurch Woods, Hope Mansel, Herefordshire, 20th August 1902. Very abundant in these and neighbouring woods for the distance of about one mile, and spreading into West Gloucester.—AUGUSTIN LEY.

*R. macrophyllus*, W. and N. Stirehley, near Shifnal, Salop, August 1902.—W. H. PAINTER. "Belongs to aggregate *macrophyllus*, but goes to sub-sp. *Schlechtendalii*, Weihe, rather than to the type."—W. Moyle Rogers.

*Rubus macrophylloides*, Genev., teste W. M. Rogers. Eastham wood, Cheshire (58), 4th August 1902. This grows mingled with *R. rosaceus*, var. *sylvestris*, and the great similarity between the stem leaves of the two plants has no doubt contributed to this addition to the Cheshire list being hitherto overlooked.—J. A. WHELDON.

*R. Sprengelii*, Weihe. Heath near Woore, Salop, 20th August 1902. The extraordinary cutting of the leaflets, and as a rule the very highly-developed panicles, made me suppose when I gathered this that it was some species quite unknown to me, though typical *Sprengelii* is familiar enough. Consequently I failed to obtain a sufficient quantity of the better-developed panicles to represent this peculiarity on all the sheets sent. The name is agreed to by the Rev. W. Moyle Rogers.—A. H. WOLLEY-DOD.

*R. Sprengelii*, Weihe, f. or var. Yeldersley Lane, near Shirley, Derbyshire, 12th August 1902. A few bushes of this grow in the hedge of the lane, which I have observed for several years. It differs from typical *R. Sprengelii* in its more robust habit; shape and texture of the leaflets, which are strongly reticulate underneath, with many shining white hairs on the veins; the many fine yellow prickles on the rachis; the sepals long-pointed, with red glandular hairs and yellow acicles; the styles, as in *Sprengelii*, are longer than the short stamens and green, the petals broad and pink. Dr. Focke remarked on its resemblance to his *R. cimbricus*, but this is only in the foliage, and in all other points it is distinct. Mr. Rogers agrees that it is connected with *R. Sprengelii*, and yet in many features different, and suggested a hybrid origin as the explanation. The bramble which prevails along the same part of the lane is *R. infecundus*, which exhibits just those features in which this plant differs from type *Sprengelii*, so that it may be very possibly *R. infecundus* × *Sprengelii*, more fertile than *Rubi* hybrids usually are.—W. R. LINTON. "Is it not a *Sprengelii* hybrid? I remember nothing like it from any other locality."—W. M. R.

*R. hirtifolius*, Muell. and Wirtg. Round the edges of dry heathy plantations on Mitcheldean Meend, West Gloucester; altitude more than 800 feet; 20th August 1902.—AUGUSTIN LEY.

*R. hirtifolius*, M. & W., var. *mollissimus*, Rogers. Dersingham Heath, West Norfolk, 1st September 1902. New county record.—A. B. JACKSON. "Yes, a form with exceptionally strong prickles on the panicle-rachis."—W. Moyle Rogers. "One specimen only sent, and retained by Mr. Rogers."—Ed.

*R. hirtifolius*, Muell. and Wirtg., variety *mollissimus*, Rogers. Open woods, commons, and fences, near Welsh Newton, Herefordshire, very abundantly, 1st August 1902.—AUGUSTIN LEY.

*R. cinerosus*, Rogers. Wyre banks, Knott End, West Lancashire (60), July 1902.—J. A. WHELDON. "Yes."—W. M. R.

*Rubus cinerosus*, Rogers (?) Preesall, West Lancashire (60), July 1902. Brambles were very backward at the time of my visit this year, and satisfactory stem pieces could hardly be obtained.—J. A. WHELDON. "Yes."—W. M. Rogers.

*R. Drejeri*, Jensen. Near Broxton Hall, Cheshire. Mr. Rogers writes: "I quite believe true *Drejeri*, though with softer leaves and less shaggy-looking panicles than usual. New record for v.-c. 58."—A. H. WOLLEY-DOD.

*R. dunensis*, Rogers. Sunny bank, Aughnadanagh, Saintfield, Co. Down, 4th August 1902.—C. H. WADDELL. "Yes."—W. M. R.

*R. radula*, Weihe, s.-s. *anglicanus*, Rogers. Almond Park, near Shrewsbury, county 40, July and August 1902.—W. H. PAINTER. "These nine sheets are exactly my *R. anglicanus*, sub-sp. of *R. radula*, as it usually grows in the northern half of England, *i.e.*, with stouter and less unequal prickles on both stem and panicle-rachis than is usual in the south. So far—and so far only—does it differ from the description of *anglicanus* in p. 63 of my 'Handbook.'"—W. M. R.

*R. radula*, Weihe. Almond Park, near Shrewsbury, July 1901 and August 1902. Named by Rev. W. Moyle Rogers.—W. HUNT PAINTER. "A strong form of my sub-sp. *anglicanus*, frequent in the north, and in its armature one step nearer to typical *radula* than the common South England form described in my 'Handbook of British Rubi,' p. 63. Several sheets sent with *anglicanus* from Almond Park by Mr. Painter are *R. rosaceus*, Wh. and N., sub-sp. *infecundus*, Rogers."—W. M. R.

*R. rudis*, W. and N. Railway embankment, Farley Dingle, near Much Wenlock, Salop, 19th August 1901. New to county. Named by Rev. W. Moyle Rogers.—W. HUNT PAINTER. "Yes."—W. M. R.

*R. Griffithianus*, Rog. (I am sorry that the authority was misquoted "Focke" on the labels.) Carey Woods, Herefordshire, 4th August and 5th September 1902. This plant has been long known to me in Carey woods, Herefordshire, and in a copse in Brockhampton parish. It was mentioned in 'Journal of Botany,' 1896, p. 217, as "*R. radula*, var. *anglicanus*, Rog." It is now placed without hesitation by Rev. W. M. Rogers under *R. Griffithianus*, but pronounced "not typical." New county record.—AUGUSTIN LEY.

*R. Babingtonii*, Bell Salt. Woods near Whitfield, Herefordshire, 6th August 1902. Locally abundant in the county.—AUGUSTIN LEY.

*R. foliosus*, Wh. and N. Rough ground between Bow Brickhill and Woburn Sands railway station, Buckinghamshire, 15th August 1902. A form of stiff soil. In its stout greenish stem, thick leaves, and white petals nearer to the typical German plant than is usual with us, but also somewhat recalling forms of *R. scaber*. Whole plant

unusually greyish, and leaves mostly 5-nate. Quite like *R. foliosus* and *R. saltuum* in the conspicuously shining upper surface of leaves (in living plant), and in the long narrow flexuose drooping panicle with strongly reflexed sepals.—W. MOYLE ROGERS.

*Rubus rosaceus*, W. and N., variety. Wood called "Llancrwm," near Longrove, Herefordshire, 1st August 1902. A remarkably pretty form, with deep red petals. Referred by Mr. Rogers to type *R. rosaceus*, W. and N.—AUGUSTIN LEY.

*R. rosaceus*, W. and N., var. *Purchasianus*, Rog. Sellack, Herefordshire, 31st July and 30th August 1902. From the bushes whence the specimens in the 'Sets of British Rubi' were supplied.—AUGUSTIN LEY.

*R. K hleri*, sp. coll., var. *cognatus*, N. E. Brown. Mynde Wood, Herefordshire, 26th August 1902. Just the ordinary Herefordshire plant, for which see remarks in the 'B. E. C. Report' for 1901, p. 9. These specimens were not seen by Rev. W. M. Rogers.—AUGUSTIN LEY. "I suppose certainly a form of *R. K hleri*, Wh. and N., and nearer to var. *cognatus* than to the type, though (like much of the Herefordshire woodland *cognatus*) hardly characteristic in leaf or panicle."—W. M. R.

*R. fuscoater*, W. Open common and fences, Welsh Newton, Herefordshire, 1st August 1902. First named by Professor Babington many years ago, and since confirmed more than once by Rev. W. M. Rogers. Mr. Rogers in the present year (1902) made the following remarks on this plant:—"Certainly under *R. fuscoater*, W., in spite of the foliage being harsher than in the Derbyshire plant."—AUGUSTIN LEY.

*R. acutifrons*, A. Ley, var. *amplifrons*, A. Ley. Very abundant in a large wood, Whitfield, Herefordshire, 6th August 1902. For an account of this plant see 'Journal of Botany,' 1902, page 69.—AUGUSTIN LEY.

*R. hirtus*, W. and K., var. *Kaltenbachii*, Metsch. Stony hillsides and fences, St. Briavel's, West Gloucester, 16th October 1902. Form with almost exclusively ternate leaves.—AUGUSTIN LEY.

*R. dumetorum*, W. and N., var. *triangularis*, A. Ley. Upper Sapey Common, Herefordshire, and Stanford Park, Worcestershire, 14th August 1902. The Sapey specimens are good and characteristic, the Stanford Park ones less so. I traced this plant this year some four miles up the Teme valley to the neighbourhood of Eastham, Worcestershire.—AUGUSTIN LEY.

*R. dumetorum*, Wh. and N.? Bradley, Derbyshire, 24th August 1894.—W. R. LINTON. "I believe that the name suggested should stand, and that the form is not far removed from var. *ferox*, Weihe."—W. M. R.

*Rosa tomentosa* × *tomentella*? Hedges near Bickerton Lane, Cheshire, 27th July 1902. This appears to be the same hybrid as I sent to the Club last year ('Report,' 1901, p. 10), though from a different locality. It formed a tall, straggling bush about nine feet high. The flowers are very pale rose and the styles very woolly. The general aspect of the bush recalled *tomentella*, and I think Mr. Marshall's suggestion that this is one of the parents is probably correct.—A. H. WOLLEY-DOD.

*R. systyla*, sp. coll. Near Lavington Church, West Sussex, 13th July 1902. I send four forms which might, probably, have all been more correctly labelled *R. systyla*, but as I cannot see characters restricting them to that segregate, I prefer to leave them under the aggregate species of the 'London Catalogue.' Form 1 may represent normal *R. systyla*, Bast. Form 2 differs essentially in its glabrous peduncles, and, in most of the specimens, in short styles and rather small, somewhat roundish fruit. Form 3 has small, very round fruit, and in this respect resembles interim states of Form 2, but the style column is always conspicuously protruded, and the peduncles, though less strongly setose than usual, are decidedly so. Form 4 generally resembles normal *R. systyla*, Bast., but has sessile styles. It has very pale rose flowers. I am sorry that I had no opportunity of noting the colour of the flower in the other three forms, and that I could not make an exactly equal number of all four forms so that one of each could be distributed together.—A. H. WOLLEY-DOD.

*R. pomifera*, Herm. For several years I have known of the existence of one bush of this rose in a hedge-row near Tidenham Chase, and on one occasion sent specimens to the Club, but have never been able to get it satisfactorily named. This year, while out with me, Mr. Marshall discovered another bush at the border of the wildest part of the common, and specimens shown by him to the Rev. W. M. Rogers were by him named as above.—W. A. SHOOLBRED.

*Pyrus intermedia*, Ehrh. Rocks in Cheddar Gorge, North Somerset, 30th July 1902. This addition to the Somerset county flora is due to the keen eye of Rev. Augustin Ley, who detected one or two small bushes without fruit in the autumn of 1901. Other trees, yielding these specimens, were found this summer. The *Pyrus* forms of this group are terribly puzzling plants, as must be realised on comparing this *intermedia* with the true *scandica*, Asch., distributed by Mr. Ley from Brecon and Denbigh.—JAS. W. WHITE.

*P. latifolia*, Syme. Limestone rocks in Leigh Wood, North Somerset, 7th June 1902. Only one tree of this was known in the vice-county until Rev. A. Ley in 1901 informed me that he had seen two or three small bushes in another part of the wood. After renewed search I came upon the fine tree—thirty feet—from which these specimens were taken. I have given them Syme's name as being one more likely to stand than that of 'Lond. Cat.'—JAS. W. WHITE.

*Carum Petroselinum*, Benth. and Hook., f. In a cornfield at Sarsden, Oxfordshire, plentifully, July 1902. There were no alien plants present. I have also seen it in similar situations in South Buckinghamshire, but there it was associated with doubtfully-native species.—G. CLARIDGE DRUCE.

*Ænanthe fluviatilis*, Colem. In the old coal canal near Midford, North Somerset, July 1902. Extremely rare in the west country, Dorset only excepted.—JAS. W. WHITE.

*Galium erectum*, Huds. Stony ground on Breakheart Hill, Dursley, West Gloucester, 27th August 1902. I agree with Hewett Watson in his expressed opinion that this is a difficult species, and not well understood by all of us. And this is probably the reason why the station here given is the only one with which I am acquainted within many miles of Bristol. New county record.—JAS. W. WHITE.

*G. Mollugo*, L., variety. Hedge, Perrystone, Herefordshire, 2nd August 1902. Under var. a, *elatum*, Thuill., I suppose, but remarkable for the suberect fruiting pedicels.—AUGUSTIN LEY.

*G. sylvestre*, Poll., v. *hirtum*, Koch. Above Andover ford, East Gloucester, July 1900. New county record for 33.—G. C. DRUCE.

*Valerianella carinata*, Loisel. Gathered in Glyn Neath, vice-county 41, on a wall, June 1902. I also enclose some ripe fruit from exactly the same situation, gathered later in the season. New county record for Glamorganshire.—H. J. RIDDELSDELL.

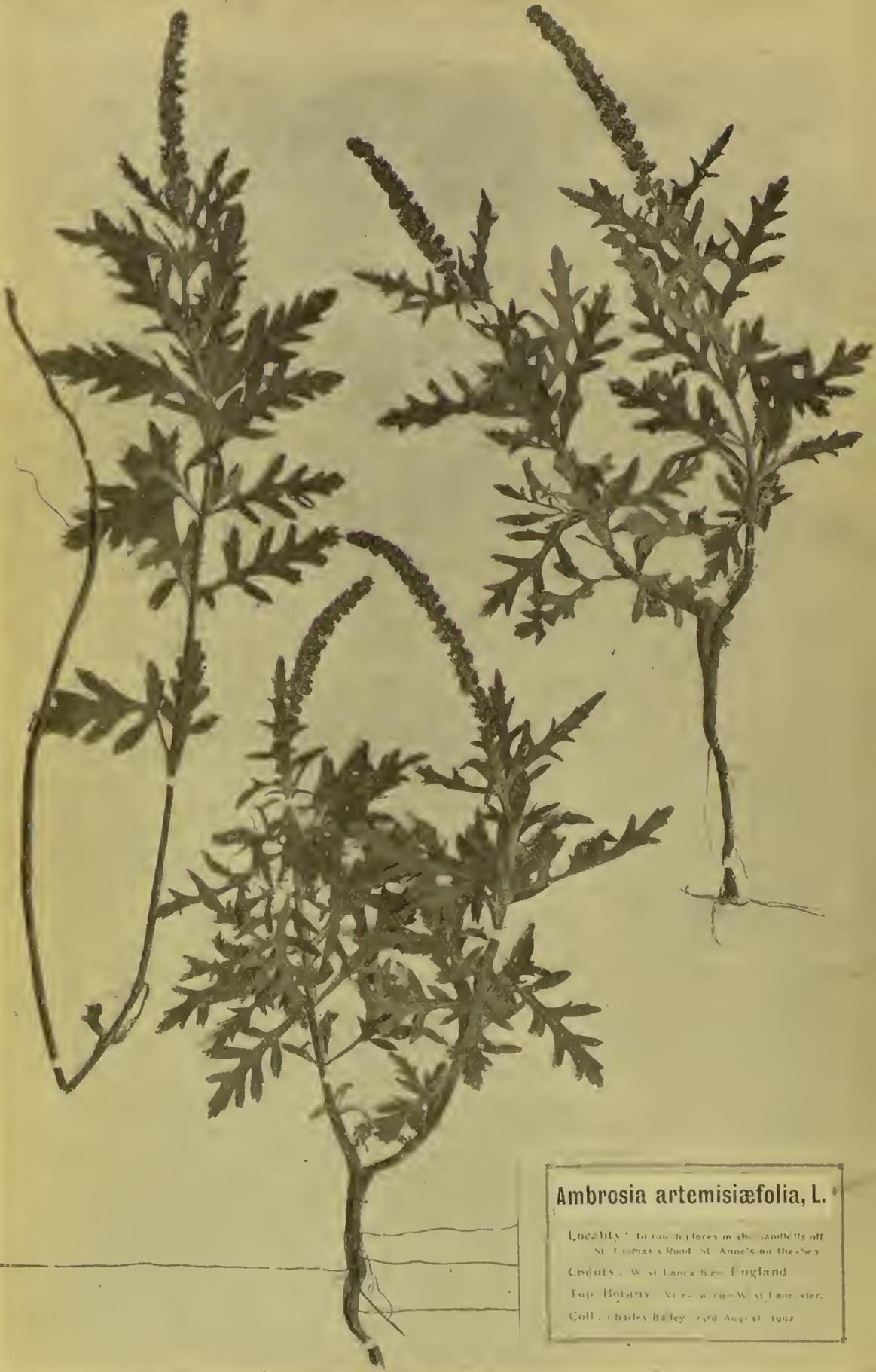
*Aster Tripolium*, L., var. *discoidea*. Salt marsh near Hunstanton, West Norfolk, 1st September 1902. With these plants occurred a form intermediate in character, a few ligulate florets being noticeable. Major Wolley-Dod has noticed that this is particularly the case when the plants are liable to be covered at high tides. The Hunstanton plants appeared to be a long distance from tidal influence.—A. B. JACKSON.

*Xanthium spinosum*, L. Alien. On waste ground near Linacre, South Lancashire (59), 2nd October 1902. The Bootle locality from whence I sent specimens on a previous occasion has been destroyed by "improvements."—J. A. WHELDON.

*Ambrosia artemisiæfolia*, L. In rough places in the sandhills off St. Thomas's Road, St. Anne's-on-the-Sea, West Lancashire, 23rd August 1902. I have posted to the members a copy of a short paper contributed to the 'Memoirs of the Manchester Literary and Philosophical Society,' vol. xlvii. (1902), No. 2, and entitled "On the Adventitious Vegetation of the Sandhills of St. Anne's-on-the-Sea, North Lancashire," from which the following remarks are condensed:—A curious arrangement of the flowers of this species at one time led me to think that the plant was diœcious, because spikes bearing con-

spicuous male flowers would be found growing by themselves, and other plants bearing conspicuous female flowers grew by themselves; but a little examination disclosed the fact that the other sex was present, though in much less proportion. The great mass of the plants bore the male flowers in profusion on the upper portion of the flowering spike, while the female flowers were below in greatly reduced numbers. As a rule the St. Anne's plants show a tendency to produce antheriferous flowers only, but occasional patches occur in which all the flowers of the spike are pistilliferous, no staminiferous flowers occurring upon them; the accompanying Plate IV. is photographed from a sheet of herbarium specimens in which the free portions of the spikes contain staminiferous flowers with very few pistilliferous flowers below; while Plate V. represents two similar examples of plants upon which there are no staminiferous flowers—these pistilliferous spikes forming less than one per cent of the whole. Examples of both forms are now sent out to the members of the Botanical Exchange Club. The original specimens are two and a half times the size represented on these plates.

*Ambrosia artemisiæfolia* grows at St. Anne's in patches several yards in diameter, and it monopolises the rough portions of the hollows of the sandhills, almost to the exclusion of the native vegetation in the midst of which it occurs. Although the American 'Floras' describe this plant as an annual, it is only the aerial shoots which die down before winter; but there is an underground portion which ensures that new plants shall spring up the following summer, even if mature seeds be not produced. While the species may have originally started at St. Anne's from the germination and growth of a few mature fruits brought to the locality by some unknown agency, the subsequent growths would seem to be the product of the slender stolons which proceed from the roots. These thread-like processes start at right angles from the thick portion of the root, and proceed in straight lines; they are of extreme length, many being over four feet long. These hair-like stolons give off, at intervals of every few inches, upright shoots which make their way to the surface as young stems, and ultimately grow into separate plants. These processes are well shown in the four or five lines from the lowermost of the three plants shown on Plate IV.; while the left-hand example of Plate V. shows them at a later stage when they have become stouter, and where four or five shoots are seen rising at right angles from the stolon; the right-hand example on Plate V. has no connection with this stolon, the plant being laid over it to fix it to the sheet. This account of its mode of growth explains the circumstance of its gregariousness, and it is also an index of the persistence of the plant in its present locality. It must have been established for several years to account for the size of the patches, and it is surprising that it has not been detected and described earlier. As far as my observation has gone the species is confined to that portion of the sandhills which lies off the South Drive both to the north and to the south of



**Ambrosia artemisiæfolia, L.**

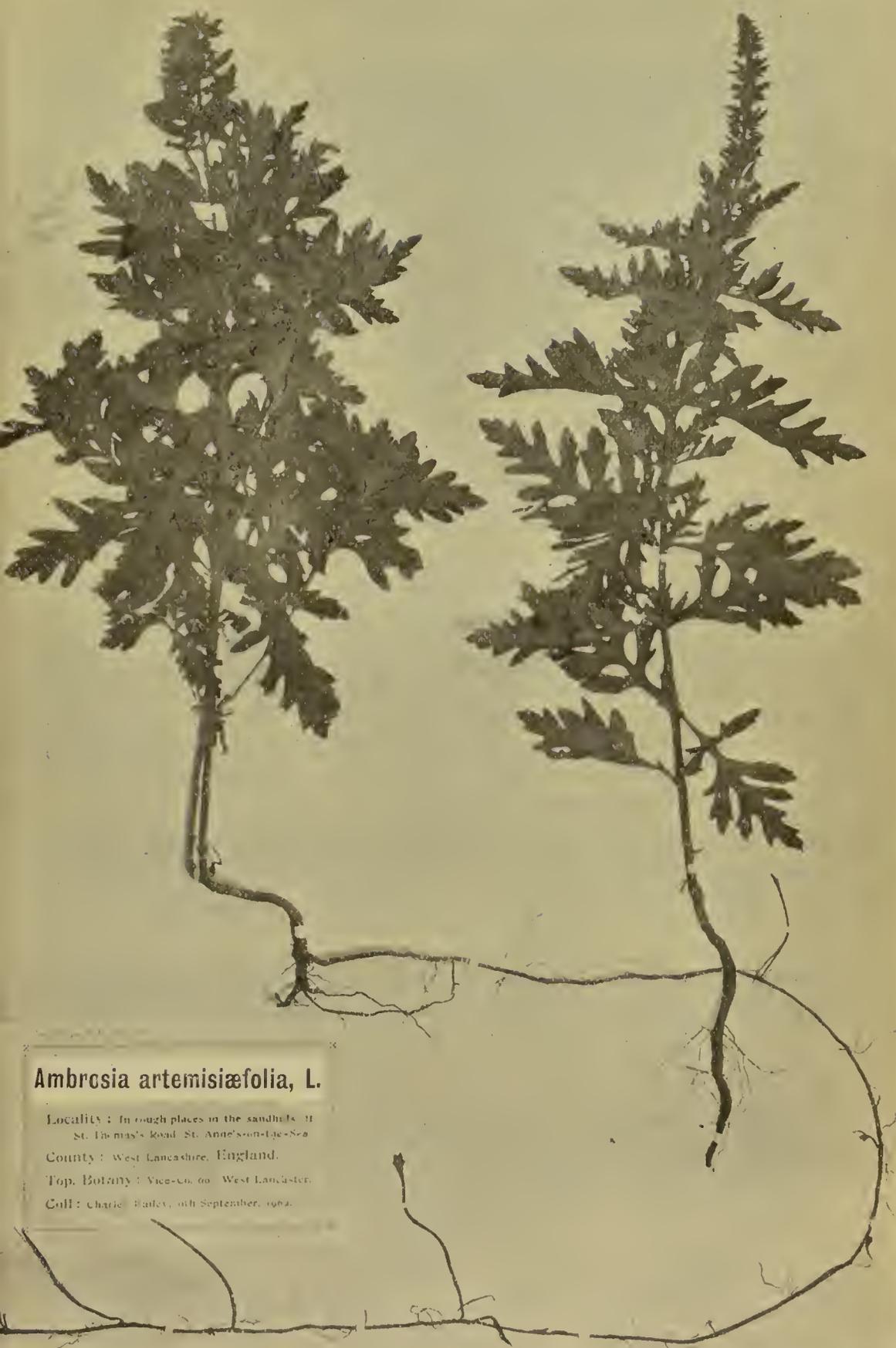
Locality: In rough places in the sandhills off  
St. Thomas's Road, St. Anne's on the Sea.

County: West Lancashire, England.

Top. Botany: View 1670—West Lancaster.

Coll.: Charles Bailey, 27rd August, 1912.

*Ambrosia artemisiæfolia*, L., with inflorescence mainly staminiferous.



***Ambrosia artemisiæfolia*, L.**

Locality : In rough places in the sands to 11  
St. Thomas's Road, St. Anne's-on-the-Sea.

County : West Lancashire, England.

Top. Botany : Vice-Co. 60, West Lancaster.

Coll. : Charlie Hatley, 10th September, 1902.

St. Thomas's Church. But it is only a question of time how soon the locality will be built over, as the plot is on sale, and three of its sides already front roads or dwelling-houses. The frequent strong gales in the spring of 1903 drifted large quantities of sand on to the stations where the *Ambrosia* occurs, but the mode of growth just described has not interfered in the least with the growth of the plant. The plants, if anything, were more vigorous in 1903 than in the preceding year, and as the pistilliferous specimens are more developed this season a better supply will be sent than was available in 1902.

It is not easy to determine in what way it has established its foothold at St. Anne's. The older residents inform me that at one time the site was used for hen-pens and hen-runs, similar to those which are found at the southern end of the same group of sandhills, and I hazard the conjecture that the fowls have been fed, at times, with the grain sweepings of the docks, from Fleetwood or Liverpool, in which fruits of the *Ambrosia* have been included.

Besides *Enothera biennis*, L., and *Sisymbrium pannonicum*, Jacq. (the latter contributed last year, p. 5), there are several interesting native plants associated with it on the St. Anne's sandhills, besides the ubiquitous *Salix repens*, L., and *Rubus cæsius*, L., viz., *Reseda lutea*, L.; *Viola Curtisii*, Forster; *Cichorium Intybus*, L.; *Hieracium umbellatum*, L.; *Convolvulus arvensis*, L.; *Echium vulgare*, L.; *Bartsia viscosa*, L.; *Thymus Serpyllum*, Fr.; *Polygonum Convolvulus*, L.; etc. But there are several others growing with the *Ambrosia* which, though native plants, may have been introduced in the same way, viz., *Lepidium ruderales*, L.; *Lactuca virosa*, L.; and *Marrubium vulgare*, L., the first and last of which I have also found in other localities in the neighbourhood.—CHARLES BAILEY.

*Senecio viscosus*, Linn. By side of river Cynon, on Breconshire bank, August 1902. New county record for county 42. Washed down from Hirwaun, a mile away. The borders of Breconshire just reach the industrial parts of Glamorgan and Monmouth, and so county 42 shares the alien records of its two neighbours at such points as Hirwaun, Merthyr, Brynmawr, and other places along the railway from Dowlais to Abergavenny.—H. J. RIDDELSDELL.

*Saussurea alpina*, DC. Ben Dearg, East Ross, vice-county 106, July 1902. New county record.—G. CLARIDGE DRUCE.

*Crepis taraxacifolia*, Thuill. Grass field on Henbury Hill, West Gloucester, 21st June 1902. The records for this species in 'Topographical Botany' are comparatively few, but the plant is believed to have spread rapidly in this country of late years, and is certainly more frequently met with about Bristol than it was formerly. In some districts, however, a good specimen may still be difficult to obtain.—JAS. W. WHITE. "I have seen fields in Surrey in which this species occurred by thousands; along every new road made in this parish (Croydon) the plant occurs, sometimes by hundreds. I believe it is a native only in very few counties."—Ed.

*Hieracium Auricula*, Linn. Old limestone quarry, Cave Hill, Belfast, 5th July 1902. I have known this plant growing on the débris of the Whitewell limestone quarries, Cave Hill, for at least six years. During that time it has neither increased nor decreased. It partially occupies an area of about two square yards. The district around it is uncultivated, save for grass. There are few gardens in the vicinity—none close at hand. I consider it an alien, but how it has reached here is not easily understood. Was its old recorded occurrence in Westmoreland that of a casual?—S. A. STEWART.

*H. protractum*, Fr. Origin, Upper Tawr, Brecon; cultivated 30th July 1902.—AUGUSTIN LEY. "These are cultivated, and may be abnormal, but they have the general appearance of a form of *H. rigidum*, Hartm."—F. J. Hanbury.

*H. lima*, F. J. H. Cheddar Gorge, Somerset, May 1902. The earliest of the Cheddar hawkweeds in flower, 26th to 29th May 1902. (Not seen by E. F. L. or F. J. H.)—AUGUSTIN LEY.

*H. lima*, F. J. H., variety *Brigantum*, F. J. H. Chapel-le-Dale, West Yorkshire, July 1902. Abundant all round Ingleborough, but not always easily distinguished from states of *H. anglicum*, Fr. This and the other hawkweeds which I have contributed this year have all been submitted to Rev. E. F. Linton and Mr. F. J. Hanbury, unless otherwise expressly stated.—AUGUSTIN LEY.

*H. Farrense*, F. J. H. Rocky river gorge at Ribbleshead, West Yorkshire, 9th July 1902.—AUGUSTIN LEY.

*H. nitidum*, Backh., var. *siluriense*, F. J. H. Waterfall and stream side at Fan-las, Glyn Collwng, Brecon Beacons, 24th July 1902. Mostly confined to the higher cliffs in the Brecon Beacons, but in this station following the stream down to under 1750 feet.—AUGUSTIN LEY.

*H. Sommerfeltii*, Lindeb., var. *splendens*, F. J. H. Origin Nant Francon, Carnarvon; garden, 23rd June 1902. From the same station as the plant issued in the 'Sets of British Hawkweeds,' No. 134.—AUGUSTIN LEY.

*H. sp.* Fissures in rocks by Upper Lake, Killarney, North Kerry, 27th June 1902.—W. A. SHOOLBRED. "Dr. Elfstrand named very similar specimens collected by Mr. Scully on Mangerton, Killarney, as *H. saxifragum*, var. *orimeles*. I also collected the same plant there many years ago."—F. J. Hanbury.

*H. saxifragum*, Fr.,  $\beta$ , *orimeles*, F. J. H. Carmarthenshire Fan, July 1902.—H. J. RIDDELSDELL. "Yes."—F. J. Hanbury.

*H. britannicum*, F. J. H. Near Buxton, Derbyshire, 15th July 1902.—W. R. LINTON. "Yes."—F. J. Hanbury.

*Hieracium murorum*, L., ex p., var. *micracladium*, Dahl. Chappelle-Dale, 7th July; Thornton Force, near Ingleton, 2nd July 1902, both in West Yorkshire. Abundant in this neighbourhood, also in Dent Dale.—AUGUSTIN LEY.

*H. murorum*, L., ex p., var. *lucidulum*, A. Ley. Ingleborough, etc., West Yorkshire, July 1902. This well-marked variety occurs in many places in West Yorkshire. It seems to me to come between var. c. *micracladium*, Dahl., and e. *pellucidum*, Læst. New county record.—AUGUSTIN LEY.

*H. sp.* Between Witton and Wensley, North-west Yorkshire, vice-county 65, July 1902.—J. A. WHELDON. "*H. murorum*, L., v. *pellucidum*, Læstad."—F. J. Hanbury.

*H. murorum*, L., var. *pellucidum*, Læstad. *H. silvaticum*, Gouan, var. *pellucidum* (see F. N. Williams in 'Journal of Botany' September 1902). These plants grew in a wood on the chalk near Amersham, Buckinghamshire, September 1902, and are the first specimens of *H. murorum* to be distributed from that county.—G. CLARIDGE DRUCE. "Right."—F. J. Hanbury.

*H. murorum*, L., ex p., var. *pellucidum*, Læst. Wood bank and railway cutting, Titley, Herefordshire, 19th June 1902. The common Herefordshire representative of *H. murorum*, L. (Not submitted to E. F. L. or F. J. H.)—AUGUSTIN LEY.

*H. murorum*, L., ex p., var. *crassiusculum*, Alm. Limestone scours, Ingleborough, West Yorkshire, July 1902. Named after comparison with type specimens of this variety in 'Herb. Hanbury,' but neither E. F. L. nor F. J. H. must be held responsible for the correctness of the name.—AUGUSTIN LEY.

*H. murorum*, v. *micracladium*, Dahlst. Near Ingleton, West Yorkshire, 2nd July 1902.—AUGUSTIN LEY. "This is *H. variicolor*, Dahlst."—W. R. Linton.

*H. murorum*, L., ex p., var. *lepistodes*, Johanss. Farley Dingle, Salop, 28th July 1902.—W. HUNT PAINTER. "Var. *pellucidum*."—F. J. Hanbury.

*H. murorum*, L., ex p., var. *pachyphyllum*, Purchas. Great Doward Hill, Herefordshire, 21st May 1902. This is the classical locality for this plant. (Not submitted to E. F. L. or F. J. H.)—AUGUSTIN LEY.

*H. murorum*, L., ex p., var. *crebridens*, Dahl. Matching specimens from the same locality named by Elfstrand in 'Herb. Hanb.,' Chappelle-Dale, West Yorkshire, July 1902. Abundant in this neighbourhood.—AUGUSTIN LEY.

*H. euprepes*, F. J. H., var. *glabratum*, Linton. Abundant in a railway cutting near Horton-in-Ribblesdale, West Yorkshire, 3rd July 1902. Not noticed elsewhere.—AUGUSTIN LEY.

*Hieracium euprepes*, F. J. H.; form or variety. Fan-las Waterfall, at the head of Glen Collwng, Brecon Beacons, 24th July 1902. I have great hesitation in describing the plant I now send under a fresh varietal name; but it is abundantly distinct both from typical *H. euprepes*, F. J. H., and from Linton's variety, *glabratum*, as a form, in that the peduncles are all lengthened and consequently the plant almost entirely lacks the geminate heads which usually give it so marked an aspect. I am unable to point out any leaf characters by which it stands apart from the type; in the clothing of the phyllaries and peduncles the tomentum is as a rule less dense than in the South Welsh type, but this is not so conspicuous when it is compared with the North Welsh or Scotch plants. Typical *H. euprepes* clearly varies considerably in the amount of hair and tomentum present in these parts. The difference, however, which the uniformly lengthened peduncles makes to the general aspect of the plant may be appreciated when I mention that the variety in question has been at various times named for me by good hawkweed authorities *H. Schmidtii*, Tausch., and *H. caesium*, Fr. I have had this form under cultivation for about ten years, and in the garden the features above noted are fully maintained and even developed. I have seen specimens of it from the Carmarthenshire Van, Riddelsdell, 1902; Kingshouse, Glencoe, Marshall; West Inverness, Marshall and Shoolbred; and I have picked it myself at the following Breconshire localities: Craig Gledsiau, Craig-ddu, Dyffryn Crownon; Fan-las—all in the Brecon range,—Taren Llwyd, Black Mountain. I should like to propose that it should stand for the present as *H. euprepes*, F. J. H., type, forma *excusosa*, nov. form.—AUGUSTIN LEY.

*H. rubiginosum*, F. J. H. Moughton Scaurs, 15th July 1902; Twistleton Scaurs, Ingleton, 18th July 1902; both in West Yorkshire.—AUGUSTIN LEY.

*H. duriceps*, F. J. H., variety *cravoniense*, F. J. H. Chapel-le-Dale (and other stations in this neighbourhood), West Yorkshire, July 1902. This is one of the most widely spread and characteristic hawkweeds of the West Yorkshire dales, occurring in the stream glens, both on the limestone and slate, and on the limestone scaurs.—AUGUSTIN LEY.

*H. vulgatum*, Fr., var. *glauco-virens*, Dahl. Wooded bank and railway cutting, Titley, Herefordshire, 19th June 1902. See 'Report of B. E. C.,' 1900, p. 638.—AUGUSTIN LEY.

*H. vulgatum*, Fr., variety *sejunctum*, W. R. Linton. 'Set of British Rubi,' No. 160. Railway cutting at Ribbleshead, West Yorkshire, July 1902. Name suggested to me by Rev. E. F. Linton.—AUGUSTIN LEY.

*H. vulgatum*, Fr., var. *mutabile*, A. Ley. Wall top and hedge bank, Llanwrtyd, Breconshire, 22nd July 1902. This seems to be a plant of hedge banks and grassy mountain slopes at a somewhat low

elevation ; I have never found it on the cliffs. When well developed it is unmistakable.—AUGUSTIN LEY.

*Hieracium vulgatum*, var. *cacuminum*. Brecon Beacons, 23rd July 1902. This was gathered at the original station for *cacuminum*, as Mr. Ley informs me. When gathering it I took it to be *H. orimeles*, and now on comparing my specimens of *H. cacuminum* and *H. orimeles* they are certainly very closely allied, and had best be arranged as *orimeles* with variety *cacuminum*.—W. F. LINTON.

*H. diaphanoides*, Lindeb., teste A. Ley. Aberant, Aberdare, vice-county 41, July 1902. Mr. Ley refers all these plants to the same species. He says "it differs much in size and in breadth of leaves, but I believe all to fall under type *diaphanoides*." The plants differ "little in clothing of heads, and I feel sure are all to be assigned to one species and one variety. *H. diaphanoides*, in my opinion, is often with difficulty distinguished from *H. dædalolepium*, and the latter ought to be taken from *H. vulgatum* and associated with it." The difficulty of distinguishing is apparent to one who gathers the plants in situ, but here at least (Aberdare) on the railway embankments, coal waste, etc., where both plants abound, *H. diaphanoides* is decidedly later in flower, by as much as a fortnight.—H. J. RIDDELSDELL.

*H. diaphanoides*, Lindeb. Upper Tawe, county 42, July 1902.—H. J. RIDDELSDELL.

*H. diaphanoides*, Lindeb. Grassy stony banks at Beasley Falls, near Ingleton, West Yorkshire, 7th July 1902. The name was suggested to me by Rev. W. R. Linton, and is, I believe, undoubtedly correct.—AUGUSTIN LEY. "Yes, it agrees with much that we have so named in this country, but is scarcely identical with the Scandinavian type."—F. J. Hanbury.

*H. rigidum*, Hartm., variety *pullatum*, Dahl. Railway cutting and banks Glyn Collwng, just to the north of Torpantau Tunnel, Breconshire, 24th July 1902. See 'Report of B. E. C.,' 1900, p. 639. The present plant is from the same locality.—AUGUSTIN LEY.

*H. rigidum*, Hartm., variety *trichocaulon*, Dahl. Origin, Parkstone, Dorset, and I believe certified by M. Elfstrand ; garden, 30th July 1902.—AUGUSTIN LEY.

*H. rigidum*, var. *tridentatum*, Fr. Pembridge, Herefordshire.—"Rather var. *acrifolium*, Dahlst."—W. R. L.

*H. rigidum*, Hartm., var. *scabrescens*, Johanss. Origin, Glyn Collwng, Breconshire (close to the station for var. *pullatum*, Dahl., mentioned above); the original plant named by M. Elfstrand ; garden, 30th July 1902.—AUGUSTIN LEY.

*Hieracium rigidum*, Hartm., variety *tridentatum*, Fr. Hedge bank, Pembridge, Herefordshire, 15th August 1902. Sent after comparison with the typical plant from Stockholm garden in Mr. Hanbury's herbarium, with which the present plant seems a very good match.—AUGUSTIN LEY.

*H. rigidum*, Hart., var. *nidense*, F. J. H. Origin, Hepote Glen, South Breconshire (the station from which the plant was described); garden, 30th July 1902. This form seems to be confined, as a wild plant, to riverside rocks, and loses a great deal of its beauty in the garden, but keeps quite distinct from other varieties.—AUGUSTIN LEY.

*H. cantianum*, F. J. Hanb. Aberdare, county 41, July 1902.—H. J. RIDDELSDELL. "This resembles *H. cantianum* in the general character of the leaves, which, however, are fewer than in the Kent and Surrey specimens. The peduncles, too, bear numerous setæ, which are absent, or nearly so, in the type. Is not this plant a *vulgatum* rather than a *rigidum* form?"—F. J. Hanbury.

*H. melanocephalum*, Lindeb. (Exsiccata No. 137). I append notes and description kindly furnished by the Rev. Augustin Ley. "Herba humiliori, capitulis nigricantibus amplioribus, squamis magis imbricatis, latoribus, minusque attenuatis, nudis et creberrime glandulosis, a proximo *H. rigido* Hart. est diversum (Lindeb.)." Mr. Ley writes that the form "is, as far as I know, unrecorded in Britain. This is a plant which last year I had confounded with *H. amphibolum*, but it is easily distinguished from that plant by the more leafy rigidum-like stem, and the numerous longish setæ on the involucre." Mr. Ley refers to *H. melanocephalum*, Lindeb., plants from Goathland, vice-county 62; Upper Teesdale, vice-county 66; Aberdare, county 41; Defynog and Callwen, county 42. They differ widely in facies from one another, but all show their near relationship to *H. rigidum*, Hartm. The Aberdare and Defynog plants are queried by Mr. Ley; some of those from Aberdare are sent for comparison.—H. J. RIDDELSDELL. "In view of Tausch's *melanocephalum* how can this name be admitted?"—Ed.

*H. protractum*, Fr. Origin, Upper Tawe, Breconshire, on stream-side rocks; garden, 30th July 1902. This plant was sent to the Club unnamed in 1900 from the same station (see 'Report' for that year, p. 639). The name now given to it was suggested by the Rev. E. F. Linton in the present year, and is, I believe, undoubtedly right. New record for England?—AUGUSTIN LEY.

*H. strictum*, Fr., var. *opsianthum*, Dahl. Origin, Elan Valley, Radnor; garden, 30th July 1902. The name was suggested to me two years ago by Rev. E. F. Linton.—AUGUSTIN LEY.

*H. corymbosum*, Fr. Origin, Elan Valley, Radnor; garden, 30th July 1902. I believe this to be the typical plant. The var. *salicifolium*, Lindeb., is the prevailing plant in South Wales. (Not seen by E. F. L.

or F. J. H.)—AUGUSTIN LEY. "*H. corymbosum*, but scarcely type."—F. J. Hanbury.

*Hieracium crocatum*, Fr. Origin, Reapsmoor, North Stafford (Rev. W. H. Purchas); garden, 9th August 1902. I believe that this Reapsmoor plant was acknowledged to be *crocatum* by the authorities when discovered in North Staffordshire by the Rev. W. H. Purchas.—AUGUSTIN LEY.

*H. boreale*, Fr., var. *virgultorum*, Jord. Haugh Wood, Hereford, 8th September 1902. I fear that these specimens are hardly worth contributing. They have broader leaves, of a deeper green, with much less hair at the base of the stem than in the type, but I have had no opportunity of seeing Jordan's variety.—AUGUSTIN LEY.

*H.* sp. Between Witton and Wensley, North-west Yorkshire.—J. A. WHELDON. "I believe this to be *H. triangulare*, Almq. = Lindeb., *H.* exs. 120, a frequent form in the West Yorkshire limestone district."—W. R. Linton.

*Lactuca virosa*, Linn. Sandhills opposite St. Thomas's Church, St. Anne's-on-the-Sea, West Lancashire, 20th September 1902. Growing with *Sisymbrium pannonicum*, Jacq., *Ambrosia artemisiæfolia*, L., *Vicia villosa*, etc. (See pages 39 and 46 of this 'Report.')—CHARLES BAILEY.

*Statice*, sp. Gore Point, West Norfolk, 1st September 1902. The salt marshes at Gore Point, on the north-west coast of Norfolk, yield several interesting sea lavenders. The locality is the headquarters in Britain of the rare *Statice reticulata*, and there is a magnificent growth of *S. Limonium* which covers a large area of ground. In July, when the flowers are expanded, the plants present an unbroken mass of colour visible at a considerable distance. Forms of *S. occidentalis* also occur, one of these now being sent for exchange. This grew in an isolated patch, the plants being noticeably smaller in stature, and simulating somewhat specimens in my herbarium labelled *S. occidentalis*, var. *intermedia*, Syme. It does not match that plant exactly, however, and Mr. C. E. Salmon, to whom I sent living examples, has reserved his opinion. It differs materially from specimens named *intermedia* by Mr. Salmon, and collected by him at Knott End, West Lancashire, last year, having much smaller and narrower leaves and panicle, and being generally of more slender growth.—A. B. JACKSON. "Merely a state of *occidentalis*."—C. E. Salmon. "The fact is, this *Statice* differs in almost every county, and so much so that Sussex specimens can be picked out from Lancashire ones, but it has no fixed variation."—Ed.

*Limonium reticulatum*, Miller. Sandy margin of Burnham Overy, salt marshes, West Norfolk, 25th July 1902.—J. GROVES. "Very nice specimens of a rare species. The reputed recurrence of this plant in East Suffolk was an error. I do not know of its having been

gathered in Cambridgeshire since the record in 'Fl. Cambs.,' 1860. 'By the riverside recently.'—A. Peckover. Specimens from Wisbeach in 'Herb. Brit. Museum,' 1796. It cannot be found in Lincolnshire, though it certainly occurred in District 12 ('Banks' Herb., Brit. Mus.') and in South Lincoln in District 17. "Extinct both in North and South Lincoln," 'Naturalist,' 1895, p. 101. So that probably East and West Norfolk are the only remaining vice-counties in which it at present exists."—Ed.

*Statice lychnidifolia*, De Gir. Estuary of the river at Carteret, Western Normandy, 3rd August 1902. It is also abundant at Portbail, a little lower down the coast. I send a few French specimens, after consulting Mr. Arthur Bennett, as the Alderney supply seems to be very limited, and the French coast is not many miles off.—L. V. LESTER. "If unduly gathered in Alderney it will soon become extinct."—Ed.

*Pulmonaria officinalis*, L. Farley Dingle, near Much Wenlock, Salop, May 1902. Originally a garden escape, but it has now spread on both sides of the valley and is growing upon railway ballast.—W. HUNT PAINTER.

*Pneumaria maritima*, Hill. Golspie, East Sutherland, vice-county 107, August 1902. New county record.—G. C. DRUCE.

*Cuscuta Epithymum*, Murr. Growing in the herbage of the roadway slope at Fairhaven, and in several places on the flat turfy spaces of the sandhills between Fairhaven and St. Anne's-on-the-Sea, West Lancashire, 2nd August 1902. Not recorded for vice-county 60 in 'Top. Bot.,' p. 283, but its occurrence at this station was published in the 'Journal of Botany,' vol. xl., No. 476, p. 295.—CHARLES BAILEY.

*Verbascum phlomoides*, L. Garden, June 1902. The history of this plant is as follows:—In 1869 and the two following years it grew in a new plantation which had been made at King's Sterndale, Derbyshire, in fair plenty. Specimens picked at this station in 1869 were named as above by both Mr. J. G. Baker and Dr. Boswell. Since that date it has been grown in the garden at Sellack, where it comes up spontaneously year by year.—AUGUSTIN LEY.

*Linaria repens* × *vulgaris*. From a deposit of chalk rubble brought from Upton, in Berkshire, to fill up a space near the railway station at Oxford, July 1892. For a full description see my 'Flora of Berkshire,' pp. 368-9, and the 'Annals of Botany' for December 1896, p. 662. The colour of the specimens has now, I am afraid, quite deteriorated. In this locality, where only *L. vulgaris* at one time grew, the advent of *L. repens*, the seeds of which were brought with the chalk rubble, led to a most beautiful series of the hybrid being produced. The first year (1891) plants were wholly hybrids near *repens*, the second year (1892) almost all stages between the two plants were represented, and in 1893 the hybrids were more numerous

than the parents and every step was practically complete. Since that date *L. repens* itself has given way to the competition of native species, as the chalk has gradually been covered with other soil, and the hybrids are fewer. This year they still exist, but the prevailing plant might be described *L. vulgaris* × *repens*, and this is not surprising, because *L. vulgaris* itself is now more frequent than *repens*.—G. CLARIDGE DRUCE.

*Limosella tenuifolia*, Hook. fil. Kenfig Pool, Glamorgan, vice-county 41. I send a further supply of this, partly of last year's May and June gatherings, and partly of a gathering made in August this year. This season the water in the pool was very low, and the specimens were gathered on the recently dried-up mud, and are somewhat larger than last year's. The foliage and fruit characters remain the same, but many more plants were found with "runners."—W. A. SHOOLBRED.

*Veronica hybrida*, Linn. Sea cliff, Humphrey Head, Lake Lanchashire, vice-county 69, on scar limestone, altitude 20 feet, July 1902. Long known in this locality, and still abundant on some parts of the cliff. *Atropa Belladonna*, *Crithmum maritimum*, and *Hypochaeris maculata* grow near it or with it. The latter is generally quite out of reach on the high vertical rocks, and is therefore not likely to become extinct.—ALBERT WILSON. "See 'Naturalist,' pp. 369-372, 1902."—Ed.

*Euphrasia curta*, var. *glabrescens*, Wetts. Yeldersley Lane, near Shirley, Derbyshire, 20th September 1902.—W. R. LINTON. "I should call it *E. nemorosa*, H. Mart. I have seen very similar plants called *E. curta*, var. *glabrescens*, by Continental botanists."—F. TOWNSEND.

*E. curta*, var. *glabrescens*, Wetts. Yeldersley Fields, near Shirley, Derbyshire, 1st September 1902.—W. R. LINTON. "*E. nemorosa*, H. Mart.; very early state."—F. TOWNSEND.

*E. Rostkowiana*, Hayne, var. fl. *albidis*, etc. In wet boggy ground, full of springs, and in company with *Hydrocotyle*, *Scutellaria minor*, etc., below Aldworth, in the parish of Lurgashall, Haslemere, Surrey, 20th July 1901. Whole plant and all its parts smaller than in the type; branches numerous, erect. Spikes crowded, hardly interrupted below. Teeth of leaves and bracts fewer. Flowers mostly white, often included. Capsules short, hardly twice as long as broad. This form seems to be not infrequent on the sandy heaths of Sussex and Surrey.—F. TOWNSEND.

*E. brevipila*, Burn. and Grem. Grass fields in abundance, Honington parish, Warwickshire, June and July 1902. I first noticed this species in Warwickshire, in a grass field, about the middle of May 1896. It was then in flower. I have this year found it abundant in other grass fields in the same parish, but less abundant than where I first noticed it. I may have overlooked it, but think it likely that the occurrence of this and other species of the genus is fitful and dependant on seasons favourable to their development.—F. TOWNSEND.

*Rhinanthus Crista-galli* (? *stenophyllus*, Schur.). Shirley, Derbyshire, June 1902. This is not an uncommon form on dry gravelly soil in this neighbourhood. Its more typical form, with broader leaves, is also more frequent.—W. R. LINTON.

*R. major*, Ehrh., a. *platyptera*, Fries. On the sea-embankment at Fairhaven, near St. Anne's-on-the-Sea, West Lancashire, 12th July 1902.—CHARLES BAILEY.

*Orobanche carulea*, Vill. (*O. purpurea*, Jacq.). Sands of St. Ouen's Bay, Jersey, 26th June 1902. Parasitic upon *Achillea Millefolium*. This is probably identical with the Alderney plant (which I have not seen) which has been named *O. Millefolii*, Reichb., by Mr. Arthur Bennett. In Reichenbach's 'Fl. Germ. Excursoria' *O. Millefolii* is put under *O. carulea*, Vill., as a doubtful variety. In many floras the anthers are said to be bearded at the summit, but bearded and glabrous anthers may be found on the same plant and even in the same flower (!), and the character drawn from the shape of the corolla lobes seems to me to be quite unsatisfactory. *O. arenaria*, Borkh., should doubtless disappear from the next edition of the 'London Catalogue.' It does not occur in Normandy, Brittany, or West France.—L. V. LESTER.

*Mentha pubescens*, Willd., variety (?). Abundant in the corner of a very rough marshy pasture at Yatton, Herefordshire, 25th September 1902. This mint does not answer to any variety of either *M. pubescens*, Willd., or *M. hirsuta*, Huds., which I possess, and I have no confidence in the name under which I have sent it out. But it seems to me to have the calyx of *M. pubescens*, Willd., rather than of *M. hirsuta*, Huds.—AUGUSTIN LEV.

*M. purpurea*, Host. Dry bed of old canal near Camerton, North Somerset, 28th August 1902. A handsome form of *M. aquatica*, L., chiefly marked by the spreading peduncled lower verticillasters.—JAS. W. WHITE.

*M. rubra*, Huds. In ditches near Iver Heath, Buckinghamshire, September 1902. It was first recorded for the county in 1746 by Blackstone, and there is a specimen in the 'Brit. Mus. Herb.' collected by Mrs. James about 1840. These are, however, the first specimens from the county distributed through this Club. I believe M. Briquet considers *M. rubra* to be a triple hybrid of *M. aquatica*, *arvensis*, and *viridis*. The odour of these specimens is nearly that of pure *viridis*.—G. CLARIDGE DRUCE.

*M. gracilis*, Sm. Garden, 27th September 1902. The root came to me, through Rev. E. F. Linton, from Mr. Bagnall; and its origin was, I believe, from Hanley Common, Warwickshire.—AUGUSTIN LEV.

*M. arvensis*, L., var. *parietariaefolia*, Beck. Rough vegetation on the river bank, Great Doward, Herefordshire, 20th September 1902.

Named originally from this station by Mr. J. G. Baker. See 'Flora of Herefordshire,' p. 225.—AUGUSTIN LEY.

*Ballota nigra*, L., var. *borealis*, Schweig. (?) Foy, Herefordshire, 2nd August 1902. This is the ordinary Herefordshire form, much more soft and hoary than the type. I have no description of var. *borealis*, Schweig., and should be glad to know whether this is it.—AUGUSTIN LEY. "The Messrs. Groves have determined that the var. *borealis* is simply referred to the typical plant by Schweigger, who makes it the *a. genuina*."—Ed.

*Atriplex littoralis*, L. On the rubbish heaps, brought from the metropolis, and deposited near the canal between Drayton and Iver in Buckinghamshire, for which it is a new county record. It also grew, but less frequently, in Middlesex, in similar situation. October 1892. A curious casual, for which it is rather difficult to guess the origin.—G. CLARIDGE DRUCE.

*Polygonum dumetorum*, L. Near Rusholts, Buckinghamshire, on a hedge bank in considerable quantity, September 1902. The first specimens distributed from this county.—G. CLARIDGE DRUCE.

*P. minus*, Huds. Buckinghamshire, vice-county 24, September 1902.—G. CLARIDGE DRUCE. "New county record."—Ed.

*Urtica dioica*, L. Meadow, Carey, Herefordshire, 5th September 1902. This pretty small-leaved form wants a name; I hope that the referees of the Club will be able to supply one.—AUGUSTIN LEY.

*Narcissus Pseudo-narcissus*, L., variety *lobularis*, Haw. Eardisley, Herefordshire, 15th April 1902. See 'Report B. E. C.,' 1901, p. 27, —AUGUSTIN LEY.

*Allium Schönoprasum*, L. Reference No. 1464. Cultivated, Graffham, Surrey, 15th June 1902. I originally discovered this in July 1895, on a low cliff near the south-east corner of Lough Mask. A year later I found it thinly scattered westward from that point to within half a mile of Clonbur. No houses are near, nor is there any sign of cultivation; indeed, the conditions would not allow it. Both seasons were very dry, so that the plants were much stunted and quite flowerless. The vegetation of this tract, though limited, is very interesting; its varieties include *Viola stagnina* and *Euphrasia salisburgensis*.—EDWARD S. MARSHALL.

*Carex vulpina*, L., form or var. Reference No. 2663. Meadow near the sea, Castle Gregory, South Kerry, 25th June 1902. A peculiar-looking plant, owing to the remarkably brown glumes. At this stage they are usually much paler.—EDWARD S. MARSHALL.

*C. divulsa* × *vulpina*. Reference No. 2673. Copse near Portskewett, Monmouth, vice-county 35, 3rd July 1902. Found growing with the parents, and evidently a cross between them. It

somewhat resembles *C. axillaris*, Good. (*remota* × *vulpina*), in habit; but that is usually a coarser plant, having the spikes more bracteate, and compound at the base. We saw no *remota* near. The specimens are somewhat miniature. I do not know whether this hybrid has been detected on the Continent; it is apparently new to Britain.—EDWARD S. MARSHALL.

*Carex axillaris*, Good., *C.* (?) *vulpina* × *divulsa*. Damp wood, Portskewett, Monmouthshire. We found one or two large tufts of this *Carex* growing near the above supposed parents, between which it seems to be just intermediate.—W. A. SHOOLBRED.

*C. montana*, L. Wyre Forest, county 40, Salop, 27th April 1902.—J. B. Duncan. "An interesting addition to the Salopian flora beyond the records in 'Top. Botany,' ed. 2, 1883. These records are for East Kent, North Somerset, Derby, and Brecon."—Ed. "I had a specimen in my herbarium collected by the late Rev. J. H. Thompson, 8th April 1876, near Cooper's Hill, Wyre Forest, which is also Mr. Duncan's habitat. This specimen was named by Mr. Thompson *C. longifolia* (?), Host, and in pencil (*montana*, L.?). This specimen, together with specimens from Mr. Duncan, has been placed in the Shrewsbury Museum."—W. H. Painter in 'Record of Bare Facts,' p. 16, 1903, Caradoc and Severn Valley Field Club. "No doubt it has been passed by from the early date it flowers; in cultivation (in Sussex) it has flowered as early as 5th April in my garden."—Ed.

*C. distans*, Linn. Very plentiful on the flat sandy expanse between the lake at Fairhaven and "The Bungalow," St. Anne's-on-the-Sea, West Lancashire, 12th July and 2nd August 1902. Not recorded for vice-county 60 in 'Top. Bot.,' p. 463, but reported for the same station in the 'Journal of Botany' for August 1902, p. 295.—CHARLES BAILEY. "*C. distans*, L., is a different plant from that usually so named by British botanists." C. B. Clarke in litt.—Ed.

*Panicum Crus-galli*, Beauv. On the large heaps of rubbish deposited near the canal, and which have been brought from the metropolis, near Drayton, but in Buckinghamshire, October 1902. A new county record.—G. CLARIDGE DRUCE.

*Setaria glauca*, Beauv. Rather plentiful on rubbish heaps between Drayton and Iver, Buckinghamshire, October 1902. Not previously distributed from county 24.—G. CLARIDGE DRUCE.

*Alopecurus hybridus*, Wimm. (*A. pratensis* × *geniculatus*). Trent, near Kegworth, Leicestershire, vice-county 55, July 1902.—A. B. JACKSON. "Not quite intermediate, but nearer *A. pratensis*, L."—E. Hackel.

*Phleum pratense*, L., form. Near Dover, Kent, July 1902. A form with slightly swollen base of stem, from a cornfield near Dover,

on the borders of which I found fairly typical *nodosum*.—G. CLARIDGE DRUCE. "*P. pratense*, L. Nothing noteworthy in it."—E. Hackel.

*Deyeuxia neglecta*, Kunth. (*Calamagrostis stricta*, Nuttall). Near Lochside, Castletown, Caithness, August 1902. The Rev. H. J. Riddelsdell and myself made an expedition in search of *D. strigosa*, of which I had not seen flowering specimens, and did not know the locality. We found the above-named grass associated with *Galium uliginosum*, etc., in a small marsh which was in the neighbourhood of Loch Durran, whence Robert Dick found his *Calamagrostis lapponica* (which subsequently Mr. N. E. Brown identified as *D. strigosa*). It strongly reminded me of the *Deyeuxia borealis* which I discovered by Loch Tay in 1888, see 'Journal of Botany,' 1888, p. 117, where I described it as *Deyeuxia neglecta*, Kunth., var. *borealis* (Laestad). Professor Hackel assures me that my Caithness specimens are fairly typical *D. neglecta*, which it may be remarked was discovered by George Don in 1807, in the White Mire Marsh, Forfar, and was shortly after destroyed by drainage. My variety *borealis* met with a similar fate about 1895, so that it is my great pleasure to add one of Don's discoveries again to the Scottish flora, and a pleasing coincidence was the fact that on leaving Caithness I was going to Dundee to give a paper on the 'History of Scottish Botany,' in which special attention was given to the work of George Don. I may say that the marsh in Caithness in which it grows is of very small extent, so that care should be taken not to eradicate it in this, its only known station in Scotland.—G. CLARIDGE DRUCE.

*D. neglecta*, Kunth. Type plant, near Thurso, Caithness, vice county 109, 4th August 1902. New county record for county 109. Mr. Druce, in whose company I collected it, writes that this is Hackel's determination. Found near Thurso in the course of a search for *D. strigosa*. There should be enough in Mr. Druce's gatherings and my own to supply all the members with this rare plant.—H. J. RIDDELSDELL. "Sent also by Mr. Druce, who says Dr. Hackel doubts the occurrence of *D. strigosa* in Scotland."—Ed.

*Avena flavescens*, var. *variegata*, Gaud. ? Pagham, West Sussex, 12th July 1902. I do not know whether this is correctly named. It appears to be connected by insensible gradations of colour with the type. I saw what appears to be the same form abundantly on the chalk downs at Graffham.—A. H. WOLLEY-DOD. "*T. flavescens*, Beauv., approaching var. *variegatum*, Gaud., but not so dark-coloured as this."—Ed.

*Koeleria cristata*, Pers., var. *gracilis*, Boreau. Portskewett, Monmouthshire, county 35, 3rd July 1902.—W. A. SHOOLBRED.

*K. cristata*, var. *gracilis*. Ref. No. 2674. This grew abundantly on a limestone hill not far from the railway station: the type occurs about a mile away. The species is not recorded for Monmouth in

'Top. Bot.,' ed. 2.—EDWARD S. MARSHALL. "Both these named '*K. cristata*, var. *gracilis*, Pers.," by E. Hackel."—Ed.

*Catabrosa aquatica*, Beauv., nov. var. *grandiflora*, Hackel in lit. The spikelets are two-flowered, and twice as large as in type. I found this conspicuous-looking grass in damp sand by the shore at Downreay, Caithness, August 1902, but well above high-water mark. It grew in very large tufts. It appeared to be at least varietally different from the ordinary plant, and Professor Hackel, to whose kindness we are so much indebted, named it as above. It is probably the same as the plant found by Mr. Hanbury, see 'Scottish Naturalist' (1889), p. 91, on Dunnet Links, and then named  $\beta$  *grandiflora* by Prof. Hackel.—G. CLARIDGE DRUCE.

*Poa compressa*, L., var. Old Wall, Chepstow, Monmouthshire, county 35, 22nd July 1902.—W. A. SHOOLBRED. "*Poa compressa*, L."—E. Hackel.

*Glyceria plicata*, Fr. (?) Marshes near Belfast Harbour, Co. Down. 10th July 1902.—Messrs. Lett and C. H. WADDELL. "Not recorded for Co. Down."—Ed. "*Glyceria plicata*, Fr."—E. Hackel.

*G. distans*, var. *obtusata*, Parnell. Breedon Cloud Quarry, Leicestershire, 1902. This variety is not included in the 'London Catalogue,' but is described in Babington's 'Manual' as occurring in Leicestershire. There is no reference to it in the 'Flora of Leicestershire,' published in 1886, and until recently no specimen of *Glyceria distans* existed in the county herbarium, this grass apparently not having been found in Leicestershire by any living botanist. When examining the *Glyceria* in the 'Babington Herbarium' at Cambridge last summer, I came across a sheet labelled as above, gathered near the limestone quarry at Breedon Cloud Wood, Leicestershire. Babington in his 'Journal,' p. 63, mentions finding the plant at Cloud Wood, near Breedon, on the banks of the tramway, on 23rd June 1837. He then considered it allied to *G. distans*, and perhaps only a variety of that plant. In August 1901 I paid a visit to the locality in company with my friend Mr. T. E. Routh. After a short search we found a *Glyceria* which was evidently Babington's grass. Most of the specimens were quite past flowering and dried up by the recent drought, but a few were obtained with the spikelets intact. Parnell's variety is said to differ from the type in having the ligule transversely truncate instead of deltoid, subacute, and the lower pale transversely truncate, not obliquely so as in the type; and Babington adds "spikelets more compound." I found, on comparing these Leicestershire specimens with examples of the type from maritime and inland localities, that there was no appreciable difference in the shape of the glumes, the other characters given for the variety being also unstable. There is a slight difference in habit, but this is probably attributable to environment. Prof. Hackel, to whom I sent a specimen, says it "does not sensibly differ, whether in the form of the apex of the pales nor in that

of the ligule, from specimens from type localities." He adds that it varies somewhat in regard to the apex being more or less truncate, and does not consider it a variety worth naming. I send a few sheets, thinking that some members may like to possess it from an inland locality. Syme in 'English Botany' mentions Bedford, Devon, Beadley Bay, Gloucester, and Dublin as additional localities for this form.—A. B. JACKSON. "*Atropia distans*, Rupr., *typica*, no variety, quite the same as from Austria, the classical country of *Poa distans*, L. (Austria, D. Jacquin). Linnæus himself says, 'flores obtusi.'"—E. Hackel.

*Sclerochloa procumbens* × *distans*. Canal bank, near Higham West Kent, 16th September 1902. The plant described by Major Wolley-Dod in 'Jour. Bot.,' 185, p. 84, as *Glyceria distans*, var. *pseudo-procumbens*, but we think there is little doubt that it is, as he surmised, this hybrid.—H. and J. GROVES.

*Festuca arundinacea*, var. or forma *angustifolia*. Dungeness, Kent, July 1902. Although so very different in appearance from the type there is little to distinguish this form except the narrow leaves. The plant is referred to by me in the 'Journal of Botany,' p. 351 (1902), in an article on the Dungeness flora as growing near the ponds of fresh water, which are one of the curious features of the vast deposit or accumulation of shingle near Dungeness. The plant grew in large tufts (all the specimens sent came from one tuft), and loose pebbles were present in considerable quantity intermingled with the lower part of the stems. The aspect was quite dissimilar from that of *F. arundinacea* of our stiff clay soils, and I hoped some other character might be found by which it could be differentiated from the type.—G. CLARIDGE DRUCE. "*F. arundinacea*, γ, *pauciflora*, Hartm. (see 'Hack. Mem.,' p. 157)."—E. Hackel. "*B. pauciflora*, Hartm. 'Hand. Skan. Fl.,' ed. 2, 1832."—Ed.

*Bromus interruptus*, Druce. Cornfields on the chalk near Prince's Risborough, Buckinghamshire, June 1900. Last year I distributed some specimens of this grass, but my time was so much occupied that I was unable to give personal supervision, with the result that, according to the Rev. E. F. Linton, a specimen of *B. mollis*, var. *glabratus*, was accidentally included in his sheet, but as the inner pale of the latter specimen was found not to be split it was of course not *B. interruptus*. Mr. Linton discusses the claim which *B. interruptus* has to specific distinction, and quoted those opinions, which were more or less adverse, and chiefly selected from the 'Report' of this Club which appeared in 1895, p. 503-4, where he says I raised it to a species. The fact is I gave it that rank in the 'Suppl. to the Pharm. Jour.' in October, and 'Journal of Botany,' December 1895. Exception has been taken to the former journal "as not strictly a botanical publication," but this cannot I think be seriously urged, since it has been the medium through which various species have been made known,

and it indeed conforms more closely to a "publication" than does this 'Report,' which is of a semi-private character. But whether the 'Pharm. Journ.' is or is not a publication according to the "Laws" is not the matter to which I wish to draw attention, but to my paper read before the Linnean Society December 1895, where a full description and account are for the first time given. Since then the *Bromus* was subjected to a full criticism, and subsequently, before printing, the President of the Society, Mr. C. B. Clarke, went very fully into the matter with Dr. Stapf. He reported in June 1896 that, in all the examples of *B. interruptus*, Druce, the upper pale is, even in the young flower, divided to the base. . . . There is nothing in any other species of *Bromus* approaching this. . . . Dr. Stapf cannot find any case parallel. The remarkable uniformity with which the upper pale is split to the base in every flower, in every specimen yet got from various localities, may be held to negative for the present that *B. interruptus* is a monstrosity. Of all the innumerable species proposed as split-offs from *B. mollis*, there is no one so well worthy of a specific name as *B. interruptus*, Druce, and no one to be compared with it in morphological interest." I may say that it was cultivated for some years in Messrs. Sutton's trial grounds at Reading, and it was found to keep absolutely true; remaining constant while *B. mollis* itself varied considerably under the same tests. The fruits were quite perfect, and could be distinguished from those of *B. mollis* by their being rather shorter. Those of *B. mollis* were longer, and frequently had the upper pale fused into them, so that they appeared more chaffy. Another character is to be found in the fruiting axis, which in *B. mollis* is drawn out to a point, while in *B. interruptus* it is terminated by a cup-shaped process. It may be readily distinguished in the field by the stronger growth and by the strict upright inflorescence. I may say that Mr. Tuffnail, of Messrs. Sutton, had no doubt of its specific distinction, nor have other competent botanists who have studied it. Is there any known instance of a monstrosity appearing in widely separated areas, always remaining constant, and able to be perpetuated by seed unaltered? In fact, the characters which separate it from *B. mollis* (a pleasing fact considering "the shadiest of shady characters" which are relied upon in some critical genera in recent British Botany) are too strong and are almost enteric rather than specific. There is a specimen labelled *B. mollis*, var. *pseudo-velutinus*, collected by Miss Barnard, at Odsey, Herts, in 1849, in the 'Watson Herbarium,' at Kew, which Mr. H. C. Watson reported on in the 'Physiologist,' iii., 807-8, as a form of *B. mollis*; see 'Fl. Herts.,' p. 468-9, which is the earliest notice of the plant in Britain which I possess.—G. CLARIDGE DRUCE.

*Bromus arvensis*, Lin. Cardiff, county 41, June 1902.—H. J. RIDDELSDELL. "*Bromus japonicus*, var. *grossus*, Asch. et Grab., Syn. ii., 620 (*B. patulus*, v. *grossus*, Celak.)."—E. Hackel. "See 'Über *Bromus japonicus*, Thunb.,' von E. Hackel, in 'Magyar botanikai lapoti,' 1903, s. i."—Ed.

*Athyrium filix-femina*, Roth, var. *erectum*, Syme. Old pool bottom, Shobdon, Herefordshire, 15th August 1902.—AUGUSTIN LEY.

*Lastræa spinulosa*, Presl., var. *elevata*, Braun. Old pool bed, Shobdon, Herefordshire, 15th August 1902.—AUGUSTIN LEY.

*L. dilatata*, Presl., var. *alpina*, Moore. Wet wood, St. Briavels, West Gloucester, 16th October 1902. Sori large; scales concolorous.—AUGUSTIN LEY.

---

Determinations of *Hieracia* by H. Dahlstedt of species referred to in the 'Report' for 1892, sent by the Rev. W. R. Linton to be incorporated in the present 'Report.'—Ed.:—

Page 454.—*H. lasiophyllum*, Great Doward, Herefordshire "A form of *Oreadea*, but I do not think it to be identical with *H. lasiophyllum*."—H. Dahl.

Page 455.—*H. cæsiuum*, forma. Cwm Taf-fechan, Breconshire. "Not *H. cæsiuum*, Fr., but is a form of *H. vulgata*, which I have not seen before."—H. Dahl.

Page 455.—*H.* —, Brecon Beacon. "Seems to be allied to *H. demissum*, Strömf."—H. Dahl. "This is the plant published under the name *cacuminum* in 'Journal of Botany,' 1895, p. 86. Dahlstedt's naming would seem to connect it with *H. alpestris*."—W. R. Linton.

Page 456.—*H. rigidum*, v. *serpentinum*, Blaen Taf, Breconshire. "A form very nearly allied to *H. stictophyllum*, mihi., from Norway."—H. Dahl.

Page 456.—*H. zellandicum*, North Roe, Northmaven, Shetland. "Belongs without doubt to *H. dovrensia*."—H. Dahl.

Page 456.—*H. auratum*, Pegal Bay, Waas, Orkney. "Seems to be a form of *H. auratum*, but more hairy than usual."—H. Dahl.

THE

BOTANICAL EXCHANGE CLUB

OF THE BRITISH ISLES.

---

REPORT FOR 1903.

---

(ISSUED 28th MARCH 1904.)

PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD.

1904.



# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

---

## REPORT OF THE DISTRIBUTOR FOR 1903.

---

THE inclement season naturally led to a smaller number of plants being sent this year than usual. The Rev. Augustin Ley, as is generally the case, sent a large parcel of excellently preserved specimens. It would add much to the value of members' contributions if they would send a sufficient number of sheets in each case; anything less than ten is troublesome, and of little general interest.

Our grateful thanks are due to Professor Hackel for naming the Gramina, Dr. J. von Sterneck, Rhinanthus, Dr. Focke, the Rev. W. Moyle Rogers, Rubi, Mr. F. Townsend, Euphrasia, the Pfarrer Kükenthal for Sedges, and Messrs. E. G. Baker, Arthur Bennett, H. and J. Groves, E. S. Marshall, W. R. Linton, Augustin Ley, H. Pugsley, and others for kind critical assistance.

Subjoined are the names of contributing members, with the numbers of specimens received:—

	No. of Specimens.		No. of Specimens.
Mr. Joseph Adair ... ..	23	Rev. H. J. Riddelsdell, <i>M.A.</i> ...	213
Mr. Charles Bailey, <i>F.L.S.</i> ... ..	52	Rev. W. Moyle Rogers, <i>M.A., F.L.S.</i> ...	73
Mr. G. Claridge Druce, <i>M.A., F.L.S.</i> ...	511	Mr. W. A. Shoobred, <i>M.R.C.S.</i> ...	40
Mr. J. Groves, <i>F.L.S.</i> ... ..	20	Mr. F. Townsend, <i>F.L.S.</i> ... ..	90
Mr. A. B. Jackson ... ..	52	Rev. C. H. Waddell ... ..	40
Rev. Augustin Ley, <i>M.A.</i> ... ..	540	Mr. J. A. Wheldon ... ..	156
Rev. W. R. Linton, <i>M.A.</i> ... ..	109	Mr. A. Wilson ... ..	17
Rev. E. S. Marshall, <i>M.A., F.L.S.</i> ...	53	Major A. H. Wolley-Dod ... ..	81
Mr. J. Cosmo Melvill ... ..	55		
Rev. W. H. Painter ... ..	46		
Miss C. E. Palmer ... ..	38		
			2209

Our sincerest regrets and sympathy are tendered to the

relatives of that distinguished botanist, M. Crépin, of Brussels, whose death last year has deprived us of a most kindly helper with the *Roses*, a genus which he did much to elucidate.

In presenting this Report for 1903 I am sure I only express the feelings of every member, when in their name I tender to Mr. Charles Bailey our warmest thanks for the great services he has rendered to this Club, and to Field Botany, during the long term of years for which he has been our presiding officer. To the regret of every member he has been obliged to retire from actual official labour connected with the Club, but his services will be kept in remembrance by them all.

I have to thank the members for allowing me to carry on the work of the Club, and although I feel in some measure the desirability of having one strong Club rather than two less powerful bodies, yet it must be admitted that there are objections to a Club containing too large a number of contributing members, since the labour of distributing, if the parcels are over 20 in number, becomes of a serious nature, especially to those members who only have limited room at their disposal. Again, it appears to many members, and none feel it more than our late Secretary, that it would be unadvisable to lower the standard of the Club's work in any way. At the same time there appears to be in our own Society every facility for the less expert botanist who may be admitted to our ranks; for much remains to be done in the way of distributing plants, even common ones, so long as they are carefully selected and well-prepared specimens. There is no danger of a parcel, even of the commonest plants, being rejected, so long as some point of interest is represented.

On this point I may quote from Mr. A. Fryer, who has long and diligently noted the critical variations of Pondweeds. He says, "any species, or varieties from any localities and as varied stations in the same locality as possible, while early and mature states from the same rootstock are very instructive. If we can get them from all parts of the kingdom what materials for the study of variations, and the effects of local conditions. To say nothing of the certainty of one or two wanting continental forms turning up. . . . The 'new county record' has been good in its day, but the new facts are what naturalists require." Mr. F. J.

Hanbury also suggests that "the members should be invited to send well dried and representative specimens of any plants from the various parts of Great Britain, so that our collections may show the common plants in all their ranges of form and character, as well as to exemplify, to a large extent, the distribution."

May I be allowed to say that with these suggestions I fully agree. At the present time there are many species whose range of variability is quite imperfectly known. When the recent 'Flore de France' is contrasted with our latest British Flora we shall be able to see what an amount of headway we have to make up before we reach that standard of critical discrimination.

But for critical purposes, very special care in selecting and preparing the specimens will have to be adopted, and solitary specimens will be useless. Again, the accompanying labels, or rather the one descriptive label which is meant for publication in the Report, could well be much more complete as to the details of the kind of situation; the soils and strata on which the plant grows, its sheltered or shaded position, the altitude, and its associates, are points which would give life and meaning to an otherwise arid or comparatively useless note.

By these means important additions to our knowledge of plant oecology would be gradually acquired. So far from the Club having finished its work, it appears to me that we are only beginning to understand the necessity of widening our range of observation and of beginning investigations from a higher level. One more suggestion. If an additional specimen of each plant sent were presented by the members, it could be sent to the British Museum Herbarium, and would be there for future reference, while the great National Herbarium would itself be made more completely representative.

Just a sentence as to our financial position. The comparatively small membership roll, on the one side, and the expense of printing not only the Report, but also the 'desiderata list,' and the cost of distributing the parcels, which are returned post free, induce me for the time to accept the kind offer of many members to increase the subscription to 7s. 6d. annually for members who contribute parcels and participate in the distribution of specimens. To those members who remain on our books and receive the

Reports, &c., only, the subscription, it is suggested, should remain at 5s. With economy and by the addition of a few new members, it is hoped that we may be able in time to revert to the latter sum for all members.

SOME OF THE CHIEF BOTANICAL FEATURES OF BRITISH  
BOTANY FOR THE YEAR 1903.

POLYGALA AMARELLA, Crantz, has been recorded from Grassington in Yorkshire, and it has been described and figured in the 'Journal of Botany,' p. 113, t. 450; but it is new to British Botany only in name, being synonymous with *Polygala austriaca*, Crantz, since an undoubted specimen of the latter from Teesdale was sent to Professor Chodat by the writer, and he also named that *P. Amarella*.

RUBUS ADENANTHUS, Boul. and Gil., first found by the Rev. W. Moyle Rogers in Jersey, has been discovered by Major Wolley-Dod in Cheshire, and excellent specimens are sent with this year's parcels.

HIERACIUM CUMBRIENSE, F. J. Hanb., originally found by the Rev. H. E. Fox on Dolley Waggon Pikes in Cumberland, but which has never been thoroughly described owing to the absence of sufficient material, was found by the Rev. H. J. Riddelsdell and the writer on the limestone near Barras in Westmoreland in August last. See 'Journ. Bot.' (1893), p. 17, and (1894), p. 226.

CAMPANULA PERSICAEFOLIA, Linn., hitherto only known as an alien species in Britain, has been found by the Rev. Father Reader in Gloucestershire, in what is probably a native situation (see 'Journ. Bot.' p. 289), and *Lilium Martagon*, Linn., is also a probable native of that interesting county.

LIMONIUM RECURVUM, C. E. Salmon. By this name Mr. Salmon has described in the 'Journal of Botany,' p. 65, t. 449, the Sea Lavender from the Isle of Portland, which appears in our list as *Statice auriculaefolia*, var. *Dodartii* (Gir.). He has also described (l.c. p. 73) a new variety of *Limonium occidentale* from the Orme's Head, Carnarvonshire, as var. *procerum*. Mr. Salmon has wisely chosen the name *Limonium* for the Sea Lavenders,

following as he does the modern continental and American systematists. The following arrangement is suggested in place of the one now adopted in the London Catalogue :—

STATICE [Tourn., ex Linn.] Hill.

- S. plantaginea All. C. (*Armeria plantaginea*, Willd.)  
var. bupleuroides (Gren. and Godr.) C.
- S. linearifolia, Laterr. (*Armeria maritima*, Willd. p. p.)  
var. planifolia (Syme).  
var. duriuscula (Bab.).
- S. maritima, Mill. (*Armeria maritima*, Willd. p. p.)  
var. complanata, Druce.  
var. pubigera (Boiss).

LIMONIUM [Tourn.] Hill.

- L. vulgare, Mill. (*Statice Limonium*, Linn.)  
var. pyramidale (Syme).
- L. humile, Mill. (*Statice rariflora*, Dej.)
- L. occidentale, Kuntze. (*Statice occidentalis* and *S. auriculae-  
folia*.)  
var. procerum, C. E. Salmon.
- L. recurvum, C. E. Salmon. (*Statice occ.*, var. *Dodartii* (Gir.).)
- L. lychnidifolium, Kuntze.  
var. corymbosum, C. E. Salmon. C.
- L. reticulatum, Mill. (*Statice reticulata*, Linn.)

RHINANTHUS RUSTICULUS (Sterneck, see 'Journ. Bot.' p. 295) has been found by the Rev. E. S. Marshall and Mr. W. A. Shoolbred on the south side of Loch Stenness, Orkney, slightly above sea level; it is very closely allied to *R. Crista-galli*, Linn.

EPIPACTIS ATROVIRIDIS, W. R. Linton. Under this name the Rev. W. R. Linton has figured and described in his recently published 'Flora of Derbyshire' (a concise and excellent work), a new species of *Epipactis*; but Mr. Arthur Bennett has expressed doubts as to its being worthy of full specific rank. It is intermediate between *E. latifolia* and *E. ovalis*, Bab.

GLYCERIA FESTUCAEFORMIS, Meynhold. This, the best discovery of the year, we owe to the indefatigable Mr. Lloyd Praeger (see 'Journ. Bot.' p. 353, t. 455), who added this new species

to the British Isles from the shore near Strangford Lough, Co. Down, where it is said to be native.

FESTUCA MARITIMA, Linn. (see 'Journ. Bot.' p. 353), has been found by the Rev. Adrian Woodruffe-Peacock in Lincolnshire at Carlby, just before the junction of the Cornbrash and Great Oolite Clay; but the plant is a South European species, and is scarcely likely to be native there. It differs widely in structure from any of our British Fescues, being placed by Nyman in the genus *Nardurus* as *N. tenella*, but it bears a somewhat superficial resemblance to some forms of *F. sciuroides*.

GLYCERIA DISTANS, Wahl., var. TENUIFLORA, Gren. and Godr. (see 'Journ. Bot.' p. 408), a new British variety from Kent and Sussex, has been distributed this year from the former county.

ARRHENATHERUM AVENACEUM, Beauv., var. BIARISTATUM (Peterm) (see 'Journ. Bot.' p. 408), another new British variety, was distributed by the writer last year from Dungeness, Kent, as a form of *Arrhenatherum*.

POA ALPINA, Linn., var. ACUTIFOLIA (see 'Journ. Linn. Soc.' pp. 421-9). The writer has in the paper quoted given this name to the plant from Loch-na-gar, which appears in the 'London Catalogue' as *Poa stricta*, Lindeb.

P. LAXA, Haenke, var. SCOTICA. In the same paper cited above the writer has given the above name to the plant named *Poa laxa*, Haenke, in Syme's 'English Botany.' It has only been found on Loch-na-gar, and by the Garachary Burn in South Aberdeenshire.

LEPTURUS FILIFORMIS, var. PYCNANTHUM, Hackel in lit. A new variety which Professor Hackel has named from plants distributed this year from Iver, Bucks, where it is only of casual origin.

Besides the 'Flora of Derbyshire' by the Rev. W. R. Linton already alluded to, another member, Mr. L. Lester-Garland, has published 'The Flora of Jersey.' To both members the congratulations and thanks of British botanists are due for their important contributions to Phyto-geography.

In conclusion, may I thank once more the members for

allowing me to take up the reins for a time, and ask for their kind consideration, and may I also say that I shall only be too glad to co-operate in any way to advance the Science which it is our common duty and desire to serve.

GEORGE CLARIDGE DRUCE,

January, 1904.

118, High Street, Oxford.

*Caltha radicans*, Forst. Glen Nevis, Westernness, Aug. 1903, new record.—G. CLARIDGE DRUCE.

*Fumaria Boraei*, Jord., forma. Garden weed, S. Briavel's, West Gloucester., 23 Sept. 1903. I am unable to identify the forms of *F. Boraei* with those described by Mr. Pugsley in 'Journ. Bot.,' 1902. The curvature of the pedicels is generally more noticeable than one would gather from studying his paper.—AUGUSTIN LEY. I believe so. Flowers much smaller than type. Perhaps var. *serotina*, Clavaud, but I do not know the varieties well.—E. S. MARSHALL. Yes, an autumnal form of the type.—H. W. PUGSLEY.

*Fumaria* ——. Odiham, Hampshire, July 1903. This *Fumaria* has come up as a weed in the garden of 'The Yews,' Odiham, growing in great quantity.—C. E. PALMER. A shade-grown *F. confusa*, Jord.—H. W. PUGSLEY and E. S. MARSHALL.

*Fumaria agraria*, Lag. Gen. and Sp. Nov. 21. This beautiful Mediterranean species grew in two or three patches on the refuse heaps from the Metropolis, which are deposited near Iver, Bucks, and Drayton, Middlesex, actually occurring in both counties. It was extremely showy from the striking contrast of the deep chocolate and pale cream-coloured flowers. July 1903.—G. CLARIDGE DRUCE.

*F. officinalis*, Linn., forma. Near Wendover, Bucks, July 1903. A rampant form, four feet high, occurring in arable soil.—G. CLARIDGE DRUCE.

*Arabis petraea*, Lam., var. *ambigua*, Fries. This is the plant which I first recorded as var. *grandifolia*, Druce, from the eastern side of Ben Laoigh, Mid-Perth, and is strikingly different from the *A. petraea* of the Cairngorms or Snowdon.—G. CLARIDGE DRUCE.

*Cardamine trifoliata*. This species is well established in the woods at Gill Foot, near Egremont, Cumberland, where it

carpets about a rood of ground, and appears to be spreading, June, 1903.—JOSEPH ADAIR. *C. trifolia*, Linn., not *trifoliata*, is a native of eastern Europe, and is not likely to be confounded with any native species. It is not given in Dunn's Alien Flora for Britain.—G. CLARIDGE DRUCE.

*Sisymbrium Irio*, Linn. Waste ground, Dublin, coll. R. L. Praeger, comm., August 1903, A. B. JACKSON.

*Lepidium graminifolium*, Linn., at Cardiff Docks, Glamorgan, v.c. 41, 29 August 1903, along with other casuals. With woody stems of extraordinary toughness. The Rev. E. F. Linton has kindly named the plant.—H. J. RIDDELSDELL.

*Lepidium Smithii*, Hook, var. *alatostyla*, Towns., Sept. 1903. Garden specimen from a two-year old plant raised from seed collected at Redbridge, near Southampton, Sept. 1901, Hab., rough banks on the coast. Coll. and comm. F. TOWNSEND. I think Mr. Townsend's *Lepidium* deserves subspecific rank, and in that case it should be called *L. alatistylum*, Townsend. Apparently Mr. N. E. Brown is quite wrong in identifying it with *L. heterophyllum*, Benth. (see 'Suppl. E. B.' p. 27), where he records it as also growing at Lydd, Kent, but of this statement no notice is made in the 'Flora of Kent,' although *L. hirtum* (which is given as synonymous with *L. Smithii*, Hook), is cited from that locality. The nomenclature of the allies of *L. Smithii*, Hook, to give the name it is best known by, is much involved. In the Desiderata lists many members ask for *Lepidium hirtum*, var. *canescens* of the 'London Catalogue,' while few ask for *L. hirtum*. It is possible that they are misled by the mistake in the 'London Catalogue' of putting the census number 88 after *L. hirtum* Sm., and not after the variety *canescens*, which should have Gren. and Godr. put in brackets, as the authors of the 'Flore de France' correctly described it as a variety of *L. heterophyllum*, to which it belongs, the latter being synonymous with *L. Smithii*, Hook. According to the information possessed at present our British plants of this section are :—

*Lepidium campestre*, R. Br., 87.

[*L. heterophyllum*, Benth.]

Var. *canescens*, Gren. and Godr., 89 (*L. Smithii*, Hook).

Forma dubia (yellow anthers), 1.

*L. alatistylum*, Towns., 1.

*L. hirtum*, Smith? 1.

Members should especially look out for any plants with hairy fruits.—G. C. D.

*Erophila brachycarpa*, Jord. Wall top, Froggatt, Derbyshire,

April 1903.—W. R. LINTON. This evidently comes under aggregate *E. praecox*, DC. Some of the specimens may perhaps pass as *E. brachycarpa*, Jord., though the pods are scarcely so broad in proportion as are his type at the British Museum.—E. S. MARSHALL.

*Viola arvensis*, Murr., subsp. *Déséglisei*, Jord. (Middle lobe of sepals foliaceous; carpels ciliate.) Waste ground near Lytham, W. Lancs. (60), July 1903.—J. A. WHELDON. Mr. Baker does not say whether this is correctly named, but gives the characteristic points of *V. Déséglisei*, Jord. 'Stems 1—4 dec. lateral spreading ascending; leaves, radical sub-cordiform oval; upper lanceolate; stipules terminal lobe lanceolate foliaceous; upper petals white or bluish; lower yellow, especially at the base, with violet lines; spur violet, slightly longer than the appendage; capsule oval oblong. Type is recorded as growing in sandy fields.'

*Viola carpatica*, Borbas. Ramford, S. Lancs. (59), June 1903. I send one or two more examples in order to place on record the fact that our plant is certainly sometimes perennial, if not always. Plants sowed in 1902 bloomed in 1903, and the lengthened old stems are now, Dec. 16th, 1903, dying away, but the old crowns are sending up healthy, vigorous shoots for next year's blooming. Whether this is a character of any specific value is a moot point. . . . It would be a boon if Mr. Baker would somewhere give us a key to the numerous British forms of this section that are now named.—J. A. WHELDON. No comment by Mr. E. G. Baker.

*Viola Pesneaui*, Jord. (*V. Curtisii*, var. *Pesneaui*). Sands of Glen Luce, Wigton, August 1899.—G. CLARIDGE DRUCE. Yes.—Mr. E. G. BAKER.

*Viola alpestris*, Jord. (*V. tricolor*, Linn., f.v. *saxatilis*, Schm., *a. alpestris*, Rouy and Fouc.) Arable fields, with numerous flint fragments, near Slough, Bucks, June 1901.—G. CLARIDGE DRUCE. Closely allied to *V. alpestris*; the continental specimens which I have seen are from mountainous situations. The leading characteristics of *alpestris* are, perennial, much branched from base, with ascending branches; median lobe of stipule foliaceous; lower leaves oval, upper oval-oblong or oblong; petals always longer than sepals, yellowish or yellowish-white.—E. G. BAKER.

*Viola subtilis*, Jord. Brickhill, Bucks, June 1901.—G. CLARIDGE DRUCE. The leading points of this species are: upper leaves and median lobes of stipules elongated; lateral lobes of stipules very narrow; flowers small; petals generally shorter than sepals.—E. G. BAKER.

*Viola obtusifolia*, Jord. Winslow, Bucks, July 1901.—G. CLARIDGE DRUCE. This agrees in most of its leading characteristics

with *V. obtusifolia*; the main features of this species are, the median lobe of stipule similar to leaves; lower leaves elliptic-oblong obtuse, narrowed to petiole, obtusely crenate; upper petals elliptic at apex, violet coloured; spur violet coloured, sub-equal to calycine appendages.—E. G. BAKER.

*Viola*. Denham, Bucks, June 1902. Reference number 24,790. This plant grew in great luxuriance in fields by the new railway from Uxbridge, which have been allowed to remain uncultivated. Some of the tufts were four feet across.—G. CLARIDGE DRUCE.  
*Viola confinis*, Jord. teste E. DRABBLE.

*Viola*. Reference number 27,492. Fields on the chalk near Hampden Bottom, Bucks, July 1903.—G. CLARIDGE DRUCE.  
Near *Viola Paillouxi*, Jord. teste E. DRABBLE.

*Viola*. Reference number, 27,493. Cornfield on the chalk above West Wycombe, Bucks, July 1903.—G. CLARIDGE DRUCE.  
*Viola confinis*, Jord. teste E. DRABBLE.

*Polygala oxyptera*, Reichb., var. *collina*, Reichb. Shell-sand, Tain, East Ross, and also in small quantity near Golspie, E. Sutherland (a new record). Prof. Chodat named my specimens, August 1902.—G. CLARIDGE DRUCE.

*Cerastium semidecandrum*, Linn. Near Amphill, Beds., June 1903. This is doubtless the plant which Abbot, in the 'Flora Bedfordiensis,' p. 102, records as *C. pumilum* (see 'Top. Bot.,' p. 81, where it is bracketted for 30 Beds.). The true *C. pumilum* is not contained in Abbot's Herbarium, while *C. semidecandrum* is represented by another species. Amphill is one of the localities given by Abbot for his *C. pumilum*, and the other locality mentioned also yields the same form of *C. semidecandrum*. The soil is a ferruginous sand, whereas the true *C. pumilum* appears to be confined in England to calcareous soils.—G. CLARIDGE DRUCE.

*C. pentandrum*, Syme? Near stream and in short turf, Carding Mill Valley, Church Stretton, Salop, Sept. 10th, 1903.—J. COSMO MELVILL. I have not seen the type of *C. triviale*, Link, var. *pentandrum*, Syme, but these specimens answer the description in being *pentandrous* in the shorter capsule and size, but from being gathered in September are not in good condition. I should call it *C. vulgatum*, var. *pentandrum* (Syme).—G. C. DRUCE. That var. is described by Sir J. D. Hooker as an annual, found on sea shores. Mr. Melvill's plant looks like a late flowering perennial, small flowered of compact stunted growth.—E. S. MARSHALL.

*Cerastium arcticum*, Lange. Cliffs of Clogwyn Du yr Arddu, Snowdon, July 1900.—G. CLARIDGE DRUCE.

*Stellaria graminea*, Linn., var. ? *macropetala*, Wiesb. Waste

ground at Llwydcoed, Glamorgan (41), September 1903. I query this identification, as I have no specimen to compare the plant with. The petals are quite twice as long as the sepals, when fresh; leaves rather broader than is usual in type.—H. J. RIDDELSDELL. Koch, in 'Syn. Fl. Germ.', p. 119, remarks: "Occurrit floribus minoribus et duplo majoribus, quae varietates, observante Schummelio, sexum polygamo-dioicum indicant." But Rouy and Foucaud in 'Flore de France,' iii. 234, under *S. graminea* have a var. *macropetala*, Wiesb., which is described as "Plante robuste, verte, lâchement diffuse; feuilles linéaires ou sublancéolées; fleurs très longuement pedicellées; pétales profondément bipartits, 1-2 fois plus longs que les sépales." I think Mr. Riddelsdell's plants agree better with var. *latifolia* (Godron, sub *Larbreae*), "Plante robuste, verte, lâchement diffuse; feuilles ovales-lancéolées ou largement lancéolées; fleurs grandes; pétales profondément bipartits, dépassant le calice;" and I have seen such also in Buckinghamshire.—G. C. D. I do not know the variety. Lloyd (Fl. de l'Ouest) says: "var. à cor.  $\frac{1}{2}$  plus longue que le cal."—E. S. MARSHALL.

*Althaea hirsuta*, Linn. Side of old limestone quarry tramroad, near Hirwaun, Glamorgan (41), Sept. 1903. Of casual occurrence only. It occurs at Cardiff Docks with other casuals, and I believe is grown sometimes in gardens about Aberdare.—H. J. RIDDELSDELL.

*Malva sylvestris*, Linn., var. *lasiocarpa*, Druce. Bullingdon, Oxford, Sept. 1892. See 'Fl. Berks,' p. 112, and 'Ann. Scot. Nat. Hist.' (1895), p. 47.—G. CLARIDGE DRUCE.

*Erodium cicutarium*, var. *triviale*, Bab. Aintree, S. Lancs., June 1902.—J. A. WHELDON. Rouy and Foucaud, in 'Flore de France,' iv., p. 107, consider *E. triviale*, Jordan, as synonymous with *E. pimpinellifolium*, Sibth., var. *genuinum*, Rouy and Fouc. In Jordan's type in Herb. Brit. Mus. the leaves are rather more finely divided than in this specimen.—E. G. B. I think it is var. *triviale*, Bab., but I doubt if it is identical with Jordan's *E. triviale*, and it is not *E. pimpinellifolium*, Sibth., which has spotted petals.—G. C. D.

*Euonymus europaeus*, Linn. forma. From limestone rocks at top of a hillside wood, Cefn, Breconshire (vc. 42), June 1903. This unusually lax form with cymes of very few flowers, generally one or two, is perhaps only caused by growing among other bushes. But the same conditions in other places do not always seem to produce this effect: in fact I do not remember to have seen it elsewhere.—H. J. RIDDELSDELL. Probably *E. vulgaris* (Mill. Dict. No. 1.) Scop., var. *angustifolius*, Schultz ap. Reichb. Fl. Excurs., p. 827, which is described in Rouy and Foucaud's 'Flore de France,' iv. p. 159, as having "Feuilles plus

étroites oblongues - lancéolées, longuement acuminées, les plus grandes atteignant 6-7 cent. de long; pédoncules 2-4 flores; capsules plutôt petites," which appears to be near this plant, which we should call *E. europaeus*, var. *angustifolius*.—G. C. D. Mr. E. G. Baker says it requires comparison with this variety.

*Medicago denticulata*, Willd. Long spined form, canal bank, near Ford, S. Lancs. (59), Sept. 1903.—J. A. WHELDON. Casual here. Var. *lappacea* (Lam.), I believe.—E. S. MARSHALL. I think *denticulata* rather than *lappacea*.—G. C. D.

*Medicago*. Waste ground near Bootle, S. Lancs. (59), Sept. 1903. This pretty little species also occurs at Birkenhead, Cheshire, whence I have had it sent as *M. minima*, from which it differs in its laciniate stipules, less hairy and broader leaflets, and loosely coiled pods.—J. A. WHELDON. I think this is *M. litoralis*, Rhode.—G. C. D. The Rev. W. R. Linton was at first inclined to think it *M. praecox*, DC., but afterwards referred it to *M. lappacea*. Mr. E. G. Baker asks if it can be starved *M. denticulata*?

*Melilotus indica*, All. On rubbish heaps at Iver, Bucks, July 1903.—G. CLARIDGE DRUCE.

*Oxytropis uralensis*, DC. Sea cliffs at Downreay, Caithness, August 1902.—G. CLARIDGE DRUCE. Specimens then mostly over flower.

*Vicia lathyroides*, Linn. Parkstone, Dorset, in plenty, May 2, 1903.—W. MOYLE ROGERS. Brickhill, Bucks, June 1903.—G. CLARIDGE DRUCE.

*Lotus tenuis*, Kit. Near Twin Woods, Beds, on clay soil, a new county record, August 1903.—G. CLARIDGE DRUCE.

*Vicia villosa*, Roth, var. *glabrescens*, Koch, 'Syn. Fl. Germ.,' p. 194 (1837), in considerable quantity on the rubbish heaps at Iver, Bucks, and near Drayton, Middlesex, and in beautiful flower. I also met with it, but nearer typical *V. villosa*, in a field of vetches near Iver Heath, Bucks, with other Mediterranean Casuals, July 1903.—G. CLARIDGE DRUCE.

*Vicia pannonica*, Jacq, var. *purpurascens*, Koch, 'Syn. Fl. Germ.,' p. 196. In a field of vetches near Iver Heath, Bucks, August 1903.—G. CLARIDGE DRUCE.

*Rubus affinis*, W. and N., var. *Briggsianus*, Rogers. St. David's, Pemb., 20 August 1903.—AUGUSTIN LEY. Yes, a form with greyer sepals and longer leaflets than usual.—W. MOYLE ROGERS.

*Rubus cariensis*, Rip. and Gen., near S. David's, Pemb., August 1903.—AUGUSTIN LEY. Yes.—W. MOYLE ROGERS.

*Rubus durescens*, W. R. Lint. Previous to 1902 this interesting bramble was known only from Mid-Derbyshire, but last year the Rev. W. Moyle Rogers discovered two or three bushes on some rough waste ground near Loun, Leicestershire. This summer I found it occurring somewhat plentifully in two other widely separated localities. It keeps remarkably distinct. Lane near Pockington, Leicester, August 9, 1903.—A. B. JACKSON. Yes.—W. M. ROGERS.

*Rubus sciaphilus*, Lange. Grwyne valley, Brecon, 13 August 1903.—AUGUSTIN LEY. Yes.—W. MOYLE ROGERS.

*Rubus argentatus*, var. *robustus* (P. J. Muell.). Saintfield, Co. Down, 31 August 1903.—C. H. WADDELL. I think best under *robustus*, though differing from our usual British form by the shorter falcate prickles and the leaflets more narrowed to their base, and rather more evenly toothed.—W. MOYLE ROGERS.

*Rubus subinermis*, Rogers. S. Briavel's, West Gloucester., 23 Sept. 1903.—AUGUSTIN LEY. Yes, forma *umbrosa*.—W. MOYLE ROGERS.

*Rubus thyrsoides*, Wimm. Fairmile Common, Surrey, 10 July 1903. Mr. Rogers says: 'I think certainly *R. thyrsoides*, sp. coll., but I have nothing exactly matching it, the leaves especially being peculiar in their imbricate, shallow-toothed, short-pointed leaflets. A specimen of Gelert's, labelled *R. fragrans*, Focke, from Westphalia, comes nearest to it, though in that the leaflets are neither imbricate nor so finely toothed as in this. But the species is a very aggregate one. This plant is abundant on Walton Common, and I have seen it near Fairmile. It is conspicuous by its long wand-like barren shoots, which reach erectly considerably above the bushes; also by its very white flowers and very white felted leaves, on rather flaccid petioles, so as to be easily turned over by the wind, showing the conspicuous white under surface. It is very constant in its characters in these stations, and is always easily recognised.—A. H. WOLLEY-DOD. A beautiful form of this very aggregate species, with leaflets less incised and more parallel-sided and short-pointed than usual.—W. MOYLE ROGERS.

*Rubus silvaticus*, W. and N. Valley above Lower Wych, Cheshire, 5 August 1903.—A. H. WOLLEY-DOD. New record for v.c. 58, Cheshire.—Passed by W. MOYLE ROGERS.

*Rubus macrophylloides*, Génév. S. Briavel's, W. Gloucester., 23 Sept. 1903.—AUGUSTIN LEY. Just *R. macrophylloides*, Génév., as

described on p. 44 of my 'Handbook of British Rubi,' and as it occurs in immense quantities in Sark.—W. MOYLE ROGERS.

*Rubus leucostachys*, Schleich. forma. Saintfield, Co. Down, 2 August 1902.—C. H. WADDELL. This seems to me a very curious and distinct form. The typical plant is absent here at Saintfield.—C. H. WADDELL. An abundant form in Co. Down, and in East Armagh, with stem less constantly densely hairy, and dark shining concave leaves. The terminal leaflet is also remarkably variable in outline; sometimes typical, but often broader with short point, and (especially in the smaller leaves) not unfrequently more or less acuminate.—W. MOYLE ROGERS.

*Rubus anglosaxonicus*, Gel., var. *vestitifomis*, Rogers. Woods at Ross, Herefordshire, 5 Sept. 1903.—AUGUSTIN LEY. Yes.—W. MOYLE ROGERS.

*Rubus infestus*, var. *virgultorum*, Ley. Near Malpas Station, Cheshire, 8 August 1903. New record for 58, Cheshire.—A. H. WOLLEY-DOD. Passed by W. MOYLE ROGERS.

*Rubus Leyanus*, Rogers. Saintfield, on open rocky bank, Co. Down, August 1903.—C. H. WADDELL. Yes, a strong form.—W. MOYLE ROGERS.

*Rubus melanodermis*, Focke. Branksome Park, Dorset, August 12, 1903. Most of the panicles in these sheets have the lower branches unusually lengthened—a peculiarity due, I suppose, to the exceptionally wet summer. In other respect the specimens seem quite typical.—W. MOYLE ROGERS.

*Rubus Bloxamii*, Lees. Alum Chine, Bournemouth, S. Hants, 8 August 1903.—W. MOYLE ROGERS.

*Rubus fuscus*, W. and N., var. *macrostachys*, P. J. M., Coldborough, Herefordshire, 8 Sept. 1903.—AUGUSTIN LEY. Rightly named, I suppose; but I cannot define the variety very exactly.—W. MOYLE ROGERS.

*Rubus divexiramus*, P. J. M. Ganarew, Herefordshire, 31 August 1903.—AUGUSTIN LEY. No doubt rightly named, though the 5-nate leaves are unusually numerous, the terminal leaflet oftener gradually acuminate (though not all) of the panicles less conspicuously bristly than I have seen before.—W. MOYLE ROGERS.

*Rubus Lettii*, Rogers. See 'Journ. Bot.' (1901), p. 381. Roadside, Saintfield, Co. Down, 22 August, 1903.—C. H. WADDELL. Yes.—W. MOYLE ROGERS.

*Rubus adenanthus*, Boul. et Gil. Below Peckforton Castle, Cheshire, 5 August 1903. Lane at Pennsylvania, Cheshire. Plentiful in the above stations which are conterminous, but not seen elsewhere.—A. H. WOLLEY-DOD. These plants cannot, I think, be kept distinct from my Gorey Bay (Jersey), *R. adenanthus*, though they have larger panicles, and stronger glandular and acicular development and more obovate leaflets than I find in my specimens. In all these particulars our *R. melanoxylon* shows quite as wide a range of variation. New record for the British Isles.—W. MOYLE ROGERS.

*Rubus Bellardi*, W. and N. Festiniog, Merioneth, 13 July 1903.—AUGUSTIN LEY. Yes.—W. MOYLE ROGERS.

*Rubus Kaltenbachii*, Metsch. Newent Wood, 10 September 1903, and S. Briavel's, W. Gloucester., 21 September 1903.—AUGUSTIN LEY. Yes.—W. MOYLE ROGERS.

*Potentilla opaca*, Linn. A probable escape at Kersal and Prestwich, near Manchester, from nursery gardens near. S.E. Lancashire. June-July 1903.—J. COSMO MELVILL. This is not the *Potentilla opaca* of Linnaeus, which is allied to our *P. verna*, but it is probably the *P. opaca* of Smith in 'E. B.' t. 2449, which is treated as synonymous with *P. intermedia*, Linn., in 'Index Kewensis.'

There is a *P. intermedia*, Nestl. 'Mon. Potent.' p. 50, which is referred to *P. heptaphylla*, Mill. in 'Index Kewensis,' but Mr. Melvill's plant is similar to Don's, and it is the *P. opaca* of Don's 'Herb. Brit.' fasc. vii., No. 165, which was gathered by him doubtless as an escape from cultivation.

Rouy and Foucaud in 'Flore de France' reject, so far as France is concerned, the Linnean *intermedia* which is described in the 'Mantissa,' i. p. 76. Mr. Melvill's plant is similar to a Swiss specimen in Herb. Oxf. labelled *P. villosa*, Hall., which is treated as synonymous with the Linnean *P. intermedia* in 'Index Kewensis,' but Nyman gives the geographical distribution for that plant 'Russia, Finland, Sweden, and North Germany,' while *P. heptaphylla*, Mill. (the *P. intermedia*, Nestl.), is found in Helv. Delph. Thuringia, Hungary, Pyrenees, &c.

It is with some doubt that I identify Mr. Melvill's plant with *P. heptaphylla*, Mill., but I have no doubt as to its not being *P. opaca*, Linn.—G. C. DRUCE. Costé in his 'Flora' states that in *P. opaca* the lobes of the epicalyx ought to be shorter than the Calyx.—E. G. BAKER.

*Rosa micrantha*, Sm. Tickwood, near M. Wenlock, Salop, Sept. 7, 1903.—W. H. PAINTER. New County record for Salop.

*Rosa pseudo-rusticana*, Crépin. Chetnole, Sherborne, Dorset, 26 August 1903.—W. MOYLE ROGERS.

*Rosa pomifera* Herrm. Undercliff near St. Margaret's, Kent. One bush far away from houses, noticed by Mrs. Davy and myself in July 1903. New to the Kentish flora.—G. CLARIDGE DRUCE.

*Crataegus oxyacanthoides*, Thuill. Near Ashridge, Bucks, May 1900. A distinct species, in my opinion.—G. CLARIDGE DRUCE.

*Saxifraga hirsuta*, Linn. ex horto Prestwich. Roots from Glen Curragh and the Gap of Dunloe, Co. Kerry. June 1903.—J. COSMO MELVILL. Correct, I think, though not extreme in leaf-characters. I should have been disposed to name it *S. Geum* × *umbrosa*.—E. S. MARSHALL.

*Saxifraga Andrewsii* Haw. (*S. Guthriana*, Engler). Originally discovered by Mr. Andrews on rocks at head of Glen Curragh, Co. Kerry, but since sought in vain. Grown in garden at Prestwich for the last quarter of a century from specimens obtained from the Botanical Gardens at Cambridge, where the examples are labelled 'received from Mr. Andrews from Glen Curragh, Co. Kerry.' My brother and sister visited the Irish habitat two or three years ago, and well searched the mountain at the head of the Glen, where Mr. Andrews recorded the species, but the only Saxifrages they noted were *umbrosa* and *hirsuta*. It has been by some considered a hybrid between *umbrosa* and *Aizoon*, the last not British, but I am not sure whether this has been proved. I have both these growing together, and have never noticed the least tendency to hybridise. It is true that the seeds [of *Andrewsii*] are infertile; and this lends some colour to the assumption of hybridity. It increases by barren shoots bearing rosettes very profusely, and is one of the handsomest of the Robertsonian group.—J. COSMO MELVILL. This has just the characters that one would expect to result from *S. Aizoon* (or one of its allies) hybridising with *S. umbrosa*. That such a plant was ever wild in Kerry is incredible. Most probably it arose from natural crossing in Mr. Andrews' garden, and was erroneously supposed by him to have been brought from Glen Curragh. The only apparent alternative to suggest is wilful imposition.—E. S. MARSHALL.

*Epilobium parviflorum*, Schreb. Near Alston, W. Lancs. (60).—J. A. WHELDON. A drawn-up apparently shade-grown *E. parviflorum*, Schreb.—E. S. MARSHALL.

*Epilobium obscurum* × *parviflorum*. Near Bamford, Derbs., 3 August 1903.—W. R. LINTON. Correct.—E. S. MARSHALL.

*Carum Bulbocastanum*, Koch. Wilbury Hill, Herts., July 1903. In some quantity in arable fields, and sparingly on the turf margins.—G. CLARIDGE DRUCE.

*Anthriscus Cerefolium*, Hoffm. = (*Cerefolium sativum*, Bess.). Rubbish heap, Eton, Bucks, August 1901.—G. CLARIDGE DRUCE.

*Seseli Libanotis*, Koch. Cherry Hinton, Camb., July 1899.—G. CLARIDGE DRUCE.

*Selinum Carvifolia*, Linn. From the well-known locality at Chippenham Fen, Camb., August 1903, in company with Mr. Druce. The plant extended over the rough damp meadow adjoining the fen for a considerable distance, and right into the very heart of the fen. I came across it several times (not in flower, however) when 50 to 75 yards distant from the edge of the fen and wading in 18 inches or 2 feet of water. The resemblance to tall luxuriant *Daucus Carota* is of the closest, in fact it required a careful look at the involucre to make sure of its identity, when I first saw it. We were passing within three yards, when I was led to look closely at the plant, solely because I knew it must be near at hand. It is quite conceivable and probable that botanists, even careful and keen-eyed men, may have overlooked it time after time. There seems to be no good ground, upon score of its late discovery, to refuse to recognise it as a native in this locality.—H. J. RIDDELSDELL. This was the first time I saw the plant in England, and I agree with Mr. Riddelsdell in saying that as it appears now, there was nothing in its growth in the fen to suggest its being a recent introduction, or indeed an introduction at all; but Mr. Fryer and Mr. Bennett, who saw it some years ago, I believe formed a different opinion. But *Selinum* appears to be a very unlikely plant to be accidentally introduced, and I can readily understand its being passed over as *Daucus*, the prevailing form of which in this locality mimics it very closely in appearance. Few botanists would pass it by for *Peucedanum palustre*, which has a different growth. That it could have been brought with any of the plants in an adjacent plantation I consider most improbable.—G. C. D.

*Galium boreale*, Linn. 60 West Lancashire. Banks of Lune, near Caton, alt. 50 feet (possibly originally brought down by floods from 27 miles higher up the river, where it occurs in Westmorland), July 1903.—ALBERT WILSON.

*Galium insubricum*, Gaud. Origin Tretire, Herefordshire, garden, 28 July 1903. The same plant as that sent by me in 1897 as *G. erectum*, Huds., see note of Herr Freyn in Report, 1897, p. 549.—AUGUSTIN LEY. I cannot think that this is Gaudin's *Galium insubricum* which he described in 'Flora Helvetica,' vol. i. p. 421, as having 'folia tenuia, neuticam carnosam, uninervia, venulosa, fere semiuncialia, latiuscula, obovata, vel obverse lanceolata, obtusa, sed subito apiculato-mucronata. Eam plantam, fortasse cum Galium Molluginis varietatibus latifoliis et tenuifoliis hucusque confusam.' Nor is it *G. elatum*, var. *insubricum* of Syme, which has 'Leaves usually 6 in a whorl, obovate.' It differs from *G.*

*insubricum* distributed through Baenitz 'Herb. Europ.' by its much narrower and more acute leaflets. Yet its cymes evidently keep it away from *G. erectum*, Huds. I think Herr Freyn is correct in referring it to *Galium dumetorum*, Jord., which by Rouy and Foucaud in 'Flore de France' is made a variety of the sub-species *G. elatum*, Thuill, characterised as having "Feuilles oblongues-linéaires; pédicelles fructifères étalés dressés, courts; panicule à rameaux très étalés; corolle blanchâtre."—G. C. D. Agrees much better with the var. *Bakeri*, Syme, in Hooker and Babington, than *insubricum*.—E. S. MARSHALL.

*Galium erectum*, Huds. Near Tring, and near Hampden Bottom, Bucks, July 1903. The latter typical *erectum*—G. CLARIDGE DRUCE.

*Valerianella rimosa*, Bast. Near Little Marlow, Bucks, July 1903, but noticed in Bucks long ago. New record for 24, the type *leiocarpa*.—G. CLARIDGE DRUCE.

*Erigeron canadense*, Linn. Bury Fields, Odiham, N. Hants.—C. E. PALMER, 9 Sept. 1903.

*Matricaria discoidea*, Linn. A recently introduced alien, growing by the side of the road between Twyford and Hurst, Berks, new to the county, August 1903.—G. CLARIDGE DRUCE.

*Senecio squalidus*, Linn. Possibly crossed with *S. vulgaris*, as it grew with both species near the railway at Reading, and at once conspicuous from the much smaller flowers than those of *S. squalidus*, which now grows there in vast quantity. As I have elsewhere stated, the leaf outline of *squalidus* varies greatly, but I think I see evidences of *vulgaris* in the leaves of this plant, although on the whole *S. squalidus* greatly preponderates. The plant is near to, but not identical with, specimens which Mr. J. G. Baker called *S. crassifolius*, but which are I think a hybrid of *S. squalidus*.—G. CLARIDGE DRUCE. I thank you very much for the curious specimen of *Senecio* you have kindly sent me. At first sight it looks, indeed, like a hybrid, but after a more careful examination I am doubtful. The shape of the leaves of *S. squalidus* is very variable, at least in Italy; the flower-heads are like those of *squalidus*, the ligules are rather large, the ribbed fruits seem to be perfect. Therefore I think there are too few characteristic marks of *vulgaris* for supposing it of hybrid origin. All the differences, however, will be seen much better in living specimens. Many hybrids look very much like one of the parents, and therefore it would not be prudent to judge from dried branches only without examination of pollen, &c.—W. O. FOCKE. The plant distributed is allied to the plant found near Oxford by Sir W. Thistleton Dyer on the site of the old workhouse at Jericho in 1867, for which he proposed the name *S. squalidus*, var. *parviflorus*. See 'Rep. of Lond. Exc.

Club,' 1867. While fully agreeing with Dr. Focke in the remarks given above, I am disposed to think the variation from the type is caused by the influence of *S. vulgaris*, although, as I have said, *S. squalidus* is the prepotent parent.—G. C. D.

*Senecio Cineraria*, DC. (*Cineraria maritima*, Linn.). Thoroughly naturalised on the cliffs between Torquay and Babbicombe. With it an evident hybrid with *S. Jacobaea* occurred. July 1903.—G. CLARIDGE DRUCE.

*Senecio campestris*, DC. Westbury Downs, South Wilts, 20 June 1903.—W. A. SHOOLBRED. Mr. Williams points out that the earliest name for this plant in the genus *Senecio* is *S. integrifolius*, Clairv., 'Man. Herb.,' p. 41 (1811).

*Carduus crispus* × *nutans*. Clandon Downs, Surrey, 29 July 1903.—A. H. WOLLEY-DOD. A good intermediate hybrid.—G. C. D. Correct.—E. S. MARSHALL.

*Cnicus tuberosus*, Roth. Root from Avebury, Wilts, cult. at Thurcaston.—Rev. T. A. PRESTON. Comm. A. B. JACKSON.

*Centaurea aspera*, Linn. Alien; canal bank, near Aintree, S. Lancs. (59), August 1903. A procumbent plant with pale purplish flowers and a profusion of interlacing branches.—J. A. WHELDON. Yes.—E. G. BAKER.

*Ambrosia artemisiæfolia*, Linn. In the sandhills north of St. Thomas's Church, St. Anne's-on-the-Sea, West Lancashire (v.c. 60), 19 Sept. 1903. Some sets of this alien, consisting of examples where the spikes are mainly staminiferous, and other examples with the spikes mainly pistilliferous, are sent in a more advanced state than the species reached in 1902. See Report, Vol. II. p. 150. In 1903 the same station yielded *Gypsophila paniculata*, *Salvia verticillata*, L. (both species flowering), and *Bromus maximus*, L. (in fruit). The station on the south side of the Church has been recently fenced in, and is now included in the Church grounds.—CHARLES BAILEY.

*Hieracium Pilosella*, nr. var. *concinatum*, F. J. H. Shirley. Derbyshire, 5 July 1903.—W. R. LINTON. A form of *concinatum*.—F. J. H. Also from Grwyne Valley, Heref. 13 August 1903.—AUGUSTIN LEY.

*Hieracium Schmidtii*, Tausch, var. *customon*, Linton. In good quantity about the coast of Gower, v.c. 41, Glamorgan, from Pwll Du Head to Oxwich Bay, and on Pennard Castle; growing chiefly on the limestone cliffs, and also in the greensward; June 1903, in company with Mr. Ley; also July 1903.—H. J. RIDDELSDELL. In 'Prod. Fl. Brit.,' p. 110, Mr. F. N. Williams speaks of *Eustomon* as 'a large flowered form a little on the way to *crinigerum*, having

attenuate leaves, but the differences do not work out well on paper or in the herbarium.'—G. C. D.

*Hieracium lasiophyllum*, var. *planifolium*, F. J. H. Deep Dale, Derby, 16 July 1903. A well-marked form, abundant in the central limestone of the county.—W. R. LINTON. Mr. F. N. Williams, l.c., p. 109, considers the Great Doward *planifolium* as probably a hybrid between *H. Schmidtii* and some form of *H. silvaticum*.—G. C. D.

*Hieracium orimeles*, W. R. L. Langowerglen, Bala, Merioneth, 6 July 1903.—AUGUSTIN LEY.

*Hieracium murorum*, var. *lucidulum*, Ley. 'Journ. Bot.' (1900), p. 3. Thornton Force, W. Yorks, 2 July 1903; a form which differs from the Welsh plant in having the ligule-tips usually pilose.—W. R. LINTON. Also as 952 var. *H. lucidulum*, Ley, Catterick glen, W. Yorks, 25 June 1903.—AUGUSTIN LEY. The *H. silvaticum*, Gouan, var. *lucidulum*, Williams, 'Prod. Fl. Brit.', p. 137.—G. C. D.

*Hieracium murorum*, var. *Stenstroemii* (Dahlst.). Near Ribblehead, W. Yorks, 23 June 1903.—W. R. LINTON. The *H. silvaticum*, var. *Stenstroemii*, Williams, l.c., p. 135.—G. C. D.

*Hieracium pellucidum*, Laest.? Wyre Forest, Worcester, 15 Sept. 1903.—AUGUSTIN LEY. *H. silvaticum*, var. *pellucidum* Almqu.—G. C. D.

*Hieracium sarcophyllum*, Stenst. Scaurs, Ingleborough, &c., W. Yorks, July 1903.—AUGUSTIN LEY. The Rev. W. R. Linton says his specimen is a form of *H. cymbifolium*, which differs from the Derby-Staffs type by its leaves being of a brighter and yellower green, with its ligules a little ciliate at the tips.

*H. rubiginosum*, F. J. H. Near Horton, W. Yorks, 24 June 1903.—W. R. LINTON.

*Hieracium insulare*, var. *petrocharis*, Linton. Craig Cailleach, Perth, August 1899.—G. CLARIDGE DRUCE. Now put under *H. flocculosum*, Backh., as var. *insulare*, Williams in 'Prod. Fl. Brit.' 119, but it has a very distinct facies when growing.—G. C. D.

*Hieracium holophyllum*, W. R. L. Near Litton, Derbs., 11 July 1903.—W. R. LINTON.

*Hieracium duriceps*, var. *cravoniense*, F. J. H. Near Ribblehead, W. Yorks., 23 June 1903.—W. R. LINTON.

*Hieracium vulgatum*, Fr. var. *sejunctum*, W. R. L. Drwsynant, Merioneth, 7 July 1903.—AUGUSTIN LEY.

*Hieracium diaphanoides*, Lindeb. Near Bala, July 6, and

Festiniog, Merioneth, July 14.—AUGUSTIN LEY, and Railway bank, Chapel-en-le-Frith, Derbs., 23 July 1903.—W. R. LINTON.

*Hieracium sciaphilum*, Uechtr., var. *pulchrius*, Ley. From the Carmarthenshire Fan, v.c. 44, and Craig Gleisiad, Brecons., v.c. 42, July 1902, named by the Rev. A. Ley.—H. J. RIDDELSDELL. Williams in 'Prod. Fl. Brit.,' p. 155, following Günther Beck in 'Fl. Mid. Osterr.,' puts *sciaphilum* as a variety of *H. vulgatum*, and I think rightly, but he makes no mention of the var. *pulchrius*.—G. C. D. This appears to have glabrous-tipped ligules, a point which, taken together with the very different foliage, and less densely glandular hairs, seems to me to place it quite off *H. sciaphilum*.—E. S. MARSHALL.

*Hieracium rigidum*, var. *pullatum*, Dahl. Llangower Glen, Bala, near Blaena Festiniog, and Heath, near Tan y Bwlch, Merionethshire.—AUGUSTIN LEY. Mr. Williams places this as a variety of the sub-species *affine* of *H. laevigatum*, Willd., under the name *obatescens*, Williams, l.c., p. 169.—G. C. D.

*Hieracium rigidum*, var. *Friesii*, Hartm. Blaena Festiniog, Merioneth, 14 July 1903.—AUGUSTIN LEY. This Mr. Williams names *H. laevigatum*, Willd., sub.-sp. *affine* (Tausch), var. *Friesii*, Williams.

*Hieracium rigidum*, Hartm., var. *scabrescens*. Origin Glyn Collwng, Brecon Garden, 30 July 1903.—AUGUSTIN LEY.—The *H. laevigatum*, Willd., sub.-sp. *affine* (Tausch), var. *scabrescens*, Williams, l.c., p. 169.—G. C. D.

*Hieracium rigidum*, Hartm., var. *nidense*, F. J. H. Origin Brecon Garden, 7 August 1903.—AUGUSTIN LEY.

*H. boreale*, var. *virgultorum*, Jord. Wyre Forest, Worcester, 15 Sept. 1903, and cultivated Brecon specimens.—AUGUSTIN LEY. This is put by Mr. Williams, l.c., 175, as *H. Sabaudum*, Linn., var. *rigens* (Jord.), Williams.—G. C. D.

*Hieracium umbellatum* var. Exposed sea-cliffs, Llanwnda, Pembroke, August 1903.—AUGUSTIN LEY.

*Hypochoeris glabra*, Linn. Brickhill, Bucks, new to North Bucks, and not recorded for the County for over a century, Sept. 1903.—G. CLARIDGE DRUCE.

*Hypochoeris glabra*, var. *Balbisii* (Loisel.) = var. *rostrata*, Coss. et Germ., 'Fl. Env. Paris,' 427 (1845). New Romney, Kent, July 1903—G. CLARIDGE DRUCE.

*Bryanthus taxifolius*, A. Gray. Sow of Athol, Perth, August 1902, over flower.—G. CLARIDGE DRUCE.

*Hypopitys Monotropa*, Crantz, var. *glabra* (Bernh.). Sandhill, Formby, S. Lancs. (59), July 1902.—J. A. WHELDON. The specimens are labelled *Hypopitys glabra*, Bernh., but he described it as a species of *Monotropa*. It is kept as a sub-species by Rouy and Foucaud, under the name *H. hypophegea* Don Gen. Syst. 3, (1834), 866, of which it appears to be the variety *serotina*, Rouy and Fouc. 'Fl. France,' iv. p. 10, which it resembles in being completely glabrous, but differs in having more numerous flowers.—G. C. D.

*Statice pubescens*, Sm. (*S. linearifolia*, Laterr. Fl. Bord., ed. 2, 189 (1821)), Sgur Mhor, and Ben Dearg, East and West Ross, also from Scrabster, Caithness, August 1902. This is the pleurotrichous plant with the furrows of the calyx glabrous.—G. CLARIDGE DRUCE.

*Lysimachia ciliata*, Ait. Garden specimens from roots brought from Sebergham, Cumberland, August 1903.—J. ADAIR. Linnaeus is the authority, not Aiton.—G. C. D.

*Gentiana lingulata*, Agardh., var. *praecox*, Towns. Plentiful on Warminster Downs, v.c. S. Wilts. Growing side by side with *G. Amarella*, L., this contrasted greatly with it in size, and in the colour of its herbage; being also in full bloom, while the other was not yet even in bud. The corolla lobes are frequently 5, though 4 is the preponderating number.—E. S. MARSHALL. Also as *Gentiana Amarella*, var. *praecox*, Raf., from the same locality.—W. A. SHOOLBRED. Exactly my plant from the Berkshire downs.—G. C. D.

*Anchusa officinalis*, Linn. var. Llwydcoed, Glamorgan, v.c. 41, June 1903. The Rev. E. F. Linton writes: 'If there were any small flowered var. of *A. officinalis* this might do for a var. *parviflora*. It is much like in habit and most particulars, but the flowers are  $\frac{1}{3}$ — $\frac{1}{4}$  the size.'—H. J. RIDDELSDELL. I doubt its being *A. officinalis*.—G. C. D. Very doubtful confer *Lycopsis*.—E. G. BAKER. No, the calyx is divided to the base, instead of half-way. It agrees much better in characters with *A. italica*, Retz., but my specimen is clearly abnormal, the stem having been injured at an early stage of growth.—E. S. MARSHALL.

*Linaria vulgaris* × *repens*. Near Aberystwith, v.c. 46, August 1903. This plant has been under Professor Salter's observation for some time past, and he has failed to find *repens* in the neighbourhood of Aberystwith. Two forms are sent, one of which bears a stronger resemblance to *L. repens* than the other.—W. H. PAINTER. Yes, one is about midway between the two parents, the other is about  $\frac{1}{3}$  *vulgaris*,  $\frac{2}{3}$  *repens*.—G. C. D.

*Euphrasia gracilis*, Fries, very young. Dalwhinnie, E. Inver-

ness, nearly 1,200 feet above sea level, July, 1903.—W. MOYLE ROGERS. Also from Barbon, Westmoreland, July, 1902.—W. H. PAINTER. The bulk of Mr. Rogers' specimens are very diminutive starved *E. gracilis*, but among them I find one very untypical small specimen of *E. brevipila*, and one of ?*E. curta*.—F. TOWNSEND. Mr. Painter's *E. gracilis* is badly dried, probably withered before it was dried, and very mouldy also, so it is not easy to determine, but it is not *E. gracilis*. It may be *E. scotica*.—F. TOWNSEND.

*Euphrasia brevipila*, Burn. and Greml. Nethybridge, July 6, Kingussie, July 15, and Aviemore, 24 July 1903. All in Easternness, at heights varying from about 700 to 1,200 feet above sea level. Advie, by R. Spey, at about 650 feet (Co. record), Elgin, July 13, and Blair Atholl, west side of Garry, Mid Perth, July 1903.—W. MOYLE ROGERS. These are mixed specimens; the bulk of the Nethybridge gathering are *E. brevipila*, but one or two specimens are, I believe, *E. Rostkoviana* × *brevipila*, one a starved diminutive form of *E. Rostkoviana*, another may be *E. curta* × *brevipila*.—F. TOWNSEND.

*Euphrasia stricta*, Host. Bullingdon Bog, Oxford (new Co. record for 23), Sept. 1903, and Cothill Bog (new record for 22 Berks), Sept. 1903.—G. CLARIDGE DRUCE.

*Euphrasia nemorosa*, H. Mart. Rough field pasture, Chetwick Salop, Sept. 1903.—J. COSMO MELVILL. Also from Chesham, Bucks, July 1903, and Kirkby Stephen, Westmorland, August 1903.—G. CLARIDGE DRUCE.

*Euphrasia latifolia*, Pursh, in great quantity at Downreay, Caithness, August 1902.—G. CLARIDGE DRUCE.

*Euphrasia Kernerii*, Wettst. Turfy escarpment of the chalk near Risborough, Bucks, August 1902.—G. CLARIDGE DRUCE. New county record for 24.

*Euphrasia Rostkoviana*, Hayne. Reay, Caithness; and Sgur Mhor Fannich, East Ross., August 1902.—G. CLARIDGE DRUCE.

*Bartsia Odontites*, Huds., var. *littoralis* (Reichb.). Cliffs near Downreay, Caithness, August 1902. New county record—G. CLARIDGE DRUCE.

*Melampyrum cristatum*, Linn. Twin Woods, Beds., August 1903. In the greatest luxuriance and beauty, but the brilliant colours quickly spoil in drying. I tried dipping these in Sulphurous Acid and Alcohol, but with slight success. Although long known to grow in the county I do not think it has been previously distributed from Beds through the Club.—G. CLARIDGE DRUCE.

*Rhinanthus minor*, Ehrh. Small coast form, St. Anne's, W. Lancs. (60), July 1903.—J. A. WHELDON. *Alectorolophus minor*, J. von Sterneck. *Rhinanthus Crista-galli*, Linn.—G. C. D.

*Rhinanthus minor*, Ehrh.? Sea coast, Wallasey, Cheshire, July 1903.—J. A. WHELDON. *Alectorolophus minor*, J. von Sterneck. R. Crista-galli, Linn.—G. C. D. The Rev. E. S. Marshall was disposed to refer this and the preceding to *R. stenophyllus*.

*Rhinanthus stenophyllus*, Schur. Warminster, S. Wilts, June 1903, named *Alectorolophus stenophyllus* by Dr. J. von Sterneck, who added that the internodes are remarkably long. This seems to be the rule in our British forms of the plant. Not previously known from Wilts.—E. S. MARSHALL. Also from Braemore, W. Ross., and from Winslow, Bucks, July 1902.—G. CLARIDGE DRUCE.

*Orobanche Picridis*, F. Schultz. St. Margaret's, Kent, July 1903 —G. CLARIDGE DRUCE.

*Mentha* ———. Spontaneous weed in garden at Sellack, Herefordshire, 21 August 1903.—AUGUSTIN LEY. This is practically identical with the plants I distributed from Shotover Hill, Oxfordshire (see 'Report' for 1888), the differences being such as would be caused by the place of growth. I name it *Mentha cardiaca*, which is the plant M. Briquet in 'Bull. Herb. Boissier,' iv. (1896) p. 776, calls *M. gentilis*, var. *cardiaca*, and is considered by him to be a hybrid. See Wildeman and Durand's 'Flore de la Belge,' fasc. 12, p. 686 (1899). In my note in the 'Report' for 1888 I suggested that it was a hybrid of *M. viridis* with possibly *M. rubra*, and I still think that may be the case, the mint smell strongly predominating; it is probably a fixed hybrid which has been long in cultivation. M. Briquet considers *M. rubra* itself to be a hybrid resulting from a cross of *M. aquatica-arvensis* with *M. viridis*.—G. C. D. *M. rubra*, Sm. I believe.—E. S. MARSHALL.

*Salicornia herbacea*, Linn, var. *appressa* (Dumort.). Southwick, Sussex, Sept. 1900.—G. CLARIDGE DRUCE.

*Rumex acutus*, Linn. (*R. crispus* × *obtusifolius*). Brackley Gorse, Sept. 1900.—G. CLARIDGE DRUCE. Correct.—E. G. BAKER.

*Euphorbia Peplis*, Linn. Crabby Bay in the Island of Alderney, 25 August 1902, coll. Cecil P. Hurst. Mr. Hurst favoured me with these specimens for the members of the Club. Members will please add the Alderney locality and date to my labels. Mr. Hurst found the same species on the shell beach at Herm twelve days earlier.—CHARLES BAILEY.

*Polygonatum officinale*, All. Wood near Ford, N. Wilts., May 28, 1903.—W. A. SHOOLBRED.

*Juncus tenuis*, Willd. Colliery siding, Ynyscynon, Aberdare, Glamorgan, v.c. 41, July 1903 and August 1903. Clearly a casual in this situation. Growing in great tufts.—H. J. RIDDELSDELL.—Correct.—E. G. BAKER.

*Juncus diffusus*, Hoppe. Bradgate Park, Leicester, Sept. 1903. Sent on account of its rarity in Leicestershire.—A. B. JACKSON.

*Juncus filiformis*, Linn. From the shore of Derwentwater, Cumberland, August 1902.—G. CLARIDGE DRUCE.

*J. capitatus*, Weigel. Quenvais, Jersey, June 1877. A locality not given, I believe, in the Jersey Flora. It was abundant there.—G. CLARIDGE DRUCE.

*Wolffia Michellii*, Schleid. (*Horkelia arrhiza*). Near Amberley, Sussex, Sept. 1902. In considerable quantity with the four species of *Lemna*. The tiny fronds appear parallel shaped, but they feel in one's hands as if tiny spherical bodies, so 'fat' are they.—G. CLARIDGE DRUCE.

*Potamogeton Drucei*, Fryer. Floating leaves of this handsome species from the classic locality. Retains its characters absolutely unchanged in cultivation. August 1903.—G. CLARIDGE DRUCE.

*Scirpus nanus*, Sprengt. Margin of the river at Abersoch, Carnarvonshire. July 1900.—G. CLARIDGE DRUCE. 87

*Scirpus maritimus*, Linn. var. *monostachys*, Sonder. Oxwich Bay, Glamorganshire, v.c. 41, July 1903. This is only one extreme of a series of forms ranging up to the var. *compactus* of Koch (as I suppose), which is the form with several sessile spikelets. The type *maritimus* was present on the same spot in abundance, so that every step might be traced which leads from the extremely depauperate state now sent to the ordinary luxuriant looking *S. maritimus* of our salt marshes. Among these specimens one or two show the tendency upwards to a more luxuriant form.—H. J. RIDDELSDELL. Also from the mouth of the Wyre, near Fleetwood, W. Lancs, August 1902.—J. A. WHELDON. Yes.—G. KÜKENTHAL.

*Carex fusca*, All. From the locality at Arisaig in West Inverness. In very fair quantity and good condition, and its situation is happily of such a nature as to make it improbable that other agencies than those of the ordinary struggle for existence will help to reduce the quantity.—H. J. RIDDELSDELL. From the same place and gathered at the same time, in August, 1903,—the spreading of *Molinia* is the likeliest factor of an inimical nature to /see 23

be feared, but it is to be hoped that botanists will only cut and not remove the roots.—G. CLARIDGE DRUCE.

*Carex stellulata*, Good. (*C. echinata*, Lond. Cat.). A nearly sterile form from Ben Lawers but not a hybrid, August 1899.—G. CLARIDGE DRUCE.

*Carex muricata*, Linn. forma. Near Little Marlow, Bucks, June 1903.—G. CLARIDGE DRUCE. Is *C. Leersii*, F. Schultz.—G. KÜKENTHAL. In 'Index Kewensis' this, which was described by Schultz in 'Flora' (1870), 455, is put as synonymous with *C. muricata*, L. Many botanists would write *C. muricata*, Linn., var. a. *contigua* (Hoppe), var. b. *Leersii* (F. Schultz).—G. C. D.

*Carex helvola*, Blytt. Ben Lawers, August 1899.—G. CLARIDGE DRUCE.

*Carex Goodenowii*, J. Gay var. From a swamp near Llwydcoed, by Aberdare, Glamorgan, 11 July 1903. Also in several spots in the neighbourhood. A densely caespitose form, the barren stems of which grow to the height of 3 feet or so; the flowering stems are much shorter and attain a length of about 18 to 24 inches. The latter are therefore produced only on the outside of the tufts; and as the long slender barren stems overhang to a noticeable extent, the impression first produced is that there is nothing else there. On turning aside the overhanging ends, however, it is found that the fertile stems are there in fair quantity, though still in a decided minority. It is a very beautiful and interesting form of the sedge.—H. J. RIDDELSDELL. *Carex Goodenowii*, var. *recta* (Fleischer).—G. KÜKENTHAL. Referable to var. *juncella*, I believe.—E. S. MARSHALL.

*Carex distans*, Linn. Stony embankment of the R. Wyre, near Knoll End, W. Lincs. (60), 25 July 1902. This is a robust form of our plant which passes (according to Mr. Clarke) as *C. distans*, L. If it is not that species which should it be called?—J. A. WHELDON. *C. distans*, Linn.—G. KÜKENTHAL.

*Carex distans*, L. non *C. distans*, var. *maritima*, auct. = *C. neglecta*, Degl. Wet meadows in Parish of Tredington, Worcestershire (an inland station), 9 July 1903.—FREDK. TOWNSEND. *C. distans*, Linn.—G. KÜKENTHAL.

*Carex*, Ref. No. 2718. Roadside, Cold Harbour, near Keevil (subsoil limestone), v.c 8, S. Wilts., June 2, 1903. This is, I believe, what we have called inland *distans*; it certainly comes much nearer to the coast plant than to either *C. binervis*, Sm. or *C. Hornschuchiana*, Hoppe. Unfortunately, the specimens are rather young; on re-visiting the spot I found that all the stems had been cut off.—E. S. MARSHALL. *C. distans*, Linn.—G. KÜKENTHAL. I understand

that Mr. C. B. Clarke regards this, and not the maritime plant, as the true *C. distans* of Linne.—E. S. MARSHALL.

*Carex extensa*, Good. From the tidal mud of Three Cliffs Bay in Gower, Glamorganshire, July 1903. This is more luxuriant form than usual, and I suppose only that. Sowerby allows for 2-4 fertile spikes; these specimens show five or six as a rule; they often have a spike near the middle of the stem, and the lowermost of the upper sessile spikes is sometimes compound. The stem is erect, and the bracts of great length, even reaching ten inches in extreme cases. The contrast with specimens I possess from Scotland (? var. *minor* of Syme, and *pumila* of Anders.) is most marked; even in the latter the bract is on the average longer than is figured in E.B.—H. J. RIDDELSDELL. *C. extensa*, Good.—G. KÜKENTHAL.

*Carex flava*, Linn. var. Wet clay soil on Warnbreck Moor, S. Lancs. (59), 15 June 1903. *C. flava* is a rare plant in this neighbourhood. The present small form differs considerably in habit from the *C. flava* of our fell districts, and the *C. Oederi* (Ehrh.) so abundant on the shore here. It also differs from both of these in hardly showing any trace of the broad tawny-brown band on each side of the green midrib of the glumes. Is it *C. flava*, var. *minor*, Towns.?—J. A. WHELDON. *C. Oederi*, Retz, var. *oedocarpa*, Anders.—G. KÜKENTHAL. I take this name to be synonymous with *C. flava*, var. *minor*, Towns. We have another variety of *C. flava* in Britain, namely *rectirostris*, which I hope to allude to before long. The Rev. E. S. Marshall answers my query and uses the same name as the Pfarrer Kükenthal, but unless we give sub-specific grade also to *lepidocarpa* it would appear to be better placed as a variety of aggregate *C. flava*, especially since the name *C. Oederi* has been used to designate two different plants.—G. C. D.

*Carex rostrata*, Stokes, var. *elatior* (Blytt.). (*C. rhynchophysa*, Lond. Cat. not of C. A. Mey.) Mullaghmore, Armagh, August 1899.—G. CLARIDGE DRUCE.

*Scirpus caricis*, Retz. Chesham Moor, Bucks, July 1903, distributed for the first time for Bucks. Also from Kirkby Stephen, Westmoreland, for which county it is also a new record. August 1903.—G. CLARIDGE DRUCE.

*Panicum Crus-galli*, Linn. Rubbish heaps, Iver, Bucks, July 1903. The long awned form.—G. CLARIDGE DRUCE.

*Phalaris aquatica*, Linn. A casual on the rubbish heaps at Iver, Bucks, July 1903.—G. CLARIDGE DRUCE.

*Anthoxanthum odoratum*, Linn. This form grew in the gravel path at Abernant Park, Aberdare, v.c. 41, Glamorgan, October 1902.

It was dwarfed, closely tufted; had lax spikes and long awns. Perhaps only due to the late season and insufficient nourishment. Re-gravelling the path has improved it out of existence. It does not seem to agree with the descriptions of *A. Puelii*, Lecoq. and Lam.—H. J. RIDDELSDELL. This is *A. Puelii*, Lecoq. and Lam.—E. HACKEL. An annual species. I have the same form from Bucks. The Rev. W. R. Linton and E. S. Marshall also refer it to *A. Puelii*.—G. C. D.

*Phleum phalaroides*, Koel (*P. Boehmeri*, auct. angl.). Wilbury Hill, in both Beds. and Herts., in considerable quantity; usually growing in scanty turf and chiefly on ground which had been disturbed, i.e. on the sides of the earthwork of the camp, on the top of the mound by the road, &c., and a few plants were also observed growing among corn. The purplish colour of the culm offers a ready means in the field of distinguishing it from forms of *P. pratense*. It was associated with *Festuca ovina*, *Koeleria*, and *Carum Bulbocastanum*, and also occurred in apparently aboriginal turf and preferring full exposure to sun. I do not think it has been distributed from Bedfordshire before. Glareal and Pascual appear to best describe it.—G. CLARIDGE DRUCE.

*Polygonum littoralis*, Sm. Origin Littlesea, Dors., cult. 29 July 1903.—AUGUSTIN LEY. Extraordinarily increased in size from the pretty almost prostrate plant of the sandy borders of Littlesea. It indeed appears probable that it is a hybrid of *Agrostis alba* with *Polygonum monspeliensis*.—G. CLARIDGE DRUCE.

*Gastridium australe*, Beauv. Rough fallow field, near Copyhold, Sussex, pointed out to me by Mrs. Davy, Sept. 1902.—G. CLARIDGE DRUCE.

*Arrhenatherum avenaceum*, Beauv., var. *nodosum*, Reichb. Near Aberystwith, the prevailing form, v.c. 46, August 1903.—W. H. PAINTER.

*Arrhenatherum avenaceum*, Beauv., var. *biaristatum* (Peterm.). Shingle, Dungeness, Kent, June 1902.—G. CLARIDGE DRUCE. A new British variety. See 'Journ. Bot.,' 408 (1903).

*Cynosurus echinatus*, Linn. Alien, on ballast, Fleetwood Dock (60), July 1902.—J. A. WHELDON.

*Molinia coerulea*, Moench, var. *breviramosa*, Parn. Cockerham Moss, W. Lancs. (60), 6 August 1902.—D. A. JONES and J. A. WHELDON. If cited as *M. varia* it would be var. *breviramosa*, Druce. Although not so extreme, I think this agrees substantially with the South Lancs. plants I distributed recently, which were confirmed by Hackel.—J. A. WHELDON. Yes.—E. HACKEL.

*Briza maxima*, Linn. Casual on rubbish heaps at Iver, Bucks, July 1903. Remarkably handsome spikelets.—G. CLARIDGE DRUCE.

*Poa nemoralis*, L., var. *angustifolia* (Parn.)? Under beech tree, Thurcaston, Leicester, 12 July 1903.—A. B. JACKSON. *P. nemoralis vulgaris*.—E. HACKEL. The Rev. E. S. Marshall points out that it is only a shade-grown state of *P. nemoralis*.

*Poa Parnellii*, Hook. and Arn. Origin, Brecon Beacons, Cult. 24 July and 10 August 1903. I believe that this is the same form as that sent by me in 1896 (from the same locality), and in 1897 from Taren-y-Esgob. See Report, 1897, p. 576.—AUGUSTIN LEY. *P. nemoralis*.—E. HACKEL. I could only name this plant *P. nemoralis*, and in answer to my question as to whether it was not the same plant which he distributed in 1895, as *P. nemoralis*, var. *rigidula*, the Rev. A. Ley tells me that is the case, the name *rigidula* being suggested by Mr. Arthur Bennett. Specimens were at that time submitted to Prof. Hackel, who referred them certainly to *P. nemoralis*. This year Mr. Ley says he was struck with the similarity of the plant to the *Poa* from Black Mountain Brecon (Taren-y-Esgob), sent by him to the Club in 1897. and pronounced by Prof. Hackel to be *Parnellii*. See Rep., 1897, p. 576. Mr. Ley adds. these plants. when growing on the mountain cliffs, look very unlike *P. nemoralis*. Prof. Hackel names the plant distributed this year as *P. nemoralis*, Linn.—G. C. D.

*Glyceria distans*, Wahl., var. *tenuiflora*, Gren. and Godr. (*Panicularia distans*, var. *Brigantiaca*). See 'Journ. Bot.,' Dec. 1903, p. 408. This plant was first named as *Aira brigantiaca* by Chaix, in Villars' 'Plantes Dauph.' i. 378 (1786), but afterwards described by Villars under the name *Aira miliacea*. Grenier and Godron, in 'Flore France,' iii. p. 536, reduced it to its proper position as a variety of *G. distans*, but unfortunately did not retain the original name, so that Richter in 'Plantae Europaeae' names it *Atropis distans* var. *brigantiaca* (Chaix). Briancon is the only locality given for it by Richter. These specimens are from a mud flat near New Romney, Kent, where it was locally common, growing with normal *G. distans*, and also with a robust form. I have also seen it near Shoreham, Sussex. These are the first British specimens distributed.—G. CLARIDGE DRUCE.

*Glyceria Borreri*, Bab. Mud flats, New Romney, Kent, July 1903. G. CLARIDGE DRUCE. Yes.—E. HACKEL.

*Festuca*. Sea-shore near Fleetwood, S. Lancs. (60). July 1902.—J. A. WHELDON. *F. rubra genuina*, v. *grandiflora*, Hack.

—W. R. LINTON. *F. rubra*, L., *vulgaris*, sub. var. *juncea*.—  
E. HACKEL.

*Festuca*. South bank of the Wyre, Fleetwood, W. Lancs. (60). July 1902.—J. A. WHELDON. *F. rubra*, L., *vulgaris*.—  
E. HACKEL.

*Festuca rubra*, Linn. var. *juncea*. Hackel. New Romney, Kent. July 1903, and from the sandy coast near Thurso, Caithness, August 1902.—G. CLARIDGE DRUCE.

*Bromus*—Ref. no. 2720. This grass grew on a steep, uncultivated down near Warminster, v.c. 8, S. Wilts, facing nearly due south, on exposed chalk débris but I doubt its being native. *B. secalinus* and *B. racemosus* have both been suggested; but I do not think either fits the plant. It has remarkably small and elegant spikelets.—E. S. MARSHALL. This is *Bromus brachystachys*, Hornung, in Flora xvi. (1833), ii. 417, a species from the Orient (I have specimens from Syria), introduced long ago in Northern Germany. The introduction in England seems more recent, I find it nowhere mentioned.—E. HACKEL. It is included in Dunn's 'Alien Flora of Britain,' p. 39 (1903). Hornung, who was a German apothecary, gives a long description, and a good figure.—G. C. D.

*Bromus interruptus*, Druce (*B. pseudo-velutinus*, Barnard ex Watson in Phyt., 1850, p. 807, without diagnosis to separate it from *B. mollis*). Fields above West Wycombe, Bucks, June 1903.—G. CLARIDGE DRUCE. I do not believe that the mention of *Bromus pseudo-velutinus* in Phytol., 1850, is to be considered a valid publication of that name.—E. HACKEL.

*Brachypodium pinnatum*, Beauv. Railway bank, Abernant, Aberdare, Glamorgan, v.c. 41. Not recorded for this county in 'Top. Bot.' ed. 2, and doubtless in this situation not native. But it may have been brought here by locomotives from some locality near at hand. Limestone occurs within a few miles distance, both in Glamorgan and Brecon counties, and the species is recorded for Som. N., Glos. W., Monm. and Hereford.—H. J. RIDDELSDELL. Yes.—E. HACKEL.

*Brachypodium pinnatum*, Beauv. forma. Shady copse, Brooklands, near Timperley, Cheshire, v.c. 58. Coll. G. A. HOLT, July 1903. It has some affinities with *B. sylvaticum*, but the spikelets are smoother and more spreading, and the flowers have shorter awns.—Comm. C. BAILEY. *Brachypodium pinnatum*, Beauv., var. *gracile*, Aschers and Grbn. Syn. ii. 633 (Excl. Syn.). *B. Gracilis*, Leyss. Fl. Hal. (1761), non Weigel (1772). The

synonyms quoted by Ascherson and Graebner (*Bromus caespitosus*, Host, &c.), do not belong to this form, which perhaps would better be called *forma leiostachya*.—E. HACKEL.

*Agropyron repens* × *junceum*, New Romney, Kent, growing with both the parents, and exhibiting a complete chain of intermediates; the toughness of *repens* gradually disappearing as the plants became nearer to the *junceum* parent. These are selected so as to show a fairly intermediate plant, which is probably the *A. acutum* of many English Botanists, if not indeed of the 'Flora of Kent,' for which the hybrid is not given, although *A. acutum* is recorded from between Romney and Dymchurch, &c., July 1903.—G. CLARIDGE DRUCE. Yes.—E. HACKEL. All, or nearly all the records of *A. acutum* in 'Topographical Botany' require confirmation.—G. C. D.

*Lepturus*.—— Rubbish heaps at Iver and West Drayton, Bucks, and Middlesex, July 1903.—G. CLARIDGE DRUCE. The *Lepturus* from Bucks is a very interesting variety of *L. filiformis*, Trin., which I should call var. *pycnanthus*, differing from the type by the internodes of the rhachis being only half as long as the spikelet, whereas in the type they are almost of the same length as the spikelet. I do not believe it an abnormal or casual state of *filiformis*, but a true variety with a certain area of distribution: it occurs in Egypt and Sicilia, and I only am astonished that it has never been distinguished from the type. In my last letter I have accepted Ascherson's nomenclature of *L. filiformis* (*L. incurvatus*, var. *strictius*, Buch.), but now I think it better to maintain the name of Trinius.—E. HACKEL. *L. filiformis*, Trin., var. *pycnanthus*, Hackel in lit. not previously recorded for Britain, is only casual in Bucks.—G. C. D.

*Asplenium septentrionale*, Hull. Near Keswick, Cumberland, August 1903. See 'Journ. Bot.,' p. 351 (1903).—G. CLARIDGE DRUCE.

*Athyrium Filix foemina* variety. Dry wood, S. Briavel's, W. Glos., 21 Sept. 1903. This hardly answers to any of the named forms, the descriptions of which I have.—AUGUSTIN LEY. Are these fronds both from the same plant? The smaller one is near *A. Filix foemina*, var. *rhaeticum* (Linn.).—E. G. BAKER.

*Lastrea dilatata*, Presl., var. *alpina*, Moore. West Wood, S. Briavel's, W. Glos., Sept. 21, 1903. See Report (1902), p. 66.—AUGUSTIN LEY. Moore gives the following diagnosis for his var. *alpina*, the type of which came from Ben Lawers. 'Fronds narrow, linear-lanceolate, membranous, bi-sub tripinnate; pinnae unequally deltoid; scales of the stipe broad-lanceolate, pale brown, variously two-coloured; sori large, numerous, with small evanescent ragged membranous indusia.' Mr. Ley's specimens differ from above (*a*)

in being a much larger plant; (*b*) scales seem rather those of a form of *spinulosa*—they have no dark centre.—E. G. BAKER From the concolorous scales there is little doubt that it is *L. spinulosa*, and probably the var. *exaltata* (Lasch).—G. C. D.

*Nitella opaca*, Agardh. Pond near Garstang, June 1903, W. Lancs. (60), sent as a vice-county record for (60), and so far not noticed elsewhere in the v.c., but it is very likely to occur. The pond in which the plant was growing is situated in a grass field, and had only been dug about 18 months. It was made as an experiment to see what water plants would appear in it, and was carefully railed off to prevent access of cattle. Besides the *Nitella* 5 other species had so far appeared, viz. *Alisma Plantago-aquatica*, *Callitriche* species, *Glyceria fluitans*, *Juncus conglomeratus*, and *J. lamprocarpus*.—ALBERT WILSON.



THE  
BOTANICAL EXCHANGE CLUB  
OF THE BRITISH ISLES.

---

REPORT FOR 1904.

---

(ISSUED AUGUST 1905.)



The Subscription, 7/6 per annum, and Non-contributing Members' Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE, M.A., F.L.S.,  
118 HIGH STREET, OXFORD.

---

PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD.

1905.

4 SEP 1905

# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

## *BALANCE SHEET FOR 1903.*

	<i>£</i>	<i>s.</i>	<i>d.</i>		<i>£</i>	<i>s.</i>	<i>d.</i>
By Subscriptions received . . .	9	2	6	Expenses of Distribution . . .	1	12	7
Balance due to Treasurer . . .	1	1	3	Receipt and Cash Books . . .	0	7	0
				Postages, &c. . . . .	0	7	2
				Printing Report . . . . .	7	17	0
	<u>£10</u>	<u>3</u>	<u>9</u>		<u>£10</u>	<u>3</u>	<u>9</u>

Balance *£1 1s. 3d.* due to the Treasurer, G. Claridge Druce, to whom all subscriptions should be paid on the first of January in each year; of *7s. 6d.* for each member who contributes and receives specimens; of *5s.* for each non-contributing or corresponding member, who receives a copy of the Reports only.

### *SECRETARY'S REPORT.*

The foregoing financial statement shows an adverse balance. With the increased subscription which comes into force this year, and with a larger membership roll, the finances are now in a more prosperous condition.

In the future, however, looms the question of the publication of a new Desiderata list. Members are invited to offer suggestions as to the form which it should take. The present one is expensive and cumbrous, and to some members deterrent. It may, indeed, be well in the future to accept well-dried specimens of any British plants which exhibit any variation or peculiarity, or, if coming from unusual soils, altitudes, or habitats. Desiderata specially asked for could be inserted in the yearly Report.

Among the chief items of Botanical interest of the year 1904, it may be mentioned that the following species have been added to the British Flora :—

FUMARIA OCCIDENTALIS, described and figured in the 'Journal of Botany,' p. 218, by Mr. H. W. Pugsley, from specimens gathered at Newquay in Cornwall. Mr. A. O. Hume found it prior to 1901, and it was gathered by the Rev. H. J. Riddelsdell at Helston in 1900. It belongs to the section *Agrariae* of *Fumaria*, hitherto not suspected to occur in Britain. It was, however, previously collected by one of our members, Dr. C. C. Vigurs, who has sent some beautiful specimens this year to the Club. Dr. Vigurs had known the *Fumaria* as a garden weed for many years, and indeed shewed it to Mr. Hume. In 1898 Dr. Vigurs sent me a specimen, but it was not in very good condition, and I was unable to refer it to any British form, and therefore asked him to send it again. A second supply left me unable to refer it to any British species, and I thought it must be a foreign casual. Still later I had another gathering, which I sent to Herr Freyn, but he also was unable to name it. Mrs. Gregory, I believe, gathered it as *F. capreolata* at Selant, Cornwall, in 1895.

VIOLA CALCAREA, Gregory. This plant, which is for the greater part the *Viola hirta*, L., var. *calcareae*, Bab., has been raised to a species by Mrs. Gregory (see 'Journ. Bot.' p. 67, t. 457 b.). Babington's var. *calcareae* also included the plant known as *V. hirta*, var. *Foudrasi* (Jord.), which may be distinguished from *V. calcarea* by the hooked spur and greater hairiness, *V. calcarea* being almost glabrate, and having a very small, short, straight, conical spur.

EPILOBIUM COLLINUM, Gmel. (see 'Journ. Bot.' p. 110). Mr. C. E. Salmon reports that in the Herbarium of the Holmesdale Natural History Museum at Reigate are two sheets of *E. collinum* labelled *E. roseum?* . . . collected by Dr. J. A. Power about 60 years ago, probably from Scotland. In 1875 I collected a Willow Herb which I named *E. montanum*, in Strath Tay, which Prof. Haussknecht subsequently named, without any expression of doubt, *E. collinum*, and I recorded it in the 'Scottish Naturalist' for 1886, p. 30, but it is unnoticed in the 'Flora of Perthshire.' Subsequently I visited the district, and after prolonged search was

able only to find forms of *E. montanum*. To my eyes the plant named by Haussknecht, which is a poor specimen, should rather be referred to *E. montanum*, and that is I believe the opinion also of the Rev. E. S. Marshall. The precise British locality of *E. collinum* still awaits discovery.

KOELERIA VALESIIACA, Gaud., which was discovered by Dillenius in 1726 at Brent [Brean], Down and Uphill, Somersetshire, see Richardson Correspondence, p. 253 (1835), but which had never been published as a British plant under its binomial name. The writer identified it among some 'various' specimens in the Appendix to the Dillenian Herbarum at Oxford recently, and was fortunate enough to re-find it at Uphill in October last, and of which specimens are now distributed.

Among other interesting discoveries may be instanced that of—

ARENARIA LEPTOCLADOS, var. SCABRA, Rouy and Fouc., Slapton, S. Devon ('Journ. Bot.' p. 9).—G. C. DRUCE.

VIOLA STAGNINA, Kit., new to Glamorganshire ('Journ. Bot. p. 312), found by Worsley-Benison, recorded by the Rev. H. J. Riddelsdell.

V. LUTEA, Curt., new to Somerset, found by Mr. A. Lyons, reported by Mrs. Gregory ('Journ. Bot.' p. 313).

RUBUS DUMETORUM, var. RADULIFORMIS, A. Ley ('Journ. Bot.' p. 120), nov. var. found in Kent, Monmouth, and Flint.

PHYSOSPERMUM COMMUTATUM, Spreng. ('Pharm. Journ.' Oct. 29, 1904), found by Mr. W. R. Sherrin, near Burnham Beeches in Bucks. A great extension of its range in Britain. Specimens are now distributed through the Club.

PICRIS HIERACIOIDES, var. GRACILIS (Jord.) = *P. gracilis*, Jord., has been found by the writer near Princes Risborough, Bucks; he hopes to distribute it next year.

× LIMONIUM NEUMANI, C. E. Salm. (*L. humile* × *L. vulgare*), described and figured by Mr. C. E. Salmon ('Journ. Bot.' p. 361, t. 466).

× VACCINIUM INTERMEDIUM, Ruthe (*V. Myrtillus* × *V. Vitis-idaea*), found by Mr. A. Sutherland near Watten, Caithness; reported by Mr. Arth. Bennett ('Ann. Scot. Nat. Hist.' p. 249), New to Scotland.

MYOSOTIS PALUSTRIS, var. NEMOROSA, Besser (*M. scorpioides*, var. *nemorosa*), ('Ann. Scot. Nat. Hist.' p. 171), near Downreay, Caithness.—G. C. DRUCE.

SCROPHULARIA UMBROSA, Dum. (*S. Ehrharti* Stev.) From Watton and Scoulton Mere, Norfolk, W. ('Journ. Bot.' p. 313). New to East Anglia.—G. C. DRUCE.

SALSOLA KALI, L., var. TENUIFOLIA, Moq. Tand., with *Atriplex rosea*, L.; as aliens at Southwick, Sussex ('Journ. Bot.' p. 26).—G. C. DRUCE.

URTICA DIOICA, L., var. HISPIDA, Gren. and Godr., Slapton Ley, S. Devon (l.c. p. 10).—G. C. DRUCE.

CLADIUM JAMAICENSE, Crantz, found by Mr. A. Wallis, near Wotton Underwood, Bucks. A few specimens are now distributed by the writer.

CAREX TOMENTOSA, L., found by the veteran botanist, Mr. T. Shephard, near Chertsey, Surrey. An important extension of its geographical range in Britain.

APERA INTERMEDIA, Hack. A new species found as a Casual at Blaby Mill, Leicestershire. Reported by Mr. A. Jackson ('Journ. Bot.' p. 348). Hitherto only known from Asia Minor.

GLYCERIA BORRERI, Bab. (*Panicularia Borreri*). Plentiful on recently dredged mud at the Docks, Cardiff; gathered by the Rev. H. J. Riddelsdell and myself in July last. New to Wales. Distributed this year.

AGROPYRON REPENS, Beauv., var. LASIORACHIS, Hack. A new variety from the side of the tidal river at Tamerton Foliot, S. Devon ('Journ. Bot.' p. 11).—G. C. DRUCE.

The chief publications of interest include the Ninth Edition of BABINGTON'S 'Manual of British Botany,' by Henry and James Groves, to whom British botanists are greatly indebted for the very valuable addition to botanical literature.

'The Flora of Hampshire.' A new edition, by Mr. Frederick Townsend. The veteran member of our Club must be heartily congratulated on producing this important work, which contains descriptions of eight species of *Salicornia*, six of which, *S. stricta*, Dumort., *S. procumbens*, Sm., *S. ramosissima*, Woods, *S. pusilla*, Woods, and var. *gracillima*, Towns., *S. intermedia*, Woods, and *S. appressa*, Dum., are annual, and two, *S. radicans*, Sm., and *S. lignosa*, Woods, are perennial. Authenticated specimens of these are among our desiderata.

'The Flora of the County Dublin' has also been issued by Mr. N. Colgan (Dublin: Hodges, Figgis and Co.), and gives a very complete account of the Flowering Plants, Higher Cryptogams and Characeae, as well as an excellent list of printed material, MSS., &c., relating to the Botany of the County.

One of our members, Mr. Stanley Guiton, has published 'Hints on Collecting and Preserving Plants' in a compact manual, at a shilling, which will be found very useful to members who desire to have good herbarium specimens.

A pleasing event of the year has been the presentation of a handsome Album, containing photographs of nearly all the members of the Exchange Club, to the late Secretary, Mr. Charles Bailey, as a slight acknowledgment of his great services to the Club during the many years he acted as its Secretary, and of the great appreciation they have for his assistance to the interests of Botanical Science.

With all best wishes,

I am,

Yours very sincerely,

G. CLARIDGE DRUCE,

118, High Street, Oxford.

Mr. James Walter White, F.L.S., has kindly consented to act as Editor of Report and Distributor for 1905. All parcels should be sent to him before Dec. 31, 1905, post paid, to Warnham, Woodland Road, Clifton, Bristol.

## REPORT OF THE DISTRIBUTOR FOR 1904.

THE number of specimens contributed is decidedly above the average of recent years, Mr. Ley, as usual, heading the list with a very large parcel of well selected and carefully dried specimens of critical species. Many of the plants sent are of great interest, among the more noteworthy being *Fumaria occidentalis*, *Koeleria valesiaca*, and a curious undetermined *Cnicus* from the Glamorgan coast.

The Club is much indebted to the following botanists who have kindly acted as referees or assisted with notes:—Mr. E. G. Baker, Mr. W. H. Beeby, Dr. Eric Drabble, Mr. G. C. Druce, Mr. Fryer, Professor Hackel, the Rev. E. F. Linton, the Rev. W. R. Linton, the Rev. E. S. Marshall, the Rev. H. J. Riddelsdell, and the Rev. W. Moyle Rogers. Ill-health has unfortunately prevented Mr. Arthur Bennett from acting as a referee. This is a great loss to the Club, his extensive knowledge of British plants and the immense fund of information he has accumulated respecting them having always hitherto been at our disposal. From the same cause we are deprived of the help of Mr. Townsend.

Members would much lighten the Distributor's task if they would adhere closely to the rules, especially by using the regulation-sized papers between the specimens, enclosing them in regulation-sized covers, and not sending less than 10 specimens of each plant, also by endeavouring, as far as possible, to avoid mixed gatherings.

JAMES GROVES.

July, 1905.

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.		No. of Specimens.
Adair, Joseph ... ..	123	Painter, Rev. W. Hunt ... ..	68
Bagnall, James E., <i>A.L.S.</i> ... ..	61	Palmer, Miss Charlotte E. ... ..	66
Bailey, Charles, <i>M.Sc., F.L.S.</i> ... ..	13	Riddelsdell, Rev. H. J., <i>M.A.</i> ... ..	533
Bell, William ... ..	66	Rogers, Rev. W. Moyle, <i>M.A., F.L.S.</i> ... ..	97
Bickham, S. H., <i>F.L.S.</i> ... ..	19	Saunders, Miss R. ... ..	30
Britton, Charles E. ... ..	41	Shoolbred, W. A., <i>M.R.C.S., F.L.S.</i> ... ..	258
Bullock-Webster, Rev. G. R. ... ..	109	Vigurs, C. C., <i>M.D.</i> ... ..	9
Crawford, F. C. ... ..	23	Waddell, Rev. C. H., <i>M.A.</i> ... ..	55
Druce, G. Claridge, <i>M.A., F.L.S.</i> ... ..	238	Wheldon, J. A., <i>F.L.S.</i> ... ..	64
Groves, James, <i>F.L.S.</i> ... ..	233	White, J. W., <i>F.L.S.</i> ... ..	211
Guiton, Stanley ... ..	10	Wilson, Albert, <i>F.L.S., F.R.M.S.</i> ... ..	106
Jackson, A. B. ... ..	37	Wolley-Dod, Major A. H. ... ..	31
Ley, Rev. Augustin, <i>M.A.</i> ... ..	991		
Linton, Rev. W. R., <i>M.A.</i> ... ..	267		
Marshall, Rev. E. S., <i>M.A., F.L.S.</i> ... ..	111		
Melville, J. Cosmo, <i>M.A., F.L.S.</i> ... ..	27		
			3897

*Anemone Pulsatilla*, L. On the chalk downs above Ivinghoe, Bucks, April 1904. A new county record. Some years ago I found this just within the Bucks border, near Albury, but these specimens are from well within the county boundary. Its occurrence was to be expected as it occurs in Beds and Herts in considerable quantity. Here it was not uncommon, but occupied only a limited area. The sepals vary considerably in outline, some being short, broad and obtuse, others longer, narrower and more acute. In colour too they vary from light to dark purple.—G. CLARIDGE DRUCE.

*Ranunculus pseudo-fluitans*, Hiern. River Wharfe, near Ilkley, W. Yorks, alt. 230 ft., July 1904.—ALBERT WILSON. "Not the original *R. pseudo-fluitans*, Baker and Foggitt, nor apparently the form *pseudo-fluitans* of Hiern Mon., which is described as having 'leaves, flowers, and peduncles large.' We cannot at present suggest a satisfactory name for it, but it seems to be a small river form of the *peltatus* group."—H. and J. GROVES.

*Caltha Guerangerii*, Bor. King's Capel, Herefordshire, 6th and 16th May 1904.—AUGUSTIN LEY. "As Mr. Beeby pointed out in B.E.C. Report 1889, p. 244, the important character for *Guerangerii* is that the ripe follicle tapers gradually into the beak. The present specimens are too young to see this. Boreau (Flor. Centr. ed. 3, II, p. 21) describes the upper leaves as 'fortement crénelé-dentées' as against 'légèrement dentées' in *C. palustris*." H. and J. GROVES.

*Aconitum Napellus*, L. Peterston super Ely, Glamorgan, July 1904. Extends for miles between Llantrisant and Ely (near Cardiff) in the valley of the River Ely. It prefers shady ditches and wet copses, rather than the actual river bank. I do not doubt that it is part of the aboriginal vegetation there.—H. J. RIDDELSDELL.

*Fumaria occidentalis*, Pugsley. Abundant in a potato field near Newquay, W. Cornwall, 6th Oct. 1904.—S. H. BICKHAM and C. C. VIGURS. Newquay, 29th Oct. 1904.—C. C. VIGURS. A valuable contribution, the specimens of both gatherings being excellent.—J. G.

*F. Vaillantii*, Lois. Cornfield on Beacon Hill, near Devizes, N. Wilts, 19th May 1904.—E. S. MARSHALL.

*Barbarea intermedia*, Bor. Waste ground, Portishead, N. Somerset, 28th May 1904. Apparently new to Somerset.—J. W. WHITE. One large plant in waste ground, Enborne Road, Newbury, Berks, 16th June 1904.—A. B. JACKSON.

*B. præcox*, R. Br. From ballast at Llwydcoed, near Aberdare, Glamorgan, June 1901 and May 1902. New county record.—H. J. RIDDELSDELL.

*Draba aizoides*, L. Limestone rocks on the coast of Gower, Glamorgan, April 1904. I send these sheets as an occasion for stating my opinion that the plant is aboriginal with us. I doubted this for a long time; but I have frequently sought along the cliffs of Gower, and have found it in so many different situations, and under such conditions, that I do not retain the slightest doubt upon the subject now. The plant was first discovered on Pennard Castle—the most easily accessible of its localities, and consequently is frequently given in handbooks as simply from ‘Pennard Castle;’ and this has prejudiced many minds against it. But it does not occur there in its greatest quantity. It occurs from Pwll-du Head to Worms Head: (1) for several miles of coast from the former to Pennard Castle; and (2) much further west about Mewslade Bay and Worms Head. In the former locality it is in great profusion. Its extremes of distribution are (in a direct line) 12 miles apart. I have not found it on the limestone N. of Worms Head.—H. J. RIDDELSDELL. Native on limestone cliffs, W. of Pwll-du Head, Gower, Glamorgan, 12th April 1904.—E. S. MARSHALL.

*Erophila*, Ref. No. 2828. Limestone quarry, Portskewet, Monmouth, 15th April 1904. Allied to *E. stenocarpa*, Jord., and perhaps also to *E. hirtella*, Jord.—E. S. MARSHALL.

*Cochlearia micacea*, E. S. Marshall. Summit (above 2,750 feet) of the Little Culrannoch, Forfar, in plenty, 27th June 1904. This plant was referred in 1889 by Prof. J. Lange to *C. danica*, L., which is very different. Nor is it ordinary *C. alpina*, H. C. Watson. It agrees very well with the original Ben Lawers form of my *C. micacea* (which, but for its being perennial, Prof. Lange would have likewise been inclined to name *C. danica*).—EDWARD S. MARSHALL. Also sent by Mr. W. A. Shoolbred from the same locality.

*Sisymbrium Columnæ*, Jacq. Waste ground, St. Philip's, Bristol, 13th June 1904.—J. W. WHITE. *S. Columnæ*, Jacq. (1776), is apparently a synonym of *S. orientale*, L. (1759).—J. G.

*Sisymbrium strictissimum*, L. In rough ground surrounding the bleach works of Messrs. Melland and Coward, Ltd., on the right bank of the River Mersey, Heaton Mersey, South Lancashire, 30th Aug. 1904.—Coll. J. E. McDONALD, Comm. CHARLES BAILEY. Mr. Bailey remarks, in Proc. Manchester Lit. and Phil. Soc., ‘‘The Heaton Mersey plant appears to have a more vigorous and ample growth than obtains in continental examples, but the chief difference

which it presents is in the length of the pods, or siliques; these are from an inch to an inch and a quarter long, or half the normal length of continental specimens. The fruiting heads are flat-topped, and the minute seeds are produced in profusion; the seeds are readily wind-borne, so that the plant may occur elsewhere than in its present station. The flowers are of a full yellow, in crowded spikes."

*Brassica Cheiranthus*, Vill. Abundant about the Docks at Port Talbot, Glamorganshire; July 1904.—G. CLARIDGE DRUCE. This was recorded from Merthyr Tydfil in 1850: from Porthcawl neighbourhood in 1902 (J. of B. 1902, p. 316), and Port Talbot 1902 (J. of B. 1902, p. 248). On the strength of the latter record it has been entered without remark in Top. Bot. ed. 2, Supp., 1905, for Glamorgan. Mr. Marshall remarks that it *looks* native near Port Talbot. I have seen it both at Port Talbot and Porthcawl, and judging by the character of its occurrence in both places, I should unhesitatingly call it 'introduced' in vc. 41. It is very abundant about Port Talbot Docks, and is certainly an alien there.—H. J. RIDDELSDELL.

*Thlaspi alpestre*, L., var. *sylvestre* (Jord.). By the Bradford, at Youlgreave, Derbyshire, 5th June 1904.—A. B. JACKSON. "Apparently a somewhat elongated form of *T. virens*, Jord."—H. and J. GROVES.

*Viola silvestris*, Reich. × *V. Riviniana*, Reich., near Bredhurst (26th June 1898), near Park House, Eynsford (3rd July 1898), and Imes Hill (2nd Sept. 1900), W. Kent; Angling Spring Wood, Great Missenden (22nd July 1900), and wood near Amersham Station (5th June 1904), Bucks.—C. E. BRITTON. Specimens from the Bredhurst and Amersham gatherings were referred to Mr. Beeby, who writes:—"I think there is little doubt that these are rightly named, but I do not know this hybrid very well."

*V. ericetorum*, Schrad. × *V. Riviniana*, Reich. By the high road between Amersham and High Wycombe and near Mop End, Bucks, 2nd Oct. 1898; near Prestwood, Bucks, 22nd July 1900; Farley Green, and Netley, and Banstead Heaths, Surrey, August 1900.—C. E. BRITTON. Of the Farley Green plant Mr. Beeby says, "Yes, *subriviniana* form," of that from Banstead Heath, "Yes, *subericetorum* form."

*V. lactea*, Sm. Beckton Bunney, Hordle, S. Hants, June 1904. The cliffs are remarkably friable at this point, and every year large landslips occur, consequently in a short time this locality will, in all probability, have ceased to exist.—J. COSMO MELVILL. See Report for 1900, p. 622.

*V. carpatica*, Borbas. Grassy bank of a ditch on Rainford Moss, S. Lancs., June 1904. The flowers are variable in size, but usually as large as or larger than those of *V. lutea*. The latter does not appear to occur in Lancashire, and Mr. Linton informs me that the record for v.c. 60 in Top. Bot. was an error.—J. A. WHELDON. "In floral characters the plant agrees well with *carpatica* named by Prof. Borbas in Herb. Mus. Brit.; in vegetative characters, however, it is every way larger and more luxuriant, the leaves and middle lobes of the stipules being at least three times as broad. Although the probability of specific identity is strong, in the absence of evidence derived from cultivation, we can hardly include the plant under the name *carpatica*."—E. DRABBLE.

*Viola* ——. Bredon Hill, Worcestersh, Aug. 1904.—R. SAUNDERS. "*V. arvatica*, Jord."—E. DRABBLE.

*Viola* ——. Ref. No. 29997. Field on the chalk, above West Wycombe, Bucks, Aug. 1904.—G. CLARIDGE DRUCE. "Very near *V. arvatica*, Jord."—E. DRABBLE.

*Viola* ——. Ref. No. 29998. Dry chalky field near Albury, Herts, May 1904. This is referred to *V. alpestris*, Jord., by Mr. E. G. Baker. A new record for Herts. I have gathered it also in several places in Bucks, but not always as typical as these specimens.—G. CLARIDGE DRUCE. Dr. Drabble concurs in regarding this as *V. alpestris*.

*Viola* ——. Ref. No. 8244. Cowley, Oxon, May 1893.—G. CLARIDGE DRUCE. "*V. alpestris*, Jord., a stout apparently lowland form."—E. DRABBLE.

*Viola* ——. Ref. No. 27694. Flinty field in the Lambourne Valley, between Weston and Boxford, Berks, July 1904. This Mr. E. G. Baker refers to *V. Paillouxii*, Jord., which confirms a previous record, see Flora Berks, p. 79.—G. CLARIDGE DRUCE. Dr. Drabble refers this to *V. alpestris*, Jord., adding, "*V. Paillouxio* is only separated on the ground of colour difference. In *Paillouxio* there is more or less—often very little—blue tinge in the upper, and perhaps also in the lateral petals, but the flowers of the same plant may show in some cases a blue tinge and others be without it. Hence in any aggregate sense the plant is *V. alpestris*, Jord." Mr. Baker entirely agrees with this naming.

*Dianthus gallicus*, L. St. Ouen's Bay, Jersey, 24th June 1904.—STANLEY GUITON. A few excellent specimens.

*Silene quinquevulnera*, L. Lawn turf border, Moorland Hotel, Heytor, Dartmoor, S. Devon, 8th August 1904. I suppose cer-

tainly introduced with grass seed, though now well established in rocky ground and among native plants.—W. MOYLE ROGERS.

*Silene* ——. Lydd, E. Kent, July 1904. This plant is abundant along the railway from New Romney to Lydd, and is also found on the shingle in that neighbourhood over an extensive area. The flowers vary from white to deep rose, or dull reddish colour (both forms are sent), and there is also considerable variation in the viscosity of the plant. The Rev. E. S. Marshall in the Flora of Kent refers it to *S. italica*, but it appears to me distinct from that species as I know it on the continent, for though the calyx is more cylindrical, and narrowed at the base, than that of typical *S. nutans*, yet it is not truly clavate as in *S. italica*. I should consider it to be a well-marked variety of *S. nutans*, distinguished by its narrower leaves which have the hairs shorter and more rigid, and the plant has a somewhat different habit. I have a specimen which occurred as a casual in Berkshire, and another from Worm Hill, Derbyshire, which I think are the same plant. Mr. Marshall speaks in a positive manner as to its being native at Dungeness, and I am not controverting the point, but it must be admitted that the deposit of shingle on which it grows is not of a very remote origin.—G. CLARIDGE DRUCE. Mr. C. E. Salmon refers Mr. Druce's plant, and others from different parts of Britain, to *S. dubia*, Herbich. In Journ. Bot. XLIII. (1905), p. 128, Mr. Salmon writes:—"Whether *S. dubia* is retained as a species, subspecies, or variety, is a matter of taste and temperament; it contrasts with its near allies in the following points. From *S. italica*, Pers., it differs in having its petals crowned, not auricled and not ciliate, its calyx not so narrowly elongated at its base and teeth acute, and its carpophore not nearly as long as capsule: from *S. paradoxa*, L., by its not elongate '*italica* like' calyx and shorter carpophore: and, finally, it may be separated from *S. nutans*, L., by its habit, which is much more delicate and graceful; by its being much less hairy and viscid in all its parts; by its root-leaves being long-petioled, spatulate acute, with many almost glabrous leaves, except for scabrid margins; by its narrow, lanceolate-acute stem-leaves; and by its calyx being narrower and more cylindrical." Mr. Marshall writes:—"Is Herbich's species identical with *S. patens*, Peete (an earlier name)?"—J. G.

*C. triviale*, Link. Variety approaching *alpinum*, Mert. & Koch. Damp precipice, Ystolion duon, Carnarvonshire, 14th July 1904. This form is abundant in the damp parts of mountain precipices in N. Wales, and reappears in S. Wales at the Brecon Beacons. In the length of its petals it makes an approach to var. *alpinum*, but is nearer to the type than to this variety.—AUGUSTIN LEV. "I agree. It is a montane form with rather larger flowers and

typical leaves. Of the Welsh plants for which the name 'alpestre' has been suggested, the Brecon Beacon form seems to come nearest (in both leaf and flower) to the Forfar plant and Koch's description of var. *alpinum*. Intermediate forms also occur on several Scotch mountains."—E. F. LINTON.

*Cerastium arcticum*, Lange. Snowdon, Carnarvon, 12th July 1904.—AUGUSTIN LEY.

*Arenaria tenuifolia*, L. Railway ballast, Peterston-super-Ely, Glamorgan, July 1904. No doubt introduced from abroad. Apparently not native in the county.—H. J. RIDDELSDELL.

*A. serpyllifolia*, L. var. *leptocladus* (Guss.). Penmaen and Aberdare, Glamorgan, June 1904. Fairly frequent in this county though never before recorded for it.—H. J. RIDDELSDELL.

*Hypericum montanum*, L. South Cornely, Glamorgan, on mountain limestone, July 1904. A new county record. It also occurs in the woods round Oxwich Bay.—H. J. RIDDELSDELL.

*Trigonella purpurascens*, Lam. Rhosili, Glamorgan, July 1904. A new county record. In turf on top of limestone cliffs, especially in slight regular hollows where the turf has been cut away. In company with *Trifolium striatum*.—H. J. RIDDELSDELL.

*Trifolium filiforme*, L. Turf of limestone cliffs, Rhosili, Glamorgan, June 1904. In company with *Trif. striatum*, *Trigonella*, &c. It occurs in most old well-kept lawns which I have examined; and on cliffs (Old Red or Limestone) in Gower; on the coal measures, there rising at Aberdare to 1,000 feet.—H. J. RIDDELSDELL.

*Anthyllis Vulneraria*, L., var. *coccinea*, L. Limestone cliffs near Rhosili, Glamorgan, June 1904. In large quantity on one cliff facing westward, almost to the exclusion of the type, which occupied the neighbouring cliffs. Also found on a rocky slope in a valley two or three miles away, at the distance of half-a-mile from the sea. I have also seen it at Porthcawl. The f. *ovata*, Bab., 'having a large broadly ovate terminal leaflet' (Bab. Manual Ed. 9) flourishes on adjoining cliffs at Rhosili.—H. J. RIDDELSDELL.

*Lotus corniculatus*, L. *forma*. On the sandhills at Aberafan and Baglan: and from Port Talbot to Kenfig, Glamorgan, July 1904. This grows intermingled with the type (or a somewhat villose form), and seems to be particularly frequent where ants are in any number. It is decidedly slenderer and yellower than the type, in all its 'green' parts. The flowers are fewer, smaller, and paler, and have the standard turned down over the wings and keel, instead of arching sharply back from them, as in the type. Ripe fruit

is produced, but not often : the tendency is for the flowers to drop off when shaken in collecting ; and it is very characteristic of the form to exhibit a number of peduncles quite innocent of flowers, and terminating in the blunt ends on which the flowers had grown. More erect than type. Mr. Druce, to whom I pointed it out, suggests some damage to the root. It is curious that it should grow frequently intermingled with the type. Is it the same thing as the form described by Mr. Linton in B.E.C. Report 1901, p. 6?—H. J. RIDDELSDELL. “Differs from the type in much the same respects as a form which the Rev. W. R. Linton gathered on Longstone Edge, Derbyshire, in 1898, and near Baslow, and at first thought a variety, then a starved or de-pauperate state. An account of it is given in the ‘Flora of Derbyshire,’ p. 107. It agrees with much of the description of *L. symmetricus*, Jord. (*Pug.*, p. 59), but of this I have not seen specimens ; and I suspect that these specimens owe their peculiarities to deficient nutrition.”—E. F. LINTON. “Apparently *villosus*, Ser.”—W. R. LINTON.

**Rubus.** The Rev. W. Moyle Rogers has kindly examined specimens of all the plants of this genus, and except where otherwise stated confirms the names.

*Rubus idæus*, L., var. *obtusifolius*, Willd. Garden hybrid : Sellack ; 2nd June 1904. This is, I believe, the state of *R. obtusifolius* called “*rotundifolius*” by Prof. Babington, which is stated by Rev. W. M. Rogers to have been a “garden hybrid.” Originally appearing in the garden of a friend at Walford, Herefordshire, I have cultivated it alongside of ordinary *R. obtusifolius* for some years. It keeps about twice the size of this, and produces flowers on the stems of the year.—AUGUSTIN LEY.

*R. affinis*, Wh. and N., var. *Briggsianus* Rogers (*Journ. Bot.* 1894, p. 42). Moor to south and south-west of the Moorland Hotel, below Hey Tor, Dartmoor, S. Devon. At about 1,100 ft. above sea-level, August 12, 1904. Abundant and clearly inseparable from the plant so frequent about Plymouth (*R. affinis*, *Fl. Plym.*), though often with less strongly developed panicle, as might be expected at 1,100 ft. above the sea. Here, as elsewhere in the West of England, in Kerry and in the Channel Islands, it keeps quite distinct from *R. affinis*, Wh. and N., and *R. nitidus*, Wh. and N., though clearly intermediate between them.—W. MOYLE ROGERS.

*R. imbricatus*, Hort, var. *londinensis*, Rogers, *Journ. Bot.*, 1903, pp. 89—90. Barnes Common, 20 Aug. 1902 ; Oxshott Heath, 3rd and 24th Aug. 1903 ; Westend Common, Esher, 25th July 1903 ; Walton and Weybridge Commons, 15th Aug. 1903 ; Tooting

Common, 14th July 1904; Streatham Common, 26th July 1904; Ockham Common, 1st Aug. 1904. All Surrey localities. It will be seen from the preceding list of localities that this form of *R. imbricatus*, Hort, (provisionally separated by the Rev. W. Moyle Rogers in his article on the "Rubi of the neighbourhood of London" in the Journ. of Bot. 1903, as var. *londinensis*), is a frequent plant in N.E. Surrey, where, upon the gravelly and sandy commons, it appears to be the only form representing *R. imbricatus*, Hort. It does not appear to exhibit much variation; the long prickles of the stem, the beautifully cuspidate leaflets, and bright rose-coloured petals being constant features. Of the specimens I send, the more luxuriant ones, from Westend Common, Esher, and Ockham Common, are from boggy situations. Outside Surrey, I have gathered this variety on Blackheath. W. Kent, and on Danbury Common, S. Essex.—C. E. BRITTON. "Beautiful and most characteristic specimens of my variety from all these localities. Strongly marked as are the features in which this plant usually differs from typical *R. imbricatus*, Hort, I have seen them so far modified in a few bushes (on Barnes Common at all events) as to justify its retention as a variety of that species. To some extent perhaps it may be said to go off from it towards *R. nemoralis*, P. J. Muell., while its peculiar prickles recall those of *R. affinis*, Wh. and N., and *R. dumnoniensis*, Bab."—W. MOYLE ROGERS.

*R. erythrinus*, Genev. Near Danby Lodge, Dean Forest, 12th Aug. 1904.—AUGUSTIN LEY. "This will in future be called *R. argenteus*, Wh. & N. See Journ. Bot. 1905, p. 200."—W. MOYLE ROGERS.

*R. durescens*, W. R. Linton. Near Mugginton, Derby, 6th Aug. 1904.—W. R. LINTON.

*R. nemoralis*, P. J. Muell., var. *Silurum*, A. Ley. Mitcheldean Meend, W. Glos., 18th Aug. 1904.—AUGUSTIN LEY.

*R. dumnoniensis*, Bab. West Cornwall, 1904: Lizard Down, in great quantity, very strong and characteristic, July 16; Housel Bay, Lizard, July 27; Mullion Cove, August 1. One of the most abundant and easily recognized brambles of the Lizard district, extending across the peninsula to within a stone's throw of the sea. Though usually quite typical, the Housel Bay plants have some of their leaves abnormally incised-lobate.—W. MOYLE ROGERS.

*R. mercicus*, Bagnall, var. *bracteatus*, Bagnall. Hartshill, Warwicksh., 16th July 1904.—J. E. BAGNALL.

*R. villicaulis*, Koehl., var. *Selmeri* (Lindeb.) Castle Bromwich, Warwicksh., July 1904.—J. E. BAGNALL. Wyre Forest, Salop, 25th Aug. 1904.—AUGUSTIN LEY.

*R. calvatus*, Blox. Yeldersley Lane, near Shirley, Derby, 8th Aug. 1904.—W. R. LINTON. "Yes, quite typical."—W. M. ROGERS.

*R. calvatus*, Blox. *f. calvula*, W. R. Linton. Shirley, Derby, 1st Aug. 1904.—W. R. LINTON. "Yes, clearly a small form of *R. calvatus*, Blox., as previously issued by Mr. Linton."—W. M. ROGERS.

*R. leucandrus*, Focke. Newent Woods, Glos., 11th Sept. 1903. Mitcheldean Meend, W. Glos., 18th Aug. 1904.—AUGUSTIN LEY.

*R. thyrsoideus*, Wimm. sp. coll. Lizard Peninsula, W. Cornwall, 1604:—Lizard Down, July 19; Mullion Cove, July 29. Most abundant locally, and apparently one of the prevailing brambles over a considerable part of the Peninsula. A peculiar form, with a great tendency to lose the felt from the under surface of the leaves. In some respects nearer to *R. rusticanus*, Merc. (very common throughout the district) than is usual with this species, and yet everywhere keeping quite distinct from it. New for Cornwall.—W. MOYLE ROGERS.

*R. thyrsoideus*, Wimm. Barkly, Leicestersh., August 1904.—W. BELL. Alveston Heath, Warwicksh., 20th Sept. 1904.—J. F. BAGNALL. ✓

*R. argentatus*, P. J. Muell. Lizard Downs and Mullion Cove, W. Cornwall; July 16—29, 1904. Fairly frequent and very variable; in some instances distinguishable with difficulty,—as elsewhere in the West of England,—from the less glandular forms of *R. micans* Gren. and Godr. Between Heytor and Liverton, parish of Ilsington, Dartmoor, S. Devon; in several spots, but hardly common; August 1904.—W. MOYLE ROGERS. Mr. Rogers writes, "Two names in this note also undergo change, *R. argentatus* becoming *R. Godronii*, Lec. & Lam., and *R. micans* becoming *R. hypoleucus*, Lef. & Muell."

*R. pubescens*, Weihe.—Roadside near Byfleet, 23rd July. No. 1,235, also near Wisley, 31st July 1904, No. 1,246.—Mr. Rogers tells me this plant is nearer the continental type than anything he has seen in Britain. It appears to be not unfrequent west of Walton, and is conspicuous by its pale green colour, with narrow remarkably long pointed leaflets, and much hooked or deflexed prickles.—A. H. WOLLEY-DOD. "Seems very near to the German type (like most of the *R. pubescens* that Major Wolley-Dod finds near Walton-on-Thames), though differing from it slightly in the glabrescent stem, rather more incised leaflets and (more conspicuously) in the ascending sepals, described by Dr. Focke as "Concava reflexa."—W. MOYLE ROGERS.

*R. hesperius*, Rogers, *f.* Near Bangor, Carnarvon; 21st July 1904.—On this bramble Rev. W. M. Rogers says, "It is apparently a form of *R. hesperius*, agreeing pretty closely with the Irish plant, but with smaller leaves, and the pedicel of the terminal leaflet longer." New record for Great Britain.—AUGUSTIN LEY. Though in my description of the Irish plant in *J. Bot.*, 1896, 504, I speak of that as "sp. n. (or var. n.)" I have since regarded it as a variety of *R. myricæ* Focke,—as it stands in my *Handbk. Brit. Rubi*, p. 42, and as Dr. Focke accepts it in his lately published monograph (see *J. Bot.*, 1905, 75). In 1902 Dr. Gilbert and I found a very closely allied plant in Warwick Park, Tunbridge Wells, W. Kent, which seems still nearer to *R. myricæ*, though apparently somewhat intermediate between it and the Irish var. *hesperius*.—W. MOYLE ROGERS.

*R. macrophyllus*, W. and N., form betw. type and vars. *Schlechtendalii* and *amplificatus*, *fide* W. M. Rogers. Shirley, Derby, 1st Aug. 1904.—W. R. LINTON.

*R. Salteri*, Bab. Aconbury, Herefordsh., 5th Sept. 1904.—AUGUSTIN LEY.

*R. Salteri*, Bab. Blackbird's Nest, near Nanpanton, Leicestershire, 7th Aug. 1904.—A. B. JACKSON. I think probably correct, though uncharacteristic in having most of the sepals reflexed. I have collected similar though more characteristic plants at Ulverscroft Lane, in the same neighbourhood.—W. MOYLE ROGERS.

*R.hirtifolius*, Muell. and Wirtg. Mitcheldean Meend, W. Glos., 18th Aug. 1904.—AUGUSTIN LEY.

*R. pyramidalis*, Kalt., *f.* Solva, Pembrokeshire, 21st August 1903. New County record.—AUGUSTIN LEY.

*R. pyramidalis*, Kalt., *forma eglandulosa*. Cowleigh, Malvern, Herefordsh., 9th Aug. 1904.—AUGUSTIN LEY.

*R. pyramidalis*, Kalt., *f.* Welsh Newton, Herefordshire, 15th August 1904. This plant I had been calling *R. mollissimus*, Rog.; but Rev. W. M. Rogers now tells me that he considers it a form of *R. pyramidalis*, Kalt., on account of its thick firm leaves and hairy stem.—AUGUSTIN LEY.

*R. lasioclados*, Focke. Wenlock Edge, Shropshire, 4th August 1904. Passed by Rev. W. M. Rogers as "very close to the Paddlesworth, Kent, plant, especially in the panicle." New county record.—AUGUSTIN LEY.

*R. criniger*, Linton. Yeldersley Lane, near Shirley, Derby, 26th July 1904.—W. R. LINTON.

*R. criniger*, Linton? Cleve Wood, near St. Bride's, Monm., 31st Aug. 1904. The Rev. W. M. Rogers has seen this bramble but was unable to give it a name further than "near *mollissimus* or *criniger*."—AUGUSTIN LEY.

*R. Gelertii*, Frider., b. *criniger*, Linton. Great Barr, Staffordshire, July 1904.—J. E. BAGNALL. Exactly *R. criniger*, Linton, as I understand it; but it must, I believe, be kept specifically distinct from *R. Gelertii*, Frider., as in my *Handbook Brit. Rubi*, pp. 12, 52.—W. MOYLE ROGERS.

*R. virgultorum*, Ley. Wenlock Edge, Salop, 4th Aug. 1904; Caer Caradoc, Salop, 5th Aug. 1904; Wyre Forest, Salop, 25th Aug. 1904.—AUGUSTIN LEY.

*R. Leyanus*, Rogers. Near Danby Lodge, Dean Forrest, Glos., 12th Aug. 1904.—AUGUSTIN LEY.

*R. radula*, Weihe, var. *echinatoides*, Rogers, *forma*. Shornden Wood and Alexandra Park, St. Leonard's-on-Sea, E. Sussex; in great quantity, 11th August 1900. A form of the variety making some approach towards my *R. Griffithianus* in the very unequal stem prickles, and to typical *R. radula* in the somewhat cordate terminal leaflet and the scattered hairs on the stem.—W. MOYLE ROGERS.

*R. radula*, Weihe, var. *echinatoides*, Rogers. Shirley, Derby, 30th July 1904.—W. R. LINTON.

*R. rudis*, W. and N. Redding's Enclosure, Monm., 12 Sept. 1904.—AUGUSTIN LEY. Mire Lane, Oadby, Leicestersh., Aug. 1904.—W. BELL.

*R. oigocladus*, Muell and Lefv., var. *Newbouldii*, Bab. Smes-ton, Worcestersh., 20th Sept. 1904.—J. E. BAGNALL. "Perhaps correct, but gathered too late in the season for satisfactory determination."—W. MOYLE ROGERS.

*R. orthocladus*, A. Ley. Heathy plantations on Mitcheldean Meend, West Glo'ster, 18th August 1904. This is the bramble sent by me in 1902 under the name of *R. holerythros*, Focke, var., from the same locality. On seeing it again in the present year the Rev. W. M. Rogers is of opinion that it is rather *R. orthocladus*; and in this opinion I quite concur. See Rep. 1902, p. 41. New county record.—AUGUSTIN LEY.

*R. Babingtonii*, Bell-Salt. Redding's Enclosure near Monmouth. (Extension woodland). Of this plant the Rev. W. M. Rogers writes: "A form of *R. Babingtonii*, Bell-Salt., going towards *R. ericetorum*, Lefv., in the narrow terminal leaflet, the less truncate panicle, and the reflexed sepals."—AUGUSTIN LEY.

*R. Lejeunei*, W. and N., var. *ericetorum* (Lefv.), *forma umbrosa* or *subumbrosa*, from Abernant Park, Aberdare, Glam. vc. 41, end of Aug. and beginning of Sept. 1904. After much consideration Mr. Rogers puts this puzzling form under the above name. It occurs in Abernant Park and the immediate neighbourhood in great quantities. Among the rhododendron bushes it climbs to the height of 12 or 14 feet, and frequently produces panicles nearly two feet in length.—H. J. RIDDELSDELL. The name, I fear, can only be accepted by way of suggestion; but I believe it to be most probably correct.—W. M. ROGERS.

*R. fuscus*, W. and N. *f.* Cowleigh, Malvern, Herefordsh., 9th Aug. 1904.—AUGUSTIN LEY. "Correct, I believe."—W. MOYLE ROGERS.

*R. Marshalli*, Focke and Rogers. Mitcheldean Meend, W. Glos., 18th Aug. 1904.—AUGUSTIN LEY.

*R. Bellardi*, W. and N. Sterridge, Herefordshire, 9th August 1904. This plant has been seen both by Dr. Focke and by Rev. W. M. Rogers; but it will be seen that a certain proportion of the specimens have quite abnormal panicles. These, it is believed, are panicles springing from the stems of the year.—AUGUSTIN LEY.

*R. serpens*, Weihe. Wyre Forest, Salop, 25th Aug. 1904.—AUGUSTIN LEY.

*R. britannicus*, Rogers. Craswall, Herefordsh., 1st Aug. 1904.—AUGUSTIN LEY.

*R. dumetorum*, W. and N., var. *diversifolius* (Lindl.) Cusop, Mouse Castle Hill, Herefordshire, July 29; Llangorse Common, Breconshire, 25 August 1898. In great quantity in both places, and fairly constant in character, especially in the long lax narrow panicle and comparatively narrow leaflets, though differing somewhat in stem armature and in the length of the stalk of the terminal leaflet.—W. MOYLE ROGERS.

*R. dumetorum*, W. and N., var. *rubriflorus* (Pursh). Shirley, Derby.—W. R. LINTON.

*R. dumetorum*, W. and N., var. *raduliformis*, A. Ley. Trelleck, Monmouth, 11th August 1903. I must apologise to members of the club for neglecting to obtain a supply of this plant described in the January number of the Journal of Botany, 1904. I have only the few sheets sent at present, but will endeavour to procure a better supply next year.—AUGUSTIN LEY.

*Alchemilla vulgaris*, L., var. *filicaulis* (Buser). Knighton Grange Farms, Leicestersh., 27th May 1904. The common form in Leicestershire.—W. BELL. "Correct."—E. F. LINTON.

*Poterium polygamum*, W. and K. Casual at Port Talbot Docks, Glamorgan, July 1904. New county record.—H. J. RID-DELSDELL.

*Rosa hibernica*, Sm., var. *Grovesii*, Baker. Barnes Common, Surrey, 2nd July 1903.—A. H. WOLLEY-DOD.

*R. mollis*, Sm. Near Harton Road Station, Salop, 3rd Oct. 1904.—W. H. PAINTER. "As Mr. Marshall points out this is *R. tomentosa*."—H. and J. GROVES.

*R. glauca*, Vill., variation II. in Ann. Sc. Nat. Hist. 1896, "teeth simple, ped. hispid-glandular, sepals glandular on back." Yeldersley Lane, near Shirley, Derby, 20th Aug. 1904. Variation II. (loc. cit.) but with longer pedicels, and less hairy stigmas than usual. Shirley, Derby, 6th Sept. 1904. Variation III. (l.c.) with slightly glandular sepals. Yeldersley Lane, near Shirley, Derby, 27th August 1904.—W. R. LINTON. These and the following were submitted by Mr. Linton to Mr. W. Barclay, and the namings are his.

*R. coriifolia*, Fr., variation III. in Ann. Sc. Nat. Hist. 1896. Yeldersley Lane, near Shirley, Derby, 20th Aug. 1904.—W. R. LINTON. "This is not the plant usually known as *R. coriifolia*, the leaves being thin and sparsely hairy, and the peduncles fairly long."—H. and J. GROVES.

*R. arvensis*, Huds., var. *bibracteata* (Bast.) Sellack, Herefordshire, 16th August 1904. This form is unlike any which I have come across. There is one small bush of it in a hedge; and although it has the technical characters of *R. bibracteata* in an exaggerated degree, I suspect it to be a hybrid.—AUGUSTIN LEY. "Crépin (J. of B. 1896, p. 178) considers that *R. bibracteata*, Bast., is a hybrid between *R. sempervirens* and *R. arvensis*. Mr. Ley's plant seems to us a weak form of the latter, but in view of his suggestion of hybridity, it would be interesting to know whether or not the fruit usually matures."—H. and J. GROVES.

*Crataegus Oxyacantha*, L., var. *kyrtostyla* (Fingerh.)? Yeldersley Lane, near Shirley, Derby, 10th June and 29th August 1904; near Stevenage, Herts, 21st Sept. 1904.—W. R. LINTON. "The Stevenage plant is apparently *C. oxyacanthoides*, Thuill., that from Yeldersley seems to be near *C. monogyna*, Jacq. Is *C. kyrtostyla* Fingerh. distinguishable from *C. monogyna*?"—H. and J. GROVES.

*Saxifraga hirta*, Haw. Mountain limestone at Morlais Castle, Glamorgan, vc. 41. Coll. June 1904. Growing with *S. hypnoides*, Linn. I am not satisfied that these specimens are correctly named, but they differ from the other digitate Saxifrages growing on the same spot by the leaves on the barren shoots being consistently 3-5 divided. I find it difficult to distinguish the two forms by the help of descriptions. A new county record if correctly named, as Sowerby, Vol. XIII., p. 182, would seem to imply, and as plants pointed out to me in Breconshire by Mr. Ley lead me to believe.—H. J. RIDDELSDELL. "The plant submitted to me is *S. hypnoides*, L., the leaves on the barren shoots being simple or 2-3 lobed, in no case 5-lobed."—E. F. LINTON.

*Ribes petraeum*, Sm. Near Egremont (several locs.), Cumberland, May and June 1904. In a hedge near to Moss Dalts the racemes were upright, as may be seen in some of the specimens.—JOSEPH ADAIR. On the two specimens sent to the Rev. E. F. Linton he remarks, "Seem right from both localities."

*Sedum reflexum*, L., var. *albescens*, Haw? Root brought by me from the cliffs at Torquay. Cultivated at Sellack, 27th July 1904. The foliage in this plant is glaucous green, and the stem leaves mainly straight and ascending, but a few of them recurved. It appears to be the ordinary semi-wild plant of old walls in Herefordshire.—AUGUSTIN LEY. The Rev. E. F. Linton agrees to the name.

*Epilobium montanum* × *roseum*? Garden weed at Clifton, July 1904. I shall be glad to know what is thought of this plant. It may be pure *montanum*, yet I suspect a mixture.—JAS. W. WHITE. "Correct."—E. S. MARSHALL.

*E. montanum*, L. × ? Ditch, Nant Francon. Carnarvon, 12th July 1904. This may be only a form of *E. montanum*, but had a distinct appearance when growing.—AUGUSTIN LEY. "I think that this is *E. montanum* × *obscurum*, nearer to the first-named."—E. S. MARSHALL.

*E. lanceolatum*, Seb. & Maur. Aberafan, Glamorgan, July 1904. A new county record. In considerable quantity, and spreading over a fairly large area. Like many of the *Epilobia*, showing a particular liking for ballast and other dry loose soil.—H. J. RIDDELSDELL. "Correct."—E. S. MARSHALL.

*Physospermum commutatum*, Spreng. In a wood on flinty soil in the neighbourhood of Burnham, Bucks, in great plenty over 2—3 acres. Found by Mr. R. Sperrin. Gathered by me in Sept. 1904. A very interesting county record, extending as

it does the range from Devon and Cornwall so much eastwards. This unexpected occurrence of such a very local western species led one to think it must have been introduced in recent times. I made a careful examination of the natural strip of wood in which it grows but found no other suspicious plant, and the wood itself was formerly united to other woods in the vicinity. The *Physospermum* grew in great quantities over a somewhat limited area. During the years I worked that neighbourhood it was extremely dense brushwood, into which I did not penetrate, and was closely preserved. About three years ago the undergrowth was cleared, and that the *Physospermum* has not been introduced since is proved by some plants appearing through the bundles of faggots which were then cut. Although on dry flinty soil (the Upper River gravels) *Rhamnus Frangula* grew in it with *Euonymus*. In many ways the place reminded me of the wood at Bodmin where it grows. At present I am inclined to think the plant is indigenous there.—G. CLARIDGE DRUCE.

*Apium nodiflorum*, Reichb. f., form or var. In moist, peaty soil, near Chalvey, Bucks, August 1904. This plant, although very different in appearance from the coarse plant of our midland streams, yet cannot, I think, be referred to the var. *ocreatum*, Bab., and certainly not to *A. repens* or its variety (as I place it) *longipedunculatum*. It grew in moist, peaty soil. Our British forms of *Apium* would bear further investigation.—G. CLARIDGE DRUCE. "I have received, thanks to Mons. Casimir De Candolle, a photograph of the type of *Helosciadium nodiflorum* B *ochreatum* DC., Prod. IV. 104. Mr. Druce's plant from Bucks resembles this in almost every leading characteristic with one exception, that is, that the umbels in the type of *ochreatum*, DC., tend to be slightly more longly peduncled. This variety must not be confused with var. *ocreatum*, Bab."—E. G. BAKER. "This goes some way towards var. *ochreatum* of DC. The outline and number of leaflets and length of peduncles fairly well suit DC.'s variety, in which leaflets are as in type *nodiflorum*. But the Chalvey plant (*quoad* my specimen) shows no signs of rooting in the upper half of the stem, whereas DC.'s type specimen (for sight of photograph of this I am indebted to Mr. E. G. Baker) roots at the nodes almost to the end: and the serration of the leaflet is deeper and coarser than in DC.'s plant."—H. J. RIDDELSDELL. The Rev. E. F. Linton remarks of this and the following: "Both *A. nodiflorum* R. fil. I do not see the supposed variation from type."

*A nodiflorum*, Reichb. var. *ocreatum*, Bab. Cropstone Brook, Leicestersh., 8th Aug. 1904. "This agrees with a specimen I have under the above name. The umbels are nearly or quite sessile—a character emphasized by Babington."—W. BELL. "Babington describes the leaves of his var. *ocreatum* as 'roundish, ovate, small, and bluntly toothed,' and he quotes E. B. tab. 1431. The plant

from Cropstone Brook is not at all like the plant figured. It seems to be a form between type and var. *ochreatum* DC."—E. G. BAKER. "This does not agree with the description of the variety; which is a small, prostrate, rooting plant, growing on ground flooded in winter, but more or less dry in summer."—E. S. MARSHALL.

*Caucalis latifolia*, L. Waste ground, St. Philip's, Bristol, 27th July 1904.—J. W. WHITE.

*Galium sylvestre*, Poll. Mountain limestone, Morlais Castle, Glamorgan, June 1904. A new county record. Type or var. *nitidulum*?—H. J. RIDDELSDELL. "Type"—E. F. LINTON. "The older name appears to be *G. umbellatum*, Lam., as given in the last edit. of Babington's Manual. This plant is the var. *pubescens*, Schrad. (under *G. sylvestre*), but less diffuse than usual."—G. CLARIDGE DRUCE.

*G. Vaillantii*, DC. Waste ground near the Feeder Canal, Bristol, West Gloucester, 14th July 1904. Probably a new county record.—J. W. WHITE.

*Valerianella carinata*, Loisel. Limestone quarry, Breedon, Leicestersh., 22nd May 1904. A new county record. Col. T. E. ROUTH, comm. A. B. JACKSON.

*Aster Linosyris*, Bernh. On carboniferous limestone rocks, in the neighbourhood of Weston-super-Mare, but not in a previously published locality, 16th Oct. 1904. In the 'Flora of Somerset' this plant is said to be extinct. I saw about 100 plants in flower.—G. CLARIDGE DRUCE.

*Anthemis nobilis*, L. Near Black Park, Bucks, July 1900.—G. CLARIDGE DRUCE.

*Artemisia vulgaris*, L., var. *coarctata*, Forcell. Alveston Heath, Warwicksh., 20th Sept. 1904.—J. E. BAGNALL.

*Senecio squalidus*, L., var. *leiocarpus*. Didcot, Berks, June 1904. In all the Floras which I have examined the achenes of *Senecio squalidus* are described as being pubescent, silky, or hairy, but in certain places, as in several localities in the Kennet Valley; at Reading, and at Didcot in Berks, plants occur with glabrous achenes. These present a similar range of variation in leaf-cutting to the normal plant with pubescent achenes. The specimens sent are a form with the leaves much less deeply cut (*forma integra*) than in the type. The Rev. E. S. Marshall was disposed to think that it might be a hybrid of *S. aquaticus* × *squalidus*. Very rarely *S. vulgaris* crosses with *squalidus*, but I can see no evidence of hybridity in these specimens, and Dr. Focke, to whom I sent a specimen, says, 'I think your plant is a variety of *S. squalidus*, and is nearly the same as the var. *glaucescens* of Sicily. Dr. Focke kindly sent

the following observations on the forms or sub-species of *S. squalidus* which he saw on the slopes of Mount Etna, where I have myself made a study of the forms of this variable species. "*S. Aetnensis*, Ten., leaves spatulate, slightly toothed or nearly entire; achenes glabrous. Grows in elevated regions of Mount Etna. *S. squalidus*, var. *glaucescens*, Spr., leaves irregularly and coarsely toothed; achenes glabrous or pubescent. Grows in an intermediate belt between the stations of *Aetnensis* and *typicus*; it occurs frequently mixed with both forms. *S. squalidus typicus*, leaves irregularly pinnatifid, with lobulated or coarsely toothed lobes; achenes silky. Grows on the lower slopes of Etna. *S. squalidus* (*S. chrysanthemifolius*, Poir. *S. siculus* All.), leaves bipinnatifid with narrow, nearly linear lobes and lobules, achenes silky. Grows on low land in Sicily. The var. *glaucescens* is a connecting link or a hybrid between *Aetnensis* and *typicus*, two well distinguished plants. There occur frequently all intermediate plants between *glaucescens* and the two other species or varieties. The var. *chrysanthemifolius* seems to be only an extreme state of *typicus*." I saw this latter growing in the volcanic dust in the Strada Etnensis, and closely allied forms on dry gravel rubble near Oxford. I may here record the occurrence of *S. squalidus* at Southall in Middlesex, at Swindon in Wiltshire, and at Verney in Bucks.—G. CLARIDGE DRUCE.

*Cnicus* (?). Rough grassy ground about Nash Point, Glamorgan, July 1904. In patches sometimes several yards across, and extending along at least three or four miles of coast: generally close to the cliff edge where the ground has been undisturbed, but also in similar ground some little way up one of the small valleys leading down to the shore. The thistles of the neighbourhood are *Carduus pycnocephalus*, Linn., *C. nutans*, Linn., *C. crispus*, Linn., *C. nutanti-crispus*, *Cnicus eriophorus*, Roth, *C. palustris*, Willd., *C. arvensis*, Hoffm., and *C. acaulis*, Willd. The last is not widely spread; it occurs sometimes in the immediate neighbourhood of the present plant. Probably the plant of Phyt. I. 780 which was gathered 'between St Donat's and Dunraven' by Westcombe, and named *C. tuberosus*, Roth. In Phyt. IV. 519, T. B. Flower (1852) wrote that he thought "Westcombe's specimens could not be referred to *C. tuberosus*, but would possibly prove to be the *C. Woodwardii* of Mr. Watson, and having lately submitted them to that gentleman he arrived at a similar conclusion, and writes me: 'The plant looks so unlike *C. pratensis* that I do not wonder at the supposition of its being some other species.'" I have no record of *C. pratensis* occurring nearer than Porthcawl Sandhills, a dozen miles away, though I have not thoroughly searched all the neighbourhood of Nash Point; but the dry surroundings, and the geological formation of the district (lias

rock coming very near the surface) do not make the occurrence of *C. pratensis a priori* likely. This, coupled with the facts regarding the neighbouring distribution of *C. acaulis*, makes it very doubtful if the determination *C. acaulis*  $\times$  *pratensis* is correct. Moreover, the fact that the plant is scattered in many compact little patches over a considerable area, of which no doubt I have actually seen only one boundary, and that it has stood its ground for many years (if I am right in supposing it is Westcombe's plant) opens the question whether it is a hybrid at all. It produces ripe and perfect fruit. Mr. Spencer Moore suggests *C. acaulis*  $\times$  *tuberosus*. A suggestion gathered by myself from the Brit. Mus. Herb. is *C. acaulis*, var. *dubius*, Willd. In neither case do the leaves look right for the Glam. plant, which moreover, I believe, has constantly a branched stem with long peduncled heads.—H. J. RIDDELSDELL. "This reminded me at once of a form (or hybrid) of *C. pratensis* which I collected at Roundstone in 1885. The only obvious difference was in the broader leaves and their very coarse lobing. The Roundstone thistle, which has also occurred on the coast of N. Wales, *vide* Mr. A. Bennett, was thought by Prof. Babington to be a form of *C. pratensis*, and proved fertile on cultivation. Though not identical in shape of leaf, I see no other difference. The involucre of the Nash Point plant is glabrous; so were our wild Irish plants; weather-worn, I think, for they proved cottony in the garden. The only possible partner out of the species named as growing about would be *C. acaulis*; but, beyond the glabrous involucre and the lobing of the leaves, I do not see in the armature and clothing of the leaves, the shape of the bracts or the fruit, any of the signs I should expect in that direction. I do not know *C. Woodwardi* from specimens. If it is a form of that hybrid it is very much on the *C. pratensis* side.—E. F. LINTON.

*Picris hieracioides*, L., var. *arvalis* (Jord.). Port Talbot Docks, Glamorgan, July 1904. A new county record. Mr. Druce kindly named the plant.—H. J. RIDDELSDELL.

**Hieracium.** The Rev. E. F. Linton has kindly examined and reported on the representatives of this genus.

*Hieracium concinnatum*, F. J. Hanb. Eardley, Herefordshire, 31st May 1904.—AUGUSTIN LEY. "Should be *H. Pilosella*, var. *concinnatum*. The English plants are neither so dwarf, stout, or short-stoloned as the original Scotch plants; still Mr. Hanbury considers they may come under the var. as a form."—W. R. LINTON.

*H. Pilosella*, L., var. *nigrescens*, Fr. Glen Clova (800 ft.), Forfar, 30th June 1904.—E. S. MARSHALL. "In two specimens

on my sheet the involucre have the clothing of the form *atrichidium*, Williams, soft black hair with hardly a gland even at the base. The remaining specimen with the involucre glandular and epilose is var. *concinatum*, F. J. Hanb."—E. F. LINTON. I have separated the specimens as well as I can, marking them respectively "a" and "b."—J. G.

*H. Pilosella*, L., var. *nigrescens*, Fr. Bank of S. Esk, upper part of Glen Clova, Forfar, 8th July 1904.—W. A. SHOOLBRED. "Rightly named, quite different from Mr. Marshall's specimens."—E. F. LINTON.

*H. Pilosella*, L., approaching var. *nigrescens*, Fr. Near Cellwen, Brecon, 11th June 1904.—AUGUSTIN LEY. "Rather undersized and with the greyer leaves of the type, but approaching var. *nigrescens* very closely in the clothing of the peduncles and involucre."—E. F. LINTON.

*H. calcaratum*, Linton. Craig-y-nos ridge, Brecon, 11th June 1904.—AUGUSTIN LEY. "Not my *calcaratum*, but *H. euprepes*, F. J. Hanb. or very like it."—E. F. LINTON. As Mr. W. R. Linton points out, *calcaratum*, Linton, is a var. of *H. anglicum*, not a species.—J. G.

*H. flocculosum*, Backh.?. Upper Wharfedale, W. Yorks, 29th June 1904. I hesitate much in referring this to *H. flocculosum*, it is too similar to *H. anglicum*, Fr., to be separated from it. Much of the *H. anglicum* of the W. Yorksh. dales is flocculose on the stem leaves and peduncles, as is the plant I now send.—AUGUSTIN LEY. "The specimen submitted to me is undoubtedly *H. anglicum*, Fr."—E. F. LINTON.

*H. Brigantum*, F. J. Hanb. Hesleden Glen, W. Yorks 5th July 1904.—AUGUSTIN LEY. "I agree to the name, though the ligules do not seem to be ciliate; but neither are they in the type specimens in my possession."—E. F. LINTON. "Should be *H. anglicum*, var. *Brigantum*."—W. R. LINTON.

*H. Leyi*, F. J. Hanb. Craig Dulyn, Carn., 19th July 1904.—AUGUSTIN LEY. "The typical plant."—E. F. LINTON.

*H. lasiophyllum*, Koch. Craig Rhiwarth, Brecon, 10th June 1904.—AUGUSTIN LEY. "With narrower heads and more luxuriant foliage than usual, perhaps induced by condition of soil, but rightly named."—E. F. LINTON.

*H. lasiophyllum*, Koch, var. *curyodon*, F. J. Hanb. The Daren, Bwllfa, Aberdare (June 1902 and 1903), and Craigyllyn (June 1903), Glamorgan. Named by Mr. Ley. A new county record.—H. J. RIDDELSDELL. "Both correct, a more developed stem-leaf is a

marked feature of these plants, and perhaps of the variety. There is little or no stem-leaf in the type." E. F. LINTON.

*H. argenteum*, Fr. Nant Francon, Carn., 12th July 1904.—AUGUSTIN LEY. "The usual Welsh form with broader, deeper green leaves than the Scotch plant."—E. F. LINTON.

*H. splendens*, F. J. Hanb. Cwmglasfach, Snowdon, Carn., July 1904.—AUGUSTIN LEY. "*H. Sommerfeltii*, Lindeb. var. *splendens*, F. J. Hanb., not a species, I believe."—E. F. LINTON.

*H. splendens*, F. J. Hanb. Nant Francon, Carn., and cult. from there. July 1904.—AUGUSTIN LEY. "This is the plant described as *H. clovense*, Linton, var. *Griffithii*, F. J. Hanb., afterwards raised to specific rank; now regarded as identical with *H. Sommerfeltii*, Lindeb. var. *splendens* (*British Hieracia*, p. 28).—E. F. LINTON.

*H. hypochwroides*, Gibs., var. *Cyathis*, Ley. Limestone rocks, near Cefn-coed-y-cyammer, Brecon, June and July 1903. Named by Mr. Ley.—H. J. RIDDELSDELL.

*H. Cyathis*, A. Ley. Craig Cille, Brecon, 15th June 1904.—AUGUSTIN LEY. The Rev. E. F. Linton points out that this was raised to a species in "The British Hieracia," p. 30, and the authority should therefore be "W. R. Linton."—J. G.

*H. britannicum*, F. J. Hanb. Craig Cille, Brecon, 15th June 1904.—AUGUSTIN LEY. "This is the plant issued in Set Brit. Hier. as *H. stenolepis*. It wants the subtriangular leaves of *britannicum*, and its phyllaries are more longly attenuate than those of *britannicum*. I am inclined to retain it under *stenolepis*, though not fully typical."—W. R. LINTON.

*H. scoticum*, F. J. Hanb. Origin, Hepste Glen, Brecon, cult. June 1904. This is a plant which has been variously named at different dates, and was distributed by me through the Club in 1894 as *H. diaphanum*, Fr. var. *stenolepis*. See Report 1894, p. 455 (where the locality is printed "Kepste"). I learn this year from the Rev. W. R. Linton that he considers it to be *H. scoticum*. A new county record.—AUGUSTIN LEY. "Looks like one of the *Alpestria*, but inflorescence very like that of *H. scoticum*."—E. F. LINTON.

*H. pachyphyllum*, Purch. Symonds Yat, W. Gloster, 30th May 1904.—AUGUSTIN LEY. "Typical, from a well-known station."—E. F. LINTON.

*H. sanguineum*, Ley. Dyffryn Crawnon, Brecon, 16th June 1904.—AUGUSTIN LEY. "Typical. First sent to the Club as *H. cinerascens*, Jord. B.E.C. Report 1893, p. 418, from this

station, and remaining undetermined till described by Mr. Ley, *Journ. Bot.*, 1900, p. 4."—E. F. LINTON.

*H. stenolepis*, Lindeb. Cellwen, Brecon, 11th June 1904.—AUGUSTIN LEY. "Differs from *H. stenolepis* in leaves and phyllaries being broader and styles livid usually, but not always, in the British plant yellow). I have the same form from Derbyshire and W. Sutherland, for which I have not yet found a name."—E. F. LINTON. "Certainly not *stenolepis*; the tips of the ligules strongly ciliate, the stem-leaf broad, the less alternate phyllaries and other features point to quite a different species. I cannot match it."—W. R. LINTON.

*H.* ——. Craig Cille, Brecon, 15th June 1904.—AUGUSTIN LEY. "Mr. Ley has before now issued this as *H. stenolepis*, Lindeb., to which it bears much resemblance; it has, however, a much more glandular inflorescence and broader leaves, and its true place may require further consideration."—E. F. LINTON. "This may perhaps be a form of *stenolepis*, i.e. the plant from this locality which has gone by that name. It is, however, considerably different from the Scandinavian plant."—W. R. LINTON.

*H. micracladium*, Dahl. Upper Wharfe, W. Yorks, 2nd July 1904.—AUGUSTIN LEY. "The usual British form with hairier phyllaries than the Scandinavian."—E. F. LINTON. "Should be *H. silvaticum*, var. *micracladium*."—W. R. LINTON.

*H. lucidulum*, Ley. Craig Rhiwarth and Dyffryn Crawnnon, Brecon, June 1904. Buckden, Wharfedale, M. W. Yorks, 30th June 1904.—AUGUSTIN LEY. Also sent by Mr. Riddelsdell from Dyffryn Crawnnon, gathered in company with Mr. Ley. "All three are what are published as *H. murorum*, L. ex parte, var. *lucidulum*, Ley (*Journ. Bot.* 1900, p. 3), and since then placed rightly as a variety under *H. pellucidum*, Laestad. (*Brit. Hieracia*, p. 43), to which it is closely allied."—E. F. LINTON. Craig Cille, Brecon, June 1904.—AUGUSTIN LEY and H. J. RIDDELSDELL. "A form with some slight differences, which the Rev. W. R. Linton prefers to retain as a slight variation under var. *lucidulum*."—E. F. LINTON. Craig-y-llyn and railway side between Hirwaun and Glyn Neath, Glamorgan, June 1903. Mr. Ley named these specimens. A new county record.—H. J. RIDDELSDELL.

*H. Stenstroemii*, Dahl. Upper Wharfe, M. W. Yorks, July 1904.—AUGUSTIN LEY. "I agree."—E. F. LINTON. Also sent from Kettlewell, M. W. Yorks, by the Rev. W. R. LINTON, who points out that it should be *H. serratifrons*, var. *Stenstroemii*.

*H. crebridens*, Dahl. Upper Wharfe, M. W. Yorks, July 1904.

AUGUSTIN LEY. "The North of England form with leaves more cordate; the Scotch plant like the Scandinavian has a truncate base of leaf, or narrowed below."—E. F. LINTON.

*H. holophyllum*, W. R. Linton. Great Orme's Head, Carn., 9th July 1904.—AUGUSTIN LEY. "Typical *H. holophyllum*."—E. F. LINTON. Kettlewell, M. W. Yorks, 1st July 1904.—AUGUSTIN LEY. Arncliffe, M. W. Yorks.—W. R. LINTON. "This W. Yorks plant is a slightly variant form with leaves more evidently toothed, inflorescence more glandular, and styles darker than usual; but it has been admitted into this species by the Rev. W. R. Linton (Brit. Hieracia, pp. 49, 50) from both the localities."—E. F. LINTON.

*H. sagittatum*, Lindeb. var. *philanthrax*, Dahl. Kettlewell, M. W. Yorks.—W. R. LINTON.

*H. philanthrax*, Stenstr. Upper Wharfedale (3 localities), M. W. Yorks, June and July 1904.—AUGUSTIN LEY. "These are all three the plants we are calling *H. sagittatum*, Lindeb. var. *philanthrax*, Stenstr. I have no Scandinavian specimens to compare."—E. F. LINTON.

*H. amplifolium*, A. Ley. Wyndcliffe, Monmouthsh., 14th June 1904.—AUGUSTIN LEY. "Shewn me growing at this station by Rev. A. Ley, who published it as a var. under *H. vulgatum*, Fr. It stands now as *H. sciaphilum*, Uechtr. var. *amplifolium*, W. R. Linton, in Brit. Hier. p. 68. These are characteristic specimens."—E. F. LINTON.

*H. diaphanoides*, Lindeb. Benthall Edge, Salop, July 1904; Llancyfelyn, Cardigansh., 22nd June 1904. New record for both counties. Named by Rev. A. Ley.—W. H. PAINTER. Llanberis, Carnarvonsh., July 1904.—AUGUSTIN LEY. S. bank of R. Lune near Halton, W. Lancs., 2nd July 1904. *Teste* W. R. Linton. New to vice-co.—A. WILSON and J. A. WHELDON. Specimens of all but the Salop plant were referred to the Rev. E. F. Linton, who writes:—"Of these the Cardigan plant is the most typical, with only glandular and no simple involucre hairs. Some other species however, as well as this, are inclined to produce more hair on the involucre in the British form than in the Scandinavian type, and I leave all these under *H. diaphanoides*, Lindeb., so does the Rev. W. R. Linton."

*H. diaphanoides*, Lindeb. Bethesda, Carn. July 1904.—AUGUSTIN LEY. "I think this is rather *H. irriguum*, Fr., a closely allied form. It is the same as the one noted in my 'Brit. Hieracia,' p. 68."—W. R. LINTON.

*H. tridentatum*, Fr. Michael Church, 1st August 1904.—  
AUGUSTIN LEY. "I agree."—E. F. LINTON.

*H. rigidum*, Hartm. var. ? Railway cutting at Parkstone, Dorset, 16th November 1904. I am told by Rev. W. R. Linton that this is undoubtedly the plant issued in the "Sets" (No. 25) as *H. trichocaulon*, Dahl. Yet the specimens I now send have very broad leaves, and are pseudo-phyllipodous, not to mention other difficulties in placing them under that variety. This plant is very luxuriant, often attaining 2 feet and more; often also branching from the root with 4—5 stems. It was not, when I gathered it, a second growth after the plant had been cut down; the rootstock shewing often 4—6 buds making ready for next year's stems; but some of its peculiarities may, no doubt, be accounted for by the late season at which it was flowering.—AUGUSTIN LEY. "My July specimens from this locality have far narrower leaves and were named var. *trichocaulon* by Am. Dahlstedt. As the inflorescence seems to me indistinguishable from my specimens, I consider Mr. Ley's specimens to be an autumnal state of the same plant."—E. F. LINTON. "This is the plant which was sent out in Set Brit. Hier. as *trichocaulon*, dated July 6, 1897. This November gathering represents a late autumn state. When similar specimens (Oct. 14, 1897) were sent to the Club two critics mistook their specimens for *H. boreale*, which is not much to be wondered at."—W. R. LINTON.

*H. rigidum*, Hartm. under var. *trichocaulon*, Dahl. Old quarry near Treorchy, Glamorgan, 29th June 1903. Named by Mr. Ley.—H. J. RIDDELSDELL. "This I identify with a var. of *H. tridentatum* from Drwsynant, which the Rev. W. R. Linton, who gathered it, tells me is var. *setigerum*, Ley."—E. F. LINTON.

*Taraxacum palustre*, Web. var. *udum* (Jord.). Yeldersley, near Shirley, Derby, 3rd June 1904.—W. R. LINTON.

*Lactuca virosa*, L. Bank of a pill, Portishead, N. Somerset, 2nd Sept. 1904.—J. W. WHITE.

*Statice maritima*, Mill. Lydd, E. Kent, July 1904. The plant with holotrichous calyx, which is much the rarer form so far as my experience goes in Britain. The common plant with a pleurotrichous calyx, that is having hairs on the calyx-ribs only, while the interspaces are glabrous or nearly glabrous is *S. linearifolia*, Laterr. = *S. pubescens*.—G. CLARIDGE DRUCE. "The amount of hairiness on the calyx in the British Thrifts varies considerably even on the same plant, and we do not think affords a sufficient character for specific distinction. In the present plant the hairiness spreads between the ribs in the middle, but above and below the grooves appear to be glabrous."—H. and J. GROVES.

*Limnanthemum peltatum*, S. P. Gmel. Old canal, Preston-on-the-Weald, Salop, 25th Aug. 1904. Evidently planted. It now covers about a quarter of an acre in a basin of the canal.—W. H. PAINTER. "The older name is *Nymphoides orbiculata*, Gilib., the genus *Nymphoides* being founded by Hill in 1756."—G. C. DRUCE.

*Symphytum asperrimum*, Bieb. Naturalized at Wrington, Somerset, 9th July 1904.—J. W. WHITE. I take this to be a form of the fodder plant referred by Sir Joseph Hooker (Bot. Mag. 1879, t. 6466) to *S. peregrinum*, Ledeb. Sir J. Hooker remarks (l.c.) :—"That it is not the true *S. asperrimum* of Donn, figured by Sims in this work (t. 929) is obvious from a comparison of that plate in which the calyx is correctly represented as short, and shortly 5-cleft to the middle only, with obtuse lobes, and which has curved prickles on the stem arising from conspicuous white tubercles." If, as Mr. Baker (B.E.C. Report 1879, p. 24) suggests, the British *S. peregrinum* is a hybrid between *S. officinale* and *S. asperrimum*, that would account for its variability. In the present plant the calyx-teeth are certainly shorter and blunter than in that collected by Mr. White at Brass Knocker Hill in 1894. It would be interesting to know whether or not these plants produce seeds.—J. G.

*Limosella aquatica*, L. Near Naphill Common, Bucks, July 1903. A new county record, but previously found by me near Colnbrook.—G. CLARIDGE DRUCE.

*Euphrasia stricta*, Host. Bank above chalk-pit, Odiham, N. Hants, 10th Sept. 1904.—C. E. PALMER. "I do not see how this differs from *E. nemorosa*." — E. S. MARSHALL. I do not pretend to know *E. stricta*, but Miss Palmer's specimens do not correspond with those we possess from the Continent, nor that figured by Mr. Townsend from Lausanne, both of which have a firmer and less branched stem, and less spreading and more acutely serrate leaves.—J. G.

*E. brevipila*, Burn. and Greml. Grassy open clearing in Stoke Wood, Stokesay, Salop, Sept. 1904.—J. COSMO MELVILL. "The two specimens sent to me are *E. Rostkoviana* and *E. nemorosa*."—E. S. MARSHALL.

*E.* ——. Bredon Hill, Worcestersh., Aug. 1904. Two gatherings.—R. SAUNDERS. "I believe that these are *E. nemorosa*."—E. S. MARSHALL.

*Stachys alpina*, L. Outskirts of Westridge Wood (600 ft.), W. Glos., 6th July 1904.—J. W. WHITE.

*Teucrium Chamædrys*, L. Old quarry at South Cornely, Glamorgan, July 1904.—H. J. RIDDELSDELL.

*Plantago Coronopus*, L. *forma lanata*. Freshwater Downs, I. of Wight, 8th Aug. 1904. Appears to be merely a state induced by exposure in the bare soil on the edge of the Downs, where it grows mixed with less lanate forms.—A. H. WOLLEY-DOD. "*P. Coronopus*, L., *tenuifolia hirsuta* Wirtgen."—E. G. BAKER.

*Polygonum mite*, Schrank. Near Newport Pagnell, Bucks, on the Oxford clay, Sept. 1903. A new county record, but found by me some years ago.—G. CLARIDGE DRUCE.

*Euphorbia Pseudo-cyparissias*, Jord. Near to the farm-house of Cote Close, Egremont, Cumberl. Formerly covered the hedge-bank for 20 or more yds., but now apparently dying out. Probably a relic of cultivation.—JOSEPH ADAIR.

*E. Cyparissias*, L. Origin, Cellwen, Brecon., Cult., 19th May 1904.—AUGUSTIN LEY. "Surely *E. Pseudo-Cyparissias*, Jord., the habit is entirely different from *E. Cyparissias*."—G. CLARIDGE DRUCE.

*E. Cyparissias*, Linn. Aberafan, Glamorgan, July 1904. Probably introduced.—H. J. RIDDELSDELL.

*Urtica angustifolia*, A. Blytt. Open glade, Knighton Spinneys, Leicestersh., Sept. 1904. The best *angustifolia* I have seen in Leicestershire; there are many grades between this and *U. dioica* type.—W. BELL. "*U. dioica* var. *angustifolia*, Wimm. and Grab."—G. C. DRUCE. Unless this 'variety' has some other character than the more or less narrow leaves it does not seem worth distinguishing.—J. G.

*Betula intermedia*, Thomas. Ref. No. 2,823. Stream side (1,400 ft.), near Bachnagairn, Clova District, Forfar. 29th June 1904, I have no doubt that this plant is derived (as I suggested in *Journal of Botany* for 1901, p. 271) from seed of *B. pubescens*, Ehrh., fertilized by pollen of *B. nana* L.; *B. alpestris*, Fr., being the product of the reverse process. The present case affords pretty conclusive evidence; as only *B. pubescens* was found in the locality itself, but *B. nana* was seen in plenty, a mile or two away. This (No. 2823) was about 12 feet high, conspicuously differing from the surrounding *B. pubescens* (*B. glutinosa*, Fr.) at a good distance by its much darker foliage, thickly interlacing branches, and peculiar rounded outline, which resembled that of a giant bush, rather than of an ordinary tree.—E. S. MARSHALL. Also sent by Mr. W. A. SHOOLBRED, from the same locality.

*B. pubescens*, Ehrh. var. *parvifolia*, Regel., Glen Clova, Forfar, 1st July 1904.—E. S. MARSHALL. Also sent by Mr. W. A.

Shoobred from the same locality, under the name of var. *parviflora* "Wimm."

*Quercus Robur*, L. var. *intermedia* (D. Don). Shirley, Derby, 10th Aug. 1904.—W. R. LINTON.

*Salix decipiens*, Hoffm, Sellack, Herefordsh., May and Aug. 1904.—AUGUSTIN LEY. "Exactly Hoffmann's plant, male as usual."—E. F. LINTON.

*S. pentandra*, L. Side of R. Cynon, in meadows below Aberdare, Glamorgan, June and Aug. 1904. A doubtful native; but unrecorded for the county in Top. Bot.—H. J. RIDDELSDELL.

*S. Caprea*, L. × *Lapponum*, L. Upper Glen. of the S. Esk, Forfar, 2nd July 1904.—E. S. MARSHALL and W. A. SCHOOLBRED. "Mr. Marshall's No. 2772 I agree to thoroughly. His No. 2773, with broad roundly-oblong leaves, has the size of the bush, and the dull colouring of the twigs in favour of the presence of *S. Caprea*. Other signs are wanting, and on the specimens sent one would have thought it a broad-leaved form of *S. Lapponum*, L."—E. F. LINTON.

*S. purpurea*, L., var. Butt's Pond, Odiham, N. Hants, 11th April and 18th July, 1904. In 1898 I sent this to Mr. E. F. Linton, and he considered it to be *S. purpurea* var. betw. *Lambertiana* and *Woollgariana*, with rather an indistinct leaf. I have only observed one tree of the species about this neighbourhood.—CHARLOTTE E. PALMER.

*Orchis latifolia*, L. Llancynplyn, Cardigansh., 22nd June 1904. Not in Top. Bot.—W. H. PAINTER. "When fresh this should have been easy to name from the markings of the lip, which are now obscure. The foliage looks to me like *O. incarnata*, L., but this alone is not decisive. It may be right."—E. F. LINTON.

*Habenaria Conopsea*, Benth. Damp sandy open copses on Margam marshes: Glamorgan, July 1904. Not in Top. Bot.—H. J. RIDDELSDELL.

*Polygonatum officinale*, L. Crevices of limestone 'pavement,' Gatebarrow Wood, W. Lancashire (100 ft.), June 1904.—ALBERT WILSON.

*Ornithogalum umbellatum*, L. Wood near Kiddington, at one time probably part of the Royal Forest of Wychwood, where I think it is indigenous, Oxfordsh., May 1904.—G. CLARIDGE DRUCE.

*Potamogeton lucens*, L. Ditch, Nailsea Moor, North Somerset, 23rd Sept. 1904. I am sending a set of specimens in deference to advice given by Mr. Fryer, some years ago, to members of the Club. He said that it was desirable to have gatherings from all

parts of the kingdom in order that variations might be noted. The plant is rare in N. Somerset.—JAS. W. WHITE. "A common state, which in the Fens has a tendency to produce its extreme, *cornutus*." —A. FRYER.

*Cyperus fuscus*, L. Peaty ditch near Weston-in-Gordano, North Somerset, 10th Sept. 1904. The experience of several years has shewn that there is nothing to marvel at in the fact that this rare plant, in its Somerset locality, eluded observation during so long a period. In the Walton Valley there may be twenty miles of ditches and possibly more. The farmers who rent the pasture are under obligation to rake out the main drains at least every four months, and in default are fined. How this plant, an annual, contrives to exist at all, is the marvel. For although, doubtless, much of it in fruit has at various times been thrown out and scattered on the adjacent land, we have never yet seen a specimen growing outside a ditch. It does not even grow on the ditch-banks, but only in shallow water at the bottom. In Sept. 1903 none could be found in those drains where the sedge was first observed, nor indeed anywhere else during a two hours' search. This year also the original locality was a blank. However, in another part of the moor we came upon about a hundred yards of luxuriant plants in good order.—JAS. W. WHITE.

*Cladium jamaicense*, Crantz. Wotton Underwood, Bucks, Aug. 1904. This addition to the Bucks Flora was found by Mr. A. Wallis, who has been a very kind and energetic helper in my task of compiling the County Flora. A large but solitary patch occurred in a pond on a duck farm in a secluded part of the county, in the Vale of Aylesbury. It is on the Oxford clay and in a low-lying district which once was doubtless much more fen-like than it is at the present time. I have been unable to find it elsewhere in the neighbourhood. At first I thought it might have been introduced from the large piece of artificial water at Earl Temple's mansion, but I have examined that situation and find it is not grown there. The habitat lies between the fen ground of Otmoor and the Eastern fens, and its occurrence may be due to aquatic fowl.—G. CLARIDGE DRUCE.

*Carex aquatilis*, Wahl., var. *sphagnophila*, Fr. Swamp by the White Water above Glen Doll, Forfar., 2nd July 1904.—E. S. MARSHALL and W. A. SHOOLBRED.

*C. Goodenowii*, J. Gay  $\times$  *rigida*, Good. Ref. No. 2760. Swamp by the White Water (2300 ft.), Clova district, Forfar, 2nd July 1904. This grew with the parents and *C. aquatilis*, var. *sphagnophila*. It is rather towards *Goodenowii*, but the influence of *rigida* is very evident. Sterile. Confirmed by Pfarrer G. Kükenthal.—E. S. MARSHALL. Also sent by Mr. W. A. SHOOLBRED.

*C. rariflora* Sm. Table-land between Glens Doll and Canness, Forfar, 27th June 1904.—W. A. SHOOLBRED.

*C. digitata*, L. Gatebarrow Wood, near Silverdale, West Lancashire, at 100 ft. on scar limestone, June 1904.—ALBERT WILSON.

*C. strigosa*, Huds. In a damp wood on the London Clay, near Penn, Bucks. Found some time ago in the county, but now sent as a new county record.—G. CLARIDGE DRUCE.

*C. Æderi*, Retz. Auct. Angl. (non Bailey). In considerable quantity in chalk marl, Wicken Fen, Cambs., Aug. 1904.—G. CLARIDGE DRUCE. "This is *C. divisa* Oeder in Flora Danica! (non Huds.), *C. Æderi*, Retz. Prof. Bailey's plant is, I believe, *C. Æderi*, var. *ædocarpa*, And. = *C. flava*, var. *minor* Towns."—E. S. MARSHALL.

*C. rostrata*, Stokes, var. *robusta*, Sonder (sub *ampullacea*). Ref. No. 2764 Glen Clova, Forfar, 4th July 1904. Determined by Pfarrer G. Kükenthal. A remarkable plant, growing in a peaty pool, and very different from the ordinary form, which is plentiful in the surrounding swamp. It is usually taller and more slender than var. *latifolia*, Ascherson, from Ireland, with narrower and more channelled leaves. The male spikelets are mostly female at the top, and the female spikelets male at the top.—EDWARD S. MARSHALL. Also sent by Mr. W. A. SHOOLBRED.

*Polygomon monspeliensis*, Desf. Cardiff Docks, Glamorgan, July 1904. Not native—H. J. RIDDELSDELL.

*Weingaertneria canescens*, Bernh. In considerable quantity over a sandy field (once arable land) at Aberafan, Glamorgan, July 1904. Also on the sandhills near by, and on the undisturbed sand within the area of Port Talbot Docks: all within a square mile area. There is no *a priori* reason why it should not be native here, as it grows in the Channel Islands and East Anglia. It is near docks and many introduced plants, but is too widely spread, even so far as I know it at present, for this consideration to weigh very heavily. The dock plants tend to be confined to the dock area. It was never recorded by Jas. Motley, who lived at Aberafan: but there are other important plants close by which he did not see. Further investigation is necessary before I can feel satisfied whether it is introduced or not.—H. J. RIDDELSDELL.

*Kæleria cristata*, Pers., var. *genuina*, G. & G. Sands of Barry, Forfar, 8th July 1904.—W. A. SHOOLBRED. "*K. cristata*, Pers. *gracilis* Richt. Pl. Eur. I. 74, *K. gracilis*, Pers."—E. HACKEL.

*Kæleria valesiaca*, Gaud. In grassy turf on carboniferous limestone rocks, in full exposure at Uphill, N. Somerset, 16th Oct. 1904. The history of this grass is peculiar. In preparing a memoir of Dillenius and an account of his Herbarium, which is now in the press, I came across a small parcel containing plants, among them being an unlocalised grass, which I thought was a foreign form of *Kæleria*. Subsequently I found a MS. note which almost certainly referred to it. Dillenius there says that he found it at Uphill and on Brent [Brean] Down plentifully, and he calls it '*Spartium montanum radice bulbosa et fungosa*.' He identifies it with the grass which A. Scheuchzer in the *Agrostographia* of 1716, p. 169, calls '*Gramen valesianum tenuifolium, panicula spicata, viridi argentea, splendente*.' This identification by Dillenius was correct, and it testifies to his great critical acumen in recognising it from the diagnosis in that work. In the celebrated description which Dillenius gives of his journey into Wales and the Western country in 1726, which is printed in the Richardson Correspondence number 100, Dillenius refers to finding this grass, the identity of which at that time he had not ascertained. Dillenius in his description of the grass, says when he gathered it in the middle of July, on Brent [Brean] Down and Uphill [Somersetshire], 'the plant had either shed its seeds or had produced none;' and when I first recognised this plant last October, I thought there was only a remote chance of discovering it so late in the season. However, I went down to Weston, and within ten minutes of getting out of the cab at Uphill, succeeded in finding it growing on the sides of that picturesque hill. The grass is instantly recognisable from its curious rootstock which is covered with a fibrous mass, consisting of the persistent strands of the old leaves. The texture of the leaves themselves is also different, and the panicles are continuous and not more or less interrupted as in *K. cristata*. Plants with the dried flowering stems were also found in sheltered situations, and it grew in considerable quantity, especially on the exposed limestone ledges, which it appeared to prefer. *Kæleria valesiaca*, Gaud., has considerable variation; for instance, Willkomm and Lange in the *Prod. Fl. Hispan.* vol. i. p. 75, give three varieties, namely, var. *glabra*, Godr., which they consider to be *K. valesiaca*, Gaud.; var. *ciliata*, Godr.; the *K. setacea* of De Candolle; and var. *pubescens*, the *Aira vallesiaca*, Bert.; but they adopt the name *K. setacea*, Pers., for the aggregate species. As the characters by which these varieties are separated depend upon the inflorescence, I defer the identification of the segregate, and the description of our British plant until I have gathered it in flower. Although the authors of the *Flora Hispanica* adopt the name *K. setacea*, Pers., as a matter of fact, Persoon did not use it. In vol. i. p. 97 of the *Synopsis*, Persoon gives the name *K. tuberosa*, the type of which is identified with *Aira cristata* of Smith, which is our *K.*

*cristata*; he gives with a query a variety *setacea* with a feeble description, which may or may not refer to Scheuchzer's plant; he localised it from the Pyrenees. Gaudin, in the *Agrostologia Helvetica* of 1811, describes it under the name *K. valesiaca* on p. 149, and this name appears to have priority. Ascherson and Graebner in the *Synopsis* ii. 354, 1900, adopt the name, but vary the spelling to *K. vallesiana*, which was used by Scheuchzer. The locality in which our British plant occurs is on the Carboniferous Limestone, and it might be expected in other similar situations. The plant of the St. Vincent's Rocks, the Glamorganshire hills, and Berry Head, is however *K. cristata*. Indeed all the specimens in the British Museum Herbarium, Kew, and my own collection from very many widely separated places, are *K. cristata*, with the exception of one gathered from one of the above Somersetshire localities, which is *K. valesiaca*. Its continental distribution, extending as it does along the French coast to the Loire, would lead one to expect it in Britain. It adds another to that interesting group to which belongs *Cephalanthera rubra*, *Stachys alpina*, *Campanula persicæfolia*, *Carex montana*, *C. depauperata*, etc. Professor Hackel and Dr. Stapf have named my specimens.—G. CLARIDGE DRUCE.

*Molinia varia* Schrank, var., *major*. Bomere Pool, near Shrewsbury, Salop, Aug. 1904. This tall form with diffusely branched panicle, green with no trace of purple tinge, does not appear to have been hitherto recorded for Salop. It grows in the S.W. margin of the pool, in company with *Lastrea spinulosa*, forming large tussocks, and is a striking object there.—J. COSMO MELVILL. *M. cærulea*, Moench, var. *robusta*, Prah. Krit. Fl. Schles.-Holst. II. 257 (1890).—E. HACKEL.

*Poa annua*, L. var. *supina*, Gaud. Rills, Snowdon and Carnedd Dafydd, Carnarvonshire, July 1904. I am not sure whether the variety is rightly given. The form I send is remarkable as growing *in rills* in the higher mountains of Wales. It is abundant in the Snowdon region.—AUGUSTIN LEY. "*P. annua*, var. *supina*, Reichb. Fl. Germ. Exc. 46 (*P. supina*, Schrad). Gaudin named it *P. annua* II. *varia*, not *supina*."—E. HACKEL.

*P. glauca*, Sm. Ystolion duon, Carn., 14 July 1904.—AUGUSTIN LEY. *P. cæsia*, Sm. (1800). *P. glauca*, Sm. (1824), non D.C. (1815), forma *viridula*, *foliis vix glaucescentibus*.—E. HACKEL.

*P. compressa*, L. Port Talbot Docks, Glamorgan, July 1904.—H. J. RIDDELSDELL. "Three specimens, of which two are *P. compressa*, L., one with 10 in. long convoluted leaves, terete culm more than 2 ft. high is *P. pratensis*, L., v. *angustifolia*."—E. HACKEL.

*Glyceria fluitans*, R. Br., var. *triticea*, Fr. River bank, Clova,

Forfar, 6th July 1904.—W. A. SHOOLBRED. See Journ. Bot. 1905, p. 116.—J. G.

*G. festucaiformis*, Heynhold. Sea shore, Marlpit Bay, Strangford Lough, Co. Down, July 1904. See J. of B. 1903, p. 353. The plants sent are not so luxuriant as have been found on other parts of the coast. I found much difficulty in separating small forms from *G. maritima*, in company with which it grows.—C. H. WADDELL. This gathering appeared to be a mixed one, and Prof. Hackel writes of the specimens submitted to him, "*Atropis maritima*, Griseb., a somewhat robust form."—J. G.

*G. Borreri*, Bab., *Panicularia Borreri*. On the mud dredged from the shore at Cardiff Docks, Glamorganshire, growing with *G. distans*, Wahlenb. New to Wales July 1904.—G. CLARIDGE DRUCE. "*Atropis Borreri*, Richt."—E. HACKEL.

*Festuca rubra*, L., sub var. *grandiflora*, Hackel. Ref. No. 2800. Coast, Carnoustie, Forfar, 8th July 1904.—E. S. MARSHALL. Also sent by Mr. W. A. SHOOLBRED. "Correctly named."—E. HACKEL.

*F. pseudo-loliacea*, Hackel. Aberdare, Glamorgan, June 1902. The old records for this plant and its allies are not at all satisfactory. But Prof. Hackel tells me that we have here both *F. pratensis*, Huds., and *F. pseudo-loliacea*, Hackel, and *forma* (of the latter) *superpratensis*, Hack. Mon. Fest. 162. The last-named is simply a form of *F. pseudo-loliacea* with the lower part of the panicle more or less branched. As two stems growing from the same root not seldom show, in the one case 'the type,' in the other 'the form,' it is clearly a point for description rather than for naming.—H. J. RIDDELSDELL.

*Festuca* ? Sandhills on the west coast of Gower, near Llangenydd, vc. 41, Glamorgan, June 1904.—H. J. RIDDELSDELL. '*F. arundinacea*, Schreb.'—E. HACKEL.

*Bromus tectorum*, Linn. Casual on waste ground, Llwydcoed, Aberdare, Glamorgan, June 1902. A new county record.—H. J. RIDDELSDELL.

*B. unioloides*, H. B. and K. Taplow, Bucks, Sept. 1904.—G. CLARIDGE DRUCE. Near Aberdare, Glamorgan, October 1902. A new county record.—H. J. RIDDELSDELL.

*Agropyron littorale*, Reichb. Bank of tidal Avon, below Bristol, 6th Aug. 1904.—J. W. WHITE. "*A. pungens*, R. and S., *aristatum*."—E. HACKEL.

*A. junceum* × *repens*. Port Talbot Docks, Glamorgan., July 1904. I took the plant for this hybrid at first sight, and

Mr. Druce kindly removed any doubts I had. The leaf ribbing is not that of *A. repens*, but intermediate between *A. repens* and *junceum*. The whole of the gathering sent is part of one large circular plant; the procumbent stems ascending slightly at the panicle end are a well marked character. Spikelets 4-5 fld.—H. J. RIDDELSDELL. Coast near Arbroath, Forfar, 10th July 1904.—W. A. SHOOLBRED. Prof. Hackel confirms both of these.—J. G.

*Chara connivens*, Braun. Hickling Broad, E. Norfolk, 5th July 1901.—G. R. BULLOCK-WEBSTER. The club is much indebted for the excellent specimens of this and a number of other Characeæ which Mr. Webster has so kindly contributed.

*C. polyacantha*, Braun. Peat ditch, Walton Moor, North Somerset, 10th Sept. 1904. A new plant for Somerset county. It has only been found in the Walton valley. Mr. Arthur Bennett says the growth is very small compared with that met with in the Broads of Norfolk and Cambs.; but these peat ditches have rarely more than a foot of water, and they are raked out at short intervals. In consequence, this vegetation has little chance of becoming large.—JAS. W. WHITE. "A small state."—H. and J. GROVES.

*C. baltica*, Bruzel. Loch Stennis, Orkney, 6th Sept. 1902.—F. C. CRAWFORD. "A good supply of this interesting form, which is much closer to the typical Scandinavian *baltica* than the Cornish and Guernsey plants."—H. and J. GROVES.

*C. hispida*, L. Peaty ditch, Ken Moor, N. Somerset, 17th Sept. 1904. Rare in the West country.—J. W. WHITE.

*C. canescens*, Loisel. Benacre Broad, E. Suffolk, growing in four feet of water, 6th July, 1898.—G. R. BULLOCK-WEBSTER.

*Lamprothamnus alopecuroides*, Braun. In brackish water, clay-pit, near Hamworthy Junction, Dorset, 10th August 1904.—G. R. BULLOCK-WEBSTER.

*Tolypella*. Canal, Brock, near Garstang, W. Lancashire, July 1904.—ALBERT WILSON. "*T. prolifera*, Leonh."—H. and J. GROVES.

*Nitella mucronata*, Miquel. Lough Monalty, co. Monaghan, in 3 to 4 ft. of water, 14th Aug. 1901.—G. R. BULLOCK-WEBSTER.

*N. opaca*, Ag. Little Sea, Studland, Dorset, 12th August 1903.—G. R. BULLOCK-WEBSTER. "A very distinct-looking form, but apparently not a permanent variety."—H. and J. GROVES.

July, 1905.

JAMES GROVES.

THE  
BOTANICAL EXCHANGE CLUB  
OF THE BRITISH ISLES.

---

REPORT FOR 1905.

---

(ISSUED APRIL 1906.)



The Subscription, 7/6 per annum, and Non-contributing Members' Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE, M.A., F.L.S.,  
YARDLEY LODGE,  
9 CRICK ROAD, OXFORD.

---

PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD.

1906.



# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

## BALANCE SHEET FOR 1904.

	£	s.	d.		£	s.	d.
By Subscriptions received	17	12	6	Expenses of Distribution	1	4	0
				Postages, &c.	1	12	0
				Balance due to Treasurer,			
				1903	1	1	3
				Printing Report	10	13	6
				Balance in hand	3	1	9

Report. The 1901 and 1902 Reports occupied 66 pages. Unfortunately in 1903 the Report was paged from 1 to 34, and that for 1904 1 to 40, as at that time I was unaware Mr. C. Bailey contemplated preparing a separate *Index* for his series. In this Report, therefore, two sets of page numbers are used, the one in brackets running from 1 to 52; the other starting at 141, so that the members can, if they choose, insert the consecutive numbers from the 1902 Report, numbering the first page of the 1903 Report p. 67 and so on, the last page of the 1904 Report being 140. Then the Reports for the years 1901—10 will form the second volume.

Among the chief items of Botanical interest of the year 1904 are the following :—

KOELERIA BRITANNICA. Under this name Dr. Domin has named a rather widely-spread form, which he calls a sub-species of *K. gracilis*, Pers. He diagnoses it as follows :—‘*Pro more laxiuscule caespitosa rhizomatibus saepe prorepentibus vel tenuibus vaginis siccis pallidis longe involucre, culmi humilioribus vel altioribus totis  $\bar{x}$  pubescentibus (mox praecipue sub panicula, manifeste villosulis, mox tantum brevissime tenuiter puberulis), foliis brevioribus vel longioribus semper angustis planis usque setaceo-convolutis  $\bar{x}$  molliter hirsutis nunquam rigidis, vaginis dense molliter pubescentibus culmum laxe ambientibus vel subpatentibus supra pro more minus dense et breviter vestita subinflata, panicula  $\bar{x}$  lobata, spiculis bifloris rarissime trifloris c. 4 mm. longis pubescentibus puberulisve raro fere glabris, glumis saepius acutis (nec acuminatis), glumellis haud raro aristulatis, flosculis e glumellis parum exsedentibus.*’ It ranges from the Orkneys to Kent, and from Cornwall to the Isle of Man.

Among the other *Koelerias* Dr. Domin has also recognised *K. GLAUCA*, DC. as the sub-species *K. ARENARIA*, Dumort., which occurs from East Sutherland to Dorset. Of this a new hybrid, *K. SUPRA-ARENARIA*, Domin, is described. It is the plant which was distributed through the Club by Mr. J. E. Griffith in 1888 under the name *K. cristata*, var. *arenaria*, Lej., from Trefadog, Anglesey, and from the beach near Llanfaglan coast, near Bangor, in 1892, as *K. cristata*, f. *humilis*, as corrected by Prof. Hackel.

*K. ALBESCENS*, DC. This has been gathered by the writer on the Quenvais in Jersey.

In addition to these plants Dr. Domin has named *K. GRACILIS*, Pers., var. *GYPSPACEA*, Domin :—‘*Caespitibus densissimis multiculmibus, culmis gracilibus humilibus pro more, c. 1—2 dm. altis, foliis basilaribus numerosis brevissimis curvatis convolutis rigidiusculisque, foliis culmeis paucis brevissime laminatis (culmis ideo insuper longe nudis), paniculis cylindricis laxioribus interdum depauperatis,*’ previously only recorded from Nordhausen. The writer gathered it on Durdham Down, Gloster W., in 1879.

Var. *LATIFOLIA*, Domin :—‘*Foliis omnino planis latioribus (usque plus 2 mm.) saepe elongatis, caeterum sum diversis K. gracilis formis congrues,*’ which occurs in Hungary and Bohemia, is a hydrophytic form found some years ago by Mr. Geo. Nicholson at Kew.

Our British *Koeleriae* are, therefore :—

*K. VALESIANA*, Asch. and Graeb. = *K. splendens* (Pourr.), Druce = *K. valesiaca*, Gaud. See ‘*Journ. Bot.*’ p. 313, 1905.

*K. GRACILIS*, Pers. (*K. nitida* (Lam. sub. Poa) ).

var. *latifolia*, Domin.

var. *gypsacea*, Domin.

× *supra-arenaria*, Domin. = *K. gracilis* × *arenaria*.

*K. BRITANNICA*, Domin.

*K. ARENARIA*, Dum.

*K. ALBESCENS*, DC.

Among other interesting discoveries of the year may be mentioned :—

*LIPARIS LOESELII*, Rich., found by the Rev. H. J. Riddelsdell in Glamorganshire (‘*Journ. Bot.*’ p. 274), a most interesting extension of its range in Britain. Specimens are now distributed.

*RANUNCULUS REPTANS*, L., and *CALTHA RADICANS*, Forst. Found by the writer near Loch Tummel, M. Perth. See *Ann. Scot. Nat. Hist.* p. 247, 1905. Also from Banff. See ‘*Rep.*’ p. 152.

*MATHIOLA INCANA*, L., Glamorganshire, Rev. H. J. Riddelsdell. Still plentiful near Hastings.

HOLOSTEUM UMBELLATUM, L. ('Journ. Bot.' p. 189 and p. 217). Discovered by Miss Cardew in Surrey, where it occurs in similar situations to the ones it formerly occupied in the eastern counties.

CERASTIUM PUMILUM, Curt., has been found by the Rev. E. S. Marshall in N. Wilts, and by the writer in Oxfordshire, both new records. Specimens from Oxford are now distributed.

CYTISUS SCOPARIUS, var. ANDRAEANUS. A large clump of this popular and curious shrub was found quite wild on Inkpen Common, Berks, by the Rev. H. D. Butler.

SALSOLA KALI, L., var. TENUIFOLIA, Mog. Tand. ('Journ. Bot.' 26, 1904, and Rep. p. 6). Mr. T. H. Hilton has found it in other places near Kingston (not Southwick), Sussex, and considers it to be native.

BETULA INTERMEDIA, Thomas. Near Bachnagairn, Clova, at 1,400 feet ('Journ. Bot.' p. 115). Found by the Rev. E. S. Marshall.

CAREX HIRTA, L., var. SPINOSA, Mort. Sandy coast near Monifeith, Forfar. Rev. E. S. Marshall.

C. GOODENOWII, Gay, var. STENOCARPA, Kük. Found by the writer in Perth, Forfar, Roxburgh.

The following alien plants have also been recorded :—

COTONEASTER MICROPHYLLA, Wallich. Well established in Glamorganshire ('Journ. Bot.' p. 244 and p. 274). It also occurs in North Somerset, and is abundant on one of the islands near Anglesey.

CENOTHERA LAMARKIANA, Ser. Mr. C. Bailey tells me Dr. Focke has identified the coast sand-hill Evening Primrose of Lancashire as the above, which is put under *C. biennis* in *Index Kewensis*.

RUDBECKIA LACINIATA, L. Although mentioned in the Flora of Perth as growing by the Tay banks below Perth, few botanists would realise until they see it the quantity and luxuriance of this

American species on the banks of that tidal river, where it is associated with *Mimulus*, two species of North American Asters, *Astrantia* and *Allium carinatum*.

*HIERACIUM AURICULA*, L. Found in a pasture near Keevil, Wilts, doubtless introduced. Rev. E. S. Marshall ('Journ. Bot.' p. 175).

*ERICA LUSITANICA*, Rudolph. Naturalised at Lytchett Heath, near Poole, Dorset ('Bot. Mag.' t. 8018). Introduced in 1876 by Lord Eustace Cecil; now there are thousands of self-sown bushes.

The Botanical publications of interest to British botanists include that of 'The British Hieracia,' by our member, the Rev. W. R. Linton, M.A., which is indispensable to the student of this highly critical genus. No fewer than 124 species are described, as well as 130 varieties, and a sub-species. The price is 4s.; it is published by West, Newman & Co., 84 Hatton Garden, London.

'The Life and Work of George Don,' by the Secretary, appeared in the 'Notes of the Royal Botanic Gardens, Edinburgh,' No. xii. 1904, which was issued early in 1905. It gives a brief Memoir, an account of Don's discoveries, his *Herbarium Britannicum*, and an identification of the plants in his private herbarium, &c.

Mr. Charles Bailey publishes in the 'Memoirs of the Manchester Literary and Philosophical Society' (vol. xlix. p. 1), an account of the occurrence of *Sisymbrium strictissimum*, L., on the Lancashire side of the Mersey, specimens of which have been distributed through the Club. See Report, 1904, p. 10.

Among other plants recorded during the year are *Polygonum minus*, Huds., var. *albidum*, A. Braun, from St. Neot's meadow, Abingdon, Berks; *Silene Cucubalus*, Wibel, var. *brachiatus* (Jord.), Cumnor, Berks; *Galium palustre*, L., var. *gracile*, Knaf., Godstow, Berks; *Carex acuta*, L., var. *angustifolia*, Kükenthal, Iffley, Berks.

Correction—*Briza maxima*, L. Casual, Iver, Bucks. See

Report, 1903, p. 31. This should be altered to *BROMUS BRIZAEFORMIS*, Fisch. and Mey., an addition to Dunn's 'Alien Flora of Britain.'

Mr. Cedric Bucknall directed my attention to the error.

We have to lament the loss of the veteran botanist, Mr. W. PHILLIPS, F.L.S., who was born at Presteigne, Radnor, on May 4, 1822, and who died at Shrewsbury on Oct. 22, 1905. He was a good fungologist, and published a 'Manual of British Discomycetes' in 1887. He had a considerable knowledge of the British flowering plants. The Secretary once had the benefit of his genial and kindly guidance to Bomere, in an unsuccessful search for *Scheuchzeria*, which had been extirpated by a too greedy collector.

Another loss to Field Botany is that created by the death of the Rev. T. A. PRESTON, F.L.S., who was born at Westminster, Oct. 10, 1838, and died at Thurcaston, Leicestershire, on Feb. 6, 1905. He published a 'Flora of Marlborough' in 1863, and the 'Flowering Plants of Wiltshire' in 1888. After he removed to Leicestershire he did considerable work at the flora of that county. He was a man of whose friendship any one might have felt proud.

FREDERICK TOWNSEND, M.A., F.L.S., of Honington Hall, formerly M.P. for Warwickshire, was born at Rawmarsh, Yorkshire, Dec. 5, 1822, and died Dec. 16, 1905. By his death this Club loses one of its most valued members, and a referee on the critical genus *Euphrasia*, the knowledge of which in Britain may be said to be owing to his zeal, assiduity, and critical observation. He was the author of many important papers in the 'Journal of the Linnean Society,' and in the 'Journal of Botany.' He wrote the 'Flora of Hampshire,' published in 1883, a second edition of which appeared in 1904, and was referred to in the last Report. All these works are of exceptional excellence. He contributed to Seeman's 'Journ. Bot.' 1864, a paper on 'The Flora of the Scilly Isles.' He also wrote the article on Botany for the 'Victoria County History' for Hants. His name is perpetuated in *Spartina Townsendii*, H. & J. Groves, *Trifolium repens*, L., var. *Townsendii*, Bab., the last found by him in the

Scilly Isles. Mr. Townsend's discoveries in Britain included *Erythraea capitata*, Willd., *Euphrasia scotica*, Kern. nov. sp. ('Journ. Bot.' 1891, p. 161), and *Lepidium alatostylum*, Towns.

The Rev. W. R. Linton, Shirley Vicarage, Derby, has kindly undertaken to act as Editor of the Report and Distributor for 1906. All parcels should be sent to him, post paid, before Dec. 31, 1906.

With all best wishes,

I am,

Yours very sincerely,

G. CLARIDGE DRUCE.

---

REPORT OF THE DISTRIBUTOR FOR 1905.

CONTRIBUTIONS almost equal in number to the record total of 1900 have been sent in. The Distributor notes with pleasure that a very large proportion of the specimens are of excellent quality—beautifully dried and carefully packed for transit. Two or three parcels only were found to have suffered damage, from the use of papers smaller than the plants placed upon them. In those cases the protruding portions had of course become a tattered fringe around their containers.

There has been a notable improvement in the number of specimens furnished in a cover. These are now rarely less than ten. Contributors should, however, try to send 15 to 20 examples of a plant, for they will find about 30 names among those who expect to share.

The Club is fortunate in numbering among its later recruits such adepts as Mr. Spencer Bickham and Dr. Vigurs, whose admirable parcels deserve mention. The Rev. Augustin Ley continues to be a mainstay: it is feared that the plants allotted

to him from the gatherings of other members make but an inadequate return for his generous labour.

The task of distribution has been a good deal lightened by the forethought of many who have submitted their doubtful plants to expert criticism beforehand; and the demand now made upon the time of those referees who so kindly give help in this matter is therefore smaller.

Of three hundred and thirty-five covers received, fifty-eight contained *Rubi*, fifty-four *Hieracia*, fourteen *Carices*, and ten *Menthae*. There are but very few *Rosae* and *Euphrasiae*, and hardly any willows or aquatics.

J. WALTER WHITE.

Clifton, Bristol,

22nd January, 1906.

#### LIST OF THE PARCELS RECEIVED

	No. of Specimens.		No. of Specimens.
Bagnall, J. E., <i>A.L.S.</i> ...	64	Painter, Rev. W. H. ...	77
Bailey, Charles, <i>M.Sc., F.L.S.</i> ...	140	Palmer, Miss C. E. ...	30
Bell, W. ...	65	Praeger, R. Lloyd ...	50
Bickham, S. H., <i>F.L.S.</i> ...	301	Riddelsdell, Rev. H. J., <i>M.A.</i> ...	340
Britton, C. E. ...	47	Rogers, Rev. W. Moyle, <i>F.L.S.</i> ...	140
Crawford, F. C. ...	40	Shoobred, W. A., <i>M.R.C.S., F.L.S.</i> ...	235
Druce, G. Claridge, <i>M.A., F.L.S.</i> ...	390	Vigers, C. C., <i>M.D.</i> ...	164
Gregory, Mrs. ...	53	Waddell, Rev. C. H., <i>M.A.</i> ...	41
Groves, James, <i>F.L.S.</i> ...	108	Wheldon, J. A., <i>F.L.S.</i> ...	54
Hilton, T. ...	34	White, J. Walter, <i>F.L.S.</i> ...	386
Horwood, A. R. ...	185	Wilson, Albert, <i>F.L.S., F.R.M.S.</i> ...	22
Jackson, A. B. ...	22	Wolley-Dod, Major A. H., <i>R.A.</i> ...	213
Ley, Rev. A., <i>M.A.</i> ...	969		
Linton, Rev. W. R., <i>M.A.</i> ...	200		
Marshall, Rev. E. S., <i>M.A., F.L.S.</i> ...	82		
Melville, J. Cosmo, <i>M.A., F.L.S.</i> ...	90		
			4542

#### CORRECTION OF 1904 REPORT.

p. 29, l. 9, for 'alternate' read 'attenuate.' (Note from W. R. Linton.)

WITH reference to recent changes in bramble-names, the Rev. W. Moyle Rogers desires members to refer to the paper in 'Journ. of Bot.' 1905, p. 198; and points out that the only changes recommended as apparently necessary are the three following :—

1. *R. argenteus*, Wh. and N., in place of *R. erythrinus*, Genev.
2. *R. Godroni*, Lec. and Lam., instead of *R. argentatus*, P. J. Muell.
3. *R. hypoleucus*, Lef. and Muell, instead of *R. micans*, Gr. and Godr.

To the above it may be well to add the following (see Mr. Rogers' note in 'Journ. of Bot.' 1905, p. 364) :—*R. Newbouldii*, Rogers, instead of *R. Newbouldii*, Bab.

---

N.B.—Some contributions that did not call for critical comment, and were not accompanied by notes from the collector, are not mentioned in this Report.

*Thalictrum dunense*, Dum. Llanmadoc, Glamorgan, v.-c. 41; July 1905. Growing among bracken and other tall herbage in two or three spots. A new record for the county.—H. J. RIDDELS-DELL.

*T. minus*, L., var. = *T. collinum*, Wallr., var. *calcareum*, Jord. Newmarket Heath, Cambridge, Aug. 1905. In the 'Lond. Cat.' this is given as occurring in Ireland only, but the authors of 'Cybele Hibernica' do not venture to separate *calcareum* from *collinum*; while Hind in 'Fl. Suffolk' places the Newmarket plant under *T. minus* as var. *montanum*, Wallr., which he considers as synonymous with *T. flexuosum*, Bernh., a name which precedes that of *collinum* of Wallroth, although there may be a point as to the 'Cat. Hort. Erf.' (1815), where *T. flexuosum* was published by Bernhardt, being a valid publication. In Babington's 'Manual' *T. collinum* is put as a variety of *T. majus*, Sm. The late Herr Freyn was disposed to consider this plant as *T. calcareum*, Jord., but he did not live to see the more complete specimens I sent him. At Newmarket on the chalk this plant is abundant. It varies much in size; in exposed places it is dwarfed to a few inches, while in sheltered and damp spots it reaches a height of two or three feet.—G. CLARIDGE DRUCE. "I have cultivated this plant for some

years. I prepared a series and submitted them to the late Herr Maximowicz, and to Dr. Schumann, but they both hesitated to give a name. I think it is nearest *T. montanum*, Wallr., var.  $\gamma$  *glandulosum*, Wallr., Sch. Crit. 255, 1822."—AR. BENNETT.

*T. Kochii*, Fr. River-side, Langdale, Westmoreland, July 1905. Abundant in Great Langdale, from Dungeon Ghyll to Skelwith Bridge, Westmoreland: occurring also in Lake Lancashire. The characters all point to this being the real plant of Fries; the fruits, although insect-swollen, shew the ovoid outline well.—AUGUSTIN LEY.

*Ranunculus peltatus*, Schr., var. *floribundus*, Bab.? Near Snelston, Derbs., 23rd June 1905.—W. R. LINTON. "A small form of *peltatus*, but not, we think, *R. floribundus*, Bab."—H. and J. GROVES.

*R. Flammula*, L. *forma*. A completely prostrate, but not rooting form. Growing on damp spots at Gerrard's Cross Common, Bucks, July 1905.—G. C. DRUCE. "There is a root on one of the specimens, and the beginning of nodal-rooting is evident on two or three others."—ED. "In all the specimens seen by me the plant tends to be nodal-rooting near the base of the stem. One of the innumerable states of the type, in my opinion."—E. S. MARSHALL.

*R. Ficaria*, L., var. *incumbens*, Schultz. On the margin of damp coppice in Ashton Park, North Somerset, 8th April 1905. This variety is rather rare about Bristol, and seems to be confined to damp, shaded situations, where the plants are luxuriant. The amount of fruit produced by the aggregate varies in different districts. An examination of about 1,000 plants in the vicinity of Bristol shewed that at Westbury-on-Trym only 1 in 400 was fertile: near Long Ashton the proportion was 1 in 150, and about the same at Backwell. I have been told that near Norton Malreward heads of carpels can be found "in every ditch,"—a frequency that might not, however, be greater than that I have last mentioned.—JAS. W. WHITE.

*Caltha radicans*, Forster. At the upper end of Loch Tummel, Mid Perth, July 1905. A new county record. Some of the specimens were the nearest to Forster's plant that I have yet seen, even the radical leaves being nearly triangular in outline. I saw it also near Methuen Bog, in the same vice-co.—G. CLARIDGE DRUCE. Also by the Couglass, near Tomintoul, Banff, vice-co. 94, 15th July 1905.—W. A. SHOOLBRED. "Leaves more like (in the Banff gathering) var. *setlandica*, Beeby, than the original form; but Mr. Beeby would now, I believe, simply call *all* nodal-rooting

plants *C. radicans*, and I agree with him. Even on the same individual there is frequently considerable variation in shape and cutting of the root-leaves."—E. S. MARSHALL.

*Papaver Rhæas*, L., var. *Pryorii*, Druce. Syston, Leics., 6th July 1905.—A. R. HORWOOD. "No doubt the form so named, but the colour in the hairs is not so apparent as in some specimens." H. and J. GROVES. "This is the form which Mr. Druce has so distinguished, though it seems to me to glide insensibly into the form with less densely hispid peduncles, and to have a doubtful claim to varietal rank."—E. F. LINTON. "The variety is based upon the *crimson colour* of the hairs."—G. C. DRUCE.

*Fumaria* — ? Gilly Tresamble, Perran-ar-worthal, West Cornwall, 2nd Oct. 1905. Coll. F. H. Davey; comm. C. C. Vigurs. This is the Fumitory reported by the 'Watson Botanical Exch. Club' in 1904 from F. H. Davey. I believe a description of it will shortly appear in the 'Journ. of Botany.'—C. C. VIGURS.

*F. Boraei*, Jord., var. *serotina*, Clavaud. Ref. No. 2915. Near West Monkton, v.-c. 5, South Somerset, 17th June 1905. The fruits, in a fresh state, were mostly rather pointed. "When plants of this kind, as in your specimens, have small and more or less globular fruits, they require to be carefully compared with *F. muralis (vera)*." H. W. Pugsley *in litt.*—E. S. MARSHALL.

*F. occidentalis*, Pugsley. Newquay, West Cornwall, Apr., June, and Nov. 1905. These specimens are not so good as those sent last year. Summer plants have generally smaller and more cirrhose leaves than autumn plants, and are more difficult to prepare. The autumn plants this year, owing to the early frosts—even at Newquay—were almost a failure.—C. C. VIGURS. All these examples are beautifully prepared.—ED.

*F. densiflora*, DC. Field near Dartford, West Kent, 7th Aug. 1905.—H. and J. GROVES. Some splendid examples of a good plant.—ED.

*F. officinalis*, L. var. An attenuate, glaucous, pale-flowered form, much resembling one of the Capreolate section. I am indebted to Mr. Pugsley for the identification. Very abundant in a shady shrubbery at Meole Brace, Salop, among stones, in June 1905.—J. COSMO MELVILL. "I know this form in our district, and think it deserves a name."—G. C. DRUCE.

*Mathiola incana*, R. Br. Newquay, West Cornwall, 24th April and 8th May 1905. This plant has been well established on the

cliffs around the harbour for about forty years, but not longer. The cliffs are of loose clay-slate, more or less calcareous: aspect N.E.—C. C. VIGURS. And from Nash Point, Glamorgan, v.-c. 41, May 1905. Mostly on quite inaccessible parts of the lias cliffs. I was directed to the spot by the Rev. W. F. Evans of Cowbridge School, who tells me that this is the only place where he knows the plant along this coast. Its *status* must remain doubtful.—H. J. RIDDELSDELL.

*Arabis petraea*, Lam., var. *hispida*, DC. Shingle by the Avon, near Tomintoul, Banff, v.-c. 94, 11th July 1905. In plenty here and for two or three miles below.—W. A. SHOOLBRED.

*Cardamine pratensis*, L., var. *palustris*, Peterm. Gwills, Newlyn East, 17th May 1905; and Rialton, St. Columb Minor, 23rd May 1905; both near Newquay, W. Cornwall. The Gwills plants are all from one large patch; some radical leaves have only three pairs of stalked leaflets while others have more. Mr. Bennett thus named for me a plant from Rialton three years ago, but as it was not returned to me I am unable to compare this gathering.—C. C. VIGURS. "The stalked, somewhat angular, denticulate leaflets seem to me rather to indicate the var. *dentata*, Hayne and Welw."—E. S. MARSHALL. Also a gathering from Yeldersley Lane, near Shirley, Derby, 26th May 1905.—W. R. LINTON. "The Cornish plant is in my opinion the *C. palustris*, Peterm., which is the common British form. For a full account of *C. palustris*, see Report 1893, p. 400."—G. C. DRUCE.

*C. flexuosa*, With., var. *umbrosa*, Gren. et Godr. No. 1354, near Hersham; No. 1355, near Walton Common, Surrey, 7th May 1905. These specimens vary somewhat, but they are all larger and more luxuriant with larger flowers than usual. So far as I know, this variety is only a shade form with leaves more angled than in the type.—A. H. WOLLEY-DOD. "My specimen agrees with the description of var. *umbrosa*, G. et G., which is perhaps our commonest form."—E. F. LINTON. "Good *umbrosa*, which is not our common plant of the Midlandts. Grenier and Godron described it under *C. sylvatica* in 'Flore de France.'"—G. C. DRUCE.

*Bunias orientalis*, L. Origin, roadside in Peterstow parish, Ross, Herefordshire; cult. June and Aug. 1905. — AUGUSTIN LEY.

*Erophila* — ? Barry Island, v.-c. 41, May 1905. In some quantity over a small area of sandy ground. Plants large. Stems more or less ascending, never erect, as a rule arranged regularly

around the root, numerous. Capsules large, not at all inflated, 2—3 times longer than broad, tapering at both ends. Leaves usually partly buried in the sand, the lowest ones with long hafts, at first dull green with purplish tinge, but very soon (long before seeds are shed, sometimes even before capsules are formed) turning dull or bright red; often not forming a flat rosette, but inclined at all angles to the horizon, a habit perhaps due to crowding; blunt, ciliate, but otherwise glabrous.—H. J. RIDDELSDELL. "The pods are somewhat turgid, and I believe it is probably referable to *E. inflata*, Hooker fil.; but I am not certain."—EDW. S. MARSHALL.

*Hesperis matronalis*, L. By the Rea Brook, a tributary of the Severn, Meole Brace, Salop, July 1905. The only previous record for Shropshire is an old one mentioned in Leighton's 'Flora,' p. 314, as occurring near Caermen, Aston, Oswestry. Though doubtless originally introduced, this species occurs in nearly all the English counties.—J. COSMO MELVILL.

*Sisymbrium strictissimum*, Linn. In rough ground surrounding the bleach works of Messrs. Melland and Coward, Limited, on the right bank of the River Mersey, Heaton Mersey. Collected by Mr. Jas. E. McDonald, 26th June 1905. To supplement the supply sent last year.—CHARLES BAILEY.

*Lepidium ruderale*, Linn. Hedgebank on the road from Westham to Polegate, north of Eastbourne, 10th October 1905. Also, in profusion on the sandy ground between the gas-works and Langney Point, near Eastbourne, south-east Sussex, 13th October, 1905. Not recorded in 'Topographical Botany' for vice-county 14.—CHARLES BAILEY.

*L. heterophyllum*, Benth. (*L. Smithii*, Hook). Near Kingsthorpe, Northants, 10th June 1905. This plant appears to be the same as that found by Mr. Druce between Kingsthorpe and Brampton. It differs from typical *Smithii* in its shorter style and yellow anthers, and from *campestre* by its habit. Mr. Druce informs me that the original station has probably been destroyed. In herbarium specimens the pods appear to be much longer than in the living plants, owing, I suppose, to shrinkage in drying.—A. B. JACKSON. "Apart from the colour of the anthers, of which there are none in our specimen, this seems fairly typical. The length of the styles is a variable character."—H. and J. GROVES. "I believe that Mr. F. Townsend considered *L. heterophyllum* to be specifically different from *L. Smithii*, in which case the latter name would stand."—E. S. MARSHALL. "This is the plant, I believe, which I sent to the Bot. Record Club (see 'Report' 1877,

p. 232) as a form of *L. Smithii* with yellow anthers. It was reported on by the Editor as receding towards *campestre* in that and other minor points. Mr. R. A. Pryor thought it was nearer true *L. heterophyllum*. 'The persistence of the form and in another station is interesting. It is the forma *dubia* of my 'Report of the Bot. Exch. Club' 1903, p. 10.'—G. C. DRUCE.

*L. Draba*, Linn. On the remains of an old waste-heap in the sand-hills near the Ormerod Home, St. Anne's-on-the-Sea, West Lancashire, 27th May 1905. Not recorded for vice-county 60 in 'Topographical Botany.'—CHARLES BAILEY.

*Cakile maritima*, Scop., var. *integrifolia*, Koch. Fistrel, Newquay, West Cornwall, 9th and 27th Oct. 1905. These were growing with the type, and with an intermediate form (of which I send a few examples distinguished by the date being affixed to the specimen), having leaves with the central portion only developed, and linear in shape.—C. C. VIGURS. "Seems correct."—AR. BENNETT.

*Viola odorata*, L., var. *floribunda*, Jord. Cobham, Kent, March 1905. Coll. E. W. Hunnybun. Verified by comparison with Jordan's type at the Brit. Museum.—E. S. GREGORY. "A better example of the variety than Jordan's own."—E. G. BAKER.

*V. odorata*, L., var. *sulfurea*, Cariot. The Lodge Wood, Weston-super-Mare, 5th April 1905. Petals yellow in their lower two-thirds, yellowish white above, faintly scented. The two lateral petals are slightly bearded (*sulfurea* should have no beard), spur violet, capsule densely pubescent.—E. S. GREGORY.

*V. hirta*, L., var. *Foudrasi*, Jord. Worle Hill, near Weston-super-Mare, 6th May 1905.—E. S. GREGORY. "This is a dwarf *hirta*, = *forma minor*, analogous to the corresponding forms of *canina* and *Riviniana*, save that in the latter the flowers are larger rather than smaller than in the type. This plant has of course nothing to do with *V. calcarea*, Gregory."—ED.

*V. calcarea*, Greg. Court Hill, Clevedon, N. Somerset, 1st May 1905.—E. S. GREGORY. "Since Mrs. Gregory drew attention to the existence of this plant in N. Somerset it has been met with on many of the limestone hills near Bristol. In individuals older than these examples the development of hard, woody rhizome, far exceeding the remainder of the plant in weight, is very remarkable."—ED.

*V. Riviniana*, Reichb., *forma minor*. Hill-side near Weston-

super-Mare, 17th May 1905. Named by Prof. Murbeck. I have examined the violets at Kew and the Brit. Museum, and find that this plant figures chiefly as *V. flavicornis* Sm. of *canina*. It may be the form *V. flavicornis* Forster of *Riviniana*, but of this I can find no examples in our public herbaria. The following description shews its decided affinity with *V. Riviniana*.—Plant dwarf with rosette of leaves, secondary flowering branch not usually developed; flowers few (often only one to a full-grown plant). Leaves roundish-cordate, very small, shining and dark-hued below. Peduncle long, flowers large—mauve splashed with white—veining and spur of *Riviniana*. The anther-spurs are likewise as in *Riviniana*, and quite unlike those of *canina*.—E. S. GREGORY. “This should certainly equal *V. flavicornis*, Forster, but Mrs. Gregory’s note shows—what I have learnt from her personally—that she does not attach so much importance to characters derived from the flowering and lengthening of primary and lateral stems as did the older botanists.”—ED.

*V. Riviniana*, Reichb. × *silvestris*, Reichb. Wood near Woldingham, Surrey, 24th June 1905. Flowers all sterile.—C. E. BRITTON. “I see no objection to this naming.”—E. F. LINTON. “I should hesitate to say, judging from leaves alone—which is all this specimen satisfactorily shows—that the violet in question is a hybrid.”—D. FRY.

*V. canina*, L. var. Dry river-bed, Clogher, Co. Tyrone, May 1905, coll. Miss Peck. Has the habit of *Riviniana* with a central rosette of leaves. It is, however, more fleshy, and there are suggestions of *canina*, especially as regards the anther-spurs. Prof. Murbeck writes of this plant:—“14th Dec. 1905. *V. canina*, L., forme qui se rapproche un peu de la variété *crassifolia*, Grönvall.”—E. S. GREGORY.

*V. canina* × *stagnina*, Kit. Woodwalton Fen, Huntingdon, 30th May 1905. Fide Prof. Murbeck.—E. S. GREGORY.

*V. nemoralis*, Kutzing, *V. Kutzingiana*, Rouy et Foucaud. Woodwalton Fen, Huntingdon, 30th May 1905. Verified by comparing with Kutzing’s type in Herb. Brit. Museum.—E. S. GREGORY.

*Viola* — ? Wood on the North Downs, west of Wrotham, West Kent, alt. 700 ft., 4th June 1905. This Pansy grew thickly over a small area in a clearing, and presented a magnificent sight. The great bulk of the flowers were purple-violet, with the lateral and lower petals dark blue-purple and the upper petals reddish-purple. There was no cultivated land in the vicinity.—C. E.

BRITTON. "This seems to me identical with Mr. Wheldon's plant from Simmons-Wood, Lancs., which has been named *V. carpatica*, Borb., in a former report (1901)."—E. F. LINTON.

*V. tricolor*, L? Turnip-field on Wraxall Hill, North Somerset, 2nd July 1903. One of those puzzling forms of the *Melanium* section which cannot be correlated with any Continental variety, and for which therefore no distinctive name can be found. The most that can be said is that it belongs rather to *tricolor* than to *arvensis*.—JAS. W. WHITE.

*Silene conica*, L. Minehead Warren, v.-c. 5, S. Somerset, abundant, 15th May 1905. Some members may like to have specimens from the only Somerset station, which is also, I believe, its western limit in England. Certainly native.—E. S. MARSHALL.

*Silene dubia*, Herbich. = *S. transsilvanica*, Schur. On exposed limestone rocks near the entrance to Thirst House Cave, Deep Dale, Buxton, North-west Derbyshire, 13th July 1905. This plant was first noted as British by Mr. C. E. Salmon in the 'Journal of Botany' for April 1905, p. 127. This species and its ally *Silene nutans*, L., are of frequent occurrence in Derbyshire. In my herbarium I have examples of *S. dubia* from the following English localities, viz., Lydd, Kent, v.-c. 15, July 1904 (G. Claridge Druce); Ashwood Dale, Derbyshire, co. 57, 6th July 1867 (Rev. Augustin Ley); Millersdale, Derbyshire, 6th July 1876 (Thomas Whitelegg); near Wormhill, Derbyshire, June and July 1878 (W. West); near Millersdale, Derbyshire, alt. 800 feet, July 1879 (W. West); Millersdale, Derbyshire, 24th June 1882 (Charles Bailey); exposed rocks, near Load Mill, in the neighbourhood of Alstonfield, Derbyshire, 25th July 1884 (Charles Bailey); and in Jersey, from near St. Aubyn's, Vingtaine de Noirmont, 28th July 1871, and St. Brelade's Bay, 29th July 1871 (Charles Bailey). All these examples have been picked out of my set of *Silene nutans*, Linn., by Mr. C. E. Salmon, as being Herbich's species.—CHARLES BAILEY. "It is the *S. nutans*, var. *dubia* (Herb.) Williams, unless it be specifically distinct, which, if judged by the Hieracium or Euphrasia standard, it certainly is. It has occurred as a casual in Berks."—G. C. DRUCE.

*Cerastium pumilum*, Curt. Near Woodstock on limestone, and on calcareous soil near Stonesfield, Oxfordshire, April 1905. An interesting addition to the county flora which I predicted would be found.—G. CLARIDGE DRUCE.

*Hibiscus Trionum*, L. A few examples gathered on cultivated ground, Meole Brace, Shrewsbury, August 1905. The plant is well

figured in *Bot. Mag.* f. 209. Mr. S. T. Dunn mentions its occurrence as an alien in this country, but it has not before been recorded in Salop.—J. C. MELVILL.

*Geranium Robertianum*, L., var. *modestum*, Jord. East Pentire, Newquay, 18th May 1905. In the Report of the Watson Exchange Club for 1904, the Distributor says that specimens sent as this plant from Padstow by F. H. Davey are not *modestum*. I think that must be an error, as Davey knows the plant, and it is distinguished at a glance from the type. Mr. Clement Reid has worked up some of our Newquay plants at the British Museum, so I feel sure that what I now send is the true plant.—C. C. VIGURS. "The named variations of *G. Robertianum* in their extreme forms are doubtless distinct enough to be readily recognized. This plant, however, is an intermediate. It does not agree with the description of Jordan's *modestum* given by Boreau, in that its flowers are too large, and that the lower peduncles exceed the leaves."—ED. "I agree."—C. BUCKNALL. "I am of the same opinion; but I do not know *modestum* well."—EDW. S. MARSHALL.

*Erodium cicutarium*, L'Hérit, var. No. 1351, hort., Walton-on-Thames, 23rd June 1905, from seed of a plant growing by the shore at Shoeburyness, S. Essex. No. 1352, allotments, Walton-on-Thames, 23rd June 1905. The Shoeburyness plant grows with a more normal looking form, but differs from it in having much paler flowers and foliage. The petals looked decidedly shorter than normal, and more regular in length, but when I came to measure them I could not discover any difference. Unfortunately though the seed of the "more normal" plant germinated in my garden, it was weeded up by an officious gardener before it flowered, so I send No. 1352 from the allotments near here for comparison. This has the usual deep reddish petals, which are unspotted, and the foliage is darker green than in No. 1351. The latter plant has a peculiar fascicled habit at the nodes, which appears constant. I cannot make either fit any description I have seen.—A. H. WOLLEY-DOD. "It is not hard to see points of difference between No. 1351 and 1352; but putting out of court the width of the leaflets, which varies according to soil, and the degree of hairiness, which varies according to the exposure, there does not remain much to separate the forms beyond the stipules which are a very conspicuous feature in No. 1351."—E. F. LINTON. "I have never been able to make the forms of *E. cicutarium* fit in well with the descriptions of Babington and Hooker. No. 1351 I should refer to var. *charophyllum*, Cav.; No. 1352 differs much in leaf-cutting, but does not agree well with our commonest form—var. *vulgatum*, Syme."—E. S. MARSHALL.

*Ulex Gallii*, Planch., var. *humilis*, Planch. Gwennap, West Cornwall, v.-c. 1, 2/10/05, coll. F. H. Davey, sent by C. C. Vigurs; and Fraddon Down, St. Enoder, East Cornwall, v.-c. 2, 20/10/05, coll. C. C. Vigurs. This constitutes almost a new British record to Mr. Davey's credit, there being, I understand, only one previous one many years ago; at all events it is a record for v.-c. 1, and mine is one for v.-c. 2. This is probably the plant recorded from the Cornish mainland many times as *U. nanus*, Forster, by Hind, Watson and others—(vide Davey's 'Tentative List of Cornish plants'). It is described by Planchon in "Annales des Sciences Naturelles," April 1849, p. 213, thus:—"var.  $\beta$  *humilis*, depressed, branches humifuse, branchlets and leaves crowded, flowers a little smaller than in the typical race." The plant was named by Mr. A. Bennett for Mr. Davey. It is probably very common in Cornwall on exposed downs. The procumbent branches are best seen the year after a piece of furze has been burnt, all the young shoots being humifuse; the specimens from Fraddon Down are all of this kind. The old bushes have very densely crowded branches. Mr. Davey's beautiful specimens give an excellent idea of the plant.—C. C. VIGURS.

*Trifolium glomeratum*, L. Rocky pastures, native, near West Monkton, v.-c. 5, S. Somerset; in two places, over half a mile apart, 26th June 1905. This is the first *definite* locality for the County.—EDW. S. MARSHALL.

*T. suffocatum*, L. Minehead Warren, v.-c. 5, S. Somerset; plentiful, 18th May 1905. New for the vice-county, and supposed to be extinct in its only other Somerset station.—EDW. S. MARSHALL.

*T. resupinatum*, L. Roadside, Clifton Down, Bristol, July 1904. Many years ago the occurrence of this plant in a field between Bristol and the Severn, whence it speedily disappeared, was noted in several botanical works of the day, and in fact received a great deal more attention than it deserved. For the species is of course alien—an introduction with cereals, seeds or foreign forage. As such, a plant or two from time to time has been noticed about Bristol,—at St. Philip's, Conham and Portishead Dock. But at the above date an unusual quantity appeared upon our Downs. Mr. C. Wall drew my attention to nine or ten patches among the turf along a roadside, and I found another at a considerable distance from any path. This curious invasion was, I suppose, due to the scattering of undigested seeds from horse-droppings. The next summer but a very small quantity was observed, and that quite as likely to be of fresh introduction as to have arisen from plants of the previous year.—JAS. W. WHITE.

*Lotus tenuis*, Kit. Pengam Moors, Cardiff, v.-c. 41, Glamorgan, 29th June 1905. New to the county. Growing on alluvial soil close to the sea.—H. J. RIDDELSDELL. "Yes."—AR. BENNETT.

*Astragalus danicus*, Retz. Near Burford, Oxon, June 1905. I was quite afraid the plant was extinct in Oxfordshire, as Baxter's locality for it had been destroyed, and it was doubtful if the one mentioned by Lightfoot on Burford Downs (which are now enclosed and under tillage) was really in the county. Lady Margaret Watney, while motoring along the road from Burford to Cirencester, saw this plant by the roadside on the Gloucestershire side, and eventually found it within the Oxford boundary, whence these specimens came.—G. CLARIDGE DRUCE.

*Spiraea Ulmaria*, L., var. *denudata*, Boenn. Roadside ditch, Bransford, v.-c. 37, Worcester, 14th July 1905. Although not uncommon in this district it is seldom that one finds a mass of it extending 50 yards as in this instance. The plant is easily distinguishable by its rougher and firmer appearance.—S. H. BICKHAM.

**Rubus.** NOTE.—All the sets contributed by Rev. Augustin Ley have been (unless expressly stated) seen and passed by Rev. W. M. ROGERS.

*Rubus suberectus*, Anders. In damp clay along a track through open woodland in St. Leonard's Forest, W. Sussex, 30th July 1905. I believe this to be the only known locality for the plant in the county.—JAS. W. WHITE.

*R. plicatus*, W. and N., var. *hemistemon*, P. J. Muell. Edge of a bog in Lyonshall Park, Herefordshire, 17th August 1905.—S. H. BICKHAM. "Most characteristic specimens of the *R. hemistemon* of 'Lon. Cat.,' ed. ix. and of my 'Handbook,' as understood by me."—W. MOYLE ROGERS. Rev. Aug. Ley sends also a set of like specimens gathered at the same time and place. He remarks:—"Examples of this plant gathered by me three years ago were passed without hesitation by Mr. Rogers. At a later date, however, his verdict was 'approaching *hemistemon*.' As I am clear that both sets were gathered from the same bush, I suppose the conclusion is that the characters vary somewhat from year to year."—AUG. LEY.

*R. incurvatus*, Bab. Pennsylvania, Cheshire, 12th Aug. 1905. Passed by W. M. R.—A. H. WOLLEY-DOD.

*R. integribasis*, P. J. Muell. Bickerton, Cheshire, 29th July 1905. These specimens are from a different station from those distributed in 1898. They have been passed by Mr. Rogers, and appear to be identical. The bushes are dwarf and prostrate, scarcely a foot high, and densely covered with small panicles almost to the exclusion of good barren shoots. I regret they had advanced so far before I was able to gather them. The petals are small, white, crumpled, and fugitive; styles green, equalling stamens.—A. H. WOLLEY-DOD.

*R. integribasis*, P. J. Muell? Alum Chine, Bournemouth, 1st—7th July 1905. The '?' here is only meant to imply (as in my 'Handbook' and in 'Lon. Cat.,' ed. ix.) that I have not seen continental specimens of Mueller's plant. The sheets now sent all belong to the form (abundant in E. Dorset and S.W. Hants.) referred to by Dr. Focke in 'Journ. Bot.,' 1890, p. 100.—W. MOYLE ROGERS.

*R. opacus*, Focke. Great Langdale, Westmoreland, July 1905. A frequent species along gravelly and boggy hedges where subject to floods, at the head of Great Langdale. Seen also in Little Langdale, both in Westmoreland and Lake Lancashire. I must apologise for the number being wrongly printed on the labels.—AUGUSTIN LEY.

*R. nemoralis*, P. J. M. var. *Silurum*, Ley. Border of Weifa Wood, Aberdare, Glamorgan, August 1905. Frequent, but in no great quantity, about Aberdare. Passed by Mr. Rogers and Mr. Ley.—H. J. RIDDELSDELL. Also from Lyonshall Park, Herefordshire, 17th Aug. 1905.—AUGUSTIN LEY.

*R. mercicus*, Bagnall. Hedge near Water Orton, Warwickshire, July 1905. I have ventured to send some specimens of the type, although not included in the *Desiderata*; and my reason for so doing is that I think this plant must have a wider range than it now appears to have, i.e. a few yards of hedge in a Warwickshire lane. This was formerly confused with *R. ramosus*, Blox., found by Mr. Briggs in Devonshire; and Mr. Bloxam, to whom I sent fresh specimens, confirmed the naming, as did also Mr. Briggs. The Rev. W. M. Rogers, however, discriminated between the two plants.—J. E. BAGNALL.

*R. mercicus*, Bagnall, var. *bracteatus*, Bagnall. Near Ambleside, Westmoreland; also near Coniston, Lake Lancashire, 12th July 1905. One of the most frequent brambles of this neighbourhood, in lane-hedges among the lower hills, in both counties.—AUGUSTIN LEY. "I find this (the Ambleside plant) to be just like some of my own specimens."—J. E. BAGNALL.

*R. leucandrus*, Focke. Coll. H. Fisher, comm. W. M. Rogers, June—Aug. 1905. Two forms (both fairly frequent in East Dorset and S.W. Hants, and both thus named in the living bushes by Dr. Focke) are here represented. 1. The more frequent; with roundish lts. dark green above, diffuse irregular panicle and large flowers, West Cliff, Carbery, and Queen's Park, Bournemouth; Bransgore and Tuckton, S. Hants. 2. With longer, paler oval lts. more pyramidal though still irregular panicle and smaller flrs. (more or less pinkish), Carbery, S. Hants. This form (in lts. and outline of panicle at least) seems the nearer to the ordinary German form, if not identical with it.—W. MOYLE ROGERS.

*R. ramosus*, Briggs. Littleworth Common, Surrey, 30th July 1905. This bramble is plentiful at the south end of Littleworth Common, and is also to be found on several other commons in this neighbourhood. The Rev. W. M. Rogers, who identified the plant in 1903, expressed the opinion that it was "a stout and less straggling form than the Devon type, and going off towards *R. macrostemon*, Focke."—C. E. BRITTON.

*R. Godroni*, var. *robustus*, P. J. Muell. Several bushes about Abernant Park, Aberdare, Aug. 1905. Named by Mr. Rogers. New record for the county of Glamorgan.—H. J. RIDDELSDELL.

*R. lentiginosus*, Lees. Putney Heath, Surrey, 20th July 1905. I understand that Mr. Rogers only provisionally applies the above name to this well-marked form, which also occurs to my knowledge in W. Kent and S. Essex. A minor character of the pl. of these localities is the often extreme foliar development of the sepals.—C. E. BRITTON.

*R. hypoleucus*, Lef. & Muell. (formerly *R. micans*, Gren. & Godr.). From various spots in the county of Glamorgan, 1905. Until now unrecorded for v.-c. 41. Mr. Rogers has seen the gatherings.—H. J. RIDDELSDELL.

*R. leucostachys*, Schleich., forma? (towards *pulcherrimus* and *rhamnifolius*). Iford to Tuckton, Hants S., fl. 3rd July; fr. 9th Aug. 1905; H. Fisher. A strongly marked form with less densely hairy stem, weaker prickles, and larger flowers than are usual in *R. leucostachys*. A similar, if not identical, plant is abundant in Co. Down and E. Armagh, where after some hesitation I placed it under *R. leucostachys* in 1901; but for dried Co. Down specimens of this I hear from the Rev. C. H. Waddell that Dr. Focke has now suggested the (to me unknown) name, *R. andegavensis*.—W. MOYLE ROGERS.

*R. lasiocladus*, Focke, var. *longus*, Rogers and Ley. Pencaeran, Neath, Glamorgan, 3rd Aug. 1905. The description of this new form appears in 'Journ. Bot.' for Feb. 1906.—W. MOYLE ROGERS.

*R. Leyanus*, Rogers. Rotherwas Park, Herefordshire, 3rd Sept. 1905. These specimens were not seen by Mr. Rogers. I must apologise for the fact that they were gathered too late in the season to form good examples.—AUG. LEY.

*R. oigocladus*, M. and L. Cox Wood, Coalbrookdale, Salop, v.-c. 40, 7th Aug. 1905. Mr. Rogers writes respecting this plant:—"I have failed in all my attempts to match this exactly, but I suppose there is no real objection to placing it under the aggregate *oigocladus*. The long-pointed leaves and patent-erect panicle branches are, however, off type."—W. HUNT PAINTER.

*R. oigocladus*, M. and L., var. *Newbouldii*, Bab. In two spots on the Wrekin, Salop, July 1900 and July 1905.—W. H. PAINTER. "I certainly cannot agree to this name; the specimen sent me is not at all like any other I have seen."—J. E. BAGNALL.

*R. Griffithianus*, Rogers. Bwlch Gwyn, Denbighshire, 28th July 1905. Mr. Moyle Rogers writes:—"An interesting plant clearly intermediate I think between my *Griffithianus* and the Dorset plant (Wareham and Bere Road, &c., in great quantity), which was named *R. præruptorum*, Boulay, for me (without qualification) by Prof. Babington in 1888. This latter name, however, still wants confirmation (*vide* 'Journ. Bot.', 1892, p. 301, and my note in 'Handbook of Brit. Rubi,' p. 69), and these 1905 specimens of your plant seem certainly not specifically distinct from *R. Griffithianus*, under which I now prefer placing it." I only know of one clump of three or four bushes within a very short distance of the Flintshire (Maelor Hundred) boundary.—A. H. WOLLEY-DOD.

*R. ericetorum*, Lefv., var. *cuneatus*, Rogers and Ley. Aberdare, 2nd Sept. 1904. Distributed last year from Aberdare as *R. Lejeunei*, W. and N., var. *ericetorum*, Lefv., *forma umbrosa* or *sub-umbrosa*, and since separated and described by Messrs. Rogers and Ley in 'Journ. Bot.', 1906, p. 59, under the above nomenclature. It is the most frequent bramble of the Aberdare Valley, and occurs elsewhere in the county of Glamorgan in some quantity. I hope to distribute more next year. Type *ericetorum* occurs at Neath. The specimens have, I believe, been all seen by Mr. Rogers.—H. J. RIDDELSDELL.

*R. castrensis*, W.-Dod. Near Harthill, Cheshire, 1st Aug.

1903, 5th Aug. 1904, and 4 Aug. 1905. See 'Journ. Bot.,' 1906, p. 63. Of the three gatherings sent No. 1300 is the most characteristic. No. 1086 is rather weak in panicle; and No. 1101 has an excess of trifoliolate leaves, which I think is abnormal, though otherwise those under this number are characteristic enough.—A. H. WOLLEY-DOD.

*R. infecundus*, Rogers. Ebnal, Cheshire, August 1905. Mr. Moyle Rogers wrote: "Certainly my *infecundus*, in spite of pale petals;" but Mr. Ley, who also saw specimens, thought it hardly this sub-species, and suggested it would be better placed under type. The plants were small and prostrate, petals greenish or yellowish-white, and sepals spreading and conspicuous after fall of petals.—A. H. WOLLEY-DOD. "Although certainly not characteristic, and of less robust habit than is usual with us, I think it nearer *infecundus* than to the type."—D. FRY. The advisability of sending such doubtful gatherings to the Club is open to question, and Major Wolley-Dod was quite willing that this packet should be rejected; but I think a useful hint is sometimes got from examination and discussion of a plant like the present.—ED.

*R. divexiramus*, P. J. Muell, Shady wood, Symond's Yat, West Glouc., 27th July 1905.—S. H. BICKHAM and A. LEY. "No doubt a woodland form of this species, which Mr. Ley knows far better than I do."—W. MOYLE ROGERS.

*R. acutifrons*, Ley, var. *amplifrons*, Ley. Big Wood near Wormbridge, Herefordshire, 4th Aug. 1905.—S. H. BICKHAM. "Beautiful specimens of Mr. Ley's variety."—W. M. R. And a set of the same from Mr. Ley, who says the locality given is still the only one known. His specimens have not been shewn to Mr. Rogers.

*R. Bellardi*, W. and N. Cowleigh Park, Herefordshire, July 31st 1905. This is a fresh station; but the district remains the only one in Herefordshire in which the plant is known. With the *R. Bellardi*, W. and N., grew in abundance a remarkable hybrid, *R. fuscus* × *Bellardi*.—AUGUSTIN LEY.

*R. horridicaulis*, P. J. Muell. Woods and hedges, Aberdare, Glamorgan, Aug. 1905. For the description by Messrs. Rogers and Ley see 'Journ. Bot.,' 1906, p. 60. I must apologise for a rather inadequate supply of stem leaves: the shortage was discovered when too late to remedy it. This I hope to make good next year, as Members may be glad to have two sheets of this strikingly distinct and beautiful form. It is very abundant in the Aberdare district, and occurs, less frequently, elsewhere in Glamor-

ganshire. The effect of colouring, in a large mass of this plant, with its white flowers, clasping sepals, and purplish or purple stem, rachis and petioles, with full dark green leaves, is one of the most distinctive *primâ facie* points about it. Small forms of it, such as grow on stony ground, simulate *leucostachys* in habit, and in colour and shape of leaflet; though, of course, very distinct in armature, &c. Very large panicles are not unusual. Mr. Rogers has seen part of each separate gathering sent.—H. J. RIDDELSDELL. This appears to be essentially, although not absolutely, the same as a plant known to me in West Sussex for very many years; and for which I have repeatedly but unsuccessfully endeavoured to obtain recognition as a species new to Britain. I am glad to find that through Mr. Riddelsdell's gatherings this contention has at length been admitted. The paper published by Messrs. Rogers and Ley ('Journ. Bot.,' 1906, p. 60) states that this bramble was first found and named by Dr. Focke in 1897. But, as is noted by Mr. Rogers in the B.E.C. Report for 1892, I had in 1891 forwarded examples to Dr. Focke, and had received from him the opinion, "a small form of *R. saxicolus*." Under that name I confess to having distributed a large number of specimens, both at home and abroad, without I fear ever holding faith in the determination. I trust that so handsome and distinct-looking a plant may now have been permanently fitted to even this ugly name, but from late experience one judges that for mutability bramble-nomenclature must be hard to beat.—JAS. W. WHITE.

*R. Kaltenbachii*, Metsch. Buddon Wood, Leics., July 1905. From a bush pointed out by Rev. W. M. Rogers.—W. BELL. The specimens show a rampant form of this bramble.—ED.

*R. tereticaulis*, P. J. Muell. Big Wood, Wormbridge, Herefordshire, 4th August 1905.—S. H. BICKHAM. "The panicle here is less compound and much closer above than in the Norfolk plant which was thus named by Dr. Focke in 1887—Prof. Babington afterwards assenting; but, after a careful examination of a good series of specimens, Mr. Ley and I could see no sufficient grounds for keeping the two apart. At the same time it must of course be borne in mind that we are not really in a position to claim any strictly critical knowledge of Mueller's species."—W. MOYLE ROGERS.

*R. velatus*, Lefv. Shady bank in Cowleigh Park, Herefordshire, 31st July, 1905.—S. H. BICKHAM and A. LEY. "I agree. Very strong."—W. M. ROGERS. "From the original station whence this plant was named as British by Prof. Babington. I ought, perhaps, to say that Cowleigh Park, including the stations both of this and *R. Bellardi*, has recently been transferred to the county of Worcester."—A. LEY.

*R. pilosus*, W. and N. Stream-bank, Lyonshall Park, Herefordshire, 17th August 1905.—S. H. BICKHAM and A. LEY. "I suppose rightly named, but if so it seems to come (with the stems so nearly bald as here) too near to var. *diversifolius* to be a very satisfactory variety. I have more characteristic specimens collected under Mr. Ley's guidance in the same locality."—W. M. R. "I have hesitated to identify this with the plant described as *R. pilosus*, W. and N., by Mr. Warren in 'Journ Bot.' 1870, p. 172, on account of its armature, which can hardly be said to resemble that of *R. diversifolius*. The stem of the present plant is more hairy than any British examples of *R. dumetorum*, W. and N., which I have seen, but the amount of hair differs much on the same stem."—AUGUSTIN LEY.

*R. dumetorum*, W. and N., var. *raduliformis*, A. Ley. Woods near Rudry and Lisvane, Glamorgan, June 1905. Open lane side near Rhosgoch Org, Radnor, 29th August 1905. This variety is proving well marked and widely spread. Besides the above localities, both giving fresh county records for the plant, I have picked it this year also in Herefordshire, at several stations, and at Cheddar, Somerset.—AUGUSTIN LEY.

*R. Bucknalli*, J. W. White ('Journ. Bot.' 1899, p. 389). Hedges, open woodland, &c., at an elevation of over 600 ft. on oolitic hills to the North of Wotton-under-Edge, West Gloucestershire, July 1905. The range of this bramble is more extensive than I thought. This summer I found an abundance of strong plants along the grassy road-side waste towards Nailsworth.—J. W. WHITE.

*Potentilla silvestris*, Neck. (*P. Tormentilla*, Sibth.) var. *sciaphila*, Zim. Wheal Cifford Down, Gwennap, West Cornwall, 14th Oct. 1905, F. H. Davey and C. C. Vigurs, and Fraddon Down, St. Enoder, East Cornwall, 20th Oct. 1905. An interesting plant, named by Mr. Ar. Bennett. It appears to have been only previously found on "some heathy hills of the rolled pebbles of the Thanet sands." The radical leaves are small, nearly orbicular, of three or four broadly wedge-shaped leaflets, and the whole plant is more compact than the type.—C. C. VIGURS.

*Alchemilla vulgaris*, L., var. *flicaulis*, Buser. Meadow, Scrap-toft, Leics., 11th June 1905.—A. R. HORWOOD. "Rightly named."—E. F. LINTON. "Correct. Though it is usually a small plant, I have seen *flicaulis* still more robust than this."—EDW. S. MARSHALL. "Buser described it as a species."—G. C. DRUCE.

*Rosa tomentosa*, Sm. var. Ham Common, Surrey, 8th July 1905. This seems to me to be unusually silky-pubescent, and

unusually glandular, though less so than when I first gathered it some years ago, when it was so glandular as to have a strong sweet-briar odour, and adhered to the paper when dried. I cannot get a varietal name to fit it.—A. H. WOLLEY-DOD. "The plant which we collected in the same locality in 1878, and of which Prof. Crépin wrote, 'Variété du *R. tomentosa*, voisin au *R. cuspidatoides*, Crép.'"—H. and J. GROVES. "Var. *subglobosa*, Sm."—E. F. LINTON.

*R. verticillacantha*, Mérat. Bradley Valley, Cheshire, 22nd July 1905. The glandular setæ appear only on some of the peduncles, but are fairly plentiful on those on which they do occur. Perhaps the name should be *R. Blondeana*, Rip., as glands are fairly plentiful on the midrib beneath, but I have not learnt to recognize that species.—A. H. WOLLEY-DOD. "A very puzzling rose, agreeing with our *verticillacantha* in most respects, but with the long peduncle and columnar style of the *R. stylosa* group. These two characters seem to me to remove it from *R. canina*, and yet it agrees with no *R. stylosa* var. known to me. Can it be a hybrid between *R. dumalis*, for instance, and *R. systyla*—an origin which has been suggested for a Dorset rose found by the Rev. R. P. Murray, and to which M. Crépin gave a qualified assent? The two plants are much alike though not identical. Major Dod's Rose is worth further study, e.g. as to whether it matures perfect fruit."—E. F. LINTON. "My specimen has quite glabrous (not glandular-bristly) peduncles, and I should have thought it good *dumalis*."—EDW. S. MARSHALL.

*Rosa andegavensis*, Bast. Lane near Edge Green, Cheshire, 15th July 1905. A glaucous plant, recalling, when growing, *R. arvensis*, but it has nothing really in common with that species. Flowers almost white, fruit urceolate-globose. I give the group-name which M. Crépin gave to it for me three or four years ago, though it is not like other plants I have similarly named, but Crépin has so labelled others with leaves quite as hairy beneath. It seems to me to have affinities with *R. obtusifolia*, Desv.—A. H. WOLLEY-DOD. "An untypical rose, hardly *andegavensis* because of the hairy leaf-nerves, and there are but few glands on the peduncle: perhaps a variation of the group *R. Deseglisei*, Bor."—G. C. DRUCE.

*R. andegavensis*, Bast. Lane near Edge Green, Cheshire, 25th July 1905.—A. H. WOLLEY-DOD. "I do not think it sufficiently glandular for that species. There are merely a few glands on some of the peduncles, whereas the plant, as I have it from Mr. J. G. Baker, has truly aciculate peduncles. I should have called this a form of *R. lutetiana*."—J. E. BAGNALL.

*R. Melvini*. Origin, Madresfield, Worcestershire, cult. September 1905. Sent to show the autumnal state of this rose, with its green unripe fruits at a season when *R. arvensis* has its fruit ripe or ripening. Only a portion of these fruits seems to persist on the bush until the next flowering season.—AUGUSTIN LEY. "So far as I remember, Prof. Crépin strongly insisted that this was one of the forms of *R. sempervirens*."—EDW. S. MARSHALL. "This rose was distributed through the Club in 1886, see 'Report,' p. 152-3. Mr. Towndrow pointed out that it differs from *sempervirens* in appearance, and in not having hairy styles. Mr. J. G. Baker said he was very doubtful about it, but was inclined to regard it as a *stylosa* form. In the 'Journ. Bot.,' 1896, p. 179, M. Crépin, while questioning the nativity of *R. sempervirens* in England, says of Mr. Towndrow's specimen, 'C'est bien une variété du *R. sempervirens* qui, par sa colonne styloïde parfaitement glabre, doit venir se ranger dans le voisinage du *R. prostrata*, DC.' In Herb. Babington Baker named it *R. stylosa*, var. *microcarpa*, but there can be no doubt as to its alliance with *R. sempervirens*."—G. C. DRUCE.

*R. virginiana*, Miller = *R. lucida*, Ehrh. A relic of cultivation, now naturalized and spreading, near the Kirktown of Clova, Forfar, July 1905.—G. CLARIDGE DRUCE.

*Pyrus Aria*, Ehrh., var. *rupicola*, Syme. Limestone cliffs near Inch Rory, Banff. New County record, 17th July 1905. The Rev. E. S. Marshall and I found one old small tree of this growing at the top of a very steep bank at the foot of some limestone cliffs about 2,000 feet above sea-level. There can be no possible doubt about the plant being indigenous in this locality.—W. A. SHOOLBRED. "Excellent examples of foliage."—ED.

*P. Aria*, Ehrh. *forma*. Cheddar Gorge, Somerset, 20th June 1905. Sent as a leaf variety of this species.—AUGUSTIN LEY. "Decidedly tending towards var. *rupicola*, Syme, I think, though not good *rupicola*."—EDW. S. MARSHALL.

*P. intermedia*, Ehrh. Cheddar Gorge, Somerset, 20th June 1905. I believe correctly placed under this name, but shewing looser and less white felt than is usual, and having the leaves narrowed at the base, as in *P. rupicola*. The young fruits also shew a tendency to become soon glabrous. In this latter character, and in the loose felt of the leaves, these specimens approach *P. scandica*, Asch.—AUGUSTIN LEY.

*Cratægus Oxyacantha*, L., var. *splendens*. Near Akeley, Bucks, Sept. 1904 and May 1905. Distinguished from *C. oxyacantha* by

the much larger fruit, and by the more wedge-shaped leaves, which are of a pale yellowish green. It is a one-styled plant, showing no evidence of the presence of *C. oxyacanthoides*, and therefore cannot be referred to *C. oxyacanthoides*, var. *macrocarpa*, Heg. Unfortunately the late frosts this year nipped the young foliage and flowers so that the May specimens are not good or characteristic. Description:—Leaves glabrous, yellowish green, rather large, often with subentire sides, and cut at the top into three or more shallowish-lobed segments. In the younger and upper leaves the serratures are more numerous and approximate more closely to the type. The veins of the leaves are not conspicuously recurved, and in some of the older and lower leaves, which are more entire, they may be even slightly incurved. The leaves of the young shoots have distinctly recurved venation. The calyx is hairy in the flowering stage, but becomes nearly glabrous in the fruiting condition. The flowers are not conspicuously larger than the type. They are one-styled, and the style is erect, or nearly so. The fruit is twice the size of that of the normal Hawthorn, and the enlargement takes place after the fruit has begun to change colour; they are one-stoned. The variety grows as a small tree about 15 feet high, and is less thorny than usual. The conspicuous fruit induced the hedger to allow it to grow, while the rest of the hedge has been layered.”—G. CLARIDGE DRUCE. “I do not know this. Mr. Druce does not say ‘mihi,’ but I presume so.”—AR. BENNETT.

*C. Oxyacantha*, L., var. *cinerascens*. This monogynous plant with large leaves of a greyish green colour, having the veins definitely recurved and small one-styled fruit, grew on the borders of Bucks, near Woodperry, Oxon, Aug. 1905.—G. CLARIDGE DRUCE. “I do not know this. I suppose ‘mihi’ also as with the last, but if so it should have been expressed.”—AR. BENNETT. “I can see no reason for calling this a *variety*—hardly even a *form*. No flower or fruit present on the specimen seen by me.”—EDW. S. MARSHALL. “Fruits were sent with each leaf example, but the railway officials damaged the parcel, and I am afraid gave the distributor a great deal of trouble. There is no doubt of the difference between this and other forms of *Crataegus* with which it grew.”—G. C. DRUCE.

*Callitriche truncata*, Gussone. Stream near Sundridge, W. Kent, 27th Sept. 1905. We could not find this in the higher part of the stream where it was formerly abundant, but traced it as far down as Riverhead. We saw no flower or fruit.—H. and J. GROVES. “A series of beautiful specimens in Messrs. Groves’ own perfect style.”—ED.

*Epilobium hirsutum* × *montanum*, L. Roston, S. Derbs., 22nd August 1905.—W. R. LINTON. "Clearly right."—E. S. MARSHALL.

*E. adnatum* × *parviflorum*. Open wood, Symond's Yat, West Glouc., 27th July. 1905.—S. H. BICKHAM. "Yes."—E. S. M.

*E. roseum* × *obscurum*. Timber Yard, Malvern Link, Worcestershire, 31st July 1905.—S. H. BICKHAM. "The four specimens seen by me are correct, although one is much nearer to *obscurum*. But Mr. Bickham gave me a sheet from the same gathering, both specimens of which are clearly *E. parvifl.* × *roseum*. So there may be a mixture somewhere in the Club packet."—EDW. S. MARSHALL.

*E. alsinefolium* × *obscurum*. Reference No. 2901. Shingly banks of the Couglass Water, at 1,000—1,100 ft., near Tomintoul, v.c. 94; Banff, 25th July 1905. Growing with the parents; a good intermediate. I have only once before seen this hybrid from Britain.—EDW. S. MARSHALL. A set also gathered at the same time and place by—W. A. SHOOLBRED.

*Oenothera Lamarkiana*, Ser. DC. (= *Æ. grandiflora*, Lam., non Ait.). On the sand-hills in Messrs. Porritt's timber-yard, St. Anne's-on-the-Sea, South-west Lancashire, vice-co. 60, flowers and fruit, 22nd July 1905, and root-leaves, 30th Sept. 1905. Doubts having been expressed as to whether the large-flowered *Oenothera* so plentiful on the Lancashire coasts (vice-co. 60 and 69) is the *biennis* of Linn., I sent examples of the St. Anne's plants, with their root-leaves, to Dr. W. O. Focke, of Bremen, under the name of *Æ. suaveolens*, Desf. (= *Æ. grandiflora*, Soland.), and he thinks they "will prove to be a form of the famous variable *Æ. Lamarkiana*, studied by De Vries."—CHARLES BAILEY. "The description of *Æ. Lamarkiana* in the 'Prodromus' is 'Caule ramoso, foliis integerrimis ovato-lanceolatis, petalis integris magnis, capsulis glabris cylindrico-tetragonis brevibus. fl. flavi.'"—G. C. DRUCE.

*Erigeron acre*, L., ? var. or subsp. New County record. In small quantity on limestone cliffs near Inch Rory, Banff, 17th July 1905. The plants were very luxuriant, apparently perennial, and somewhat different in habit in other ways from the south-country form of the type.—W. A. SHOOLBRED. This certainly appears to be more than biennial; but on careful comparison with descriptions in the new edition of 'Koch,' I can only make it the typical plant with a somewhat simple inflorescence.—ED.

*Anacyclus* ——. Found as a casual at Cardiff Docks, v.c. 41, Glamorgan, Sept. 1903. Professor P. Ascherson of Berlin remarks:

“It belongs to *Anacyclus*, different from *Anthemis* by its largely winged achœnia (at least the outer ones) and in the section *Diorthodon* also by the unequally 5 cleft disk florets with 2 (sometimes but 1) longer, upright lacinia. I think it is the widely distributed Mediterranean species *A. clavatus*, though I knew this species only with purely white ray-florets. I cannot identify it with the yellow-rayed *A. radiatus*, because the involucre bracts have no ‘diaphanous dilatation above’ referred to by Babington, ‘Manual,’ Ed. 8, p. 195. At all events I think it improbable that the Welsh plant with yellow rays represents a hybrid between *A. clavatus* and *A. radiatus*, rather than a ray-colour variation of the former. I think it is not quite sure that the two species are really different . . . . . As to the brown-margined involucre bracts your plant belongs to the variety *marginatus* (*Anac. margin.* Guss.), cf. Willkomm and Lange ‘Prodr. Fl. Hisp.’ II., p. 84.” The plants all grew in one circumscribed area, and unfortunately do not appear to have survived the winter. I could find no trace of them in July 1904, and have not been able to make extended observations. The specimens, however, though gathered late, afford accurate detail. A careful examination of them in the light of Professor Ascherson’s remarks has convinced me that they are separable into two distinct forms, corresponding (apparently) to *A. clavatus*, var. *marginatus*, and *A. radiatus*. I have accordingly divided them into two bundles, in one of which the labels are marked A, in the other B. *A.* Specimens in A are light-rayed, white with a tinge of yellow, or pure white: the involucre bracts usually narrow to the top and have sometimes a narrow scarious margin,—very rarely a broad one. *B.* Here the rays are coloured, of a lemon to golden yellow (does this variation depend on the age of the antherode?), and are accompanied by a broader-topped bract which expands into a ‘diaphanous dilatation above.’ This broad scarious margin becomes opaque and brown with age, and is quite common; indeed its absence in B seems as rare as its presence in A. Its breadth often exceeds that of the bract itself. I put A accordingly to *A. clavatus*, var. *marginatus*, and B to *A. radiatus*. But the differences, if they stand alone, are so slight as to justify Prof. Ascherson’s hesitation in keeping the forms apart. The two forms grew side by side and to some extent intermingled. A very few doubtful plants, intermediate at least in colour, I have not distributed, as they were too few: but they suggest a possible hybridisation, or in any case a completer series of forms than I am able to send now.—H. J. RIDDELSDELL.

*Senecio vulgaris*, L., var? Waste ground, Aylestone, Leics., 16th June 1905.—A. R. HORWOOD. Suggested to be a variety with leaves much more amplexicaul and with larger auricles than

usual; the plant also more branched and smoother than in type. But this species varies normally in the clothing of the stem, which is sometimes cottony and at others smooth. The leaves are always more or less auricled.—ED. "A large lax state induced by having less competition than usual, or rich ground."—AR. BENNETT. "The variation in the leaves—broad, fleshy and more amplexicaul, or narrow, of thinner texture, and simply sessile, depends on the richer or poorer soil of the habitat. This is only a *state*, not a variety."—E. F. LINTON. "I have seen similar plants on rich waste ground about Oxford, but they are not permanent."—G. C. DRUCE.

*Carduus nutans* × *crispus*. Lowesby, Leics., at 700 feet elevation, July 1905. One of the highest pieces of ground in E. Leics., where the Middle Lias Marlstone forms a somewhat bold escarpment, and where a number of interesting plants appear that are unknown in the valleys below. The only other thistles growing on this hill are *crispus* and *arvensis*. The hybrid shews most generally a nearer approach to *C. nutans*, but a few are more nearly *C. crispus*. The seeds do not appear to be well developed.—A. R. HORWOOD. "There is no trace in my specimen of *C. crispus*, which moderates the size and multiplies the number of the heads of *C. nutans*, besides refining the armature of the upper part of the stem, in the hybrid. This is an extra-prickly specimen of type *C. nutans*, with abundance of fertile seeds which are indistinguishable from seeds of *C. nutans*. Greater care should be taken in the preparation of supposed hybrid thistles, which are not easy to determine from any but the best material."—E. F. LINTON. "Correct, I believe. Certainly much nearer to *C. nutans* in the inflorescence, but the foliage shews strong influence of *C. crispus*."—E. S. MARSHALL. "I think the foliage undoubtedly shows the influence of *C. crispus*."—G. C. DRUCE.

*Saussurea alpina*, DC. Rocks on sea-shore at Thurso, Caithness, 12th August 1905. Growing so near the sea that the plants must often have been splashed with salt water, which seems extraordinary for an alpine species. But Druce mentions it from the same station in the 'Scottish Annals.'—F. C. CRAWFORD.

*Centaurea nigra*, L., *forma*. Wilbury, Beds., August 1905. The phyllaries are somewhat untypical, and at first suggested a cross with *C. Scabiosa*, but subsequent examination in the dried state did not confirm this idea.—G. C. DRUCE. "A hybrid with *C. Scabiosa* would produce large heads; these are unusually small. I can see nothing to take it off our ordinary *C. nigra*, in which the cutting of the phyllaries varies a good deal."—E. S. MARSHALL.

**Hieracium.** Nomenclature is that of the Rev. W. R. Linton in 'British Hieracia, 1905.'

*Hieracium Peleterianum*, Merat. Origin, Dovedale, Derbs.; cult. 5th June 1905. This plant retains its features unaltered after many years of cultivation, and even exaggerates them so as to become hardly distinguishable from the Channel Islands form.—AUGUSTIN LEY.

*H. Pilosella*, L., var. *nigrescens*, Fr. (1.) Hort. Hanbury, no doubt from Glen Dole, Forfar; cult. Sellack, 5th June 1905. (2.) Origin, Great Doward, Herefordshire; cult. June 1905. (3.) Origin, Selside, West Yorks; cult. 5th June 1905. Except in the larger size and general development of Mr. Hanbury's Highland plant, all these seem to me to represent a single variety of *H. Pilosella*.—AUGUSTIN LEY. "The Selside plant is not this variety, in my opinion. The long hairs of the flower-buds are whitish, instead of being black, as they should be in var. *nigrescens*; the involucre black glands are also far too few."—EDW. S. MARSHALL. "I have long since given up growing *Hieracia* in the garden, but have little doubt that the *Hieracium Pilosella* var. *nigrescens* (1) was from a portion of a plant that the Rev. E. S. Marshall brought from Canlochen Glen, Forfar, in 1892. He got it at an elevation of 2,900 feet. As he issued specimens grown in his garden, it is almost certain that my plant would have been a portion of his, as I do not seem to have any wild specimens of my own collecting."—FRED. J. HANBURY.

*H. anglicum*, Fr., var. *jaculifolium*, F. J. H. Dollywaggon, Westmoreland, July 1905. This appears to be the most common and widely spread form of *H. anglicum* in the English Lakes. I met with it at Skelwith Force, Lake Lancashire, and at other places in that county. The type grew along with the variety at Dollywaggon Pike.—AUGUSTIN LEY.

*H. Schmidtii*, Tausch. Glen Avon, Banff, N.B., 26th July 1905.—W. A. SHOOLBRED.

*H. Schmidtii*, Tausch, var. *eustomon*, Linton. Pwll-du head, Glamorgan, 2nd June 1903. This point is several miles east of Pennard Castle, and of the cliffs near the Castle from whence this hawkweed was sent to the Club by the Rev. H. J. Riddelsdell last year. Fine and plentiful at Pwll-du.—AUGUSTIN LEY.

*H. rubicundum*, F. J. H. Origin, Hatterel Hills, Hereford. Cult. 9th June 1905. Self-sown seedlings in the garden at Sellack.—AUGUSTIN LEY.

*H. pseudonosmoides*, Dahlst. In great abundance for some yards by the river Avon, below Tomintoul, Banff, v.-c. 94, 18th July 1905. New county record. We also found it growing, but in less quantity, on the East Inverness bank of the Avon, below Bridge of Avon.—W. A. SHOOLBRED.

*H. stenolepis*, Lindeb. *forma*. Near Peak Forest, Derbs., 22nd June 1904. Heads somewhat larger; leaves commonly blotched, more oval in shape, and more symmetric at base; petioles shorter, as compared with 'Lindeberg, *H. Sc. Exs.*' 129.—W. R. LINTON.

*H. Cyathis*, Ley. Cheddar Gorge, Somerset, 20th June 1905. This and *H. Lima* are decidedly the most abundant hawkweeds of Cheddar; *H. stenolepis* and *H. Schmidtii* being less common.—AUGUSTIN LEY.

*H. hypochæroides*, Gibson, var. *lanCIFOLIUM*, W. R. Linton. Limestone scaurs of the Ingleborough range, West Yorks, July 1903. Widely spread in this part of the Craven district, and shewing no approach to the type, which is still more abundant in that locality. I could wish that the specimens were better.—AUGUSTIN LEY.

*H. sagittatum*, Lindeb., var. *maculigerum*, W. R. L. Near Arncliffe, W. Yorks, 29th June 1904. I think it desirable to mention that the cultivated plant sent out as *H. rubiginosum* from the Settle district is really *maculigerum*; it is this plant (*maculigerum*) which Am. Dahlstedt pronounced on as very near his *H. crebridens*. *H. rubiginosum*, which is almost equally prevalent and over the same area as *maculigerum*, is very different.—W. R. LINTON. A set of this var. also from Arncliffe, Kettlewell, and other parts of Upper Wharfedale, W. Yorks, June and July 1904.—AUGUSTIN LEY. On another set of the same from Fanfechan Cliff, Carmarthenshire, 4th July 1905, Mr. Ley writes:—"I think that I may have been mistaken in identifying this plant with the variety named by Mr. Linton, but it clearly belongs to the aggregate *H. sagittatum*, Lindeb." The Rev. W. R. Linton, however, passes it.—ED.

*H. ciliatum*, Almq., var. *repandum*, Ley. Craig Rhiwarth, West Brecon, 10 June 1904. This is the plant sent by me to the Club in 1898 as *H. rivale*, F. J. H., from Craig Gledsiau, Brecon Beacons (see 'Report,' 1898, p. 579). It is very abundant at Craig Gledsiau (sandstone), Craig Rhiwarth (limestone), and at other stations in Breconshire.—AUGUSTIN LEY. The specimens are mislabelled *H. repandum*, Ley. Perhaps only forestalling their elevation to specific rank.—G. C. DRUCE.

*H. pachyphyllum*, Purchas. Limestone bank near Bridge of Avon, Banff, v.-c. 94, 12th July 1905. So named with much doubt, as Rev. Augustin Ley inclines rather to consider the plant *H. tricolor*, W. R. Linton.—W. A. SHOOLRED.

*H. pachyphyllum*, Purchas. Railway banks, Symond's Yat, W. Glouc., 25th May 1905.—S. H. BICKHAM. "All rightly named."—AUG. LEY. And a set from the Great Doward, Herefordshire, 22nd May 1905.—AUGUSTIN LEY.

*H. sanguineum*, Ley. Given specific status in Rev. W. R. Linton's work on the British Hieracia. Gathered at Duffryn Crawnnon, Breconshire, v.-c. 42, June 1904, in company with Mr. Ley, and the name vouched for by him.—H. J. RIDDELSDELL. And a similar set gathered at the same time and place—the original station.—AUGUSTIN LEY. "Did not Mr. Ley call it *H. murorum*, var. *sanguineum* in 'Journ. Bot.,' p. 5 (1900)? The name should therefore be *H. sanguineum*, W. R. Linton."—G. C. DRUCE.

*H. silvaticum*, Gouan, var. *subcyaneum*, W. R. Linton. Near Buxton, Derbs., 9—16 July 1903.—W. R. L. Also from Upper Wharfedale, West Yorks, June and July 1904. This is the plant sent by me in 1903 as *H. sarcophyllum*, Stenst.; which the Rev. W. R. Linton at that time considered this abundant Yorkshire plant to be. It is thought that a larger supply of a newly named form would be acceptable.—AUGUSTIN LEY.

*H. silvaticum*, Gouan, var. *subcyaneum*, W. R. Linton, *forma*. Upper Wharfedale, West Yorks, June and July 1904. A few sets are sent of this form of the plant, varying from the type in having darker phyllaries, yellow styles, and ciliate ligules. Growing along with the type, but far less abundant.—AUGUSTIN LEY. "A mixture; on my sheet one specimen is right, the other with large dark and glandular heads is more like *crebridens*: *subcyaneum*, of course, is not a species."—W. R. LINTON.

*H. cymbifolium*, Purchas. Ingleborough range, West Yorks, July 1903. One of the most abundant hawkweeds throughout the limestone scaurs of the Craven district.—AUGUSTIN LEY.

*H. platyphyllum*, Ley. Origin, Black Mountain, Breconshire; cult. 9th June 1905.—AUGUSTIN LEY.

*H. rubiginosum*, F. J. H. Cheddar Gorge, Somerset, 19th June 1905. Name suggested by Rev. W. R. Linton, who wrote:—"This Cheddar hawkweed is just *rubiginosum* of West Yorks; exactly the same save for slight differences in head-clothing and

pilosity, and that glands are somewhat more in evidence."—AUGUSTIN LEY. "This discovery adds a species to the Flora of Somersetshire, and once more gives evidence of the acuteness of Mr. Ley's observation. Local and other botanists, who have tramped through the Gorge so many times without becoming aware of the presence of a very distinct and interesting plant, certainly owe the discoverer a candid acknowledgment of their shortcoming."—ED.

*H. cæsum*, Fr., var. *coracinum*, Ley. Craig Gledsiau, Brecon Beacons, 3rd July 1905. Fairly abundant on certain parts of this precipice, but still unknown elsewhere.—AUGUSTIN LEY.

*H. serratifrons*, Almq., var. *Stenstrœmii*, Dahlst. Gorge of Water of Ailnack, Banff, 14th July 1905.—W. A. SHOOLBRED. "Nearer this than any other form."—W. R. LINTON. A set also from Upper Wharfedale, West Yorks, 30th June and 5th July 1904.—W. R. L.

*H. cæsiomurorum*, Lindeb. Wooded banks of the Avon below Tomintoul, Banff, v.-c. 94, 27th July 1905. I am doubtful about this name as Mr. Ley disagrees and would call the plant *H. euprepes*, var. *clivicum*, F. J. H.—W. A. SHOOLBRED.

*H. pinnatifidum*, Lönroth. (*H. vulgatum*, var. *nemorosum* of Lindeberg's set.) Near Bridge of Brown, E. Inverness, v.-c. 96, 24th July 1905. So named by Mr. Linton from specimens of the same gathering submitted to him by Mr. Marshall. At the time we thought it was a luxuriant form of *H. vulgatum*, and Mr. Linton was at first inclined to name it var. *sejunctum*.—W. A. SHOOLBRED. "I believe it is this form, which I have also identified with specimens from Perthshire, Dumfries, Carnarvon, and Denbigh. 'Dahlst. Bidr.' iii. 88—90. 'Lindeb. Exs.' 74."—W. R. LINTON. Not included in 'The British Hieracia.'—G. C. DRUCE.

*H. irriguum*, Fries. (1) Thickets and river-side rocks on the Brathay; Westmoreland and Lake Lancashire, July 1905. (2) Waste ground (old coal-heaps, &c.) at Neath, Glamorgan, August 7th 1905. (1) Name suggested by Rev. W. R. Linton. (2) I have no authority for this beyond my own judgment.—AUGUSTIN LEY. "I should certainly place (2) under *H. diaphanoides*, Lindeb."—W. R. L.

*H. diaphanoides*, Lindeb. (1) Great Doward, Herefordshire, 13th June 1905.—(2) Beezley Glen, Ingleton, West Yorks, 1st July 1903.—(3) Roadbank near Trecastle, Breconshire, 4th July 1905.—AUGUSTIN LEY. "I agree to all; but (3) has a rather more leafy stem than the type."—W. R. LINTON.

*H. sciaphilum*, Uechtr., var. *strumosum*, Ley. Origin, Grwyne valley (Monmouth, Brecon, and Hereford); cult. 1st July 1905. Part of the plant from which this variety was described. I am sorry not to have had opportunity of obtaining a larger supply this season.—AUGUSTIN LEY.

*H. gothicum*, Fries. (1) River Brathay, Westmoreland, 20th July 1905.—W. R. LINTON. (2) Bank by stream near Bridge of Brown, E. Inverness, v.-c. 96, 29th July 1905.—E. S. MARSHALL and W. A. SHOOLBRED. (3) *Forma latifolia*. River gravels and rocks on the Brathay, Westmoreland (and Lake Lancashire), 20th July 1905. These specimens illustrate the correctness of Rev. W. R. Linton's judgment in making this plant a mere form. They shew every variation in the breadth of leaf from the narrow leaf of the type to the broadest of the variety.—AUGUSTIN LEY.

*H. tridentatum*, Fries., var. *setigerum*; Ley. Drws-y-nant, Merioneth, July 1903. I am sorry not to have more specimens available.—AUG. LEY.

*H. tridentatum*, Fr. First record for the type in Glamorgan, occurring in great quantity in a wood near Aberdare in August 1905. Mr. Ley believes it 'to represent good typical *tridentatum*.'—H. J. RIDDELSDELL. "Yes, typical."—W. R. L.

*H. corymbosum*, Fr., var. *salicifolium*, Lindeb. River-side banks and gravels, Upper Langdale, Westmoreland, July 1905. Abundant both in Great and Little Langdale; both in Westmoreland and Lake Lancashire. Name suggested by the Rev. W. R. Linton.—AUG. LEY.

*Pyrola rotundifolia*, L.,  $\beta$  *arenaria*, Koch. Damp hollows in the sand-hills near Arnsdale, S. Lancs. (59), July 1899, and near Formby, S. Lancs., August 1905. This promises to become at an early date one of our rarest British plants. It is extinct, or very nearly so, in the Lytham district (v.-c. 60), and its area has recently been greatly reduced in S. Lancs. (v.-c. 59). Almost yearly one of the hollows in which it used to abound is found to be either built upon, or drained and converted into golf-links. There are now only one or two very limited "slacks" in which it flourishes, and which may be invaded at any time.—J. A. WHELDON.

*Primula scotica*, Hooker. Dunnet Links, Caithness, 12th August 1905.—F. C. CRAWFORD.

*Lysimachia ciliata*, L. Edge of a rough shrubbery (garden escape) near Bromesberrow, W. Glouc., 18th July 1905.—S. H.

BICKHAM. Mr. Bickham did not desire to publish a Note on this alien, but from its examination a point arose that it may be instructive to comment upon. At first I doubted if the name were correct, being led by Babington's description to conclude that *L. ciliata* should have 15 stamens, "filaments 10 free 5 sterile." But on conferring with Mr. Marshall he drew my attention to the figure and description in 'Syme, E. B.' with which Mr. Bickham's plant exactly agrees. The stamens are really 10,—5 with anthers and 5 abortive, the former connected at the base, the latter reduced to minute triangular points. The 'Manual' is somehow at fault, I think possibly by the omission of a figure and a comma.—ED.

*Gentiana germanica*, Willd. Some luxuriant specimens from Penley Wood, Bucks, Sept. 1904. The locality was formerly included in Oxfordshire, it is put in Bucks in the new maps.—G. CLARIDGE DRUCE.

*Linaria supina*, Desf. Par, East Cornwall, v.-c. 2, 24th May 1905. I have found this plant also near Newquay in v.-c. 1, but apparently it is not obtaining a good hold.—C. C. VIGURS.

*Linaria repens* × *vulgaris*? Bank, near Farningham, W. Kent, 7th August 1905. From the same station as the specimens sent to the Club by us in 1880. We presume it is the hybrid, but have not seen *L. repens* in the neighbourhood. The record for that species from Farningham, in the 'Flora of Kent,' is an error.—H. and J. GROVES. "Doubtless right."—EDW. S. MARSHALL. Yes, about two-thirds *repens*, but the absence of the species is remarkable.—G. C. DRUCE.

*Scrophularia aquatica*, L., β *cinerea*, Dum. Pond-side, Underdown, Ledbury, 25th June 1905.—S. H. BICKHAM. "I agree; β *cinerea* is the usual British form."—E. F. LINTON.

*Mimulus Langsdorffii*, Don., var. *guttatus*. Quite established for some miles along the Couglass Burn, Banff, in some places in great abundance and forming fine masses of colour, 15th July 1905.—W. A. SHOOLBRED. "Yes, but (DC.) should follow the varietal name, and Donn is the authority for the species."—G. C. DRUCE.

*Euphrasia brevipila*, Burn. and Greml. Llanbadarn Marsh, Aberayron, and Parson's Bridge, Cardiganshire, June 1904 and June 1905, coll. Dr. J. H. Salter; and Strata Florida Abbey, Cardiganshire, 5th July 1905.—W. H. PAINTER. "Right; a form with broad, bluntly-toothed leaves."—EDW. S. MARSHALL.

*E. Rostkoviana*, Hayne. Parson's Bridge, Cardigan, June

1904, and Llyfnant Valley, Cardigan, June 1904.—W. H. PAINTER. “The two specimens received (from Parson’s Bridge) are clearly the same form of *brevipila* which is sent from Llanbadarn, crossed with *E. Rostkoviana*. The habit is almost wholly that of the former, and there are many short, eglandular hairs and some short-stalked glands, but the numerous long-stalked glands prove *Rostkoviana* to be the second factor.”—E. S. M.

*E. curta*, Wettst., var. *glabrescens*, Wettst. Sand-hills, near Formby, v.-c. 59, Sept. 1905. New to S. Lancs.? Going towards *E. nemorosa* in its laxer habit of growth than usual, but its leaves not awned and their grey green colour seem to suggest *E. curta*. I confess, however, to great difficulty in separating glabrescent forms of *E. curta* from *E. nemorosa*.—J. A. WHELDON. “Some of these are very glabrous even for the var. *glabrescens*, and I quite agree as to the difficulty of separating such forms from *E. nemorosa*. Perhaps, however, the large broad terminal lobe of the leaf will help to distinguish it.”—CEDRIC BUCKNALL.

*E. stricta*, Host. South Croxton, Leics., July 1905, coll. Miss O. M. Horwood.—A. R. HORWOOD. “Certainly not *E. stricta*, Host., which has remarkably straight erect-growing branches. I think that it is an unusual form of *E. nemorosa*, H. Mart., but the line between that and some of the plants which Wettstein has named for me as *E. curta*, var. *glabrescens* is very difficult to draw.” EDW. S. MARSHALL. “Some of the smaller specimens are distinctly hairy and might readily be taken for *E. curta*, var. *glabrescens*, especially as the flowers are rather small for *E. stricta*. But the calyx-teeth generally exceeding the capsule, the more elongate lower stem leaves, and the acute teeth of the upper leaves and bracts point rather to *E. stricta*, and I therefore am inclined to leave these specimens as labelled.”—CEDRIC BUCKNALL.

*E. stricta*, Host. Hamilton Grounds, Leic., v.-c. 55, Aug. 1905. The late Mr. F. Townsend, to whom specimens from this station were submitted in 1904, wrote, “*E. stricta*, but not typical.”—W. BELL. “I think that Prof. Wettstein would name these *E. curta*, Fr., var. *glabrescens*, Wettst.”—E. S. M.

*E. salisburgensis*, Funk. Nantenan, near Askeaton, co. Limerick, 11th August 1905.—C. H. WADDELL. “Certainly not; the leaves not having the characteristic teeth, and the capsule being ciliate. The short glands on the leaves and calyces leave no doubt but that it is *E. brevipila*, Burn. and Greml. ”—C. BUCKNALL. “Not at all like *salisburgensis*. The four plants on my sheet are all more or less glandular. Either an unusual form of *E. brevipila*, or (possibly) *E. brevipila* × *nemorosa*.”—E. S. M.

*Bartsia Odontites*, Huds., var. *serotina*, Rchb., approaching *divergens*, Balb. Road-side, South Croxton, Leics., Sept. 1905. The specimens sent are finer than usual, and appear to be intermediate between *serotina* and *divergens*. They seem to point to those forms as being less stable than the var. *verna*, so strongly marked by its leaves and erect branches.—A. R. HORWOOD. "Good *serotina*."—E. F. LINTON. "I should say *serotina*."—AR. BENNETT.

*B. Odontites*, Huds., var. *serotina*, Rchb. Hamilton Grounds, Leics., August 1905. This is the normal state of the Leicestershire plant. The specimens are sent with a view to determination, as the form has been referred both to *verna* and *serotina*.—W. BELL. "Though the leaves are rather narrow for the typical plant, I put this under *a. verna*, which is the type, and of which it has the floral character well developed."—E. F. LINTON.

*Rhinanthus major*, Ehrh., var. *stenoptera*, Fr. Corn-field near Inch Rory, Banff., v.c. 94, 13th July, 1905.—W. A. SHOOLBRED.

*Mentha longifolia*, Huds., var. *villosa*, Sole. Between Cothill and Frilford, Berks, August 1905. M. Malinvaud passed the name as correct. According to M. Briquet this is *M. villosa*, Huds., 'Fl. Angl.,' 1778, p. 249, which he considers to be a ternary hybrid, i.e. *M. rotundifolia* crossed with *longifolia* and *viridis* (*spicata*). We have no *rotundifolia* in Berkshire, so if that be the origin, this plant, which is very abundant by a stream for at least a mile, may have been originally a cultivated form.—G. CLARIDGE DRUCE.

*M. longifolia*, Huds., var. *Nicholsoniana*, Strail. Stream-side, Cagebrook, Herefordshire, 11th Sept. 1905.—AUGUSTIN LEY.

*M.* —? Fair Park, St. Columb Minor, West Cornwall, 1st Sept., 1905. This has been variously named by authorities as a form of *M. rubra* or *gentilis*. I should be glad if its name could be settled. I have only found it in the one spot.—C. C. VIGURS. "Rather poor *M. rubra*, Sm., with the whorls fewer and smaller than in well-developed specimens."—D. FRY.

*M. rubra*, Sm., *forma spicata*. Quarry, Alton Court, Ross, Herefordshire, 31st August 1905.—AUG. LEY. "A very good example of the spicate variety of *M. rubra*, Sm., which Mr. Baker describes as 'bearing the same relation to the ordinary form that the var. *paludosa* does to normal *M. sativa*.'"—D. FRY. "Forms of mints are sometimes rather states induced by their surroundings, and the position in an old quarry with hard stony soil, and

probably full exposure and less moisture than usual, would naturally produce a more floriferous and less foliaceous result than would occur in a wet situation in deep or rich soil, while shade of tree or hedgerow would still more limit the development of flowers. Perhaps '*f. aprica*' would describe the plant not less accurately than '*f. spicata*.'—E. F. LINTON. M. Briquet considers *M. rubra* to be *M. [aquatica-arvensis × viridis]*; if this be so, a very considerable range of variability is to be expected, and the suggestion seems a probable one.—G. C. DRUCE.

*M. resinosa*, Opiz. Origin, edge of Llyn Padarn, Llanberis, Carnarvon. Cult., Underdown, Ledbury, 10th August 1905. See 'Watson Club Report,' 1904, p. 22.—S. H. BICKHAM. "Nyman gives *M. resinosa*, Opiz. as a syn. of *M. gentilis*, L., and more I cannot find about it beyond Mr. Bennett's note. Mr. Bickham's specimens seem to me allied rather to *M. gentilis* than *M. rubra*. The only specimen I possess at all like this is one from Nuthurst Common, which I suspect to be *M. rubra × viridis*. I have *M. rubra* from the locality. If I am right in this conjecture, then this plant of Mr. Bickham's may very well be *M. gentilis × viridis*, the flowers recalling *M. gentilis* chiefly as the leaves do *M. viridis*. The glands on the calyx referred to by Mr. Bennett are not of critical value in this case."—E. F. LINTON. "M. Briquet considers *M. gentilis* to be a hybrid of *M. arvensis* with *M. viridis*, see 'Prod. Fl. Belg.,' p. 685."—G. C. DRUCE.

*M. gentilis*, L., var. *Wirtgeniana*, F. Schultz. River-side, Fawley, Herefordshire, 12th August 1905. The distinctions which separate this variety from the type seem so small as to leave me quite doubtful where to refer this—the common form in this neighbourhood. I shall be glad of expert opinion on it.—AUGUSTIN LEY. "No doubt correct. In its foliaceous inflorescence this plant agrees exactly with *M. Wirtgeniana*, F. Schultz, in Wirtgen's set of Mints No. 5 labelled 'forma foliosa,' in the 'Herb. Pl. Rhen.,' except for Mr. Ley's plant having rather more hairy leaves. In this particular, however, it does not differ from No. 68 in the same set, a typical specimen of *M. Wirtgeniana*. According to 'Syme E. B.,' *M. gentilis* (sensu restricto) has leaves and calyx more thickly clothed with hairs."—E. F. LINTON. "This probably fairly represents what is known as *M. Wirtgeniana*, F. Schultz; but, besides the somewhat thinner and more glabrous leaves, and less hairy stems, there does not seem to be much to distinguish it from the normal *gentilis*, of which I am inclined to regard it rather as a sub-glabrous form than a well-marked variety, and the points in which it differs from them may be due to damp situations."—D. FRY. "*M. Wirtgeniana* is put as a variety of *M. rubra* in the 'Prod. Fl. Belg.'"—G. C. DRUCE.

*Origanum vulgare*, L., var. *megastachyum*, Link. (1) Dry bank, near Symond's Yat, West Glouc., 27th July 1905. (2) Dry bank near Aymestry, Herefordshire, 12th Sept. 1905. This plant is widely spread in the latter county, and in my judgment has equal claims with the type to be considered native.—AUGUSTIN LEY. 'Yes, = *O. prismaticum*, Gaud. Boreau makes it a distinct species, for which I think there is not sufficient warrant."—ED.

*Stachys Betonica*, Benth. Sea-coast near Redruth, West Cornwall, 5th July 1905. This dwarf form was found by Mr. Davey growing on a slope of short turf with *Gentiana præcox*, etc.—C. C. VIGURS. "I do not know any special name for this plant; the variation from type may probably be ascribed to an exposed maritime situation."—EDW. S. MARSHALL. "Calyx unusually bristly. No doubt the dwarf habit and greater hairiness are probably due to its place of growth."—H. and J. GROVES.

*Lamium maculatum*, L. Tresillian, Newlyn East, West Cornwall, 17th June 1905. A garden outcast as usual; well established. The ring of hairs in the corolla is much less distinct than the books would lead one to suppose.—C. C. VIGURS.

*L. intermedium*, Fries. Cultivated ground by the railway, Muchalls, Kincardineshire, July 1905.—H. and J. GROVES. A set of beautiful specimens.—ED.

*Plantago Coronopus*, L., var. *ceratophyllum*, Rap. Sandy shore, Skegness, Lincs., 13th June 1905.—A. R. HORWOOD. "I think best under type."—E. F. LINTON. "A not uncommon seaside state of *P. Coronopus*. The var. *ceratophyllum*, Rapin, as described and figured by Mr. E. G. Baker, 'Journ. Bot.,' 1897, p. 257, t. 371, is a much more extreme form."—H. and J. GROVES.

*Chenopodium botryodes*, Sm. Near Gravesend, Kent, October, 1904.—G. CLARIDGE DRUCE. "Poor miserable specimens of what is a beautiful plant when gathered at maturity."—AR. BENNETT.

*Atriplex Babingtonii*, Woods., var. *virescens*, Lange. Kingston-by-Sea, West Sussex, September 1905.—T. HILTON.

*Salsola Kali*, L., var. *tenuifolia*. Kingston-by-Sea, West Sussex, Aug. 1905.—T. HILTON.

*Polygonum mite*, Schrank. Binsey Common, Oxon; growing with *P. minus* and *P. Persicaria*, October 1905. Not quite typical, and may possibly be a hybrid of *P. minus* with *P. Persicaria*.

Some specimens of *P. minus* are also sent from the same locality. —G. C. DRUCE. “Merely a state of *mite*, and does not answer to any of the forms described by Sælan.”—AR. BENNETT.

*Urtica dioica*, L., *forma parvifolia*. Breinton, Hereford, 31st Aug. 1905. This appears to be a well-marked form, and to be also widely distributed. I have it from several Herefordshire stations and from Brecon of my own gathering; from Oxford through the Club under the names of “*parvifolia*” and “*microphylla*” from Mr. Druce; and from Pachbrook, Warwick, from Mr. Bromwich, under the name “*angustifolia*.” I should be glad to know the correct name and authority. See ‘Report, B.E.C.,’ 1902, p. 60.—AUGUSTIN LEY. “The described forms of *U. dioica* related to Mr. Ley’s plant are the following:—(1) var. *microphylla*, Hausmann, ‘Flora von Tirol,’ vol. 2, p. 771, 1852. (2) var. *angustifolia*, Wimmer and Grab., ‘Flora Silesia.’ See ‘Bab. Man.,’ ed. 9. This var. *angustifolia* was originally described by Fischer in 1819, ‘Hornem Hort. Hafn. Suppl.,’ 107; *pro specie*. (3) var., *angustifolia*, Ledebour, ‘Flora Altaica,’ 4, p. 241, 1833. (4) Also of Blytt in his ‘Vegetationsf. Sogne Fjorden,’ 108, 1869; (he seems to have overlooked that the name had been used before). (5) var. *atrovirens*, Gren. et Godr., ‘Flore Fr.,’ vol. iii., p. 108, 1855. Probably the plant sent by Mr. Ley is No. 2.”—AR. BENNETT. “See ‘Report, B.E.C.,’ 1888, p. 230, 231. I suppose the name *parvifolia* is a bantling of Mr. Druce’s. In ‘Koch Syn. Deutsch. und Schw. Fl.,’ ed. iii., Fischer’s *angustifolia* is described as having ‘Upper leaves linear-lanceolate.’ Will not the present plant do well under *microphylla* (No. 1), with ‘leaves small, mostly lanceolate?’—ED. “This small-leaved much-branched form, if constant, seems better worth distinguishing than the var. *angustifolia* as understood in this country. We have not been able to come across either specimen, figure, or full description of var. *microphylla*, Hausm. In the new ed. of Koch, p. 2785, the only character given is ‘leaves small, mostly lanceolate.’ Dr. Gürke, in ‘Plantæ Europææ’ II., p. 78, quotes var. *parvifolia*, Wierzb. (1858) as a synonym for var. *microphylla*, Hausm. ‘Tir. II.,’ p. 771 (1852).”—H. and J. GROVES. “The description of *microphylla* in Hausmann ‘Flora’ is, ‘hat 2—3 mal Kleinere, Schmälere, an der Basis kaum herz förmige, selbst lanzettliche, lang-zugespitzte Blätter.’ The specimens I sent to the Club in 1888 were, on the contrary, very dwarfed prostrate plants, and I hesitated to refer them to the above. I think these plants would come under Hausmann’s variety.”—G. C. DRUCE.

*Cannabis sativa*, L. Field of tares, abundant with *P. Fagopyrum* also, Elmsthorpe, Leics., July 1905. This casual has not been noticed before in the county. The first plants found were barren.

Later the Rev. H. P. Reader, with the contributor, found fertile plants at Billesdon and at Groby—at the latter place apparently a good while established. The characteristic smell was only noticeable with the fertile plants, but even from those it was dissipated by drying.—A. H. HORWOOD.

*Salix herbacea* × *lanata*. From Clova, Forfar, cult. May, June, and July 1905.—W. R. LINTON.

*S. Caprea* × *cinerea* = *S. Reichardtii*, A. Kerner. All from one large bush, by the side of an old engine-pond, at Abernant, Aberdare, Glamorgan, v.-c. 41, May 1905. Named by Rev. E. F. Linton.—H. J. RIDDELSDELL. “Rightly named, I believe.”—EDW. S. MARSHALL.

*S. Arbuscula*, L., f. *angustifolia*. From Killin, Mid Perth, cult. 24th May and 26th July 1905. I have never seen anywhere, except in this one locality, a plant so narrow-leaved, and in that respect aberrant from the type. It has not been distributed before.—W. R. LINTON.

*S. viminalis* × *Caprea*. Stream-side, Madresfield, Worcester, 6th April and 8th Aug. 1905.—S. H. BICKHAM and F. TOWN-DROW.

*Liparis Loeselii*, Rich. For an account of the occurrence of this species in Glamorgan, see ‘Journ. Bot.’ 1905, p. 274. Collected July 1905.—H. J. RIDDELSDELL.

*Epipactis violacea*, Boreau. Shrubbery, Colwall, Hereford, 17th August 1905, coll. R. F. Towndrow. Nearly all the plants had several stems, but only seven were found in flower.—S. H. BICKHAM.

*E. atrorubens*, Schultz. In fair quantity on limestone banks in one or two spots below Tomintoul, Banff, v.-c. 94. New county record. 12th July 1905.—W. A. SHOOLBRED.

*Allium Schœnoprassum*, L. Rocky bed of the River Wye, near Erwood, Brecon, 9th June 1904.—S. H. BICKHAM.

*Juncus* —? Marshy meadow near Marcham, Berks, July 1897. The locality is specially interesting as a saline spring flows through it, so influencing the soil as to allow several maritime plants to exist in an inland situation. This rush has been referred to *J. Gerardi*, but is not typical. Buchenau accepts the name, but says the inner perianth-leaves are broader than usual.—G. CLARIDGE

DRUCE. "A rush accepted by Buchenau may well pass."—AR. BENNETT. "True, yet Mr. Bagnall suggests that this is possibly a state of *J. compressus* with unfertilized flowers. He has found closely similar plants in Warwickshire."—ED. "Probably *J. Gerardi*, but too immature for certainty. I have seen *Gerardi* from the Thames Valley near Staines, Middlesex."—EDW. S. MARSHALL.

*Arum italicum*, Mill. Thickets on the Undercliffs, Ventnor, I. of Wight, 1890—1893. Coll. Capt. Stuart.—J. A. WHELDON.

*Potamogeton alpinus*, Balb. Canal at Odiham, N. Hampshire, 18th August 1904.—C. E. PALMER.

*Scirpus cernuus*, Vahl., var. *pygmaeus*, Kunth. Fairwood Common, July 1903, and Jersey Marine, July 1905, both v.c. 41. This is the only form of the species that we have in the county, so far as I know; single and double spiked heads occur side by side. The specimens distributed represent the normal local growth.—H. J. RIDDELSDELL. "The proper name for this plant appears to be *S. cernuus*, Vahl., var. *monostachys*, Hook. fil. It is mostly subarctic, and I believe it to be quite a good variety."—EDW. S. MARSHALL.

*Eriophorum* —? Trebiskin Moor, Cubert, West Cornwall, 31st July 1905. Mr. A. Bennett reports that this "may be the var. *triquetrum*, Anders. (*E. triquetrum*, Fr. non Hoppe)." He has the plant in hand. I hope to send him further specimens next year, when he may be able to give a definite opinion. It flowers much later than typical *E. polystachion*, and occurs also in Mr. Davey's district, in Gwennap parish.—C. C. VIGURS. "To me this seems to be *E. polystachion* in a young stage with the bristles not fully developed. The glabrous peduncles of course exclude *E. triquetrum*, Hoppe."—C. BUCKNALL.

*Carex divisa*, Huds. Saltmarsh, Cliffe-at-Hoo, West Kent., 30th May 1905.—J. GROVES. "A good series of a much-wanted Sedge."—ED.

*C. paradoxa*, Willd. In a small marsh near Denham, Bucks, but likely to be destroyed by preparations for a new railway. A new county record, but only a slight extension of its known range, May, 1905. In the young stage the panicle recalls *C. elongata* rather than *C. paniculata*, as the scarious margins to the glumes are practically absent. Flowers earlier than *C. paniculata*.—G. CLARIDGE DRUCE. "It is remarkable how of late years the comital distribution of this *Carex* has been increased. It is now on record for 8 counties in Britain."—AR. BENNETT.

*C. ovalis*, Good., var. *capitata*, Sonder. Damp hollow on Malvern Link Common, Worcester, 21st June 1905.—S. H. BICKHAM. "I should not so name it. It is as near the var. *bracteata*, Syme, as anything, only less developed. *C. leporina*, L., var. *capitata*, Sond. Fl. Hamb., 1851, has truly capitate heads, the spikes being agglomerated into a single head, and thus resembling the arctic *C. festiva*, Desv. It was named *C. subfestiva*, Lange, in 1860."—AR. BENNETT.

*C. Hudsonii*, Ar. Benn., var. *turfosa*, Ar. Benn. Swamp near Over Kellet, W. Lancs., 24th June 1905, coll. A. Wilson and J. A. Wheldon. First found in West Lancashire several years ago by Mr. Wilson, and then thought to be a form of *C. stricta*, Dr. Lees pointing out that it was not the typical plant. On comparing it with Mr. Beeby's specimen of *C. turfosa* we saw it corresponded, and Mr. Bennett confirmed that name. We hope next year to send specimens to the Club showing the roots to have short stolons.—J. A. WHELDON. "Why not follow the 'Manual' and use the name *C. elata*, All., var. *turfosa* (Fries)?"—G. C. DRUCE.

*C. Hornschuchiana*, Bab. Black Down on Mendip, N. Somerset, at 1,050 ft., 23rd June 1905.—JAS. W. WHITE. "*C. Hornschuchiana*, Hoppe, which many British botanists persist in naming *C. fulva*, Good., though that is almost certainly a hybrid of *Hornschuchiana* with one of the *flava-Oederi* group. One specimen on my sheet is probably a hybrid with *C. Oederi*, var. *oedocarpa*."—EDW. S. MARSHALL.

*C. rostrata*, Stokes f. or var. Swamp, valley of the Couglass, near Tomintoul, Banff, v.-c. 94, 15th July 1905.—W. A. SHOOLBRED. "A common form of the species in places where the plant has to contend with wet and dry periods. I do not know any name for it."—AR. BENNETT.

*C. pulla*, Good. N. side of Ben More, at 2,800 ft., Mid Perth, July 1905, coll. Albert Wilson and J. A. Wheldon. A few examples for comparison with the *C. Grahami* that grew along with it.—J. A. WHELDON.

*C. pulla*, Good., var. *Grahami*, Boott. With the last at 2,800 ft. Passed by Kükenthal.—J. A. WHELDON and A. WILSON.

*Spartina Townsendi*, Groves. Salt marsh between Sturt Pond (Milford) and Hurst Castle, S. Hants., 14th Oct. 1905. In 1895 and 1896, when I previously examined this marsh in the autumn, none of this grass was visible to the best of my recollection. It

now is most plentiful, and evidently is rapidly increasing. I traced it as far as Keyhaven to the north, but there it is not so abundant at present.—J. COSMO MELVILL.

*S. Townseni*, Groves. In some quantity by the Fever Hospital, Poole, Dorset, v.-c. 9, with *Salicornia radicans* and *Suaeda fruticosa*, Oct. 1905. I cannot find a record for Dorset in 'Top. Bot.'—H. J. RIDDELSDELL. "Nor is the genus mentioned in the 'Flora of Dorset.'"—ED. I have no doubt a recent introduction to the Dorset coast. I did not see it near Poole when I carefully worked the coast some years ago.—G. C. DRUCE.

*Alopecurus geniculatus*, L., *forma*. In Brading salt marshes, Isle of Wight, Sept. 1905.—G. CLARIDGE DRUCE. "The normal form."—DR. HACKEL.

*A. hybridus*, Wimmer. Banks of the Soar, Belgrave, Leics., July 1905. The plants now distributed come from the third known locality in this county and exhibit a closer relationship with *A. pratensis* than to *A. geniculatus*. The converse is seen in specimens recently sent to the Club from Birstall, Leics., by Mr. A. B. Jackson.—A. R. HORWOOD. See 'Reports B. E. C.' 1900, p. 650, and 1902, p. 61.—ED. "From the habit and narrowness of the inflorescence I think that this is probably (as suggested) *A. geniculatus* × *pratensis*."—EDW. S. MARSHALL.

*Agrostis palustris*, Huds., *forma*. Road-side, near Shirley, Derby, August 1905. If rightly named this plant departs from the type in the somewhat open panicle, which remained open till in October the roadman cleaned all away. The ligule also did not appear to be exactly acute, as according to the books it should have been. Possibly a form of *nigra*, but the lower panicle branches are compound, and the colour pinkish, not 'blackish-brown.'—W. R. LINTON. "*Agrostis alba*, L., Sp. Pl. 1, 63, 1753. *A. palustris*, Huds., Fl. Angl. 1, 27, 1762. I have no specimens to compare, but this plant seems in the direction of var. *limosa*, Asch. and Graeb. Syn. Fl. Mit. Europ. 174, 1889."—AR. BENNETT. "No peculiar form."—E. HACKEL.

*Koeleria splendens* (Pourret), Druce. *K. vallesiaca*, Gaud. Uphill, North Somerset, June 1905. Flowering specimens to supplement the examples sent last year. See 'Report B.E.C.' 1904, p. 37, and 'Journ. Bot.,' November 1905.—G. CLARIDGE DRUCE.—A series of specimens also from Uphill and Worle Hill, N. Somerset, 7th July 1905.—JAS. W. WHITE. See 'Journ. Bot.,' March 1906, p. 103.—ED. *K. vallesiana*, Asch. and Graeb.—G. C. DRUCE.

*K cristata*. Pers. var. *gracilis*, Boreau. Lowesby, Leics., 15th July 1905.—A. R. HORWOOD. “*K. gracilis*, Pers., correctly named.”—E. HACKEL.

*Poa nemoralis*, L., var. *Parnellii*, Hook. and Arnott. Origin, Taren Llwyd, Black Mountain, Brecon, cult. June and August 1905. This I believe to be identical with the plant sent from Taren-r'-Esgob, Black Mountain, in 1897. See ‘Report B.E.C.’ 1897, p. 576.—AUGUSTIN LEY. “The latter gathering was passed by Dr. Hackel.”—ED.

*P. Chaixii*, Villars. Abernant Park, Aberdare, Glamorgan, June 1905. This grass, which I suppose to be the above, is presumably not native, though I cannot find any trace of its cultivation in the neighbourhood. Two patches.—H. J. RIDDELSDELL. “Quite right.”—G. C. DRUCE.

*Glyceria fluitans* × *plicata*. Rodsley, near Shirley, Derbs., 4th August 1905.—W. R. LINTON. “Nearer to *G. fluitans* than this hybrid (*G. pedicellata*, Towns.) usually is, but no doubt correct.”—EDW. S. MARSHALL. “I cannot find any difference from true *G. fluitans*.”—E. HACKEL.

*G. declinata*, Brèb. Osmaston, 7th June, and Osmaston to Old Yeldersley, Derbs., 5th June 1905. These are sent as being fresh localities for this, which after observation of it in many places in this neighbourhood through the past season, I now realize is most certainly a good species.—W. R. LINTON. “Correct, I believe.”—AR. BENNETT. “I have not at hand Brèbison’s work, and cannot say whether the identification is right. The plant you sent is the same as *Glyceria plicata*, var. *depauperata*, Crèp. Not. pl. cr. iv. 1867.”—E. HACKEL.

*G. festucæformis*, Heynh. Stony sea-shore, Craigaveagh, Strangford Lough, County Down, 10th July 1905.—R. LLOYD PRAEGER. “An excellent series of good specimens, but the plant seems merely to be a strong form of *G. maritima*, M. and K. See ‘Report B.E.C.’ 1904.”—ED. “Although kept as a distinct species by Richter, ‘Pl. Europ.’ and by Ascherson and Graebner in ‘Fl. Mitt. Eur.’ the alliance with *G. maritima* seems very close.”—G. C. DRUCE.

*G. distans*, Wahl. Entrance to grass-field on stiff clay, Coleman Road, Leicester, June 1905. This maritime grass has previously been recorded for Leics., but so far as is known that county

is the only one that hitherto has afforded inland stations for the species. Babington records the var. *obtusa* from Leicestershire, but these specimens are pronounced by Prof. Hackel to be the type. The plant has taken good hold of a portion of a field at the side of a little used cart-road just outside Leicester, completely covering an area of twenty or more square yards. How originally it became introduced there is unknown.—A. R. HORWOOD.

*Festuca ciliata*, Danth. Field by Ditchley Road, Brighton, East Sussex, May 1905.—T. HILTON. "Described in 'Fl. Hampshire,' ed. ii. p. 648. See remarks by C. E. Salmon in 'Journ. Bot.,' 1906, p. 65."—ED.

*F. rubra*, L., *a. vulgaris*, Hack. Sandy shore, Skegness, Lincs., 13th June 1905. *Fide* Prof. Hackel.—A. R. HORWOOD. "A clerical error seems to have been made here. The plant must be *F. ovina*, L., and perhaps the var. *vulgaris*, Koch., of that aggregate."—E. S. MARSHALL.

*F. rubra*, L.,  $\beta$  *arenaria*, Osb. Sandy shore, Skegness, Lincs., 13th June 1905. This variety is exceedingly abundant at the locality, where it is associated with *F. dumetorum*, L., previously gathered by the contributor, and closely allied to that species. Prof. Hackel writes of this:—"The specimen shews indeed a near approach to *Festuca dumetorum*, but the structure of the leaf is quite that of *F. rubra*."—A. R. HORWOOD.

*F. elatior*  $\times$  *Lolium perenne*, Meadow, Sellack, Herefordshire, 23rd June, 1905. In the same meadow occurs abundant *Festuca pratensis*, Huds., and depauperate forms of the same, running down to simple spikes, as well as abundant *Lolium perenne*. The present plant is markedly different from all those. It occupies a damp corner of the meadow, in which it has apparently spread from a single clump, and is certainly increasing rapidly. Unfortunately I was unable to watch if it produced perfect seeds, as I went from home, and on my return found the plant all mown down for hay.—AUGUSTIN LEY. "Correctly named."—E. HACKEL.

*Bromus unolioides*, H.B.K. This grass, a native of parts of Central and South America, has in recent years begun to invade many areas in the temperate regions. I believe I was the first to gather it in the United States as a weed near the Battery, Charleston, So. Ca., in 1872. As an alien it has been met with in many parts of Great Britain, and has several times been sent to the Club. It has not hitherto been recorded for Salop, but both in 1904 and 1905 I noticed it in some abundance both on cultivated ground and in shrubberies at Meole Brace.—J. COSMO

MELVILL. "Yes, an alien of increasing frequency, now yearly to be seen about the docks and railways at Bristol."—ED.

*B. brachystachys*, Hornung. Rottingdean, East Sussex, June 1905. *Fide* Mr. Geo. Claridge Druce and Rev. Edw. S. Marshall.—T. HILTON.

*Cystopteris fragilis*, Bernh., var. *dentata*, Hook. Shady wooded limestone cliffs by the Avon near Tomintoul, Banff, v.-c. 94, 22nd July 1905.—W. A. SHOOLBRED. And from the same locality, 20th July 1905. Some specimens seem to closely approach *C. Dickiana*.—EDW. S. MARSHALL. "These seem to me to be nearest to var. *dentata*."—AR. BENNETT.

*Lastræa spinulosa*, Presl., var. *elevata*. All these specimens are from a single clump; but some of them shew a tendency to pass into the more common var. *exaltata*, Lasch. Lyonshall Park, Herefordshire, 17th August 1905.—AUGUSTIN LEV. And other examples gathered at the same time and place by S. H. BICKHAM.

*Ophioglossum vulgatum*, var. *polyphyllum*, Braun. From long herbage on sandy ground near Llanmadoc, Glam., v.-c., 41, June 1904, and July 1905. The Rev. E. F. Linton told me of its occurrence here, and on his authority I have distributed it under the above name. Mr. Arthur Bennett has accepted it for Glamorgan, 'Top. Bot. Suppl.', 1905.—H. J. RIDDELSDELL. "These specimens do not well shew the characters of the variety. They have but one frond apiece and look merely like type to my eyes."—ED.

*Equisetum palustre*, L., var. *polystachium*. On ballast of a railway bank, where it crosses Crumlyn Burrows, Swansea; in quantity, July 1904, and May 1905.—H. J. RIDDELSDELL. "Surely var. *nudum*, Newm. The var. *polystachium* is, I think, usually a good-sized, freely branching plant, quite different from this."—EDW. S. MARSHALL. See Milde, 'Mon. Equis.' p. 329. "My specimen I should put under *polystachium*, Vill. It is 15 inches high and branched, but is rather a monstrosity than a true variety."—G. C. DRUCE.

*E. litorale*, Kùhl.? (*E. arvense* × *limosum*?) Ref. No. 2931. Rocky pool, or backwater, by the river Barle, in 6 to 12 inches of water, about half a mile above Dulverton Station, v.-c. 5, S. Somerset, 30th May 1905. This was at first taken to be a variety of *E. arvense*, but I doubt whether that species ever occurs under such circumstances. It very closely resembles Mr. Beeby's *E. litorale* from Surrey; and Rev. R. P. Murray agrees with me in

thinking them identical. No fertile stems were seen, as they would be withered by that date, so that some uncertainty must remain at present.—EDW. S. MARSHALL.

*E. trachyodon*, Braun. Bank of stream in Colin Glen, co. Antrim, June 1905.—C. H. WADDELL.

*Chara fragilis*, Desv., var. *delicatula*, Braun. Clear slow-flowing stream near Borwick, West Lancs., v.-c. 60, June 1905. Named by Rev. G. R. Bullock-Webster. New to West Lancashire. We only found a little, and are therefore unable to send more than two or three sheets.—ALBERT WILSON and J. A. WHELDON.

*C. vulgaris*, L., var. *longibracteata*, Kuetz. Mill-dam, Itton, Monm., v.-c. 35, 16th August 1905.—W. A. SHOOLBRED. Rightly named.—ED.



THE  
BOTANICAL EXCHANGE CLUB  
OF THE BRITISH ISLES.

---

REPORT FOR 1906.

---



The Subscription, 7/6 per annum, and Non-contributing Members' Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE, M.A., F.L.S.,  
YARDLEY LODGE,  
9 CRICK ROAD, OXFORD.

---

Parcels for 1907 should be sent post paid in December to the  
Rev. H. J. Riddelsdell, M.A., St. Michael's College, Aberdare,  
the Editor and Distributor for 1907.

---

PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD.

1907.

10 FEB. 1908

# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

## BALANCE SHEET FOR 1905.

	£	s.	d.		£	s.	d.
By Subscriptions received . . . . .	15	17	6	Expenses of Distribution . . . . .	1	8	6
Sale of Reports . . . . .	1	3	0	Postages, &c. . . . .	1	11	0
Balance in hand . . . . .	3	1	9	Printing . . . . .	11	18	6
	£20	2	3	Balance in hand . . . . .	5	4	3
	£20	2	3		£20	2	3

Balance in hand of Treasurer, G. Claridge Druce, Yardley Lodge, Oxford, £5 4s. 3d. To him all subscriptions should be paid on the first of January in each year; of 7s. 6d. for each member who contributes and receives specimens; of 5s. for each non-contributing or corresponding member, who receives a copy of the Reports only.

## SECRETARY'S REPORT FOR 1906.

Thanks to the larger number of members and the increased subscription, the finances are now in a sound condition. The question of the *Desiderata List* still awaits consideration, but it is deemed inadvisable to print it at present.

Our late esteemed Secretary has very generously presented to the Club a large number of the *Reports* from the year 1879. They include over thirty complete sets. It is suggested that members may have a complete set for the years 1879—1900 for 12s. 6d. post free, odd copies 1s. each, three for 2s. 6d.

Among the chief items of botanical interest of the year 1906 are the following :—

POLYGALA SERPYLLACEA, Weihe, var. VINCOIDES, Chodat, in lit. ('Journ. Bot.' 1906, p. 35). Leaves elliptical, shortly pointed, sub-imbricate, mostly opposite, only the upper ones alternate, raceme terminal, short, not at all involucred, wings more elliptical than oblong . . . style not at all longer than ovary, seeds ellipsoidal, smooth, rather patent, sparingly hairy. Between Redruth and Truro, Cornwall. Specimens are distributed this year.—F. HAMILTON DAVEY.

SILENE MARITIMA, With., var. PARVIFOLIA, Druce, in 'Journ. Bot.' 1906, p. 30. A large diffuse prostrate plant, with the leaves very small ( $\frac{1}{4}$ — $\frac{1}{3}$  in. broad) but with the solitary or sub-solitary flowers of the normal size. On the shingle at Looe Bar, Cornwall.

SPERGULARIA ATHENIENSIS, Ascherson & Schweinfurth, Beitr. Fl. Aethiop. p. 267, 1867. (*Buda atheniensis*.) In mobile sand and dry sandy places, St. Helier's, Jersey. A Mediterranean species distinguished from *S. rubra* by the broadly-triangular stipules, and by the absence of the basal rosette of leaves.—G. CLARIDGE DRUCE.

OXALIS CORNICULATA, L. It may be well to draw attention to a paper in 'Journ. Bot.' 1906, p. 386, in which Mr. B. L. Robinson points out that we have been wrong in our application of this name. The plant we have been calling *O. corniculata* should be known as *O. stricta*, L., and vice versa.

RUBUS CASTRENSIS, Wolley-Dod. Cheshire ('Journ. Bot.' 1906, p. 63). This is between *R. imbricatus* and *carpinifolius*.

R. RHOMBIFOLIUS, Weihe, var. MEGASTACHYS, Wolley-Dod. Walton Common, Surrey ('Journ. Bot.' 1906, p. 64).—A. H. WOLLEY-DOD. Specimens now distributed.

RUBUS GODRONI, Lec. and Lam., var. FOLIOLATUS, Rogers and Ley, in 'Journ. Bot.' 1906, p. 58. Brecon, Glamorgan and Cheshire.

R. LASIOCLADOS, Focke, var. LONGUS, Rogers and Ley, in 'Journ. Bot.' l.c. Neath Valley, Glamorgan. Specimens now distributed.

R. ERICETORUM, Lef., var. CUNEATUS, Rogers and Ley, l.c. Brecon, Glamorgan and Monmouth. Specimens now distributed.

R. SERTIFLORUS (P. J. Muell.), as a sub-species var. SCOTICUS, Rogers and Ley, l.c. Dumbarton, Perth, Argyll, Renfrew.

APIUM NODIFLORUM, Reichb. f. Under the name Helosciadium nodiflorum the Rev. H. J. Riddelsdell and Mr. E. G. Baker print a valuable paper in 'Journ. Bot.' 1906, p. 185, on the puzzling forms of this species, of which it may be said in nature there is no sharp line of delimitation, although by rejecting intermediates we may arrange the plants into three or four groups. The authors issue the following clavis:—

[*Apium nodiflorum*, Reichb.] = *Helosciadium nodiflorum*, Koch.

A. Involucre 0 or 1 or 2 bracts, in var. *longipedunculatum*, Schultz, sometimes 3.

a. Peduncle 0 or short. Plant rooting at base only, stout. Leaflets 3—7, elliptical-lanceolate or ovate-lanceolate. Var. *vulgare* (F. Schultz).

b. Peduncle always present, sometimes attaining the length of the rays.

\* Roots at most of the nodes. Leaflets 5—7, sub-lanceolate. Var. *ochreatum* (D. C.).

\*\* Small plant rooting at all the nodes. Leaflets generally 3—5, broadly ovate or rotund. Var. *pseudo-repens* = *ochreatum*, Bab. (H. C. Wats).

c. Peduncle long. Stem slender elongate. Leaflets 5—7. Var. *longipedunculatum* (F. Schultz).

B. Involucre of 3—7 bracts. Leaflets 9—11, Peduncle long. Var. *repens* (Jacq.).

HIERACIUM CONSPERSUM, Dahlst. Tilberthwaite Ghyll, Yewdale Beck, Coniston Lake, Lancashire. ('Journ. Bot.' 1906, p. 173.)  
REV. A. LEY and W. R. LINTON.

NARCISSUS ODORUS, L. In a damp field about 2 miles south of St. Austell, by the Sticker road from London Apprentice. Quite naturalised. ('Journ. Bot.' 1906, p. 215.)—F. HAMILTON DAVEY.

ERIOPHORUM ANGUSTIFOLIUM, Roth, var. TRIQUETRUM, Fries, in 'Flora Scanica' p. 184, 1835. West Cornwall ('Journ. Bot.' 1906, p. 279).—F. HAMILTON DAVEY.

CAREX PAIRAEI, F. Schultz, Herb. Normale n. 1160, and 'Flora,' p. 302, 1868. Between Helston and Porthleven, Cornwall, June, 1904.

Habit of *C. muricata*; the leaves narrower, stricter, the lower perishing (the leaf-fibres alone remaining) before the flowering is over. The ovate ligule is partly adherent to the limb, the interior part hollowed and curved. The spike compact, sometimes interrupted at the base. The perigynia divergent large but short ( $3\frac{1}{2}$  mm. by 2) abruptly contracted into a short beak. The nut nearly as broad as long, glume more abruptly contracted than in *muricata*.

In *muricata* the perigynium is 5 mm. by 2 mm. and the beak elongated.

In *divulsa* the perigynia are upright, not divergent, and much longer than broad.—G. CLARIDGE DRUCE. The name *C. Pairaei* is said ('Bull. Herb. Boiss,' 107, 1907) to be antedated by *C. echinata*, Murr., the latter being wrongly given in 'Lond. Cat.' for Goodenough's *C. stellulata*.

CAREX ELATA, All., var. HOMALOCARPA. (Petermann in 'Flora,' 1844, p. 333.) As a species. 'Differs from the type by its flaccid bending culms inclining outwards, and the flaccid dark grass-green leaves.' ('Journ. Bot.' 1906, p. 226.) Wroxham, Norfolk.—C. E. SALMON.

C. RIPARIA, Curt., var. HUMILIS, Uechtr. Near Brewhurst Mill, Loxwood, Sussex, W. Smaller in all its parts than *riparia*; leaves shorter, only 3—6 mm. broad, strongly greyish-green, female spikelets, usually 2, more distant, 0.20—0.30 mm. long, but densely flowered, cylindrical or ovate at the base, very shortly stalked or almost sessile. ('Journ. Bot.' 1906, p. 227.)—C. E. SALMON.

LITHOSPERMUM OFFICINALE, L., var. PSEUDO-LATIFOLIUM C. E. SALMON. Between Steephill and St. Lawrence, Isle of Wight. ('Journ. Bot.' p. 367, t. 482 b. 1906.)

PRUNELLA LACINIATA, L. Originally recorded as *P. vulgaris*, var. *alba*, by its discoverer, Mr. Weaver, in 'Journ. Bot.' 1887,

p. 84, from the vicinity of Moreton in the Marsh, Gloucester, but thought then to be an introduction. However our member, Mr. J. Walter White, has since found it in evidently native situations in upland limestone pastures between Draycott and Cheddar, N. Somerset, and has figured and described it in 'Journ. Bot.' 1906, p. 365, t. 482 a. Mr. Weaver has also found it near Tilehurst, in Berkshire, where the writer has seen it growing in aboriginal turf. Mr. T. Hilton and Mr. C. E. Britton have found it on the Sussex and Surrey Downs. It flowers in early July, and the blossoms are cream-coloured; the leaves are usually pinnatifid (var. *pinnatifida*, Koch). This character and the narrower calyx, the teeth of which are clothed with long stiff ciliæ, and the longer filaments distinguish the plant from *P. vulgaris*. Specimens now distributed.

SALVIA MARQUANDII, Druce. (*S. clandestina*, Syme, E.B. iii, vii, p. 434, t. 1057), not of Linn. Vazon Bay, Guernsey ('Journ. Bot.' 1906, p. 405 t. 483). Specimens now distributed.

× ORCHIS EVANSII. *Orchis maculata*, var. *ericetorum* × *Habenaria conopsea*. This interesting hybrid, with the flowers very Orchis-like and without the long spur, had the more cylindrical-spike and sweet perfume of *conopsea*. Both parents were in the vicinity where it grew, near Langton Lees, Berwick. Found with Mr. A. H. Evans in July, 1906.—G. CLARIDGE DRUCE.

× OPHRYS MUSCIFERA × ARANIFERA, Reichb. 'Ic. Fl. Germ.' xiii. and xiv., t. 465. Wye Downs, Kent. W. R. Jeffrey, ex. 'Orchid Review,' 1905, p. 233. ('Journ. Bot.' 1906, p. 347.)

LIPARIS LOESELII, Rich., var. *ovata*, Riddelsdell. S. Wales. Now distributed.

AGROSTIS VERTICILLATA, Vill. Vale, Guernsey, July, 1906. New to the Channel Isles, and not hitherto recorded for Britain. Descr. Stoloniferous, stem 6 in. to 24 in. high, geniculate-ascending, leaves flat, glaucescent, ligule short truncate, panicle compact thyrsoidlobate, 1 to 4 inches long, whitish-green or often richly purple, the branches of the panicle short and covered with spikelets to their base, glumes puberulent-scabid over their whole surface, pales equal obtuse. Last July, when in the company of Mr. E. D. Marquand, at Vale, I saw a grass which I recognized as distinct from any known

British species growing plentifully in the excavated soil near the Vale Castle, and we afterwards found it plentifully not only in such situations, but also by the sides of roads, and other dry bare places in the northern part of Guernsey, and also extending westwards to Vazon and the Grande Mare. On my visit to Alderney I found it in Braye Bay and about quarry debris farther east. I have also detected a piece among some plants I gathered at St. Luke's, Jersey, in the previous June, but this was on some recently disturbed waste ground. In Corbiere's 'Nouvelle Flore de Normandie' it is reported as a southern species naturalised for upwards of 40 years at Cherbourg. From the fact of its not being a native of western France it may be held to be also adventitious in the Channel Islands, and in an area so disturbed by the operations of man as these small islands it must be difficult to decide upon the indigenuity of the species. On the one hand there are the facts of its absence from the opposite coast of France as a native species, and that it has hitherto escaped observation in these islands, while the geographical range is not strongly in favour of its being native here, yet on the other hand it may be urged that it extends up the western coast as far as Spain and Portugal, that it is extremely like *Agrostis alba*, var. *stolonifera*, in appearance, and chooses similar situations, while in its undoubtedly native area it prefers ground which has been disturbed by man, and that it is now very abundant in Guernsey.—G. CLARIDGE DRUCE. Specimens now distributed.

KOELERIA BRITANNICA, Domin (as a sub-species), var. ARISTATA, Domin. E. Mayo, and var. BRACHYPHYLLA, Dom. South Wilts. ('Journ. Bot.' 1906, p. 103).—E. S. MARSHALL.

HOLCUS LANATUS, L., var. ALBO-VIRENS, Reichb. 'Ic. Fl.' t. 1720. Near the Lizard, Cornwall.—G. CLARIDGE DRUCE. ('Journ. Bot.' 1906, p. 32.)

Among the recent publications interesting to our members may be mentioned 'Alien Flora of Britain,' by Stephen Troyte Dunn, B.A., F.L.S., pp. xiv., 208, price 5s., West, Newman and Co., which gives a brief account of many of our alien species, a subject which is receiving greater attention by field botanists at the present time.

'Supplement to Topographical Botany,' Ed. 2, by Mr. Arthur Bennett, F.L.S., has been reprinted from the 'Journal of Botany' by West, Newman and Co., price 3s., 118 pp., as has the 'Index Abecedarius,' an alphabetical Index to the first edition of the 'Species Plantarum' of Linnaeus, price 1s. Compiled by W. P. Hiern, F.R.S.

Subscriptions are invited to a 'Flora of West Lancashire,' by our members; Messrs. J. A. Wheldon and Albert Wilson, 4 Eaton Road, Ilkley, price 10s. 6d.

'Notes on the Life History of British Flowering Plants,' by the Right Hon. Lord Avebury, P.C. Macmillan and Co., price 15s., pp. xxiii, 450, 1905.

'Classification des Saules d'Europe et Monographie des Saules de France.' A. and E. G. Camus, Paris. J. Merich, 1904.

'Die Farn-und Blüten Pflanzen von Tirol, &c.' Prof. Dr. K. W. v. Dalla-Torre and Ludwig Grafen von Sarnthein. Innsbruck, 1906.

'The Trees of Great Britain and Ireland,' by Henry John Elwes, F.R.S., and Augustine Henry, M.A. Vol. i. pp. xiv, 200, tt. 60, Edinburgh. Privately printed. Subscription price, £15 15s.

The first volume of this sumptuous work, in which will be described about 300 species of Trees native to or introduced to Britain, and in which much original work will appear, is excellently done. In it is mentioned a variety of the Weeping Beech which is said to be native in Milton Park, Northants, under the name *Fagus sylvatica*, L., var. *miltoniensis*, Elwes and Henry, and under *Taxus baccata*, L., the var. *fastigiata* (Lind.) is said to be indigenous at Florence Court, Ireland. The var. *Dovastoni* (Loudon) is also included. The Wyre Forest Sorb is named *Pyrus Sorbus*, Gaertn. (vice *P. domestica*, Ehrh.), and the trees in the Botanic Garden at Oxford are said to be seedlings from the Wyre Forest tree, planted by John Sibthorp. *Pyrus latifolia*, Boswell Syme, replaces *P. rotundifolia*, Bechst., and under it are put var. *rotundifolia*, Bechst., and var. *decipiens* (Bechst.), which occurs in Somerset, Denbigh, S. Devon and E. Ross?

*Pyrus intermedia*, Ehrh., synonymous with *P. scandica*, Aschers., has a var. *scandica* (Fries) from Denbigh, Brecon (but not the Isle of Arran), var. *Mougeoti* (Soy.-Will.) from Monmouth and Hereford, and as var. c. the *P. minima*, A. Ley. The name *P. pinnatifida*, Ehrh., is retained (as it is said not to be synonymous with the *P. hybrida*, Moench.) for the Isle of Arran plant, which probably is of hybrid origin. It is the *Sorbus arranensis*, Hedl.

The book is an important addition to the British arboricultural literature.

The year 1906 has been remarkable for the great losses Botanical Science has experienced in the deaths of so many of its devotees. The places occupied by Sir Mountstuart Grant Duff, C. Baron Clarke, William Mitten, Harry Marshall Ward and F. H. Arnold will be difficult or impossible to fill.

Sir M. E. GRANT DUFF, G.C.S.I., born in 1829, died Jan. 12, had a most distinguished career. He was a warm-hearted friend, and a charming litterateur; his 'Notes from a Diary' will give delight to many thousand readers, and his touching and graceful memoir of Lord de Tabley prefaced to the 'Flora of Cheshire,' will make an abiding impression on the memory, and was a worthy tribute to a distinguished man. He loved to see our British plants in their place of growth, and did much to stimulate the love for them in the minds of his many young friends of both sexes. Even during his last illness he was able to write a letter expressing his joy at seeing *Orchis simia*.

CHARLES BARON CLARKE (see 'Journ. Bot.' 1906, p. 370) was born at Andover in 1832, and died at Kew, Aug. 25th, 1906, and published a 'List of Andover Plants' when at Calcutta in 1866. He collected an immense amount of plants in India during his connection with the Educational Department (over 25,000 sheets), which he presented to Kew, but of his Botanical work in India and his publications there is no space here to consider. He was a most charming man, and it was a great delight to meet him at our mutual friend's (Henry Willett) house at Brighton, and listen to the account of his exploration of the Indian flora. It appears to the writer that a really good botanist is one of the most interesting individuals; unlike the devotees of some sciences, the effects

of a field botanist's pursuits seem to give a wider range of thought and culture; and this catholicity of mind Clarke possessed in an eminent degree. 'Every one who knew him loved him.' Only a short time before his death the writer saw him busy at his task of completing the 'Flora of Madeira,' which had remained unfinished since the tragic death of Lowe.

WILLIAM MITTEN (see 'Journ. Bot.' 1906, p. 329) was born at Hurstpierpoint in Sussex, in 1819, and died there on July 27th, 1906. He was by calling a Chemist, and from early years was interested in botany. In 1848 he wrote 'Descriptions of some Plants new to the British Flora' in Hooker's 'London Journal of Botany,' vii., 1848, p. 52, which included *Potentilla mixta*, Nolte, *Filago spathulata*, Presl., under the name of *F. Jussiaei*, Coss. and Germ., *Mercurialis ovata*, Sternb. and Hoppe, *Carex Kochiana*, D.C., *Lolium linicola*, Sond. (see 'E. B. Suppl.' t. 2955), and *Triticum biflorum*, Brign; the last known in our lists as *Agropyron caninum*, var. *Donianum*. Shortly after he recorded for the first time in Britain a plant gathered by Mr. Borrer in Cornwall under the name *F. agraria*, which is the *F. confusa*, Jord. He also discovered the plant named by Mr. J. G. Baker *Myosotis collina*, var. *Mittenii*. But Mitten soon deflected his attention from the Phanerogams to that of Mosses and Hepatics. In this study he soon became facile princeps, his 'Musci Austro-Americana' occupying the whole of the twelfth volume of the 'Journal of the Linnean Society.' For many years he practically named all the Musci for the Kew Herbarium, continuing his work to 1891. At Hurstpierpoint, where for many years he had the close friendship of Borrer, Mitten had an old-world garden, from the point of a gardener an awful place, but to the botanist full of interest. It was a great charm to chat with the keen intellectual devotee of science, and hear him describe Borrer, Sir William Hooker, Jenner, and other botanists of a preceding time. His name is perpetuated in *Mittenia*, Lindberg.

H. MARSHALL WARD, F.R.S., Professor of Botany in the University of Cambridge, born in 1854, died at Torquay on Aug. 26th, 1906, belongs to another school of botanical workers, but although essentially a histologist and a professional botanist,

he by no means scorned our more lowly branch, indeed on one occasion when we were together at Pwlheli, in Carnarvonshire, when the writer found *Agropyron junceum*, Beauv., var. *megastachyum*, he was keenly interested in *Agropyron*, and other grasses of the dunes. For a more complete account of his brilliant career and a list of his works, see 'Nature,' Sept. 13th, 1906.

FREDERICK HENRY ARNOLD, M.A., LL.D. (see 'Journ. Bot.,' 1906, p. 287), was born at Petworth, Sussex, Feb. 18th, 1831, and died at Emworth, May 4th, 1906. In 1887, he published the 'Flora of Sussex,' a small handy volume, but not in the same rank as the 'Floras of Hampshire' and 'Middlesex.' He was a pleasant correspondent, and from 1874 onwards the writer was in frequent communication with him. He wrote the Botany for the County of Sussex in the 'Victoria County History,' but for some years he had scarcely kept in touch with the developments of British Botany.

With all best wishes,

I am,

Yours very sincerely,

G. CLARIDGE DRUCE.

The Rev. H. J. Riddelsdell, St. Michael's College, Aberdare, has kindly consented to act as Distributor and Editor of the Report for 1907. All plants should be sent to him in December, 1907.

---

*ADDITIONAL DESIDERATA FOR THE YEARS  
1907 AND 1908.*

COMPILED BY THE SECRETARY.

× <i>Ranunculus Hiltoni</i> , Groves.	<i>Brassica arvensis</i> , O. K., var. <i>hispida</i> , Lej. and Court.
<i>Nymphaea lutea</i> , L., var. <i>minor</i> , Lej.	<i>Helianthemum Chamaccistus</i> , Mill., var. <i>surrejanum</i> .
<i>Fumaria confusa</i> , var. <i>hibernica</i> , Pugs- ley.	————— var. <i>tomentosum</i> , Sm.
<i>Arabis hirsuta</i> , Br., var. <i>propinqua</i> (Jord.).	<i>Viola nemoralis</i> , Kütz.
<i>Cardamine amara</i> , L., var. <i>erubescens</i> , Peterm.	<i>Polygala serpyllacea</i> , var. <i>vincoides</i> , Chodat.
————— var. <i>umbrosa</i> , D.C.	<i>Silene paradoxa</i> , Sm. ( <i>S. patens</i> Peete).
<i>Radicula Nasturtium-aquaticum</i> , L., var. <i>siifolia</i> (Reichb.).	—— <i>maritima</i> , var. <i>parvifolia</i> , Druce.

- Arenaria leptoclados*, var. *viscidula*, Rouy and Fouc.  
 ————— *scabra*, Rouy and Fouc.  
*Buda* (*Spergularia*) *atheniensis* (Asch. and Schwein.).  
*Ulex Gallii*, var. *humilis*, Planch.  
*Vicia hirsuta*, var. *angustifolia*, Druce.  
*V. tetrasperma*, var. *tenuissima*, Druce.  
*Rubus imbricatus*, var. *londinensis*, Rogers.  
 ————— *castrensis*, Wolley-Dod.  
 ————— *lacustris*, Rogers.  
 ————— *rhombifolius*, var. *megastachys*, Wolley-Dod.  
 ————— *gratus*, var. *sciaphilus*, Lange.  
 ————— *Godronii*, var. *foliolatus*, Rogers and Ley.  
 ————— *leucanthemus*, P. J. Muell. ?  
 ————— *lasioclados*, var. *longus*, Rogers and Ley.  
 ————— *Lettii*, Rogers.  
 ————— *adenanthus*, Boul and Gil.  
 ————— *cinerosus*, Rogers.  
 ————— *dunensis*, Rogers.  
 ————— *regillus*, Ley.  
 ————— *Lejeunei*, Wh. and N.  
 ————— *ericetorum*, Lefv., var. *cuneatus*, Rogers and Ley.  
 ————— *sertiflorus*, var. *scoticus*, Rogers and Ley.  
 ————— *Purchasianus*, Rogers.  
 ————— *horridicaulis*, P. J. Muell.  
 ————— *dumetorum*, var. *triangularis*, Ley.  
 ————— var. *raduliformis*, Ley.  
*Potentilla erecta*, L., var. *sciaphila* (Zimm.).  
*Pyrus latifolia*, Syme, var. *Mougeoti*, Elwes and Henry.  
*Cirsium lanceolatum*, var. *hypoleucum* (D. C.).  
*Rudbeckia laciniata*, L.  
*Centaurea Scabiosa*, var. *Gelmii*, Briq.  
*Picris hieracioides*, var. *gracilis* (Jord.).  
*Hieracium Auricula*, L.  
 ————— *conspersum*, Dahlst.  
 ————— *pinnatifidum*, Lönnr.  
*Leontodon nudicaule*, Merat., var. *arenaria* (D. C.).  
*Erica lusitanica*, Rudolph.  
*Lithospermum officinale*, var. *pseudolatifolium*, C. E. Salm.  
*Myosotis palustris*, var. *nemorosa*, Besser.  
*Orobanche flavescens*, Reut.  
*Salvia Marquandii*, Druce, S. Verbanaca, var. *Marquandii*.  
*prunella laciniata*, L.  
*Plantago lanceolata*, var. *eristachya*, Roehl.  
*Polygonum minus*, var. *albidum*, Braun.  
*Salsola Kali*, var. *tenuifolia*, Moq. Tand.  
*Salicornia stricta*, Dum.  
 ————— *procumbens*, Sm.  
 ————— *pusilla*, Woods, var. *gracillima*, Towns.  
 ————— *intermedia*, Woods.  
 ————— *appressa*, Dum.  
 ————— *lignosa*, Woods.  
*Urtica dioica*, var. *hispida*, D. C.  
*Cephalalanthera latifolia* (Mill.) = *ensifolia*, from Scotland.  
*Liparis Loeselii*, var. *ovata*, Riddelsdell.  
 × *Orchis Evansii* (*O. ericetorum* × *Habenaria conopsea*).  
 × *Ophrys muscifera* × *aranifera*.  
*Narcissus odorus*, L.  
 × *Potamogeton Lintoni*, Fryer.  
*Eriophorum polystachion*, var. *triquetrum* (Fries.).  
*Carex remota* × *muricata* (× *pseudoaxillaris*).  
 ————— *leporina*, var. *argyrolochin*, And.  
 ————— *vulpina*, var. *litoralis*, Nolte.  
 ————— *Pairaei*, F. Schultz. (*C. echinata*, Murray).  
 ————— *Leersii*, F. Schultz.  
 ————— *canescens*, var. *fallax* (Kük.).  
 ————— *elata*, All., var. *homalocarpa* (Peterm.).  
 ————— *acuta*, var. *angustifolia* (Kük.).  
 ————— *Goodenowii*, var. *recta* (Kük.).  
 ————— var. *stenocarpa* (Kük.).  
 ————— var. *chlorostachya* (Reichb.).  
 ————— *hirta*, var. *spinosa*, Mort.  
 ————— *riparia*, Curt, var. *humilis*, Uechtr.  
*Agrostis verticillata*, Vill.  
 ————— *canina*, var. *laevis*, Hack.  
 ————— *alba*, var. *armata*, Celak.  
*Koeleria gracilis*, var. *gypsacea*, Domin.  
 ————— var. *latifolia*, Domin.  
 ————— *britannica*, var. *aristata*, Domin.  
 ————— var. *brachyphylla*, Domin.  
 ————— *arenaria*, Dum.  
*Holcus lanatus*, var. *albo-virens*, Reichb.  
*Glyceria palustris* (Seenus, sub *Festuca*) = *G. festucaeformis*, Heyn.  
*Festuca bromoides*, L., var. *intermedia*, Hack.  
*Bromus hordeaceus*, L., var. *leptostachys* (Pers.).  
 ————— var. *Thomini* (Breb.).  
*Agropyron lepens*, var. *lasiorachis*, Hack.

## REPORT OF THE DISTRIBUTOR FOR 1906.

MUCH trouble is caused to the Distributor by violation of rules, such as sending parcels later than Dec. 31, not writing name of plant on lower left-hand corner of cover, &c. Fixing the label to the specimens, though allowable, commonly results in the specimens being injured in stamping. Plants labelled "var." should have the features mentioned which are thought to constitute the variety.

A very large number, mostly of excellent specimens, were sent in, 4,556 in all, enabling the Distributor to send out good parcels to every contributor. It is desirable that 30 specimens of each plant should, where feasible, be supplied.

Thanks are due to several botanists who have very kindly assisted with notes, viz. Revs. A. Ley, E. F. Linton, E. S. Marshall, H. J. Riddelsdell, W. Moyle Rogers, and Mr. G. C. Druce.

WM. R. LINTON.

Feb. 1907.

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.
Bagnall, J. E., <i>A.L.S.</i> , 84 Wilton Road, Aston, Birmingham	40
Bailey, C., <i>M.Sc.</i> , <i>F.L.S.</i> , Atherstone House, North Drive, St. Ann's-on-the-Sea, Lancashire	194
Bell, W., Knighton Road, Leicester	178
Bickham, S. H., <i>F.L.S.</i> , Underdown, Ledbury	291
Britton, C. E., 39, Carlton Park Avenue, Raynes Park, Surrey	28
Crawford, F. C., 19, Royal Terrace, Edinburgh	20
Cryer, J., 182, Cliffe Wood Mount, Shipley, York	112
Druce, G. C., <i>M.A.</i> , <i>F.L.S.</i> , Yardley Lodge, Oxford	476
Groves, J., <i>F.L.S.</i> , 1, Sibella Road, Clapham, London, S.W.	75
Hilton, T., 1, Clifton Street, Brighton	38
Horwood, A. R., Corporation Museum, Leicester	100
Jackson, A. B., 346 Kew Road, Kew, Surrey	100
Keleey, Mrs. Foord, Quorn Vicarage, Loughborough, Herefordshire	128
Ley, Rev. A. <i>M.A.</i> , Sellack Vicarage, Ross-on-Wye	795
Linton, Rev. W. R., <i>M.A.</i> , Shirley Vicarage, Derby	163
Marshall, Rev. E. S., <i>M.A.</i> , <i>F.L.S.</i> , West Monkton Rectory, Taunton	140
Melvill, J. C., <i>M.A.</i> , <i>F.L.S.</i> , Meole Brace Hall, Shrewsbury	67
Painter, Rev. W. H., Stirehley Rectory, near Shifnal, Salop	134

	No. of Specimens.
Palmer, Miss C. E., The Yews, Odiham ... ..	30
Riddelsdell, Rev. H. J., <i>M.A.</i> , St. Michael's College, Aberdare ... ..	550
Rogers, Rev. W. M., <i>M.A.</i> , <i>F.L.S.</i> , Chetnole, Grosvenor Road, Bourne- mouth West ... ..	18
Shoolbred, W. A., <i>M.R.C.S.</i> , <i>F.L.S.</i> , St. Ann's, Chepstow ... ..	360
Vigurs, C. C., <i>M.D.</i> , Prospect House, Newquay ... ..	115
Waddell, Rev. C. H., <i>M.A.</i> , Saintfield Vicarage, Co. Down ... ..	15
Wheldon, J. A., <i>F.L.S.</i> , 60, Hornby Road, Walton, Liverpool ... ..	139
White, J. W., <i>F.L.S.</i> , Warnham, Woodland Road, Clifton, Bristol ... ..	99
Wilson, A., <i>F.L.S.</i> , <i>F.R.M.S.</i> , 4, Eaton Road, Ilkley, Yorkshire... ..	59
Wolley-Dod, Major A. H., Pymont, Common Road, Walton-on-Thames ... ..	102
	4,556

#### NON-CONTRIBUTING MEMBERS.

- Adair, Joseph, Gill Fort, Egremont, via Carnforth.  
 Babington, Mrs., Brookside, Cambridge.  
 Bellamy, F., *M.A.*, *F.R.A.S.*, 4, St. John's Road, Oxford.  
 Bromwich, H., Cemetery Road, Milverton, Leamington.  
 Bullock-Webster, Rev. Canon G. R., Parkstone, S.O., Dorset.  
 Carr, Prof. J. W., The University College, Nottingham.  
 Comber, John, High Steep, Jarvis Brook, Sussex.  
 Cummings, J., *M.A.*, Eastfield House, Rugby.  
 Dunn, S. T., *B.A.*, *F.L.S.*, 16, High Street, Teddington.  
 Evans, A. H., *M.A.*, 9 Harvey Road, Cambridge.  
 Ewing, P., *F.L.S.*, The Frond, Uddingston, N.B.  
 Farr, E. H., *F.C.S.*, The Laboratory, Uckfield.  
 Fortescue, W. Irvine, *M.B.*, *C.M.*, *J.P.*, 7, Bon Accord Square, Aberdeen.  
 Fryer, Alfred, *A.L.S.*, Chatteris, Cambridge.  
 Gasking, Rev. Samuel, *B.A.*, *F.L.S.*, *F.G.S.*, 26, Yew Tree Road, Walton,  
 Liverpool.  
 Geldart, Miss, Colman Row, Norwich.  
 Gregory, Miss, 34, Montagu Road, Chesterton, Cambridge.  
 Guiton, Stanley, 8, Victoria Crescent, St. Heliers, Jersey.  
 Hanbury, F. Janson, *F.L.S.*, Stainforth House, Upper Clapton, London, N.E.  
 Hirst, C. P., Lockyer's Private Hotel, Llandudno.  
 Hunnybun, E. W., Field House, Buckden, Huntingdon.  
 Johnstone, Lieut.-Col. Henry Halcro, Orphir House, Kirkwall, Orkney.  
 Lester Garland, L.V., *M.A.*, *F.L.S.*, The School House, Victoria College,  
 Jersey.  
 Murray, Rev. R. P., *M.A.*, *F.L.S.*, Shapwick Vicarage, Blandford, Dorset.  
 Peck, C. L., Miss, Avonhurst, Bathampton, Bath.  
 Somerville, A., *B.Sc.*, *F.L.S.*, 4, Bute Mansions, Hill Head, Glasgow.  
 Webster, George, Merton Cottage, Holgate, York.

*Thalictrum flavum*, L., var. *nigricans*, Jacq. In large masses in several spots near Llangorse Lake, Breconshire, 26th July 1906. The black coloration of foliage and stem was conspicuous even in the fresh plant, and has become more marked when dried. The fruits, as usual, are often distorted and swollen by insects, but when not so shew the outline of this variety fairly distinctly. Note the narrow upper leaves, and the fruits as in Reichenbach, t. 43, oval-elliptic, whereas the *T. Morisonii* has broader, blunter leaves and longer fusiform fruits (Rchb. t. 45).—A. LEV. "This is, I believe, the same as a cultivated Welsh plant sent to the Club some years ago, which Freyn named *T. gallicum*, Rouy and Foucaud."—E. S. MARSHALL. "Yes, Mr. Whitwell grew it from a Welsh plant, and I have seen the same form in gardens as well as in wild spots in Carnarvonshire. Herr Freyn named it for me *T. gallicum*"—G. C. DRUCE. The Rev. E. F. Linton says Mr. Lev's plant is "certainly not *T. gallicum*."

*Ranunculus peltatus*, Schrank form. R. Rheidol, Llanbadarn Fawr, Cardiganshire, June 1906. Mr. J. Groves writes respecting these specimens: "Mr. Hiern figured a form with similar leaves to these in his paper upon Batrachian Ranunculi, J. of B., 1871, Tab. 115."—W. H. PAINTER.

*R. Baudotii*, Godr. Old river bed, Ashton, near Preston, W. Lancs. (60), Sept. 1906.—J. A. WHELDON.

*R. acris*, L., var. *tomophyllus* (Jord.). The Quarries, Wirksworth, Derbyshire, 7 July 1906. The hairiness of this plant attracted my attention.—W. BELL. "*R. tomophyllus* (Jord.) I believe."—E. F. L. "I believe that E. F. Linton is right (i.e. it is a hairy form or var. of *R. Boreanus*, Jord.); but I do not know these plants very well."—E. S. M. "I think correct; the rhizome is sub-vertical, the hairs on the stem patent or deflexed, not appressed (as in *Boreanus*), but the leaves are not so densely covered with patent hairs as in typical *tomophyllus*."—G. CLARIDGE DRUCE.

*R. parviflorus*, L. In good quantity on the calcareous cliff, and on the sand of the Glamorgan coast: April 1906. N.C.R.—H. J. RIDDELSDELL. "I have not seen a form quite like this before, it has much of the habit of *muricatus*. The more rounded crenations, the distinct rosette of leaves and caulescent condition, are characters which separate it from the type, as well as the more silky pubescence on the petioles. *R. parviflorus* is very variable in size."—G. CLARIDGE DRUCE.

*Chelidonium majus*, L., var. *laciniatum*, Stokes. Hedge outside

a cottage garden, near Ledbury, Herefordshire, v.-c. 36, 14th May 1904. Doubtless an escape, but I cannot find where it is cultivated.—S. H. BICKHAM. "From the Watson Club Report, 1904-5."—W. R. L.

*Neckeria bulbosa*, N. E. Brown. *Corydalis solida*, Sw. 1819. *Corydalis bulbosa*, DC., 1821. Established for many years in grounds of Meole Brace Hill, Salop. Why is the name *solida* not adopted, preferentially, for this species? *Fumaria bulbosa*, L., is identical with *Corydalis tuberosa*, DC.—J. COSMO MELVILL.

"*Capnoides solida*, Moench. In Bab. Man. ed. ix."—W. R. L.

*Fumaria pallidiflora*, Jord. (*F. capreolata*, L.). Ponsanooth, v.-c. 1, West Cornwall, 21st Sept. 1906.—Coll. F. H. DAVEY. Some beautiful specimens prepared with Mr. Davey's usual skill.—C. C. VIGURS.

*F. Boræi*, Jord., var. *muraliformis*, Cl. Capel — Bangor, 26th June 1901, Llanfihangel-genu, 10th July 1905, Cardiganshire. Named by Mr. H. W. Pugsley.—W. H. PAINTER. The Llanfihangel plant is not the same and appears to be rather type *Boræi*."—A. LEY and W. R. L.

*F. Boræi*, Jord. var. *serotina*, Clavaud. Potatoe-field, Ponsanooth, v.-c. 1, West Cornwall, 20th Sept. 1906.—Coll. F. DAVEY. Some more of Mr. Davey's excellent specimens about which Mr. Pugsley remarks (in litt., 10th Oct. 1906). "A form with sepals smaller than usual and globose fruits. I have seen similar plants from the Channel Islands and elsewhere, and it no doubt approaches *F. muralis*, and perhaps should be raised to separate varietal rank."—C. C. VIGURS.

*F. purpurea*, Pugsley. Duck's Nest, Cubert, v.-c., 1, West Cornwall, 11th May 1905. Mr. Pugsley kindly named this plant for me, remarking "with sepals smaller than usual." I should not have sent these few sheets had I not noted that the plant had not been distributed through this club since it has been separated from *F. Boræi*, Jord.—C. C. VIGURS.

*F.*—A rigid slightly fleshy climbing plant, associated with a shrubby form of *Vicia Cracca*, L., among gorse and heather. Hordle, Hants., about 200 yards from sea cliffs. Aug. 1906.—J. COSMO MELVILL. "The fruit differs from type *officinalis* by being rotund rather than retuse."—A. LEY. "Doubtfully distinguishable from *F. officinalis*."—W. R. L.

*Barbarea arcuata*, Reichb.—Origin side of drain-ditch, Upton-on-Severn, 19th May and 4th July 1906.—S. H. BICKHAM “Right, I believe, seeds longer than broad, corolla persistent.”—A. LEV. “Beautiful specimens of this plant, which is doubtless the *B. arcuata* of many English and Continental botanists, but it differs from the *B. arcuata* of Reichenbach (‘Icones Fl. Germ.’ ii., Fig. 4356) in a character on which Syme (‘E.B.’ iii, vol. i., 173) lays great stress, namely in the seed being broad and short. In Reichenbach’s type, which I have also examined, the seed is long and narrow, i.e., more than twice as long as broad. This Upton plant is what in ‘Flora of Berkshire,’ p. 44, I have called *B. Vulgaris*, var. *decipiens* = *B. lyrata* Aschers., var. *decipiens*, but if anything the flowers are a trifle larger; my plant being near to, if not identical with, the plant wrongly figured by Reichenbach in Sturm’s ‘Deutschland Flora’ as *arcuata*, and this may be the origin of the confusion respecting it by continental authors.”—G. CLARIDGE DRUCE.

*Arabis ciliata*, R. Br. Growing in the barer places of the turf on sea sand, close to the coast in Dog’s Bay, Roundstone, Galway, Sept. 1906. Only a stray plant was in flower. With it were myriads of *Spiranthes spiralis*, (L.)—*S. autumnalis*, Rich., having a delicious odour of white lilac.—G. CLARIDGE DRUCE.

*Alyssum maritimum*, Lam. On waste ground at the railway station, Killarney, Kerry, Sept. 1906.—G. CLARIDGE DRUCE.

*Cochlearia* — ? The Quarries, Wirksworth, Derbyshire, v.-c. 57. *C. alpina*, H. C. Wats, is recorded from this station (‘Fl. Derbyshire’). The shape of the fruit of these specimens does not quite agree with those of *alpina* which I have from the North. These are globose; while I am under the impression that *C. alpina* should have somewhat tapering or pointed fruits.—W. BELL. “The fruits are those of *C. officinalis*. The Rev. W. R. Linton notes that the limestone plant (‘Fl. Derbs.’) considered by J. G. Baker to be intermediate between *littoralis* and *alpina* becomes true *alpina* in cultivation. The Wirksworth plant is of Painter’s recording, I see; therefore not tested by W. R. L. in cultivation; but may be the same as what he has grown.”—E. F. L. “Wirksworth is given as a locality for *C. alpina*, H. C. Wats, in ‘Fl. Derbyshire.’ The foliage and petals decidedly favour that. In nature the shape of the capsules varies more than in books. I should say decidedly a form of *C. alpina*, rather than of *officinalis*.”—E. S. M. “The plant which I cultivated was from The Winnats, near Castleton; the fruits were moderately pointed but not so much so as in Scottish specimens.”—W. R. L.

*C. danica*, L. By the dry moat round Walton Gaol, S. Lancs. (59.) Flowers, May 1906; Radical leaves, Xmas. 1906. This plant is always a very small one, with the radical leaves only occa-

sionally angular lobed. Its flowering period does not agree with that named in Bab. Man. (v. to viii.). It flowers from March to June, and as a rule has quite disappeared long before the end of August.—J. A. WHELDON.

*Draba incana*, L. Thorpe, Mid-west Yorks., Aug. 1906, alt. 1,100 ft. This dwarf condition is the characteristic state of this plant as it grows on a knoll-reef (Elbolton Fell) resting on the black limestone of the carboniferous series.—J. CRYER.

*Erophila stenocarpa*, Jord. Sandy field, Greatham, W. Sussex, v.-c. 13, 13th May 1906. "Yes, *E. stenocarpa*, Jordan, or under it."—E. S. MARSHALL.—T. HILTON.

*Hesperis matronalis*, L. Meole Brace, Salop, July 1905.—J. COSMO MELVILL.

*Sisymbrium Irio*, L. On waste ground on the Iffley Road near Oxford, in great plenty, Sept. 1906. Doubtless the plant was brought to this place with rubbish from the Botanic Gardens, but it has been constant in this locality for the last 6 years, and will remain doubtless until the ground is built upon.—G. CLARIDGE DRUCE.

*S. Columnæ*, Jacq. Penzance, W. Cornwall, July 1902.—C. C. VIGURS. Sent to the Club as *S. orientale*, L., the older name in 1899, see Report for 1899, p. 597; see also Report for 1904, p. 10.—W. R. L.

*Capsella Bursa-pastoris*, Moench, var. *cuneata*, Mott. forma *prostata*. *Bursa pastoris*, Weber, var. *cuneata* (Mott). Port Meadow, Oxford, growing on the recently-disturbed turf which has been replaced over the deposit of street-refuse. Plentiful and the prevailing form. Sept. 1906.—G. CLARIDGE DRUCE. "This looks to me like Mott's var. *cuneata*."—E. S. MARSHALL.

*Thlaspi alpestre*, L. Roadside, Cromford, Derbyshire, v.-c. 57, 7th July 1906. Vars. *virens* (Jord.) and *silvestre* (Jord.) are recorded from Derbyshire ('Flora Dbysh.', W. R. Linton). I do not know these vars.—W. BELL. "I have never gathered *T. virens*, Jord.; but the long style points to that. *T. virens* is recorded by Linton in 'Flora Derbyshire' from Cromford. There is only one station given for *T. silvestre* in the county."—E. S. MARSHALL. Var. *virens* (Jord.).—W. R. L.

*T. virens*, Jord. The High Tor, Matlock, Derbyshire, preferring bare sunny spots. May 1906.—G. CLARIDGE DRUCE.

*Rapistrum orientale*, L. Waste ground west of All Saints' Road, St. Anne's-on-Sea, N.W. Lanc. 13th Oct. 1906.—C. BAILEY.

*R. perenne*, All. West of Brighton, v.-c. 14th, E. Sussex. July 1906; *vide* G. C. Druce.—T. HILTON.

*Reseda stricta*, Pers. Some large plants of this Spanish species are quite naturalized on the stonework of Wytham Mill, Berks. Sept. 1906. I trust I am correct in the above identification, but this is not a very easy genus. The description in Persoon's 'Synopsis,' vol. ii., p. 10, is "Caule simplicissimo, fol. omnibus trifidis linearibus, flor. pendulis, fruct. erectis clavatis, Cal. 6-fidus, rugosus, Cor. fimbriatis, alba." The flowers of plant are tinged with yellow. *R. stricta* is not included in Dunn's 'Alien Flora.'—G. CLARIDGE DRUCE.

*Viola hirta*, L., showing cleistogamous flowers. Lane near Pit, Winchester, 18th May 1906. Specimens of this state of common plant will no doubt be welcome to most members.—A. B. JACKSON.

*V. hirta*, L., *forma nova*? Scraptoft, Leics., 13th May 1906.—A. R. HORWOOD. "This is the 'small form of *hirta*' mentioned in 'Journ. Bot.' 1904, p. 68. I have specimens of it from Box Hill, and Buckland Hill, Surrey. Whether it is deserving of varietal distinction can only, in my opinion, be determined by cultivation."—W. R. L. "Nearest to *V. calcarea*, Greg., though the spur of one flower is longer than is usual. The leaf-folding is pretty conclusive."—E. S. GREGORY.

*V. silvestris*, Reich., *forma leucantha*, G. Beck. Strong plants growing on a made calcareous bank near Porthkerry, Glamorgan, v.-c. 41, 18th April 1906. The flower is small, and very nearly white, with the characteristic spur of the species, and otherwise typical. A New County record.—H. J. RIDDELSDELL. "*Leucantha* I should say."—E. S. GREGORY.

*V. tricolor*, L. Tillage field, Brilley, Herefordshire, 10th September 1905. A handsome, large-flowered form resembling *V. Sagoti*, Jord. I worked this out at the Brit. Museum in company with Mr. E. G. Baker.—AUGUSTIN LEY. "Seems like a degenerate garden pansy."—E. S. MARSHALL.

*Polygala vulgaris*, L. var. On the coast sands at Aberafan and Port Talbot, Glamorgan, v.-c. 41, 30th June 1906. Plant smaller than type, lower leaves absent, probably worn off by trituration, upper leaves much shorter, tough and leathery looking.

Racemes short. The form has neither the flower nor the wing of *P. oxyptera*. The wings are as broad as the fruit, but longer *in proportion to fr.* than in type *vulgaris*. The venation of the wings is less marked and intricate. Fruit and seeds are apparently smaller, even where fully ripened, and the margin of fruit is broader and less clearly defined. Notch of fr. deeper, midvein projecting very shortly, in type it is apparently sunk in margin of fruit. Unless the variations are too slight to notice, I would suggest the name *maritima* for the variety, if it is not already in use.—H. J. RIDDELSDELL. The mature capsules are broader than the sepals; also the habit, foliage, and flowers make for *P. oxyptera*, to which I should rather refer it.—E. S. MARSHALL.

*P. serpyllacea*, Weihe. Hills above R. Perddyn, Glamorgan, v.-c. 41. N.C.R., and in plenty in the county. 9th June, 1906.—H. J. RIDDELSDELL.

*P. serpyllacea*, Weihe, var. *vincoides*, Chodat. Carnmarth Hill (700 ft.), v.-c. 1, West Cornwall, 23rd Sept. 1906. Coll. F. H. DAVEY. I esteem it a great privilege to be able to send these specimens of Mr. Davey's new plant. A description of it, with a plate, appeared in last year's Report of the Watson Exchange Club. I found a few plants scattered around Yelverton, South Devon, this autumn, but they were difficult to disentangle from the surrounding herbage, and it was impossible to get any such good specimens as these.—C. C. VIGURS.

*P. amarella*, Crantz. On the limestone hills near Grasington Wood, Yorkshire, May 1906. Over a considerable area the plant is extremely common, and is dotted about the shoulders of the upper part of the hills, although occasionally found among the turf lower down. I saw no pink-flowered plants, but only deep or pale blue and milky white. The above is the name under which it was first published from this locality in 'Journ. Bot.,' p. 113, 1903, but Professor Chodat gives the same name for the Teesdale plant, which is almost invariably pink in colour. There is great divergence of opinion respecting the nomenclature of this plant. In my opinion it is specifically distinct from the Wye plant which has been identified with *P. austriaca*, Crantz, with which Syme united it as a variety. Nor does the description of Crantz for *P. amarella* in 'Stirpium Austriacum,' fas. v., 439, answer for this plant, since he describes his species as having the flowers of *vulgaris*. It is not the *P. alpina*, Jacquin, since a specimen in Herb. Brit. Mus., as pointed out to me by Mr. E. G. Baker, is also a large flowered plant. But it appears to be specifically identical with the *P. amara* of the Linnean Herbarium and the Systema. I have not examined the base of the capsule of the Linnean specimen, but it may be that Reichenbach is correct in

making the plant, which is said to be identical with the Teesdale form, a var. *alpina*. I cannot agree with Mr. N. E. Brown in 'E. B. Suppl.,' p. 35, in saying that *P. austriaca*, Crantz, and *P. amara*, L., are identical, and his making *amarella* identical with *calcarea* is certainly wrong.—G. CLARIDGE DRUCE.

*P. amarella*, Crantz. This species, which grows on the Great Scar Limestone in the West Riding of Yorkshire, was to be seen the past season in great abundance over a large area. It could be found in many situations and at various altitudes from Sweet Side, Grassington, to Buckden Pike, a distance of about nine miles as the crow flies; from Buckden Pike to Arncliffe, four and a half miles; from Arncliffe to Gordale, five and a half miles; and from Gordale through Bordley to Skythorne, four miles. These districts embrace an area, as measured on the Ordnance Map, of about thirty-six square miles. Specimens seen were from three to eight inches high at an elevation of 750 feet; as the elevation increased, the height diminished, till the plant became less than one inch high. Blue-flowered specimens were found well distributed over the whole area; white-flowered specimens were unequally distributed; rose-coloured plants were only found in one locality, but there it was locally abundant. Spathulate rosettes of root-leaves are the winter state of the plant. One characteristic of *Polygala amarella* is, that it can grow where there is but little soil for its support. I have found it growing on what was almost bare rock; it has the habit of thrusting its roots into the cracks and crevices of rocks or between the stones and rocky fragments. Wherever I have found it, with one exception, there has been little or no depth of soil.—JOHN CRYER. This is, no doubt, what Chodat has called *P. amarella*, Crantz. I do not know whether he distinguishes it from *P. amara*, L., to which, indeed, our *P. calcarea* has sometimes been referred. It seems a good deal different from the Kent and Surrey *P. austriaca*.—E. S. MARSHALL.

*P. austriaca*, Crantz. Bavinge Farm, Kent, on chalk, 12th June 1905.—JOHN CRYER.

*Dianthus Caryophyllus*, L. Rochester Castle walls, 30th Sept. 1905 and 13th July 1906; see Watson Club Report, 1905-6.—S. H. BICKHAM.

*D. gallicus*, Pers. On the sand dunes St. Ouens Bay, *Locus classicus*, Jersey. Limited to a small area over which it is plentiful, the stiff tap-roots of the plants penetrating the soil to a considerable depth. Just coming into flower June 1906. It is difficult to understand that this plant with its beautiful and conspicuous blossoms should have remained unnoticed, if really indigenous there. I think it must be a comparatively recent introduction, although now perfectly established.—G. CLARIDGE DRUCE.

*Stellaria nemorum*, L. Dense wood at Watersmeet, N. Devon, 14th June 1906. I send a few specimens which may be acceptable, since the plant is, I believe, a new record for the Peninsula.—AUGUSTIN LEY.

*S. neglecta*, Weihe. *Stellaria umbrosa*, Opiz., var. *decipiens*, Marshall. South Croxton, Leics., 30th May 1906, v.-c. 55. This plant is local in its distribution throughout v.-c. 55, but where it occurs it is plentiful and robust in habit. It frequents the shaded sides of hedge-bottoms where undergrowth has been allowed to run rank, especially in the neighbourhood of hawthorn hedges which have not been "layered" for several years.—A. R. HORWOOD.

*Sagina maritima*, L. Sea coast between Heysham and Sunderland Point, W. Lancs. (60) 10th July 1906.—ALBERT WILSON and J. A. WHELDON. New to W. Lancs. "This seems to be *S. maritima*, var. *stricta* (Gren. and Godr.)"—G. CLARIDGE DRUCE. "I have never met with this so drawn out as in the larger specimens."—E. S. MARSHALL.

*S. maritima*, Don. var. *debilis*, Jord. Sandy road, Westons.-Mare, 21st June 1906.—S. H. BICKHAM. "Correct."—E. S. MARSHALL.

*Malva sylvestris*, L., var. *eriocarpa*, Boissier. Waste ground near Portishead Dock, North Somerset, 30th July 1906. This is one of a number of alien Malvaceæ which have been observed lately on dock-sides and city refuse heaps at Bristol, and which Mr. Edmund Baker has kindly named for me. It will be seen that the plant is more than a mere hairy-fruited form of *M. sylvestris*, the leaf outline and habit differing widely from the type. I have not found a description in my books. Gussone (*Flora Sicula*) mentions the variety in his index, but was evidently unacquainted with it. Barley from Smyrna is probably the source of introduction.—JAS. W. WHITE. "Var.  $\gamma$ . 'Scœpius hirsuta; carpella plus minusve dense tomentosa,' Boissier, 'Flora Orient.' I. 819."—W. R. L. Not identical with the plant 'Flora Berks,' p. 112, which I named *lasiocarpa*.—G. C. DRUCE.

*M. pusilla*, Sm. Bissoe, Kea, v.-c. 1, West Cornwall, 24th August 1906, Coll. F. H. DAVEY. "I have again to thank Mr. Davey for an excellent series of specimens.—C. C. VIGURS. "Right."—E. F. L. St. Anne's-on-Sea, W. Lanc., 22nd Sept. 1906.—C. BAILEY.

*Radiola Linoides*, Roth. Plentiful on the shore of Llyn Helyg, Flintshire (51); 25th Aug. 1906.—A. A. DALLMAN and J. A. WHELDON.

*Geranium lucidum*, L. Llanilar, Cardiganshire, 29th June 1906. New County Record —W. H. PAINTER.

*Tilia cordata*, Mill. Leaves from stump-shoots; and fruit, King's Wood, near Yatton, N. Somerset, 19th Sept. 1906. When underwood is cut in the old limestone woods below Bristol the stumps quickly produce an abundance of strong succulent shoots. These, in the earlier years of their growth, whether they be oak, hazel, aspen or lime, bear leaves of unusual size and shape. In the case of the two last mentioned trees the difference in area, outline, and texture between these stump-shoot leaves and ordinary foliage is so great that the former would hardly be recognized if the conditions that produced them were not known. I send herewith examples from *T. cordata* stumps in illustration. Most of them are 5—7 inches in length and nearly as broad. They several times exceed their petioles, in contradiction to one of the main characters that distinguish the species. There is, moreover, an exaggeration of toothing and of basal one-sidedness, besides the attenuation into an acuminate point which makes the leaf longer than broad, whereas the length of a typical adult leaf is commonly less than the breadth. This attenuation into a long point is also well marked in the stump-shoot leaves of *Populus tremula*, which make a still greater contrast with the sub-orbicular normal leaves of that tree. I think one must assume that these are examples of hypertrophy due to an excessive supply of water and food-material under pressure. When a tree is coppiced, the stump is so surcharged with sap that many adventitious buds form along the vitally active cambium layer; and these buds, stimulated by the concentrated nutriment available, develop into vigorous shoots bearing abnormal leaves. As the shoots lengthen year by year the hypertrophy diminishes until the bush once more attains full stature, and it then bears only typical foliage. It has been said that the small-leaved Lime produces fruit but rarely, and a walk through our woods might support that idea. The fact is, however, that this tree does not flower until of good age, and that it is often coppiced before reaching that age. Older trees as well as coppice-bushes that escape the usual fate of underwood for a sufficient time flower freely and bear plenty of fruit.—JAS. W. WHITE.

*Ulex Gallii*, Planch., var. *humilis*, Planch. On the rocks at Derrynane, Kerry, also seen at Roundstone, Galway, and at L'Etac, Jersey. New to Ireland and the Channel Isles, Sept. 1906. The gorgeous display of colour afforded by *U. Gallii* in the last sunny September on the West coast of Ireland will be an abiding memory.—G. CLARIDGE DRUCE.

*Medicago tribuloides*, Desr. Plentiful in one place, Shoreham Beach, W. Sussex, v.-c. 13, June 1906.—T. HILTON.

*Arthrolobium ebracteatum*, DC. Tresco, Scilly, July 1875. Coll. John Ralfs and Wm. Curnow.—Comm. J. A. WHELDON. = *Ornithopus pinnatum* (Mill.)—G. C. DRUCE.

*Vicia Cracca*, L., forma. A peculiarly rigid state, not *incana*, Thuill., though approaching thereto. When growing it looked out of the common, the flowers being deeper blue than usual, and general growth very compact. Hordle, Hants, about 200 yds. from sea, Aug. 1906.—J. COSMO MELVILL. Probably a state due to soil and situation.—W. R. L.

*Rubus sulcatus*, Vest. Werfa Wood, Aberdare, Glamorgan, 1st Aug. 1906. Pronounced by Mr. Rogers, who saw it growing in 1905, to be typical *sulcatus*, except for the small panicles and flowers.—H. J. RIDDELSDELL.

*R. plicatus*, W. and N., f. Llanbadarn Fawr, Cardiganshire, 6th July 1906. "Apparently having the flowers of var. *Bertramii* but hardly its stem leaves."—W. M. ROGERS.—W. H. PAINTER.

*R. affinis*, W. and N., var. *Briggsianus*, Rogers. Thicket, Andover Road, near Winchester, 10th Sept. 1906.—A. B. JACKSON.

*R. incurvatus*, Bab., f. *aprica*. Sedbergh to Dent, Mid West Yorks, 4th August 1906. Exceedingly luxuriant, and with leaves conspicuously concave and shiny above. Very near the North Wales type, though with paler petals and stamens, and more nearly rounded and less deeply incised terminal leaflet.—W. MOYLE ROGERS.

*R. Schentzii*, Lindeb. Threlkeld, Keswick, Cumberland, 1st Aug. 1906.—W. M. ROGERS.

*R. nemoralis*, P. J. M., var. *Silvrum*, Ley. On waste ground close to a wood, near Aberdare, Glamorgan, 2nd Aug. 1906.—H. J. RIDDELSDELL.

*R. pulcherrimus*, Neum. × *R. rusticanus*, Merc.—Several adjacent clumps of this hybrid bramble grow on Abrook Common, all sterile, or producing but little fruit. The characters of both parent species are well marked, and one character, derived from *R. pulcherrimus*, that is, the production of leaves with six or seven leaflets, is a very strongly marked feature, much more so indeed than in *R. pulcherrimus*, in which, according to my experience, leaves with more than five leaflets are uncommon.—C. E. BRITTON. We consider this to be certainly a hybrid, but fail to see the presence of *rusticanus* in it: more likely the other parent may be *rhamnifolius* or *Lindleianus*.—A. LEY and W. R. L.

*R. lacustris*, Rogers. Threlkeld, Keswick, Cumberland, 28th July 1906. See 'Journ. Bot.,' Jan. 1907.—W. M. ROGERS.

*R. rhombifolius*, Weihe., var. *megastachys*, W.-Dod. Ref. No. 1454. Walton Common, Surrey, 24th July 1906. Recognized primarily by its much larger, broader panicle, with larger flowers, i.e. longer petals. For fuller description see 'Journ. of Bot.,' Feb. 1906, p. 64.—A. H. WOLLEY-DOD.

*R. rusticanus*, Merc. × *pyramidalis*, Kalt. Ivory Hill, West Glouc., on sandstone, 4th Aug. 1905. Absolutely sterile. Considered by Mr. Rogers to be either this hybrid or *rusticanus* × *leucostachys*, but more probably the former. *R. pyramidalis* grows close by. Abundant over about an acre of ground. Ivory Hill is one of the few morsels of the Saxon Royal Forest of Kingswood that remain in a primitive state. There has therefore been plenty of time for a strong hybrid like this to spread over a large area by rooting at the tip only.—JAS. W. WHITE.

*R. macrophyllus*, var. *macrophylloides*, (Génév.) From a hedge close to a colliery, outside Werfa Wood, Aberdare, Glamorgan, 2nd Aug. 1906. Named by Mr. Rogers in 1905. I took the best specimens I could find, but the coal-dust is thick even on them.—H. J. RIDDELSDELL.

*R. hirtifolius*, Muell. and Wirtg. f. Shirley, Derbs., 1st Sept. 1906.—W. R. LINTON. Apparently best under *R. hirtifolius*, though in stem pieces going off rather towards *R. Selmeri*, and in panicle perhaps towards *R. villicaulis*! Our *hirtifolius* is still considerably aggregate, and this form seems to claim further study a little earlier in the season. The nearly bald stem (on Sept. 1st) need occasion no difficulty.—W. M. R.

*R. leucostachys*, Schleich., forma *aculeata*. Penyard, Herefordshire, 30th August 1906. This well-marked, very prickly form is abundant on the wooded hills rising to the south of Ross, Herefordshire. It is clearly, from its abundance and its free fruit-bearing, not a hybrid.—AUGUSTIN LEY.

*R. lasiocladus*, var. *longus*, Rogers and Ley; see 'J. B.' 1906, p. 58. Gathered in company with Mr. Ley on 11th July 1906, on a railway bank at Ystalyfera, Glamorgan. This is in the Upper Tawe Valley, and an extension of range; it is close to the Breconshire border.—H. J. RIDDELSDELL. By a slip mislabelled *R. longus*.—W. R. L.

*R. Gelertii*, Frider, var. *criniger*, Linton. Repton Rocks, Derbyshire, v.-c. 57.—T. E. ROUTH and W. BELL. "Exactly *R. criniger*, Linton, as I know it."—W. M. ROGERS.

*R. curvidens*, A. Ley. Cwm Eion, Cardiganshire, 2nd July 1906. Named by Mr. Rogers.—W. H. PAINTER. Certainly not *curvidens*. I believe it to be, without doubt, *criniger*, Linton.—A. LEY. I agree, it is rather glabrous and thin-leaved *criniger*.—W. R. LINTON.

*R. Leyanus*, Rogers. Edge of Suff Wood, Howle Hill, Hereford, 27th July 1906. "Yes."—W. M. R.—S. H. BICKHAM. *R. Drejeri*, sub sp. *Leyanus*.—W. R. L.

*R. oigoclados*, M. and L., var. *Newbouldii*, Rogers. The Wrekin, Salop, 20th Aug. 1906. "Just my var. *Newbouldii*. Considerably different from typical *oigoclados* of Dev. and Hertford."—W. M. ROGERS. These specimens are sent in lieu of those gathered by me in 1905. See Report of Club, p. 24, 164.—W. H. PAINTER.

*R. Babingtonii*, Bell-Salt, var. *phyllothyrus* (Frider.). The specimens sent represent a form of the variety abundant in N.E. Surrey on the Bagshot sand formation, especially on the commons about Esher. It is distinguished by its roundish leaflets, often very large panicle, and deep red petals. It keeps quite distinct from *R. Babingtonii*, and on Weybridge Common grows in company with the normal form of the variety.—C. E. BRITTON.

*R. ericetorum*, var. *cuneatus*, Rogers and Ley. See 'J. B.,' 1906, p. 59. In great abundance about Aberdare, Glamorgan. These specimens were taken from Abernant Park, 30th July 1906.—H. J. RIDDELSDELL. Abercrair, South-West Brecon, 11th July 1906. See 'Jour. Bot.,' 1906, p. 59.—AUGUSTIN LEY.

*R. mutabilis*, Génév. A few plants among the ruins of an old iron works, Abernant, Aberdare, Glamorgan, 1st Aug. 1906. Mr. Rogers saw specimens in 1905, and placed them here in spite of the coloured petals and stamens.—H. J. RIDDELSDELL.

*Rubus horridicaulis*, P. J. Muell. From a hedge on a copse border at 800 feet above sea level, near Aberdare, Glamorgan, 10th Aug. 1906. See 'J. B.,' 1906, p. 60, and Rep. 'B. E. C.,' 1905.—H. J. RIDDELSDELL.

*R. Kochleri*, W. and N., var. *cognatus*, N. E. Br. Dolybout, Llanfihangel, Cardiganshire, 10th July 1906. Named by Mr. Rogers.—W. H. PAINTER.

*R. Marshalli*, Focke and Rogers. From a piece of furzy common ground by a lane outside Werfa Wood, Aberdare, Glamorgan, 2nd Aug. 1906. Named by Mr. Rogers, 1905.—H. J. RIDDELSDELL. "See 'Journ. Bot.,' 1906, p. 97."—W. R. L.

*Rubus* — . Senni Valley, Brecon, 7th August 1906. Referred to Rev. W. M. Rogers, this bramble was pronounced by him to be either *hirtus*, W. and K., or *hystrix*, W. and N.: later, the preference was assigned to *hystrix*, *f.*—AUGUSTIN LEY. “ ‘Between *hirtus* and *hystrix* ’ on the labels.”—W. R. L.

*R. minutiflorus*, P. J. M. Bigwood, Whitfield, Herefordshire, 25th August 1906. An enormous and very handsome plant, which I have known for some years, but to which I have been unable to assign a name until it was settled as above by Rev. W. M. Rogers in 1904.—AUGUSTIN LEY and S. H. BICKHAM. “Yes, this agrees admirably with the plant (Highlands, Mereworth, W. Kent) referred to at the foot of p. 89 of my Handbook, as having been named ‘*R. minutiflorus*, P. J. Muell (non Lange !)’ by Dr. Focke in 1896; and I can detect no real difference between them and a rather weaker spec. of Wirtgen’s now in my herb.”—W. MOYLE ROGERS. “Yes.”—A. LEY.

*R. hirtus*, W. and K. Bigwood, Whitfield, Herefordshire, 24th August 1906. Rev. W. M. Rogers said that this might be taken for typical *hirtus*, if any type of the species could be allowed.—AUGUSTIN LEY and S. H. BICKHAM. “Certainly not *rubiginosus*, which is much more strongly armed and less hairy, and has an ovate gradually acum. term. lt. with coarser and partly patent teeth. Its best place, I think, is under aggregate *R. hirtus*, though hardly very near to the type, of which, however, I still have only a hazy idea.”—W. M. ROGERS. “Yes.”—A. LEY.

*R. hirtus*, M. and K., var. *flaccidifolius* (P. J. M.). Suff Wood, Knowle Hill, Herefordshire, 27th July 1906. “This plant must go under *R. hirtus*, M. and K., and comes nearest to *R. flaccidifolius*, P. J. M., differing from it chiefly in the (often) shorter leaves with more cordate base, and less long acumination; still the leaves in the Suff Wood plant vary considerably, some being very short, almost lobate, others just as in the Woburn *flaccidifolius*.”—A. LEY and S. H. BICKHAM. “Most probably correct, I think, though the Beds and Bucks plant, for which Dr. Focke has suggested the name, has much larger and more oval leaflets and a narrower and more pyramidal panicle.”—W. MOYLE ROGERS.

*R. cæsius* × *corylifolius*. Between Stirtloe and Buckden, Hunts, 30th July 1906. The history of this bramble will be found in B. E. C. Rep. for 1886, p. 152 top, for 1887, p. 177.—W. R. LINTON. Why not one of the stronger forms of *R. cæsius*, or (if you think that unlikely) a cæsian hybrid with *cæsius* as the predominant parent? It seems quite barren. I do not know *R. nemorosus*,

Hayne, but I see nothing in Focke's description of it (Syn. R. G., 403) to separate it specifically from an aggregate *R. caesus*.—W. M. R.

*Alchemilla vulgaris*, var. *flicaulis* (Buser). Near Ingarsby Tunnel, Leics., 12th May 1906, v.-c. 55. The specimens sent for distribution last year being of rather abnormal size, a few are contributed for this year of the usual type for comparison, though in all other respects they exhibit the characters of the variety to an equal extent. It may almost be said to be the type of the species locally, *A. pratensis*, Schmidt, being of comparatively rare occurrence in Leics. or the Midlands generally, whilst it seems that the converse obtains in the southern and western counties. The var. *alpestris* (Schmidt) being also confined more or less to the north and west of England, and seldom or rarely in the central counties.—A. R. HORWOOD.

*Rosa mollis*, Sm., var. *cærulea*, Woods. Stony pasture and waste, Cerrig Haffes, West Brecon, 13th July and 2nd August 1906. Abundant at this spot, and apparently quite the plant of Woods. I have not met with it elsewhere in Brecon.—AUGUSTIN LEY.  
*R. mollis*, Sm., var. *cærulea* (Woods)=*R. villosa*, L., var. *cærulea* (Woods).—G. C. DRUCE.

*R. mollis* × *pinpinellifolia*. R. Clunie, Braemar, S. Aberdeen, 24th July 1906.—W. A. SHOOLBRED.

*R. tomentosa*, var. *uncinata*, F. A. Lees, Ref. No. 1451. Hill-side above Llys y Gwynt, near Llanfairfechan, Carnarvonshire, 31st July 1906. This, I imagine, is the original habitat for this variety, at least it corresponds with the locality mentioned as well as with the (only?) characteristic of the variety itself, namely the abnormally hooked prickles. The curvature of these organs varies a good deal, and I have not been able to find a plant in Cheshire with them quite so normal as in these, Mr. Ley, however, tells me that similar plants are frequent in Herefordshire.—A. H. WOLLEY-DOD. Stony pasture and waste ground at Cerrig Haffes, West Brecon, 13th July 1906. This rose is common in many parts of Breconshire, and is apparently the exact plant described by F. A. Lees from Carnarvon. The under surface of the leaves is more glandular than the *R. uncinata* of Herefordshire.—AUGUSTIN LEY.

*R. tomentosa*, Sm. Hedge near Ippolits, between Hitchin and Welwyn, Herts, 25th Aug. 1877.—H. GROVES. "*R. uncinata*, F. A. Lees, form. Nearest to this by the erect sepals and very glandular leaf back, but the thorns less uncinata than usual."—

A. LEY. Dr. F. A. Lees only named it as a variety, and M. Crépin was never quite satisfied as to the position of *uncinata* under *tomentosa*, Sm. See 'Journ. Bot.,' 1896, p. 267, but this is not Lees' plant.—G. C. DRUCE. A low growing bush, with the leaves resembling *R. mollis*, referred by Crépin to his *R. cuspidatoides*.—H. and J. GROVES.

*R. glauca*, Vill. Hedge between Staithes and Hinderwell, N.E. Yorks, Aug. 1894.—J. GROVES. "Would apparently come under *Watsoni* of Baker's arrangement."—H. and J. GROVES. "A very interesting rose; cannot be *R. glauca* on account of the doubly serrate leaves and glandular leafbacks; one of the *tomentosa* section which I would suggest to be placed under *R. uncinata*, F. A. Lees, as *f. glabrata*."—A. LEY. Certainly not restricted *R. glauca*, Vill., but under *R. coriifolia*, Fr. agg.—G. C. DRUCE.

*Rosa foetida*, Bast., Ref. No. 1447. Roadside, Conway Old Road, Penmaenmawr, Carnarvonshire, 1st Aug. 1906. I do not name this with any confidence, but rely mainly on the glabrous or sub-glabrous styles, all other British varieties of the *tomentosa* group having them more or less hairy.—A. H. WOLLEY-DOD. "I do not know *R. foetida*, Bast., but should imagine it to be a much more glandular form than the present. The glands on the under surface here are confined to the midrib or almost so, and the surface of the leaf is eglandular."—A. LEY. "I agree with Mr. Wolley-Dod that this must stand under the segregate *foetida* on account of the glabrous or sub-glabrous styles, though this var. is usually more glandular on the under surfaces of the leaflets, but Déséglise has named specimens quite as little glandular as the present ones."—W. R. L.

*R. tomentosa*, Sm. Thames Ditton, Surrey, 11th Sept. 1875 and 1, 1877.—H. GROVES. "*R. omissa*, Déségl., var. *resinosoides*, Crépin; sepals less truly persistent than is usual in this rose."—A. LEY. This was referred by Déséglise to *R. foetida*, Bast., but Crépin did not consider the leaves sufficiently glandular beneath for that plant.—H. and J. GROVES.

*R. rubiginosa*, L. Slope of Warton Crag towards the sea, West Lancs., 60. 9th Sep. 1906. "I think undoubtedly *R. rubiginosa*."—W. M. ROGERS. It occurs on the scar limestone, a considerable distance from any house, and with only native plants near. But it may be only a denizen, and not truly native. It is new to West Lancs.—J. A. WHELDON. = *R. Eglantria*, L.—G. C. DRUCE.

*Rosa rubiginosa*, × — Ref. No. 1329. Kidnal, Cheshire, 30th July 1906. I am unable to name this Rose. I suggest hybridity with *R. rubiginosa* mainly on account of the presence of

acicles on the flowering branches below the origin of the peduncles. *R. latebrosa*, Déségl., is said to have this characteristic, but differs in other important points, and several continental species are similar, but I cannot make them accord with the present one. The fact that only a small proportion of the fruit ever ripens, though of course no proof, favours the hybrid theory, and another, though even less important point, is the fact that the plant almost monopolizes about 15 yards of hedge-row just as *R. hibernica* does in the Wirral Peninsula, but whether this is due to the effort to reproduce itself by root-runners, in defect of good fruit, or to the *spinosissima* influence in the *hibernica* hybrid, I cannot say. *R. Robertsoni* in Surrey behaves in the same way, but not other hybrids I have seen where there is no *spinosissima*, which is certainly absent from the present plant. Against the *rubiginosa* parentage is the fact that the glands on the leaves, though abundant enough, are very firm and scentless, those of that specie being very conspicuous, and turning darker on drying. The colour of the petals is very pale rose.—A. H. WOLLEY-DOD. “The very regular hooked prickles and the rosy tint of the leaves point to *micrantha* as one parent, and Major Wolley-Dod’s suggestion of *latebrosa* as the other may well be correct.”—A. LEY. “I should guess *R. canina*, L., to be the other parent.”—E. S. MARSHALL.

*R. vinacea*, Baker. Ref. No. 1441. Hedge at Cliffbank, Carden, Cheshire, 26th Aug. 1906. Nearest this I think, but rather larger in all its parts, and leaves more narrowed at base than usual. Baker describes the fruit as “oblong,” but these are unusually so, and much narrowed at the base. The leaves are micro-glandular beneath, which is, I believe, usually the case in this species, but it is nowhere reddish. *R. biserrata*, Mér., which this plant certainly approaches, is described as having a globose fruit, which character has, I think, been overlooked or ignored by British botanists.—A. H. WOLLEY-DOD. Baker’s own *vinacea*, No. 28 in the ‘Herb. Rosarum,’ was a form of *R. scabrata*, Crép. See ‘Journ. Bot.’ 181, 1896.—G. C. DRUCE.

*R. canina*, L., var. *Kosinsciana*, Bess. Bull-in-the-Oak Lane, Leicestershire, v.-c. 55, 20th Sept. 1906. The fruit is globose; peduncles with stalked glands; leaflets nearly orbicular. The Rev. Father Reader was with me when this was collected, and he suggested *R. verticillacantha* (Mérat), or a form near it. “Agrees more nearly, if not exactly, with var. *Kosinsciana*, Besser, which comes between *andegavensis* and *verticillacantha*, and ought to have been in the list I think. I have British specimens.”—E. F. LINTON. *R. canina*, L., var. *Kosinsciana*, Bess., has been reported from Derbyshire; this would appear to be a new record for Leicestershire.—W. BELL. M. Crépin unhesitatingly rejected all the British

*Kosinsciana*, including specimens so named by the Rev. E. F. Linton and J. G. Baker, and put them in his group *R. verticillacantha*. *R. Kosinsciana*, Besser, is, according to M. Crépin, a hybrid of *R. gallica* with *R. Eglanteria* or *canina*. See 'Compte-rendu . . . Bot. Belg.' xxxiii., par. 2, p. 15.—G. C. DRUCE.

*R. canna*, L., var. —? Ref. No. 1001. Elevenshillings, Knighton, Leicester, v.-c. 55, Aug. 1906.—W. BELL. Gathered at a stage when in the dried specimen it is difficult to say whether the sepals will be ascending or reflexed; apparently the former. On other grounds this rose with its long peduncles and indefinite serration is not easy to place, in its young fruiting stage; ripe fruit would materially assist. May be the same as No. 406, a form of *arvatica*; and so I should call it if not subcristate.—E. F. LINTON. Again M. Crépin rejected *R. arvatica* because it was a 'melange de plusieurs especes.' Baker's No. 27, 'Herb. Ros.,' belongs to the group *R. Blondæana*, Rip., and Baker even put some of the subcristate Roses to it.—G. C. DRUCE.

*R. Crépiniana*, Déségl. Hedge near Chelsfield, W. Kent, 16th Sept. 1882.—J. GROVES. This was commented on in Rep. 1901, pp. 10, 11. Déséglise (Cat. Raisonné) describes *R. Crépiniana* as having oval leaflets, ovoid fruit, blood-red, crowned by the persistent calyx." Rouy and Foucaud describe it as having "leaflets oval-acute, green with shallow teeth; fruit ovoid, red." *R. glauca* differs by having broadly oval leaves, glaucous, with veins a little reddish; fruit large subglobose or spherical, orange or orange-red. The above descriptions are the substance of a note sent me by Major Wolley-Dod; he adds that whether *subcanina*, Christ, is the same as *Crépiniana*, is at present not made out, Déséglise's name is the older of the two.—W. R. L. So named by Déséglise. See Report for 1901, p. 10, when the same plant was sent.—H. and J. GROVES.

*R. fugax*, Gren. Ref. No. 1439. Hedge at Cliff-bank, Carden, Cheshire, 26th Aug. 1906. Though this name may be unknown to the majority of British botanists, I am not introducing a new species to them, the name having already been applied by Déséglise to a plant collected by Webb on the banks of the Menai Straits, which he had labelled "*R. Reuteri* [i.e. *glauca*] f. with setose peduncles," and with which my plant agrees very closely except that in Webb's plant the leaf-toothing is not quite identical. Both are certainly *biserrate*, but whereas in Webb's plant one small tooth alternates with one large one, in mine the toothing is really compound, each large tooth being again micro-toothed. The description of *R. fugax* makes the fruit as well as the peduncles setose, but they are not so in Webb's specimens nor in other examples. Were it not for the

obviously rising sepals and soft fruit I might be disposed to suggest the name of *R. Blondæana*, Rip. (= *R. marginata*, Bak. non Wallr.) for this rose on account of the presence of very fine glands on the back of some of the leaves, but they are usually more conspicuous in *R. Blondæana*, which belongs to the *Tomentella* group.—A. H. WOLLEY-DOD.

*R. implexa*, Grenier? Hedge near Shepperton, Middlesex, 11th Sept. 1880.—J. GROVES. "This is a form intermediate between *urbica* and *implexa*, corresponding to the *subcanina* form of *dumalis*."—A. LEY. The same plant was sent to the Club in 1878. The sepals are subpersistent, but it is doubtful whether it would come under *R. glauca*.—H. and J. GROVES.

*Pyrus rotundifolia*, Bechst., var. *decipiens*, N. E. Brown. Minehead, Somerset, 11th June, and Watersmeet, N. Devon, 14th June 1906. The latter station may be a New County Record. The station at Minehead might if it stood by itself be possibly non-native: that at Watersmeet, where the tree grows abundantly in the limestone cliffs, is clearly native. The white felt on the underside of the leaves brings this remarkable plant near *P. Aria*, Ehrh., while the form of leaf cutting, and especially the berry, brown when ripe, deservedly unite it to *P. rotundifolia*, Bechst.—AUGUSTIN LEY. Also from the Somerset locality.—S. H. BICKHAM. "I agree."—E. F. L. *Pyrus latifolia*, Syme, var. *decipiens*, Elwes and Henry.—G. C. DRUCE.

*Sedum reflexum*, L., var. *albescens*, (Haw.) Origin, Babbacombe, near Torquay, Devon, 20th July 1906.—S. H. BICKHAM.

*Bupleurum opacum*, Lange. = *B. aristatum*, Bartl. The Quenvais and sand dunes of St. Ouens Bay, Jersey, June 1906. The English plants usually belong to the var. *nanum* (Koch), but these are fairly typical, although a few small plants are also included. In Guernsey and Alderney the var. *nanum* is the prevalent form.—G. CLARIDGE DRUCE.

*Apium nodiflorum*, Reichb. f., var. Growing on the muddy margins of a small stream in Port Meadow on ground usually submerged, Sept. 1906.—G. CLARIDGE DRUCE. "No statement accompanies the specimens of the features which are supposed to constitute the variety. I have not infrequently noticed states of *A. nodiflorum* similar to this, which have been produced simply by situation."—W. R. L. "A mere 'state,' I believe, not a true variety. I think that the same can be said about the var. *ochreatum*, DC., from the same locality, though it may be rightly named."—E. S. MARSHALL. "Not distinguishable from type: one or two umbels are very shortly stalked, but habit, size and shape of leaves, absence of rooting upper nodes, &c., place it to type (= *vulgare*, F.

Schultz).” H. J. RIDDELSDELL. The specimens were mostly rooting in the soft mud, whereas those which grew under the shelter of the bridge were upright.—G. C. DRUCE.

*A. nodiflorum*, Reichb., f. var. *ochreatum*, DC. On the margins of a small stream, Port Meadow, Oxford, Sept. 1906. The specimens grew on mud and were slightly shaded by the arch of a small bridge under which the plants assumed a more erect form. I have another series collected from the mud in full sun-exposure, from what is usually a water-course, but was then dry. No sharp line of demarcation can be drawn between the local forms of the above plant.—G. CLARIDGE DRUCE. “The specimen sent to me shows no sign of rooting at the nodes, and the leaves and leaflets are large for the variety. In habit and length of ped. it approaches it, but is only shortly removed from *small type* towards var. *ochreatum*, DC.”—H. J. RIDDELSDELL.

*A. nodiflorum*, var. *repens*, Koch. Port Meadow, Oxford, where a series of forms occurs 20th July 1906. See ‘Journ. Bot.’, 1906, p. 189.—A. B. JACKSON. “Certainly not var. *repens*, Koch, which differs in habit, number, shape and cutting of leaflets, number of umbel bracts, and other points. The plant is, however, very similar to var. *pseudo-repens*, H. C. Watson, though differing in number and shape of leaflets.”—H. J. RIDDELSDELL.

*Anthriscus Cerefolium*, Hoffm. Ledbury, Hereford, 8th June 1906.—S. H. BICKHAM.

*Peucedanum sativum*, Benth. and Hook. Coast line between Penarth and Lavernock, Glamorgan, 27th July 1906. The only place in the county where I know of the species as a native. It is a new record for v.-c. 41.—H. J. RIDDELSDELL.

*Galium erectum*, Huds. Llanychairan, Cardiganshire, 7th July 1906. Leg. J. H. Salter, D.Sc., New County Record.—W. H. PAINTER.

*Galium*. In the Park of Mr. J. S. Davy, Copyhold, Sussex, where Mrs. Davy directed my attention to it. It is one of the many forms of *Galium erectum*, Huds., but whether it has received a special name I do not know. June 1906.—G. CLARIDGE DRUCE. “A rather hairy form of *G. erectum*, Huds., I think.”—E. S. MARSHALL.

*Filago gallica*, L. From sandy arable ground near La Valette, Sark, where it was originally discovered by Mr. C. P. Hurst. July 1906.—G. CLARIDGE DRUCE.

*Diotis candidissima*, Desf., *D. maritima* (L.), Cass. In plenty on shingley bar south of Lady's Island Lake, Co. Wexford. In good flower, Sept. 1906.—G. CLARIDGE DRUCE.

*Anthemis tinctoria*, L. This plant grows in great abundance on the railway embankment at Collingham Bridge, Yorkshire, 5th July 1906.—JOHN CRYER. "Beautifully prepared specimens."—W. R. L. Var. *discoidea*. Rodshrone Farm, Preston, v.-c. 14, June 1906.—T. HILTON. "Is, I believe, *A. tinctoria*, var. *discoidea* = *A. discoidea*, All."—G. C. DRUCE.

*Matricaria discoidea*, DC. Abundant in a rough road, Repton to Bretby, Derbs., 26th July 1906.—Mrs. FOORD-KELCEY.

*Artemisia vulgaris*, L., var. *coarctata*, Forsell. I have not been able to have these specimens verified, and I do not know the var. myself. Mr. Newbold is recorded in 'Bagnall's Flora of Warwickshire' to have seen the var. in the same neighbourhood where these were got.—C. H. WADDELL. "Good *coarctata*."—A. LEY and W. R. L. "This, I believe, is the plant of Forselles."—E. S. MARSHALL. "Yes, this is what I take the plant to be. Corbiere ('Fl. Normandie,' p. 326) also separates a var. *vestita*, which has the leaves covered on the under side with a dull-greyish (*grisâtre*) pubescence. These have the silvery-white pubescence characteristic of the typical plant."—G. CLARIDGE DRUCE.

*Petasites albus*, Gaertn. In the wood under Belfield, near Ferry Nab, Windermere Lake, Lancashire, 12th April 1906.—C. BAILEY.

*Senecio vulgaris*, var. *radiatus*, Koch. Cardiff Docks, Glamorgan, v.-c. 41, in plenty; with *S. squalidus*, *S. squalidus* × *vulgaris* (in small quantity), and other senecios, 11th April and 15th May 1906. This gathering is sent for purposes of comparison with other gatherings sent herewith, on which I should be glad to have light thrown. I have not sent the hybrid × *S. squalidus* × *vulgaris*, as I could only satisfactorily place here quite a few plants.—H. J. RIDDELSDALL. "No, the ligules are much too large. The foliage resembles *S. vulgaris*; perhaps it may be *S. squalidus* × *vulgaris*, if not a distinct species."—E. S. MARSHALL. "Correct so far as the two smaller specimens are concerned, but the larger may have a strain of *squalidus*, since the ligules are much longer and broader."—G. C. DRUCE.

*Senecio*, sp. (A.) Cardiff Docks, Glamorgan, v.-c., 41, 15th May 1906. I believe this is very near *S. vernalis*, Waldst and Kit. Pl. Hung. I. 23, t. 24: which is described as follows: Stem pilose-

lanate. Annual. Stem erect, 18 inches or less in height, much branched. Branches axillary, crowded at base of stem. Leaves pinnatifid; pinnae short, distant, unequal, unequally toothed, curled. Lower leaves with apparently a broad petal, upper auricled, clasping; top leaves terminating in a blackened seta. Flowers in terminal 3—7 headed cymes. Ped. unequal 1-2 fld., with 2-3 subulate sphacelate bracts. Cal. subcylindrical, ovate at base, with narrow linear ligules, sphacelate at top: inner about 20: outer 18 adpressed,  $\frac{1}{4}$  shorter. Anthode with 11-12 ray florets: disc rather prominent, hemispherical—H. J. RIDDELSDELL.

*Senecio*, sp. (B.). Cardiff Docks, Glamorgan, v.-c. 41, June 1905. This is very near *S. vulgaris*, but seems to differ in deep and profusely toothed cutting of leaves, in few-flowered cymes, in less cylindrical anthodes (with rounder base), which are also rather larger; and somewhat longer ped., as well as in ray florets. All the specimens sent are from *one* large plant, which showed no central stem; the stems were arranged round the root, and were all nearly erect from a decumbent base.—H. J. RIDDELSDELL. “Not *vulgaris*, but looks intermediate between that and *vernalis*.”—A. LEY and W. R. L.

*Senecio*, sp. (C.) Cardiff Docks, v.-c. 41, 11th April 1906. I suppose only *S. vulgaris* var. *radiatus*, Koch., but if so, much more hairy than usual; the foliage was quite grey with long dense hairs as well as from a powdered look of the surface, and the habit was so remarkable as to be worth a note. A dwarf plant, with stems (none in the centre) arranged in a circle, ascending: so compactly placed, and with the flowers so numerous, as to form an almost unbroken ring of colour. The plants would have been a suitable garden ornament, and were very distinct in appearance from the ordinary var. *radiatus* which abounded in the neighbourhood.—H. J. RIDDELSDELL. “These are very puzzling plants. Forms of the allied European species *S. crassifolius*, *S. gallicus*, and *S. vernalis*, are difficult to discriminate in the dried state. A. and C. are very like *vernalis*, but that usually has longer peduncles, and the anthode is more hemispherical. *Crassifolius* is eliminated by those specimens having black points to some of the phyllaries, whereas in *crassifolius* they are concolorous, the leaves too in that plant are thicker in texture. *Gallicus* has black achenes, these are brown, studded with stiff hairs on the ridges, the leaf outline too is different. *S. rupestris* is a plant I am not well acquainted with, its ally *S. nebrodensis*, in description, comes near to these, but I should be inclined to consider them hybrids of *vulgaris*  $\times$  *squalidus* (=  $\times$  *Baxteri*, Druce), the influence of the latter being shown by the larger anthodes with conspicuous ray florets, by the sharply pointed lips to the leaf divisions and by the smaller amount of wool. The achenes have a good deal of silk hair on the ridges. About 70 % of the achenes were

barren in the heads I examined. B. is nearer to *squalidus* than A. or C. A careful examination when in the fresh state would be helpful in arriving at a more positive conclusion. I have seen plenty like B. at Oxford and Reading, and felt little doubt as to their hybrid origin."—G. C. DRUCE.

*S. viscosus*, L. On the ballast of the permanent way near Reading Station, Berks. Introduced since 1904. Not previously recorded for the county. August 1906.—G. CLARIDGE DRUCE.

*Senecio*, ———? Odiham, N. Hampshire, 31st July and 6th Sept. 1906. I am sending these specimens wishing to know how to name them. No. 1 came up spontaneously in a very little cultivated part of my garden. All sheets are from one plant 4 feet in height, and with a girth at the base of stem  $2\frac{1}{2}$  inches in circumference. No. 2 also all sheets from one plant, growing in a waste piece of ground not far off. This one had a more scattered growth than No. 1, and was quite 5 feet in height. No other senecio was growing near except *S. vulgaris*, and before this they had not appeared, neither have I seen any but these two plants. I know not whether to refer them to *erucifolius*, L., or to *Jacobea*, L., or whether they might be a cross between the two.—C. E. PALMER. "No. 1 has pubescent achenes, No. 2 glabrous achenes. These are evidently a form of *S. Jacobea*, L., how much of the variation is due to rich soil, and greater shade one can only surmise. So far as a named variety these plants come most nearly to *S. nemorosus*, Jord., reduced to a var. of *S. Jacobea*, in 'Lor. et. Barr. Fl. Mons.' p. 337. Rouy and Foucaud give the description 'racine bisannuelle, tige plus élevée rougeatre, feuilles a pointour obovale, à segments plus larges et plus allongés, calathodes petites en corymbe ample et lache floraison ordt. assez tardive.' These specimens have green stems, but in other respect fairly answer the description. I notice, too, that the date of flowering agrees with that of this variety.—G. C. DRUCE.

*S. squalidus*, L. Linley, Salop, 4th June 1906, Leg. G. POTTS. This plant is invading Shropshire on the S.W. side, on the borders of Radnorshire; and on the S.E. side by the Severn Valley.—W. H. PAINTER. "Achenes glabrous; see Rep. for 1904, 24-5."—W. R. L. "Correct as var. *leiocarpus*."—G. C. DRUCE.

*Cnicus tuberosus*, Roth.? From Nash Point, Glamorgan, v.-c. 41, 26th July 1906. I send another supply of this thistle (cf. Report 1904) to say that it does not alter in appearance under cultivation, except to grow more luxuriant. I have not been able to get to it at Nash Point in the fruiting stage; and it has not yet shown signs of fruiting in the garden, probably because it has not yet flowered very freely there. The root is thick, fleshy, and tuberous, much like that

of *C. tuberosus*. A similar looking plant gathered at Carliff in 1904 and 1905 alters considerably under cultivation, the leaves losing their deep lobes and becoming almost entire, and much like those of *C. pratensis*, and the phyllaries becoming broader. Perhaps some of the continental referees of the Club may be able to throw light on the puzzle.—H. J. RIDDELSDELL. "We consider this to be good *tuberosus*. It was reported on inconclusively in the 1904 Report."—A. LEY and W. R. L. "Very close to *tuberosus*, but until I have seen the roots I still lean rather to its being a *pratensis* hybrid."—G. C. DRUCE.

*C. arvensis*, Hoffm., var. *setosus* (Bess.). In abundance in a small belt of plantation newly formed near the railway station, Ross, Herefordshire, August and September 1906. Unknown hitherto in the county, and there is no evidence how it got to its present station.—AUGUSTIN LEY.

*C. arvensis* (Curt.), var. *argenteus*, Vest. Waste ground, Wells Street, Leicester, v.-c. 55, Aug. 1906. My attention was first drawn to this thistle by the white appearance of the underside of the foliage. It was growing on a bank near the G.C. Railway, and well above the street level. When the breeze bent the plants over and allowed the sunshine full play on the underside of the leaves the contrast with the type—which was equally plentiful—was great. At first I thought it might be caused by an attack of some insect or fungus; but on closer examination I believe it to be the form *argenteus*, F. B. White (Bab. Man. ix. ed.), N C.R.—W. BELL. "This seems to blend the characters of vars. *mitis*, Koch., and var. *vestitus*, Koch. (= *Cirsium argenteum*, Vest). B. White simply gives the leaf character from Koch and the name  $\gamma$ . *argenteus*, Vest. I think it should be called var. *argenteus*, Vest."—E. F. LINTON. "I do not know White's variety. It seems to be var. *vestitus*, Koch., or very near it. The leaf-cutting is not bad for *mitis*. As a variety, White's name should probably stand if given under *Cnicus*; for Vest apparently described it as a species. If his name is retained, you should write it *vestitus* (Vest)."—E. S. MARSHALL. "Hoffman is the authority for *Cnicus arvensis*. This plant appears to answer the description given by Mr. F. N. Williams ('Prod. Fl. Brit.,' p. 52) for *Cirsium arvense*, var. *incanum*, Ledeb., i.e. *Cirsium arvense*, var. *vestitum*, Wimm. and Grab."—G. CLARIDGE DRUCE.

*Centaurea Scabiosa*, L., var. *succisæfolia*, Marshall. In small quantity in one or two spots on the coast of Gower, Glamorgan, v.-c. 41, July 1906. The type with which it grows is in great preponderance and attains greater size. There are signs of transition between the forms, possibly owing to the action of hybridis-

ation. The signs of transition are of two kinds: (1) the leaves are slightly divided; (2) the base leaves are quite undivided, but the stem leaves are of the deeply divided type. The plant grows on the cliff face, in full exposure: the leaves are thick and succulent, and though they do not dry a good colour, yet they dry quickly and surely. First discovered here in July 1897. H. J. RIDDELSDELL. "Quite like my plant from Tongue Bay, W. Sutherland."—E. S. MARSHALL. "Mr. F. N. Williams ('Prod. Fl. Brit.,' p. 63) identifies this with the var. *Gelmii*, Briquet in 'Bull. Herb. Boiss.,' 1897, p. 475, which precedes the above-named. Gaudin's var. *integrifolia* ('Fl. Helv.' iii., p. 404, 1829) which Mr. Williams queries as synonymous should be compared."—G. CLARIDGE DRUCE.

*Hieracium Pilosella*, L., var. *concinatum*, F. J. H. Wall tops and banks, Countisbury, N. Devon, 14th June 1906. New County Record?—AUGUSTIN LEY. "No, this has the heads pilose as well as glandular. I cannot see how it is separable from the type."—E. S. MARSHALL. My specimens have glandular heads, but I have found in the same patch or cluster of *H. Pilosella* plants with glandular and with pilose heads; the variety is a stout dwarf short stolonated plant, with crimson ligules, and glandular white hoary heads; the present specimens do not exhibit these characters well.—W. R. L.

*H. stoloniflorum*, Wimm. On the railway bank near Hanslope, Bucks, in great quantity, and extending its area, June 1906.—G. CLARIDGE DRUCE.

*H. praealtum*, Vill. These are better specimens of the plant which I have already distributed through the Club from the same locality, i.e., railway banks, between Hanslope and Castlethorpe, Bucks, where it is very abundant, and is slightly increasing its range. Its continental range is general, other than Britain, Scandinavia, North Russia, Finland, Spain and Portugal, June 1906.—G. CLARIDGE DRUCE.

*H. Schmidtii*, Tausch., forma. By the river at Watersmeet, N. Devon, 14th June 1906. Best I suppose under the type.—AUGUSTIN LEY. "Typical var. *eustomon*, Linton."—A. LEY and W. R. L.

*H. argenteum*, Fr., fide the Revs. A. Ley and W. R. Linton. On Craig Fawr, Treorchy, Glamorgan, 7th July 1906. Growing in company with *H. cambricum*, Ley. The species is hitherto recorded from Radnorshire only in South Wales. The soil is the Pennant grit rock. The quantity of specimens available was small: and the quality not very good.—H. J. RIDDELSDELL.

*H. britannicum*, F. J. Hanb. Gathered 15th June 1904, on Craig Cil-le, Breconshire, v.-c. 42, in company with the Rev. AUGUSTIN LEY, who distributed plants from the same locality last year.—H. J. RIDDELSDELL. "See 'Rep.' 1904, p. 29. *H.* — Craig Cil-le, &c. I now consider this to be a new form not identical with *stenolepis*, and which Mr. Ley will probably describe." —W. R. L.

*H. vagense*, A. Ley. Origin Gloddaeth, and on rocks near Llandudno Junction, Carnarvon. Garden, Sellack, 23rd June 1906. This plant becomes under cultivation exactly the original plant of the Wye valley in Brecon and Radnor.—AUGUSTIN LEY.

*H. silvaticum*, Gouan., var. *asymmetricum*, A. Ley. Origin, Ingleborough Range, West Yorks. Garden, Sellack, 30th June 1906. I have both this variety and var. *tricolor*, W. R. Linton, under cultivation, and they remain distinct, though very near one another AUGUSTIN LEY.

*H. serratifrons*, Almq., var. *Cinderella*, A. Ley. This form was at first put to *H. ciliatum*, Almq., but Mr. Ley has recently transferred it, and described it as a variety of *H. serratifrons*. See 'J. Bot.' 1907. It has a wide distribution in Glamorgan, apparently extending in small quantity to the coast near Barry; but it occurs abundantly in some places on the coal measures and the mountain limestone, &c., in woods and by stream sides, as well as on dry hedge banks. The specimens sent (all of which Mr. Ley has seen) were gathered (1) at the end of June 1905, in Mr. Ley's company, along the line of limestone and sandstone hills about Llanishen and Caerphilly. (2) In June 1906 in the woods about Taffswell. (3) In June and July 1906 in several parts of the Upper Neath Valley.—H. J. RIDDELSDELL. Also from Caerphilly.—A. LEY.

*H. subulatidens*, Dahl., var., *cuneifrons*, A. Ley. See Linton's 'British Hieracia,' p. 48. Origin Craig Cil-le, Brecon; garden, Sellack, 23rd June 1906.—A. LEY.

*H. petrocharis*, Linton. Rocks by Glen Ey Burn, near Braemar, S. Aberdeen, 28th July 1906.—W. A. SHOOLBRED.

*H. sagittatum*, Lindeb., forma. Fanfechan Cliffs, Carmarthen, 4th July 1906: and origin Fanfechan: garden 4th July 1906. Not I believe the typical Scandinavian plant, which occurs in Scotland; nor any of the named varieties described by Rev. W. R. Linton in his handbook. Two or more forms of *H. sagittatum* occur in Breconshire.—AUGUSTIN LEY and W. R. LINTON.

Var. *philanthrax*, Dahlst. Streams 1,200—1,500 ft. Glen Shee, E. Perth, 14th July 1906.—W. A. SHOOLBRED. "Agrees closely with W. Yorks. plants, though diverging in some slight respects from the Scandinavian form."—W. R. L.

*H. dissimile*, Lindeb. Coolah Burn, Glen Beg, E. Perth, 12th July.—W. A. SHOOLBRED. The specimens comprised two forms; one with sharply cut leaves is the *H. dissimile* form of 'Set Brit. Hier.', the other, with less toothed or subentive leaves and fewer and more slender glands on the heads and peduncles, comes rather under *H. cæsium*, Fr., var. *insulare*, F. J. Hanb.—W. R. L.

*H. acroleucum*, Stenstr., var., *dædalolepium*, Dahlst. Riverside, Glen Shee, E. Perth, 16th Aug. 1906.—W. A. SHOOLBRED. "I think this is nearer the type; the heads in the variety are almost pilose."—W. R. L.

*H. acroleucum*, var. *mutabile*, Ley. Abundant on granite refuse, Mount Sorrel Quarries, Leics. The Rev. W. Linton writes, 22nd Oct. 1906: "The plant has only previously been found in S. Wales and that part of England." 23rd Oct., 1906.—F. L. FOORD-KELCEY. "Excellent and typical."—A. LEY. Also from Pontfaen, Breconshire, 4th Aug. 1906. Plants such as these are not seedlings but show the stature of the plant when growing on dry mountain banks.—A. LEY.

*H. pinnatifidum*, Lönnr. Woods in the Ogwen Valley below Bethesda, Carnarvon; July 1904. Apparently abundant in the neighbourhood.—AUGUSTIN LEY. "Agrees very closely with the Scandinavian plant Lindeberg's exs. No. 74; Dahlst. exs., i., 84, 85; 'Hb. Hier.,' Scand. cent., ii., 86."—W. R. L.

*H.* — Watersmeet, N. Devon, 14th June, and Upper Tawe Glen, Brecon, 5th July 1906. The name I have been giving to these plants is *H. scanicum*, Dahl.; but I must leave it to those who know more than I to decide whether it is correct.—AUGUSTIN LEY. Upper Tawe Glen, Brecon, 5th July 1906.—W. R. LINTON. ✓

? *H. scanicum*, Dahlst. This name is used, at present, only provisionally, as Mr. Ley informs me, for many plants which, in Glamorgan and South Wales, were called *H. diaphanoides*. It is very near *H. irriguum*, Fr. The specimens distributed were gathered at Ystalyfera in Glamorgan, on the borders of Breconshire, at the beginning of July 1906, and in the Rhondda and Aberdare Valleys in 1903. But the form is very widely distributed in the county, and is far the most frequent hawkweed there.—H. J. RIDDELSDELL.

Llanilar, Cardigan, 6th July 1906, under name of *H. irriguum*.—W. H. PAINTER. "It is doubtful whether *H. scanicum* and *H. irriguum* can be kept apart from each other. *H. scanicum*, as described in Dahlst. Bidr., iii., p. 89, differs from *H. irriguum* in the long white hairs of the stem, the broader oval subentive or less toothed leaves, the rather thicker heads, narrower phyllaries, and styles more nearly pure yellow; the above specimens agree rather with *H. scanicum*, which however, as already implied, is scarcely more than a slight variety of *H. irriguum*.—W. R. LINTON.

? *H. cacuminatum*, Dahlst. This name appears (provisionally) to cover 'all the common *sciaphilum*—like plants which we used to put to *sciaphilum*—wherever the ligules are glabrous,' as Mr. Ley informs me. *H. cacuminatum* has considerably fewer stem leaves than has *H. sciaphilum*. It is a common plant in Glamorgan. These specimens were gathered at Ystabyfera, Gowerton, Ewenny Down, &c., in July 1906.—H. J. RIDDELSDELL. Woods, Lower Chapel, Brecon, 31st July; road-bank, Harewood, Herefordshire, 23rd July 1906. Named on the authority of Rev. W. R. Linton.—AUGUSTIN LEY. For a notice of this plant and the next, see 'Journ. Bot.' 1907.

*H. cacuminatum*, Dahl. var. *barbareæfolium*, Lönnr. Wall top, Pen-cae, Brecon, 7th July 1906. See on *H. cacuminatum*, above.—AUGUSTIN LEY. Quarries, Wirksworth, Derbs., 7th July 1906.—W. BELL. "*H. sciaphilum* has a very close panicle with a number of parallel subpatent branches, which gives the panicle a marked and characteristic look. The number of leaves on the stem is only a reliable feature in well developed plants. All the above, including the Pen-cae plant, I think, *H. cacuminatum* type."—W. R. L.

*H. protractum*, Fr. Origin, Hepste Glen, Brecon. Garden, Sellack, 30th June 1906. This plant has unfortunately been wrongly labelled, it should be 983 *H. truncatum*, Lindeb. Origin, Mellte Glen. See Linton's 'British Hieracia,' p. 75. Will members kindly make necessary correction?—AUGUSTIN LEY.

*H. sparsifolium*, Lindeb., var. *Lingua*, A. Ley. Origin, West Brecon. Garden, Sellack, 23rd July, 1906. See Linton's 'British Hieracia,' p. 79.—AUGUSTIN LEY. Var. *longiciliatum*, F. J. Hanb. Glen Clunie, S. Aberdeen, 17th July 1906.—W. A. SHOOLBRED. "Characteristic specimens of the variety from the locus classicus."—W. R. L.

*H. rigidum*, Hart., type? Origin, Fanfechan, Carmarthen. Garden, Sellack, 18th July 1906. So named for me by Rev. W. R.

Linton, in 1904. The style, however, in this plant is yellow.—  
AUGUSTIN LEY. “Yes, I think type *H. rigidum*. New County  
Record.—W. R. L.

*H. rigidum*, Hart., var. *Friesii*, Hartm., forma. Road and  
riverside bank, Pont-faen, Brecon, 4th August 1906. This plant  
is placed by Rev. W. R. Linton without hesitation under *H. Friesii*,  
Hartm. It agrees with this in the clothing of the leaves, stem, and  
phyllaries; but differs in being often pseudo-phyllipodous.—  
AUGUSTIN LEY.

*H. strictum*, Fr., var. *subcrocatum*, Linton. Origin, Reaps-  
moor, Staffordshire (Rev. W. H. Purchas). Garden, Sellack, 24th  
July 1906. See ‘Rep. B. E. C.,’ 1902, p. 56 (under the name of  
*H. crocatum*, Fr.). The present name was given to this plant in  
1906 by Rev. E. F. Linton, and is undoubtedly the true one.—  
AUGUSTIN LEY.

*H. corymbosum*, Fr., var. *salicifolium* (Lindeb). Origin, Glyn  
Taffechan, Brecon. Garden, Sellack, 24th July 1906.—AUGUSTIN  
LEY.

*H. boreale*, Fr., near *H. sabaudum*, L. Near Shirley, Derbs.,  
13th Aug. 1906. The upper leaves are rounded subcordate at the  
base, and the stem roughly hairy throughout.—W. R. LINTON.

*Leontodon autumnalis*, L., var. *simplex*, Duby. Yelverton, South  
Devon, v.-c. 3. This form was very plentiful around Yelverton;  
but in more sheltered spots and on richer soil it gradually merged  
into the type. Query—is it worthy of varietal rank?—C. C.  
VIGURS. “The above evidence is against its being more than  
a form.”—A. LEY and W. R. L.

*Taraxacum officinale*, var. *erythrospermum* (Andrz.). Downs  
near Winchester, 18th May 1906. This pretty compact growing  
form was abundant over a small tract of the Winchester Downs, in  
places which had been bared of turf. The specimens have the  
characteristic dark red achenes.—A. B. JACKSON. “Appears to be  
the variety.”—W. R. L. “This is our plant so named, which I  
consider specifically distinct from var. *Dens-leonis* of ‘Lond. Cat.’  
I grew coast-plants for two seasons in the garden at Milford,  
Surrey, and found the characters quite stable.”—E. S. MARSHALL.

*Ambrosia trifida*, L. On land formerly sandhills off All Saints’  
Road, St. Anne’s-on-Sea, W. Lanc., 22nd Sept. 1906.—C. BAILEY.

*Campanula latifolia*, L. Merthyr Mawr, Glamorgan, v.-c 41,  
26th July 1906. A New County Record. Can it be this plant to

which the record in 'Journ. Bot.,' 1902, p. 317, refers?—H. J. RIDDELSDELL. "The plant recorded in 'Journ. Bot.,' 1902, is *C. rapunculoides*."—W. R. L.

*C. rotundifolia*, L., var. *montana*, Syme. Craig Gledsiau, 6th August, and Frau Nedd, 7th August, Brecon, 1906. The name of *lancifolia*, Mert. and Koch., has been given to this mountain form; I believe quite wrongly, e.g., in 'Bab. Man.' ed. ix.—AUGUSTIN LEY. "*Lancifolia* is a tall robust plant 12—18 ins. high or more, with lower leaves broader than type, oblong-lanceolate, and upper leaves gradually decreasing, Syme 'E. B.' iii. v., p. 13, 1866; *montana* is a small mountain plant with lower stem leaves, elliptical to oblong-lanceolate, and flowers solitary or much fewer than type. Mr. Ley's plant is much nearer the latter, though it may be questionable whether it is a good variety. See Reports for 1888, pp. 224-5, and 1893, p. 420."—W. R. L.

*C. Rapunculus*, L. Occurs occasionally outside the kitchen garden at Underdown, Ledbury, 4th July 1906. The garden is a very old one, was it formerly cultivated?—S. H. BICKHAM.

*Specularia hybrida*, A. DC. Cornfield between East and West Leake, Notts, July 1906. N. C. R.—A. B. JACKSON.

*Erica Mackaii*, Hook. On Craigga-more, a stony moorland hill of about 250 feet elevation, and on the adjoining heath on peat, apparently avoiding the wetter portions, and in profuse flower in the drier places. Abundant over a limited area, and keeping remarkably true in its botanical characters. Near Roundstone, Galway, September.—G. CLARIDGE DRUCE.

*Hottonia palustris*, L., Mud form. Wytham Meadows, Berks., Aug. 1906. The drought of this abnormal summer dried up some of our deep ditches and pools. In one of these places, a well-known locality for this species, it was growing on the mud.—G. CLARIDGE DRUCE.

*Primula elatior*, Jacq. Kingston Wood, Cambridgeshire, May 1906.—G. CLARIDGE DRUCE.

*Myosotis* ——. A small and pale flowered plant which was very plentiful and unvarying in appearance occurred on the sides of the railway between Roads and Hanslope, Bucks., June 1906.—G. CLARIDGE DRUCE. "*M. arvensis*, dry ground form."—A. LEY and W. R. L.

*Solanum Dulcamara*, L. To show the seedling leaves. Walton, S. Lancs., July 1906.—J. A. WHELDON.

*Linaria purpurea*, Mill. Naturalised in Churchyard and on old walls, Hythe, E. Kent, 10th July 1906.—F. L. FOORD-KELCEY.

*Limosella aquatica*, L. Port Meadow, Oxford, Aug. 1906. *Limosella* was first found near Oxford by Sir Joseph Banks about 1760, but Sibthorp records it in 'Fl. Oxon.' 1794 from Noke, and Binsey Common, the latter doubtless the locality where Banks found it. In 1820 Baxter found it on Port Meadow, and by the towing-path near Medley Lock, which is close to the Binsey locality, and also on Cowley Marsh on 11th Sept. of that year. Since that time till 1905 we had no record of its being refound in any of these localities. Year by year I have made search for it in vain, nor has any one of the numerous workers at our local flora been rewarded by finding it. In 1905 however, I discovered two or three plants on the S.E. of Binsey Common, growing on the muddy margin of a ditch. This year Mr. A. B. Jackson found it on the muddy bed of a dried up pond on Binsey Common in abundance, and I also found it near Upper Wolvercote on Port Meadow, and on the dried up site of a pond at Noke. The prolonged drought appeared to be favourable to its appearance, as it prevented the plant being overshadowed by *Lemna* or *Glyceria*, etc. It is not a little singular that the plant should have for so long a period been able to exist without being noticed. I may say that although in August the plant almost made a carpet on the mud, seeding very copiously, by the middle of September there was hardly a vestige left, the plant having been scorched by the sun. Does it exist like *Eleocharis acicularis* is capable of doing for many years without flowering, and then when brought to the light and air, only produces its seeds?—G. CLARIDGE DRUCE.

*Euphrasia* —? Chalky bank of the river Kennet, Newbury, Berks., August 1906. At the time of gathering I was rather puzzled over this eyebright; but I now think it must go under *E. nemorosa*, H. Mart.—W. BELL. "I also think this is a luxuriant *E. nemorosa*, H. Mart."—E. S. MARSHALL.

*Euphrasia* —? Roborough Downs, v.-c. 3, South Devon, September 1906. This plant was submitted to Rev. E. S. Marshall, who wrote that he was unable to name it, and that it was quite a new form to him. It has been sent to Prof. Dr. R. von Wettstein, who has not yet definitely named it, but suggests a form of *E. Rostkoviana*. Mr. Davy and I thought it might be *E. campestris*. The same plant was found a week after I found it by Mr. W. Tressider of Goonhavern, West Cornwall, in his neighbourhood.—C. C. VIGURS. "The Roborough Common plant and another found at Porth Towan, Redruth, by Mr. F. H. Davy have been pronounced to be the same, and a new species by Prof. Wettstein, who has requested Mr. Davy to publish it, which he will do in 'Journ. Bot.' for 1907."—C. C. V.

*Rhinanthus monticola*, Druce (*Alectorolophus monticola*, Sterneck). Ref. No. 2947. Grassy ground in Glen Dee, near Allan-a-Quoich, Braemar, v.-c. 92, S. Aberdeen, 30th July 1906. Agrees very well with specimens of mine determined by Dr. von Sterneck.—EDWARD S. MARSHALL.

*Mentha longifolia*, Huds., var. *mollissima* (Borkh)? Dunbarney, near Perth, Sept. 1906.—ALBERT WILSON. "Yes, *mollissima*."—A. LEY and W. R. L. This closely resembles Marshall's 1898 plant (Ref. No. 2178) from Forres. The leaves are too broad for *mollissima*, in which the teeth of the leaves are much more prominent.—G. C. DRUCE.

*M. pubescens*, Willd. Crantock, W. Cornwall, Aug. 1903 and 1905.—C. C. VIGURS. "A form of *M. hirsuta*, which approaches *M. pubescens* in the length of the calyx teeth."—A. LEY and W. R. L.

*M. rubra*, Lin. This plant appears to harmonize in every way with descriptions of typical *M. rubra*, Linn. It grows, very locally in a marshy field very near my house, and in close proximity to the Rea or Mede Brook, a tributary of the Severn. Though not a new record for Shropshire, it is undoubtedly very rare in the county.—J. COSMO MELVILL. "This plant is, we consider, a form of *sativa*, var. *paludosa*, which simulates *rubra* in the dark colouring and the partially glabrous leaves, but differs from the usual form of both *sativa* and *rubra* in the small leaves."—A. LEY and W. R. L. No. This does not belong to the *rubra* set, i.e., hybrids of *viridis*, but to the *verticillata* (*aquatica* × *arvensis*) group. The odour is distinctly that of *aquatica*, the pedicels are not glabrous but covered with hairs, and the whole plant is more hairy than true *rubra*. This is doubtless a hybrid of the red-veined form of *aquatica* with *arvensis*, and has probably been named by Continental botanists.—G. C. DRUCE.

*M. gracilis*, Sm. River bank, Great Doward, Herefordshire, 7th September 1906. Not quite typical, but best I think under this species. Typical *M. gracilis*, Sm., should have sessile leaves: this has them slightly stalked. New County Record as a native plant.—AUGUSTIN LEY. Origin, Haseley Common, Warwickshire, cult. 6th Aug. 1906.—S. H. BICKHAM. "Specimens collected from this locality by Mr. H. Bromwich were named *Cardiaca* by Mr. J. G. Baker. M. Malinvaud says it looks like a form of *gentilis* considerably away from the type, and suggesting hybridity as possibly accounting for it. Mr. Bromwich says that it occurred in small quantity with typical *M. Cardiaca*, of which it may be a variety. See Report, 1890.—G. C. DRUCE.

*M. gentilis*, L., var. *Wirtgeniana* (F. Schultz). Treglasta, Davidstow, v.-c. 2, East Cornwall, 29th Sept. 1906. This was named for me some three years ago by Mr. A. Bennett from specimens gathered in the same spot as these. But it differs considerably from my specimen received from the Club last year communicated by Rev. A. Ley. The bracts are larger, the serrations of the bracts and leaves are larger, the calyx is more hairy and the stem usually also, but the hairiness of the stem is variable. These specimens were growing by a roadside in a wet ditch. When gathering I was struck by the marked thinness of the leaves and the very feeble scent.—C. C. VIGURS. "Seems rightly named."—A. LEY and W. R. L.

*M. Requiinii*, Bth. Established in a shady gravel path above the Lake at Penllergaer, in the grounds of Sir John Llewellyn, near Swansea, July 1906, Glamorgan, v.-c. 41. I am indebted to Mr. E. G. Baker for the name.—H. J. RIDDELSDELL.

*Origanum vulgare*, L., var. *prismaticum*, Gaud., var. *megastachyum* (Link.). Lond. Cat., Great Doward, 7th Sept. 1906.—AUGUSTIN LEY. Also from The Warren, Folkestone, S. E. Kent, 27th Sept. 1906.—C. BAILEY. "Both gatherings agree with Syme's description in the essential characters, though the inflorescence is much more compound than in the examples figured. ('E. B.' ed. iii. t. 1046.)"—E. S. MARSHALL.

*O. vulgare*, L., ? c. *humile*, DC., *O. humile*, Poir. Flat tops of cliffs, above the Warren, Folkestone, E. Kent, 27th Sept. 1906.—C. BAILEY. This agrees fairly well with the description of this variety, which is: 'stem low, branching; spikes small, numerous.'—W. R. L. See note on p. 252.

*Salvia Marquandii*, Druce, in 'Journ. Bot.' p. 405 t. 483, 1906. (*S. clandestina*, Syme not Linn.) Vazon Bay, Guernsey, July 1906. Differs from *S. Verbenaca* by the more prominent and differently shaped lighter blue flowers, by the less spiny calyx teeth, by the absence of viscosity due to the scarcity of the glandular hairs on the upper flower whorls, and by its different odour, which recalls that of *Calamintha Nepeta*. From *S. pratensis* it may be known by the flowers being about half the size, although in shape resembling *pratensis* rather than those of *Verbenaca*, and in the flowers being quite eglandular. From true *clandestina* it may be known by its wholly blue flower, whereas *clandestina* has the lower lip white or very pale, and by the less rugose and usually less divided leaves. Some may prefer to write *S. Verbenaca* var. *Marquandii*.—G. CLARIDGE DRUCE.

*Prunella laciniata*, L. Poldean, Pottingdean, E. Sussex, v.-c.

Handwritten notes at the bottom of the page, including "Pottingdean, E. Sussex" and "9 27 1906. 1909 p. 41".

14, July 1906.—T. HILTON. “Misnamed on the labels *P. pinnatifida*. See ‘Journ. Bot.’ 1906, pp. 365, 428. An interesting extension of this newly discovered species for Britain.”—W. R. L.

*Nepeta Glechoma*, Benth., var. *parviflora*, Benth. Stoughton Road, Leicester, 16th May 1906.—W. BELL. *N. hederacea*, Trev., var. *parviflora* (Benth.). Is this more than a dimorphic condition?—G. C. DRUCE.

*Leonurus Cardiaca*, L. Waste ground on the Iffley Road, Oxford, Sept. 1906. Its first British record is that of Gerard’s ‘Herbal,’ p. 569, 1597. “It ioieth among rubbish and other barren and rough places, especially about Oxford.”—G. CLARIDGE DRUCE.

*Littorella juncea*, Berg., forma ? Llyn Helyg, Flintshire, Sept. 1906.—A. A. DALLMAN and J. A. WHELDON. We have had the following names suggested for this plant by various botanists. (1.) A sterile form of *Isoetes*. (2.) *Subularia aquatica* (the smaller plants). (3.) Perhaps *Lobelia Dortmanna*. (4.) The submerged leaves of *Alisma*; and (5) the name we suggest on the labels. When growing, the leaves are cylindrical, erect, and quill-like, not channelled, and in transverse section quite round, with from five to nine large lacunae arranged in a circle or nearly so. This does not agree with *Isoetes*. The plant seems too large for *Subularia*. We have not seen fresh *Lobelia*. The submerged leaves of *Alisma* are flattened and have a quite different appearance. I have it growing in my aquarium side by side with the present plant. Ordinary *Littorella* was growing and also flowering plentifully about the shore of the lake. The plants sent grew mingled with it, and there seemed nothing exactly intermediate. They also spread nearly all over the lake, carpeting the floor even in the middle, far from the shore, mixed with *Isoetes*.—J. A. WHELDON. “Rather strong, but I see nothing at all ‘off type.’”—E. S. MARSHALL. “Obviously *Littorella*. I have gathered the same thing in ponds in Derbyshire.”—W. R. L.

*Chenopodium opulifolium* × *album*? Growing with a quantity of the two parents suggested, on waste ground by the canal near Aintree, S. Lancs. (59) Sept. 1901. It looked very intermediate when growing, the leaves recalling in shape the first named, but differing in being less glaucous and of a lighter shade of green.—J. A. WHELDON. “The fruit seems to be malformed or not formed, a further evidence of hybridity.”—W. R. L.

*C. opulifolium* × *ficifolium*. A single plant growing with the two parents on the canal bank near Aintree, S. Lancs., Sept. 1901. The leaves showed a distinct tendency towards the shape of those of the first-named parent, although the habit of the plant as a whole more nearly approached that of *C. ficifolium*.—J. A. WHELDON.

*C. hybridum*, L. Ely, Cambs. (v.-c. 29) Sept. 1891. Leg. W. J. CROSS.—J. A. WHELDON.

*Roubieva multifida*, Moquin-Tandon. (*Chenopodium multifidum*, Linn.) Waste ground at the head of Portishead Dock, North Somerset, 9th Oct. 1906. This alien has held its ground the last two or three years, and produces a good deal of fruit. According to Nyman it is doubtfully spontaneous in Portugal, and has been introduced into France and elsewhere in Southern Europe. Mr. Chas. Bailey tells me it is a South American species recorded from Peru, Quillota, Buenos Ayres, &c.; and that he has specimens from several French stations about Toulon. There is a description by Grenier et Godron, who says of it: "Commun sur les glacis de Toulon; Soreze; Montpellier." The plant is not yet mentioned in German books.—JAMES W. WHITE.

*Atriplex tatarica*, L. On the waste heaps between Drayton and Iver, Bucks. This Central Asian species, which Dunn in 'Alien Flora' erroneously states is a native of the Mediterranean coasts, was rather plentiful in the above locality, Sept. 1906. It is a late flowering species which, according to Nyman, is found in Baden and Eastern Europe.—G. CLARIDGE DRUCE.

*Kochia scoparia*, Schrad. On the waste ground near the Railway Station at Reading, Berks. This native of south-eastern Europe, which is also naturalised in France, Spain, &c., is not included in Dunn's 'Alien Flora.' It has also been noticed on the rubbish heaps near Slough, Bucks., Aug. 1906.—G. CLARIDGE DRUCE.

*Polygonum aviculare*, L., var. Reference No. 3130. Sandy coast near Dunster, v.-c. 5, S. Somerset; associated with *P. Raii*, Bab., 20th Sept. 1906. This I suspect to be a reduced form or state of var., *arenastrum* (Boreau); which occurs not far off, quite characteristic. It does not agree at all well with Syme's description of var. *microspernum* (Jord.).—EDWARD S. MARSHALL.—"*Arenastrum* I think."—W. R. L.

*Polygonum sagittatum*, L. (*P. sagittifolium*, Colgan and Scully.) Near Castle Cove, Kerry, Sept. 1906. I am able by a lucky chance to give the history of the introduction of this North American prickly *Polygonum* to Ireland. While driving to Derrynane I gave a peasant a lift on my car, who on seeing a plant in my hand, says "Why you have 'dada's weed.'" He then in answer to my enquiries informed me that over fifty years ago a small vessel laden with Indian corn was wrecked on the adjacent coast. His father-in-law, who then had a small mill (all traces of which have now disappeared) about a mile away on the hill-slope, obtained possession of the

corn, which he ground in his mill; but next year this plant sprang up, which in course of time spread along the small stream side to the sea, and also was carried by cattle into an adjoining marsh, where it now looks absolutely native. A similar cause is possibly the origin of *Sisyrinchium californicum* at Rosslare, Wexford.—G. CLARIDGE DRUCE.

*Daphne Laureola*, L. Lavernock, Glamorgan, v.-c. 41, 16th April 1906. N. C. R.—H. J. RIDDELSDELL.

*Ulmus surculosa*, Stokes, var. *glabra*, Mill. Baggrave Park, Leics. Catkins, 18th May 1906; leaves 6th Aug. 1906 (v.-c. 55). Little attention seems to have been paid to the variations of our British species of *ulmus*. Locally their distribution has not been exhaustively studied. The variety sent seems to be of fairly frequent occurrence. Unfortunately it appears to suffer much more than the type from the depredations of lepidopterous larvæ, the softer nature of the leaf affording more congenial *pabulum* than that of the type with its harder and coarser texture and attendant protective covering of hair universally distributed over its surface. For this reason the young leaves attached to the branches bearing the "keys" are regrettably imperfect, but the later leaves gathered in August will, it is hoped, serve to exhibit the essential characters of the variety. It may be of interest to draw attention to the markedly different habit of growth of this variety. Unlike the type, which is an erect tree with a tall trunk with more or less ascending branches, the glabrous form has very much the aspect of *U. montana* in the distance, having a short bole with branches slightly ascending and then widely spreading and occasionally descending. But from the Wych Elm this tree can be usually distinguished by its branches being much less pendant at their extremity, and from the smaller nature of the leaves it is not so dense and does not obscure the objects immediately behind it in the field of the observer viewing it from a distance. Though these are hardly tangible distinctions, they serve in the field, after a little practice, to distinguish the three plants. The glabrous form of the common elm was found to be of quite frequent occurrence in v.-c. 55 when once their distinction in this way was noted.—A. R. HORWOOD. "This plant is the form of *campestris* which lacks the tall straight bole of type *campestris*, having instead very long spreading branches; the bark in the suckers and young vigorous twigs of 2—4 years' growth is *deeply suberosa*, the leaves are much larger and longer in proportion to their breadth than in the type, and have a deep green, glossy and smoothed upper surface: it is the form of *campestris* which appears most truly native, growing in mountain glens where the type is absent. I call it *U. suberosa*, Ehrh., and reserve the name *glabra*, Sm., for the 'Leicestershire Elm,' a totally different tree."—A. LEY.

*Urtica dioica*, L., var. *angustifolia*, Wimm. and Grab. Weston-under-Penyard, Herefordshire, 30th August 1906. See the full note on this plant in 'B. E. C.' Rep. 1905, p. 184.—AUGUSTIN LEY. "In the 1905 Report the majority of critics considered this plant to be rather var. *microphylla*, Hausman, than as named above."—W. R. L.

*Parietaria officinalis*, L., var. *fallax*, Gren. and Godr. Kingston-by-Lewes, E. Sussex, v.-c. 14, June 1906.—T. HILTON. *P. ramiflora*, Mönch., var. *fallax* (Gren. and Godr.).—G. C. DRUCE.

*Betula nana* × *pubescens*. Glen Callater, S. Aberdeen, 23rd July 1906.—W. A. SHOOLBRED. *B. tomentosa*, Reith, 1790, is an earlier name than *B. pubescens*, Ehrh.—G. C. DRUCE.

*Salix alba* × —. Near Railway Station, Croft, Leicestershire, May 1906. This appears to be a hybrid, but I cannot quite say how; it reminds me of *S. alba purpurea—fragilis*.—W. BELL. "*S. alba*, L. Fruit quite typical. Foliage required to say if type or var. *cærulea*.—E. F. LINTON.

*S. purpurea*, L. By pond in a field, Glen Parva to Aylestone, near Leicester, 8th May and 11th Aug. 1906. "A form of *purpurea* with narrow leaves."—W. R. LINTON—F. L. FOORD-KELCEY.

*S. purpurea* × *viminalis* = *S. rubra*, Huds. Abernant Park, Aberdare, Glamorgan, v.-c. 41, May and 30th July 1906. Very probably planted, as apparently are so many of our willows here.—H. J. RIDDELSDELL.

*S. Caprea* × *Lapponum*, Ref. No. 2961. Lochy Burn (about 1,800 feet), Glen Shee, v.-c. 89, E. Perth, 13th July 1906. From the original British plant, first found by me in 1892.—EDWARD S. MARSHALL and W. A. SHOOLBRED. Also from Glen Callater, S. Aberdeen, 23rd July 1906.—W. A. SHOOLBRED. "There is some mistake, apparently accidental, in Mr. Shoolbred's specimen from Lochy Burn; the leaves have blackened in drying, showing the presence of *S. nigricans* in the plant, indeed I learn that it has been pronounced to be merely a form of *S. nigricans* by E. F. L."—W. R. L.

*S. herbacea* × *repens*, Ref. No. 2,966. Near the Spittal of Glen Shee, v.-c. 89, E. Perth, 14th July 1906. Several plants of this hybrid were met with, growing with the parents, between 1,200 and 1,500 feet. The present form is remarkable for its small foliage, which mimics that of *Vaccinium uliginosum*.—EDWARD S. MARSHALL and W. A. SHOOLBRED.

*S. herbacea* × *repens*, Ref. No. 2,965. Near the Spittal of Glen Shee, v.-c. 89, E. Perth, 14th July 1906, at 1,400 feet. A larger-leaved form than No. 2,966. Both are beyond a doubt the offspring of these two species, which grow together in plenty thereabouts.—EDWARD S. MARSHALL and W. A. SHOOLBRED.

*Liparis Loeselii*, Rich., var. From the Glamorgan locality, July 1906. Less in quantity this year, and not so fine: the rabbits had bitten down a great many plants, and many others did not flower. The broader, shorter, blunter leaves, and fewer flowers give the west county form of the species a distinct look. It perhaps merits a distinct name, and I would suggest var. *ovata*, if that is available.—H. J. RIDDELSDELL. "We approve of this plant being varietally distinguished from the type; it is well marked off from it by the features, to which Mr. Riddelsdell calls attention."—A. LEY and W. R. L.

*Orchis pyramidalis*, L. Sully, Glamorganshire, 26th June 1906. N. C. R.—H. J. RIDDELSDELL.

*O. ericetorum*, Linton. In plenty on the upland moors of the coal measures. From the Upper Neath Valley, above the River Perddyn, Glamorgan, v.-c. 41, 9th and 16th June 1906.—H. J. RIDDELSDELL. "Correct."—E. F. L.

*Crocus nudiflorus*, Sm. Trent Meadows, Nottingham, 19th Mar. and 4th Oct. 1906. This plant is likely soon to become extinct in this locality, as the meadows by the Embankment on which it grew are rapidly being built over. It is now confined to two fields, where it grows abundantly with *Crocus vernus*.—F. L. FOORD-KELCEY.

*Ornithogalum pyrenaicum*, L. Ursleigh Hill, North Somerset, 18th April and 14th June 1906. Complete specimens may be useful to those members who do not live within reach of the growing plant, and who may not have seen its leaves. The long flask-shaped bulb sends up in March a tuft of leaves something like those of the blue-bell, but which grow to a length of about two feet. They are too weak to support themselves, and wither before the flowers appear in June. It is therefore difficult for a stranger to the locality to procure any unless he have marked down flowering plants during the previous summer.—JAS. W. WHITE.

*Potamogeton Kirkii*, Syme. In the River Maam, Galway. Locus classicus. Referred to *P. sparganiifolius*, by Babington in 'Man.' ed. vi., p. 363, but Mr. A. Fryer says it differs from the plant of Laestadius, and suggests its being a hybrid of *P. natans* and *P. poly-*

*gonifolius*. The long narrow bright grass-green lower submerged leaves seem to remove it from either species. I could not find fruiting specimens, but I was very late in the season, Sept. 1906.—G. CLARIDGE DRUCE.

*P. filiformis*, Nolte. Coldisham Loch, Berwickshire. In great plenty on the somewhat muddy or sandy margin of the Loch, near which *Caltha radicans*, Forst., also grows. August 1906. The latter a New County Record.—G. CLARIDGE DRUCE.

*Juncus tenuis*, Willd. Gathered with Mrs. Davy in the grassy riding of a wood near Uckfield, growing in the cart tracks, that is not in the undisturbed woodland. A New County Record for Sussex. The curious increase of this and *Sisyrinchium angustifolium*, both North American species, is very remarkable. June 1906.—G. CLARIDGE DRUCE. "The occurrence of this species in a wood is surely in favour of its being native. Some of the Kerry stations are remote from any probable source of introduction."—E. S. MARSHALL.

*Cyperus fuscus*, L. On the mud of a partly dried-up pond on Dorney Common, Bucks., in considerable quantity; also sparingly on the muddy margin of slow stream on the southern side of the Common, and very sparsely by a pond nearer Huntercombe, Bucks. Aug. 1906. A very interesting addition to the county flora and a notable extension of its range in Britain, this being now its most easterly and most northern locality. Surely it will be found in Berks. 1906 was a specially favourable year in the Thames Valley for the observation of aquatics; owing to the prolonged drought many places were dried which normally are under water.—G. CLARIDGE DRUCE. "Little Chelsea, where it used to occur, is more easterly than Bucks."—W. R. L.

*Eleocharis uniglumis*, Schult., showing the creeping sobole. Sea coast between Heysham and Sunderland Point, W. Lancs. (60). 10th July 1906.—A. WILSON and J. A. WHELDON.

*Schoenus ferrugineus*, L. In Strath Tummel, Mid. Perth. Locus classicus. Growing on shallow peat above sandy soil. Members must excuse the absence of roots in the case of a scarce and local species, limited as it is to this locality, I felt it undesirable to destroy many plants. July 1905.—G. CLARIDGE DRUCE.

*Carex Bœnninghausiana*, Weihe. Swampy wood, Henfield, v.-c. 13, June 1906.—T. HILTON. Clearly right, i.e., *paniculata* × *remota*; but nearer to *C. remota* than any examples that I remember to have seen.—E. S. MARSHALL.

*C. helvola*, Blytt. (*curta* × *lagopina*.) Ref. No. 2980. N. corrie of Lochnagar, at 3,300 feet, v.-c. 92, S. Aberdeen, 21st July 1906. This station is lower down than the original one, and at some distance from it; *C. lagopina* grows within 30 yards, and *C. curta* also occurs on the mountain, though we did not come across it close by. Herr Kükenthal writes of both our gatherings:—" *Carex canescens* × *lagopina*, very characteristic." In the other locality it was considerably taller and more developed, the snow having melted longer there.—EDWARD S. MARSHALL and W. A. SHOOLBRED.

*C. alpina*, Swartz. = *C. Halleri*, Gunn. In turfy places, at an elevation of 3,000—3,200 feet on Ben Heasgarnich, Mid. Perth, a much greater elevation than in Glen Fiagh, Forfar. August 1906.—G. CLARIDGE DRUCE.

*C. acuta*, L. Groby Pool, Leics., 3rd June 1906.—W. BELL.

*C. Hudsonii*, Ar. Benn, *C. stricta*, Good. Twyford Water Meadows, near Winchester, May 1906. Teste Kükenthal. Sent on account of its rarity in Hants. It is quite a frequent plant in the water meadows near Winchester, but is unknown elsewhere in the county.—A. B. JACKSON. "If correct, this is very far from characteristic; the important character at the base of the stems is not shown in my specimens. The *facies* is that of a tall *C. Goodenowii*; it may be a hybrid, but the material is inadequate."—E. S. MARSHALL. "I doubt if this is right. Rather young to decide, but it looks to me like *C. acuta* × *Goodenowii*."—E. F. L. "These specimens are inferior to those sent up and reported on in Rep. for 1898, p. 591, but I think they are the true plant; my example exhibits sparingly the fibrous structure towards the base of the stem. Surely the correct name is *C. elata*, All.—W. R. L.

*C. aquatilis*, Wahl., forma. Near the Spittal of Glen Shee, v.-c. 89. E. Perth. Ref. No. 2988. 10th July 1906. "Is towards var. *virescens*, And.; but in that the glumes are half the length of the fruit, arranged very symmetrically; but it is not quite type." Ar. Bennett in "Litt."—EDWARD S. MARSHALL and W. A. SHOOLBRED.

*C. aquatilis* × *Goodenowii*. No. 2989. In a small swamp near the Spittal of Glen Shee, v.-c. 89, E. Perth; mixed with *C. aquatilis*, and with the other parent close at hand. Fairly intermediate, and apparently sterile; narrower-leaved and more glaucous than the *aquatilis* among which it mostly grew.—EDWARD S. MARSHALL and W. A. SHOOLBRED.

*C. Goodenowii* × *rigida*. Bog, near the top of Lochnagar at 3,500 feet. No. 2982. 27th July 1906. Determined by Herr Kükenthal.—EDWARD S. MARSHALL.

*C. Oederi*, Ehrh. Shore of Llyn Helyg, Flintshire, 25th Aug. 1906. Leg. A. A. Dallman. New to v.-c. 51 (?). It is confined to a very small portion of the shore and occurs in a very dwarf state only.—J. A. WHELDON. I should name this *C. cyperoides*, Marss. = *C. chrysites*, Link.—W. R. L. *C. Oederi*, Ehrh.—G. C. DRUCE.

*C. hirta*, L., var. *hirtæformis* (Pers.). Edge of damp shrubbery, Malvern, Worcester, 8th July 1906.—S. H. BICKHAM. "This is var. *spinosa*, Mortensen, having long-awned glumes. In other respects it comes near the state called var. *hirtæformis*; but some of the leaves are thinly hairy.—E. S. MARSHALL."—I am responsible and not Mr. Bickham for the name on the label; in the distinguishing characters of *C. hirtæformis* it comes very close to that form, in fact it combines the features of two vars.—W. R. L.

*C. rostrata*, Stokes, var. *involuta* (Bab.). Abundant by Lake Fawnog, near Colwyn, N. Denbigh, June 1906.—C. BAILEY. "Babington's *C. involuta* is, I believe, *C. rostrata* × *vesicaria*; the present plant being a narrow-leaved form of *C. rostrata*, which grows plentifully at Wybunbury Bog, Cheshire, and was mistaken by me for *C. involuta*."—E. S. MARSHALL. *C. ampullacea*, about typical. For a description of *C. involuta* see 'Flora of Cheshire,' p. 337.—W. R. L.

*Panicum sanguinale*, L. On the rubbish heaps at Iver, Bucks, Sept. 1906.—G. CLARIDGE DRUCE.

*Phalaris canariensis*, L. Sewage Works, Leicester, v.-c. 55, July 1906. H. P. Reader and W. Bell. These fine plants had cylindrical spikes, 2 in. and over in length. The usual form of the inflorescence is ovate. The glumes are rather narrower than type. Is it a special form or only slightly off type?—W. BELL. "I believe that *Phalaris minor* comes very near *P. canariensis*. This may be the former, but I do not properly understand them."—E. S. MARSHALL. "I think this must be referred to *P. canariensis* since the wing to the glume is entire, not, as in *P. minor*, toothed. I have seen similar plants with the cylindric panicle from cornfields in Devon.—G. CLARIDGE DRUCE.

*P. minor*, Retz., Obs. iii., p. 8, 1779—91. In cultivated ground and in waste places, St. Luke's, Jersey, June 1906. Also at La Perelle, Guernsey. I should have only called it a colonist in either Island. In Dalla Torre's 'Farn-und Blütenpflanzen von Tirol,' the plant is called *P. brachystachys*, Link, but in Richter 'Pl. Europ.,' and in 'Index Kewensis,' *P. minor*, it is kept distinct; In 'Nyman Conspectus,' p. 791, *brachystachys* is also kept distinct, and *canariensis* put under it as a sub-species, even if synonymous *P. minor* is the earlier name.—G. CLARIDGE DRUCE.

*Anthoxanthum odoratum*, L., forma *longiaristata*. Moorland, Minehead, Somerset, June 1906. This form evidently falls under *A. odoratum*. I can find no notice taken of it in any books I have been able to consult: it is, however, a well marked form, in the slenderness of the small spikes as well as their lengthened awns. It appears to be abundant everywhere. Typical *A. odoratum*, L., was growing in company with it in the locality from which I send these specimens.—AUGUSTIN LEY. "The same form occurs in woodlands in Derbs., it has never received any name, and when submitted to Prof. Hackel, was not differentiated by him from the type."—W. R. L.

*Phleum pratense*, L., var. *stoloniferum*, Bab. Coleman Rd., Leicester, 15. vii. 1906 (v.-c. 55). New County record. The stoloniferous variety of *Phleum pratense*, bears anthers of a pale straw colour, but those of the var. *nodosum* are lavender colour. In other respects the former differs little from the latter, if the stolons are wanting, as in some cases often happens when plants are growing in heavy ground. This was the case with some of the specimens contributed, but they were all derived from plants exactly the same, from the same locality, as a specimen identified for me by Prof. Hackel as Babington's variety. The var. *nodosum* is, if anything, more glaucous-looking, and of less elegant growth than the latter, but both are more or less bulbous, and differ in this and other respects from the more robust and usually fibrous-rooted type.—A. R. HORWOOD.

*Agrostis palustris*, Huds., var. *armata* (Celak), Hackel ined. Cultivated ground, Highfield, Southampton, July and Aug. 1906.—A. B. JACKSON, J. T. RAYNER. *A. alba*, L., var. *armata* (Celak).—G. C. DRUCE.

*Agrostis verticillata*, Vill. In the Channel Isles. 'Journ. Bot.,' 1906, p. 320.—G. CLARIDGE DRUCE.

*Calamagrostis Epigejos*, Roth. Edge of limestone cliff, near Port Eynon, Glamorgan, v.-c. 41, 24th July, 1906. This is sent simply for the interest attaching to the *habitat* of the species in this County.—H. J. RIDDELSDELL.

*Weingaertneria canescens*, Bernh. Abersfan, Glamorgan, v.-c. 41, 30th June 1906. See Report B. E. C. 1904. Another series sent for the purpose of noting that I am convinced that the species is native in this county. There is a long narrow strip— $\frac{1}{2}$  mile—of the sand-hills, on which it abounds, with no introduced plant accompanying it; it is quite out of the influence of Docks or Works, and frequently occupies large spaces of the slopes and hollows of the dunes to the exclusion of almost all other vegetation.—H. J. RIDDELSDELL.

*Deschampsia caespitosa*, Beauv., var. *brevifolia*, Parn. Yelderley, S. Derbs., 27th June 1906. In an upland meadow, about 500 feet alt. "A short leaved form of the type, the rough stem taking it off from the variety."—A. LEY. "I have hitherto understood that Parnell's plant was an alpine one, synonymous with var. *alpina*, Gaud. This Derbyshire form has short leaves, it is true, but I doubt whether the lowland or the much dwarfer mountain plant is more than a state."—E. S. MARSHALL. "I have good *brevifolia* from Berks, which Parnell described as a var. of *Dica caespitosa* (it is not synonymous with *alpina*, Gaud.). Hackel passed my specimen.—G. C. DRUCE.

*Cynosurus echinatus*, L. On the West Mount, Jersey, in considerable quantity. This species is somewhat erratic in its occurrence, some years appearing in great profusion, in others only very sparingly. This sunny summer evidently suited it, and it was also plentiful and luxuriant at Vale, etc., Guernsey, June 1906.—G. CLARIDGE DRUCE.

*Koeleria cristata*, Pers., var. *gracilis*, Pers. Lowesby, Leics., 7th July, 1906 (v.c. 55). In Leics. the variety seems to be of more frequent occurrence than the type.—A. R. HORWOOD. "This has very hairy inflorescence, which would take it off typical *K. gracilis*, Pers.; but the root leaves are not normal for sub-species *britannica*, to which the spikes would take it."—E. S. MARSHALL. Hackel however placed specimens from same locality to *gracilis*, see Rep. for 1905, p. 189.—W. R. L.

*K. britannica*, Domin. This grass grows abundantly on Linton Common, Yorkshire. I submitted specimens to Mr. G. Claridge Druce, who wrote me, "Probably *Koeleria britannica*, Domin"; also to Mr. Arthur Bennett, who wrote, "The *Koeleria* is what I believe Domin names *K. britannica*."—JOHN CRYER. "The taller of the two specimens on my sheet has the inflorescence glabrous, or nearly so, and very narrow root-leaves; it seems to be *K. gracilis*, Pers. The other looks like sub-species *britannica*."—E. S. MARSHALL. Clova, Forfar, 15th July, 1890.—W. R. LINTON.

*Koeleria* ——. Wye Down, Kent, 25th June 1885. "I think that this is our ordinary plant, now called *K. gracilis*, Pers., sub-species *britannica*, Domin.—E. S. MARSHALL.

*Molinia varia*, Schrank, var. *depauperata* (Lind.). Shady banks, Glen Mona, between Manghold Head and Laxey, N.E. coast, Isle of Man, Sept. 1906. Leg., G. A. Holt.—C. BAILEY. "This does not seem to be Lindley's *M. depauperata*, which he describes ('Syn.' p. 307, 1828,) as having leaves much longer than

the panicle; the panicle thin, few flowered, colourless. Glumes very unequally-flowered. Lower palea acuminate, obtuse, 5-ribbed. In this plant the leaves are about as long as the panicle, and in such florets as I have examined I find that although 1-flowered the glumes are coloured with violet, and the lower palea has three nerves, a character which Lindley gives for *M. cærulea*.—G. CLARIDGE DRUCE.

*M. cærulea*, Moench. (= *varia*, Schrank.) var. *robusta*, Prah. ('Krit. Fl. Schleswig-Holstein,' II. 257, 1890,) vide 'B. E. C.' Report, 1904, p. 38. Two years ago I was unable to forward more than two or three examples to the Club of this very interesting grass, lately pronounced to be Prah's plant by Prof. Hackel. It forms large, spongy, somewhat solitary tussocks in one place only, towards the S.W. margin of Bomere Pool, Salop; in a lordship unfortunately quite lately devastated by fire, which has killed many plants; *Lastrea spinulosa*, Presl., occurs with it.—J. COSMO MELVILL. "I have known this plant for many years in south-west Surrey, where it occurs plentifully in boggy alder-beds, &c., on peaty soil; but I doubt its deserving to rank as a good variety."—E. S. MARSHALL.

*Poa annua*, L., var. *supina*, Gaud. Mountain borders of Brecon and Caermarthen, July 1906. N. C. R.—A. LEY. "No; Gaudin's variety has the spikelets beautifully tinged with violet-purple. This only tends somewhat towards it".—E. S. MARSHALL.

*P. bulbosa*, L., forma *vivipara*. Near Barry, Glamorgan, v.-c. 41, 26th June 1906. First discovery in Wales; hitherto known from South Devon, Wight, Sussex E. and W., Kent E., Suffolk E., Norfolk E.: this is therefore a considerable extension of range. The locality is a pebbly shore, with mud among the pebbles. In considerable quantity and in company with large quantities of *Trifolium striatum*, &c.—H. J. RIDDELSDELL.

*P. glauca*, Sm. Origin Carnedd Dafydd, Carn. Cult., 23rd June 1906.—A. LEY. "This appears to be a different plant from the specimen sent by Rev. A. Ley through the Club in 1890. The older name is *P. caesia*, Sm."—G. C. DRUCE.

*P. nemoralis*, L., var. —. Ref. No. 2995. Linn of Corriemulzie, Braemar, v.-c. 92, S. Aberdeen, 20th July 1906. This was gathered by Mr. J. F. Hanbury and myself in 1886; and was then referred to var. *Parnellii*, Hook and Arn. I think, however, that it is more probably weak, shade-grown var. *divaricata*, Syme, which is the prevalent form of rocky stream-sides in the district. Foliage rather glaucous.—EDWARD S. MARSHALL. "I think this is var. *subuniflora*, Reichb. Professor Hackel named a plant which I gathered in this locality, 1882, *P. Parnellii*, Bab., but subsequently

another gathering from the same place he named var. *subuniflora*. The upper leaf is much longer than its sheath, which does not agree with the description of *P. Parnellii*.—G. CLARIDGE DRUCE.

*P. pratensis*, L., var. *sub-cerulea* (Sm.). Sandy ground near Heysham Harbour, W. Lancs., 10th July 1906.—J. A. WHELDON and A. WILSON. "The foliage is too narrow and too acute; it comes, I believe, between that and the type."—E. S. MARSHALL.

*Glyceria fluitans* × *plicata*. Bradley, S. Derbs., 12th June 1906. Quite sterile, and just intermediate between the two parents.—W. R. LINTON.

*Festuca*. Sandy shore near Heysham Harbour, West Lancs. (60), 10th July 1906.—ALBERT WILSON and J. A. WHELDON. "Identical with the plant from Wallasey reported on by E. Hackel in 'B. E. C.' Rep. for 1892, p. 393. *F. rubra*."—W. R. L.

*F. rubra*, L., var. *arenaria* (Osbeck). Sandhills, Weston-super-Mare, 22nd June 1906.—S. H. BICKHAM. "Correct."—A. LEY and W. R. L. I think not; the root being merely fibrous without runners, it is not *genuina*, Hackel, note the very long awns.—E. S. MARSHALL.

*Bromus erectus*, Huds. Stony ground, Colwyn, N. Denbigh, June 1906.—C. BAILEY.

*B. secalinus*, L., var. *velutinus* (Schrad.). Cornfield, Snelsmore, Bucks (probably introduced with barley crop), 15th July 1906.—A. B. JACKSON. "Correct, I believe, though by no means extreme."—E. S. MARSHALL.

*B. unioloides*, H. B. U. Meole Brace, Salop.—J. COSMO MELVILL. "See Rep. for 1905, p. 190."—W. R. L.

*Gaudinia fragilis*, Beauv. Named by Professor Hackel, who writes, "A species of the Mediterranean region, frequently observed as an introduced alien plant in the neighbourhood of Paris, in Belgium, rarely in Northern Germany, but not yet, as I believe, in Great Britain nor Ireland." On the shore near Barry, Glamorgan, v.c. 41, 26th June, 1906. New to Britain. The presence of the plant in this spot, apparently far away from all possibility of introduction, is difficult to account for.—H. J. RIDDELSDELL.

*Lolium perenne*, L., var. *tenuë* (L.). Meadow, Sellack, Hereford, 30th June 1906.—A. LEY.

*L. perenne*, L., var. *multiflorum*, Lamark. Tow-path by the river Avon below Bristol, July 1905.—JAS. W. WHITE. "Should this not stand as a full species—i.e. *L. multiflorum*, Lam.?"—G. C. DRUCE.

*Agropyron littorale*, Rchb. By the Avon, below Bristol, N. Somerset, 18th Aug 1904.—J. W. WHITE. "Is this *specifically* distinct from *pungens*?"—G. C. DRUCE.

× *A. Hackelii*, mihi., *A. repens* × *junceum*, forma *cristata*, Hack. in lit. This conspicuous grass occurs near the Grand Havre, Guernsey, and is probably put under *Triticum pungens* in the 'Guernsey Flora.' Professor Hackel says it is a hybrid of the above species. It has received many names by botanical writers, and is the *T. acutum* for the greater part of our British lists. The above plant is a striking form from its wheat-like panicle. July 1906.—G. CLARIDGE DRUCE.

*Equisetum variegatum*, Schleich., var. *majus*, Syme. Shallow Marsh, Weston-super-Mare, N. Somerset, 26th June 1906.—S. H. BICKHAM. "'Eng. Bot.' ed. iii., vol. xii., p. 169, 1886, defines the variety:—'Stem rather slender, *not flexuose, erect*; stem ridges each with two acute angles and a conspicuous central furrow' [the italics are my own]. The stems in these specimens are decidedly flexuous and not more than ascending, hence not good for the variety."—W. R. L.

*Pilularia globulifera*, L. Abundant on the shore of Llyn Helyg, Flintshire (51), 25th Aug. 1906. It is probably lost in the only recorded locality, so this is an interesting re-discovery of it as a Flintshire plant.—A. A. DALLMAN and J. A. WHELDON.

*Chara canescens*, Lois. In a lagoon north of Wexford Harbour, in the locality where the Rev. E. S. Marshall originally discovered it. With it was *C. connivens* in small quantity, Sept. 1906.—G. CLARIDGE DRUCE.

NOTE.—*Origanum vulgare*, L., var. ? *humile*. DC. 'Prod.' vol. xii. p. 193. Folkestone Warren, 3rd Oct. 1906.—C. BAILEY. Quite different from Continental specimens so named in the Kew Herbarium. In the 'Prodromus' the variety is described as "vix semipedali glabriusculum, foliis angustioribus et spiculis parvis, numerosis corymbosis." Mr. Bailey's plant, which is conspicuously hairy, appears to be a stunted, ill-developed form, possibly induced by the habitat.—A. B. JACKSON.

*Rosa tomentosa*, Sm. Substitute for my criticism "under *R. Andrzejovii*, Steven."—AUGUSTIN LEY.

THE

# BOTANICAL EXCHANGE CLUB

OF THE BRITISH ISLES.

---

REPORT FOR 1907.



The Subscription, 7/6 per annum, and Non-contributing Members' Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE, M.A., F.L.S.,  
YARDLEY LODGE,  
9 CRICK ROAD, OXFORD.

---

Parcels for 1908 should be sent post paid in December to  
W. Bell, Esq., Knighton Road, Leicester.

---

PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD.

1908.

22 JUL 1908

# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

---

## THE REPORT OF THE TREASURER AND SECRETARY FOR 1907.

I BEG to say that the financial report is satisfactory.

### *BALANCE SHEET FOR 1906.*

	<i>£</i>	<i>s.</i>	<i>d.</i>		<i>£</i>	<i>s.</i>	<i>d.</i>
By Subscriptions received	20	0	0	Expenses of Distribution	1	15	0
Sale of Reports	0	19	5	Postages, &c.	1	0	0
				Printing	13	9	0
Balance in hand	5	4	3	Towards 'Lists'	5	0	0
				Balance in hand	4	19	8
	<u>£26</u>	<u>3</u>	<u>8</u>		<u>£26</u>	<u>3</u>	<u>8</u>

Balance in hand of Treasurer, G. Claridge Druce, Yardley Lodge, Oxford, £4 19s. 8d. To him all subscriptions should be paid on the first of January in each year; of 7s. 6d. for each member who contributes and receives specimens; of 5s. for each non-contributing or corresponding member, who receives a copy of the Reports only.

Members may have a complete set of the *Reports* for the years 1879—1900 for 12s. 6d. post free, odd copies 1s. each, three for 2s. 6d., and from 1901-6 at 1s. 6d. post free.

Among the chief items of interest in British Botany of the year 1907 are the following :—

BERBERIS VULGARIS × AQUIFOLIUM. Described by the Rev. E. S. Marshall from a plant noticed in Somersetshire 'Journ. Bot.' 1907, p. 393.

CERASTIUM VULGATUM, L., var. OBTUSUM, Druce. A tall rigid plant with clustered cymes, short capsules and shorter, broader and less acuminate sepals. St. Aubin's, Jersey.—G. CLARIDGE DRUCE.

SPERGULA ARVENSIS, L., var. NANA, E. F. Linton. From Guernsey ('Journ. Bot.' p. 380, 1907). Distributed this year.

HYPERICUM HUMIFUSUM, L., var. LIOTTARDI, Vill. At Darenth in Kent, and West Kirby in Cheshire. E. Drabble in 'Journ. Bot.' p. 212, 1907.

TRIFOLIUM PRATENSE, L., var. AMERICANUM, Harz. Pointed out by Dr. Domin; it is a robust plant with a copious patent pubescence on the stems, and appears to be widely distributed. It is what I recorded as var. *expansum* from Forfar, in 'Ann. Scot. Nat. Hist.'—G. CLARIDGE DRUCE.

VICIA SATIVA, L., var. CANESCENS, Druce. Leaves and stems covered with a dense hoary pubescence. Among turf, Bouley Bay, Jersey. G. Claridge Druce ('Journ. Bot.' p. 420, 1907).

V. ANGUSTIFOLIA, L., var. GARLANDII, Druce. See 'Flora of Jersey,' p. 101, and 'Journ. Bot.' l.c.—G. CLARIDGE DRUCE.

RUBUS LACUSTRIS, Rogers ('Journ. Bot.' p. 9, 1907). Found in some quantity in the English Lake district, as about Patterdale, W. Langdale, between Coniston and Ambleside, Threlkeld, and by Thirlmere and Derwentwater.

POTENTILLA VERNA × CRANTZII. Fairly intermediate, with larger blossoms than *verna*. On the limestone at Grassington, Yorkshire, whence both species are recorded. June 1906.—G. CLARIDGE DRUCE.

BRITISH ROSES OF THE MOLLIS-TOMENTOSA GROUP are treated in a Paper by the Rev. A. Ley in 'Journ. Bot.' p. 200, 1907, in which *R. submollis*, Ley, *R. omissa*, Déségl., and *R. pseudo-rubiginosa*, Ley, among others are described.

SAXIFRAGA HYPNOIDES × TRIDACTYLITES = × S. FARRERI, Druce. Discovered by Mr. Reginald Farrer on Ingleborough, and showing evidence of both parents. I saw *S. tridactylites* growing near the locality where Mr. Farrer gathered it. He has it in

cultivation at his rock-garden at Clapham, Yorks.—G. CLARIDGE DRUCE.

PICRIS HIERACIOIDES, L., var. INCANA, Druce. Densely aggregated capitula, the centre one much overtopped by the lateral. The outer phyllaries covered with a short greyish-white tomentum. Alderney. See 'Journ. Bot.' p. 423, and 'Linn. Soc.' Rep.'

HIERACIUM BRITANNICUM, F. J. H., var. OVALE, Ley. Brecon, West York. ('Journ. Bot.' p. 109, 1907.)

H. CILIATUM, Almq., var. VENOSUM, Ley. Brecon. ('Journ. Bot.' p. 109.)

H. SERRATIFRONS, Almq., var. CINDERELLA, Ley, Gloucester, Hereford, Worcester, Salop, Glamorgan, Montgomery. ('Journ. Bot.' p. 109, 1907.)

H. PINNATIFIDUM, Lönnr. (*H. vulgatum*, var. *nemorosum*, Lindeb.) Carnarvon, Denbigh, Derby, Leicester, Easterness, Perth.

Var. VIVARIUM, Lönnr. Hereford, Carnarvon. ('Journ. Bot.' p. 110, 1907.)

H. CONSPERSUM, Dahlst. Lake Lancashire. W. R. Linton. ('Journ. Bot.' p. 111, 1907.)

H. SCANICUM, Dahlst. Very near *H. irriguum* according to the Rev. W. R. Linton. Area general. Only a slight variety. ('Journ. Bot.' p. 111, 1907.)

H. ANFRACTUM, Fr., sub. sp. CACUMINATUM, Dahlst. Our *H. sciaphilum* to a great extent is represented by this form.

Var. BARBAREAEFOLIUM, Dahlst. Gloucester, Hereford, Brecon, Glamorgan, Derby. ('Journ. Bot.' p. 111, 1907.)

H. ORNATUM, Dahlst. Carnarvon. W. R. Linton. But Dahlstedt says *in litt.* "a form approaching *ornatum*." ('Journ. Bot.' p. 112, 1907.)

LEONTODON NUDICAULIS, Mérat [L. HIRTUM, L.], var. ARENARIA (DC). See 'Journ. Bot.' p. 423, 1907. Jersey, Guernsey, Alderney.

Var. PRISTIS, Druce. A densely hairy, sub-simple plant, with strong taproot, the leaves deeply repand-runcinate, covered with long shaggy hairs at base and sub-glabrous phyllaries. Guernsey, Alderney. ('Journ. Bot.' l.c. and 'Rep. Linn. Soc.')

—G. CLARIDGE DRUCE.

TARAXACUM SPECTABILE, Dahlst. Shetlands. W. H. Beeby in 'Ann. Scot. Nat. Hist.' p. 169, 1907. Allied to *T. palustre* DC.

STATICE PLANTAGINEA, All., var. BRACTEATA, Druce. Common on the Quenvais. See 'Journ. Bot.' p. 424, 1907.

RHINANTHUS GROENLANDICUS, Chabert. Unst. W. H. Beeby in 'Ann. Scot. Nat. Hist.' p. 234, 1907.

EUPHRASIA VIGURSI. F. H. Davy. Porth Towan. Between New Quay and Perranporth, Cornwall, and Roborough Downs, near Yelverton, Devon. Found by our Member, Dr. Vigurs. Allied to *E. Rostkoviana*. ('Journ. Bot.' p. 217, 1907, with plate, t. 486.)

OROBANCHE RITRO, Gren. & Godr., var. HYPOCHAEROIDES (Beck) as forma. A most beautiful and distinct plant, of a bright citron-yellow colour, very glandular. Its nearest ally is *O. elatior*, Sutt. St. Ouen's, Jersey. See 'Journ. Bot.' p. 425, 1907, and 'Rep. Linn. Soc.' The type is only recorded from Marseilles.

—G. CLARIDGE DRUCE.

O. MINOR, Sm., var. CONCILIATA. (Beck as forma). "Corolla excepta basi alba amethystino-violacea, squamae calycis cum cauli purpurascens." Miss M. C. Murray. 'Ann. Scot. Nat. Hist.' p. 253, 1907.

ULMUS SATIVA, Mill., var. LOCKII. A graceful tree with small rather narrow leaves, and very distinct habit. Is frequent about Fine-shade and other parts of Northamptonshire, and is known there as Lock's Elm.—G. CLARIDGE DRUCE.

Forms of *Potamogeton* new to Britain, by Arth. Bennett ('Journ. Bot.' 172, 1907), include :—

2512 bis. POTAMOGETON VAGINATUS. Turcz. 'Cat. Baic. Dah.'

n. 1092. Allied to *P. pectinatus*, L. Tingwall Loch, Shetland. W. H. Beeby. See also 'Ann. Scot. Nat. Hist.' p. 235, 1907.

2489. *P. GRACILIS*, Woflg. Westmeath and Longford. (? *P. alpinus* × *gramineus*.)

2493. *P. TISELII*, Richter (*P. gramineus* × *natans*). Westmeath and Longford. It is the *P. fluitans*, 'Irish Top. Bot.' p. 318, 1901.

2495. *P. NITENS*, Weber, var. *MAXIMUS*, Ar. Benn. East Perth, Mid Ebudes. New in name only, it is the var. *latifolius*.

2508. *P. PUSILLUS*, L., var. *ACUMINATUS*, Ar. Benn. Stirlingshire.

2512. *P. PECTINATUS*, L., var. *SALINUS*, Voch. (var. *pseudomarimus*, Ar. Benn.) Norfolk.

2493. *P. INTERMEDIUS*, Tiselius (*P. heterophyllus*, var. *intermedius*, Ar. Benn.) Orkney.

2501. *P. UNDULATUS*, Woflg. See 'Ann. Scot. Nat. Hist.' p. 104, 1907 (*praelongus* × *crispus*).

*P. ALPINUS* × *PRAELONGUS*? Odilham, Hants. C. E. Palmer. = × *P. Palmeri*, 'Brit. List.'

*P. ALPINUS*, Balb., var. *LACUSTRIS*, Marss. Lunan Burn, Perth.

2499. *P. UPSALIENSIS*, Tiselius. From the Earn above Fort Eviot, W. Perth. A. Sturrock. Near × *P. decipiens*, Nolte.

× *P. MACVICARII*, Ar. Benn. = *P. praelongus* × *polygonifolius*, Moidart. Argyll. S. M. Macvicar. 'Ann. Scot. Nat. Hist.' p. 106, 1907.

*AGROSTIS CANINA*, L., var. *LAEVIS*, Hackel *in litt.* Found on Brandon Mountain, Kerry, in Sept. 1906. See 'Irish Naturalist,' p. 152, 1907. Differt a typo foliis omnibus planis latiusculis (circ. 2 mm. latis) prorsus laevibus, paniculae ramis spicularumque pedicellis laevibus, spiculis majusculis.—G. CLARIDGE DRUCE.

GLYCERIA MARITIMA, Wahl., var. FOUCAUDII, [Hackel], as *Atropis Foucaudii* in Husnot 'Gramina,' p. 49, 1896, recorded from the coast near Grain, West Kent, Mundeford, Hants, and Auginish Island, Co. Limerick. See note by E. S. Marshall in 'Journ. Bot.' p. 210, 1907.

TRITICUM PEREGRINUM, Hackel. A newly described Alien Species found by our member Mr. Fraser, near Edinburgh. 'Ann. Scot. Nat. Hist.' p. 101, 1907.

DRYOPTERIS REMOTA (Braun.) has been reported from Lomond in Scotland by W. B. Boyd. See 'Trans. and Proc. Edinburgh Botanic Society,' xxiii. p. 281.

CYSTOPTERIS FRAGILIS, Bernh., var. SEMPERVIRENS. From Corrie Ceann-mor, S. Aberdeen. W. Young. 'Proc. Soc. Bot. Edin.' xxiii. (1906), pp. 192—194.

DEVEUXIA STRIGOSA, Kunth. This (as I suggested in the 'British Plant List') must be now removed from our British species. The Caithness plant which I have collected in all its known localities must be referred teste Prof. Hackel to *D. neglecta*, Kunth. The true *strigosa* is now usually considered to be *D. neglecta* × *Calamagrostis epigeios*. The latter species does not now occur in North Scotland.—G. CLARIDGE DRUCE.

Among the recent publications (up to 1907) interesting to our members may be mentioned the following:—

'List of British Seed-Plants and Ferns.' Exhibited in the Department of Botany, British Museum (Natural History), by A. B. Rendle and James Britten. pp. 44. London. Printed by order of the Trustees of the British Museum, 1907, price 4*d*.

'The Dillenian Herbaria': An account of the Dillenian Collections in the Herbarium of the University of Oxford, together with a Biographical Sketch of Dillenius, Selections from his Correspondence, Notes, &c., by G. Claridge Druce. Edited with an Introduction by S. H. Vines, M.A., Sherardian Professor in the University, Oxford: at the Clarendon Press. 1907, 8vo. pp. cxii, 258, with portrait, price 12*s*. 6*d*.

'The Flora of Glamorganshire,' by our member the Rev. H. J. Riddelsdell, M.A., has appeared as a 'Supplement' to the 'Journal of Botany' during the year, and is issued as a separate work at 2s. 6d. pp. 88. It forms a concise and excellent account of enormous personal work. His interesting discovery of a new variety of the rare *Liparis Loeselii* has already been mentioned in these pages.

Another work on the Flora of the same County is being prepared by our member, Prof. A. H. Trow, D.Sc., F.L.S.

'The Flora of Sussex,' by the late Rev. F. H. Arnold, LL.D. pp. 154, 4s. 6d., Mitchell and Co., Arundel, adds but little to the matter given in the preceding edition, and a complete Flora of the County on more modern lines is still a desideratum.

'The Flora of West Lancashire.' J. A. Wheldon, F.L.S., and Albert Wilson, F.L.S. pp. 511. 1907, 12s. 6d. Our members must be heartily congratulated upon producing this handsome volume, which shows the distribution of 797 native species of Phanerogams and Higher Cryptogams, 44 Colonists, and 31 Denizens, through that interesting vice-county. In addition there are about 100 Aliens mentioned. Five additional native species are given at the end. The Mosses, 332, and Hepaticae, 100, and 309 Lichens are also included, and the work is illustrated by 15 beautiful reproductions of photographs, taken by Mr. Wilson, of plants in situ, &c. An excellent introduction treating of the species enumerated from an œcological standpoint is given.

'The Trees of Great Britain and Ireland,' H. J. Elwes, F.R.S., and A. Henry, M.A. Vol. ii., 1907. Privately printed, £3 3s. In this volume *Quercus Robur* and *Q. sessilis* (under the name *Q. sessiliflora*, Salisb.) are described, and it is satisfactory to find these two distinct species kept apart. The Horse-chestnut is said to have been first grown at Vienna in 1576 from seeds sent from Constantinople. *Larix decidua*, Mill. (under the name *L. europæa* DC.) and *Pinus Laricio*, Poir, which now is self-sown at Holkham, Norfolk, are also among the species described, and beautifully illustrated.

'Wild Flowers of the British Isles,' H. Isabel Adams. Revised by our member J. Bagnall, A.L.S. Ranunculaceae to Compositae,

4to., pp. xvi., 168. 30s. nett. Heinemann and Co. 75 coloured plates.

The year 1907 has deprived us of two members by death, and the Botanical world is poorer by their loss, and by that of the other botanists mentioned below :—

HENRY BROMWICH, eldest son of Wm. Bromwich, gardener, was born at Warwick on Mar. 10, 1828, and died in the adjoining parish of Milverton on May 28, 1907. He was early interested in Botany, and while young took a number of prizes for his collections of wild flowers at the local horticultural shows. He was for some years gardener at Wroxall Abbey, the seat of Miss Wren (a descendant of Sir Christopher Wren), where he gained much of his botanical knowledge, the neighbourhood, especially Yarningdale Common, being rich in uncommon species. For many years he was a member of the *Botanical Exchange Club*, and he rendered material aid, which is warmly acknowledged, to Mr. Bagnall, when preparing the 'Flora of Warwickshire.' Mr. Bromwich also for some years was honorary curator to the Botanical Department of the Warwick Museum, to which institution he expressed a wish his own Herbarium should be given. In the 'Report' of that Museum in 1904 the botanical collection is referred to as one of the best in the provinces, 'the Warwickshire plants are represented by a special collection, the work chiefly of Mr. Bromwich, a well-known and experienced local botanist, who still contributes to its further development.'

ALEXANDER SOMERVILLE, born in Glasgow, 1842, the son of an eminent Missionary, Dr. A. N. Somerville, died there at Hillhead on June 5, 1907. His early years (after three years at the University) were spent in business in that city, and also at Calcutta, where he lived fifteen years. On his return he graduated B.Sc. He was an enthusiastic worker at the marine fauna of Western Scotland, a member of the Conchological Society, and also one of its referees for Marine Mollusca, and was three years its President, and was also at one time President of the Glasgow Natural History Society, and many of his papers appeared in its *Transactions*. He was elected a Fellow of the Linnean Society in 1881. He greatly interested himself in the Topographical Botany of Scotland, at which he did much excellent work. For many years he was a valued

member of this Club, his specimens being always very carefully prepared. He also contributed papers to the Botanical Society of Edinburgh. He had a charming personality, and was an excellent correspondent. See 'Ann. Scot. Nat. Hist.,' p. 195, 1907, where there is a portrait.

EDWARD ARTHUR LIONEL BATTERS, born at Enfield, Dec. 26, 1860, died at Gerrard's Cross, Bucks, Aug. 11, 1907, educated at King's Coll. School, London, and Trinity Hall, Cambridge. Published in 1890 in the 'Annals of Botany' with E. M. Holmes a 'Revised List of the British Marine Algae,' and in 1902 the 'Catalogue of the British Marine Algae' as a 'Supplement to the Journ. Bot.' His herbarium consists of upwards of 10,000 British specimens. *Battersia* was established by Reinke in 1890 in his honour.

OTTO KUNTZE, died Jan. 28, 1907, in his 64th year at San Remo. He was a good systematist as well as a profound student of Botanical Nomenclature. He was a chemist by profession, and he published as long ago as 1867 his 'Flora of Leipzig' and a critical revision of the German 'Rubi.' He monographed the genus *Clematis* in 'Verhandlungen der Prov. Brandenburg.' His important work 'Revisio Generum Plantarum' was issued in 1891-8, and included not only his views on nomenclature, which aroused a strenuous opposition, but also a description of the numerous species noticed on his foreign travels. In 1904 he, in conjunction with Dr. Post, issued a valuable botanical 'Lexicon,' and numerous contributions, chiefly of a polemic character, have been made from time to time. His views did not receive the respect they should have met with at the Vienna Congress, about which he spoke with no bated breath. He had an important library at his pleasant villa at San Remo, where, although very deaf, he was a kind and interesting host. His copies of the rare first edition of Linnaeus' 'Species Plantarum,' and the still more scarce 'Systema' of 1735, have been acquired by the library of the Oxford Botanic Gardens.

MAXWELL T. MASTERS, F.R.S., born at Canterbury, April 15, 1833, died at Ealing, May 30, 1907, educated at King's College, London, M.D., Sub-Curator of the Fielding Herbarium at Oxford,

Lecturer on Botany at St. George's Hospital, 1855-68, Co-Editor 1865, and Editor, 1887, et sequente of the 'Gardener's Chronicle.' He contributed largely to the 'Linnean Transactions' and 'Journal,' to the 'Journal of Botany,' &c., and by British botanists he will also be remembered for his paper 'On the Flowering Plants and Ferns of Oxfordshire and the contiguous Counties,' which he contributed to the Ashmolean Society in 1857, and especially by his work on 'Vegetable Teratology,' which was published in 1869 by the Ray Society. His name is perpetuated in *Mastersia*, Benth., a Leguminous genus. His geniality and kindness impressed any one with whom he came in contact. He was a corresponding member of the Institute of France. See 'Gard. Chronicle,' June 8, 1907, with portrait, and 'Journ. Bot.,' p. 258.

RACHAEL F. THOMPSON, born at York 1856, died at Southport Dec. 9, 1906, was a grand-daughter of John Tatham of Settle, whose records of plants she contributed to Lees' 'Flora of West Yorkshire.' She assisted in the preparation of the ninth edition of the 'London Catalogue,' and drew up the excellent account of the *Hieracia* for Groves's edition of 'Babington's Manual.' See 'Journ. Bot.,' p. 78, 1907.

G. CLARIDGE DRUCE.

Mr. W. Bell, of Knighton Road, Leicester, has kindly consented to act as Distributor and Editor of the 'Report' for 1908. All plants should be sent to him in December 1908.

Mr. E. W. Hunnybun, Mill Common, Huntingdon, who is making a most beautiful series of drawings of British plants, would be very much obliged if members would assist him in obtaining some of his *desiderata*, a list of which, with other information, will be gladly supplied by him. He will defray the cost of transmission and supply tins for the plants.

By the kindness of C. Bailey, Esq., we are enabled to have the benefit of the accompanying reproductions of his photographs of *Oenothera*.

## ADDITIONAL DESIDERATA FOR THE YEAR 1908.

COMPILED BY THE SECRETARY.

- Berberis vulgaris* × *Aquifolium*.  
*Silene latifolia* × *maritima*.  
*Cerastium vulgatum*, L., var. *obtusum*,  
 Druce.  
*Viola tricolor*, L., var. *polychroma*,  
 Borbas.  
 — *arvensis*, Murr., var. *derelicta*  
 (Jord.).  
 ————— var. *contempta*  
 (Jord.).  
 — *lutea*, Huds., var. *multicaulis*,  
 Koch.  
*Spergula arvensis*, L., var. *nana*, Lin-  
 ton.  
*Hypericum humifusum*, L., var. *Liot-*  
*tardi*, Vill.  
*Trifolium pratense*, L., var. *ameri-*  
*canum*, Harz.  
 ————— *leucochraceum*,  
 Aschers. and Prantl.  
*Vicia sativa*, L., var. *canescens*, Druce.  
*V. angustifolia*, Reichard, var. *Gar-*  
*landii*, Druce.  
*Potentilla argentea*, L., var. *dissecta*,  
 Wallr.  
 ————— *verna* × *Crantzii*.  
*Rosa mollissima*, Willd., var. *pseudo-*  
*rubiginosa* (Lej.).  
 — *omissa*, Déségl.  
 — *villosa*, L., var. *submollis* (Ley).  
 ————— var. *recondita* (Pugct).  
*Saxifraga hypnoides* × *tridactylites* =  
 × *S. Farreri*.  
*Senecio nebrodensis*, L.  
*Picris Hieracioides*, L., var. *incana*,  
 Druce.  
*Hieracium*, *Schmidtii* Tausch, var.  
*fealense*, Beeby.  
 ————— *britannicum*, F. J. H., var.  
*ovale*, Ley.  
 ————— *ciliatum*, Almq., var. *veno-*  
*sum*, Ley.  
 ————— *serratifrons*, var. *cinderella*,  
 Ley.  
 ————— *pinnatifidum*, Lönn., var.  
*vivarium*, Ley.  
 ————— *scanicum*, Dahlst.  
 ————— *anfractum*, Fr., var. *cacumi-*  
*natum* (Dahlst.).  
 ————— *barbareae-*  
*folium*, Dahlst.  
 ————— *ornatum*, Dahlst.  
 ————— *breve*, Beeby.  
 ————— *demissum*, var. *australe*,  
 Beeby.  
 ————— *subtruncatum*, Beeby.  
 ————— *strictum*, Fr., var. *humile*,  
 Beeby.
- Hieracium crocatum*, Fr., var. *conges-*  
*tum*, Beeby.  
*Leontodon nudicaulis*, Mérat., var.  
*arenaria* (DC.).  
 ————— *pristis*, Druce.  
*Taraxacum spectabile*, Dahlst.  
*Statice plantaginea*, All., var. *bracte-*  
*ata*, Druce.  
*Rhinanthus groenlandicus*, Chabert.  
*Euphrasia Vigursii*, F. H. Davy.  
*Orobanche Ritro*, Gren. and Godr.,  
 var. *hypochaeroides* (Beck).  
 ————— *minor*, Sm., var. *conciata*  
 (Beck).  
*Thymus glaber*, Mill.  
 ————— *ovatus*, Mill., var. *montanus*  
 (W. and K.).  
 ————— *subcitratus*  
 (Schreber).  
 ————— *praecox*, Opiz.  
 ————— var. *spatulatus* (Opiz).  
*Plantago lanceolata*, L., var. *depressa*,  
 Rostr.  
*Polygonum aviculare*, L., var. *conden-*  
*satum*, Beck.  
 ————— *erectum*  
 (Lej and Court).  
*Ulmus sativa*, Mill., var. *Lockii*.  
*Potamogeton alpinus*, Balb., var. *la-*  
*custris*, Marss.  
 ————— × ? *gramineus* =  
*P. gracilis*, Wolfg.  
 ————— × ? *praelongus* =  
*P. Palmeri*.  
 ————— *gramineus*, var. *intermedius*  
 (Tisel.).  
 ————— × *natans* = *P.*  
*Tiselii*, Richt.  
 ————— *upsaliensis* Tiselius.  
 ————— *nitens*, Weber, var. *maximus*,  
 Ar. Benn.  
 ————— *praelongus* × *polygonifolius*  
 = *P. Macvicarii*, Ar. Benn.  
 ————— × *crispus* = *P.*  
*undulatus*, Wolfg.  
 ————— *pusillus*, L., var. *acuminatus*,  
 Ar. Benn.  
 ————— *pectinatus*, L., var. *salinus*,  
 Voch.  
 ————— *vaginatus*, Turcz.  
*Glyceria maritima*, L., var. *Foucaudii*  
 (Hackel).  
*Triticum peregrinum*, Hackel.  
*Polystichum angulare*, Presl., var.  
*Brannii* (Spenn.).  
*Cystopteris fragilis*, Bernh., var. *sem-*  
*pervirens*.

*REPORT OF THE DISTRIBUTOR FOR 1907.*

APOLOGIES are due to members for a late appearance of the Report.

A large number of plants was sent for distribution: their quality and interest was on the whole high. Members seemed to appreciate the return parcels greatly.

The Distributor's work is, at the best, exacting of much time and labour. It is made much heavier, however, when members send their plants arranged otherwise than in the order of the London Catalogue, or do not supply enough labels. One parcel arrived without a separate sheet for each specimen; and the plants had to be *disentangled* from each other, and provided each with its own sheet. Notes on the plants were not always written on detached slips of paper, but sometimes on the enclosing cover. Specimens might often be better prepared: complaints have come from several quarters on this point. And generally, it would be a help to Distributors and Members if the rules of the Club were carefully observed.

The Club's thanks are due to many well-known botanists who have supplied notes: Messrs. E. G. Baker, H. W. Pugsley, E. F. Linton, E. Hackel, D. Fry, and many of our own members.

In Mr. Druce's absence from England, it remains for me to recall to members the great and irreparable loss which the Club has suffered by the death of the Rev. W. R. Linton, which took place on 4th Jan. of this year. We have had, however, the privilege of receiving the valuable series of plants which he collected in 1907, and annotated and prepared for distribution. We also have to record, with regret, another gap in our membership, caused by the death of Mr. Adair; a small parcel of his plants is distributed, through the kindness of Mr. Bailey.

H. J. RIDDELSDELL.

12 May, 1908.

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.
Bailey, C., <i>M.Sc.</i> , <i>F.L.S.</i> , Atherstone House, North Drive, St. Anne's-on-the-Sea ... ..	300
Bell, W., Knighton Road, Leicester ... ..	51
Bickham, S. H., <i>F.L.S.</i> , Underdown, Ledbury ... ..	240
Bullock-Webster, Rev. Canon G. R., Canford, Parkstone S.O., Dorset ...	23
Crawford, F. C., 19 Royal Terrace, Edinburgh ... ..	10
Cryer, John, 182 Cliffe Wood Mount, Shipley, Yorks ... ..	158
Cumming, L., <i>M.A.</i> , Eastfield House, Rugby ... ..	38
Druce, G. C., <i>M.A.</i> , <i>F.L.S.</i> , Yardley Lodge, Oxford ... ..	434
Ewing, P., <i>F.L.S.</i> , The Frond, Uddingston, Glasgow ... ..	48
Food-Kecey, Mrs., Quorn Vicarage, Loughborough ... ..	105
Gregory, Mrs., 34 Montague Road, Cambridge ... ..	28
Horwood, A. R., Corporation Museum, Leicester ... ..	63
Jackson, A. B., 346 Kew Road, Kew, Surrey ... ..	132
Ley, Rev. A., <i>M.A.</i> , Netherton, Brampton Abbots, Ross-on-Wye ...	971
Linton, Rev. W. R., <i>M.A.</i> ... ..	462
Marshall, Rev. E. S., <i>M.A.</i> , <i>F.L.S.</i> , West Monkton Rectory, Taunton ...	208
Melville, J. Cosmo, <i>M.A.</i> , <i>F.L.S.</i> , Meole Brace Hall, Shrewsbury ... ..	105
Painter, Rev. W. H., Storchley Rectory, Shifnal, Salop ... ..	50
Peck, Miss, Avonhurst, Bathampton, Bath ... ..	29
Riddelsdell, Rev. H. J., <i>M.A.</i> , St. Michael's College, Llandaff ... ..	578
Rogers, Rev. W. M., <i>F.L.S.</i> , Chetnole, Grosvenor Road, Bournemouth West ... ..	110
Shoolbred, W. A., <i>M.R.C.S.</i> , <i>F.L.S.</i> , St. Ann's, Chepstow ... ..	27
Vigurs, C. C., <i>M.D.</i> , Newquay, Cornwall ... ..	362
Waddell, Rev. C. H., <i>M.A.</i> , Vicarage, Saintfield, Co. Down ... ..	17
Wheldon, J. A., <i>F.L.S.</i> , 60 Hornby Road, Walton, Liverpool ... ..	136
White, J. W., <i>F.L.S.</i> , Warnham, Woodland Road, Clifton, Bristol ...	171
Wilson, A., <i>F.L.S.</i> , <i>F.R.M.S.</i> , 4 Eaton Road, Ilkley, Yorks. ... ..	54
Wolley-Dod, Major A. H., Pymont, Common Road, Walton-on-Thames	84
Total	4,994

## NON-CONTRIBUTING MEMBERS.

- Babington, Mrs., Brookside, Cambridge.  
 Bagnall, J. E., *A.L.S.*, 84 Wilton Road, Aston, Birmingham.  
 Bayley-Balfour, Prof., *F.R.S.*, Royal Botanic Garden, Edinburgh.  
 Beeby, W. H., *A.L.S.*, Hildasay, Portsmouth Road, Thames Ditton.  
 Bellamy, F., *M.A.*, *F.R.A.S.*, 4 St. John's Road, Oxford.  
 Britton, C. E., Limpsfield, Adela Avenue, West Barnes Lane, New Malden, Surrey.  
 Bromwich, Joseph, 19 Hamilton Gardens, St. John's Wood, N.W.

- Carr, Prof. J. W., University College, Nottingham.  
 Comber, John, High Steep, Jarvis Brook, Sussex.  
 Drabble, Dr. Eric, Ivy Cottage, Upper Brighton, near Liverpool.  
 Evans, A. H., *M.A.*, 9 Harvey Road, Cambridge.  
 Farr, E. H., *F.C.S.*, The Laboratory, Uckfield.  
 Forteseue, W. Irvine, *M.B., C.M., J.P.*, 7 Bon Accord Square, Aberdeen.  
 Fryer, Alfred, *A.L.S.*, Chatteris, Cambridge.  
 Gasking, Rev. Samuel, *B.A., F.L.S., F.G.S.*, 26 Yew Tree Road, Walton,  
 Liverpool.  
 Geldart, Miss, Colman Row, Norwich.  
 Groves, J., *F.L.S.*, 1 Sibella Road, Clapham, S.W.  
 Hanbury, F. Janson, *F.L.S.*, Stainforth House, Upper Clapton, N.E.  
 Hilton, T., 1 Clifton Street, Brighton.  
 Hirst, C. P., Lockyer's Private Hotel, Llandudno.  
 Hunnybun, E. W., Mill Common, Huntingdon.  
 Johnstone, Lieut.-Col. Henry Halcro, Orphir House, Kirkwall, Orkney.  
 Laidlaw, F. F., Ivanhoe Hotel, Great Russell Street, W.C.  
 Lester Garland, L.V., *M.A., F.L.S.*, The School House, Victoria College,  
 Jersey.  
 Maekenzie, Roderick, Sunnyclose, Henley-on-Thames.  
 Milne, R. M., Devon Lodge, Dartmouth, S. Devon.  
 Murray, Rev. R. P., *M.A., F.L.S.*, Shapwick Vicarage, Blandford, Dorset.  
 Palmer, Miss C. E., The Yews, Odiham.  
 Pugsley, H. W., 81 Alexandra Road, Wimbledon, S.W.  
 Talbot, G. V., 36 Wilton Crescent, S.W.  
 Trow, Prof. A. H., Glanhafren, Penarth, Glam.  
 Webster, George, Merton Cottage, Holgate, York.

---

*Thalictrum*, sp. River side, Erwood, Brecon, and Llanstephan, Radnor, 25th June and 15th July 1907. Same plant (origin Erwood, Brecon) cultivated, 13th September 1907. This *Thalictrum* has scattered glands on foliage, petioles, and inflorescence.—AUGUSTIN LEY.  
*Thalictrum*. Wye banks. I think this may be called *T. pubescens*, Schleich., which I have placed as a variety under the aggregate *T. minus*, L., though the specimen is very thinly glandular for that form. It appears to be shade-grown, a condition in which the surface of the leaflets is larger and the glands apparently less developed. In maturity *T. pubescens* has the fruits glandular as well as the other parts.—E. F. LINTON. *Thalictrum*, orig. Erwood. Very near *T. collinum*, Wallr., but as there appear to be a few glands even at this late state of growth, it may be *T. pubescens*, Schleich.—E. F. LINTON.

*T. flavum*, L., var. *sphaerocarpum*, Lej. Marshy lake side, Llangasty, Brecon, 30th Sept. 1907. Fruit well developed and nearly free from insect distortion: it is thought that this may be welcome to some members.—AUGUSTIN LEY. Yes, var. *sphaerocarpum* (Lej. and Court).—E. F. L.

*T. flavum*, L., var. *nigricans*, Jacq. Marshy meadow, Llangasty, Brecon, 26th June and 30th Sept. 1907. A few more specimens from the same spot as those sent last year, to assist in determining if possible this plant. Rev. E. F. Linton (in Rep. of Watson Club) is right in saying that this plant is densely cæspitose. I am cultivating it in the garden, and hope to obtain by this means "honest fruit."—AUGUSTIN LEY. See 'Rep. B.E.C.' 1906, p. 208. What British Botanists have been calling var. *nigricans* is now in the 'Lon. Cat.' as var. *rufinerve* (Lej. and Court).—H. J. R.

*Ranunculus Drouetii*, F. Schultz, forma. Small road-side pool south of Trevemper, Crantock, West Cornwall, v.-c. 1, 7th and 25th June 1907. Messrs. H. and J. Groves write about this plant that it is a "difficult form approaching *R. trichophyllus* in some respects, but much nearer *R. Drouetii*, to which it is perhaps better referred."—C. C. VIGURS. Clearly right, I should say; a not uncommon, small-flowered form.—E. S. M.

*R. Baudotii*, Godr., forma. On brackish sandy mud at St. Columb Minor, Porth, West Cornwall, v.-c. 1, 18th and 21st June 1907. Messrs. Groves write of this plant that it is a "mud form of *R. Baudotii*, not *R. marinus*, Fries, which is a more distinct plant." It was named *R. marinus*, Fries, for me some years ago by a good botanist, and seems to agree with the description in Babington's Manual, Ed. IX., of that plant, for which of course the Editors are not responsible.—C. C. VIGURS. Only the *state* which this plant assumes when growing on mud; not a true variety.—E. S. M.

*R. tripartitus*, DC. Castle Killibury (alias Kelly Castle), near Wadebridge, East Cornwall, v.-c. 2, 19th June 1907. It was found here by Mr. Clement Reid in 1906. It was growing (when I saw it) in a small portion only of one of the two circular moats of this ancient earthwork situated on top of a knoll. The only possible origin of the plant in this situation would seem to be transportation of the seeds by birds. It existed in a very dense mass; the stems were inextricably entangled, and though fine, were comparatively strong. The segments of the submerged leaves were very slender, weak, and completely collapsing; all the floating leaves were yellowish-brownish-green, not at all the colour of *R. lutarius*, Bouv., and it seemed to me to be as distinct from *R. lutarius* as that plant

is from *R. hederaceus*, L.; I should not think anyone who knew *R. lutarius* would pass it by for that species. Messrs. H. and J. Groves have seen and passed some of Clement Reid's and of this gathering. *Vide*, 'Journ. Bot.', 1907, p. 452.—C. C. VIGURS. Also sent by S. H. BICKHAM.

*R. hederaceus*, L., var. *omiophyllus* (Ten.). Roadside pool a mile south-east of Newquay, West Cornwall, v.-c. 1, 16th and 21st June 1907. Messrs. Groves say—"In the direction of *omiophyllus*, but not the extreme form." The plants were rooted near the edge of the pool, and the stems floating for at least two feet; the flowers were few and small.—C. C. VIGURS. I believe so; but is this anything more than a luxuriant, submerged *state*? I doubt it.—E. S. M.

*R. acris*, L., var. *tomophyllus*, Rouy et Fouc. = *R. tomophyllus*, Jord. (*pro specie*). Pastures about Failand and Portbury, N. Somerset, July 1907. My friend Cedric Bucknall has joined me in a diligent endeavour to identify the forms of *R. acris* that grow about Bristol, with the idea of arranging them under the segregates described by Jordan and other continental botanists. Many gatherings have been made in every kind of situation, with care to secure representative roots, leaves and fruit. The specimens have been repeatedly examined and compared with descriptions, and also with such collections—by no means complete—as are contained in our National Herbaria. The result of this work—chiefly undertaken by my friend—stated shortly, is that we cannot consider any of the variations worthy to rank as distinct species. Of 'subspecies' I say nothing, for I have never been able to form a mental picture of that entity. As happens with other groups of critical plants, our British forms of *R. acris* cannot often be precisely collated with those known to grow on the continent. A few certainly agree fairly well with one or other of them, and a larger proportion can be named more or less uncertainly; but in the majority of cases puzzling cross-affinities are found to obtain, so that the plants cannot be allotted to any named variety, and sometimes not even to a particular section. The best that can be said of many of these *tomophyllus* specimens is that they are nearer to this than to anything else. Although sometimes classed as a secondary form under *Boreanus*, in its extreme state this plant is as far removed from the latter as from either of the other segregates.—JAMES W. WHITE. Yes, well marked; but would it not be better to subordinate it to *R. Boreanus* as var. *tomophyllus* (Jord.) Towns., as was done by Mr. Townsend in 'Journ. Bot.'? *R. Boreanus* and *tomophyllus* are connected by many intermediate forms, and are not even *subspecifically* distinct.—J. A. WHELDON. 'Lon. Cat.,' Ed. X., gives it as *R. acris*, L., var. *Boreanus* (Jord.),

f. *tomophyllus* (Jord.)—H. J. R. Evidently near Jordan's plant, but is it hairy enough? In any case, hardly more than a sub-variety of the same author's *R. Boreanus*, I believe.—E. S. M.

*R. acris*, var. *tomophyllus*, Jord.? Wyaston, S. Derby, 13th June 1907.—W. R. LINTON.

*R. acris*, L., subsp. *Boreanus*, f. *rectus*, Rouy et Fouc. = *R. rectus*, Boreau (*pro specie*). Pastures near Axbridge, North Somerset, 28th June, 1907. This form is rather common about Bristol, ranking in frequency next to *tomophyllus*, as far as can be judged at present. In England it seems difficult to lay hold of a character much relied upon by authors for the diagnosis of these plants, viz. the direction of the rootstock, whether oblique, horizontal or vertical. On continental specimens, however, I have seen roots such as I have never met with at home. Unless the plant grows in sand, peat, or similar loose soil, its root must obviously be liable to deflection by obstructions in its path, and the root-character will therefore be often obscured when a thin layer of earth overlies rock; or on stony roadsides. Nor does the rootstock take a direction in line with the aerial stem when plants spring from ditch-banks or other sloping ground. Thus one finds it difficult to make out clearly those forms which differ little from each other, save in the direction of their rootstocks, e.g. *Steveni* and *rectus*, which are instanced by Townsend; and the same hindrance lies in the way of a decision on many doubtful gatherings.—JAMES W. WHITE. This appears in 'Lon. Cat.,' Ed. X., as *R. acris*, L., var. *rectus* (Jord.)—H. J. R.

*R. acris*, var. *rectus*, Bor. Yeldersley Lane, S. Derbs., 13th June 1907. This was a robust plant growing in wet ground on the side of the lane.—W. R. LINTON. Not the *rectus* of Boreau.—J. W. WHITE.

*Glaucium phœniceum*, Crantz. It occurs in quantity over ground laid out in allotments at Canton, Cardiff, Glamorgan. Gathered Sept. 1907. It appears to seed freely.—H. J. RIDDELSDELL. Placed by Boissier as a var. of *G. corniculatum*, Curt. (i.e., var. *phœniceum*, DC.). It depends on the colour of the flowers.—E. G. BAKER.

Mr. Pugsley wishes it to be borne in mind that in most of Dr. Vigurs's specimens he has only seen samples of the Fumitories; he does not vouch for his remarks applying beyond the sheets which he actually saw.

*Fumaria purpurea*, Pugsley. Roadside at the top of the hill North of Trebellen, Cubert, v.-c. 1, West Cornwall, 30th Aug. and

14th Sept. 1907, and one specimen 11th May 1905. Confirmed by Mr. Pugsley.—C. C. VIGURS. Allotment gardens, Malvern, Co. Worcester, 23rd Sept. and 7th Oct. 1907. Mr. Pugsley has seen specimens gathered 23rd Sept., and those gathered 7th Oct. are from the same exact spot.—S. H. BICKHAM. Field between Lancaster and Caton, W. Lancs., Aug. 1907. "A weak shade grown form" of *F. purpurea*, teste Mr. H. W. Pugsley.—ALBERT WILSON.

*F. Boræi*, Jord. Cobo, Guernsey, July 1906. Named by Mr. Pugsley. One of the commonest species in the Channel Islands and occurring in Jersey, Guernsey, Alderney and Sark.—G. CLARIDGE DRUCE.

*F. Boræi*, Jord. Type? Tillage near Erwood, Radnorshire, 25th June 1907.—AUGUSTIN LEY. Yes, type.—H. W. PUGSLEY.

*F. Boræi*, Jord., var. *serotina*, Clavaud. Victoria Gardens, Truro, v.-c. 1, West Cornwall, 25th July 1907. Fide Mr. Pugsley.—C. C. VIGURS.

*F. Boræi*, Jord., var. *serotina*, Clavaud. 1. Roadside N.W. of Tregair, St. Newlyn East, 27th June 1907 and 16th July 1907; 2, roadside East of Lescliston (alias Rosecliston) "watering," St. Newlyn East, 16th July 1907; 3. vegetable garden, Trevella. Crantock, 31st Aug. 1907, all v.-c. 1, West Cornwall; 4. vegetable garden, Yelverton, S. Devon, v.-c. 3 (the last confirmed by H. W. P.). Of No. 1 Mr. Pugsley says "probably correct, but the material is hardly sufficient to separate it from var. *muraliformis*." Of No. 2, "a slender form of *F. Boræi* type, I think." Of No. 3, "probably so but not certain in absence of fruits."—C. C. VIGURS.

*F. Boræi*, Jord., var. *serotina*, Clavaud (teste Pugsley). Fields near Halton, W. Lancs. (60), Sept. 1907.—A. WILSON and J. A. WHELDON.

*F. confusa*, Jord. Cobo, Guernsey, July 1906. Named by Mr. Pugsley. Widely distributed and frequent also in Sark and Alderney, and St. Ouen's and St. Helier's, Jersey, for which island it is a new record.—G. CLARIDGE DRUCE. The petals are dark-tipped; I think that it is the var. *hibernica*, Pugsley.—E. S. M. 'Lon. Cat.,' Ed. X., names this *F. Bastardi*, Bor.—H. J. R.

*F. officinalis*, L. f. Tillage near Erwood, Radnor, with *F. Boræi*, Jord., 25th June 1907. Hardly differing from type, except in its large, deeply coloured flowers.—AUGUSTIN LEY. Yes.—H. W. PUGSLEY.

*Barbarea vulgaris*, R. Br. f. ?. Origin, Glais, Glamorgan (on colliery debris), cultivated 27th May and 9th July 1907. This curious form has the seed longer than broad, short spreading pods with not more than 2-3 seeds in each.—AUGUSTIN LEV. A form of *B. vulgaris* with imperfect fructification. The 1-3 seeded silicles are evidently not normal.—E. F. L. A distinct looking plant, striking features of which are the large yellow flowers and short nearly patent pods. Mr. J. R. Drummond and I compared this with Kew material and found that it came nearest to *B. taurica*, DC. Syst. 2, 207, a plant of Afghanistan and Cashmere, but Boissier, 'Fl. Orient.' I. 183, makes *B. taurica* a synonym of *B. arcuata*, Reichb., a plant which I do not pretend to understand. The description in the *Systema* is as follows:—*Barbarea foliis radicalibus et inferioribus pinnatipartitolyratis lobis terminalibus foliisque summis ovatis dentatis, pedicellis patulis, siliquis adscendentibus*. The label conveys no information as to whether this was an alien or not, but the abortive condition of many of the pods in my specimen is an indication of foreign origin. An examination of the *Barbarea* specimens preserved at Kew makes it clear that a revision of this difficult genus is desirable, but this would not be possible without a careful study of the living plants.—A. B. JACKSON. '*Barbarea vulgaris*, Br.' now appears in 'Lon. Cat.' as *B. vulgaris*, Ait.—H. J. R.

*B. vulgaris*, Br., var. Near Aberdare, June 1904 and 1905, and cult. from seed, Llandaff, Glam., 1907. Flowers small; silicles slenderer than in type, and in cultivation spreading, though in the wild state nearly adpressed. Does a name already exist for the variety? It is not var. *decepiens*, Druce ('Fl. Berks,' p. 44), which does not cover this small fld. form.—H. J. RIDDELSDELL. Is *B. vulgaris*, Br.—E. F. L. i.e., *B. vulgaris*, Ait.—H. J. R. I should cross out the var. Allowing for a certain amount of variation, I do not see how it differs from the plant usually recognised as *B. vulgaris* type.—A. B. JACKSON. Mr. Jackson adds in a subsequent letter, "I believe that the material preserved under "*B. vulgaris*" at Kew includes two if not three different plants. . . . The direction taken by the pods both when young and mature seems very variable. I find a small flowered plant very much like yours in habit but having the young pods spreading, collected by the late Mr. C. B. Clarke near Andover. This also is named *vulgaris*."

*B. stricta*, Andrz. Banks of the Thames near Richmond (*locus classicus*), June and July 1907. This is associated with *B. vulgaris* in the locality named but is remarkably distinct from it, and no intermediate plants were noticed. The stiff erect hairs which are present on the young sepals of *B. stricta* afford a useful distinguishing character not mentioned in British floras. In *B. vulgaris*

the sepals are quite glabrous. See 'Journ. Bot.,' April 1908, where Messrs. T. A. Sprague and J. Hutchinson publish a valuable paper on the differences between these two species.—A. B. JACKSON.

*Sisymbrium hispanicum*, Jacquin. On made ground in St. Philip's Marsh, Bristol, 10th July 1907. A plant of the Pyrenees and Central Spain that has been with us several years in succession although it does not appear to form good fruit.—JAS. W. WHITE.

*S. Columnæ*, Jacq., = *S. orientale*, Linn., var. *stenocarpum*, Rouy and Fouc. On the sites of old poultry runs on the sandhills off the North Drive, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 6th and 20th July, and 3rd and 31st August 1907. My contributions to the Club this season are aliens which have been introduced in grain siftings and sweepings upon which poultry are fed. As building operations extend the fowls are removed, and on the site of their old feeding grounds seeds of foreign plants germinate, and by the time that they flower and fruit builders' or other traffic destroys them. I have collected many other aliens, some of which shall be sent next year, as all their names are not yet worked out. The *S. Columnæ* was widely spread over the area bounded by St. Leonard's Road, St. Andrew's Road South, Beach Road, and the North Drive. Its narrow fruits bring it under Rouy and Foucaud's var. *a. stenocarpum*. ('Flore de France,' ii. p. 21.) —CHARLES BAILEY.

*Erysimum perfoliatum*, Crantz, = *Coutringia orientalis*, Andrz. This is another of the St. Anne's-on-the-Sea aliens occurring, in isolated examples, in the same stations as *Sisymbrium Columnæ*, noted above. Flowering and fruiting examples on the 6th and 23rd July 1907, growing in the shade of luxuriant examples of *Sinapis nigra*, Linn.—CHARLES BAILEY. *E. orientale*, Mill.—H. J. R.

*Sinapis juncea*, Linn. This plant was under observation throughout the season. It grew on the margin of a cindered passage-way between the North Drive and St. George's Gardens, St. Anne's-on-the-Sea (v.-c. 60), along the side of Atherstone House. At first I took it to be a starved state of *Sinapis nigra*, Linn., but as growth progressed it was clearly seen not to be that plant. Examples of this starved condition, collected 26th July and 31st August 1907, are included in the parcel. Besides this station there were several others on the contiguous sandhills of a more luxuriant growth, some of them in stations which had been free from fowls for at least three or four years; the best examples were collected 7th September 1907. Some plants in my herbarium from Swinemünde, Pomerania, suggested to me that the plant might be the

*S. juncea*, Linn., given in the 'Prodromus' (Vol. I., pp. 218, 219) as a native of China, and cultivated in fields of *Trifolium alexandrinum* in Egypt, but the examples growing on the cindered pathway lacked the character of the "ramis fasciculatis" of the 'Prodromus.' Later on in the summer some plants of the same species were sent to me for naming by Mr. Jas. E. McDonald of Heaton Norris, as occurring on a refuse tip in his neighbourhood, and these possessed the fascicled branches which were lacking in the cinder-grown examples. These fascicles are shown by the sandhills plants of 7th Sept. There are some variations in the direction of the pods, and in the length and shape of the style, and I am not sure that *Sinapis brassicata*, Linn., may not be represented in some of these gatherings.—CHARLES BAILEY. Mr. Bailey informs me that he sent examples of all his gatherings to Kew, and they were all returned to him as *S. juncea*, L.—H. J. R. This is *Brassica nigra*, Koch, = *Sinapis nigra*, Linn., Sp. Pl. 933, and not *Brassica juncea*, Hf. and T. (see 'Fl. Br. Ind.' i. 157), which has a different pod and leaves, and is a true *Brassica*. *B. juncea* is a sub-tropical plant, seldom maintaining itself even in its own region (Anatolia and N. Africa to the Gangetic Plain) as an escape, and occurring in these islands solely as a depauperated casual near wool and oil factories, &c., and that comparatively rarely.—J. R. DRUMMOND.

*Eruca sativa*, Lam. A frequent plant on the poultry areas of the sandhills of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, during 1907. The flowers were all yellowish straw-coloured. The examples sent were collected 20th July 1907.—CHARLES BAILEY.

*Thlaspi alpestre*, L., var. *occitanum* (Jord.). Yarnbury, Aug. 1907. Typical of the waste heaps of the lead mines of the West Riding of Yorkshire.—JOHN CRYER. I think this had better be left under the aggregate *T. alpestre*, L. Quite recently Mr. Bucknall and I have compared specimens very carefully with the descriptions and figures given by Jordan in his *Diagnoses* and in the *Observations*. We noted that Jordan's name is *occitanicum*, not 'occitanum.' With that segregate the present plant agrees fairly well in characters of the capsule, including the number of seeds. But the *occitanicum* has very glaucous leaves—more or less dentate; and a biennial root 'vraiment pivotante.' As far as I can tell from the small specimen at hand Mr. Cryer's plant is not glaucous; its leaves have but little tothing; and the root appears to be perennial.—JAS. W. WHITE. 'Lon. Cat.,' Ed. X., drops var. *occitanum* (Jord.).—H. J. R.

*Reseda stricta*, Pers. ?, on waste ground at Canton, Cardiff, Glam., Sept. 1907. *R. lutea*, L., grew close by. The plant now

distributed much resembles a *Reseda* from Wytham sent in 1906 by Mr. Druce and named by him *R. stricta*, Pers.—H. J. R. Yes, *Reseda stricta*, Pers. This species belongs to that section of *Resedastrum* in which the calyx is caducous and seeds smooth or nearly so.—E. G. BAKER.

*Viola Riviniana* f. *minor*, Murbeck, = *V. flavicornis*, Forst. Clogher, Co. Tyrone. Coll. Miss Peck, April and May 1907.—E. S. GREGORY.

*V. canina*, L. Railway Bank, Malvern Link, Co. Worcester, 30th July 1906, and 11th June 1907.—S. H. BICKHAM. I do not think that this is pure *canina*,<sup>b</sup> "Linn" (*V. ericetorum*, Schrad.), but probably a hybrid with *V. Riviniana*.—E. S. M. I suppose this to be *V. silvestris*, Reich., of rather diffuse growth.—D. FRY. I have no hesitation in giving my opinion in favour of the hybrid *Viola Riviniana* × *ericetorum*. It is a plant I know pretty well, as I cultivated it for years in my garden at Weston-super-Mare. Mr. Beeby very kindly named it for me in 1898, and I have taken a good series of specimens for my herbarium; one of which, gathered late in the season, is almost the counterpart of Mr. Bickham's example.—E. S. GREGORY. Mr. Bickham subsequently wrote to Mrs. Gregory:—"I think that . . . we may have on this railway bank *V. Riviniana*, *V. ericetorum*, and the hybrid *V. Riviniana* × *ericetorum*, all growing together. Towndrow writes that he used to think he found—

1. True *canina* (*ericetorum*).
2. *V. Riviniana*.
3. A doubtful plant which he then supposed to be *V. Riviniana* × *ericetorum*, but could get no one to agree with him."

*V. canina* × *Riviniana*. East Pentire, Newquay, West Cornwall, v.-c. 1, 16th May 1907 (with Mr. F. H. Davey), and 14th July 1907. This was first identified in 1905 by Mrs. E. S. Gregory, who kindly wrote, "I take (it) to be a hybrid between *canina* and *Riviniana*," but reserved a definite opinion till seeing full material, which illness prevented me sending the next year. This year I sent it to Mr. E. Baker, who kindly forwarded it to Dr. Becker, who replied that he believes the plant to be *canina* × *Riviniana*. Mr. Baker says that in most of the sheets of this hybrid in the British Museum the leaves are rather more cordate at the base than in my plants; he does not give a positive opinion; and says that Mr. Pugsley does not think there is any *Riviniana* in it, and would call it a form of *ericetorum*. The plant forms a small group of large, very compact tufts, the largest, nearly 3 ft. in diameter, having been lately destroyed by quarrying operations. No root-leaves can be seen. On 28th June, I collected

a few specimens bearing partially developed fruits, generally with one, sometimes with two, but never with all three carpels developed; but by the 14th of July cleistogamous flowers only were to be seen, and these are completely barren. *V. ericetorum* and *V. Riviniana* (also *V. hirta*) grow close by. The Rev. E. F. Linton (in 'Journ. Bot.,' 1907) says this hybrid is always sterile. I have not examined the pollen.—C. C. VIGURS.

*V. canina* × *stagnina*. Woodwalton Fen, Hunts. Coll. E. W. Hunnybun, June 1907.—S. H. BICKHAM.

*V. canina*, var. *crassifolia*, Grönv. Woodwalton Fen, Hunts, 29th May 1907. Coll. E. W. Hunnybun. Named on the authority of Dr. Neuman.—E. S. GREGORY. Also sent by S. H. BICKHAM.

*V. stagnina*, Kit. Woodwalton Fen, Hunts. Coll. E. W. Hunnybun, 13th June 1907.—S. H. BICKHAM.

*V. nemoralis*, Kützing, which Dr. Neuman says is a synonym for *V. montana*, L. Woodwalton Fen, Hunts, 29th May 1907. Coll. E. W. Hunnybun—E. S. GREGORY. Also (13th June 1907) from S. H. BICKHAM.

The Fen violets gathered by Mr. Hunnybun and sent by me to the Club, have acquired a new interest through notes recently received from Mr. Becker, of Hedersleben, Germany. In October 1907, I put up a set of four plants (all from Woodwalton) which I considered tolerably distinct and sent them first to Dr. Neuman labelled thus :—

I. *V. stagnina*, Kit. Fls. small, whitish, slightly tinged pale blue, spur greenish.

II. *V. canina*, L. Fls. larger, bright blue, spur yellow.

III. *V. stagnina* × *canina*. Leaves thick, roughish, fls. pale blue. (This plant had been named for me in 1905, by Prof. Murbeck.)

IV. *V. nemoralis*, Kützing. Leaves thinner, fls. pale blue.

Dr. Neuman replied as follows :—

I. *V. stagnina*, recte.

II. *V. canina* β *crassifolia*, Grönvall.

III. *V. canina* × *pumila*, vel. *pumila* × *Riviniana*, probably the latter. Stipules too long to be of *canina* × *stagnina*.

IV. *V. montana*, L. (syn. *V. nemoralis*, Kützing).

By Mr. Arthur Bennett's advice, I sent the same plants to

Dr. Becker and received them late in January, with the following notes :—

I. If at this place *V. canina* or *V. montana* occurs, you will hardly look in vain for *V. canina* × *stagnina*, or *V. montana* × *stagnina*. These hybrids form large bushes. *V. stagnina* and *canina* × *stagnina* were the reason that impelled me to study more particularly the genus *Viola*.

II. These *canina* forms obviously approach by their long stipules and long leaves to *V. montana*, L.

III. *V. canina* and *montana*. *V. canina* and *montana* are sub-species of one collective species.

IV. *V. montana*, L. = *V. nemoralis*, Kütz. Agrees with German and Scandinavian examples. Determ. W. Becker.—E. S. GREGORY.

*V. Lloydii*, Jord. Yoke Cliff, Wirksworth, Derbs, 10th July and 4th Sept. 1907. Named for me by Dr. E. Drabble. Growing in a wooded limestone cliff and looking like a distinct species.—W. R. LINTON.

*V. saxatilis*, Schmidt., var. *monticola*, Jord.? Origin, Brilley, Herefordshire; cult. June and July 1907. This is the same plant which I sent to the Club last year under the suggested name of *V. Sagoti*, Jord. Under cultivation in poor soil in a shaded situation it has proved to bear more resemblance to *V. monticola*, Jord.—AUGUSTIN LEV.

*V. saxatilis*, Schmidt, ff. Tillage, Llangammarch, Brecon, 24th July 1907.—AUGUSTIN LEV. *V. Lloydii*, Jord.—E. G. BAKER.

*V. carpatica*, Borb. Near Oldcastle Mill, Cheshire, 1st Aug. 1907. No. 1640. Plants bearing this name have several times been distributed, and I would not have added to their number, had I not the impression that they are not all the same species. *V. carpatica*, Borb., is said to be perennial or sub-perennial, whatever that may mean, but these are annual or possibly biennial. I do not know the § *Melanium*, and therefore cannot suggest an alternative name unless it be *V. polychroma*, Kern., also a perennial or sub-perennial species. These gatherings were made in a sandy rabbit burrow, and the plant did not extend beyond the excavated sand, probably because it will only grow in recently turned soil, like most of its section.—A. H. WOLLEY-DOD.

*V. obtusifolia*, Jord. Some seeds from a plant so named by Dr. Drabble, gathered near Winslow, Bucks, were sown in my

garden; the specimens are sent to show the characters are fairly fixed, as they have also independently been named *obtusifolia*. Aug. 1907.—G. CLARIDGE DRUCE. *V. arvensis*, var. *obtusifolia* (Jord.) of 'Lon. Cat.,' Ed. X.—H. J. R.

*V. nana*, DC = *V. Kitaibeliana*, Reichb., var. *nana* (DC). From the Quenvais, Jersey, June 1906 and April 1907. This appears to be quite a distinct species; the tiny flowers often suffused with purplish-violet are very curious. It also occurs on the L'Anresse Common, Guernsey.—G. CLARIDGE DRUCE. *Viola arvensis*, var. *nana* DC of 'Lon. Cat.,' Ed. X.—H. J. R.

*Polygala Amarella*, Crantz. A few rose-tinted and white-flowered specimens to supplement those sent last year. I enclose also a few blue-flowered from a new station. These were found growing on very wet stony ground on the lower northern slope of Hawkswick Clowder, eight to nine hundred feet above sea-level.

Hawkswick Clowder is a hill 1,500 ft. high between Kilnsey and Arncliffe in Wharfedale, Yorkshire.—JOHN CRYER.

*Saponaria Vaccaria*, Linn. = *Vaccaria parviflora*, Moench. A few plants occurred with the other aliens of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 20th July, 24th and 31st August 1907.—CHARLES BAILEY.

*Silene Cucubalus*, Wibel, var. *puberula*, Syme. Rough turf in a plantation on an old limestone quarry, Waltham, Leics., v.-c. 55, 25th July 1907. In the report of the Watson Botanical Exchange Club, 1907, Mr. Bell remarks of *Silene Cucubalus*, var. *puberula*, "It is strange that there are no specimens of it in the County Herb., Leicester, nor have I seen living plants in the County."—F. L. FOORD-KELCEY. Correct.—D. FRY. *S. latifolia*, Rendle and Britten, var. *puberula* (Jord.) in 'Lon. Cat.,' Ed. X.—H. J. R.

*S. Armeria*, L. Self-sown in the Parks, Oxford, Sept. 1907.—G. CLARIDGE DRUCE.

*S. noctiflora*, Linn. On broken ground, the site of an old poultry farm, in the sandhills to the south of Birkdale railway station, Southport, south-west Lancashire, v.-c. 59, 24th August 1907. This site has afforded a large series of aliens to Southport botanists, one of whom, Mr. Henry Ball, pointed it out to me. Together we collected *Sideritis montana*, *Salvia verticillata*, *Anagallis cœrulea*, *Cerinthe minor*, *Silene dichotoma*, &c.—CHARLES BAILEY. *S. noctiflora* never has this elongate habit. The calyx is quite different, whitish and membranous between the nerves, with long narrowly subulate teeth, not to mention other floral characters. Mr. Bailey's plant is *Lychnis alba*, Mill.—E. F. L.

*Lychnis dioica* × *aiba* = *L. intermedia*, Schur. Near Stow Wood, Oxford, in the vicinity of both parents, July 1907.—G. CLARIDGE DRUCE.

*L. Flos-cuculi*, L., fl. pl. Cult. Egremont, Cumberland, by the late Joseph Adair. Comm. Harold Adair, per Charles Bailey. Mr. Harold Adair writes to Mr. Bailey under date 25th December 1907:—“The plant was found in a line near where hundreds of this plant grow, but only one with double flowers. I brought the root to my garden, and the 15 or 18 specimens were gathered from it.”

*Cerastium triviale*, var. *alpestre* (Lindbl.), Hartm. Ben Lawers, Mid Perth, July 1907.—P. EWING. I have not seen a Scandinavian specimen; but I believe that the name has been denied to our British alpine plants. From a neighbouring hill, Cam Chreag, I have a more luxuriant, but otherwise practically identical sheet; in both of them the pubescence is longer and more copious than in our usual alpine *triviale* forms. Both var. *alpinum*, Mert. and Koch, and *C. longirostre*, Wichura, are identified by Rouy and F. N. Williams with var. *fontanum* (Baumg.); and the present plant comes near that, if it is not the same thing.—EDWARD S. MARSHALL.

*C. triviale*, Link, ? f. *filiforme*, Hartm. Cam Chreag, Glen Lochay, v.-c. 88, 24th July 1907.—P. EWING. I do not know this form.—E. S. M.

*C. alpinum* × *alpestre*?. Ben Lawers, Mid Perth, 12th July 1907.—P. EWING. I can see no trace of hybridity. The sheet before me matches several gatherings of *C. alpinum* (type), which happens to be very well represented in my collection.—E. S. M.

*Stellaria umbrosa*, Opiz. Shrewsbury, Salop, April—May 1907.—J. COSMO MELVILL. Yes, *S. neglecta*, Weihe, var. *umbrosa* (Opiz). E. S. M.

*S. neglecta*, Weihe, var. *decipiens*, Marshall. Main road above Shirley, Derbs., 8th July 1907. Mr. Marshall, to whom I sent specimens, considers this to be *S. media* only. It is a large luxuriant form, but as Mr. M. points out, wants the long reflexed fruiting pedicels, and the seeds are too small.—W. R. LINTON.

*S. graminea*, L. var. Hartsfield Common, E. Grinstead, Sussex. (Mrs. Carlos Patteson coll.) Comm. J. Cosmo Melvill, July 1907. A very curious compact and stunted form, growing in a dwarfed way amongst low herbage, gorse, &c., in damp places. The stamens light purple, rendering the effect of pale lilac flowers. I have never

noted this form in European collections, and I do not think it bears a varietal name.—J. C. MELVILL. A small form, which (as far as I can make out) is apetalous. I know of no definite name for it.—E. S. M.

*Arenaria norvegica*, Gunner. At about 230 feet above sea level near Inchnadamph, W. Sutherland, July 1907. Very rare.—G. CLARIDGE DRUCE.

*Spergula arvensis*, L., var. *nana*, Linton. This plant I had described as var. *praecox*, and as such have it included in my 'British Plants,' which was printed off in July of 1907, but not yet published, and the name therefore must give way to Mr. Linton's name *nana*, which has been published in 'Journ. Bot.' The chief points of interest are its small size, its very early flowering, Jan. to March, and its habitat, which is not cornfields, but aboriginal turf-ledges on sea-cliffs, and also grassy commons. Mr. Marquand, in the 'Flora of Guernsey,' long ago drew attention to it. As I have said, its point of interest is in its growing in natural turf, this proving it to be native of the Channel Isles, and not to have been brought in with cornfield weeds. The seeds are papillose, and the plant has the habit of *Sagina procumbens*. March 1907.—G. CLARIDGE DRUCE. *S. arvensis*, L., var. *nana*, Linton ('Journ. Bot.,' 1907, p. 380).—E. F. L. This is the small plant recently described in 'Journal of Botany' as var. *nana*, Linton.—E. S. M.

*Tilia cordata*, Mill. Swithland Wood, 7th Aug. 1907. Hitherto this has been recorded under *parvifolia*, but at nearly all the stations it is known to have been planted, so that the indigeneity of *Tilia cordata* in Leicestershire has been locally questioned. Professor A. G. Tansley and Dr. Moss, who were here with the British Association, state that, "judging from the ground flora *Tilia cordata* is undoubtedly indigenous at Swithland."—W. BELL. This differs from all the other Limes in having an erect, not drooping inflorescence, a character not mentioned in the books.—A. B. JACKSON.

*Geranium Robertianum*, L., var. *modestum* (Jord.), on shingle, Kingsdown, near Walmer, E. Kent, v.-c. 15; 9th July 1907.—F. L. FOORD-KELCEY. This plant occurs frequently on the southern coasts of England, and I have seen it in Co. Kerry. It is usually called var. *purpureum* (Vill.); but it is, perhaps, too near to var. *modestum* (Jord.) to deserve separate rank. Rev. R. P. Murray once told me that he regarded the two as identical.—E. S. M.

*Erodium cicutarium*, L'Hérit, var. *glandulosum*, Bosch. Deal Sandhills, E. Kent, v.-c. 15, 2 July 1907.—F. L. FOORD-KELCEY. Yes; originally recorded from this station, the specimens having

been so named by Mr. Arthur Bennett. I have since found it on various sandy coasts, including Glamorgan and E. Sutherland.—E. S. M.

*Ononis repens*, var. *horrida*, Lange. Sandy Coast, Stert, S. Somerset, 22 Aug. 1907.—E. S. MARSHALL.

*Trigonella caerulea*, Ser. With many other introduced plants on waste ground at Canton, Cardiff, Glam., Sept. 1907. Is it this species?—H. J. RIDDELSDELL. This would seem to deserve distinguishing by a varietal name, such as var. *oblonga*, for the fruiting raceme is cylindrical oblong instead of round or roundly ovate. The whole plant is more slender, and the leaves and stipules narrower, as also are the racemes, than in my specimen which coincides in these respects with the description.—E. F. L.

*Medicago lupulina*, L., var. *Willdenowiana* (Koch)? Fruit hairy; simple hairs whitish; glandular hairs many, very minute. On railway banks, Sellack, Herefordshire, 8th July 1907.—AUGUSTIN LEY. The fruit is more or less hairy, but apparently not *glandular*-hairy; so that it is hardly the variety. I believe that var. *scabra*, Gray, is an earlier name.—E. S. M. Not the variety which has glandular hairs on the pods. In my specimens the pods are pilose but the hairs are eglandular. I have found the variety in three separate localities during the last two years, but always in garden ground.—A. B. JACKSON.

*M. lupulina*, L., var. *Willdenowii*, Boenn. Waste ground, Canton, Cardiff, Glam., Sept. 1907. Probably introduced. The fruit is covered with glandular hairs, which, however, tend to disappear as the fruit ripens and blackens.—H. J. RIDDELSDELL. Should be called var. *scabra*, Gray.—H. J. R.

*Melilotus indica*, All., = *M. parviflora*, Desf. Very abundant on the sandhills, in the poultry area, on the north side of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 20th July 1907. Generally growing in the shade of large bushes of *Sinapis nigra*, and species of *Chenopodium*.—CHARLES BAILEY.

*Trifolium*, Sp. Waste ground at Canton, Cardiff, Glam., Sept. 1907.—H. J. RIDDELSDELL. *T. diffusum*, Ehrh. A Mediterranean species not previously noted for Britain so far as I can make out. Mr. Drummond and I determined it.—A. B. JACKSON.

*T. striatum*, Linn., ? var. *erectum*, Leight. East Pentire, Newquay, West Cornwall, v.-c. 1, 14th July 1907. I take this to be var. *erectum*, though it does not seem to agree with the

description in "Babington." It was quite erect, growing with *Mesembryanthemum virescens*, which is rapidly establishing itself here.—C. C. VIGURS. I heard from Mr. Arthur Bennett, some years ago, that Leighton's plant was much larger. The question of mere size, however, seems immaterial; and I believe that it may stand as correct.—E. S. M.

*T. dubium*, Sibth. (forma autumnalis umbelliformis). I have noted this autumnal form of the Lesser Yellow Clover, of which I can find no mention in any text-books, in two or three localities, seemingly putting forth the whole of its strength to complete flowering and fruiting in the late autumn, the topmost flower heads assuming a strong umbellate appearance. It occurred plentifully in two places—between Meole Brace and Bagster Hill, and at Redhill, Salop—in September and October 1907.—J. C. MELVILL. I cannot separate this from type.—E. S. M.

*Vicia sepium*, L., forma. This pretty dwarf procumbent form of the Hedge Vetch occurred in some quantity on the sandy bay between Betty Hill and Farr Point, West Sutherland, July 1907.—G. CLARIDGE DRUCE. Not worth distinguishing, in my opinion; the northern climate and (probably) an exposed situation account for its habit.—E. S. M.

*Prunus domestica*, L. Small spreading tree in hedge by G.C.R. line near Quorn Station, Leics., v.-c. 55, 18th April and 28th July 1907.—F. L. FOORD-KELCEY. I should call it *P. insititia*, L.—E. F. L. So should I.—H. J. R. I think this belongs to *insititia* rather than to *domestica*, as the flowers, foliage, and fruit are too small for the latter, with which also the downy peduncles are not consistent.—D. FRY. I agree.—JAS. W. WHITE.

Mr. Rogers has seen sample specimens of all the Rubi distributed; and in some cases has seen all the plants sent out. With exceptions particularly noted, he agrees to the names on the labels.

*Rubus sulcatus*, Vest. August 1907. (1) Near "Salterns," east side of Poole Harbour; (2) Near Hamworthy Junction, Dorset; (3) Moor, near Redhill, S. Hants.—W. MOYLE ROGERS. To my regret I find myself obliged to ask the members to alter the specific name given above. Misled by the extraordinary luxuriance of the living bushes, with their long high-arching, sharply-angled stems bearing crowded wide-spread 5 nate leaves, I believed this handsome plant to be a form of *R. sulcatus* with exceptionally narrow leaflets and only moderate-sized flowers. Further study has shown me that I was wrong, and that it cannot be separated

from Focke's typical *R. opacus*, as represented by specimens collected by him near Bremen and now in my herbarium. It is also, I am convinced, the same form as the Somersetshire specimens issued as No. 78 in the "Set of British Rubi" (1892—1895), and as a Dorset plant which grows in some quantity at West Moors, near Wimborne. With reference to the latter, submitted by me to Dr. Focke in 1893, he wrote, "Quite my plant." I may add however that, in its autumnal condition, especially as seen in the specimens now distributed to the members, it is considerably unlike a smaller and more pubescent plant, which Focke distinguishes as his "*forma minor*." The latter is represented in the "Set" by No. 106, consisting of specimens collected by me in S. Devon, where I had constant opportunities of becoming familiar with the living bushes. This small form, as stated in my Handbook, p. 23, is also found near Bremen "on very poor and dry soil," and is readily distinguished from the type by its greyer, more hairy, and more finely-toothed leaves and short-pointed leaflets:—characters which make any confusion of it with *R. sulcatus* practically impossible.—W. M. R.

*R. affinis*, Weihe and Nees. Small form. Peterston, Glamorgan, 28th August 1905. Some of the panicles, gathered at this late date, show great development of the lower branches. Mr. Rogers has seen the bushes at this locality.—H. J. RIDDELSDELL. Yes.—W. M. R.

*R. holerythros*, Focke. Colgate, St. Leonard's Forest, W. Sussex, 30th July 1906.—JAS. W. WHITE. Yes.—W. M. R.

*R.* ——. Woods near Apley, N. Lincoln, 16th August 1907. This bramble, which has been the subject of a good deal of correspondence between myself and Rev. W. M. Rogers, has at length been definitely assigned by him to *R. mercicus*, Bag., and I concur in the identification. New County record.—AUGUSTIN LEY. *R. mercicus*, Bagnall. Off type, towards subsp. *bracteatus*, Bagnall, especially in outline of panicle.—W. MOYLE ROGERS.

*R. mercicus*, Bagnall. Gathered in Market Rasen Wood, Lincolnshire (in company with Mr. A. Ley). I have since shown scanty material to Mr. W. M. Rogers, who says it "certainly resembles closely *R. mercicus*."—L. CUMMING.

*R. thyrsoideus*, Wimm. Wrawby Moor, N. Lincoln, 23rd August 1907. This is a form recalling, so far as the narrowness of the foliage goes, the continental *R. candicans*, W.; the panicle, however, takes it quite away from that plant. New Vice-County record.—AUGUSTIN LEY. Yes.—W. M. R.

*R. Godroni*, Lec. and Lam., var. *foliolatus*, Rogers and Ley. Larkton Hills, Cheshire, 15th August 1907, No. 1635. I send this plant as I had labelled it, believing it to be the same variety as was so named for me last year by Mr. Rogers, though not from the same bush. Just before making up my parcel, however, I received from M. Sudre, to whom I had sent three or four Rubi to name, the following note on a specimen of the present plant:—" *R. Muenteri*, Marsson (*P. Maassii*, Focke, subsp. *R. Muenteri*, Sud. Rub. Eur.) = Set of Brit. Rub. No. 11 ex parte (sub. nom. *R. leucandrus*)." I leave further remarks for those better acquainted than I am with the species in question.—A. H. WOLLEY-DOD. Yes.—W. M. R. Labels give Ref. No. 1636.—H. J. R.

*R. silvaticus*, W. and N. Woods near Apley, N. Lincoln, August 1907. Frequent in Cockglade, Springwood, and other woods near Apley; often shewing slight glandular and acicular development on the stem. New County record.—AUGUSTIN LEY. Yes.—W. M. R.

*R. silvaticus*, W. and N. Hedge, near Bow Lough, Saintfield, Co. Down, 31st August 1907.—C. H. WADDELL. Yes.—W. M. R.

*R. Salteri*, Bab. Radyr, Peterston, Llantrissant, Caerphilly, Glamorgan, August 1907. Apparently a frequent form over this area of the County.—H. J. RIDDELSDELL. Mr. Rogers agrees to all these specimens.

*R. hypoleucus*, Lef. and Muell. In great quantity and variety round Radyr, Llandaff, &c., Glamorgan, August 1907. Seen by Mr. Rogers, who says, "hardly glandular at all except on bracts." In spite of all precautions this form seems persistently to dry a bad colour.—H. J. RIDDELSDELL. Mr. Rogers saw all these.

*R. hypoleucus*, Lef. and Muell. f. Duckington Dingle, Cheshire, 12 August 1907, No. 1637. Mr. Rogers saw specimens of this last year, and thought it undoubtedly came under aggregate *R. hypoleucus*, Lef. and Muell, as a form.—A. H. WOLLEY-DOD.

*R. hypoleucus* × ? *leucostachys*. One bush at Radyr with both species, 20 August 1907. The *hypoleucus* parentage is clear. Mr. Rogers suggests *leucostachys* on the other side.—H. J. RIDDELSDELL.

*R. Lettii*, Rogers. Cwm Einon, 18th July 1907, Cardiganshire, v.-c. 46. This is the *Rubus* which I sent last year to the Club as *R. curvidens*, A. Ley, and which Mr. Ley believed to be *R. criniger*, Linton. This year I visited Cwm Einon again, and obtained a good supply of the plant, which has been submitted to the Rev.

W. Moyle Rogers and A. Ley, and which they are both agreed is *R. Lettii*. New Record for Cardiganshire. See 'Journal of Botany,' 1901, p. 381; 1907, p. 319.—W. H. PAINTER. Bolston Wood, Herefordshire, 31st July 1907. See 'Journ. Bot.,' 1907, pp. 319, 320. Since writing the above, the Rev. W. M. Rogers has expressed himself satisfied with the practical identity of this Herefordshire plant with the Irish *R. Lettii*.—AUGUSTIN LEY. The Bolston Wood plant differs from the Cos. Down and Armagh type *Lettii* by its stem-prk. rather more unequal, and with stouter base; stipules conspicuously narrower (nearly filiform instead of rather broadly lanceolate), and panicle browner, more irregular in outline, and with less remarkably needle-like pale prk. which seem *always* eglandular, while only *mostly* so in the Irish plant. Slight and unimportant as these differences may seem in detail, the aggregate result is such that I felt some difficulty at first as to specific identity. But the large series of specimens which I have received from Mr. Ley, at intervals since 1901, have now convinced me that his Herefordshire plant cannot be kept distinct from the Irish type. I also agree with his suggestion that Mr. Painter's Cardiganshire plant should go with the Herefordshire one. Here, however, a fresh difficulty arises in the fact—possibly due to mixture—that most of Mr. Painter's stem-pieces are (quite unlike my *R. Lettii*) either glabrous or glabrescent. I should add that generally the Welsh plant is less conspicuously grey and hairy than the Irish.—W. MOYLE ROGERS.

*R. adenanthus*, Boul. and Gill, forma. Several bushes in hedges at Aberdare, Glam., 14th August 1905 and 3rd August 1907. Flowers faint blush, nearly white, cup shape, petals rather broad. Mr. Rogers saw the 1905 gathering, and specimens of 1906 also, when he wrote, "I think it impossible to separate any of these from my Gorey Bay *R. adenanthus*, which they resemble more closely than W.-Dod's Cheshire plant does. The latter is much more glandular and aciculate than the Jersey plant."—H. J. RIDDELSDELL.

*R. radula*, Weihe, subsp. *anglicanus*, Rogers. Bournemouth neighbourhood, S. Hants and Dorset; very common; July and August 1907. Off type *radula* towards *R. ericctorum*, Lefv.; but I am convinced after many years of study under favourable circumstances, nearer to the former than to the latter, in spite of M. Sudre's opinion to the contrary. It is truly radulan in armature, though often less conspicuously so than type *radula*; while *R. ericctorum* is characteristically sub-Koehlerian.

Among other marked differences the following are usually quite conspicuous, in addition to the distinct stem armature:—

*R. anglicanus*, *ls.* 5 nate-digitate (thick). *Term. lt.* round

based or emarginate, *with rather short or moderate point*, and petiolule about  $\frac{1}{2}$  its length. *Pan.* fairly compact in the considerable ultra-axillary top, with one or no simple l. few and *inconspicuous acic. and std. gl. almost wholly sunk in long hair*; rach. and sep. shaggy. *Fl.* very showy, starlike.

*R. ericetorum*, L., 3—5 nate-pedate (thin). *Term. lt.* with narrow sub-cuneate base and *very long gradually acum. point*; petiolule moderate, often less than  $\frac{1}{3}$  its length. *Pan.* remarkably elongate, very lax throughout, and more narrowed above, normally with three to five simple leaves reaching almost to the top; *rach. and ped. with close felt crowded acic. and other unequal arms, but only scattered short hair.* Prk. more deflexed.

Both forms are found with us almost exclusively in S. and W. England:—*anglicanus* in 25 v.-c., and most abundant in the S.W.; while *ericetorum* is known in 18 v.-c., and seems most frequent in S.E. England and along the Welsh border.—W. MOYLE ROGERS. Mr. Rogers has asked me to add that he has himself seen no continental specimens of Lefevre's *R. ericetorum*, but assumes that Dr. Focke was right in assigning that name to our plant after seeing living bushes of it in 1894.—H. J. RIDDELSDELL.

*R. radula*, sp. coll., var. *echinatoides*, Rog. Old Wood, Skellingthorpe, S. Lincoln; August 1907. The station is misprinted on the labels "Skellington." Abundant throughout this large wood.—AUGUSTIN LEY.

*R. regillus*, Ley. Gorsley, Herefordshire (in Linton Wood); 4th September 1907.—AUGUSTIN LEY.

*R. regillus*, Ley. Gathered in Queen's Wood, Ross, in company with Mr. A. Ley.—L. CUMMING. The specimens needed more careful pressing.—H. J. R.

*R. podophyllus*, P. J. Muell. Plantations and woods near Grasby (also near Barnetby), N. Lincoln; abundant and characteristic; August 1907.—AUGUSTIN LEY.

*R. Lejeunei*, W. and N. Wood border at Llangammarch, Breconshire; 25th July 1907. New station for this rare bramble.—AUGUSTIN LEY.

*R. fuscus*, subsp. *obscurus* (Kalt). From the classic locality, Belmont Wood, Hereford, 3rd Aug. 1907. Seen and approved by Mr. Rogers.—H. J. RIDDELSDELL.

*R. pallidus*, W. and N., var., *leptopetalus*, Rog. Plantations on Mitcheldean Meend, West Gloucester; 31st Aug. 1907.—AUGUSTIN LEY.

*R. thyrsiger*, Bab. In quantity at Llantrissant, Glam., Aug. 1907. Discovered there by Mr. Rogers in 1905.—H. J. RIDDELSDELL.

*R. rosaceus*, subsp. *infecundus*, Rogers. Port Talbot, v.-c. 41, 29th July 1907. Named by Mr. Rogers.—H. J. RIDDELSDELL.

*R. rosaceus*, sp. coll., subsp., *Purchasianus*. Sellack, Herefordshire; 7th September 1907.—AUGUSTIN LEY.

*R. Marshalli*, var. *semiglaber*, Rogers. Port Talbot, v.-c. 41, 29th July 1907. Named by Mr. Rogers.—H. J. RIDDELSDELL.

*R. velatus*, Lefv. Wood at Glynhir (near Llandebie), Carmarthenshire; July 1907. New County record.—AUGUSTIN LEY.

*R. dumetorum*, W. and N., var. *raduliformis*, Ley. Near Eltham (also at Barnetby and other stations), N. Lincoln; August 1907. New County record.—AUGUSTIN LEY.

*R. dumetorum* W. & N., var. *triangularis*, Ley. Whitbourne, Herefordshire; August 1907. The specimens are not very characteristic; but are this variety.—AUGUSTIN LEY.

*R. Balfourianus*, Blox. Woods near Grasby, abundant and characteristic (also at Barnetby), N. Lincoln. Petals usually white, sometimes pink.—AUGUSTIN LEY. Rightly named, I believe, though untypical in the glabrous or glabrescent stem, very broad roundish terminal leaflet and narrow stipules.—W. MOYLE ROGERS.

*R. Balfourianus*, Blox. Hedges, Bridstow, Herefordshire; July and September 1907. Petals uniformly white.—AUGUSTIN LEY.

*Geum rivale*, L., albino. Stanton, Staffs., cult., 11th June 1907.—W. R. LINTON.

*Potentilla erecta*, Hampe, var. *sciaphila* (Zimm). *P. Tormentilla*, Neck., var., *sciaphila*, Asch. & Gr., *Syn. VI.* 838 (1904). Sandy, ericetal places, Richmond Park, Surrey, 28th Aug. 1907, leg. A. B. Jackson & K. Domin. This well marked variety has only hitherto been recorded from East and West Cornwall by Mr. Davey (see 'Watson Exchange Club Report,' 1905-6, p. 50), and from heathy hills of the rolled pebbles of the Thanet sands ('B. E. C. Report,' 1905, p. 167); but an examination of the material preserved under the name *Potentilla Tormentilla*, Neck. (= *P. silvestris*), at the British Museum and Kew shows that the variety is of fairly general distribution in Britain. It may be distinguished from the type by its smaller, prostrate habit, the stems

short, not more than four inches in length, slender flaccid, leaves shortly petiolate, stipules small, entire or toothed only at the apex, leaflets obovate lanceolate, with only one or two teeth at the leaf apex, not deeply toothed as in the type, flowers small on long slender pedicels, leaflets of the epicalyx only half the length of the calyx. Dr. Domin considers that the occurrence of this variety in England is interesting from a phyto-geographic point of view. On the Continent it is very rarely found except in the Alps, though a plant coming near the variety occurs in S. Bohemia (Domin) and Dresden (Wolf). The Richmond specimens agree very well with Cornish examples collected by Mr. Davey and named by Dr. Wolf, the monographer of the genus.—A. B. JACKSON. I fail to see why this should be called a *variety*; to me it appears to be only a starved *state*, which is common enough in such situations.—E. S. M. In the total absence (in the specimens I received) of the characteristic root-leaves, and in the absence of the compactness which Mr. F. H. Davey and I take from Mr. A. Bennett to be the chief features of this variety, it is impossible to accept this as Zimmeter's var. *sciaphila*. Vide 'B. E. C. & Watson E. Club Reports' for 1905, and 'Jour. Roy. Inst. Cornwall,' No. LII. (1905).—C. C. VIGURS.

*P.* — sp.? Clogher Valley, Co. Tyrone, June 1907.—C. L. PECK. *Two Sheets*:—1. Leaves sessile; stipules much cut; flowers small. *P. erecta*, Hampe (*sylvestris*, Neck.). 2. *a.* Leaves stalked; stipules undivided; flowers fairly large. *P. procumbens*, Sibth. *b.* Leaves more shortly stalked, the leaflets narrower and more deeply cut; stipules more or less cut; flowers intermediate. A poor specimen; but I am pretty sure that it is *P. erecta* × *procumbens*.—E. S. M.

*P. rupestris*, L. Radnorshire, June 1907. Still unknown from any other station in Radnor.—AUGUSTIN LEY. A very freely seeding plant. It is remarkable that it does not spread.—H. J. R.

*Rosa mollis*, Sm., var., *caerulea*, Woods. Thicket on Cefn hill, Herefordshire (at about 1,250 ft.), 9th Sept. 1907. New County record for the variety.—AUGUSTIN LEY. Var. *caerulea* should have the peduncles and fruit nearly or quite smooth. In my specimen these are decidedly glandular-hispid; so I think that the varietal name cannot stand.—E. S. M.

*R. omissa*, Deség., var. *submollis* (Ley). Road hedge, near Melton Ross. Plantation near Grasby; both North Lincoln. New Vice-County record.—AUGUSTIN LEY.

*R. omissa*, Deség., var. *submollis* (Ley). Hedge at Capel-y-ffin, Brecon, 17th September 1907.—AUGUSTIN LEY.

*R. omissa*, Deség., var. *submollis* (Ley). Gorsley, Herefordshire (in two spots), 4th September 1907.—AUGUSTIN LEY.

*R. Andrzejovii*, Steven, var. *pseudomollis* (Ley). Exley Valley, Herefordshire, 9th September 1907.—AUGUSTIN LEY.

*R. cuspidatoides*, Crépin. Aymestrey, Herefordshire, 10th September 1907.—AUGUSTIN LEY.

*R. tomentosa*, Sm. var. Hedgerow, Ingarsby, Leics. Ref. No. 84.—A. R. HORWOOD. I doubt this belonging to *R. tomentosa*, and think it is one of the *R. coriifolia* group coming nearest *R. cinerea*, Rap. This species has not been recorded from Britain though Mr. Baker makes it synonymous with his *R. Watsoni*, from which it differs chiefly in its much more glandular petioles and peduncles, but both species have usually more fully biserrate leaflets, while *R. Watsoni* never, and *R. cinerea* rarely has hispid fruit. Its differences from all other species of the group are greater than those from *R. Watsoni*.—A. H. WOLLEY-DOD.

*R. micrantha*, var. *Briggsii*, Baker. Hedge by roadside near Hadzor, Droitwich, Worcs., 9th Aug., 1907.—C. H. WADDELL.

*R. Borreri*, Woods. Between Edge and Tilston, Cheshire, 15th Aug. 1907. Ref. No. 1515.—A. H. WOLLEY-DOD.

*R. canina*, Linn., var. —. Hedgerow, South Croxton, Leics. Ref. No. 106. Sept. 1907.—A. R. HORWOOD. British authors would probably label this *R. lutetiana*, Lém., to which group it belongs, coming near *R. fallens*, Deségl., in its hairy petioles, while the broad leaflets and obovoid fruit show an approach to *R. Touranginiana*, Deségl. and Rip. There are almost as many forms of some of these species as there are bushes. Another gathering by Mr. Horwood from the same place, but without reference number, is the same form.—A. H. WOLLEY-DOD. *R. canina*, L., var. *lutetiana* (Leman).—D. FRY. An intermediate, towards *dumalis*. Quite a common form.—J. W. WHITE.

*Pyrus Domestica*, Ehrh. (*P. Sorbus*, Gaertn.). From a large tree in the Botanic Gardens at Oxford, which is said to have been grown from a fruit of the Wyre Forest Tree. June flowers. Sept. fruit, 1907.—G. CLARIDGE DRUCE.

*Saxifraga umbrosa*, L., var. Orig., limestone rocks, Lovers' Leap, Ashwood Dale, Buxton, v.-c. 57, May 1906. Cult. Quorn

Vicarage Garden. When this Saxifrage was distributed through the Watson Botanical Exchange Club in 1906, the Rev. E. S. Marshall remarked on it: "This is the crenate-serrate (Pyrenean) plant."—F. L. FOORD-KELCEY. The Pyrenean type, with oblong-oval, crenate-serrate leaves. This does not, apparently, occur as a native in Ireland; and it is probably not so in England.—E. S. M.

*Epilobium lanceolatum* × *roseum*? Waste ground, by the Rea Brook, Meole Brace, Shropshire, Aug. 1907. Concerning this, the Rev. E. S. Marshall, to whom I submitted specimens, and for whose verdict I am very grateful, writes as follows:—"A very puzzling hybrid—one parent is certainly *E. roseum*, which predominates in the inflorescence. The long-stalked, irregularly-toothed stem-leaves favour *E. lanceolatum* as the second factor, and I believe that it is most probably a narrow-leaved *lanceolatum* × *roseum*. At first I thought that it might be a cross with *E. tetragonum*, Curt. (*adnatum*, Grisebach), but that hybrid would not produce such long petioles in such irregularly shaped foliage. I am, however, not yet quite certain about the proposed determination; it is a most difficult plant."—E. S. M. I carefully examined the *Epilobia* of the immediate neighbourhood. *E. roseum*, Schreb., was present, in cultivated ground, but quite rare. *E. montanum*, L. everywhere abundant, while by the banks of the Rea Brook were *E. hirsutum*, L. in profusion, also coming up as a weed away from the water-edge, and *E. parviflorum*, Schreb., not abundant. No sign of *E. lanceolatum*, S. and M., one of the supposed parents of the hybrid, has yet been observed, nor *adnatum*, Griseb., but I contemplate searching the ground more minutely this forthcoming year.—J. COSMO MELVILL. This name was suggested by me for the only specimen which I had previously seen. I do not think that it is a foreign species. If it is (as I believe) a hybrid, *E. roseum* is certainly one parent (note the glandular, short and shrunken capsules, small, *roseum*-like flowers, long-stalked lower leaves, &c.). Mr. Melvill tells me that *E. roseum* occurs sparingly close by, but that he has seen neither *E. tetragonum*, Curt. (*adnatum*, Griseb.) nor *E. lanceolatum* anywhere near. The shape and irregular toothing of the leaves (which also shew no tendency to be adnate-decurrent) are strongly in favour of a *lanceolatum* origin, besides some other points. I have seen specimens of *lanceolatum* from Yorkshire, which is further north.—E. S. MARSHALL.

*E. Lamyi*, F. Schultz. Orig. Dulverton, v.-c. 5, S. Somerset, Cult. 2 Aug. 1907.—E. S. MARSHALL.

*Oenothera biennis*, L. Sandhills near Hightown, South Lancs,

(59), 30th August 1907. In these examples the flowers are much smaller than in *Æ. Lamarkiana*, but the stigmas occasionally exceed the stamens, especially when they are united before being reflexed. The styles are usually about the same length as the stamens—J. A. WHELDON. I examined the Linnean type-specimen last spring. Although miserably scrappy, it resembled this plant in the small size of its flowers; so the name is probably correct.—E. S. M.

*Æ. Lamarkiana*, Ser. in DC. The three plates, I. to III., which accompany this Report, illustrate the growth of this plant at St. Anne's; they were sent last year, but too late to be included in last year's Report. They are taken from an address to the members of the Manchester Field Club on "De Lamarck's Evening Primrose." A copy of this address was sent last summer to every member of the Botanical Exchange Club.—CHARLES BAILEY.

*Carum verticillatum*, Koch. Rhostie, Cardiganshire, v.-c. 46. Leg. J. H. Salter, D.Sc., 13th Sept. 1907. Communicated, Rev. W. H. PAINTER. I send these specimens *in fruit* thinking that they may be acceptable to members of the Club.

*Falcaria vulgaris*, Bernh. Field border (allotments) in the outskirts of the city of Lincoln, August 1907. Abundant for a few yards.—AUGUSTIN LEY.

*Galium erectum*, Huds. Origin, Shirley, Derbs. (communicated to me by Rev. W. R. Linton). Cultivated 29th August 1907.—AUGUSTIN LEY. Correct.—E. S. M.

*G. erectum*, Huds. From Yeldersley fields, S. Derbs., cult. 1st July 1907. This is a very rare species in Co. 57; the present plant seems very nearly typical.—W. R. LINTON. Yes. W. R. L. had doubts about its proper status.—E. S. M.

*G. ochroleucum*, Syme non Kit. = *G. vero-mollugo*, Wallroth; *G. decolorans*, Grenier et Godron. Grassy roadside waste, Failand, North Somerset; 10th Aug. 1907. Growing with *G. verum* and *G. Mollugo*, these plants certainly appear to be the result of crossing between those species. The several patches produce stems varying in character and tint of flowers; some favouring one parent and some the other. At the end of September gatherings shewed only abortive ovaries. I could not find a single good fruit. The specimens agree well with examples gathered abroad; but I have sometimes doubted if the continental plant be really a hybrid, for it is of general distribution in Southern Europe, and often grows



*Enothera lamarkiana*, at St. Anne's-on-the-Sea.





*Enothera Lamarckiana*, at St. Anne's-on-the-Sea.





*Enothera Lamarkiana*, at St. Anne's-on-the-Sea.





*Ambrosia artemisiifolia*, at St. Anne's-on-the-Sea.



where neither of the supposed parents can be seen. I have not, however, had an opportunity of searching for fruits in late summer.—JAMES W. WHITE. Yes; *G. Mollugo* × *verum*, decidedly on the *verum* side. I have gathered a similar form in W. Sussex.—E. S. M.

*Valeriana Mikanii*, Syme. On the lias limestone between East and West Leake, Notts., 27th July 1907.—Leg. A. B. JACKSON and T. E. ROUTH. I should say undoubtedly *V. Mikanii*, Syme, though not thoroughly characteristic, as the lower stem-leaves have much fewer leaflets than is usual in well developed plants, in which they often run to 8 or 10 pairs.—D. FRY. This is now identified with *V. officinalis*, L. Correct.—E. S. M.

*Valerianella eriocarpa*, Desv. Portland and other places near Weymouth, v.-c. 9, June 1907. The locality by the backwater looks a native one.—H. J. RIDDELSDELL. From the description of the station in Mansel-Pleydell's *Flora*, this might well be a native in Portland. It appears to be common in W. France.—E. S. M.

*Solidago virgaurea*, L., var. *cambrica* (Huds.). Rocks by the Wye, Brecon, and Radnor, 25th June 1907. Leaves varying in breadth, usually broad; somewhat hairy; margin shortly ciliate; heads large.—AUGUSTIN LEY.

*S. virgaurea*, L. Variety. In river gravel at Abergwesyn, Brecon, 23rd July 1907. Leaves narrow lanceolate, somewhat coarsely serrate; somewhat hairy, and with ciliate margin; heads large. These varieties of Golden Rod agree with *S. cambrica*, Huds., in having fewer larger heads than the typical plant; in flowering earlier, and in growing mainly on rocks, either by streams or on mountain cliffs; but differ from it, and vary extremely among themselves in breadth of leaf. Would it not be more satisfactory to disregard the breadth and shape of the leaf and unite them all as a "var. *præcox*" of the type?—AUGUSTIN LEY.

*Aster* ——. By the railway between Yarnton and Wolvercote, Oxfordshire, in great quantity, Oct. 1907. Perhaps best referred to *A. novi-belgii*, L.—G. CLARIDGE DRUCE. In spite of the very few serrations on the leaves, I believe this is the same as the Wicken Fen plant, on which there is a note in 'B.E.C. Report,' 1897, p. 551. Those who can understand the note will be able to supply the name. My Dorset specimens of the same plant vary greatly in the number of serrations.—E. F. L.

*Ambrosia artemisifolia*, Linn. Plate IV., issued with this Report, illustrates the growth of this alien, which has been

established for over twenty years at St. Anne's-on-the-Sea, v.-c. 60. The area represented on the plate has been invaded by drifting sand, and building operations have begun in its immediate neighbourhood. The Club is indebted to the Manchester Literary and Philosophical Society for the use of the plate. It was issued with a paper entitled "Further Notes on the Adventitious Vegetation of the Sandhills of St. Anne's-on-the-Sea," read 9th April 1907, a copy of which was posted to each member of our Club.—CHARLES BAILEY.

*Achillea*, sp. Pettycur, Fife, 18th July 1907.—W. R. LINTON. We found a good patch of this alien by the railway embankment. I don't know the species.—E. S. M. The *Achillea* (unnamed) seems very near to *A. lanata*, Spreng, if not quite it. But this section of the genus is variable and rather perplexing.—J. W. WHITE.

*Matricaria suaveolens*, Buchen. (= *M. discoidea*, DC.). By the railway at Basingstoke, Hants. New county record. Sept. 1907.—G. CLARIDGE DRUCE.

*Senecio viscosus*, L. Railbanks near Walton, Liverpool (v.-c. 59), Aug. 1907. New to S. Lancs.? This plant, which is not recorded for the north side of the Mersey in Green's 'Liverpool Flora,' did not occur in this locality until this year. The ground was disturbed (but no ballast brought) to lay a temporary railway siding, and unless seed was brought with the rolling stock or plant, it would appear to have been dormant in the soil.—J. A. WHELDON.

*S. viscosus*, L. Highley, Salop, Aug. 19th, 1907, v.-c. 40.—W. H. PAINTER. Growing upon railway sidings in great profusion. Doubtless introduced with ballast.

*Cnicus tuberosus*, Roth. Orig., Nash Point, Glam.; cult., Llandaff, 5th and 12th Aug. 1907. Also (A) heads cut from wild plants, 7th Aug. 1907; and (B) ripe heads from the native locality, Sept. 1907. Many members already have sheets of the wild plant: the cult. specimens are added in illustration of certain points. Fruit ripens freely in the wild state (B), but much more sparsely in cultivation. The cultivated plant is very luxuriant, often developing a large number of branches, heads, and stem leaves. Though the wild plant makes good specimens and preserves its colour well, yet elaborate precautions have failed to keep a good colour in specimens from the garden: at any rate, in 1907. This may be due to the heavy clay soil, or to the unusually cold season.

The plant has fleshy 'tuberous' roots, and not the creeping rhizome found in *C. pratensis*, Willd., and *C. Woodwardii*, Wats.

(cf. 'Report B.E.C.' 1904, p. 25, 1906, p. 229, for other reasons for keeping it distinct from *C. pratensis*). It agrees very well with the description of *C. tuberosus* in 'Sowerby' V. 13 [the anthodes are, however, often not solitary], and produces good fruit. Reports of experts given below seem to place beyond a doubt its identity with *C. tuberosus*, Roth.

I have in my herbarium a poor specimen of *C. tuberosus* from Avebury, coll. G. C. Druce; a cultivated specimen of the same, comm. A. B. Jackson; and a plant [wrongly assigned in my 'Flora of Glamorganshire' to *C. Woodwardii*] from a small patch found in the dredged mud of the Cardiff new docks, a locality many miles away from Nash Pt. There is also a specimen in St. Brody's herbarium at Gloucester labelled 'see *Carduus Forsteri*, Syme. Mr. Dyer thinks it *Woodwardii*.' 'A fine patch of this rare thistle grows near the Stonehouse Station, Glouc., 1868.' There is no root present. It is not possible, I believe, to distinguish these last two specimens from *C. tuberosus*, Roth. But it is doubtful if either of them was native.

The Avebury plant in cultivation shews certain changes. The phyllaries become more decided and contrasted in colouring, and much more clearly veined. The leaves become more clearly veined, stronger and more rigid; as well as broader, through the lengthening of the lobes.

The wild Glamorganshire plant is more rigid than that from Avebury, with thicker and more solid leaves. It is stouter and taller; and more luxuriant, branching lower down the stem. The leaves have a broader rachis and are larger. The veins of the phyllaries are much less prominent; their mucro longer. Under cultivation the leaf lobing is more coarse and sometimes almost disappears. The phyllaries do not develop their veining. The Cardiff and Stonehouse plants are somewhat intermediate between the Wilts and Nash Point plants in these respects.

Professor Paul Ascherson writes: "Your plant agrees tolerably well with the German one. I write but 'tolerably,' because there is a slight difference in the form of the leaves; the *acaule*-liking form, exhibited in all leaves of your plant, occurs in nearly all of my German specimens only in the primordial ones: in the majority of leaves the segments are cleft into lanceolate laciniae. But there are specimens from a locality in Bohemia (where the *Cirsium bulbosum* is only an alien, introduced with grass seed) agreeing very well with yours. I think it very probable that at your locality the plant is a native. In Western France the species occurs also in very scattered localities, as in Brittany and Normandy. The hypothesis that the English plant is a hybrid between *Cirsium acaule* and *anglicum* or even *Carduus crispus* seems to me to be highly improbable."—H. J. RIDDELSDELL. I compared this with Lambert's original Boynton specimen preserved at Kew, and it

matches very well with that plant except that the Welsh specimens have rather less divided leaves.—A. B. JACKSON. On seeing fuller specimens of this interesting plant, I withdraw the suggestion that it is the same as a Roundstone, Connemara, plant, and accept the present naming.—E. F. L. I suppose that this is correct. But the Avebury plant, which I saw in good flower in Rev. T. A. Preston's garden at Marlborough in 1885, branched far more freely in cultivation.—E. S. M.

*C. acaulis*, Willd., var. *caulescens*, Pers. Plentiful in pastures on the Lias, about Compton Dundon, v.-c. 6, N. Somerset, 14th August, 1907. Ref. No. 3195.—E. S. MARSHALL.

*C. arvensis*, Hoffm. var. *setosus* (Bess). Waste ground, Canton, Cardiff, Sept. 1907. I have doubts that this variety is rightly named. The plants vary considerably in leaf outline, from entire to lobed—the lobes always small. Perhaps it is var. *vestitus* (Vest). Forms of var. *mitis* were also present.—H. J. RIDDELSDELL. According to G. Beck's arrangement of the forms of *Cirsium arvense* in Koch, ed. iii., p. 1553, this is *C. arvense*, Scop., var. *obtusilobum*, forma *subincanum*, G. Beck. The leaves are not quite so rounded and obtuse, or so distinctly lobed, as in the Bath plant, which has also been called *setosus*, but in error, for *C. setosum*, Mey., as described in Koch's 'Flora,' comes under var. *commune*—the section with sharply pointed leaf-lobes.—C. BUCKNALL and JAS. W. WHITE. Agrees very well with foreign specimens so named at Kew. For an account of this variety see F. N. Williams' 'Prod. Fl. Brit.,' part 2, 51.—A. B. JACKSON. This is rather the var. *mitis*, Koch, than var. *setosus* (Bess.), which has entire or subentire leaves.—E. F. L.

*Onopordon Acanthium*, Linn. A few plants on the sandhills off the North Drive, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 24th August and 12th October 1907.—CHARLES BAILEY. Approaching var. *viride*, Michet; a form which I have seen at Deal, March, and Chatteris.—H. J. RIDDELSDELL.

*Serratula tinctoria*, L., var. *monticola* (Boreau). Watermeadows in the Parish of Kempford, Fairford, E. Gloucester, v.-c. 33, 20th July 1907. Some of the larger specimens have longer peduncles, and the heads in that case are larger. Is this the same as var. *alpina*, Gren. and Godr.?—H. J. RIDDELSDELL. Similar to specimens so named at Kew, but appears to be a mere state, and not a good variety. I found a form which appeared to be intermediate between type and variety on the Downs near Winchester in the autumn of 1906, and possibly this was the plant recorded from there as var. *monticola* by the late Mr. F. I. Warner.—A. B. J.

*Hieracium Pilosella*, L., var. Scape and phyllaries very white and tomentose; nearly glandless. Origin, Wenlock Edge, Salop; cult. 19th June 1907.—AUGUSTIN LEY. This is the form referred to in 'British Hieracia,' p. 9, as eglandular. Fries does not describe the heads of *H. Pilosella* as being glandular; this may therefore be the type, though the species with us is usually more or less glandular.—E. F. L.

*H. Auricula*, L. Root from Keevil, v.-c. 8, N. Wilts.; cult. 10th June 1907.—E. S. MARSHALL. Nice examples of *H. Auricula*, L., without any of the faults that often make cultivated specimens unwelcome.—E. F. L.

*H. pratense*, Tausch. In crevices of wall, and upon bank; very locally, just South of Shrewsbury, Salop, August 1907. It is impossible to say how long this plant has been located in this spot, but it looks as if it had been there for a considerable period, at all events. I am indebted to the Rev. E. F. Linton for confirmation of the identification. Not before recorded for Salop, or indeed, I believe, for England; the other records being for Scotland and Ireland.—J. COSMO MELVILL. I do not think that this is correctly named; but the material is so very poor that it is not worth troubling about.—E. S. M. So I named it when Mr. Melvill sent it me tentatively last autumn. It agrees with what Aman. Dahlstedt has formerly confirmed for me as *H. pratense*, Tausch. This was the plant cultivated at the Cambridge Botanic Gardens, identical with, and I believe originating from the Scotch plant. The cyme is often more compact, but in some situations it opens out, e.g. in specimens from the garden at Sellack.—E. F. L.

*H.* —. Found at Culbone, v.-c. 5, S. Somerset, at the end of May 1907, and grown on in my garden. I thought that it might be *H. cyathis*; but Rev. W. R. Linton pointed out that it differs in several respects. Very possibly it may be *H. Schmidtii*, var. *devoniense*, modified by being cultivated in good soil.—EDWARD S. MARSHALL. The specimen submitted is too imperfect for identification, but I recognise it as one which has not been identified, and is under consideration.—E. F. L.

*H. centripetale*, F. J. Hanb. Correifron, Moffat, N.B. 20th July 1907.—W. R. LINTON.

*H. lasiophyllum*, Koch. Rocks, Aberedw, Radnor, 25th June 1907.—AUGUSTIN LEY. Yes.—E. S. M.

*H. rubicundum*, F. J. H. Origin, Black Mountain, Hereford and Brecon. Garden seedlings, 6th June 1907.—AUGUSTIN LEY.

*H. vagense*, Ley. Side of the Wye at Boughrood, v.-c. 43, and Erwood, v.-c. 42, 27th July 1907.—H. J. RIDDELSDELL. Correct.—E. F. L.

*H. serratifrons*, var. *lepistoides*, Johanss. Radyr, v.-c. 41, 23rd August 1907; Goring, v.-c. 23, 4th June 1907; downs and wood near Stroud, v.-c. 34, 9th July 1907. Named by Mr. Ley, who refers to this form plants which "used to be called *pellucidum* by English Botanists," the true *pellucidum* appearing to be identical with what was named var. *lucidulum*, Ley.—H. J. RIDDELSDELL. I agree (Stroud plant).—E. F. L. Not what I understand by var. *lepistoides*—a plant with the involucre very pale, like a peeled twig, whence the name is derived. In these specimens the heads are densely black-glandular.—E. S. M.

*H. serratifrons* var. *lepistoides*, Johanss.? Symonds Yat, Glouc., 21st June 1907. I have queried this, as it does not exactly agree with my Scandinavian specimens; I have sent specimens to Scandinavian experts, and hope to get their opinion on them before long.—W. R. LINTON.

*H. Cinderella*, Ley. Symonds Yat, West Gloucester; June and July 1907. I am informed by Rev. W. R. Linton that the position of this plant will have to be changed from that under which it was published (cf., 'Bot. Jour.,' 1907, p. 109). I therefore refrain from quoting it as under *H. serratifrons*, Alm. The present specimens may be taken as good characteristic specimens of the true plant.—AUGUSTIN LEY. The name should not have a capital letter.—E. S. M.

*H. subulatifrons*, Alm., var. *cuneifrons*, Ley. Origin Craig Cille, Brecon; cult. 3rd July 1907.—AUGUSTIN LEY.

*H. platyphyllum*, Ley. Among quarry debris at foot of the cliffs, Portland Island, near the neck, v.-c. 9, 20th June 1907. "Phyllaries and branching of panicle just characteristic," A. L. A curious extension of area for the species, which is known otherwise from W. Yorks, Brecon, Monmouth, Caermarthen, Glamorgan, and Hereford Counties.—H. J. RIDDELSDELL. The Portland plant seems rightly referred to *H. platyphyllum*, from which it differs very slightly and in characters that may be due to climate and situation. It might be worth while cultivating this form by the side of the typical plant, to test the identification.—E. F. L.

*H. duriceps*, F. J. Hanb., var. *cravoniense*, F. J. H. Various localities in the Moffat neighbourhood, July 1907. This differs from description in 'Brit. Hier,' p. 63, in having peduncles with few

to rather many glands and heads with scattered glands on the phyllaries. Thus it is a slight variety of the variety.—W. R. LINTON.

*H. acroleucum*, Stenstr., var. *mutabile*, Ley; named on Mr. Ley's authority. From Boughrood, Radnorshire; and Erwood and near Llangammarch, Breconshire; 26th and 27th July 1907.—H. J. RIDDELSDELL.

*H. subramosum*, Lönnr. Coast and railbank near Pettycur, Fife, 18th July 1907. This is the plant gathered in the same locality by Dr. Boswell Syme in 1876. As growing it looks very like stout *H. vulgatum*, but on nearer inspection differs both in panicle and head clothing. I have sent specimens to Scandinavian experts and hope soon to receive their opinion.—W. R. LINTON. This agrees well with the description of *H. subramosum* in 'Brit. Hier.,' but there are some divergencies from the plant gathered and distributed by Syme in 1876. That had the leaves glabrous on the upper surface, all but the lowest strongly dentate with long teeth, the heads rather few, the phyllaries shaggily clothed with long hairs and some small glands, styles inconspicuous perhaps late exerted. The Pettycur plant differs in all these respects, with leaves nearer *H. vulgatum*, Fr., in texture, clothing, shape, teeth and colour; phyllaries with shorter hairs, styles much exerted and early produced. It is not ordinary *H. vulgatum*, but it is extremely like subalpine forms of *H. vulgatum* from Glen Doll, &c., which Aman. Dahlstedt formerly accepted as a *f. montana* of that species. It would be desirable to take his opinion on this Pettycur plant.—E. F. L.

*H. sciaphilum*, Uecht. Glynhir and neighbourhood, also at Talley Abbey, Carmarthen, July 1907. It is thought that specimens of this common Hawkweed may be valued, to compare with *H. cacuminatum* Dahl. It is easily separated, in a general way, from that, by the numerous, more coarsely toothed stem leaves, rougher, cuneate-based heads, bracteolate peduncles, and unmistakably ciliate florets.—AUGUSTIN LEY.

*H. sciaphilum*, Uecht., var. *strumosum*, Ley. Origin, Black Mountain; cult. July 1907.—AUGUSTIN LEY.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Aber-gwesyn and near Llanwrtyd, Breconshire, 23rd July 1907. Fide A. Ley.—H. J. RIDDELSDELL.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Aber-gwesyn, Brecon, 23rd July 1907. "I still retain this under the name *amphibolum*," W. R. Linton. Note: The name should of course be as above. It has been printed "*H. amphibolum*, Lindeb." on the labels, as though a species.—AUGUSTIN LEY.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Nant Hebog, Llanwrtyd, 23rd July 1907. This is the Hawkweed from Llanwrtyd ascribed in 'British Hieracia' (p. 69) to *H. Adlersii*, Almq. I believe that Rev. W. R. Linton is now inclined to view it as probably *H. amphibolum*.—AUGUSTIN LEY.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Aberedw and Boughrood, Radnor, 25th June 1907. This plant has been sent by Rev. W. R. Linton to Enander.—AUGUSTIN LEY.

*H. cacuminatum*, Dahl. Ammanford, 20th July 1907. "Probably *cacuminatum*."—W. R. LINTON. This is near the Scandinavian type specimens of *H. cacuminatum*; differing from the British plants we have been ascribing to this species in the phyllaries being far less clothed with glands and having their tips esenescent.—AUGUSTIN LEY.

*H. cacuminatum*, Dahl., *f.* Abergwesyn, Breconshire, 23rd July 1907. This is the *sciaphilum*-like plant common in many parts of Britain, which has been placed under *H. cacuminatum*, Dahl., but is not the typical plant of Dahlstedt.—AUGUSTIN LEY.

*H.* — ? Origin Mellte glen, S. Brecon. Cult. 3rd July 1907. This plant has been distributed before under various names; but its right place in our lists remains still doubtful. Rev. W. R. Linton does not favour the suggestion that it can be placed under *H. sparsifolium*, Lindeb.—AUGUSTIN LEY.

*H. sparsifolium*, Lindeb., var. *lingua*, Ley. Origin West Brecon; cult. 1st July 1907. This plant readily grows by seed and increases in the garden.—AUGUSTIN LEY.

*H. rigidum*, var. *trichocaulon*, Dahlst. Hedge bank, Howellsfield, W. Glos., 19th Aug. 1907.—W. A. SHOOLBRED. This matches nicely the var. *calcaricolum*, F. J. Hanb. The specimens are better developed and not so desiccated as the few original specimens, whose corymbs were probably reduced to 1-2 heads through the drought and the exposure of their habitat.—E. F. LINTON.

*H. boreale*, Fr., var. *eminens* (Jord.). Origin Aberedw, Radnor; cult., 28th August 1907.—AUGUSTIN LEY.

*H. umbellatum*, L., near var., *filifolium*, Back. Roadsides near Eltham, N. Lincoln; 19th August 1907.—AUGUSTIN LEY. No.—W. R. LINTON. I should prefer to call this var. *linariifolium*, Wallr., a widely spread form, from Perth and Wigton to Lancashire and Norfolk, rather than var. *filifolium*, which has yet narrower and more entire leaves.—E. F. L.

*H. umbellatum*, L., var. near *coronopifolium* (Bernh.). Roadside near Doddington, S. Lincoln, 14th August 1907. Much more hirsute than *H. coronopifolium* usually is.—AUGUSTIN LEY. Yes.—W. R. LINTON. Very good.—E. S. M. This differs from my English series of var. *coronopifolium*, which all have the more glabrescent leaf character; but it is included in M. Arvet-Touvet's description, "feuilles glabrescentes ou pubescentes-blanchâtres en dessous." Fries ('Symb. Hist. Hier.' p. 177), wrote "*folia subtus glabrescentia vel puberula*," and altered this in his 'Epicrisis' (p. 136) to "*foliis pubescenti-incanis*." A hairy form would thus be included in the older descriptions.—E. F. L.

*H. umbellatum*, L. Tenby, 5th Sept. 1907. At Mr. Ley's suggestion I sent this to Mr. W. R. Linton labelled var. *pauciflorum*, Hartm., who replied, "I doubt this: I was over those sandhills some few years ago and considered the *H. umbellatum* only the type: you may find all stages from plants short one headed to full form. I think the reduced form is due to situation perhaps aided by sheep or rabbits."—S. H. BICKHAM. Var. *curtum*, Linton, just like some of the original Abersoch specimens.—E. F. L.

*H. umbellatum*, L., var. *paniculatum*, Cariot? Origin, Nant Francon, Carnarvon; cult., August 28th 1907. Much disfigured by garden mildew. Styles dark greenish. Phyllaries all blunt.—AUGUSTIN LEY. Not var. *paniculatum*, Cariot, with which I identified Mr. Griffiths' Bangor plant ('B.E.C. Report,' 1890, p. 306), and which has green phyllaries (pale green when fresh). I do not know the hirsute Great Orme's Head plant, referred to under var. *paniculatum*, with the account of which Mr. Ley's plant agrees pretty well.—E. F. L.

*Trachelium cœruleum*, L. Naturalised on a wall in St. Peter's, Guernsey, but doubtless only an escape from the neighbouring garden. July 1906.—G. CLARIDGE DRUCE.

*Anagallis cœrulea*, Schreb. Waste ground, Canton, Cardiff, Sept. 1907. The petals are finely gland-fringed.—H. J. RIDDELSDELL. Now known as *A. femina*, Mill.—ED.

*Erythraea Centaurium*, Pers., forma. Penhallow Moor, St. Newlyn East, West Cornwall, v.-c. 1. 13th Aug. (with Mr. H. Groves) and 4th Sept. 1907. A much-branched densely-flowered form growing in a patch of 50—100 plants, with ordinary *E. Centaurium* and *E. pulchella* close by. The small plants resemble var.

*capitata* (Koch.), but the larger are quite different. Rev. E. S. Marshall tells me he has seen similar plants at Lytham. Hybridity between *E. Centaurium* and *E. pulchella* might be suggested, but I imagine the variability of the former is sufficient to account for this form.—C. C. VIGURS. *Centaurium umbellatum*, Gilib.—H. J. R.

*E. littoralis*, Fr. Dornoch, 10th Aug. 1907. Passed by Ar. Bennett.—S. H. BICKHAM. A remarkable variety which I cannot match in an extensive series. It differs principally from typical *E. littoralis* in its sepals relatively shorter than the corolla tube, and their broader, more obtuse, and less attenuate apices. They are also much less scabroso-puberulous, although more so than in *E. Centaurium*.—J. A. WHELDON. Yes; the usual form of the N.E. coasts.—E. S. M. *Centaurium vulgare*, Rafn.—H. J. R.

*Gentiana baltica*, Murb. Quintrell Downs, St. Columb Minor, 21st Aug. 1907 (with Mr. H. Groves), and Penhallow Moor, St. Nelwyn East, 4th Sept. 1907, both West Cornwall, v.-c. 1. As will be seen from these specimens the plant varies much in size in the same locality. The tiny specimens with one or two flowers only grow together in fairly large numbers in a group, and remind one of *G. verna*. They seem to me to be as worthy of varietal rank as are many of the forms which have been so raised.—C. C. VIGURS. Very typical! I greatly doubt the occurrence of true *G. campestris* in the South of England.—E. S. M.

*Anchusa officinalis*, L. In the greatest luxuriance and abundance in the station already cited for *Silene noctiflora*, L., viz., Birkdale, south-west Lancashire, v.-c. 59, 24th August 1907. From the well established growth of the plant it must have been there for many years.—CHARLES BAILEY. I agree.—E. F. L.

*Pulmonaria officinalis*, L. In a coppice now an outlying part of Wychwood Forest, Oxford, where it was pointed out to me by Lady Margaret Watney. Here the habitat looks a very natural one as it is far from houses or gardens, or other sources of introduction. April 1907.—G. CLARIDGE DRUCE.

*Echinosperrum Lappula*, Lehm. = *Lappula echinata*, Gilib. Occurring in the undergrowth of larger aliens in the poultry area of the sandhills north of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 6th and 20th July 1907. Other species of *Echinosperrum* also occurred.—CHARLES BAILEY.

*Echium italicum*, L. In a field on a fowl-farm at Cothill, Berks. Doubtless introduced with other aliens with foreign corn.

It was also in very beautiful growth on the edge of one of the gravel pits near Ware, Herts, there introduced probably by the cleanings from the foreign barley used in malting. August 1907.—G. CLARIDGE DRUCE.

*Verbascum sinuatum*, L. ? On waste ground, St. Philip's, Bristol, 20th Sept. 1907. I am not at all sure that the naming is correct, for the specimens do not entirely correspond with my continental ones. Several Mulleins have been growing for some years on this waste ground. They are all difficult, and possibly not European. Mr. Britten does not recognize them, and I have not had the chance of working them out in any big herbarium.—JAMES W. WHITE.

*Linaria arenaria*, DC. On the Burrows near Westward Ho, N. Devon, Oct. 1907. The situation appeared to be quite a natural one, but the plant is of extremely limited distribution in Europe, being confined to the dunes of the neighbourhood of Cherbourg in Western France. Subsequently ('Journ. Bot.' 451, 1907) it has been shewn that seeds were sown here about 14 years ago which had been brought from France.—G. CLARIDGE DRUCE.

*Veronica didyma*, Ten., var. *grandiflora*, Bab. Garden, Shirley, Derby, 25th Aug. 1907.—W. R. LINTON. I believe that this is Babington's var. *grandiflora*, published under *V. polita*, Fr. So far as I remember, the identification of this species with *V. didyma*, Ten., was rejected by Fries himself when describing it.—E. S. M.

*V. serpyllifolia*, var. *humifusa* (Dickson). Self-sown in my garden from a plant introduced from Ben Lawers about twelve years ago. It seems to have retained completely its character both in the prostrate stem and in the glandular pubescence of the fruit. The purity of the breed may be largely due to the situation of my garden, in the middle of the town, preventing admixture with type.—L. CUMMING. Should be var. *tenella*, All.—H. J. R.

*V. peregrina*, L. Clogher Valley, Co. Tyrone, June 1907.—C. L. PECK.

*Euphrasia Vigursii*, Davey. Quintrell Downs, St. Columb Minor, 8th Sept. 1907, and Newlyn Downs, St. Newlyn East, 16th Sept. 1907, both West Cornwall, and collected C. C. V., Roborough Downs, 13th Aug. 1907, and High Moor, Lydford, 3rd and 15th Sept. 1907, both South Devon, v.-c. 3. The plants I send are from a locality already published and from three new localities. For those from Roborough Downs I am indebted to Mr. Clive Sara, who collected them at my request, and those from near Lydford (elevation about 900ft.) to Miss D. Glazebrook, who found them there.

The Quintrell Downs plants, growing amongst ling, short furze, &c., are generally more branched and "drawn up" than the others. These Cornish specimens have usually a paler and larger corolla than the Devonshire ones. Records for East Cornwall and North Devon are (I believe) still wanting. All the known localities for this plant (except Davey's original one) are heathy and furzy downs or crofts; in at least three of them *Gentiana baltica* also grows, and in the original one *Gentiana præcox*.—C. C. VIGURS. *E. Vigursii*? Quintrell Downs. This has larger, paler flowers than Mr. Davey's plant from Perranzabuloe, and the bracts and flowers are not so crowded. The glandular hairs are shorter than those of *E. Rostkoviana*, and less abundant on the stem. Can it be *E. campestris*, Jord.?—C. BUCKNALL. *E. Vigursii*, Davey.—E. S. M.

*E. brevipila*, Burn. and Gr.? Roundstone and Woodford, Co. Galway, Ireland, 21st and 24th Aug. 1907. Doubtful gatherings as regards some of the specimens. It seems evident that although in England, *E. brevipila* is fairly constant in characters, in the West of Ireland there are several forms that differ rather widely. Some of these specimens are almost, and others quite, eglandular, while the habit of the latter verges towards that of *E. stricta*. Still, I know not where else to place them.—JAMES W. WHITE. *E. brevipila* (Woodford). Yes; a peculiar form, sometimes simulating the habit of *E. nemorosa*.—E. S. M. Ditto (Roundstone). Very characteristic.—E. S. M.

*E. borealis*, Towns. Limestone pasture on Mendip, N. Som., 3rd Sept. 1907.—J. W. WHITE. Correct.—E. S. M.

*E.* ——. Redhill, Salop, on and near waste ground connected with the disused railway track, Aug. 1907. Probably *E. nemorosa*, H. Mart., but a very large growing form.—J. COSMO MELVILL. This is *E. nemorosa*, H. Mart.—C. BUCKNALL and J. A. WHELDON. A form of *E. nemorosa*, I believe; material not very good.—E. S. M.

*E. gracilis*, Fries. Clifden, Co. Galway, Ireland, 16th August 1907.—JAS. W. WHITE. And from Rossmore, by the Shannon, Co. Galway, 24 Aug. 1907.—JAS. W. WHITE. *E. gracilis* (Clifden). On my sheet there is, I think, a mixture; part being *E. gracilis*, and part *E. scottica*, Wettst.—E. S. M. *E. gracilis* (Rossmore). Yes.—E. S. M.

*E. scottica*, Wettst. Moffat, Dumfries, 18th July 1907.—W. R. L.

*E. scottica*, Wettst. Tatham Moor, Hindburndale, W. Lancs.,

Aug, 1907. This occurs in two forms, one with flowers violet streaked with red-purple, the other with flowers pale violet and white. It is found also on the same moor on the Yorkshire side, in v.-c. 64, York, mid-west.—ALBERT WILSON. Right, but Wettstein's name was spelt *scottica*.—E. S. M. No, it is *E. gracilis*, Fr.—C. BUCKNALL. The notes suggest a mixed gathering.—H. J. R.

*E. curta* v. *glabrescens*, Wettst. Longstone Edge, Derbs., 28th Aug. 1907. Mr. Marshall, to whom I sent specs., considers this to be rather *E. Kernerii*, Wettst., on account of the larger flowers.—W. R. LINTON.

*E. latifolia*, Pursh. Farr Point, W. Sutherland. It is to be desired that these Scottish forms should be carefully examined and compared with American examples. I have some doubts about their identity. July 1907.—G. CLARIDGE DRUCE. Correct.—E. S. M. Not enough labels sent.—H. J. R.

*Bartsia viscosa*, L. Grassy parts of the sands near the sea, Baglan, Glam., 30th June 1906.—H. J. R.

*B. alpina*, L. Ben Laoigh, July 1907.—P. EWING.

*Rhinanthus Crista-galli*, L., var. *angustifolius*, G. and G.? Abundant in marshy meadows, Llangasty, Brecon, 25th June 1907. This agrees with the description of var. *angustifolius*, G. and G. in the narrowness of the leaf, but instead of being a "bushy much-branched" form has a slender, nearly simple stem.—AUGUSTIN LEV. This does not appear to me distinguishable from typical *R. Crista-galli* (*minor*, Ehrh.).—E. S. M.

*R. C-galli*, var. *stenophyllus*, Schur. Near Llangorse Lake, Brecon, 24th June 1907.—W. R. LINTON. Probably *R. stenophyllus*, Schur.—E. S. M.

*R. stenophyllus*, Schur.? Coast sand dunes, Formby, S. Lancs, (59), Aug. 1907. The same plant as that already distributed from the coast of Cheshire and W. Lancs., referred by Mr. Marshall to *R. stenophyllus* and by Mr. Druce to *R. minor*. I should like to know which it really is. It is associated with *Pyrola rotundifolia*, *Orchis incarnata*, *Epipactis longifolia* and *Ophrys apifera* in the above named station.—J. A. W. Correct, I think.—E. S. M. This is no doubt *Alectorolophus stenophyllus*, Sterneck, in *Ost. bot. Zeitschr.*, 1895; = *Rhinanthus stenophyllus*, Schur.; but is only the autumnal form of *R. Crista-Galli*, L.—C. BUCKNALL.

*Melampyrum arvense*, L. This interesting addition to the Oxfordshire flora was discovered by Mr. W. Evetts of Tackley in

a cornfield, and also in a field of clover between Tackley and Steeple Aston. It is in small quantity, Sept. 1907.—G. CLARIDGE DRUCE.

*M. pratense*, L. Clogher Valley, Co. Tyrone, June 1907.—C. L. PECK. Why sent to the Club?—ED.

*M. pratense*, var. *hians*, Druce, Midlaw Burn, Moffat, N.B., 23rd July 1907, and Raehills, Dumfries, 24th July 1907.—W. R. LINTON.

*Mentha alopecuroides*, Hull. Bossington, S. Som., native, N.C.R., 14th and 23rd Sept. 1907.—E. S. M. This belongs, I suppose, to *M. alopecuroides*, Hull, but the spikes are very unusually and remarkably short.—D. FRY.

*M. alopecuroides* x *rotundifolia*? Ref. No. 3,202. Near Bossington, v.-c. 5, S. Somerset, with the supposed parents, 23rd Sept. 1907. Though perhaps nearer, upon the whole, to *M. rotundifolia*, I think that there is good evidence of *M. alopecuroides* both in the foliage and the inflorescence. No such hybrid appears to be known. I am growing this, to test it by cultivation.—EDWARD S. MARSHALL. The leaves of this plant approach those of *alopecuroides* in being rounder and more deeply incised than in typical *rotundifolia*, and Mr. Marshall's suggestion of a hybrid origin may very likely be correct.—D. FRY.

*M. longifolia*, Huds., var. *Nicholsoniana* (Strail). Stream side at Three Cocks Inn, Breconshire, 30th September 1907. New County record, it is believed, for the variety.—AUGUSTIN LEY.

*M. Pulegium*, L., var. *giganteum*, Lej. and Court. (var. *erecta*, Syme). On the margin of a pond at Salford, Beds., Sept. 1904. The plant was uniformly erect. It is a new county record for the species.—G. CLARIDGE DRUCE. Var. *erecta*, Syme. I do not know the var. *giganteum*, which may be an earlier synonym; but it is quite unsuitable to the small specimens now before me.—E. S. M.

*Thymus Serpyllum*, L., fl. albo. Sea Cliffs, Hordley, Hants, near Mead End, July 1906.—J. COSMO MELVILL.

*Salvia pratensis*, L. In some quantity in the well-known native locality round Cornbury and Finstock, Oxon, June 1907.—H. J. R. Right, no doubt, but very luxuriant.—J. W. W. Hardly *S. pratensis*, L., with these floral bracts, which rather recall *S. Sclarea*, L. In a more advanced condition the difference is more obvious between these two; I have no young *S. Sclarea* to compare.—E. F. L.

*Nepeta Glechoma*, Benth., var. *parviflora*, Benth. Symonds Yat, West Gloucester, 21st June 1907. The sub-glabrous stem and leaves are a characteristic of this variety, in addition to the small corolla.—AUGUSTIN LEY. Yes, I think this is the var. *parviflora* of *N. Glechoma*.—D. FRY. No doubt, correct enough; but a pretty poor 'variety.' Considering how Bentham 'lumped' together totally distinct species, he might well have spared us this.—E. S. M. Var. of *N. hederacea*, Trev.—H. J. R.

*Lamium maculatum*, L. In the corner of a meadow half-way between the villages of Threshfield and Skirethorns, Yorkshire, I have noticed a luxuriant bed of *Lamium maculatum*, L., for a period of eight years. It is well-established, occupies about two square yards, apparently does not spread, but maintains its own ground very tenaciously. The above villages are a mile apart, and the bed is half-way between on the margin of a branch of the Craven fault. How it came to be established I cannot find out.—JOHN CRYER.

*Ballota nigra*, L., var. *borealis*, Schweigg. Sellack, Herefordshire, 4th July 1907.—A. LEY. I don't know where to look for the description of *borealis*, and can say nothing on the naming of these specimens. But that they differ from the type is manifest. I got the same beautifully soft, velvety plant from Winterbourne, West Glouc., some time ago, and am glad to have a name suggested for it.—JAS. W. WHITE. I have somewhere seen it stated that *borealis* is really type-*nigra*. Whether that is correct or no, this villous plant, which seems to be confined to the West of England, is a well-marked variety.—E. S. M.

*Chenopodium ficifolium*, Sm. = *C. serotinum*, Linn. A few plants on the sandhills south of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 12th October 1907. In 1906 this species was frequent on the north side of St. Anne's, in Orchard Road, but by the winter of that year that station was completely covered with houses.—CHARLES BAILEY.

*Chenopodium hybridum*, Linn. Amongst dewberry plants on the upper parts of sandhills by the side of Devonshire Road, North Drive, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 3rd, 24th, and 31st August 1907. Evidently of alien origin, as this species did not occur previously in this station in any of the five previous years.—CHARLES BAILEY.

*Chenopodium urbicum*, L., var. *intermedium*, Moq. Farmyard at Kilve, v.-c. 5, S. Somerset, 30th Sept. 1907. Ref. No. 3209.—E. S. MARSHALL.

*Salicornia procumbens*, Sm. A small form ; abundant on mud near the mouths of the rivers Brue and Parret, below Highbridge, v.-c. 6, N. Somerset. Procumbent, or ascending from a procumbent base, very red. 14th Oct. 1907.—EDWARD S. MARSHALL.

*Polygonum aviculare*, L., form between *arenastrum* and *denu-datum*. This occurred in quantity in a fallow field below Sharpstone's Quarry, Salop, on the farm-road towards Bomere, and seems to embody characters of two varieties, one of which is essentially maritime. — J. COSMO MELVILL. Poor material ; seems near *arenastrum*, but not good.—E. S. M.

*Rumex rupestris*, Le Gall. Fistrel Beach, Newquay, West Cornwall, v.-c. 1, 27th July 1907 and 3rd August 1907, with fruit 22nd Sept. 1907. Found by Mr. Clement Reid three or four years ago. Do these specimens agree well with those from near Plymouth? We expected the leaf base to be more gradually narrowed. The tubercles seem so large as to occupy almost the whole of the sepals. Many of the panicles seem infected by a parasite near the base ; I particularly noticed *R. crispus* and *R. conglomeratus* growing near were not similarly affected.—C. C. VIGURS.

*R. limosus*, Thuill. Chard Reservoir, S. Som., 16th Sept. 1907, N.C.R.—E. S. M.

*R. limosus*, Thuill.? or a form of *R. maritimus*? Growing on mud at the side of the Great Pool, Westwood Park, Droitwich, Worc., 7th August 1907. Some of the plants were very large and much branched below. I do not know *R. maritimus* well, but this does not seem to match the specimens I have. Can it be *limosus*? or the hybrid of *R. maritimus* described as *Warrenii*? I should like to have it named.—C. H. WADDELL. A form of *R. maritimus*, with the inflorescence less crowded than usual. The tubercles of the fruit are much too small for *R. limosus*.—E. S. M.

*Euphorbia stricta*, L. Origin, St. Briavels, West Gloucester ; cult. July and August 1907.—AUGUSTIN LEY.

*E. coralloides*, L. At the sides of the road among shrubs, &c., in Horney Park, Sussex, probably introduced from Borrer's plants ; June 1906.—G. CLARIDGE DRUCE.

*E. sp.* By the railway, Littlemore, Oxon, where I have noticed it for some years ; June 1907.—G. CLARIDGE DRUCE. Is not this *E. Esula*, L.?—E. S. M. The same as a plant near *E. Esula*, L., which I found by the Wye, and have called *E.*

*mosana*, Lej.—E. F. L. I believe this is *E. Esula*, L., but in the absence of fruit I cannot be certain.—C. BUCKNALL. This is *E. Esula*, L., a variable species. I have seen it in a similar habitat near Milverton, Leamington.—A. B. JACKSON.

*E. sp.* By the road near Marcham, Berks, doubtless alien, June 1907.—G. CLARIDGE DRUCE. Appears to be the same as the last, and equally insufficient for determination.—C. BUCKNALL.

*Fagus sylvatica*, L., var. I send out this as a somewhat remarkable leaf variety. Leaves uniformly much smaller, thicker, with veins on the under side much impressed; thicker and less sticky to the touch than in type. Small, very fructiferous trees on the north ridge of Moel-y-golfa, Montgomery, 18th July 1907.—AUGUSTIN LEY.

*Salix aurita* × *phylicifolia*. Kinnelhead, Moffat, N.B., 19th July 1907.—W. R. L.

*S. rugosa*, Lief. Pond, Quenby, Leics., 14th August 1906 and April 1907.—A. R. HORWOOD. *S. cinerea* × *viminialis*, I believe.—E. S. M. Rather a narrow-leaved form, both of *S. rugosa*, Leefe, and of the hybrid *S. caprea* × *viminialis*. The older name is *S. sericans*, Tausch.—E. F. L. Not, I believe, the willow formerly known as *S. rugosa*, Leefe (a name now dropped), but another of the numerous hybrids between *viminialis* and the *Capreae* (*Smithiana*, Willd.). The so-called *S. rugosa* has broader and more oblong leaves than those in Mr. Horwood's specimen.—D. FRY.

*S. herbacea* × *repens*. By stream, about 1,400 ft., Glen Shee, E. Perth, v.-c. 89, 14th July 1906.—W. A. SHOOLBRED.

*S. myrsinites* × *nigricans*, Glen Fiagh.—W. R. L. Yes; nearer to *nigricans*, but there is good evidence of *myrsinites*.—E. S. M.

*Populus alba*, L. Shirley, Derby, 20th April and 5th Aug. 1907: planted.—W. R. LINTON. Correct.—E. S. M.

*P. canescens*, Sm. Wyaston, S. Derbs., 19th April and 30th July 1907.—W. R. LINTON. Yes; *P. alba* × *tremula*.—E. S. M.

*P. nigra*, L. These autumnal leaves from the true plant which grows in Christ Church Meadow, Oxford, shall be supplemented by catkins next year. Sept. 1907.—G. CLARIDGE DRUCE. I suspect that this is more probably *P. canadensis*.—E. S. M. Yes, the true *nigra*, which may be distinguished at once from the planted American tree by its burred trunk, denser foliage and leaves with a cuneate base and longer more acuminate points.—A. B. JACKSON.

*P. deltoidea*, Marsh., var. *serotina*, Hartig, [*P. nigra*, auct. ang. p.m.p. *P. monilifera*, Ait.]. This tree, which is so extensively confounded with the true *P. nigra* by English writers, is much the more frequent of the two. It is an extremely rapid grower and therefore has been very frequently planted through England. It is the *P. monilifera*, Aiton, and may be the *P. canadensis* of some authors. In a somewhat aggregate sense *P. deltoidea* of Marshall's 'Arbustum,' 106 (1785), is this plant. These are the autumnal leaves from a tree in Christ Church Meadow, Oxford, Sept. 1907.—G. CLARIDGE DRUCE. Dode, the latest monographer of the genus, identifies this poplar as *P. serotina*, Hartig. These specimens are identical with material so named by Dode. Another better known name for this tree is *P. monilifera*, Aiton. It is one of the commonest planted poplars in England, and is probably of American origin. It is the Black Poplar of many English botanists, but it differs from the true *P. nigra* in its leaves, which are truncate and not cuneate at the base, with much shorter points, smooth bark, and sparser habit.—A. B. JACKSON.

*Orchis incarnata*, L. Borth Bog, Cardiganshire, v.c. 46, 1st July 1907. I gathered this plant in 1905 as *O. latifolia*, but having since discovered my error I send these specimens as vouchers of Mr. Pugsley's find. See 'J. of B.' 1906, p. 395.—W. H. PAINTER. Right. Preserved so well that the marking of the lip is discernible.—E. F. L. No; *O. latifolia*, L. *O. incarnata* has the stem-leaves hooded at the tips, and a conical spur; in this plant the leaf-tips are quite flat, and the spur more elongate-oblong.—E. S. M.

*O. ericetorum*, Linton. Fairly abundant in rough strong moorland grass at Alwoodley near Leeds, July 1907.—JOHN CRYER. Correct, I believe; but my specimen is imperfect, as it does not shew the foliage properly.—E. S. M.

*Sisyrinchium californicum*, Ait. In the marshy fields near Rosslare, Wexford, where Mr. Marshall first found it. A few miles south of this place is Carnsore Point, on which more wrecks have occurred than almost anywhere else in Ireland. It might easily have happened that some Californian produce from wreckage drifted here containing its seed, which is very freely produced. Now in this locality it is so abundant that in walking through the marshy fields the seeds are scattered in one's progress. Moreover the pads of earth scattered by horses had, I found, seeds attached, so that animals grazing there help to spread it. The fields too are subject to floods which also assist in its dispersal. The locality is contiguous to the sea; indeed the separating bank is not of ancient formation. It is an interesting example of the complete naturalisation of a Western American species. Some

specimens were still flowering in late Sept. 1907.—G. CLARIDGE DRUCE. I do not think Mr. Druce's ingenious conjecture that this may have originated through the wreck of a ship at Carnsore Point at all probable. The Point is several miles away; and the plant grows at some distance from tidal influence; nor does it seem at all likely that seeds of this marsh-loving species would have been conveyed in a cargo of corn from the Western United States. Its companions are such plants as *Eriophorum angustifolium*, *Juncus acutus*, *Orchis incarnata*, etc.; and, unless it was intentionally sown there (as is possible, but not very probable), I believe that it is native, and will some day be found elsewhere in Ireland.—EDWARD S. MARSHALL.

*Asphodelus fistulosus*, Linn. Frequent in the sandhills about Devonshire Road, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 20th July 1907. The species did not mature its fruits, as it did in 1906 on the Orchard Road site.—CHARLES BAILEY.

*Muscari racemosum*, Mill., Lam., and DC. Near Kiddington, Oxfordshire, where it was discovered by Capt. Gaskell. I think there is little doubt that it is a genuine native. Its habitat is a large pasture ground in an upland situation, and the plant is so abundant as to give a distinct colour to the place. There are no ornamental grounds nearer than Ditchley Park, and it is not at all likely to have been brought from that place. May 1907.—G. CLARIDGE DRUCE.

*Juncus tenuis*, Willd. Near Lochgilphead, Argyllshire, Oct. 1907. So far as I am aware this is a new record for Argyllshire, v.-c. 98: consequently have enclosed a few plants thinking that some of the members would like to have one.—P. EWING.

*J. effusus* × *glaucus* = *J. diffusus*, Hoppe. Margin of pond in Richmond Park, Surrey, 28th Aug. 1907. Leg. A. B. JACKSON and K. DOMIN. My two specimens are imperfect, the basal sheaths not being present. Pith continuous. It is quite sterile; but I am not sure that it is the hybrid.—E. S. M.

*J. lamprocarpus*, Ehrh., var. *littoralis*, Patze = *J. nigritellus*, Bab. Sandy shore near Ainsdale, South Lancs. (v.-c. 59), October 1907. Leg. J. A. Wheldon. It differs from *J. lamprocarpus* in its ascending stems which sometimes root at the nodes, and the very dense fasciculate clumps in which it grows. The inner perianth segments are acute.—J. A. W. I believe that this is what Babington called var. *nigritellus* (Don's *J. nigritellus* was probably *J. alpinus*, Vill.). But it seems to me merely a *state* of maritime sands, undeserving of varietal rank. It is much more marked at Berrow, N. Somerset.—E. S. M.

*Luzula multiflora*, Lej., forma. Ref. No. 3161. Rocky ravine, Correifron, Moffatdale, v.-c. 72, Dumfries, 20th July 1907.—EDWARD S. MARSHALL. Mr. Arthur Bennett thinks that this is near the var. *nivalis*, Koch. It looked much more distinct when growing than in its dried state.—E. S. M.

*L. multiflora*, Lej. Correifron, Moffat, N.B., 20th July 1907. Often tall, panicle markedly umbellate, large broad stem-leaves; looked different from the ordinary lowland form.—W. R. LINTON.

*L. pallescens*, Besser. Woodwalton Fen, 13th June 1907, coll. E. W. Hunnybun. "We have again examined the *Luzula* and have come to the conclusion that it should be referred to *L. pallescens*, Besser, though differing somewhat from Wahlenberg's specimen, named *Juncus pallescens*, in the Natural History Museum." James Groves *in litt.* to E. W. Hunnybun.—S. H. BICKHAM. I have not seen a type specimen of Besser's plant, but this distinct looking *Luzula* is evidently what is understood as the true thing on the Continent, judging from material collected in Northern and Middle Europe, preserved at Kew. Besser described his *L. pallescens* in 'Enum. pl. Volh. Podol' 15 (1820), other synonyms being *L. campestris*, var. *pallescens*, Wahlenb., 'Fl. Suec.' I. 218 (1824), *L. multiflora*, Lej., var.  $\beta$  *pallescens*, Bluff et Fingerhuth, 'Comp. florae germ.', I, 444 (1825), *L. sudetica* (Willd.), Presl., var. *pallescens*, Aschers., 'Fl. Prov. Brandenburg,' 74 (1864). Buchenau, *Mon. Juncaceae* ('Engl. Jahrb.' XII. 163, 1890), points out that the extreme form of this plant has a very distinct appearance and might well deserve specific rank, were it not that intermediate states are found. According to Ascherson and Graebner, 'Syn. Mitt. Fl.' II. 520 (1904), however, shade forms of the common *Luzula campestris* have been mistaken for true *pallescens*, and these have been regarded as transitional states between *L. sudetica* and *L. campestris*. *Luzula pallescens*, Besser, may be easily recognised by its pale colour and slender habit, the foliage being of a brighter green than in *L. multiflora* and less hairy, with smaller shorter spikelets mounted on slender very unequal peduncles. The individual flowers are smaller than in *L. multiflora*, with bristle-tipped outer perianth segments, which are, however, shorter than in *L. multiflora*, with shorter greener fruits. Among the specimens in 'Herb. Mus. Brit.' I find one labelled "*L. multiflora*, var., Woods of Aghadoe, Killarney, Aug. 30, 1883. Coll. H. N. Ridley," and another, a rather scrappy specimen, "*Luzula multiflora*, var. Pinus Wood, Balmuto, Fife. J. Boswell Syme, Aug. 1871." Both of these match Mr. Hunnybun's plant. Several Continental specimens of *Luzula multiflora* in the Kew Herbarium shew a tendency to vary in the direction of *L. pallescens*.—A. BRUCE JACKSON. At the end of May and the beginning of June of last year I went to a rough piece

of fen (i.e. of fen land which has never been under cultivation) forming part of Woodwalton Fen, Hunts.

My object was to collect fen violets for distribution by the two Exchange Clubs. I found a strip of land which had been spade-dug for the purpose of planting willow cuttings to form an Osier Holt. The ground had been dug over about two years previously, and it was being rapidly covered with vegetation. On this piece of ground there was an abundance of *V. crassifolia*, *stagnina*, and *nemoralis*, together with hybrids, and growing near was a *Luzula*, which I at once perceived was a new form to our Flora. I have no doubt its appearance on that spot was due to the turning over of the soil and that it will quickly disappear. I found about six roots. The rough fen which is surrounded with water and is only accessible by boat, is covered with very coarse grasses, sedges, and rushes, so that there is a regular struggle for existence. The largest root of the *Luzula* was a big tussock. The other roots were much younger, evidently originating from the larger root.

I came to the conclusion from the description in 'Boreau' that it was *pallescens*, Besser. I sent specimens to Mr. A. Bennett. He was too busy to do more than look up his notes, from which he gathered that he had received "*pallescens*, Besser," from Messrs. Ley, Marshall, and Somerville. As he had not compared my plant with the specimens sent by those gentlemen, I thought it probable that what they had sent was merely a variety of *multiflora*, and not the true plant of Besser. On enquiry Messrs. Ley and Marshall said my surmise was correct. Mr. Somerville had unfortunately just died, so I do not know anything about his plant. Mr. Marshall felt sure that my plant was that of Besser. I then sent specimens to Mr. Evans and afterwards to the Messrs. Groves. . . . The soil of the fen is pure turf. There was plenty of luxuriant *multiflora* growing in different parts of the same rough fen, but the two plants bore no resemblance to each other.—E. W. HUNNYBUN. Mr. Hunnybun in a note observes: "*L. pallescens*, Besser, may possibly be fairly abundant in the fen, but there is such a matted growth of sedge and grass that except, as in the present instance, where a small piece had been dug over with a spade to plant willow cuttings, it would find it almost impossible to grow. It will soon be choked and disappear again."

*Sparganium* ——. With a larger plant in a pond near Walton, Liverpool (v.-c. 59), October 1907. The larger plant was *S. neglectum*, Beeby, but I was unable to identify these much smaller plants. Are they *S. ramosum*, var. *microcarpum*, Neum?—J. A. WHELDON. Yes.—W. H. BEEBY. This may be *microcarpum*, but it is immature, and without fruit one cannot say positively.—JAS. W. WHITE. Not *S. neglectum*, Beeby, but *S. erectum*, L. (*ramosum*, Curt.), var. *microcarpum*.—E. S. M.

*Arum italicum*, Miller. Trevowah, Crantock, 8th June 1907, and Treago, Crantock, 1st July 1907, v.-c. 1, West Cornwall. The latter gathering was from a shaded place with a North aspect.—C. C. VIGURS.

*Potamogeton falcatus*, Fryer. Ditch in Hocking Fen, Ramsey, Hunts, 7th Aug. 1907, coll. E. W. Hunnybun and A. Fryer, see 'Journ. of Bot.,' 1889, p. 65.—S. H. BICKHAM. This cannot spread without difficulty as the fen drain or ditch is a small one and almost a cul de sac owing to one end being more or less grown up. We found the tenant of the land working on it, and he told us that he clears out the drain or ditch every year, but still the plant is abundant. We might have sent you a barrow load.—E. W. HUNNYBUN. This has occurred in Nottinghamshire, where it was found by Prof. Carr.—AR. BENNETT in a letter to S. H. B.

*P. Zizii*, Roth., narrow-leaved form. Ditch in Mepal Fen, Cambs., coll. E. W. Hunnybun and A. Fryer, 26th July 1907.—S. H. BICKHAM. *P. angustifolius*, Bercht. and Presl.—H. J. R.

*P. Cooperi*, Fryer. From the classic locality, Loughborough Canal, Leicestershire, 23rd July 1897. Kindly communicated by Mr. Cooper.—G. CLARIDGE DRUCE.  $\times$  *P. Cooperi*, Fryer. River Soar at Quorn, v.-c. 55, 19th Aug. 1907.—F. L. FOORD KELCEY. *P. crispus  $\times$  *perfoliatus* ( $\times$  *P. Cooperi*, Fryer), according to 'Lon. Cat.,' Ed. X.—H. J. R.*

*Eleocharis multicaulis*, Smith. Penhallow Moor, St. Newlyn East, West Cornwall, 24th July 1907. Although the season was dry, and not far advanced, some of the spikes are already viviparous.—C. C. VIGURS. Looks right; but it is only in flower.—E. S. M.

*Scirpus cernuus*, Vahl. (*S. filiformis*, Savi.), var. *pygmaeus* (Kunth). Fistrel Beach, Newquay, West Cornwall, 3rd August 1907. The variety is much more common in this district than the type is. Vide 'B. E. C. Report,' 1905, p. 186 (46), as to nomenclature; but I prefer sticking to the 'Lon. Cat.,' Ed. IX. according to our Regulations, until names shew a tendency to "crystallize out" of their present "liquid" state.—C. C. VIGURS. As Mr. C. B. Clarke pointed out, Kunth's name is that of a synonym, not a variety. This is *S. filiformis*, Savi., var. *monostachys*.—E. S. M.

*S. triqueter*, L. Mud banks by the Thames, between Richmond and Hammersmith, Sept. and Oct. 1907.—A. B. JACKSON.

*S. lacustris  $\times$  *triqueter* (*S. carinatus*, Sm.). Mud banks by the Thames between Kew and Hammersmith, Aug. and Sept. 1907.—A. B. JACKSON and K. DOMIN. This bulrush forms a conspicuous feature of the riverside vegetation on the Surrey side*

of the river, but is somewhat difficult of access even at low tide owing to the mud banks which surround it. After examining a large number of specimens *in situ* and comparing it with its associate, *S. triqueter*, which, however, occurs in much less quantity, we are convinced that it is a hybrid (*S. lacustris* × *triqueter*), as suggested by Rev. E. F. Linton ('Journ. Bot.,' 1907, 301). The stems are always taller than *S. triqueter* but more slender than *S. lacustris*, the lower part round, the upper part obtusely triangular. In extreme forms which approach *S. lacustris* we observed that the stems in the upper half were only very slightly angled with very obtuse sides, or nearly round, but never quite circular as in the common bulrush, *S. lacustris*. Other plants evidently nearer *S. triqueter* have stems triangular from the base, with occasionally one angle sub-acute, leaves with or without lamina, inflorescence compact or with the spikelets on elongated branches and evidently pedicelled; hypogynous bristles mostly equalling the ovaries, anthers glabrous or shortly ciliate, styles 2 or 3. Pollen often ill developed. The essential characters of the hybrid and assumed parent may be contrasted as follows:—

<i>S. triqueter.</i>	<i>S. carinatus.</i>	<i>S. lacustris.</i>
Flowering stems acutely triangular about 3 ft. high.	Flowering stems terete below, obtusely triangular above, 3—6 ft. high.	Flowering stems stout, terete 6—10 ft.
Leaves reduced to a sheath, lamina not developed.	Leaves with or without lamina.	Leaves with lamina more or less developed.
Spikelets two to many, sessile, and compact at the apex of elongated branches.	Spikelets varying in number, sessile, or on elongated branches.	Spikelets never sessile, often long pedicelled.
Hypogynous bristles equalling or a little shorter than the nut.	Hypogynous bristles mostly equalling the ovaries.	Hypogynous bristles equalling or slightly exceeding nuts.
Anthers glabrous.	Anthers glabrous or shortly ciliate.	Anthers fringed at apex.
Styles 2.	Styles 2—3.	Styles 3.

The character of the nuts we do not mention as nearly all the spikelets of *S. triqueter* and *S. carinatus* were found to be barren. In the case of *S. triqueter* this sterility may have been due to an abnormal season. Jackson found well-developed nuts in one or two spikelets of *S. carinatus*, and these were convex on the back, as described in Babington ('Manual,' Ed. IX., 450), and quite different in shape from those of *S. lacustris*, correctly described as bluntly trigonous. Some forms of this hybrid bulrush much resemble *S. lacustris*, but they are always more slender than

in that species, with the other characters exactly intermediate, as described above. The apparent absence of *S. lacustris* from the area covered by *S. carinatus* may be considered by some as a point against its hybrid origin, but it will be well to point out that *S. lacustris* has been recorded from Strawberry Hill, which is some miles west of the above-mentioned locality. Having regard to the fact that both the assumed parents do not grow in close proximity, it is, of course, possible to regard *S. carinatus* as a secondary hybrid. These secondary hybrids in the course of generations often simulate good species and may even become so, as for instance, *Potentilla aurulenta*, which has arisen from the primary hybrid combination *P. verna* × *opaca*. *Scirpus carinatus* has not advanced so far, but its great variation is a sufficiently clear indication of its hybrid origin. It is interesting to note that *S. carinatus* and *S. triqueter* are associated on the banks of the Arun, near Amberley, Sussex, and by the Tamar, near Calstock, Cornwall. I am unable to ascertain whether *S. lacustris* grows near Amberley, but it is not recorded from the banks of the Tamar in Davey's list of Cornwall plants.—A. B. JACKSON and K. DOMIN. *S. carinatus* is widely spread on the Continent, where it is apparently often associated with *S. triqueter*.—A. B. JACKSON.

*S. maritimus*, L., var. *compactus*, Koch. St. Columb Minor Porth near Newquay, West Cornwall; 26th June 1907 and 10th Sept. 1907.—C. C. VIGURS. Yes; var. *conglobatus*, Grey, is an earlier name. But I regard this and var. *monostachys*, Sonder, as merely depauperate states.—E. S. M.

*Eriophorum angustifolium*, Roth., var. *triquetrum*, Fries. Trebiskin Moor, Cubert, West Cornwall, v.-c., 1, 18th July 1907 and 9th August 1907. Vide 'B. E. C. Report,' 1905, page 186 (46), and 'Journ. Bot.,' 1906, p. 279.—C. C. VIGURS.

*E. polystachyon*, L. (*E. latifolium*, Hoppe). Between E. Anstey and Brushford, S. Som., 27th Aug. 1907, N. C. R.—E. S. M.

*Carex chordorrhiza*, L. f. Marsh near Tubeg of Mudale, a locality about a couple of miles from Mr. Marshall's original locality at Alltnahara. It is fairly plentiful in both places, but the ground is very wet. July 1907.—G. CLARIDGE DRUCE. Insufficient number of labels supplied.—H. J. R.

*C. canescens*, L., var. *fallax*, E. S. M. Lochnagar, S. Aberdeen, cult. 14th July 1907.—W. R. LINTON. Yes; I gave this name to W. R. L., as applied by Pfarrer Kükenthal to my wild specimens from the same spot (Loch-nan-Eoin). But *C. canescens*, L., by Linnaeus's type-specimen, and the description and habitat given

in *Spec. Plant.*, was really *C. divulsa*, Good. The name *C. canescens* had better be dropped. I call it *C. curta*, Good., var. *fallax*. W. R. L. had this in cultivation for many years; and, although increased in size, it has kept its slender habit very well indeed.—E. S. M.

*C. Goodenowii*, Gay, var. *Ref. No. 3,221*. Ditch, near the coast, below Porlock, v.-c. 5, S. Somerset, 27th May 1907. A remarkably tall form or variety. Mr. Arthur Bennett believes it to be *C. vulgaris*, Fr., var. *elatior*, Sonder, 'Fl. Hamb.' p. 493 (1551).—EDWARD S. MARSHALL. I call this simply *C. Goodenowii*.—E. F. L.

*C. vulgaris*, Fr., var. *recta* (Fleischer), Kük., Sgiath Crom, Mid Perth, 4th July 1905.—P. EWING.

*C. tomentosa*, L. From Fairford, 12th July 1907, in a gutter by the roadside; and from a new locality, near Whelford, in Kempsford Parish, 19th July 1907; both E. Gloster. The Fairford plant has narrower leaves and a more wiry habit, though it was in as wet a place, and in as long grass, as the Whelford plant.—H. J. RIDDELSDELL. The length and breadth of the leaves of *Carices* vary so much according to situation, in shade or exposure, short turf or long herbage, that there is no need to distinguish such variations even as forms.—E. F. L.

*C. depauperata*, Curt. In the recorded station from near Godalming, Surrey, in good fruit, but at a later date than usual, Aug. 1907.—G. CLARIDGE DRUCE.

*C. sylvatica*, Huds. forma, growing very abundantly and luxuriantly in Grass-wood, Grassington, Yorkshire. This past season I noticed for the first time that many of the spikes were branched at or close to the base. On examining a large number of living specimens in various parts of the wood I found at least fifty per cent. had branched spikes.—J. CRYER. The compound spikelets, which I have seen even more developed, are due, I think, to luxuriance.—E. F. L. Lower spikes branched at the base. It does not, I think, deserve a special name.—E. S. M. Rightly named. The small spikes at the base of the leading one are very peculiar.—D. FRY.

*C. acutiformis*, Ehrh., forma. Tregair Moor, St. Newlyn East, West Cornwall, v.-c. 1, 13th July 1907. About half a mile away at Trevenper Bridge on slightly brackish land grows what Mr. A. Bennett characterises as "*good typical acutiformis*"; this he says is abnormal.—C. C. VIGURS. For so variable a species this plant is fairly typical.—E. F. L. I cannot separate this from the type.—E. S. M. Correct.—D. FRY.

*C. vesicaria*, L., forma? This was found in abundance in the Mere near Raincliffe Wood, Scarborough. It was growing with typical *C. vesicaria*, L., and *C. hirta*, L., the former of which was abundant. I looked for but did not see any specimens of *C. rostrata*, Stokes, near. Many of the flowers were barren, but not all. I should like the opinion of the Club on this.—JOHN CRYER. A slender, narrow-leaved plant, which looks as if it had grown among rank herbage and been drawn up. Not a variety, I believe.—E. S. M. A form with shorter smaller perigynia than usual.—E. F. L.

*C. vesicaria*, L., var. *alpigena*, mihi non Fries. Ben Laoigh, Mid Perth, v.-c. 88, 27th July 1907.

I have named this *Carex vesicaria*, Linn., var. *alpigena*, non Fries. If this plant is compared (even in its half developed state) with Fries' des. in 'Nov. Fl. Suec. con.' p. 142, it will be seen that they do not agree in various points. In this plant the male spikes are commonly two; the female spikes, when the fruit is mature, are always dark black and hanging on long thread-like peduncles; the leaves are not sub-convolute as in *C. pulla* or *C. Grahamii*. I know that this plant has been confused with *C. Grahamii*, but when they are seen growing together in the same marsh, as was the case with the plants herewith, there is no difficulty in distinguishing them, even in the young state.—P. EWING. This differs from all the plants I have which have been put to var. *alpigena*, Fr., some of which appear to be nothing more than luxuriant *C. pulla*, Good. This is much nearer *C. vesicaria*, of which it might be an alpine state but for the dark brown male spikelets. I suspect, however, that it is a hybrid of *C. vesicaria*, and should like to see maturer fruit.—E. F. L.

*C. pulla*, Good, var. *Grahamii* (Boott). Ben Laoigh, Mid Perth, 27th July 1907. I have so named this plant as that is the name given to this form in the 9th Ed. 'Lond. Cat.' but why it is placed under *C. pulla* I do not understand; it is neither more nor less than a hill form of *C. vesicaria* and has nothing in common with *C. pulla*, unless its ability to exist at the same altitude.—P. EWING. I believe that this cannot be separated from *C. Grahamii*, Boott; but it clearly comes under *C. vesicaria*, L., and is not a form of *C. saxatilis*, L. (*pulla*, Good.)—E.S.M.

*Panicum miliaceum*, Linn. A well-established patch of several years' growth occurs on the sandhills adjacent to St. Leonard's Road, and St. Andrew's Road South, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60. The plants contributed, with both light and dark-coloured spikes, were collected 12th October 1907; on a visit a month later to the same station, for mature fruits, it was found that frost had prevented further growth.—CHARLES BAILEY.

*Alopecurus fulvus*, Sm. f. bearing anthers, first whitish, then dull orange. Pool side, Sellack, Herefordshire, 20th June 1907.—AUGUSTIN LEY. *A. fulvus*, Sm.—E. HACKEL. i.e. *A. equalis*, Sobol.—H. J. R.

*Phleum pratense*, L., var. *stoloniferum*, Bab. Kewsholt, N. Lincoln, 10th August 1907.—AUGUSTIN LEY.

*P. nodosum*, L. Sand dunes at Meols, Cheshire, 7th August 1907, Ref. No. 1641. This is, I think, our usual *Phleum* of dry barren places, and is perhaps not worth distributing.—A. H. WOLLEY-DOD. Correct; but it is a variety of *P. pratense*, L., not a species.—E. S. M.

*Agrostis vulgaris*, With., var. *pumila* (Linn.). On the disused roadway and refuse heaps at the Swithland Quarries, Leicestershire, 7th August 1907. This is a new County record for this pretty form of *Agrostis*. When conducting the Botanical Excursion of the British Association on Charnwood Forest, I noticed a few plants at Bardon Hill; and subsequently a good patch or two were found in Swithland Wood.—W. BELL. Correct; but it is not a genuine variety, only a diseased (fungoid) condition. Rev. W. R. Linton tested it in his garden at Shirley, and it at once reverted to type. It is accordingly omitted from the new edition of 'Lond. Cat.'—E. S. M. *A. tenuis*, Sibth.—H. J. R.

*A. tenuis*, Sibth., var. *pumila* (Linn.). Yeldersley fields, S. Derbs., wild 1906, the same cult. August 1907. It is, I imagine, well known, since Mr. E. S. Salmon's investigations, that *A. pumila* is merely a state of the type caused by the attack of a fungus. I brought some of the variety into the garden, and the result is well seen in the specimens sent. It appears to have quite got rid of the fungoid invader. *A. pumila*, therefore, as a variety falls.—W. R. LINTON.

*Deyeuxia*, sp. This is the plant which appears in our lists as *Deyeuxia strigosa*, Kunth. = *Calamagrostis strigosa*, Hartm. This, or allied forms, occur in several localities in Caithness. Robert Dick first found it by Loch Duran, which has since been drained. At first I believe it was named *C. lapponica*, but afterwards it was referred to *C. stricta* (*Deyeuxia neglecta*), until Mr. Arth. Bennett named it in after years as *C. strigosa*. Subsequently Professor Hackel named some plants collected by me from Loch Duran-side, the locality being a small marsh (a relic of the Loch), which will soon be destroyed. This year I have sent Prof. Hackel specimens from Grant's original locality near Loch Duran, some from my own locality about half a mile away, as well as specimens identical with these which were gathered near Loch Watten (where it is abundant),

and also specimens from a new locality in a marsh near Loch Scarcelett; all these localities being lowland, and so far as one can see with but little range of variation in the plants. The rhizomes are extensively creeping, and so much intermingled with those of other plants as to be with difficulty separated; so that the description 'caespitose' given for *strigosa* by Groves in the 'Manual' is not applicable to these plants. July 1907. I have not yet had time to make a microscopical examination of the glumes.—G. CLARIDGE DRUCE. *Calamagrostis neglecta*, Beauv.—E. HACKEL. Identical, I believe, with the Loch Duran plant, which has been referred to *D. strigosa*, Kunth. The panicle-branches are hispid; but I understand that the name has been called in question.—E. S. M. Dr. O. Stapf considers this to be type *D. neglecta*. I have a similar plant labelled "*Deyeuxia strigosa*, Loch Duran, Caithness, July 1886.—E. S. Marshall." The true *D. strigosa*, judging from Scandinavian material preserved at Kew, seems to be a grass with larger spikelets, but otherwise much the same.—A. B. JACKSON. *Deyeuxia neglecta*, Kunth., of 'Lon. Cat.,' Ed. X.—H. J. R.

*Gastridium australe*, Beauv. In an undoubtedly native situation, in aboriginal turf among furze, in company with *Geranium columbinum*, *Euphorbia exigua*, &c., on a steep bank by the sea, near Nash Point, Glam., August 1907, N.C.R.—H. J. RIDDELSDELL. *Gastridium lendigerum*, Gaud., of 'Lon. Cat.,' Ed. X.—H. J. R.

*Sieglingia decumbens*, Bernh., f. On a wet clayey rushy hill-side near Llangammarch, v.c. 42, 24th and 25th July 1907, at about 800 ft. above sea level. This form, as it grew, was a very remarkable looking plant, with wide open panicle, upright growth, densely tufted habit, and the stem considerably taller than usual. But in drying the open panicle usually becomes nearly closed, and other small points, which at first seemed to separate the form—e.g. the panicle is often very near the topmost leaf-sheath, the flowers often exceed the glumes, the pales sometimes have more numerous veins, &c.—disappeared, or were found under careful examination not to be constant. And in spite of the habit and the open panicle, the plant can apparently only be put down as a very robust form. Prof. Hackel agrees to this. He says:—"Only the open panicle would, if constant, give a varietal character, but I could not find it always in your specimen. I should have awaited that your form had chasmogamous flowers, as was the case in some French specimens with open panicle I described in the 'Oester. Bot. Zeitschr.,' but your specimen is cleistogamous. The spikelets and flowers are somewhat greater, and so is also the habit of the plant, but this is not a distinct character."—H. J. RIDDELSDELL. An unusually luxuriant plant; but I cannot see that it differs from

the type in any particular save habit.—JAS. W. WHITE. Very luxuriant. I have found a plant with an inflorescence about as branched among the Kew specimens. According to Hackel this grass has cleistogamous flowers (*Botanische Zeitschrift*, 1902, p. 474). Dr. Stapf points out to me that this species should be merged into *Danthonia*, the structure of the glumes being essentially the same as in that genus. This is evident on comparing it with the European *D. provincialis*, which differs in having awned pales, but this does not constitute a generic distinction. The American and Australian species of *Triodia* are totally different. I therefore suggest that the name *Danthonia decumbens*, DC., 'Fl. France,' III. 34 (1805), be revived.—A. B. JACKSON.

*Sesleria cærulea*, Ard., var. *luteo-alba*, Opiz. I do not know that this beautiful grass has been noticed near Grassington before. It was fairly abundant in tufts on a steep slope with a northern aspect, 750 ft. above sea-level, this last June. *Sesleria cærulea*, Ard., is always very abundant over a large area, and at different altitudes.—JOHN CRYER.

*Koeleria cristata*, Pers., var. —. Groby Pool, 7th August 1907. This form is far more robust than our general Leicestershire forms; is it one of the forms which have recently been differentiated?—W. BELL. This is, I consider, the *K. cristata*, of British authors, now called *K. gracilis*, Pers., subsp. *britannica*, Domin.—E. S. M. *K. gracilis*, Pers.—E. HACKEL.

*Koeleria*, sp. Smallmouth Sands, Weymouth, v.-c. 9, 16th June 1907.—H. J. RIDDELSDELL. I cannot venture an opinion. It may be *K. glauca*, DC., var. *albescens* (DC.). I don't think it *britannica*.—E. S. M. *K. gracilis*, Pers.—E. HACKEL.

*K. albescens*, DC. Plentiful on the Quenvais, Jersey, where I first discovered it in 1877. June 1907.—G. CLARIDGE DRUCE. *K. glauca*, DC., var. *albescens* (DC.), of the 'Lon. Cat.' Ed. X.—H. J. R.

*K. ? albescens*, DC. Smallmouth Sands, Weymouth, v.-c. 9, 18th and 20th June 1907.—H. J. RIDDELSDELL. *K. albescens*, DC.—E. HACKEL. *K. glauca*, DC., var. *albescens* (DC.), of the 'Lon. Cat.' Ed. X.—H. J. R.

*Poa bulbosa*, L., f. *vivipara*. Shore near Barry, v.-c. 41, 18th May 1907. Earlier and better specimens of the plant distributed last year.—H. J. RIDDELSDELL.

*P. nemoralis*, L., variety. Plant green, erect, wiry; fruit-panicle spreading. Exposed mountain rocks, Black Mountain; Brecon and Hereford; September 1907. This form is abundant on

these hills.—AUGUSTIN LEY. *P. nemoralis*, L., *vulgaris*, Gaud., approaching somewhat var. *montana*, Gaud., but nearer to *vulgaris*.—E. HACKEL. Gathered too late. It seems to me to be sub-alpine, depauperate form of the type, tending rather towards var. *coarctata*, Gaud.—E. S. M.

*P. Chaixii*, Vill. In the pleasure ground of Chiselhampton House with *Festuca heterophylla*, where it may have been introduced. Now very abundant. June 1907.—G. CLARIDGE DRUCE.

*P. palustris*, L. (*P. serotina*, Ehrh.). Still abundant in the original locality, i.e. a marsh on the west side of the River Tay, about four miles below Perth, where it is abundant over a limited space; but I think purely alien. July 1907.—G. CLARIDGE DRUCE.

*Festuca ovina*, L., forma. On the limestone cliffs at Inchnamph, W. Sutherland. Only a form of the type, not true *supina*. July 1907.—G. CLARIDGE DRUCE. Material poor. I cannot see how it differs from var. *capillata*, Hackel.—E. S. M.

*F. rubra*, sub-var.  *barbata*, Hack. Correifron, 9th Aug. and Midlaw Burn, 23rd July, Moffat, N.B., 1907.—J. T. JOHNSTONE and W. R. LINTON. Mr. Marshall considers this to be probably the above variety. It grows on cliffs to upwards of 2,000 ft., and mixed up with the type. The Correifron plant is more pronounced than the other.—W. R. LINTON. *F. rubra*, var.  *barbata*, Hackel, of 'Lon. Cat.' Ed. X.—H. J. R.

*F. rubra*, L., recently sown pasture near Ledbury, v.-c. 36, 8th July 1907.—S. H. BICKHAM. Var.  *fallax*, Hackel, I believe.—E. S. M. Mr. Bickham subsequently suggested *F. dumetorum*, L.—ED.

*F. rubra*, v.  *fallax*, Thuill. Near Moffat, Dumfries, 16th July 1907. Pointed out to me by Mr. Marshall. Chiefly growing on wall tops and in partial shade. Characterised by the long involute root-leaves.—W. R. LINTON. *F. rubra*, var.  *fallax*, Hackel, of 'Lon. Cat.', Ed. X.—H. J. R.

*F. heterophylla*, Lam. In the pleasure grounds near Chiselhampton House, Oxford, in immense quantity. This is the locality whence I first recorded it in 1889. Here it is associated with *Lilium martagon*, *Poa Chaixii*, *Tulipa sylvestris*, *Ornithogalum umbellatum*, etc., and is probably an introduced species, although now completely naturalised. June 1907.—G. CLARIDGE DRUCE.

*F. heterophylla*, Lam. In woods on the Bere Estate between

Pangbourn and Bradfield. In this situation it has all the appearance of a native species. No introduced plants are near, nor is the place a plantation or near houses. I am making investigations into the history of the woodland and in other directions, but its occurrence here gives it a different status from what the plant previously possessed. The Rev. H. J. Riddelsdell was with me when these were gathered in June 1907. A new county record.—G. CLARIDGE DRUCE. From both localities also by H. J. R.

*Bromus giganteus*, L., var. *triflorus*, Syme, Saundersfoot, v.-c. 45, 22nd Aug. 1907. On a specimen sent to Mr. A. Bennett he remarked "Yes."—S. H. BICKHAM.

*B. racemosus*, L. Canal bank near Aintree, Liverpool, 30th July 1907.—J. A. WHELDON. I believe, correct.—E. S. M. Not *Bromus racemosus*, L., but *B. mollis*, var. *glabrescens*, Coss. Apart from other characters. *B. racemosus* is, perhaps, most readily distinguished from "*mollis*" forms by its differently shaped lower pale, as described by many authors.—D. FRY. To the same effect.—JAS. W. WHITE.

*B. brachystachys*, Hornüing. Canal bank near Aintree, Liverpool (59), 30th July 1907. New to South Lancs. This has been noticed for several years and taken for a starved form of *B. racemosus*, with which it grows in plenty. It may, however, be readily distinguished by its paler colour, smaller and more shining spikelets, and very contracted panicle, besides the difference in the shape of the glumes, &c.—J. A. WHELDON. *B. mollis*, var. *leptostachys*, Pers.—E. HACKEL.

*B. interruptus*, Druce. In a field at Rainham Camp, Northants, 6th June 1907.—H. J. RIDDELSDELL.

*Lolium multiflorum*, Lam., var. *muticum*, DC., 'Fl. Fr.', Ed. 3, V. 286 (1816). Rough grassy places, Kew Gardens, Aug. 1907. Coll. A. B. JACKSON and K. DOMIN. The Italian rye grass was abundant in rough grassy places on the west side of Kew Gardens last summer, and assumed a great variety of forms, among them being the above, which is distinguished by its awnless glumes. I recorded the same variety from Leicestershire ('Journ. Bot.', 1904, p. 349). This grass might be passed by for the common *L. perenne*, but it is easily separated from that by its scabrid rachis. A form which has some of the flowering glumes shortly awned seems to connect var. *muticum* with the type. When very luxuriant the spikelets of both type and var. become branched. We have seen similar forms near Richmond, Oxford, and St. Alban's.—A. B. JACKSON and K. DOMIN.

*L. perenne* × *multiflorum*. We observed this combination in Kew Gardens and also near Oxford, and probably it occurs in other localities where the parents are associated. This hybrid appears to be sterile, and the different forms it assumes may conveniently be divided into two groups as follows:—

*L. perenne* × *multiflorum*. In vegetative characters more like *L. perenne*, but much stouter, with leaves nearly or quite glabrous, bright green, spikelets smaller; some of the flowering glumes shortly awned, others without awns, rachis scabrid. Barren. The specimens now distributed apparently belong here.

*L. multiflorum* × *perenne*. More like the first-named plant [i.e. *multiflorum*], but the spikelets have less numerous flowers, and glumes longer than is usual in *L. multiflorum*.—A. B. JACKSON and K. DOMIN. The labels give *L. italicum* × *perenne*.—H. J. R.

*L. perenne* × *multiflorum* (*L. hybridum*, Hackel). Near Godstow, Berks. Dr. Domin pointed this out to me in Sept. 1907, and it is similar to specimens given me by Mr. A. B. Jackson which Dr. Domin showed him near Kew.—G. CLARIDGE DRUCE. *L. multiflorum*, Lam.—E. HACKEL.

*Agropyron*, sp. Ref. No., 3226. Banks of the Parret, towards its mouth, between Stert and Combwich, v.-c. 5, S. Somerset. 22nd Aug. 1907. I suppose that this is only a glaucous, maritime form of *A. repens*, though it looked very peculiar when growing.—EDWARD S. MARSHALL. *A. repens*, var. *maritimum*, Hack. nov. comb. = *Triticum repens*, var. *maritimum*, Koch. & Ziz., 'Fl. Pal.' (1815). *Agropyron repens*, var. *littorale*, Lange, 'Handb.,' 47 (1850).—E. HACKEL.

*Lastræa Filix-mas*, Presl., var. *abbreviata*, Bab. Clifden, Connemara, Ireland: 16th Aug. 1907. A curious variety that attracts notice in many spots near Clifden, growing out of rubble stone walls in exposed places. The crowded overlapping pinnæ and pinnules, due to a general shortening of the internodes; and the dense clothing of the stipe, are such as might be expected on plants fully exposed to weather on the verge of the Atlantic. Here and there one sees an approach to var. *paleacea*, Moore.—JAMES W. WHITE. These specimens, although I think correctly named, differ from the description in 'Fl. Franc.' and in Newm. 'Brit. Ferns,' as also from authentic Ingleboro' specimens, in having more numerous sori at the base of each pinnule. In the typical plant there are 1 or 2, very rarely three on the lower pinnules, and they are arranged nearer the midrib of the pinna. In my example of Mr. White's gathering the sori are quite often 5 or 6 and sometimes 7 on each pinnule, the lowest pair being further from the rachis,

so as not to appear as though clustered along it as in the Ingleboro' plant. The specimens are more robust and pinnules more numerous than in Ingleboro' examples.—J. A. WHELDON.

*L. spinulosa*, Presl., var. *glandulosa*. (Moore, ex. p.). Sandy woods near Caistor; and again sandy woods Wrawby Moor, N. Lincoln; August 1907. These plants vary much in the shape of the scales of the stipe and the presence or absence of a dark stain in their centre; but all differed in a well marked manner from typical *spinulosa* and typical *dilatata*, in company with which they grew. Some of the fronds bear a close resemblance to fronds originally named *glandulosa* from Lydbrook, West Gloucester. I was unable to trace any difference in the root stock between the plants I send as *L. glandulosa*, and *L. dilatata* growing near.—AUGUSTIN LEY. Agrees very well with specimens named by Moore from Epping Forest.—A. B. JACKSON.

*Equisetum* — Ref. No., 3227. On mud, Chard Reservoir, v.-c. 5, S. Somerset, 16th Sept. 1907. Sub-erect from a creeping-rooting base. Stems scabrid at the angles; central tube very small, exceeded by 6 or 7 lateral ones. I thought this most likely to be either a curious form of *E. palustre* or (possibly) a hybrid, *E. arvense* x *palustre*. Two good judges refer it to *palustre*; a third could see nothing to keep it from *arvense*. The station is against *arvense*; this season the water was remarkably low, and I believe that it is usually more or less submerged. Only barren plants occurred in the restricted locality where it grew.—EDWARD S. MARSHALL. Agrees with *E. palustre*, forma *longiramosa*, Klinge, but representing a weak state of it.—J. A. WHELDON.

*Chara hispida*, var. *horrida*, Braun. Quy Fen, Cambridge, coll. R. P. Gregory, 18th June 1907.—E. S. GREGORY. No; that (as its name implies) is extremely spinous. My specimen is almost spineless.—E. S. M. The labels were written '*Carex*.'—H. J. R.

*Tolypella intricata*, Leonh. Pitney, N. Som., 27th April 1907. N. C. R.—E. S. M.

*Nitella ornithopoda*, Braun. Shallow water on the Cazan road, Arcachon, Gironde, France, March and April 1906; f. *laxa*.—G. R. BULLOCK WEBSTER. Canon Bullock Webster has kindly sent a supply of this rare and local charad from W. France; it was thought that specimens would interest the members. Notes from the report of the Linnæan Society's meeting, 7th March 1907, are appended:—

Messrs. H. & J. GROVES, F.L.S., exhibited a series of specimens

of *Nitella ornithopoda*, A. Braun, collected by the Rev. Canon Bullock Webster. This rare species has only been found in a small district in the West of France, from Angoulême in the north to the south of Arcachon, and doubtfully in one locality in Portugal. The especial interest of the specimens exhibited, which were collected to the south of Arcachon in March and April 1906, was that they represented gatherings of the plant from very different habitats and showed great variations. The plants collected in shallow ditches were already in full fruit, while those from running water and from Lake Cazan were quite immature, and so far sterile. Only a few specimens of this species have previously reached England, and the collection exhibited was probably by far the most extensive series of forms yet obtained.

Braun recognized two forms—the more typical one almost resembling in habit some forms of our *N. tenuissima* (this form was called f. *moniliformis* by Prof. Migula), and the other var. *laxa*, which resembles *N. gracilis*. Among the specimens were some from roadside ditches near Arcachon, representing a third and very distinct form; this may be called var. *robusta*. It is 4-5 in. high, very dark green, much more robust than the ordinary form, and with comparatively short ultimate rays to the branchlets, giving it the appearance of *N. mucronata* in miniature.

*N. ornithopoda* is interesting as representing in Europe Braun's section POLYARTHRODACTYLÆ. The headquarters of the species in this section is Australasia, where there are eleven species; two reach north to Japan, and one occurs in India. Two or three are found in South America, and one in North America. Three species occur in Africa, one of which is also recorded by Dr. Nordstedt from Portugal. It is not quite certain that *N. ornithopoda* is distinct from this last.



THE

BOTANICAL EXCHANGE CLUB

AND SOCIETY OF THE BRITISH ISLES.

REPORT FOR 1908.



The Subscription, 7/6 per annum, and Non-contributing Members  
Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE,  
YARDLEY LODGE,  
9 CRICK ROAD, OXFORD.

Parcels for 1909 should be sent post paid in December to  
S. H. Bickham, Esq., Underdown, Ledbury.

PRINTED BY JAMES PARKER & CO., CROWN YARD, OXFORD.

1909.

*HONORARY MEMBERS.*

- SIR JOSEPH DALTON HOOKER, G.C.S.I., F.R.S.  
PROFESSOR E. HACKEL.  
DR. G. RITTER BECK VON MANNAGETTA.  
DR. W. O. FOCKE.  
DR. K. DOMIN.  
DR. J. VON STERNECK.  
PFARRER G. KÜKENTHAL.  
DR. R. VON WETTSTEIN.  
DR. C. H. OSTENFELD.  
DR. W. BECKER.  
DR. S. MURBECK.  
PROF. C. H. FERNALD.  
DR. N. L. BRITTON.  
J. G. BAKER, ESQ., F.R.S.

*CORRESPONDING MEMBERS.*

- A. FRYER, ESQ., A.L.S.  
J. E. BAGNALL, ESQ., A.L.S.  
F. ARNOLD LEES, ESQ., M.R.C.S.  
S. A. STEWART, ESQ., A.L.S.

# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

---

## THE REPORT OF THE TREASURER AND SECRETARY FOR 1908.

I **BEG** to say that the financial report is satisfactory.

### *BALANCE SHEET FOR 1907.*

	<i>£</i>	<i>s.</i>	<i>d.</i>		<i>£</i>	<i>s.</i>	<i>d.</i>	
By Subscriptions received . . . . .	19	5	0		Expenses of Distribution . . . . .	1	18	3
Sale of Reports . . . . .	1	16	0		Postages, Stationery, &c. . . . .	1	7	0
Balance in hand from 1906 . . . . .	4	19	8		Report, &c. . . . .	19	19	2
					Balance in hand . . . . .	2	16	3
	<u>£26</u>	<u>0</u>	<u>8</u>			<u>£26</u>	<u>0</u>	<u>8</u>

Balance in hand of Treasurer, G. Claridge Druce, Yardley Lodge, Oxford, *£2 16s. 3d.*, to whom should be sent on the first of January in each year the subscription of *7s. 6d.* for each member who contributes and receives specimens ; of *5s.* for each non-contributing or corresponding member, who receives a copy of the *Reports* only.

Members may have a complete set of the *Reports* for the years 1879—1900 for *12s. 6d.* post free, odd copies *1s.* each, three for *2s. 6d.*, and from 1901-7 at *1s. 6d.* post free.

Among the chief items of interest to British Botanists for 1908 are the following :—

291. VIOLA STAGNINA × MONTANA. Fen, near Ramsey, Hunts.

292. V. MONTANA × CANINA. Fen, near Ramsey, Hunts.

296. *V. CANINA* × *SYLVESTRIS*. Near Malvern Link. W. J. Rendall. 'Journ. Bot.' p. 364.

303. *V. TRICOLOR*, L., var. *VIVARIENSIS* (Jord.). Sutherland. G. C. Druce. 'Ann. Scot. Nat. Hist.' p. 41.

406 *bis*. *SAGINA REUTERI*, Boiss., var. *GLABRA*, Ingham and Wheldon. 'Journ. Bot.' p. 109, t. 489 *d*. Differs from type in being glabrous and eglandular. The type is being found in various localities. To the counties recorded I may add Beds, 30, Bucks, 24, Oxon, 23.

421. *MONTIA LAMPROSPERMA*, Chamisso, in *Linnaea* vi. (1831) 564, t. vii., f. 2. This I first recorded as British at a meeting of the Linn. Soc. on December 17th, 1908, from specimens in my herbarium gathered in Glen Dochart, Perth, 1874, &c.

This plant, which is in part the *M. rivularis*, Gmel., of Syme, E. B. ii. 136, was described by Chamisso (l.c.) "semine majori atro-castaneo nitente splendente leviter tenuiter areolato." He distinguishes it from "*M. fontana*," which has "semine minori nigro opaco densissime crassiusculo tuberculato quasi echinato t. vii. f. i. Utriusque varietatis *M. minoris* et *rivularis*, Gmel., Bad., semen prorsus idem."

In the last edition of Koch's "Synopsis" *M. lamprosperma* is kept distinct from *M. minor*, Gmel. Bad. i. 301, and *M. rivularis*, Gmel., in the section "B. B. an ihrem Grunde frei," with seeds "stark-glänzend, spröde, mit stumpfem Radicularrand, grösser als *minor* und *rivularis* undeutlich-punktiert." *M. minor* et *rivularis* are in section "An ihrem Grunde niteinander krz-zsgewachsen." *M. minor* having seeds "fast glanzlos, von gröberem, spitzeren Wärschen bekörnelt; Radicularrand scharf." *M. rivularis* having seeds "glänzend, deutlich, aber weniger (flacher) warzig; die Warzen in Bogen gereiht, Schilder bildend; sonst wir vor." Ostenfeld, 'Botany of the Faeroes,' iii. 853, states that *M. lamprosperma* is the only form found in the Faeroes, and that this form is more northern than the one with small, dark, strongly tuberculate seeds (*M. minor*, Gmel.). It is the plant of Greenland, Iceland, Scandinavia, and of Northern Russia, occurring also in Finland, Pomerania, and, as we have seen, in North Britain. The examination of Linnaeus' specimen, labelled *Montia fontana* in Herb. Linn., showed

that it is the shining, reticulated fruited form (*M. lamprosperma*), as might have been expected from its being the normal plant of northern latitudes. The synonyms quoted by Linnaeus in the 'Spec. Plant,' and in 'Flora Suecica' from Micheli, Haller, Vaillant, &c., chiefly if not wholly refer to the more southern form (*M. minor*, Gmel.), but in the 'Flora Suecica,' Linnaeus first cites 'Flora Lapponica;' and as in that the habitat "In locis mucosis ad scaturigines aquarum frigidarum per Lapponiae deserta saepius conspicitur, per Westrobothniam omnium vulgatissima est" refers to *lamprosperma*, we may assume that the plant known to Linnaeus was this species, though there appears to be no evidence that he recognised the markings on the seeds as characteristic; he does, however, refer to the larger and smaller forms which he thinks belong to one species. Necker ('Delic. Gallo-Belg.' i. 78, 1768) was the first author who separated the small plant, under the name *Montia verna*, as a distinct species. He cites "Hall. Helv. 608. n. 1, Mich. 18, Tab. xiii. fig. 1, 2. Alsinoïdes annua, verna Vaill. Bot. Tab. iii. f. 4 exquisita. . . ." This figure of the seeds is marked with strong lines. Therefore on the evidence of the Herbarium specimen, of its being the plant of the localities of "Fl. Suec." and "Fl. Lapp." and therefore primarily of the "Spec. Plant," and on the principle of the first separation of the compound species, it would appear that *M. fontana*, L., must replace *M. lamprosperma*, Cham., = *M. rivularis*, Gmel., p.p., if retained as a distinct species. This has its smaller erect, terrestrial typical form, as well as the larger, perennial, water form—var. *boreo-rivularis* (Lindb. fil.). I have seen *M. fontana*, L., in the foregoing sense from Denbigh, Carnarvon, Derby, Notts, Durham, Cumberland, York N.-W., Northumberland, Peebles, Edinburgh, W., E. and Mid Perth, Forfar, spout of Loch na Gar, 3,400 feet, S. Aberdeen, E. and W. Inverness, Argyle, W. and E. Ross, W. and E. Sutherland, Orkney, Shetland. (*R. Tate*, 1865.) D. O. Paulson saw it in S. Kilda in 1905. I have seen it also in Co. Down and Sligo.

*MONTIA VERNA*, Necker, with small, dull black, strongly reticulate seeds = *M. fontana*, Chamisso. *M. fontana*, L., var. *erecta*, Pers. = var. *chondrosperma*, Ledeb., 'Fl. Ross.' ii. p. 150, 1846 = var. *minor*, Koeh and Syme. Commonly distributed through the south and central parts of England and Ireland, France! Italy! Spain! Switzerland! Belgium, Southern Germany! &c. In last December,

when examining the specimens in the Brit. Mus Herb., I noticed some specimens had seeds which differed from the type by being less strongly tuberculate, and more polished. Mr. W. H. Beeby ('Ann. Scot. Nat. Hist.' (1909), 104) has described these as *M. fontana*, s. sp. *minor*, Gmel., var. *intermedia*, Beeby. "Seeds covered on their face with rather coarse reticulations, but with about three rows of much smaller and more conical tubercles on each side of the keel, which is also minutely tuberculate; black and perhaps more shining," = *M. verna*, Neck., var. *intermedia* (Beeby). He records it from Cornwall W., Surrey, and I have seen it from Worcester, &c., and Cork.

*M. VERNA*, Neck., var. *RIVULARIS* (Gmel. 'Fl. Bad.' i. 302) = *M. aquatica major*, Micheli, *M. fontana*, var. *repens*, Pers., *M. fontana*, var. *major*, Koch, *M. fontana*, var. *rivularis*, Syme, in part. Not uncommon.

478. *GERANIUM PRATENSE* X *ROBERTIANUM*. Lathkil Dale, Derbyshire. ('Journ. Bot.' p. 301.) E. and H. Drabble.

740 *b*. *PRUNUS INSITITIA*, L., var. *SEPIVAGA* (Jord. and Four.). Near Quorn, Leicest. See 'Rep.' 1907, p. 283. Mrs. Foord-Kelcey.

839 *b*. *RUBUS MUTABILIS*, Genev., var. *NALDRETTI*, J. W. White. See 'Rep. Wats Exch. Club,' 1906-7.

866 *f*. *R. HIRTUS*, W. and K., var. *MINUTIFLORUS* (P. J. M.). 'Lond. Cat.' Ed. x, p. 15.

1199. *GALIUM ERECTUM* X *VERUM*. Malvern Wells. W. J. Rendall and F. Towndrow in 'Journ. Bot.' p. 365. Also from Wood-Walton Fen, as distributed; found by E. W. Hunnybun and G. C. Druce.

1418. *ARCTIUM LAPPA* (as *majus*) X *MINUS* (W. H. Beeby), in a valuable paper on *Arctium*, 'Journ. Bot.' p. 380, where also *A. minus*, Bernh., var. *purpurascens*, Blytt, is described. Mr. Beeby in this paper clears up the muddle which resulted from following Lange's leading, and shows that *A. nemorosum*, Lej., is British and replaces the name *A. Newbouldii*, A. Benn, in 'Journ. Bot.' 1899, p. 342 (surely then not properly a pub-

lished name), and 'Irish Nat.' 1903, p. 289; both publications are ignored by Williams in 'Prod. Fl. Brit.' p. 54, where he writes '*Lappa intermedia*, var. *Newbouldii*, Mihi.' Williams says of *Newbouldii* that the specimens first collected by Newbould at Llanberis "do not agree with *nemorosum* as understood by continental authors, nor have they been satisfactorily matched with any continental form of *L. intermedia*. It seems, therefore, reasonable to name them after their discoverer." In my "List" I unfortunately followed Williams, but raised *Newbouldii* to a species. This name, if Mr. Beeby be correct, must be replaced by *A. nemorosum*, Lej., and Mr. Beeby says *A. intermedium*, Lange, consists partly of *A. majus* × *minus*, and partly of *A. minus*, var. *purpurascens*. *A. pubens*, Bab., is at present ambiguous.

1567. *HIERACIUM LONGILOBUM*, Dahlst., 'Journ. Bot.' p. 214. Rev. E. S. Marshall, from 72 and 88.

1631 *b*. *H. PRENANTHIOIDES*, Vill., var. *SUBELATUM*, Almq. 'Lond. Cat.' p. 26.

1635 *e*. *H. CROCATUM*, W., var. *VINACEUM*, Beeby. In a very valuable paper on the flora of Shetland, a group of islands whose flora has been so assiduously studied by Mr. Beeby ('Ann. Scot. Nat. Hist.' pp. 110—117), several new species and varieties of *Hieracia* are described. By the writer's kindness in allowing me sight of the MSS. most of these were incorporated in the *List of British Plants*; the above variety is, however, additional.

*CREPIS TARAXACIFOLIA* × *TARAXACUM VULGARE*. Mr. Towndrow records this from Malvern Wells ('Journ. Bot.' p. 365), but as bigeneric hybrids are quite unusual, it may be well to await the results of Mr. Towndrow's promised observations before definitely including it in the 'List.'

1722 *bis*. *STATICE ALPINA*, Poir. Under the name *ARMERIA ALPINA*, Willd., Mr. F. N. Williams, in an interesting paper on "The High Alpine Flora of Britain" ('Ann. Scot. Nat. Hist.' p. 248), identifies some thrifts from summit of Ben Lawers (W. Gardener, 1842), Snowdon (J. F. Young, 1839), and of Carn Tual (H. N. Ridley, 1883), all in the National Herbarium at Cromwell

Road, as being *Armeria alpina*, Willd.; but for the present the matter had better be left in suspense until our more critical botanists have carefully examined and reported on these specimens.

Mr. F. N. Williams says, "Linnaeus is so inconsistent and indefinite in his use of the generic names of *Statice* and *Armeria*, that most botanists will prefer to follow Willdenow, who separated the thrifts from the Sea Lavenders and called them *Armeria*." But in this matter Linnaeus' inconsistencies are no justification for Willdenow's ignoring the well defined genera of *Limonium*, Hill, and *Statice*, Hill, which Mr. Williams has perhaps overlooked, and it is flying in the face of the Vienna or Paris rules to use *Statice* in the wrong sense, i.e., instead of *Limonium*.

1809 *b*. PULMONARIA OFFICINALIS, L., var. *b*. IMMACULATA, Opiz. Rev. E. S. Marshall suggests that this varietal name represents the presumably wild form in Britain of *P. officinalis*.

1940 *bis*. EUPHRASIA MINIMA, Jacq. Approaches *nemorosa* in some particulars; it is distinguished by its smaller size, by its leaves being crenate-lobate, with obtuse lobes, and the margins revolute, the narrow bracts with short cuspidate serratures, by the small corolla, the upper lip violet, the lower yellow with lilac striations, the obovate or ovate-cuneate capsule, which when mature is larger than calyx. In the Alps the flowers are sometimes wholly yellow, and forms entirely violet or lilac-white have been found. Discovered by Miss Saunders on Exmoor, Somerset, between 1200—1400 feet altitude. Wettstein considers this to be an English form of the widely distributed *E. minima*, Jacq.

It may be remarked that Ostenfeld, after a careful examination of many hundreds of specimens from the north, refers *E. scotica* and *E. foulaensis* to *E. minima*, Jacq. There is no doubt that *E. scotica* is very closely related to it.

1962 *bis*. OROBANCHE RETICULATA, Wallr., var. PROCERA (Koch). In the "Monographie der Gattung Orobanche," by Dr. Ritter Beck, Von Mannagetta, 1890, this plant is put in section v. *Osproleon*, Wallr., which, with the exception of *O. ramosa* and *O. purpurea*, contains all our British species. *Osproleon* is again divided into 1. *Inflatae* not British, and 2. *Angustatae*, which has 7 tribes—*C. Galeatae* contains 42, *O. caryophyllae*; *D. Curvatae*

characterised "Linea dorsalis tota e basi usque ad labium superum plus minus saepe acriter curvatur rarius in labio supero paulo complanata. Faux ampla; laciniae labii superi patentis. Corolla typice in basi luteola, limbum versus dilute fusco-violacea vel rosea, rarius ochroleuca. Stamina in tertio infimo corollae inserta. Stigma bilobum cum lobis confluentibus, sulco transversali profundo perductum vel subinfundibuliforme, luteum. Germen antice non gibbosum. a. spica densi-et multiflora (rarius serius in parte basali laxiflora). Scapus copiose in basi plurimum imbricatim squamatus," with 45, *Orobanche major*, L. [*O. elatior*, Sutt.], under which is put *O. ritro*, Gren. and Godr. "*G. Glandulosae*—Corolla typica albida vel ochroleuca limbum versus in nervis imprimis autem in labio supero rubra amethystea vel purpurea et pilis glanduliferis coloratis saepe tuberculo brevi insidentibus praedita. Linea dorsalis e basi curvata in medio dorsa subrecta vel paulo curvata in labio supero declivis. Faux ampla. Stamina in tertio infimo corollae inserta. Stigmatis lobi hemisphaerici confluentes et sulco transversali perducti coccinei purpurei nigrescentes rarius aurei vel lutei." Under this comes 64, *O. alba*, Steph. [*O. rubra*, Hook.] and 67, *O. reticulata*, Wallr. Tribe I. *Minores* has 70, *O. amethystea*, 79, *O. picridis*, 82, *O. minor* and 83, *O. hederac*.

*O. reticulata* is distinguished "Calycis partes plurimum indivisae rari bidentatae; ejusdem dentes 1-nervi in siccitate nigrescentes; corolla tubulosa 14—22 mm. longa, in dorso subrecta, concava vel leviter curvata; labium superum bilobum; laciniae magnae, in margine plurimum subglabrae; filamenta 2—4 mm. infra basim corollae inserta, infra parce pilosa supra parce glanduloso-pilosa vel utroque subglabra; stylus plurimum parce glanduloso-pilosus; stigma typice rubrum vel purpureum; odor nullus vel levis." In var. *procera* (Koch. Fl. Deutsch iv., p. 438) "corolla tubulosa vel subampla, linea dorsali in dorso anthesi modo recta mox curvata praedita, plurimum 15—18 mm. longa. Stamina 2—4 mm. infra basim corollae inserta."

The history of this as a British species is as follows:—On July 21st, 1908, Mr. N. E. Craven of Leeds, in response to a letter which I had written in "Pharm. Journ." of the 18th respecting our Exchange Club, told me that in 1907 he had found an *Orobanche* which he believed was parasitic on *Cirsium eriophorum*

near Leeds, which although near minor did not agree with the description in the 'Manual.' On the 31st of July he sent me in answer to my request 2 specimens. These I saw were distinct from any described British species, and I thought they were *O. procera*, Koch. I sent them to Dr. Gunther Beck, and he without doubt referred them to *procera*, which he puts as a form of *O. reticulata*, Wallr. This year in July I visited the locality with Mr. A. H. Evans of Cambridge, and found the plant certainly parasitic on *Cirsium eriophorum* (which here hybridises with *C. lanceolatum*); the place being a grassy slope with bushes on Permian limestone which overlies the Millstone grit about 12 miles from Leeds with an altitude of about 300 feet. The examination of the fresh plant shows that it is quite distinct from *majus*. The height is 12—21 inches. In colour the pinky-grey to amber-yellow flower spike with brown tipped bract sepals unequally bifid, many-veined, orate below, gradually narrowed into subulate points, much shorter than the very short corolla tube which is angled rather than curved, slightly inflated at base, with a small wavy-edged triparted equal-divisioned lip with darker veins, anthers orange, changing to chocolate, stamens inserted below the middle of corolla tube, *glabrous*. Stigma with lobes not much connated *purple*.

From *O. major* it is readily distinguished by the above sectional characters, i.e. the less curved corolla, and by the glabrous or nearly glabrous filaments, and in the fresh state by the paler colour of the plant and by the purple, not yellow stigma.

OROBANCHE RETICULATA, Wallr., Orob. gen., p. 42, 1825, var. *procera* (Koch. 'Flora Deutsch.' iv., p. 438, as a species), Reich. 'Ic. Fl. Habitat Germ.' xx. t. 1787. As *O. pallidiflora*, Wimm and Grab. Alsatia (r.r.), Badia, Bavar. (r.r.), Thuringia, Borussia (r.), Pomerania (r.), Silesia, Bohemia (r.), Morav., Austr. (r.), Styria, Salsb., Tyrol., Hungaria, Slavon., Banatia, &c., teste Nyman Consp. 559. See also Archangeli 'Fl. Ital.' 411, 1894.

We owe it to the critical acumen of Mr. H. C. Craven that this striking plant was added to our flora, and it is sincerely to be trusted that botanists will not eradicate this interesting addition to our list. Mr. G. R. Lane Fox, M.P., has kindly consented to

assist in preserving the host-plant. I am assured he may believe the Broom Rape to be no undesirable alien, but a native species.

1974. [*L. CLANDESTINA*, L. ('Journ. Bot.' p. 123), recorded by Mr. B. Reynolds. It is a matter for regret that this should have been published without due enquiry being first made at Cambridge. The fact would have been elicited that specimens of *L. Clandestina* from the Botanic Gardens had been planted in a wild-looking station.]

1989. *MENTHA ALOPECUROIDES* × *ROTUNDIFOLIA* ('Journ. Bot.' p. 259), from Bossington, Somerset, E. S. Marshall, who also (*l.c.*) records *M. piperita* × *sativa*, but of that we await further particulars. As *M. sativa*, or rather *M. verticillata* and *M. piperita*, are each supposed to be hybrids, the offspring must be interesting from its complexity.

THE BRITISH SPECIES OF *THYMUS* are treated of in a valuable paper ('Journ. Bot.' p. 34, 1908), by K. Domin and A. B. Jackson, in which it is shown we have *T. Serpyllum*, L., *T. ovatus*, Miller, *T. glaber*, Miller, and *T. praecox*, Opiz.

*T. OVATUS*, Miller, the *T. Chamædryes* for the greater part of British botanists but not of Fries, belongs to the group *Suberecti* of Velenovsky; the leaves are large and ovate, and the inflorescence elongated; without stolons. This frequently hybridises with *Serpyllum*.

*T. SERPYLLUM*, L., belonging to group *Repentes*, Velenovski, with flowers congested in a short terminal head and elongated, creeping sterile stolons.

*T. PRAECOX*, Opiz. Flowers in rather large terminal looser capitula, and the leaves very strongly nerved. Hybridising with the preceding plant.

*T. GLABER*, Miller (the *T. Chamædryes*, Fries), appears to be a montane or sub-alpine plant similar to *T. ovatus*, but having long creeping or procumbent branches, and a bright shining glabrous appearance with larger leaves. It occurs in North Wales, York, and in many Scottish counties, e.g., on Ben Heasgarnich, Ben Hope, &c.

2026 *d.* *SALVIA VERBENACA*, L., var. *INCISA*, Benth. Under

the sub-species name *S. horminoides*, Pourret, Mr. Pugsley ('Journ. Bot.' p. 145, 1908) gives this from the Salisbury Crags, Edinburgh, on the faith of a specimen in the Nat. Herb. at Cromwell Road, collected by Brand, 1832. I have given reasons ('Journ. Bot.' 1909, p. 87) for hesitating to adopt Pourret's name in place of *S. Verbenaca*.

2298 *bis*. VALLISNERIA SPIRALIS, L., a native of South Europe, has been found in the canal at Redditch, where *Chara Braunii* grows. Also given for Worcester in 'Vict. County Hist.'

2479 *bis*. SAGITTARIA HETEROPHYLLA, Pursh., var. ISCANA, Hiern. ('Journ. Bot.' p. 273, 1908). Probably first brought to Britain in 1798. See 'Donn Hort. Cantab.' Ed. v., p. 246, 1811, and Sims, 'Bot. Mag.' (as *S. rigida*) t. 1632 (1814). Known at once from *S. sagittifolia* by its leaves being unlobed and resembling those of *Alisma Plantago-aquatica*, by the flowers having no dark violet patch at the claw, and the flowering scape falling short of the foliage. Leafing specimens are distributed to the members. Now thoroughly established in the river at Exeter. Found by Mr. W. P. Hiern.

2485. *P. NATANS* × *POLYGONIFOLIUS*, new in name only = *P. polygonifolius*, var. *linearis*, Syme, from Killarney; it is × *P. gessnacensis*, Fisch. See paper on "Potamogeton," by Mr. Arth. Bennett ('Jour. Bot.' p. 250), which also includes a correction of *P. nitens*, var. *maximus*, to var. *praelongifolius*, Tis.

JUNCOIDES PALLESCENS = *Luzula pallescens*, Besser, 'Enum. Fl. Vollhyn,' p. 15, 1822, = *Juncus pallescens*, Wahl., 'Fl. Lapp.' p. 87, 1812. *Luzula multiflora*, var. *pallescens*, Bluff et Fingerh. 'Comp. Fl. Germ.' vol. i., p. 444, 1825 = *L. sudetica*, var. *pallescens*, Aschers., 'Fl. Brandb.' p. 741, 1864. *L. campestris*, DC., var. *pulchella*, Celak., 'Prod. Fl. Böhmen,' p. 85, 1869. *L. campestris*, DC., var. *pallescens*, Celak., 'Prod. Fl. Böhmen,' p. 749, 1881, et 'Buch. Mon. Juncac.' p. 164, 1890.

*Juncodes pallescens*, OK., differs from *J. campestris* by its smaller and pale long-stalked capitula, and by the small caruncule at base of seed; and from *multiflora* by its much smaller and paler flowers, and by the outer division of the flowers (*tepala*) being distinctly longer. The pale flowered form (*pallescens*, Hoppe) of *multiflora* has the

larger flowers of the type. It occurs in a fen near Huntingdon, where it was discovered by our Member E. W. Hunnybun, in 1907; it is almost certainly native, and I think specifically distinct from *J. multiflorum*.

The following diagnosis of the *Spartinas* by Dr. Otto Staff, in his interesting paper, we owe to the kindness of the *Gardeners' Chronicle*, in which it was published on Jan. 18, 1808:—

SPARTINA STRICTA. Forming small tufts  $\frac{1}{2}$  to  $1\frac{1}{2}$  feet high; rhizomes and stolons wiry, culms with a succession of up to 15 tight; firm, short sheaths, which, with the exception of the upper, soon throw off the blades; spikes usually 2, sub-contiguous, rigid, overtopping the leaves, spikelets  $5\frac{1}{2}$ —7 lin. long, pubescent; second glume 3-nerved, lateral nerves delicate, tips hyaline.

S. TOWNSENDII. Forming large clumps or beds 2—4 feet high; rhizomes and stolons soft; culms with a succession of up to 10 or 12 somewhat soft sheaths, much increasing in length upwards, the lowest throwing off the blades; spikes usually 3—5, sub-erect, rigid, overtopping the leaves; spikelets about  $8\frac{1}{2}$  lin. long, delicately pubescent; second glume 3—6 nerved, with 1 or 2 stouter side nerves, keeled, keel ending abruptly below the hyaline tip.

S. ALTERNIFLORA. Forming large clumps or beds 2—3 feet high; rhizomes and stolons soft; culms with a succession of up to 8 or 9, soft and very smooth sheaths, not throwing off the blades, which gradually decay; spikes usually 5—7, sub-erect, slender, and often slightly flexuous, overtopped by the long drawn-out blades; spikelets glabrous to the natural eye, 6— $7\frac{1}{2}$  lin. long; second glume delicately 5—6 nerved, keeled to their very tip.

In addition to *Sagittaria heterophylla*, Pursh., a large number of Aliens have been recorded during the year which will be noticed elsewhere, but we may signal out *Tunica Saxifraga*, Scop., which has been found in very considerable quantity near Tenby.

Among the recent publications (up to 1908) interesting to our members may be mentioned the following:—

LIST OF BRITISH PLANTS, containing the Spermophytes, Pteri-

dophytes and Charads, found either as natives or growing in a wild state in Britain, Ireland, and the Channel Isles, by George Claridge Druce. Oxford: Clarendon Press, Jan. 1908. Price 2s. 6d. Interleaved, 3s. 6d., pp. xv, 104. Jan. 1908.

THE LONDON CATALOGUE OF BRITISH PLANTS, containing the British Phaenogamica, Filices Equisetaceae, Lycopodiaceae, Selaginellaceae, Marsiliaceae, and Characeae. Tenth Edition. London: J. Bell and Sons. Price 9d. Interleaved, 1s. 3d., pp. 48. Edited by W. A. Clarke and Rev. E. S. Marshall. Feb. 1908.

MONOGRAPHIE DER GATTUNG TARAXACUM, von Dr. H. Frei. v. Handel-Mazzetti. 4to., pp. 175.

In this excellent work 58 species of *Taraxacum* are described with most copious synonymy, and with numerous localities given. The author has seen the National Collections at Kew and South Kensington.

Our British species are treated as follows:—

38. *T. PALUDOSUM*, Schlecht., ex Crepin, 'Man. Fl. Belg.' Ed. 2, p. 231, 1866, = *Leontodon paludosum*, Lightf., 'Fl. Scot.' p. 432, 1777, = *T. palustre*, Lam., and DC., Syn., 'Fl. Gall.' p. 262, 1806.

This the author considers to be the ancestral form from which *T. vulgare* has been evolved. Between it and *T. vulgare*, Handel-Mazzetti gives a long and interesting account of the intermediate (Mittelformen) plants. In fact he cites the t. 553 of English Botany as being one of these. Another is figured on t. 55 (MCCCCVI), fig. 1 of Reichenbach's 'Ic. Fl. Germ.' vol. xix., and he cites as a Syn. *L. palustre*, Huds., 'Fl. Ang.' p. 339, 1778, and *L. Taraxacon*, With., 'Nat. Arr.' iii. 679, 1796, *T. officinale*, var. *alpinum*, Kling., and *T. udum*, *T. rubrinerve*, and *T. maculatum*, Jord.

He says he has noticed *T. vulgare* in the Bot. Gard., Vienna, change into *T. paludosum* when growing in the Alpine part, and he believes that *paludosum* is the ancestral type from which has been evolved *T. vulgare*; but that *T. vulgare* is not as yet a completely stable species, and, under certain conditions, can revert to *paludosum*. The more recent species *T. vulgare* has a better capacity for extension.

Curiously from the whole of Denmark *T. paludosum* is absent, being represented by *T. balticum*; but at the same time there are many intermediates between *paludosum* and *vulgare* which are probably *T. paludosum* changing into *T. vulgare*, or *vulgare* reaching back to *paludosum*, but never attaining the final stage.

That this is a more sensible method of looking at these intermediate forms, which the modern critical botanist is too apt to ignore, or to describe as hybrids, will, I think, commend itself to most field botanists. The description for instance of many of the intermediates of *Euphrasias* as hybrids is a case in point. For convenience I have given a place in the British 'Plant List' for these intermediate forms as a var. of *T. paludosum*.

TARAXACUM VULGARE, Schrank = LEONTODON VULGARE, Lam., 'Fl. Fr.' ii. 113, 1778; of this he gives no varieties. The author, although living at Vienna, it will be seen ignores the so-called "totzgeboren" rule, which I have in vain searched for in the Vienna 'Actes.'

*T. LAEVIGATUM*, DC. With this he makes synonymous *T. erythrospermum*, Bess. Capitula parva vel mediocria. Involucri foliola ecorniculata vel plerumque corniculis mediocribus vel parvis instructa. Exterioris seriei foliola adpressa, patentia vel e basi patenti recurva interioribus latiora eorumque longitudinis tertiam vel dimidiam partem vix superantia . . . margine membranaceo distinctissimo. Flores citrini. Achaenia parva intense rufopurpurea vel fere atropurpurea . . . in cuspidem anguste linearem longam . . . abrupte contracta.

50. *T. OBLIQUUM*, Dahlst. This is for the greater part the *T. laevigatum*, auct. angl., and differs from *T. laevigatum*,—capitula saepe majora et flores saepe lutei, *T. vulgaris* floribus vix pallidiores. Involucri foliola glaucescenti-pruinosa; exteriora saepe lanceolata, angustiora, sed interioribus semper latiora, florendi tempore saepe leviter arcuato-recurva *Achaenia pallide griseo-brunnea, parva, in cuspidem saepe brevem* (tum quintam totius fructus partem vix aequantem) abrupte contracta. *Leontodon laevigatum*, Fries, and *L. obliquus*, Fries, 'Novit. Fl. Suec.' p. 13, 1814.

Mazzetti has seen specimens from Sussex, Finsbury Park, and Carlingleugh Bay near Arbroath.

We may expect two other species to be found in Britain,

namely, 3a. *T. balticum*, Dahlst., which occurs in Finland, Oeland, Denmark, and North Germany, &c. Indeed he queries Britain on the evidence of Herb. Jacquin, and *T. lapponicum*, Kihlm., occurring in Iceland, Faroes, Norway, &c.

I am unable to find any reference in the 'Monograph' to *T. spectabile*, Dahlst., or to *maculiferum*, Dahlst. The latter is reported from St. Kilda, the former from Shetland.

MONOGRAPHIE DER GATTUNG POTENTILLA in BIBLIOTHECA BOTANICA. Stuttgart, 1908, pp. 714, tt. xx. An exhaustive account of the genus in which 305 species are described. The following have been found in Britain:—

895. POTENTILLA ARGENTEA, L., has 10 varieties, of which two appear to be British, i.e. var. *dissecta*, Wallr., and var. *decumbens* (Jord.), Focke.

894. P. CANESCENS, Bess., is treated as a full species (*P. inclinata*, Vill., is given up).

892. P. RECTA, L., has 10 varieties, of which *sulphurea*, Lam. and DC., and *obscura* (Willd.), Koch, have been found by me as casuals in Britain.

893. P. HIRTA, L., has 11 varieties.

893 bis. P. THURINGIACA, Bernh. (the *P. opaca*, J. C. Melv. in 'Rep. B. C.'), and var. *Nestleriana*, Tratt. The latter has been found as a casual at Oxford.

899. P. CRANTZII, Beck., is described as *P. alpestris*, Hall. f., with var. *debilis* (Schleich.), and has many varieties and hybrids given.

900. P. VERNA, L. p.p., has also several varieties and hybrids. One, the *alpestris* × *verna*? is the Grassington plant, which I sent to Herr Wolf, who reported "an forsan *alpestris* × *verna*."

901. P. REPTANS, L., has 5 varieties—the *microphylla*, Tratt., being British, as well as the two hybrids.

902. P. PROCUMBENS, Sibth., with the hybrid, *P. procumbens* × *erecta*.

903. P. ERECTA, Hampe, is given as *P. Tormentilla*, Neck., with 5 varieties, including *sciaphila* (Zimm.).

890. P. ANSERINA, L., has 7 varieties, of which *nuda*, Gaud., and *sericea*, Hayne, are British. Herr Wolf does not include *Sibbaldia* among the Potentillas. The geographical sources and the

exsiccata are not given with the same thoroughness which characterizes most recent continental monographs; but in other respects this is an excellent piece of work.

THE TREES OF GREAT BRITAIN AND IRELAND, by H. J. Elwes, F.R.S., and A. Henry, M.A. Vol. III. Edinburgh, privately printed, 1908, pp. vi, 451—711, plates, Nos. 127—207. Includes *Carpinus Betulus* with a var. *quercifolia*, Desf., in Cawston Parish, near Aylsham, Norfolk. Also var. *incisa*, Aiton, Beaufort, Sussex; Smeaton, Hepburn, East Lothian. *Arbutus Unedo*, L., with var. *rubra*, Aiton, noticed by Mackay on Red Slate near Glengariff. *Pinus sylvestris*, L., var. *scotica*, Elwes and Henry, differs in the redder bark of stem, in the shorter and more glabrous leaves ( $1\frac{1}{2}$  inches) often persistent for four years, and in the shorter cones,  $1\frac{1}{2}$  inches long. *Acer Pseudo-platanus*, L., with a pyramidal sport (var. *pyramidalis*, Nicholson), which originated in a grove of trees at Newby, and several variegated forms are also described. It is stated that as yet no fossil remains of the Sycamore have been noticed in Britain, and Clement Reid thinks it was introduced by the Romans. The last British tree described is *Acer campestre*, L., undoubtedly native in England. The illustrations of the trees mentioned are very good.

TREES AND THEIR LIFE HISTORY, by Percy Groom, M.A., D.Sc. 4to., pp. xv, 407. Price 25s. nett. Cassell & Co. A charming and useful book with beautiful illustrations.

THE SUBSECTION EU-CANINAE OF THE GENUS ROSA, by Major A. H. Wolley-Dod, published in 'Journ. Bot.' 1908, and issued as a supplement. This is a painstaking investigation into the members of the *Canina* group, which will be found very useful to students of that puzzling assemblage. The life-long labours of our late expert, M. Crépin of Brussels, have scarcely received their due, and M. Déséglise, whose arrangement of the genus was anything but natural, has been allowed to take the premier place. It is to be hoped our member, Major Wolley-Dod, will continue his researches, and allow us to have the benefit of his industry and knowledge.

INDEX KEWENSIS PLANTARUM PHANEROGAMARUM. Supple-

mentarum Tertium . . . . MDCCCI usque ad finem annis MDCCCXV complectus . . . . Oxon: Clarendon Press, 4to., pp. 193. £1 8s.

In this Supplement an important departure from the earlier volumes is made, namely in keeping as distinct genera *Alsine*, *Gymnadenia*, *Viorna*, *Melandryum*, *Vitis Idaea*, &c.

### OBITUARIES.

THE year 1908 has deprived us of four members by death, and the Club and British Botany suffer severely by the loss, notably of the Rev. W. R. Linton, M.A.

Rev. W. R. LINTON. Born April 2, 1850, at Diddington Vicarage, Hunts. Died at Shirley Vicarage, Derby, January 4, 1908. He was the 5th son of Canon Linton, of Oxford. Entered Corpus Christi College, Oxford, 1869. Married, in 1886, Miss Alice Shirley, of Oxford. He was a most valued member of this Club, and acted as Distributor and Editor of *Report* in 1897, 1899, and 1906. He added *Rubus durescens* to the Rubi, and collaborated with his brother, the Rev. R. P. Murray, and the Rev. W. Moyle Rogers in issuing the *Set of British Rubi*. Afterwards, with his brother, he issued the *Set of British Willows*, and the *Set of British Hieracia*. He published the *Flora of Derbyshire* in 1903, and in 1905 he issued an *Account of the British Hieracia*, and for some years acted as our critical adviser for this difficult genus as well as for the *Salices*. He described a Helleborine under the name *Epipactis atroviridis*, besides numerous species of *Hieracia*. Our last 'Desiderata' list was also drawn up by him. See 'Journ. Bot.' p. 65, with portrait.

Mr. GEORGE NICHOLSON, of Kew, an old member of the Club. Born at Ripon, Dec. 7, 1847. Died at Richmond, Sep. 20, 1908. He obtained appointment in the Office in Royal Garden, Kew, 1873. Published notes on *Cardamine pratensis* and *Spergula arvensis*, when he first clearly pointed out to British botanists the essential differences between *Spergula arvensis* and *S. sativa*. He added a new hybrid, *Scutellaria galericulata* × *minor* = *S. Nicholsoni*, Taubert (see *Verhandl. Prov. Brand.*, xxviii. p. 25, t. 2) to

our flora from Virginia Water. His name is also commemorated in *Mentha Nicholsoniana*, which was named by the Abbe Strail in our 'Rep. Bot. Exch. Club,' p. 12, 1879. And Christ also named *Rosa Nicholsoni*, found by Mr. Nicholson's brother in York (placed in the *involuta* group by M. Crépin). Nicholson also found *R. stylosa*, var. *evanida*, Christ. See 'Report' l.c., p. 12, 1879. More recently C. E. Salmon has ('Ann. Bot.' xiii. p. 123, t. 6) established *Fissidens Nicholsoni*, and Dr. U. Dammer in 1901 named a Palm *Neonicholsonia Georgei*, a double-barrelled compliment. See 'Journ. Bot.' p. 337, with portrait.

RICHARD VERCOE TELLAM, born in Withiel Parish, Cornwall, Feb., 1826. Died at Wadebridge, Sept. 18, 1908. Botanical collection given to Truro Museum. A most useful worker at local botany, who gave many records to Mr. Davey for his flora, adding 13 species to the county list, also several new British seaweeds. His name is commemorated in the genus *Tellamia*, Batters ('Ann. Bot.' ix. p. 168). See 'Journ. Bot.' pp. 361—363, 1908, by F. H. Davey and E. M. Holmes.

JOHN BENBOW, of Uxbridge, was born at Maidenhead, March 8th, 1821, went to reside at Uxbridge in 1838, and there died Feb. 10, 1908. He was educated at Dr. Trimmer's School at Putney. He was very fond of hunting, and followed the Old Berkeley, Quorn and Pytchley Hounds for many years. He unfortunately met with an accident in the hunting field, which resulted in his losing the sight of one eye. He early took a great interest in Botany, and between 1860 and 1870 gave great attention to the varieties of British Ferns, systematically searching Somerset, Devon, and Cornwall, and also discovered some beautiful varieties or sport of ferns in Black Park, near Slough. Subsequently he studied the Willows and Brambles, adding several species of the latter to the flora of Bucks and Middlesex. After he was sixty he took up the study of Mosses, which he pursued with great ardour. When I first knew him he had already lost the sight of an eye, and his walking powers had a little begun to fail. In his earlier years he was a great pedestrian, and he thought little of walking 30 miles or more, thus investigating with considerable minuteness the district surrounding Uxbridge, his investigations being chiefly made in

Middlesex, and in the delightful Buckinghamshire country which lies between Uxbridge and Beaconsfield, about Denham, Langley, and the Chalfonts. He contributed several notes of considerable interest to the 'Journal of Botany' on the flora of Middlesex, to which county he added several species. He kindly gave me a list of his Buckinghamshire records, several of which are the earliest known. He was of good stature and handsome bearing, of keen intellectual tastes, and had a quick insight into character. He had a strong will, and an independent judgment, and keenly resented any unfair treatment. A striking instance of this will be found in his notebook. It was always a pleasure to visit him even in late years, as when his walking powers had given out, he was usually to be found with his one available eye examining Mosses with keen delight. Then as his eyesight failed, he took up Horticulture with zeal. His Herbarium and MSS. have been given to the National Herbarium at South Kensington.

THE REV. RICHARD PAGET MURRAY. Born on Dec. 26th, 1842, at Thornton, Isle of Man. Died Oct. 29, 1908. Graduated from Corpus Christi College, Cambridge, being first in the First Class Natural Science Tripos in 1867. He was ordained in 1868, and held Curacies at Plymstock, 1868-71, and Beckenham from 1874—1877, and he had the sole charge of Baltonsborough, Somerset, from 1878—1882, and since 1883 has been Vicar of Shapwick, Dorset. In 1882 he was elected F.L.S. He has been for many years a valued member of this Club. He worked with considerable assiduity at the Flora of Portugal, from which country he named several new species, and still later at the Flora of the Canaries, from which he also described several new species. With the Rev. W. M. Moyle Rogers and the Revs. E. F. and W. R. Linton, he issued a set of British Rubi, and himself described *R. durotrigum*, which has been distributed by him through the Club. In 1896, he published the 'Flora of Somerset,' and was a willing helper in Mansel Pleydell's second edition of the 'Dorset Flora.' On Professor Balfour vacating the Sherardian Chair of Botany at Oxford, Mr. Murray was anxious to enter the list of aspirants, but on his learning that there was no hope for a systematist, I do not think he actually sent in an application. He had an agreeable personality, and his death creates a very perceptible loss to British

field Botany, as well as a sincere regret to those who knew him. His large herbarium of Foreign and British specimens has been given to the National Herbarium at South Kensington.

WE have also lost by death this year MR. JOSEPH ADAIR, who contributed to the Club, among other plants, the naturalised *Cardamine trifolia*, L.; Mr. W. IRVINE-FORTESCUE, M.B.C.M., J.P. of Aberdeen, a relation of Dr. Boswell Syme; and Mr. F. C. CRAWFORD of Edinburgh, who in his later years began the study of the structural morphology of *Carices*. He also found a hybrid *Erica* in Ireland, of which further information is desired.

G. CLARIDGE DRUCE.

S. H. Bickham, Esq., Underdown, Ledbury, has kindly consented to act as Distributor this year. Parcels should be sent post paid before December 30, 1909.

Mr. E. W. Hunnybun, Mill Common, Huntingdon, who is making a most beautiful series of drawings of British plants, would be very much obliged if members would assist him in obtaining some of his *desiderata*, a list of which, with other information, will be gladly supplied by him. He will defray the cost of transmission and supply tins for the plants.

*ADDITIONAL DESIDERATA, 1908-9,*

WHICH ARE ALSO ADDITIONS TO THE BRITISH PLANT LIST.

COMPILED BY THE SECRETARY.

- |  |   |
|--|---|
| <p>1 bis <i>C. Flammula</i> L. Eur. [Wight.]<br/>         4 c. [T.] <b>odoratum</b> (Gren. &amp; Godr.).<br/>             d. [T.] <b>pubescens</b> (Schleich.).<br/>         41 f. [R.] <b>quinquelobus</b> Koch.<br/>             × <b>trichophyllus</b>.<br/>         42 × <b>heterophyllus</b>.<br/>         131 bis <i>B. sicula</i> Presl. Eur. mer.<br/>             [Leith.]<br/>             genus 43 bis <i>TETRACME</i> Bunge<br/>             del. Sem. Hort. Dorpat. 1836.<br/>             sp. 174 bis <i>quadricornis</i> Bunge. Turkest.<br/>             [Yorks.]<br/>         188 bis <i>S. hispanicum</i> Jacq. Eur.<br/>             [Bristol.]<br/>         191 bis <i>S. runcinatum</i> Lag. Hisp.<br/>             [Leith.]<br/>         252 bis <i>I. sempervirens</i> L. Eur. or.<br/>             [Leith.]<br/>         291 × <b>montana</b>. Hunts.<br/>         292 × <b>canina</b>. Hunts.<br/>         303 j. <b>Provostii</b> (Bor.).<br/>             k. <b>vivariensis</b> (Jord.).<br/>         *325 bis <i>T. Saxifraga</i> Scop. Eur.<br/>             [Tenby.]<br/>         332 c. [<i>hybrida</i> L. Northants.]<br/>         358 bis <i>L. chalconica</i> L. Eur.<br/>         366 bis <i>C. tomentosum</i> L. Eur. [Hunts.]<br/>         398 bis <i>A. stellarioides</i> Willd. Caucas.<br/>             [York.]<br/>         406 bis <b>S. Reuteri</b> var. <b>glabra</b> Ingh.<br/>             and Wheldon.<br/>         407 e. <b>alpina</b> Syme. Scot.<br/>         408 c. <b>maritima</b> S. Gibs.<br/>         421 <b>Montia lamprosperma</b> Cham.<br/>             Brit. bor. 19. II. 2.<br/>         421 bis <b>M. verna</b> Neck. Var. <b>inter-</b><br/>             <b>media</b> (Bechy.)<br/>         447 bis <i>L. ambigua</i> DC. Eur.</p> | <p>474 bis <i>G. collinum</i> Steph. Eur. or.<br/>             [Wilts.]<br/>         478 × <b>Robertianum</b>.<br/>         494 <b>minor</b> Rouy &amp; Fouc.<br/>             genus 123 bis <i>RUTA</i> [Tourn.] L.<br/>             Sp. Pl.<br/>         514 bis <i>graveolens</i> L. Eur. [Leith.]<br/>         529 bis <i>L. linifolius</i> Roth. Eur. mer.<br/>             [Leith.]<br/>         561 bis <i>T. radiata</i> Boiss. Eur. [Yorks.]<br/>             (= <i>Pocockia</i>).<br/>         565 bis <i>M. obscura</i> Retz. Eur.<br/>             b. <i>spinosa</i>.<br/>         577 bis <i>M. coronata</i> Desr. Eur. mer.<br/>         586 c. <b>scabra</b> S. F. Gray.<br/>         616 bis <i>T. diffnsum</i> Ehrh. Eur. mer.<br/>             ter <i>T. formosum</i> D'Urv. Byzant.<br/>             [Leith.]<br/>         650 bis <i>L. ornithopodioides</i> L. Eur.<br/>         657 bis <i>A. Stella</i> Gouan. Eur. mer.<br/>             [Leith.]<br/>         658 bis <i>A. hispidulus</i> DC. Arabia.<br/>             [Leith.]<br/>         670 b. <i>O. roseus</i> Duf. Eur. [Surrey.]<br/>         671 b. <i>H. multisiliquosa</i> L. Eur.<br/>             [Leith.]<br/>         681 bis <i>V. atropurpurea</i> Desf. Alger.<br/>             [York.]<br/>         697 b. <i>canescens</i> Druce.<br/>         704 c. <i>glabrescens</i>.<br/>         717 bis <i>L. setifolius</i> L. Eur. austr.<br/>             [Yorks.]<br/>         740 b. <b>sepivaga</b> (Jord. &amp; Fourr.).<br/>         780 b. <b>megastachys</b> W. Dod.<br/>         839 b. <b>Naldretti</b> White.<br/>         866 f. <b>minutiflorus</b> (P. J. M.) 3.<br/>         887 bis <i>F. indica</i> Andr. Asia or.<br/>         892 b. <i>obscura</i> Willd. Eur. [Oxon.]</p> |
|--|---|

- c. *sulphurea* Lam. & DC. Eur.  
[Oxon.]
- 893 bis *thuringiaca* Bernh. Eur. [Lanc.  
etc.]
- (dele 896 *P. heptaphylla* Mill.  
and *P. collina* Wibel, the first being  
*P. thuringiaca*, the second a col-  
lective name of doubtful application.)
- 958 *P. semi-pinnata* Roth. Eur.
- 980 b. *incurvifolia* D. Don.
- 1010 c. **alpinum** Westcott.
- 1023 bis *S. pallidum* Bieb. As. Min.  
[Sussex.]
- 1077 bis *M. aequilaterale* Haw. Afr.
- 1083 *A. helleborifolia* Salisb. Cauc.  
[Linlith.]
- 1175 bis *C. capitata* Wallich. Himaly.  
[S. Devon.]
- 1181 bis *V. lantanoides* Michx. Am.  
bor. [Yorks.]
- 1196 c. **montanum** (Vill.).
- 1199 × **erectum**. Hunts. Worc.  
gen. 289 bis *Helipterum* DC. Prod. v,  
211 (1837).
- 1278 bis *corymbiflorum* Schlecht.  
Austr. [Tweed.]
- ter *hyalospermum* F. Muell. Austr.
- 1289 bis *I. ambrosiifolia* A. Gray. Am.  
bor. [Cornw.]
- 1304 bis *H. Maximiliana* Schrad. Am.  
bor. [Leith.]
- 1317 bis *H. Fitchii* A. Gray. Calif.
- 1349 bis *A. Chamomilla* Willd. Eur.  
[Cornw.]
- 1356 ter *C. frutescens* L. Ins. Canar.
- 1365 bis *C. australis* Hook. f. Austral.  
[Tweed.]
- ter *C. integrifolia* Hook. f. Tas-  
man. [Leith.]
- gen. 322 bis *CENIA* Juss. Gen. 1789.
- 1365 ter *C. turbinata* Pers. Afr.  
[Tweed.]
- b. *concolor*.
- 1408 bis *S. lautus* Sol. Austral.  
[Tweed.]
- ter *S. brachyglossus* F. Muell.  
Austral. [Tweed.]
- quat. *S. subdentatus* Phil. Chili.  
[Tweed.]
- quint. *S. arabicus* L. Arabia.
- 1413 bis *X. annuum* L. Eur.
- 1418 × **minus** (A. intermedium Lange  
p.p.)
- 1420 read **nemorosum** Lej.
- 1421 b. **purpurascens** Blytt.  
gen. 335 bis *COUSINIA* Cass. in  
Dict. Sc. Nat. xlvii, 503 (1827).
- 1421 bis *tenella* Fisch. & Mey. Armenia.  
[York.]
- 1423 bis *C. nigrescens* Vill. Eur. occ.  
[Leith.]
- 1446 c. **integrifolia** D. Oliv.
- 1505 c. **viride** Gaud 1.  
f. *tardans* N. & P. Eur. [Surrey.]
- 1522 b. **ciliatidens** Elfst. Cairngorm.
- 1567 bis **longilobum** Dahlst. 2.
- 1572 h. **grandidens** (Dahlst.).  
i. **torticeps** (Dahlst.).
- 1609 d. **transiens** Ley in lit.
- 1613 c. **simplex** Ley.
- 1631 b. **subelatum** Almq.
- 1635 c. **vinaceum** Beeby. Shetland.  
The genus *TARAXACUM* follow-  
ing Handel-Mazzetti's Monograph  
is as follows :—
- 1645 **vulgare** Schrank. (T. officinale  
Wigg.)
- 1645 bis **laevigatum** DC. (T. ery-  
throspermum Bess.)
- 1645 ter **obliquum** Dahlst. (T. laevi-  
gatum Auct. Angl. p.p.)
- 1646 **paludosum** Schlecht.  
b. **intermedium**.  
c. **spectabile** (Dahlst.).  
d. **maculiferum** (Dahlst.) St.  
Kilda.
- 1649 b. *dubia*. Jord. Eur. [Cornw.]  
gen. 376 bis *PERNETTYA*  
Gaudich in Ann. Sc. Nat. Scr.  
iv, 102 (1825).

- 1691 bis *P. mucronata*, Gaud. Reg. Magell. [York.]  
 gen. 376 ter *GAULTHERIA*, Kalm. ex L. Amœn. Acad. iii, 14, 1756.
- 1691 ter *Shallon* Pursh. Am. bor. [Hants.]  
 gen. 382 bis *KALMIA* L. Amœn. Acad. iii, 13, 1756.
- 1704 bis *K. angustifolia* L. Am. bor. [Lanc.]
- 1719 ter *Limonium spicatum* O.K. Oriens. [Yorks.] (*Statice spicata* Willd.)  
 quat. *L. leptostachyum* O.K. Persia (Stat. leptostachya Boiss.).
- 1757 bis *Centaurium tenuiflorum* (Link.)
- 1787 bis *L. patula* (Lehm.) Reg. Med. [Cornw.]  
 gen. 421 bis *TRACHYSTEMON* D. Don. in Edin. Phil. Journ. xiii, 239 (1839).
- 1797 bis *orientale* D. Don. As. min. [Warw.]
- 1800 bis a. *ochroleuca* M. Bieb. Oriens. [Herts. Berks.]
- \*1808 b. *immaculata* Opiz. 2.  
 gen. 429 bis *MACROTOMIA* DC. in Meisn. Gen. 281.
- 1824 bis *echioides* Boiss. Oriens. [York.]
- 1843 bis *C. Tinei* Insinga. Amer. [Cardiff.]
- 1894 c. *bracteata* Druce (transferred from 1892 c.)
- 1922 bis *V. digitata* Vahl. Hisp. [Yorks.]
- 1935 × *foulaensis*.  
 × *scotica*.
- 1940 bis *minima* Jacq. Exmoor.
- 1957 bis *groenlandicus* Chab. Shetland.
- 1988 b. *Bauhini* (Ten.).
- 1962 bis [*O. reticulata* Wallr.]  
 var. *procera* (Koeh). Yorks.
- 1989 × *rotundifolia*.
- 2003 b. *dissectus* With.
- 2007 bis × *Serpyllum*.
- 2009 bis *S. montana* L. Eur. [Suss.]
- 2034 bis *N. nuda* L. Eur. [Leith.]
- 2089 bis *P. Cynops* L. Eur.
- 2092 c. *depressa* Rostr.
- 2099 bis *P. tenuiflora*, W. & K. Eur. or. [Yorks.]  
 gen. 501 bis *PARONYCHIA* Adans. Fam. ii. 272, 1763.
- 2102 bis *P. bonariensis* DC. Argent [Tweed.]
- 2116 bis *hybridus* L. Am. bor. [Malvern.]  
 ter *hypochondriacus* L. Am. bor.
- gen. 505 bis *CELOSIA* L. Sp. Pl.
- 2116 sex. *cristata* L. Trop. Cosm. [Edin.]
- 2151 bis *A. spongiosa* F. Muell. Austr. [Tweed.]
- 2184 j. *condensatum* Beck.  
 k. *polycnemiforme* Lec. & Lam.
- 2210 quat. *R. Brownii* Campd. Austr. [Tweed.]
- 2259 b. *quercifolia* Desf. Norf.  
 c. *incisa* Aiton.
- 2268 bis *S. decipiens* Hoffm
- 2269 c. *caerulea* (Sm.).
- 2277 c. *oleifolia* (Sm.).  
 gen. 549 bis *VALLISNERIA* L.
- 2298 bis *V. spiralis* L. Eur. mer. [Redditch, Wore.]
- 2352 bis [*I. sibirica* L. Eur. [Yorks.]  
 gen. 580 bis *VAGNERA* Adans. Fam. ii, 496, 1763. (Smilacina.)
- 2386 bis *stellata* Morong. Amer. bor. [Lirlith.]
- 2400 bis *A. neapolitanum* Cyr. Eur. mer.
- 2442 c. *ranarius* Nees.
- 2465 b. *microcephalum* (Neum.).
- 2476 c. *graminifolium* Wahl.
- 2479 bis [*heterophylla* Pursh.]  
 \* b. *iscana* Hiern. Am. bor. [Exeter.]

- 2485 b. *prolixus* Koch.  
 c. *rotundifolius* Bréb.  
 x. *polygonifolius* = *P. gess-*  
*nacensis* Fisch. [Killarney.]
- 2489 c. *spatulatus* Marss.
- 2493 x. *nitens*. 1.
- 2514 *P. pennsylvanicus* Willd. Am.  
 bor. [Halifax.]  
 (P. *Claytoni* Tuckerm.)
- 2520 c. *stenophylla* Asch. & Graebn.
- 2561 c. *alpigena* Fr. Perth.
- 2575 x *lepidocarpa*.  
 x *Oederi* = *C. fulva* Good.
- 2577 b. *subglobosa* (Mielich.) Lough  
 Neagh.  
 c. *elatior* And.
- 2578 c. *latifolia* Bocck. Wigton.
- 2599 c. *hebridensis* (Ar. Benn.).
- 2601 h. *sphaerocarpa* Kük. Surrey.
- 2604 h. *subcaespitosa* Kük. Ross-  
 larc.  
 i. *strictiformis* Kük. Scotland.  
 j. *tornata* (Fr.) Kük.
- 2608 bis [? *C. brizoides* L. ? Yorks.]
- 2673 c. *praecox* (Jord.).
- 2697 bis *D. retrofracta* Kunth. Austr.  
 [Tweed.]
- 2715 bis *T. Cavanilesii* Trin. Eur.  
 [Leith.]
- 2717 bis *A. sterilis* L. Eur. [Leith.]  
 gen. 681 bis *SPHENOPUS* Trin.  
 Fund. Agrost. 135, 1820.
- 2746 bis *divaricatus* Reichb. Eur. [Leith.]  
 (S. *Gouani* Trin. I. K.)
- 2759 d. *strigosa* Gaud.  
 c. *sectipalea* Parnell. [Fife.]
- 2761 d. *palustris* Stokes.  
 e. *setacea* Stokes.
- 2785 j. *littoralis* Hack.  
 k. *glaucescens* (Hack).  
 l. *acutifolia* Hack.
- 2806 \*e. *grossus* DC.  
 \*f. *divergens* Reichb.
- 2811 g. *microstachys* (Duval-Jouve.)
- 2817 bis *B. arduennis* Dum. Belg.  
 [Cornwall.]  
 ter *B. marginatus* Nees. Amer.  
 [Leith.]
- 2823 d. *muticum* DC.
- 2830 h. *maritimum* Hack.
- 2837 b. *macrochaetum* Hack. [Leith.]
- 2842 bis *T. ventricosum* Ces. Eur.  
 [Leith.]
- 2844 bis *T. Aegilops* Beauv. Oriens  
 [Cornw.]
- 2845 bis *L. cylindricus* Trin. Eur.  
 [Leith.]
- 2848 bis *H. bulbosum* L. Eur. [Edin.]
- 2854 bis *H. chilense* Brongh. Chili  
 [Leith.]
- \*2862 e. *Dovastoni* Leight. Salop.
- 2864 b. *scotica* Elwes & Henry. Scot.
- 2919 bis [*lanceolatum* Angstr.]  
 Helleborine Hill.
- 2318 for *H. violacea read H. purpurata*  
 (Sm.) Druce.
- 2319 for *H. atrorubens Druce read H.*  
*atropurpurea* (Raf.).
- Non-British Helleborines include—
- II. *latifolia* Druce.  
 var. *varians* (Crantz St. Austr. fasc.  
 vi, 467 (1769).  
 var. *orbicularis* (K. Richter in Verz  
 Z.B.G. xxxvii, p. 190, 1887).  
 var. *purpurea* (Cel. Prod. Fl. Bohm.  
 p. 65, 1867).  
 var. *parvifolia* (Pers. Syn. i, 512).  
 var. *viridiflora* (Irnisch in Linnaea  
 xv, 451, 1842).
- II. *microphylla* (Sieb. in Vet. Akad.  
 Holm. 232, 1800) Eur.  
 var. *intermedia* (Schur, Enum. 649,  
 1866).
- II. *palustris* Schrank.  
 var. *salina* (Schur, Enum. p. 650,  
 1866).  
 var. *ericetorum* (Asch. and Graeb.  
 Syn. iii, 871, 1907).

## NOTES ON THE REPORT OF 1907.

My absence from England during the printing of the *Report* prevented my attention to the plants sent. I therefore venture to make a few observations on some critical forms.

*Stellaria graminea*, L. J. C. MELVILL. My specimen has petals which are shorter than the calyx, and not pure white. A somewhat similar specimen was sent me from Ruan Minor by the late Mr. F. T. Richards, described as having "reddish-blue flowers, smaller blossoms, 10 stamens, all with anthers and very small style." The flowers in *S. palustris* and *S. graminea* appear to be dimorphic.—G. C. DRUCE.

*Trigonella caerulea*, Ser. Rev. H. J. RIDDELSDELL.

The above name should be written *T. M[elilotus] caerulea* as in 'Br. Pl. List,' but I think the identification is incorrect. From its narrower stipules, and narrow oblong leaves, with sharp serratures, I am disposed to call it *T. Besseriiana*, Seringe. See 'Reichb. Ic. Fl. Germ.' et Helv. xxii, p. 48, and 'Rep. of Exchange Club,' 1889.—G. C. DRUCE.

*Medicago lupulina*, L., var. *Willdenowiana* (Koch)? Rev. A. LEY. This is not the var. *scabra*, Gray. In 'Nat. Arr. Brit. Pl.' ii, 605, 1821, Gray describes *scabra* "Legumen cochleate, about 10 in one peduncle, slightly compressed, rough, with many tubercles." It is based on Doody's plant described in Ray's Syn. 4.333. The description by Koch ('Fl. Germ.' 161, 1837) of var. *Willdenowiana*, "leguminibus glanduloso-pilosis; pilis patentibus articulatis," does not fit Mr. Ley's specimens, which may be the var. *eriocarpa*, Rouy and Fouc., "Legume pubescent ou velue."—G. C. DRUCE.

*Prunus domestica*, L., F. L. Foord-Kelcey. This is fairly represented in the Plate No. 219 of Jordan and Fourreau's *Icones*, and there named *P. sepiivaga*. On p. 56 it is described as having the fruit "sat parvo subaequaliter rotundato." I should call it *P. insilitia*, var. *sepiivaga* (Jord.).—G. C. DRUCE.

*Valeriana Mikanii*, Syme. This name is absolutely untenable. There is a distinct species named *Mikanei* from South America, which antedates Syme's name; moreover *V. Mikanii*, Syme, is the *V. officinalis*, L., both of the 'Species Plantarum' and Herbarium.—G. C. DRUCE.

Aster, p. 293. I do not follow Mr. Linton's remark. The note in 'B.E.C. Report,' 1897, p. 551, by Mr. Wheldon, shewed clearly his difficulty—i.e., that two names *Aster novi-belgii* and *A. salignus* had been given to the Wicken Fen plant. Subse-

quently Mr. Williams in 'Prod. Fl. Brit.' p. 11, refers the Wicken plant to *A. salignus*, Willd., and if Mr. Linton is right in considering the Oxfordshire and Wicken specimens identical, and Mr. Williams is correct in his identification, our plant must be named *A. salignus*, Willd. Against this may be urged the fact that Prof. Asa Gray named an Aster apparently identical from the vicinity *A. novi-belgii*, which name he remarked "meant a great deal."—G. C. DRUCE.

*Rhinanthus stenophyllus*, Schur. I believe correctly determined, but the specimens alluded to, which both Dr. Sterneck and myself named *minor*, sent by Mr. Wheldon some time since from the same locality, are different from these; therefore both species occur on the sand-dunes. Dr. Bucknall says that *stenophyllus* is only the autumnal form of *Crista-galli*, but I have good specimens of *stenophyllus* gathered in June and specimens of *Crista-galli* gathered late in the year; doubtless plants which might be thought in the early state to be only *Crista-galli* prove themselves to be *stenophyllus* when fully developed.—G. C. DRUCE.

*Salvia pratensis*, L., p. 306. These plants from the well-known locality have nothing to do with the very distinct *S. Sclarea*; the size of the floral bracts in *pratensis* varies considerably.—G. C. DRUCE.

*Ballota nigra*, L., var. *borealis* (Schweigg.). Not *B. borealis*, Schweigg., as in 'Konigsb. Arch. Nat.' i. (1812), p. 214, figured and described by Reichenbach, 'Ic. Fl. Germ.' xviii. p. 10, t. mc cxviii., where it is said to be like *foetida*, but with small leaves (*eadem microphylla*); Koch. ('Syn. Fl. Germ.' i. p. 172) says it is a modification of *foetida*, "cujus aristo indentibus calycis dente ipso brevior est." This western plant (probably *B. ruderalis*, Bab. (not Fr.) in part), which Bolton King brought me from Herefordshire in 1882, is quite a distinct variety characterised by its larger, softer, velvety leaves and laxer habit, which may be distinguished as var. *membranacea*.

*Festuca ovina*, L., forma, p. 322. *F. ovina*, L., is awned, as are these specimens; var. *paludosa*, Gaud. (= *capillata*, Hackel), is awnless, the leaves in *paludosa* are usually longer than in the type. In aspect the Inchnadamph plant is like the var. *supina*, Schrad., but the sheath is different, being that of typical *ovina*, which has split sheaths.—G. C. DRUCE.

*Cnicus tuberosus*, Roth. = *Cirsium tuberosum*, All. Rev. H. J. RIDDELSDELL. Having seen the roots, and having the plant in cultivation, I now believe it to be a variety or form of *Cirsium tuberosum*, All.

## REPORT OF THE DISTRIBUTOR FOR 1908.

THE plants sent in this year have been mostly of an interesting nature, and well prepared. In several instances (*Stellaria graminea*, *Cnicus tuberosus*, and *Senecio vulgaris*, vars.) sets were sent which add to the usefulness of the Club by allowing the members to compare the different forms and vars., as well as to know their Topographical distribution.

In addition to the general plants good series of the *Viola*, *Rubi*, *Rosæ*, *Hieracia*, *Cnicus*, *Mentha*, *Potamogeton*, &c., have been received; and fine sets of *Potamogeton pensylvanicus* were contributed, so that all members should now be in the possession of a good specimen.

Unfortunately the *Batrachian Ranunculi* were conspicuous by their absence, and *Chara* was represented by one gathering only.

Several complaints have reached me with reference to specimens being received in the return parcels in a damaged condition. This is attributable to the fact that some members will persist in sending in sheets considerably larger than the authorized size (16 in. × 10 in.).

I thank the members, referees and the Secretary for their ready help in the distribution.

KNIGHTON ROAD,  
LEICESTER.

W. BELL,  
*Editor of the Report and Distributor  
for the Club, 1908.*

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.
Bailey, C., <i>M.Sc.</i> , <i>F.L.S.</i> , Atherstone House, North Drive, St. Anne's- on-the-Sea ... ..	138
Bell, W., Knighton Road, Leicester ... ..	234
Bickham, S. H., <i>F.L.S.</i> , Underdown, Ledbury ... ..	128
Britton, C. E., Limpsfield, Adela Avenue, West Barnes Lane, New Malden, Surrey ... ..	77
Cryer, John, 182 Cliffe Wood Mount, Shipley, Yorks ... ..	216
Cumming, L., <i>M.A.</i> , Eastfield House, Rugby ... ..	64
Druce, G. C., <i>J.P.</i> , <i>M.A.</i> , <i>F.L.S.</i> , Yardley Lodge, Oxford ... ..	210
Ewing, P., <i>F.L.S.</i> , The Frond, Uddingston, Glasgow ... ..	16
Foord-Kelcey, Mrs., Quorn Vicarage, Loughborough ... ..	169
Groves, J., <i>F.L.S.</i> , 1 Sibella Road, Clapham, S.W. ... ..	34
Hayward, Miss Ida M., 7 Abbotsfield Road, Galashiels, N.B. ... ..	43
Hilton, T., 1 Clifton Street, Brighton ... ..	75
Horwood, A. R., Corporation Museum, Leicester ... ..	40
Jackson, A. B., 346 Kew Road, Kew, Surrey ... ..	37
Ley, Rev. A., <i>M.A.</i> , Netherton, Brampton Abbots, Ross-on-Wye ... ..	608
Marshall, Rev. E. S., <i>M.A.</i> , <i>F.L.S.</i> , West Monkton Rectory, Taunton ... ..	287
Melvill, J. Cosmo, <i>M.A.</i> , <i>M.Sc.</i> , <i>F.L.S.</i> , Meole Brace Hall, Shrewsbury ... ..	39
Painter, Rev. W. H., Stirchley Rectory, Shifnal, Salop ... ..	72
Riddelsdell, Rev. H. J., <i>M.A.</i> , St. Michael's College, Llandaff ... ..	370
Salmon, C. E., Pilgrim's Way, Reigate ... ..	46
Shoolbred, W. A., <i>M.R.C.S.</i> , <i>F.L.S.</i> , St. Ann's, Chepstow ... ..	292
Trow, Prof. A. H., Glenhafren, Penarth, Glam. ... ..	281
Vigurs, C. C., <i>M.D.</i> , Newquay, Cornwall ... ..	208
Waddell, Rev. C. H., <i>M.A.</i> , Vicarage, Saintfield, Co. Down ... ..	25
Wheldon, J. A., <i>F.L.S.</i> , 60 Hornby Road, Walton, Liverpool ... ..	146
White, J. W., <i>F.L.S.</i> , Warnham, Woodland Road, Clifton, Bristol ... ..	158
Wilson, A., <i>F.L.S.</i> , <i>F.R.M.S.</i> , 28 St. James' Road, Yorks. ... ..	85
Wolley-Dod, Major A. H., Pymont, Common Road, Walton-on-Thames ... ..	97
Total	4,195

## NON-CONTRIBUTING MEMBERS.

- Babington, Mrs., Brookside, Cambridge.  
 Bayley-Balfour, Prof., *F.R.S.*, Royal Botanic Garden, Edinburgh.  
 Beeby, W. H., *A.L.S.*, Hildasay, Portsmouth Road, Thames Ditton.  
 Bromwich, Joseph, 19 Hamilton Gardens, St. John's Wood, N.W.  
 Bullock-Webster, Rev. Canon G. R., Canford, Parkstone S.O., Dorset.  
 Carr, Prof. J. W., University College, Nottingham.  
 Comber, John, High Steep, Jarvis Brook, Sussex.  
 Drabble, Dr. Eric, Ivy Cottage, Upper Brighton, near Liverpool.

- Drummond, J. R., 11 Ennerdale Road, Kew Gardens.  
 Evans, A. H., *M.A.*, 9 Harvey Road, Cambridge.  
 Farr, E. H., *F.C.S.*, The Laboratory, Uckfield.  
 Foggit, T. J., Thirsk, Yorkshire.  
 Fraser, James, 18 Park Road, Leith.  
 Gasking, Rev. Samuel, *B.A.*, *F.L.S.*, *F.G.S.*, 26 Yew Tree Road, Walton,  
 Liverpool.  
 Geldart, Miss, Colman Row, Norwich.  
 Gregory, Mrs., 34 Montagu Road, Cambridge.  
 Hanbury, F. Janson, *F.L.S.*, Brockhurst, East Grinstead.  
 Hirst, C. P., Lockyer's Private Hotel, Llandudno.  
 Hunnybun, E. W., Mill Common, Huntingdon.  
 Joint, F. L., 56 South Street, Exeter.  
 Johnstone, Lieut.-Col. Henry Halcro, Orphir House, Kirkwall, Orkney.  
 Laidlaw, F. F., Ivanhoe Hotel, Great Russell Street, W.C.  
 Lester Garland, L.V., *M.A.*, *F.L.S.*, The School House, Victoria College,  
 Jersey.  
 Mackenzie, Roderick, Sunnyclose, Henley-on-Thames.  
 Milne, R. M., Devon Lodge, Dartmouth, S. Devon.  
 Moss, C. E., *D.Sc.*, The University Herbarium, Cambridge.  
 Palmer, Miss C. E., The Yews, Odiham.  
 Patey, W., c/o Roberts & Co., New Bond Street, London.  
 Peck, Miss, Avonhurst, Bathampton.  
 Pugsley, H. W., 81 Alexandra Road, Wimbledon, S.W.  
 Rogers, Rev. W. Moyle, Chetnole, Grosvenor Road, Bournemouth W.  
 Vines, Prof. S., *F.R.S.*, *D.Sc.*, University Herbarium, Oxford.  
 Webster, George, Merton Cottage, Holgate, York.

---

*Thalictrum* —? Dyffryn Crawnon, Brecon, 25th Sept. 1908 ;  
 and Craig Cille, Brecon, 14th July and 24th Sept. 1908. The  
 Rev. E. F. Linton reports this plant to be *T. minus*, L., *d. pubescens*,  
 Schleich. In both localities on mountain limestone ; at a height  
 of from 1,500 to 1,700 feet.—A. LEV. Apparently a form of *T.*  
*minus*, L., var. *collinum* (Wallr.). This var. occurs in quantity on  
 the mountain cliffs of South Wales. I have it from Craig-y-llyn,  
 Glam., Craig Cille, Breconshire ; Llyn-y-fanfach, Caermarthenshire ;  
 and always quite glabrous. The Dyffryn Crawnon plant differs  
 from these in being finely pubescent nearly all over (not glandular,  
 as far as I can see, and therefore not, I presume, var. *pubescens*,  
 Schleich.). The same feature occurs to a less extent in one speci-  
 men (out of two) gathered in 1896 at Barden Tower, by the River  
 Wharfe, v.-c. 64, Mid-West Yorks. I do not know of any name  
 for the var.—H. J. RIDDELSDELL.

*T. flavum*, L. Thames meadows, Godstow, Oxon, Aug. 1908.  
 I send this in order to obtain the opinion of different botanists as  
 to its varietal name. It is fairly uniform in character over the large

meadow on the Upper Thames, above Godstow, where it occurs.—G. CLARIDGE DRUCE. Apparently identical with plants from the higher parts of the Thames drainage, above Kempsford, in N. Wilts, and E. Gloucester. The panicle is compact, and the fruit ovoid. Var. *sphaerocarpum* (Lej. & Court), I believe.—H. J. RIDDELSDELL.

Syme says, 'Achenes globular-ovoid, panicle generally contracted = *sphaerocarpum*.' 'Achenes oval-ovoid, panicle generally rather lax = *riparium*.'

*T. flavum*, L., var. —? Side of brooklet at foot of cliffs, Anker Church, Derbyshire, v.-c., 57, July 1908.—T. E. ROUTH and W. BELL. In great plenty. Flowers yellowish-green. Plants about 5 ft. high. I do not know these forms.—W. B. Ripe fruits are essential to determine the critical forms, this in the early flowering stage, but I should have thought this was typical *flavum*.—G. C. DRUCE.

*Ranunculus Flammula*, L., var. near *radicans*, Nolte. Splashes near stream, Bramble Hill, Bramslow, Hants, 6th Sept. 1908. A curious variety allied to *radicans*, but seemingly not quite the same; rooting at the nodes, and nearly abortively flowering. From small splashes in the New Forest, in deep shade, and peaty ground.—J. COSMO MELVILL. Not var. *radicans*, Nolte, which is a small-leaved state of northern lake-shores, more or less simulating *R. reptans*, L. I should not separate this from the type.—E. S. M. Somewhat similar to *pseudo-reptans*, Syme, as distributed by H. C. Fox, 'Exch. Club,' 1890, but Syme says his plant has leaves narrower than type; these are broad. It differs from type by its rooting habits.—G. C. DRUCE.

*R. acris*, L., var. —? [ref. No. 3351]. Meadows, Kilgwrrwg, about 7 miles from Chepstow, v.-c. 35, Mon., 29th May 1908. Shown to me by Mr. W. A. Shoolbred. Near *Borœanus* and *trichophyllus* [*sic*].—E. S. MARSHALL. Two plants on this sheet. The larger one with long glabrous lower joints is clearly *Borœanus*: the smaller one is good *tomophyllus*.—C. B. and J. W. W.

*R. acris*, L., var. —? Marshy meadows near stream, Great Kilgwrrwg Farm, Kilgwrrwg Bottom, Mon., 29th May 1908.—W. A. SHOOLBRED. Two gatherings: the younger less developed specimens look more untypical than those of the later gathering.—W. A. SHOOLBRED. Mr. Shoolbred shewed me this growing in abundance. I believe it to be *R. acris*, var. *Borœanus* (Jord.), sub-var. *tomophyllus* (Jord.).—E. S. M. Is a form of *R. Borœanus* (Jord.), with the lower part of the stem and petioles rather more hairy than usual, but with the leaves less dense and paler coloured than in the var. *tomophyllus* (Jord.), from which it differs in the rootstock.—J. A. WHELDON. One large specimen on the sheet, and that is *tomophyllus* without doubt.—C. B. and J. W. W.

*R. acris*, L., var. — ? Marshy meadow, Kilgwrrwg Bottom, Mon., v.-c. 35, 19th May 1908.—W. A. SHOOLBRED. A very interesting form—remarkably glabrous, and in that respect differing from any British gathering we have yet seen. It agrees well with specimens gathered at high altitude in Switzerland, which are placed under *R. rectus* (Jord.) as a glabrous state.—C. BUCKNALL and J. W. WHITE.

*R. acris*, L., var. — ? [ref. No. 3263]. Rocky streamlet (Allt Tarsuinn), near Oykell Bridge, E. Sutherland, v.-c. 107, 10th July 1908. Perhaps only a state of *Borœanus* (Jord.) Rootstock præmose.—E. S. MARSHALL. A weak form of *Borœanus*; nearer to that than to *rectus*, but the radical leaves are in bad order.—C. BUCKNALL and J. W. WHITE.

*R. acris*, L., intermediate between sub-sp. *Borœanus* and *rectus*, Walton, S. Lancs., v.-c. 59, July 1908.—J. A. WHELDON. This does not remind us at all of *Borœanus*. We name it *tomophyllus*.—C. BUCKNALL and J. W. WHITE.

*Berberis Aquifolium* × *vulgaris* [ref. No. 3171]. Hedge, near Bossington, v.-c. 5, S. Somerset, 9th June 1908. Nearly past flowering at this date. I am confirmed in my original opinion as to its parentage. Evidently of long standing, as it extends for about 20 yards. *B. vulgaris* is frequent in the neighbourhood; usually, but not always, in hedges.—E. S. MARSHALL.

Originally recorded 'Journ. Bot.,' 1907, p. 393, "as a natural *Berberis*-hybrid in England. In the hedge-row of a narrow unfrequented lane, midway between the hamlet of Bossington and Hurlstone Point, v.-c. 5, S. Somerset. A brief examination of the characters convinced me that it was a hybrid between the common Barberry and the Shrubbery plant of our gardens, *B. aquifolium*, and this determination is fully borne out by comparison with the parents. I believe *B. vulgaris* is the female parent; the agency both of insects and birds must, I think, have contributed to its production, as the locality is about half-a-mile from the nearest house. It is curious that this plant [a full description of which is given] should so strongly incline towards one species [*vulgaris*] in habit, armature, and simple foliage, and to the other in fruit. The Somerset plant appears to be the first known instance of a quasi-wild hybrid in the genus."

[Later the Rev. E. S. Marshall writes: "My supposed *B. aquifolium* × *vulgaris* has been identified at Kew, as *B. aristata*, DC., a Himalayan species. It is more likely bird-sown than purposely planted."]

This is a *Berberis* not uncommon in the Kumaon-Chamba Himalaya at about 6,000—9,000 feet elevation. Mr. Marshall's

specimens correspond exactly with the plant in Herb. Kew. referred by C. K. Schneider to *B. aristata*, DC. sensu stricto.—A. B. JACKSON and J. R. DRUMMOND.

*Chelidonium laciniatum*, Mill. Near Galashiels, Selkirkshire, July 1908.—J. M. HAYWARD. Good examples of *laciniatum*.—W. B.

*Fumaria occidentalis*, Pugsley. Tregunnel, Newquay, Cornwall, v.-c. 1, 9th June 1908.—C. C. VIGURS. The plants from which these specimens were taken were growing in a sheltered corner with a southerly aspect, and were the most beautiful summer examples of this plant that I have ever seen in my ten years' intimate acquaintance with it; unfortunately the drying process has destroyed most of their beauty. Here this plant seems to take the place of *F. pallidiflora*, which is apparently absent from the district. On the whole the plant seems to me to be much nearer *F. pallidiflora* and *F. purpurea* than to *F. confusa*, so that I should prefer to retain it in the position it now occupies in the 'Lond. Cat.,' Ed. x., and not shift it to just following *F. confusa*. I have noticed that ripe fruits frequently show a keel on the back of the carpels in addition, of course, to the ridges at the junction of the carpels. I do not know whether this is peculiar to this species or not, but I do not find it in any other species in my herbarium. In my ignorance I fail to understand the remark which Mr. Pugsley makes at the commencement of his *Salvia* paper ('Journ. Bot.' 1908, p. 97) about *Fumaria occidentalis* being discovered in the year 1902. It would seem to me that 1898, or even 1895, would be more correct. Perhaps the Referees will give an opinion on the matter after carefully reading Mr. Druce's remarks, 'Exch. Club Report,' 1904, p. 4, which are fairly accurate, but do not explain that even in 1898—the year when I first took up botany—I was cognisant of the fact that the fumitory I most commonly saw here (now known as *F. occidentalis*) would not "fit" any species described in Hooper's '*Student's Flora*.'—C. C. VIGURS.

*Fumaria Vaillantii*, Lois. Kempsford, v.-c. 33, June and July 1908. New record for East Gloucestershire. As a small quantity of *F. officinalis*, L., was also gathered from the same field, an occasional fruit of the latter may have been also distributed. The large plants had remarkably interlacing branches.—H. J. RIDDELSDELL.—Correct.—E. M. S.

*Matthiola incana*, Br. (seeds only). A seedling plant was secured from the cliff at Nash, in the summer of 1906, and planted in my garden at Penarth. In 1907 it flowered freely and normally, and the seeds were saved for distribution and exchange. It flowered

again in 1908—a few shoots bearing normal purple flowers, the remainder, flowers of a streaky white and purple—an effect of the environment on the same individual which I had noticed before in successive generations and wrongly ascribed to crosspollination by the Brampton stocks of the neighbouring gardens.—A. H. TROW.

*Nasturtium palustris*, Mœnch., = *Radicula palustris*. Pumping Station, Abbey Lane, Leicester, v.-c. 55, Sept. 1908. Sent with a view to determine the form or var. This form is plentiful by the side of the River Soar, on the north side of the town.—W. BELL. *N. palustre*, DC. = *R. palustris*, Mœnch.—G. C. DRUCE.

*Neslia paniculata*, Desv., by the path of Hollingbury Castle, E. Sussex, Oct. 1908.—Alien.—T. HILTON. As I pointed out in 'Flora Berks.' p. 69, the oldest name for the genus is *Vogelia*, 'Med. Pflanz.' p. 32, April 1792, and the plant is *V. paniculata*, Horn. See Schinz 'Bot. Mus. Univ. Zurich,' p. 540, 1908.—G. C. DRUCE.

*Rapistrum Linneanum*, Boiss. et Reut., var. *a glabrum*, Cariot. On the sand hills south of a new road (Devonshire Road) off North Drive, St. Ann's on Sea, W. Lancs., 9th Aug. 1907.—C. BAILEY.

*Lepidium rudemale*, Linn. Gloucester Docks, v.-c. 34, 26th Sept. 1908.—F. L. FOORD-KELCEY.

*Reseda stricta*, Pers., or *inodora*, Rchb.? By the railway, Newhaven, E. Sussex, June 1908.—Alien.—T. HILTON.

*Helianthemum Chamæcistus* × *polifolium* [ref. No. 3350]. Purn Hill, Bleadon, v.-c. 6, N. Somerset, 20 June 1908. Growing here and there with the parents, on mountain limestone; flowers pale sulphur-yellow. Mr. L. A. M. Riley had this in cultivation two years ago, and told me that it was apparently fertile.—E. S. MARSHALL. This has been referred to × *H. sulfureum*, Willd. I have a similar plant as a "straw-coloured var." Collected by Miss Townsend at Torquay in 1858.—G. C. DRUCE.

*Viola hirta* × *sylvestris*. Great Doward, Hereford, 15th May 1908. I feel sure that the plants sent represent this hybrid, which I do not find recorded previously. Both parents are abundant in the locality. The plants were growing in marshy ground where it would be subject to floods.—A. LEY. The outline and texture of the leaves, and the narrow petals, favour this view; likewise the sepals. I should have expected, however, to have seen a more hooked spur.—E. S. M. I consider this to be a very marked example of *V. Riviniana*, Reichb., f. *villosa*. No hybrid between any members of the two groups of violets—*Caulescentes* and *Acaules*—

has come under my notice ; nor am I able to hear of any such, on enquiry among other botanists. In my experience forma *villosa* reverts to type on transplantation ; it would be interesting to know whether this extreme form would hold its own under cultivation. If there is any hybridity in this plant—I take it to be between *sylvestris* and *Riviniiana*—the calycine appendages are undeveloped, as in the former, but the spur is that of *Riviniiana*.—E. S. GREGORY.

*Viola lactea* × *Riviniiana*. Hort. Cult. Chepstow, June 1908. Origin, Tidenham Chase, W. Gos., where it grows with both parents, the hybrid being apparently more abundant than *V. lactea*, Sm. I have had the plant in cultivation for three or four years, and although cleistogamous flowers are produced in abundance no capsule has ever been produced.—W. A. SHOOLBRED. A good intermediate, which I saw last year growing with the parents. In cultivation I have found it to be always sterile.—E. S. M. At first sight this hybrid is unconvincing ; but on examination one realizes that the characters of *lactea* and *Riviniiana* are about equally blended.—E. S. GREGORY.

*V. tricolor*, L., var. *variata* (Jord.). Near Beaconsfield, Bucks, Aug. 1908. This plant has received various appellatives by critical students. Dr. Drabble has recently named it *variata*. In this extremely confusing section of *Violas* some time must necessarily elapse before finality of name can be obtained.—G. CLARIDGE DRUCE. This seems fairly good *V. variata* ; comparison with Jordan's description (Pug. 26), and with specimens from Aberdare, 1901, named "near *variata*," by Messrs. Baker and Drabble, shows that the colour should be upper petals deep violet (very rarely pallid) ; side petals, blue-violet with yellow spots. In the Beaconsfield plant they are pale yellow.—H. J. R. Yes ; this is the plant I call yellow *variata*. It can be distinguished at once from *V. alpestris*, Jord., by its short spur.—E. D.

*V. arvensis*, Murr., var. *Lloydii* (Jord.). In extending the sewage works at Bingley a considerable area of river-deposit was turned over, and on the deposited soil *V. Lloydii* appeared in great abundance this last season. Some of the plants were very luxuriant.—J. CRYER. Is not this a form of *V. saxatilis*, Schmidt.?—E. S. M. *V. Lloydii*, Jord., but not very typical. The leaves are usually larger, and the plant branched from the base.—E. D.

*V. arvensis*, Murr., var. *Lloydii* (Jord.). Hort., Shipley, 360 ft., Summer 1908. Some seeds from a plant bearing the name *V. carpatica*, Borb., 'Report,' 1907, p. 278, found their way into my garden, and three robust plants developed, from which the specimens have been prepared. In submitting them to Dr. Eric Drabble

he named them as above.—J. CRYER. Is not this a form of *V. saxatilis*, Schmidt?—E. S. M. This is *V. Lloydii*, Jord. It differs from the *saxatilis* set in having short spur and broader petals. Mr. Cryer thinks this came from seed of the plant sent to the Club in 1907, by Major Wolley-Dod, and termed *V. carpatica*, Borbas, about which he expresses a doubt, 'Report,' 1908, p. 278. Certainly *carpatica* and *Lloydii* have been much confused; but *carpatica* as I know it (and my knowledge is the outcome of a careful examination of plants named by Prof. Borbas himself, and kindly lent to me by Mr. Wheldon) differs from *Lloydii* by the much narrower and more deeply toothed leaves. I confess to a doubt as to the constancy of *carpatica* (which was originally described as a hybrid). It may pass into *Lloydii* on cultivation.—E. D.

*V. agrestis*, Jord. Railway Cutting, near Malpas, Cheshire, 4th Aug. 1908. Flowers yellowish-white; upper lip rarely pale violet. Not our common Cheshire cornfield species, which I think is *V. ruralis*, Jord. It does not grow on the undisturbed soil of the railway cutting, but only on the sand excavated by rabbits.—A. H. WOLLEY-DOD. Agrees fairly well with the description in Boreau, 'Fl. de Fr.,' p. 81, and specimen from Aberdare, 1902, named *V. agrestis*, L., by Dr. Drabble; but peduncle should be more spreading: bract should be much below the flower, not on or above the curve of peduncle: petals should be lilac or blue or whitish; in the Malpas plant they are whitish (violet spots on the petal), and the lowest is yellow.—H. J. R. Yes: *V. agrestis*, Jord.—E. DRABBLE.

*V. arvensis*, Murr., var. *agrestis* (Jord.)? Sparingly on sandy and gravelly soil at Lutterworth, Leicestershire, v.-c. 55, July 1908. The palish yellow or straw-coloured petals scarcely exceeded the sepals.—W. BELL. Poor material, but apparently the same form as the Malpas plant.—H. J. R. *V. scgetalis*, Jord.—E. D.

*V. arvensis*, Murr., var. —? Abbey Park, Leicester, v.-c. 55. This large flowered form or var. has become naturalized under the shrubs near the Medicinal Garden, where it is believed to have been imported with seeds about 7 or 8 years ago.—W. BELL. In spite of the very large flowers I think this must come under *Lloydii*, Jord. It is not one of the *saxatilis* set, as it has a short spur. It may be a large-flowered state (of *Lloydii*) due to rich soil.—E. D.

*V. arvensis*, Murr., —? Hedge bank, Blackbird Lane, Leicester, Sept. 1908.—W. BELL. (No. 9) I think this must come under *Lloydii*, Jord.—E. D.

*V. arvensis*, Murr., var.—? Hedge-bank, Blackbird Lane, Leicester, v.-c. 55. I have noticed this *Viola* in this station for

several years, and it appears quite constant in habit.—W. BELL. I prefer not to give a name to this plant at present. It may be *Lloydii*: but, if so, it is not at all typical.—E. D.

*V. arvensis*, Murr., var. *segetalis* (Jord.). Burford Downs, Oxford, a rather common segregate in our area.—G. CLARIDGE DRUCE. *V. segetalis* (Jord.)—E. D. Agrees fairly well with the description in Jord. 'Obs. fragm.,' 2, p. 12, t. 1, except that the peduncle should be more patent. Specimens (from Aberdare) in my possession are in this respect more typical. Close comparison of these forms is only possible in the fresh state, unless notes as to shape, colour, &c., of the petals and other organs are made in the gathering.—H. J. R.

*V. obtusifolia*, Jord. Walton, S. Lancs., v.-c. 59, 10th Aug. 1908. Varies in the breadth of the leaf, but apparently all belonging to the same sub-species.—J. A. WHELDON. Agrees well (in points where comparison is possible) with description in Jord. 'Pug.' 23, and with specimens from Aberdare, &c., so named by Dr. Drabble.—H. J. R. No. *V. agrestis*, Jord.—E. D.

*V. arvensis*, Murr., var. *obtusifolia* (Jord.). Barley-field, South Knighton, Leicester, v.-c. 55.—W. BELL. My specimen has not the characteristic obtuse leaves, lower and upper, of *V. obtusifolia*, Jord.; nor is the medium lobe of the stipule broad enough. It would do better in some respects for *V. agrestis*, Jord., as described by Boreau in 'Flore de France,' p. 81; but bract on peduncle should be considerably lower for that.—H. J. R. *V. agrestis*, Jord. *V. obtusifolia* has broader and very obtuse leaves.—E. D.

*Lychnis alba* × *dioica*, [ref. No. 3346]. West Monkton, v.-c. 5, S. Somerset, 5th June 1908. About intermediate. Flowers flesh-coloured. Apparently fertile.—E. S. MARSHALL.

*Cucubalus baccifer*, L. Cultivated at Clifton, July 1908.—J. W. WHITE. Examples in good fruit.—W. B.

*Stellaria neglecta*, Weihe. In some quantity round Cardiff, v.-c. 41. This is the plant with acutely tubercled seeds, and hairy peduncles = var. *decipiens*.—E. S. M. I believe 10 stamens.—H. J. RIDDELSDELL. The ripe fruit of my specimens is acutely tubercled; that makes them the type, and not my var. *decipiens*, which has shorter, broader and very blunt tubercles.—E. S. M.

*Stellaria Holostea*, Linn. Apetalous form. Malvern Link, v.-c. 37, Worcester, 11th May 1908.—R. F. TOWNDROW and S. H. BICKHAM. Var. *apetala*, Rostrop, in 'Botanisk Tidsskrift' xiv.,

p. 118, 1879. Recorded from Denmark by Rostrop—l.c.—A. BENNETT.

*Stellaria graminea*, Linn. Cottenham Park Road, near Raynes Park, Surrey, 19th June 1908. Examples sent to show the dimorphism that exists in this species. The two forms may be found in most situations frequented by *Stellaria graminea*, and occurring in patches are very evident to the eye, as they are distinguished by their larger or smaller flowers. The one with the larger flowers is the hermaphrodite form, and the one with the smaller flowers is functionally a female form. Form "A," hermaphroditi, has flowers with petals quite one-third (or even twice) as long as the sepals; stamen 10 in number, with filaments long and of equal length; anthers reddish at first, afterwards deep brown in colour, pollen bearing, and styles as long as stamens. Form "B," feminine, is marked by flowers with petals shorter than (or equalling) the sepals; stamen 10 in two series, with filaments dwarfed, five longer and five shorter; anthers light brown in colour, pollen not formed; styles very prominent exceeding sepals, petals, and stamens.—C. E. BRITTON.

*Arenaria verna*, L. This plant grows abundantly on the limestone rocks and hills in Grassington and neighbourhood. It ranges over a zone from 700 feet to 1,250 feet above sea-level. It flowers most profusely in May.—J. CRVER.

*Sagina* —? Near Whiston, S. Lancs., v.-c. 59, Coll. Rev. M. Tookey. Near *S. Reuteri*, Boiss., var. *glabra*, Wheld. and Ingh., 'Journ. Bot.' 1908, p. 111. This was submitted in a fresh state to one of the Club Referees, who named it *S. maritima*. Besides being from an inland locality it had neither the texture nor technical characters of that species. I should have thought it a slender small capsuled form of *S. procumbens*; but for the fact that the central stem seems to always, sooner or later, lengthen and flower. There appears to be only the variety named above which agrees with it in technical characters. It is so much more robust and diffuse, and, hence, so different in appearance from the original Yorkshire examples, that it is so named with diffidence; although it may be an older, and, perhaps, biennial state. The Rev. M. Tookey, who is a most careful observer, says, "Whenever I find the central stem lengthening and flowering I find the pedicel nodding in fruit. The leaves, too, are regularly somewhat hairy and have also often glandular hairs, and the plants are of a dark green colour."—J. A. WHELDON. My specimens are incomplete, not showing the roots; but from their appearance I should judge them to be perennial, and to belong to *S. procumbens*, L.—E. S. M. Why not ordinary *S. procumbens*, L.?—H. and J. GROVES. The nodding

pedicel and perennial growth I think remove it from *Reuteri* to *procumbens*.—G. C. DRUCE.

*Spergula arvensis*, L. Barley-field, South Knighton, Sept. 1908, v.-c. 55.—W. BELL. Yes; = *S. vulgaris* (Boenn.), a form of it which is rather more glandular than usual.—J. A. WHELDON. The ripe seeds are well covered with club-shaped papillæ, so the plant goes to *S. arvensis*, L. (*S. vulgaris*, Boenn.)—C. B. and J. W. WHITE. I believe this to be *S. sativa*, Boenn., though the foliage is usually more densely glandular.—E. S. M. Is *arvensis*, L.—C. E. S. Seeds distinctly papillate, hence *S. arvensis*, L. = *S. vulgaris*, Boenn.—G. C. DRUCE.

*Spergula sativa*, Boenn. Fields near Massbridge, S. Lancs., v.-c. 59, Aug. 1908. Although said to be very common in the 'Flora of Liverpool,' this very glandular form seems to be much rarer on the north bank of the Mersey than *S. arvensis*, Linn.—J. A. WHELDON. Right.—E. S. M.

*Malva rotundifolia*, L. Allotment Gardens, Belgrave, Leicester, v.-c. 55, Sept. 1908. At first I was inclined to put this under *M. pusilla*, Sm., but Mr. C. E. Salmon writes: "This is, to me, *M. rotundifolia*: it has the short outer sepals, smooth carpels, &c., of that species."—W. BELL. Yes.—H. J. R. and G. C. D.

*Malva parviflora*, L. (1) Whitehawk Down, Brighton, Oct. 1908. Alien.—T. HILTON. (2) On the site of an old poultry run at the corner of Devonshire Road and North Drive, St. Anne's-on-the-Sea, W. Lancs., 3rd Aug. 1907.—C. BAILEY. Yes: the glabrous-fruited state. 'Bab. Man.,' Ed. IX., p. 70, only mentions the form with hairy carpels; but Coste, 'Fl. France,' mentions both.—C. E. S.

[Mr. C. E. Salmon writes:—"In the 'B.E.C. Report' 1906, p. 215, and in the 'Watson B.E.C. Report' 1906-7, p. 83, *Malva pusilla* is noted from St. Anne's-on-Sea, 22nd Sept. 1906.—C. BAILEY. In the former 'Report' the name is not questioned; in the latter, both the Revs. E. S. Marshall and E. F. Linton call the plant *M. rotundifolia*. On looking at my sheet of specimens, I see that both Mr. C. Bailey and his critics are correct, for while one example on the sheet is undoubtedly *M. pusilla*, Sm. (with reticulate carpels and long outer sepals), the other is unmistakably *M. rotundifolia*, L. (with smooth carpels and much shorter outer sepals). Perhaps others have a mixture of specimens also."]

*Linum perenne*, L. Gogmagog Hills, Cambridgeshire, 5th Aug. 1907. Fruiting specimens of this beautiful plant.—Coll. A. BENNETT; Comm. C. E. SALMON.

*Geranium macrorrhizum*, Linn. Hort., Newquay; origin, Post-

bridge, Dartmoor, 'South Devon, v.-c. 3, 1902, per A. O. Hume and W. Barratt. Coll. and Comm. C. C. Vigurs, 1907 and 1908. In general appearance this seems much nearer *G. sylvaticum* and *G. palustris* than to *G. sanguineum*, where it is placed in Mr. Druce's list.—C. C. V. The arrangement in 'The British Plant List' is based on Nyman's 'Conspectus.' In this instance Nyman has followed Boissier's arrangement, in which *macrorrhizum* is put in the 'Unguiculata,' while *G. sanguineum* comes first in the 'Batrachia.' The latter doubtless in facies resembles *macrorrhizum* more closely than does *sanguineum*.—G. C. D.

*G. Robertianum*, L., var. *modestum* (Jord.). Hedge-banks near West Monkton, v.-c. 5, S. Somerset, 8th June 1908. Anthers black-purple; carpels slightly hairy, upwards. Lamina of petals about as long as the claw; colour of a purer brighter red than in the type.—E. S. MARSHALL.

*Medicago denticulata*, Willd., var. *apiculata* (Willd.). Whitehawk Down, E. Sussex, Aug. 1908. Alien.—T. HILTON. According to Babington's 'Manual,' *apiculata* has the spines not hooked, and the peduncles 3 to 10 flowered. In this plant the spines, though short, are decidedly hooked, and the peduncles 1 to 2 flowered.—E. S. M.

*Melilotus*, —? On land formerly a Market Garden, Hove, W. Sussex, July 1908. Alien.—T. HILTON.

*Rubus opacus*, Focke. Littleworth Common, Surrey, 19th July 1908.—C. E. BRITTON. Rightly named, I believe; a strong form with abnormally greyish sepals and even leaf-toothing.—W. MOVLE ROGERS.

*R. affinis*, W. and M. Holme Fen, Huntingdon, 28th Aug. 1908. Abundant here. New County record.—A. LEY. I agree.—W. M. R.

*R. nemoralis*, P. J. Muell, var. *silurum*, A. Ley. Near Devil's Bridge, Cardiganshire, v.-c. 46, 20th July 1908.—W. H. PAINTER. Yes.—W. M. R.

*R. argenteus*, W. and M. Dol-y-bont, Llanfihangel, near Aberystwyth, Cardiganshire, v.-c. 46, 13th July 1908.—W. H. PAINTER. Yes.—W. M. R.

*R. hirtifolius*, Muell and Wirtz. Cwm Einon, Cardiganshire, 15th July 1908. New County record.—W. H. PAINTER. A form of *hirtifolius*.—W. M. R.

*R. hirtifolius*, M. and W., var. *mollissimus*, Rogers? Welsh Newton, Hereford, 12th Sept. 1908. Only hesitatingly ascribed to this form (on my suggestion) by Rev. W. M. Rogers. I understand M. Sudre, to whom I had sent it, to propose publishing it as a new species.—A. LEY. With only one sheet before me of this very late-collected and apparently shade-grown form, I am not prepared to write very confidently. But I see no justification whatever for making a new species, or separating it from our aggregate *R. hirtifolius*. On the whole it seems nearer to var. *danicus* than to *mollissimus*, though different from the former and quite like the latter in the weak acicular prickles of the panicle. Our *mollissimus* is apparently unknown on the Continent.—W. MOYLE ROGERS.

*R. mucronatoides*, A. Ley, MS. New Radnor, 10th Sept. 1908. These were gathered in company with Rev. A. Ley, in a hedge at the base of a hill marked "Vron" in the map, near to New Radnor.—L. CUMMINGS. Also from Mr. LEY.

*R. orthocladus*, Ley. Dol-y-bont, Llanfihangel, near Aberystwyth, and Llyprant Valley, Cardiganshire, v.-c. 46.—W. H. PAINTER. New County record. Respecting the Llyprant Valley specimens, these cannot, I believe, be kept distinct from *R. orthocladus*, Ley, which shows considerable variations, except in stem clothing, both in Monmouthshire and West Gloucestershire, as well as in Belgian. This form goes off towards *R. lentiginosus*.—W. M. R.

*R. hypoleucus*, Lefv. and Muell. Dol-y-bont, Llanfihangel, near Aberystwyth, Cardiganshire, v.-c. 46, 13th July 1908. New County record.—W. H. PAINTER. Yes.—W. M. R.

*R.* —? Mossbridge, S. Lancs., v.-c. 59, Aug. 1908.—J. A. WHELDON. *R. Borreri*, Bell Salt. New for v.-c. 59.—W. MOYLE ROGERS.

*R. oigocladus*, M. and W., var. *Newbouldii*, Rogers? Woods, Welsh Newton, Herefordshire, 12th Sept. 1908. Thus named by Rev. W. M. Rogers, but only "probably off type." M. Sudre writes concerning this plant "*R. foliosus*, W. and N., or micux *corymbosus*, P. J. Muell." *R. corymbosus*, P. J. Muell, I do not know; *R. foliosus* it certainly cannot be, if British batologists are right in the plants they place under that species.—A. LEY.

*R. oigocladus*, M. and W., var. *Newbouldii*, Rogers? Another form. Welsh Newton, Herefordshire, 12th Sept. 1908, and Demesne Wood, Garway, Herefordshire, 2nd Oct. 1908. Again named by Rev. W. M. Rogers with hesitation, and as a f. M. Sudre calls this "*R. obscurus*, Kalt., sub-species *erraticus*, Sudre." This is

a plant found in many stations in the extreme South-west of Herefordshire.—A. LEY.

*R. oigocladius*, Muell & Lefv., var. *Bloxamianus* (Coleman). Hill opposite Machen, v.-c. 41, Glamorgan, 15th Aug. 1908. Mr. Rogers says: "I think not distinct from *Bloxamianus*, though hardly characteristic."—H. J. RIDDELSDELL.

*R.* —? Lowesby, Leicestershire, v.-c. 55, 8th Aug. 1908. —A. R. HORWOOD. *R. oigocladius*, Muell and Lefv., var. *Bloxamianus* (Coleman).—W. M. R.

*R. scaber*, Wh. and N. 1. Radyr, 22nd Aug. 1907. 2. Wood, Pontyclun, 8th Aug. 1908. 3. Roadside hedge, Lisvane, 15th Aug. 1908. 4. Pontyclun, 8th Aug. 1908. 5. Wood at Llanishen, 15th Aug. 1908; all v.-c. 41, Glamorgan. Some of the specimens under No. 2 are specially queried by Mr. Rogers.—H. J. RIDDELSDELL. I think that all . . . go best to *R. scaber*, which (according to Focke's interpretation) is a very aggregate species.—W. M. R.

*R. pallidus*, Wh. and N. f. 1. Wood near Whitchurch, 7th Aug. 1908. 2. Ditto, 14th Aug. 1908. 3. Open wood near St. Fagan's, 10th Aug. 1908; all v.-c. 41. Mr. Rogers says of 1, "must go, I think, to *R. pallidus*, Wh. and N., though off type in the less hairy st. and pan-rach., and in the more unequal gland-tipped organs of rachis." Of 2, "I suppose a sub-glabrous f. of it, though the stem clothing (nearly glandular and non-aciculate) is most abnormal," and of 3, "same as" No. 2. The 1st seems "rather intermediate between" 2 and 3, and "type *pallidus*."—H. J. RIDDELSDELL.

*R. pallidus*, Wh. and N., var. —? Radyr, Aug. 1907 and 1908. Rudry, Aug. 1908, v.-c. 41. Mr. Rogers said in 1907: "Cannot, I think, be kept from *R. pallidus*, Wh. and N., with which in most respects it is identical; though, in my experience, it is not usual to see the sepals so generally reflexed on fall of petals, nor the stem so dark coloured." And this year confirms his remarks, adding, "I cannot quite match" the plant. Petals pale pink to white, small and narrow. In great quantity at Radyr.—H. J. RIDDELSDELL.

*R.* —? Low bush, roadside, Highway Spinneys, Braunstone, Leicester, Aug. 1908.—W. BELL. Apparently *R. rosaceus*, Wh. and N., var. *infecundus*, but the material is poor and collected too late in the season.—W. M. R.

*R. velatus*, Lefv. Wood near Titley Station, Herefordshire, 12th Sept. 1908. These were gathered in a steep wood near Titley

Station. There seems to be a great variety in the variation of the armature of the stems in different plants. The specimens sent illustrate this.—L. CUMMINGS. Rightly named, I believe.—W. M. R.

*R.* —? Roadside, Stoughton × Stretton, Leicester, 3rd Aug. 1908.—W. BELL. *R. dumetorum*, Wh. and N. Perhaps a rather weak uncharacteristic state of var. *ferox*, Weihe.—W. MOYLE ROGERS.

*R. dumetorum*, W. and N., var. *diversifolius* (Lindl.). 1. St. Fagan's, 10th Aug. 1908. 2. Pontyclun, 8th Aug. 1908, v.-c. 41. Of No. 1, Mr. Rogers says "that, or one step away towards *ferox*."—H. J. RIDDELSDELL.

*R. dumetorum*, W. and N., var. *triangularis*, Ley. Whitbourne, Herefordshire, 23rd July 1908. It is hoped that these specimens will give a better representation of this variety than those sent last year.—A. LEY.

*R. dumetorum*, W. and N., var. *pilosus*, W. and N. Kimbolton, Hunts, 31st Aug. 1908. Named thus by Rev. W. M. Rogers. This plant appears to represent a really distinct form of *R. dumetorum*, better than any I have previously gathered. Abundant throughout a large wood at this station. New County record.—A. LEY.

*R. laciniatus*, Willd. Esher, Westend Common, Surrey, 19th July 1908. This bramble maintains its place in this locality, for which it was recorded by the Rev. W. Moyle Rogers, 'Journ. Bot.,' 1903. A place may be claimed for it among the bramble flora of the Surrey Commons, as, in addition to this locality, it grows on the heath-land near Weybridge.—C. E. BRITTON. I agree.—W. M. R.

*Potentilla norvegica*, Linn. New Malden, Surrey, 3rd Sept. 1908. Plentiful on land situated at the western extremity of Merton Parish, that was formerly meadows, but denuded of turf during the previous winter, and afterward became over-grown with an assembly of plants containing many alien to the district.—C. E. BRITTON.

*Alchemilla vulgaris*, L., var. *alpestris*, Pohl. Creag Mhor, Mid Perth, 1st Aug. 1908.—P. EWING.

*R. mollis*, Sm., var. *recondita*, Puget? In the Mellte glen, near Ystrad Fellte, Breconshire (limestone), 19th Aug. 1908, two bushes. "*R. mollis*, Sm., voisin de la var. *pseudo-mollis* (Rouy); *R. villosa*, v. *pseudo-mollis*, Rouy."—M. SUDRE. Of one of these

Dr. H. Dingler writes: "villosa group: but I am sceptic if really var. *recondita* (Puget)." This is the rose which was sent to M. Sudre. Of the other, which appears to me identical with No. 1, Dr. Dingler writes: "Seems to me a form of the tomentosa group, perhaps near to *R. omissa*." Both plants have the curved peduncle, and the fruit with disk O, characteristic of *R. mollis*, Sm.; both have abundant sub-foliar glands, and therefore work out as *R. recondita*, Pug., according to my scheme. I regret that I could not obtain more numerous specimens.—A. LEY. Not *R. recondita*, Pug., which is a plant with large parallel-sided leaflets, just like those of *R. pomifera*, but much more glandular. Its short peduncles, and rather short and only spreading-erect considerably pinnate sepals indicate to me the *R. Sherardi* (i.e. *omissa*) group; but I can suggest no precise name.—A. H. W.-D. Certainly not var. *recondita*, Puget; and very different from the Scottish form of *mollis*, which Mr. Ley considers to be the same variety. I agree with Dr. Dingler's opinion, which is practically the same as that of Major Wolley-Dod. Observation of the bush at the full maturity of the fruit would show whether or not it really belongs to the *omissa* group, i.e., whether the sepals persist until the fruit is fully ripe.—W. BARCLAY.

*Rosa* — ? Craig Cille (limestone), Breconshire, 3 July 1908. Thorns long, quite straight, very few; petals ciliate.—A. LEY. "*R. pomifera*, Herrm., var. *Grenierii*, Déség."—M. SUDRE. Form of the group *villosa*: but not *R. pomifera*, Herrm."—Dr. H. DINGLER. A *mollis* form, considerably on the *pomifera* side; and I think probably *R. Grenierii*, Déség., which is ranked under *R. pomifera* by continental botanists.—A. H. W.-D. This is neither *R. pomifera* nor its variety *Grenierii*, Déség., but simply a form of *R. mollis*, Sm. It differs from the next in having larger leaves, shorter peduncles and a much more globose calyx-tube. I have seen *R. mollis* with larger leaves, though not quite so large as that mentioned by Mr. Baker ('Mon.', p. 213), which had a leaf 6½ in. long with a terminal leaflet 2½ in. by 2 in.—W. BARCLAY.

*R. mollis*, Sm., var. *Grenierii*, Déség.? Dyffryn Crawnnon (limestone), Breconshire: at about 1,700 ft., 18th July and 24th Sept. 1908. Leaves without sub-foliar glands; petals ciliate. "*R. mollis*, Sm., variety."—Dr. H. DINGLER. This form of *R. mollis* produces quite small narrow-necked fruit; the petals are yellow at the base, answering, in this respect, to the description of var. *Grenierii* (Déség.): but Mr. Barclay informs me that my plant does not agree with this either in fruit or in the shape of the leaflet.—A. LEY. Not identical with, though hardly separable from the Craig Cille *R. Grenierii* plant. The leaflets are rather unusually narrower and acute for any form of *R. mollis*, Sm.

—A. H. W.-D. This, in my opinion, is simply a form of *R. mollis*, Sm., with narrower leaflets than usual and with fruit of an uncommon shape. As to the relation between *R. mollis*, Sm., and *R. pomifera*, Herrm., I believe, with Crépin, that these should be united as one species (Agg.) under the name of *R. villosa*, L.—W. BARCLAY.

*R. omissa*, Déség., var. *submollis* (Ley)? Near New Radnor, 10th Sept. 1908. "*R. tomentosa*, Sm., très voisiné de la var. *tunoniensis*, Déség."—M. SUDRE. "Form of the *tomentosa* group."—DR. H. DINGLER. This a puzzling rose, which I refer with hesitation to my *R. submollis*, on account of the thorns being somewhat straight, some variously curved on the same bush. May it be a *submollis* ×?—A. LEY. An *omissa* form, near my idea of var. *submollis*, Ley. The leaflets in my specimen are only microglandular; but Mr. Ley considers them to be too glandular for his variety. The difficulty of seeing the sub-foliar glands, and the uncertainty as to the degree of importance to be attached to microglands renders the diagnosis of the whole *villosæ* subsection very difficult.—A. H. W.-D.

*R. Andrzejovii*, Steven. By Pentwyn Reservoir, Dolygaer, Breconshire, 14th July and 24th Sept. 1908. The strong slightly falcate main thorns, leaves with sub-foliar glands, and aciculate petioles, mark the plant I am attributing to *R. Andrzejovii*, Steven. M. Sudre thinks there are two plants here, 1. (the flowering plant) "voisine de la var. *sub-globosa*, Cariot." 2. (the fruiting plant) "différente, fruits hispides; nerves secondaires glanduleuses." They were certainly picked from the same bush! Dr. Dingler "very fine form; probably of the *tomentosa* group, perhaps near to *R. omissa*, Déség.—A. LEY. See remarks on the New Radnor specimen as to the name *R. Andrzejovii*. This seems very near var. *pseudomollis*, Ley (*R. tomentosa*, v. *pseudomollis*, E. G. Baker), and still nearer *R. intromissa*, Crép.; but the latter, so far as I am aware, has not been identified as British. Mr. Ley thinks the glandular leaflets are against my suggestion; but my specimen has these either quite eglandular or only some of them with microglands.—A. H. W.-D. With regard to this and the two following specimens, would it not be better to make certain, before asking an opinion respecting them, whether or not they really belong to the *omissa* group, i.e., whether or not the sepals persist until the full maturity of the fruit. Mr. Ley seemingly thinks they do not; whilst Dr. Dingler and Major Wolley-Dod think they probably do in the case of the first two, whilst in the case of Mr. Bell's plant the Major seems certain of the fact. The specimens in all three cases leave me uncertain on this essential point and the collectors do not give the information, so that it seems best to wait until further

observation has been made, or specimens at full maturity of the fruit be obtained.—W. BARCLAY.

*R. Andrzejovii*, Steven. Cwn Nes, New Radnor, 10th Sept. 1908—A. LEY. Probably a form of *R. omissa*, Déség.—H. DINGLER. Mr. Ley now agrees with me that we have not Steven's species in Britain. It has been misunderstood by Déséglise and other French botanists. I can only say of this specimen that it is one of the *R. Sherardi* (*omissa*) group.—A. H. W.-D.

*Rosa* —? Braunstone, Leicester, v.-c. 55, Sept. 1908. This agrees with, or is near to, a form from Shoulder of Mutton Hill (which is near to the Braunstone Station), and which has been named *R. sub-tomentosa*. The present plant is a good sized bush in a hedge-row; but it appears to be a very shy flower and fruit bearer.—W. BELL. *R. Andrzejovii*, Steven.—A. LEY. *R. omissa*, Déség., near type.—A. H. W.-D. Mr. Barclay raises the point in regard to the persistency of the sepals until the full maturity of the fruit in regard to this and the two preceding plants. In the case of the Braunstone plant I can answer in the affirmative.—W. BELL.

*R. cuspidatoides*, Crép., var. *britannica* (Déség.). Aconbury, Herefordshire, 14th Aug. 1908.—M. SUDRE: "*R. annesiensis*, Déség., on tres voisine la var. *britannica* (Déség.), m'est inconnu." DR. DINGLER: "Form of *R. cuspidata*, Déség. = *pseudo-cuspidata*, Crép." Déséglise describes *R. annesiensis* as having persistent sepals; here they are not so.—A. LEY. Déséglise never published *R. britannica*, which name he proposed for the supposed *R. Jundzilliana*, Bess., from Cheshire, but afterwards thought the latter was identical with *R. fatida*, Bast., an opinion quite confirmed by specimens. This example differs from *R. fatida* in having quite hairy styles; and should, I think, be placed under *R. pseudo-cuspidata*, Crép. (= *R. cuspidata*, Auct. Gall. non Stev.), but the sub-foliar glands are finer than usual, scarcely more than microglands.—A. H. W.-D. The group to which this and *R. cuspidatoides*, Crép., var. *fatida* (Bast.), Aconbury, belong is not well represented in Scotland, so that I have little knowledge of it in the field. No doubt *R. fatida*, Bast., has as much or as little right to be ranked as a species as *R. cuspidatoides*, Crép.—W. BARCLAY.

*R. cuspidatoides*, Crép., var. *fatida* (Bast.). Aconbury, Herefordshire, 14th Aug. 1908. M. SUDRE: "*R. tomentosa*, Sm., var. *Arrondiana*, Rouy. Bien que la type de cette var. *Arrondiana* provienne des environs de Toulouse, je ne l'ai pas encore rencontré; mais votre plante parait en posséder tous les caractères." DR. DINGLER: "Form of *R. fatida*, Bast., something differing from

type." This plant is clearly different from the ordinary *R. fetida* of Bast.; and M. Sudre's remarks upon it will be read with interest.—A. LEY. Under *R. fetida*, Bast., with slightly hispid styles. I believe M. Sudre named this *R. tomentosa*, var. *Arrondiana*, Rouy., which differs from *R. fetida* chiefly in its narrower more hairy leaflets. Mr. Ley's name cannot stand. Bastard described *R. fetida* as a species, and it is a much older name than *cuspidatoides*, Crép.—A. H. W.-D.

*Rosa carionii*, Déségl. and Gill. Gallonty Bank, Cheshire, 27th July 1908, teste Mons. SUDRE and DR. DINGLER. This species is likened by its authors to an eglandular *tomentella* (Léman). This has not a very close resemblance to that species, and like most of the specimens in Déséglise's herbarium the leaflets are not quite eglandular beneath.—A. H. WOLLEY-DOD. This cannot be *R. Carionii*, Déség. and Gill., which, as the Collector states, is given by Déséglise as a form of *R. tomentella*, Lémi., with the leaves eglandular below. This has on many of the leaves quite as many sub-foliar glands as the type of Léman, from which indeed it cannot be properly separated.—W. BARCLAY.

*R. canina*, L., var. *dumalis* (Bechst.). Cerrig Raffes, Brecon, 12th July 1908. M. Sudre simply notes it "*R. dumalis* (Bechst.)." Major Wolley-Dod writes: "It may be *R. insignis*, Déség.; but the styles are those of the glauca group."—A. LEY. This falls into the *dumalis* sub-group; but is far removed from that segregate. Specimens sent direct to me by Mr. Ley, from this bush, were named var. *recognita*, Rouy, by M. Sudre, of which I have not seen authentic specimens. Dr. Dingler thought it nearer var. *fraxinoides*, H. Braun (also unknown to me), but with some doubt, adding that its sub-erect sepals, which are not apparent on my specimen, showed some affinity with *R. Reuteri*, var. *sub-canina*, Chr.—A. H. W.-D. One of the numerous forms of *R. dumalis*, Bechst.—W. BARCLAY. Crépin told me that *R. sarmentacea*, Woods = *R. dumalis*, Bechst., and Woods' name has priority, being published in 1817.—G. C. DRUCE.

*R. canina*, L., var. *dumalis* (Bechst.), form *rubelliflora*, Rip. Linton, Herefordshire, June and Nov. 1908. M. Sudre has suggested the name, which is also borne out by Major Wolley-Dod's remark on the plant.—A. LEY. One of the numerous forms of *R. dumalis*, Bechst. According to Keller the form *rubelliflora*, Rip., should have its style *dicht behaart*, which is not the case with the specimen.—W. BARCLAY. Ripart described *rubelliflora* as a species.—G. C. DRUCE.

*R. canina*, L., var. *hispidula*, Rip. Glewstone, Herefordshire, 9th Aug. 1908. The name is due to M. Sudre. Major Wolley-

Dod suggests *R. incerta*, Déség., or *R. Lemeitrei*, Rip.—A. LEY. Comprehensive a species as *R. hispidula* is, I do not think it covers plants with glabrous styles, which character also removes Mr. Ley's plant from *R. incerta*, Déség., which it much resembles. I do not know any species combining uniserrate leaflets, hairy on veins beneath, hispid peduncles, and glabrous styles, except *stylosa* forms. This certainly bears considerable resemblance to that aberrant variety *evanida*, Christ., of *R. stylosa*, of which I have seen original specimens, and have also gathered it on Ham Common; but I doubt its identity therewith. Very similar specimens from Marstow, Hereford, sent to me by Mr. Ley were named *R. Burnati*, Burn. and Greml, for me by M. Sudre; but Dr. Dingler dissented, and labelled them near *R. Déséglisei*, Bor., under which I think this should be placed; but it is not the typical plant.—A. H. W.-D. To what Major Wolley-Dod says I would add that it is only the leaflets of the barren stem which have hairs on the secondary veins. On the older leaves the secondary veins seem quite glabrous, and even on the midrib the hairs seem to be much fewer. It may be that when still older the leaflets become quite glabrous. At any rate this point should be ascertained. If this be so, I should be inclined to class the plant as one of the naked-styled forms of *R. canina*, L., var. *andegavensis* (Bast.).—W. BARCLAY. Ripart described *hispidula* as a species, therefore brackets are necessary. Is not Christ the authority for *R. Burnati*?—G. C. DRUCE.

*R. dumetorum*, Thuill, var. *Gabraelis*, Girard. Kilpeck, Herefordshire, 5th Aug. 1908. The name is given on M. Sudre's authority. Major Wolley-Dod dissented from the name I had suggested (*Corymbifera*, Borkh.), on account of its large clusters of flowers; but was unable to suggest another name.—A. LEY. Much like specimens from other stations so named for me by M. Sudre and Dr. Dingler. Gerard describes it as a species, not as a variety, and Killer ranks it nearer to *R. urbica*, Linn., than *R. dumetorum*, Thuill, on account of its ovoid rather than sub-globose calyx tube.—A. H. W.-D.

*R. dumetorum*, Thuill, var. *Déséglisei* (Bor.). Brampton Abbots, Herefordshire, 10th Aug. 1908. M. Sudre and Major Wolley-Dod both agree in assigning this name to the present plant, with no hesitation.—A. LEY. Quite correct except for its villous styles. They are usually hispid or thinly so.—A. H. W.-D. Both this and the following agree well enough with my specimens from the Continent. In one of my specimens the styles are quite as villous, and the leaflets glabrescent above.—W. BARCLAY. *R. Déséglisei*, Borean, of my 'List.'—G. C. DRUCE.

*R. Déséglisei* (Bor.). Duckington Wood, Cheshire, 3rd Aug. 1908. Named for me by Mons. Sudre and Dr. Dingler, though it

appears to be "off type" in its leaflets being quite thinly hairy above, and only that when young. The weakness of the glandular hispidity of the panicles, which are sometimes quite smooth, is characteristic; but there is no trace of hairs thereon, as is so often seen in Continental specimens. The sub-globose fruit also is a usual feature of this species.—A. H. WOLLEY-DOD.

*R. hemitricha* (Rip.). Grange Farm, Malpas, Cheshire, 26th July 1908. This is a close ally of *R. urbica* (Lém.), from which it differs in its more or less biserrate leaflets, less hairy beneath, and its petioles more glandular. These specimens, in common with those from other Cheshire stations, have longish, densely hispid, almost woolly styles which are conspicuous from quite an appreciable distance in the growing plant. This was not the case with Briggs' Devonshire specimens, which constituted its first record for Britain; nor does Ripart give densely hispid styles as a character, though Rouy and Foucaud give them this character in 'Flore de France.' The absence of prickles is not a usual feature of this species. Mons. Sudre and Dr. Dingler both agree as to the name of this.—A. H. WOLLEY-DOD. Rightly named, I believe. I have a very similar form gathered two years ago near the shore of Loch Tay.—W. BARCLAY.

*Rosa arvensis*, Huds. Quenby, Leicester, v.-c. 55, Aug. 1908. This is a robust free-growing form distinct from the typical plant. The styles are markedly longer; and the fruit is longer. The flowers were white with yellow throat. The peduncles are elongate, and often clustered, and are always uniformly glandular. The petals are partly reflexed, and the disc prominent. The leaves, with few glands, are downy along the midrib as well as upon the under surface of the leaflet. The petiole is quite as pubescent as many *canina* forms. Though distinct from *stylosa* this tall and arched hedge-row plant seems to approach some of its forms.—A. R. HORWOOD. Under the type, differing only in its leaflets being more acuminate than usual.—A. H. W.-D.

*Pyrus latifolia*, Syme, var. *decipiens* (Beechst.). Hill-side above Minehead, S. Somerset, v.-e. 5, 15th Aug. 1908. In 1906 I sent specimens in flower—I now add examples in fruit from the same trees.—S. H. BICKHAM.

*Pyrus cordata*, Desv. On limestone cliffs above the Wye, Pen-Moyle, near Tutshill, v.-c. 34, W. Glos., 31st May, 1908. Mr. Shoobred showed me this tree in 1894, and we then believed it to be *P. cordata*; but a good botanist rejected the name. This year, however, it flowered and fruited sparingly, and the question is settled affirmatively. No doubt native; associated with other species of the *Sorbus* section.—E. S. MARSHALL. Also from

Mr. Shoolbred. Does *P. cordata* belong to the *Sorbus* section? surely not!—G. C. DRUCE.

*Crataegus monogyna*, Jacq. Near Ardvroek Castle, Loch Assyut, W. Sutherland, v.-c. 108, 17th July 1908.—W. A. SHOOLBRED. Mr. Shoolbred pointed out this very striking tree to me; but I omitted to take specimens. The petioles and leaf-edges, as well as the peduncles and calyces, are villous; the styles are curved. It may be the var. *Kyrtostyla* (Fingerh.), which I do not know.—E. S. M. Certainly not *kyrtostyla*, Fingerhuth, which has style abruptly bent. This is *C. Oxyacantha*, L., of the Herbarium and Species Plantarum. Jacquin's *C. monogyna* is probably synonymous and still-born. This specimen has pubescent leaves, thinly so on upper surface, which are cut into rather large segments; the peduncles and fruit are densely pubescent, the style suberect. It may be worth separating as *forma pubescens* to distinguish it from the common lowland glabrous, shining leaved plant.—G. C. DRUCE.

*Saxifraga hirsuta*, L. Origin, rocks at the head of the Slakeny Valley, S. Kerry (1903). Cult. at West Monkton Rectory, 23rd May 1908. This seems to be rather a sub-species of *S. Genm*, L., than a full species. I do not see any trace of hybridity with *S. umbrosa*.—E. S. MARSHALL.

*Saxifraga umbrosa*, L., sub-sp. *S. serratifolia*, Mackay. Origin, rocks at the head of the Slakeny Valley, S. Kerry, 1903. Cult. at West Monkton Rectory, May 1908. This appears to me to deserve sub-specific rank. It has remained constant in cultivation. The plants of this group hybridize readily, so that all sorts of intermediates occur. A considerably different plant from the ordinary Irish form, *S. punctata*, Haworth.—E. S. MARSHALL.

*Sedum Forsterianum*, Sm. [ref. No. 3343], (type). Root from a rocky wood at Culbone, 1907. Cult. at West Monkton Rectory, 26th June 1908. Foliage dark green. A more slender plant than var. *glaucescens* [No. 3342], which is identical with the Stanner Rocks (Radnor) and Portland (Dorset) form. Somewhat enlarged by cultivation.—E. S. MARSHALL.

*S. Forsterianum*, Sm., var *glaucescens*, Wats. [ref. No. 3342]. Abundant on coast cliffs near Minehead, v.-c. 5, S. Somerset, 1st July 1908. Foliage very glaucous. I could find no *S. rupestre* recorded from that neighbourhood in Murray's 'Flora of Somerset.'—E. S. MARSHALL.

*Drosera longifolia*, L. Beinn Garbh, Loch Assynt, Sutherland, v.-c. 108, 18th July 1908.—W. A. SHOOLBRED. On one sheet was a specimen of what appeared to be *Pinguicula lusitanica*, L.,

although the flower was defective.—W. B. More accurately from the shores of Loch Assynt, below Beinn Gharbh. This is a fine *longifolia* (*intermedia*, Drev. and Hayne), a new record for W. Sutherland.—E. S. M.

*Callitricha intermedia*, Hoffm. Loanan River, Inchnadamp, W. Sutherland, v.-c. 108, 14th July 1908. Coll. E. S. MARSHALL; Comm. S. H. BICKHAM. A form or var. with very narrow leaves, rather common in the Highlands.—S. S. M. I saw it in the same spot two years ago.—G. C. DRUCE.

*Astrantia major*, L. Locally abundant in two places in Stoke Wood, Stokesay, Salop, 12th June 1908. This interesting plant is gaining ground, and is to be found in plenty at the top of Stoke Wood.—J. COSMO MELVILL.

*Danaa cornubiensis*, Burnat, *Physospermum cornubiense*, DC. Ruthern Bridge, Withiel, East Cornwall, v.-c. 30, Aug. 1907. Coll. H. GROVES and C. C. VIGURS.

*Bupleurum falcatum*, L. Norton Heath, Ongar, Essex, Oct. 1908. Coll. E. ROLLESTON; Comm. F. L. FOORD-KELCEY.

*B. tenuissimum*, L. Near Cardiff, v.-c. 41, Sept. 1908. Not in 'Top. Bot.' or 'Supplement' for Glamorgan, though Mr. Bennett tells me he has a specimen from the county.—H. J. RIDDELSDELL.

*Galium erectum*, Huds. Near Wilcote, Oxon, June 1908. One of the many forms of this variable species; in many instances, and perhaps in this, not really native; but introduced with grass seeds.—G. CLARIDGE DRUCE. Very good *erectum*, I believe.—E. S. M. consp. Mrs Foord Kelsey. 19

*Galium erecto-verum*. Wood Walton Fen, Hunts., Aug. 1908. Gathered with E. W. Hunnybun. Its occurrence here was a special feature of interest inasmuch as it must have convinced the most sceptical disbeliever in hybrids that such do occur in nature. We have on one side *G. verum* in plenty, and on the other a form of *G. erectum*, Huds. A complete chain of intermediates could be seen, in which the flowers varied from pure yellow to white, through all the shades; and again the leaves showed all gradations from those of *erectum* to those of *verum*. I may say that the intermediates were more frequent than the parent *erectum*.—G. CLARIDGE DRUCE. I see nothing against this determination, though the specimen before me is a poor one; it seems nearer *G. verum*. The correct name is *G. erectum* × *verum*; the alternative, *erecto-verum*, being contrary to the usage adopted by the Vienna Congress.—E. S. M.

*Galium asperum*, Schreb. Colley Hill, Reigate, Surrey, 31st May and 7th June 1908. Following the 'Lond. Cat.,' Ed. X., I labelled these specimens *G. asperum*, Schreb., but possibly a better name would be *G. sylvestre*, Poll., var. *hispidum*, Schrad., leaving *asperum* to represent the much scarcer British plant (which I have from Matlock) with lower leaves deusely hairy and scabrid on the surface.—C. E. SALMON. In 'Prod. Fl. Brit.,' Part V., p. 219, Mr. Williams gives the name *G. austriacum*, Jacq., for the mountain plant, which he retains as a distinct species leaving *G. asperum*, Schreb., for the more southern species. This gets out of the difficulty of priority involved in using Pollich's name.—G. C. DRUCE.

*Galium palustre*, L., var. *elongatum* (Presl.). Ditch, Magor, Mon., v.-c. 35, 7th Sept. 1908.—W. A. SHOOLBRED. Quite right. From a considerable acquaintance with this plant, I am disposed to think it is a good species. Nyman keeps it separate from *G. palustre*.—E. S. M.

*Galium Aparine*, L., form or var. Bank by roadside, Pwllmeyric, Mon., v.-c. 35, 30th May and 15th June 1908. This appears to be a somewhat common form of *G. Aparine* in this district, especially when young it has a very distinct appearance, looking somewhat more like *G. Vaillantii* than ordinary *G. Aparine*.—W. A. SHOOLBRED. Also sent by Rev. E. S. Marshall from same place, dated 30th May. Very distinct-looking when fresh, with a different habit from ordinary "Cleavers." It is, I think, the same as a plant, from the North Coast of Sutherland, which Mr. Arthur Bennett named for me as var. *angustifolium*, Meyer.—E. S. M. Could this be the var. *tenerum*, Reichb., mentioned in Lange's 'Danske Flora'?—C. E. SALMON.

*G. Vaillantii*, DC. Allotments, Fairford, v.-c. 33, 14th July 1908. New record for E. Gloster. Sparingly in one spot, abundantly in another. Flowers a sickly hue of yellowish green. Growing with *G. Aparine*, the fruits of which are much larger; but in both species the fruits are hispid with *hooked* hairs.—H. J. RIDDELSDELL. Correct.—E. S. M.

*Valerianella carinata*, Lois. 1. Edgcombe Avenue, Newquay, W. Cornwall, v.-c. 1, 24th May 1908.—Coll. and Comm. C. C. VIGURS. 2. Hedge-bank, Buckland, Surrey, 8th June 1908.—C. E. SALMON.

*Aster* —? Established many years on the quarried hillside below Hawkesbury, Upton, W. Glos., 12th Oct. 1907. I should be glad if some botanist acquainted with these plants will give me a name for it.—J. W. WHITE.

*Erigeron canadense*, L. Gloucester Docks, v.c. 34, Sept 1908.—F. L. FOORD-KELCEY.

*Matricaria suaveolens*, Buch. Abergavenny, Monmouth, Aug. 1908, also at Crickhowell; on the hillside, near Craig Lille, here evidently introduced with chicken food; at Hay, by the river, Brecon.—G. CLARIDGE DRUCE. Yes: this alien was sent to the Club in 1903, 1906, and 1907. Can we not be spared it in the future?—H. J. R. The rule of the Club is that plants which are not 'desiderata' can be sent from counties for which they are unrecorded.—G. C. DRUCE.

*M. inodora* L. var. *discoidea* Celak. St. Philip's Marsh, Bristol (on a tipping), 26th June 1905.—J. W. WHITE.

#### SOME SEGREGATES OF *S. vulgaris*, LINN.

About the year 1891 I began to examine a striking radiate type of groundsel which is very abundant near Cardiff, and in January 1894, Dr. C. T. Vachell sent a specimen to Kew, which Mr. Hemsley reported upon as follows:—"I cannot make anything of this but *vulgaris*, *b. radiatus*." The occurrence, ten years later, of two distinct radiate forms in my own garden at Penarth, and of a very distinct dwarf form in the Cathays Park, Cardiff, induced me to submit all the local forms to a test which may be described briefly as that of *experimental pedigree culture*.

The experiments commenced in September 1905, and are still in progress. Already it has become necessary to recognize the seven segregates contained in the set.

These may be arranged, according to their affinities, in four groups:—(a) *præcox* and *genevensis*: (b) *erectus*; *erectus*, var. *radiatus*; and *latifolius*: (c) *multicaulis*: and (d) *lanuginosus*.

The last was kindly sent to me from Guernsey by Mr. Marquand, *genevensis* was collected at Montreux, and the remainder were found in or near Cardiff.

*Lanuginosus* is so distinct that it will probably have to be separated altogether from *vulgaris*: if identical with *S. denticulatus*, Nolt., which seems probable, it would of course retain the latter name, and take rank as an ordinary or primary species. The remaining segregates, with the exception of the radiate varieties, may conveniently be regarded as "elementary species" of the aggregate species, *S. vulgaris*, Linn.

Hybrids of these seven types probably occur in every possible combination. The following have been obtained experimentally and sometimes in each of the two possible ways:—(1) *præcox* × *erectus*, var. *radiatus*; (2) *erectus* × *erectus*, var. *radiatus*; and (3) *multicaulis* × *erectus*, var. *radiatus*.

Attention is directed to the following characters, many of which are recognisable even in the dried specimens:—

(a) *præcox*, Trow. This form has a somewhat zig-zag stem, with few, but long internodes; the leaves are nearly plane, and not deeply pinnatifid or pinnatisect, as in the other types; the main axis is soon overtopped by the uppermost branch; and the capitula are relatively small and slender. The first head of seeds is produced 72 days after the date of sowing; this interval of time may be styled a “generation.”

(b) *genevensis*, Trow. Early like *præcox*; a generation = 75 days. Stems stronger, with more internodes; leaves more -fid, almost -sect, giving the plant a characteristic “bitten” appearance. A stronger, later *præcox*: the only groundsel apparently of the vineyards around Montreux.

(c) *erectus*, Trow. This form has many rather short and stout internodes and a straight erect stem; the leaves are pinnatisect, yellow-green, and strikingly pectinate when half developed, especially near the apex of the stem. Capitula of medium size. A generation = 83 days.

(d) *erectus*, var. *radiatus*, Trow. The radiate form of the preceding type, and the plant which Hemsley named *vulgaris*, var. *radiatus*. It is indistinguishable from the preceding type until the flowers begin to mature. A generation = 83 days. It has been tested side by side with *erectus* for four generations, and is perfectly constant. The ray florets are long—no doubt causing many botanists to suspect an origin from *squalidus*—are revolute only at night or in old flowers; and the number varies from 8 to 13. This is not the plant figured by Sowerby. It occurs in several parts of Glamorgan, and also at Swindon and Cambridge.

(e) *latifolius*, Trow. A robust *erectus*; being taller, stronger and broader leaved than it. In the sense in which the term is used by most British botanists, it is a “variety” of *erectus*. It is not a “state,” as so many forms of groundsel prove to be.

(f) *multicaulis*, Trow. Recognisable by the following characters:—(1) dark green colour; (2) leaves like those of *erectus*, but longer; (3) large capitula; (4) soft yellow colour of the disc; (5) browning of the florets after pollination; (6) the crowding of the nodes at the base of the stem; and hence (7) the production of many stems later from the middle of the leaf-rosette; (8) long narrow bracts; and (9) large cotyledons. A generation = 90 days.

In all these types, the date of sowing was March 30th. Hence *præcox* is early, *multicaulis* is late, and *erectus* intermediate.

(g) *lanuginosus*, Trow. The distinguishing characters are:—(1) ray-florets much smaller than in *erectus*, var. *radiatus*, and more obviously tridentate; (2) the constant and pronounced hairiness

(in the other types hairiness is a variable and inconstant character); and (3) the alveolate character of the ripe receptacle. The change from the Guernsey sands to the Glamorgan clays completely alters the external form and general appearance of the plant. The characters given above remain constant. This is, doubtless, the plant figured by Sowerby. It has physiological characters which separate it sharply from the other types. A generation = 100 days.

The radiate form with short, sometimes almost erect, often quilled and very distinctly tridentate rays is the hybrid of *erectus*, var. *radiatus*, with one of the non-radiate types, generally *erectus*.

The offspring of this hybrid segregate according to Mendel's law. In one test, of seeds taken from one plant, which comprised 449 individuals, the results were:—*erectus* individuals: *erectus*, var. *radiatus* individuals: hybrid individuals: 109 : 114 : 226—a very close approximation to the ratio 1 : 1 : 2.

The hybrid *præcox* × *erectus*, var. *radiatus* combines two pairs of characters and the progeny is certainly made up of nine types. The numerical results need further elucidation.

All these types are easily recognisable when pure-bred colonies are examined in flower. It is very difficult to identify them in the field in areas where hybridization has been going on.

Herbarium specimens, often reduced in size for drying, give poor ideas of these forms, yet nevertheless suffice to fix the type. There must be many more of these segregates in Great Britain alone. Owing to the facility with which they hybridize, pedigree cultures are really necessary for their "critical" study.—A. H. TROW.

Although the method of research followed in the cultivation of these forms is in the highest degree praiseworthy, and likely to lead to results of great interest, all botanists must deplore the fact that following the example of De Vries, it has been thought necessary to bestow specific names on these mutations. Our nomenclature is already overburdened without the addition of these "pseudo-species" of *Senecio*, and it would have been preferable to have called both these and De Vries's *Ænothera*, "forms" or "varieties."—J. A. WHELDON.

The various cross fertilizations which produce "*radiatus*" point very distinctly to a common origin of the parents of each combination; and raises the question as to whether all the segregates enumerated deserve more than varietal names.—W. BELL.

The terminological difficulty is a serious one. Perhaps the simplest solution is to recognise primary and secondary species, and to adopt for these a corresponding binomial and trinomial nomenclature. The radiate types, which are true "varieties" in De Vries's sense of the term, could then be arranged as varieties of the secondary (or sub-) species. The acceptance of Mr. Wheldon's proposal

would not get rid of any burden, and would result in bringing together units of very unequal value.—A. H. TROW.

All workers at British Botany must thank Prof. Trow for his very beautiful specimens, and for the line of research he has undertaken. Unfortunately our rules of nomenclature makes us loath to accept specific names for these forms. With regard to *lanuginosus*, I may say that having seen the small annual form so common on the cliffs of Guernsey, and also found in Jersey, and watching it in cultivation, under which its distinctive characters were retained (although necessarily in richer soil and less exposed situation the plant became larger), I had proposed the same name to represent this shaggy leaved and stemmed and radial flowered plant as *S. vulgaris*, var. *lanuginosa*, and I believe it deserves that rank.

I may also say that I have grown the small violet from L'Ancrese, and St. Ouens (*V. nana*, Lloyd = *V. Kitabeliana*, var. *nana* of my 'List') from seeds, and it comes perfectly true in the size and colouring of its petals, the shape of the leaves, &c., and it is only slightly larger than well-developed wild specimens.

I have also proved the permanency by seed cultivation of the white-flowered form of *Geranium Robertianum*, and *Satureja Acinos*, so that minute differences are frequently constant. Comparative culture of our British critical forms cannot fail to give us important information, and Prof. Trow for this contribution deserves our hearty gratitude.—G. C. DRUCE.

*S. Cineraria*, DC. Harbour Cliffs, Newquay, W. Cornwall, v.-c. 1, 25th June 1908. An outcast from gardens near by, well established, and rapidly spreading. The leaf coating is very variable; lower leaves of shoot often nearly entire. I have seen a few plants of the hybrid *C. Cineraria* × *Jacoea*, but not this year.—C. C. VIGURS.

*S. lautus*, Forster. Banks of the Tweed, near Galashiels, Selkirkshire, Aug. 1908. This is a "wool introduction," and grows in abundance on the banks of the Gala and the Tweed, the seeds probably being washed down by the river from the manufacturing town of Galashiels. It is a native of New South Wales, Tasmania, South and West Australia and New Zealand. *S. lautus* grows to be a handsome plant of over 2 ft. in height, on alluvial soil. The species varies much in the shape of its leaves. I first noticed this in Aug. 1908. It is a first record for Great Britain.—I. M. HAYWARD. Miss Hayward showed me the same plant growing there in 1909.—G. C. DRUCE.

*Cnicus tuberosus*, Roth. 1. Avebury, v.-c. 7, 6th July 1908. 2. Nash Pt., v.-c. 41, 1st Aug. 1908. 3. The latter, cult. Llandaff, 1908. Specimens of each of the three gatherings are made up into

parcels for distribution. The points, both of resemblance and difference, between the N. Wilts and Glamorgan plants mentioned in the 1907 'Report' seem well established by the comparison which this year allowed; and in addition, the habit of the plant in the two localities is remarkably similar. The Avebury form is the less robust; but it grows in patches exactly like those of the Glamorgan coast, where the exposure is much greater. It was in far larger quantity than I had been led to expect, and was easily detected a long way off. It has fewer and broader phyllaries, and heads which are usually, *but not always*, more basin shaped: though the anthodes of the Welsh plant become more round based as they become mature. I have no evidence as to fruit, for at Avebury the plants were only just in flower. The pappus is the same. Until evidence from fruit is forthcoming, I cannot separate the two forms except as varieties. I believe they are that, and good ones too. The difference in phyllaries, in leaf and habit, seems decisive. I do not know which of the two forms is nearer the original *C. tuberosus*. Both are growing together in the garden at Llandaff.—H. J. RIDDELSDELL. These specimens were prepared before I had seen the note in the 'Report' for 1907, p. 294. They may be of interest as supplementing those distributed by Mr. Riddelsdell. The specimens were grown in my garden at Penarth, the soil being very similar to that of the native habitat. My plants are very fertile, which may be due to the incessant pollination by bumble-bees. Thirty-five heads produced 4,528 seeds, all sound, an average of 129. Each packet of seeds is the product of a single head, and interesting results may be expected if they are sown and records kept as to the fertility of the offspring. In the native habitat most of the seeds are cleaned out by some boring pest.—A. H. TROW. Shewing well the differences, already pointed out, between the Glamorganshire and Wiltshire forms, both in leaf character, in shape of anthode, and in the breadth of phyllaries. It is a valuable addition to our information to know that the Glamorganshire plant keeps its characters under cultivation from seed. The bisecting of the anthodes has tended to give an appearance of slight approximation to the Wilts plants in shape of head. In this point, however, the Glamorgan plant varies somewhat.—H. J. R.

*Crepis mollis*, Aschers. This grows plentifully amongst limestone rocks, "in rough hillside pastures," at Buckden, Yorks., at an altitude of 900 ft. and upwards. Hooker and Babington say "Woods." Named for me by the Rev. E. F. Linton.—J. CRYER. Like Mr. Cryer's specimens, this is beautifully dried; but the labels should not be glued down.—E. S. M. I have also seen it in rocky places in Westmorland; in Teesdale it grows in a damp place with *C. paludosa* on a high river bank occupied by a small plantation.—G. C. DRUCE.

*Hieracium pratense*, Tausch. On wall a short distance south of Shrewsbury, Salop, June 1908. This Hawkweed, of which I forwarded a small set last year to the Club, has this year increased in quantity in the same locality—in the interstices of a limestone wall a short distance south of Shrewsbury. The naming has been confirmed by the Rev. Edward F. Linton.—J. COSMO MELVILL.

*Hieracium Langwellense*, F. J. H. By Corrie Mulzie River, E. Sutherland, v.-c. 117, 11th July 1908.—Coll. W. A. SHOOLBRED.

*Hieracium hyparcticum*, Dahlst. Banks of stream, Inchnadamph, W. Sutherland, v.-c. 108, 15th and 22nd July 1908.—W. A. SHOOLBRED. My specimen is rightly named.—E. S. M.

*Hieracium Schmidtii*, Tausch., substylose form of var. *eustomon*, Linton? [ref. No. 3196]. Root from a rocky wood at Culbone, v.-c. 5, S. Somerset, 1907. Cult. in shade, West Monkton Rectory, 15th June 1908. Rather glaucous. Styles yellow. Ligules, when present, glabrous. Phyllaries porrect in bud. This seems to me not materially different from the plant of the coast near Greenaleigh, Minehead, which has been referred to var. *devoniense*, F. J. Hanb. That is a large-flowered robust form, with much the same appearance as authentic specimens of var. *eustomon*, and very different from the Tutshill (W. Glos.) *devoniense*. The heads are, also, too glandular, I think.—E. S. MARSHALL.

*Hieracium* —? [ref. No. 655]. By Upper Traligil, W. Sutherland, v.-c. 108, 23rd July 1908. Near *rubiginosum* or *rubicundum*. Styles yellow; ligules glabrous.—W. A. SHOOLBRED. "Very probably *rubiginosum*, not *rubicundum*."—A. LEY. "*Rubicundum*, or near it."—E. F. LINTON. *H. rubicundum*, F. J. Hanb.; is a rather weak, probably shade-grown plant. Styles yellow; ligules glabrous-tipped. Foliage strongly ciliate, with the characteristic colouring of this species.—E. S. M.

*H. maculatum*, Sm. Railway Bank, Sapperton Tunnel, v.-c. 34, 18th and 19th June 1908. Is this rightly named?—H. J. RIDDELSDELL. One of the most striking features is the extraordinary development of the lower branches in mature specimens.—E. S. MARSHALL.

*Hieracium nitidum*, Backh., var. *siluriense*, F. J. Hanb. Dry railway bank at the head of Glyn Collwng, Brecon, at about 1,350 ft., 15th July 1908. This plant is extremely variable in stature, and somewhat so in breadth and toothing of the leaves; it also grows in a diversity of situations: exposed precipice at 2,500 ft.; stream-side rocks; dry or wet mountain banks; even on hedge-banks at under 900 ft. elevation. I have never seen any. Welsh plants which could be placed under type *nitidum* of Backhouse.—A. LEY.

*Hieracium hypochæroides*, Gibs., var. *griseum*, Ley. Craig Cille, Brecon, 3rd July 1908. I have to apologise for the few and poor specimens; but the Hawkweeds of this exposed limestone cliff were this year so dried up at this date as to render it hardly possible to obtain any specimens at all. This form has a very limited range on the cliff.—A. LEY.

*Hieracium silvaticum*, Gouan, var. *tricolor*, W. R. L. form? Cellwen, Brecon, 9th July 1908. This is a very interesting plant, which I refer with some certainty to *H. silvaticum*, but whether it falls under var. *tricolor* I cannot say: it differs much from both Yorks. and Westmorland specimens which I have of these forms.—A. LEY.

*Hieracium silvaticum*, Gouan, var. *subtenuè*, W. R. L. [ref. No. 649]. By Corrie A'Connaghen Burn, E. Sutherland, v.-c. 107, 10th July 1908.—W. A. SHOOLBRED.

*Hieracium grandidens*, Dahlst. 1. Under yew hedge in garden, Highlands, Amberley, W. Glos., v.-c. 34, June 1908.—F. L. FOORD-KELCEY. "Typical-phyllaries short, senescent, styles dark, ligule sub-pilose."—A. LEY. Only the first sheet (which is accompanied by Mr. Ley's note) was submitted to him; but all the plants were growing together within an area of a few yards.—F. L. FOORD-KELCEY. The plants distributed are identical with the one on the sheet carrying Mr. Ley's note.—W. BELL. 2. Abercarn, Brecon, 7th July 1908.—A. LEY. 3. Mellte Glen, Brecon, 10th Aug. 1908.—A. LEY. 4. Titley, Herefordshire, 1st July 1908.—A. LEY.

*Hieracium torticeps*, Dahlst. 1. Symonds Yat, W. Glos., 22nd June 1908. 2. Gilwern, Brecon, 2nd July 1908. 3. Upton Bishop, Herefordshire, 27th June 1907.—A. LEY.

*Hieracium serratifrons*, Almq., var. *cinderella*, Ley. Symonds Yat, W. Glos., 22nd Aug. 1908.—A. LEY.

*Hieracium* —? [ref. No. 646], *serratifrons*, Almq., var. *morulum* (?). Glen Einig, E. Sutherland, v.-c. 107, 9th July 1908.—W. A. SHOOLBRED.

With reference to the forms of *H. serratifrons*, Almq., the following notes may be interesting to members:—

*H. lepidoides*, Johanns. Seems to be characterised by broad, coarsely-serrate leaves; heads brown or dark brown (not full black); senescent phyllaries, nude ligules, and yellow styles.

*H. crassiceps*, Dahlst. Has (as its name implies) large heads, broad, straight, esenescent, very dark phyllaries, nude ligules; and usually dark style.

*H. grandidens*, Dahlst., and *H. torticeps*, Dalhst. (placed by Dalhstadt under *H. grandidens*), are both of them characterised by phyllaries which are curved outwards: the former has the phyllaries senescent, and the ligules often ciliate; the latter has both organs nude at the point. The leaves of *H. grandidens* are typically broad based and very coarsely toothed, but these vary greatly (in Dalhstadt's own type specimen, Fasc. 2, No. 54, Herb. Kew, they are quite narrow, long elliptic), so little reliance can be placed on their *shape*.

*H. cinderella*, Ley. Stands nearest to *H. grandidens*; but it is well distinguished from all the above by its very narrow, usually grey, heads; long narrow senescent phyllaries which exceed the pappus when the plant is in fruit; and distinctly ciliate ligules. Typical leaves of *H. cinderella* are identical with typical leaves of *H. grandidens*.—A. LEY.

*Hieracium* — ? [ref. No. 646]. Glen Einig, E. Sutherland, v.-c. 107, 9th July 1908.—W. A. SHOOLBRED. Flowers usually stylose; styles dull yellow; ligules glabrous; leaves with impressed veins; heads pilose, with long-stalked glands.—W. A. S. Rev. E. F. Linton considers this to be very near *H. serratifrons*, Almq., var. *morulum*, Dahlst., and perhaps a form of it, more floccose and less glandular-headed than usual. I have no definitely named example of var. *morulum* to compare it with.—E. S. M.

*Hieracium euprepes*, F. J. Hanb., var. *clivicolum*, F. J. Hanb. 1. Dyffryn Cwman, 14th July 1908. 2. Fau las waterfall, Brecon, 15th July 1908. The most common form of the plant on the Brecon range.—A. LEY.

*Hieracium caesium*, Fr., [ref. No. 629]. Alltna Droighin, Inchnadamph, W. Sutherland, 16th July 1908.—W. A. SHOOLBRED. "This looks to me all *caesium*, Fr."—A. LEY. "I think under *caesium*: perhaps *insulare*."—E. F. LINTON. This was Rev. E. F. Linton's first suggestion; but he afterwards named it *H. silvaticum*, Gouan, var. *subtenne*, W. R. Linton, of which it is clearly a yellow-styled form, identical with Mr. Shoolbred's No. 649, and just matching Mr. C. E. Salmon's Canisp specimens, determined by W. R. Linton.—E. S. M.

*Hieracium caesium*, Fr., var. — ? [ref. No. 666]. Rocks by stream, Oykell Bridge, E. Sutherland, v.-c. 107, 7th July 1908. Flowers deep yellow; ligules glabrous; styles yellow; outer phyllaries rather lax; leaves with impressed veins, slightly hairy above, very hairy beneath.—W. A. SHOOLBRED. "Under type *caesium* I think."—E. F. LINTON. "Try *dissimile*."—A. LEY.

*Hieracium caesiomurorum*, Linden [ref. No. 630]. By Lub Cory Burn, E. Sutherland, v.-c. 107, 8th July 1908.—W. A. SHOOL-

BRED. *H. sarcophyllum*, Stenstr., var. *amplifolium*, W. R. Linton.—E. F. LINTON. Before detailed examination, Rev. E. F. Linton placed it under *H. cæsiomurorum*; but he afterwards referred it to *H. sarcophyllum*, var. *ampliatum*, and it well matches his series from W. Yorks. It is now raised to specific rank as *H. ampliatum*, Ley. The phyllaries are remarkably senescent.—E. S. M.

*Hieracium porrigens*, Almq. Origin, Eglwyseg, Denbigh; cult, 12th and 26th June 1908.—A. LEY.

*Hieracium pinnatifidum*, Lönnr., var. *vivarium*, Lönnr. Wood and railway cutting at Titley Junction, Herefordshire, 1st July 1908. Very abundant at this station; and, I believe, well representing the variety, which appears to be much rarer in Britain than the type.—A. LEY.

*Hieracium* —? [ref. No. 2131]. Railway banks between Brookwood and North Camp (also seen elsewhere, near North Camp), v.-c. 17, Surrey, 15th June 1898. Styles livid. Ligules glabrous. Heads small, green, slightly floccose, very glandular, but usually almost epilose; buds narrow. Leaves flaccid, dull green, more or less hairy on upper surface. This was formerly referred to *H. surréjanum*, var. *megalodon*. In July 1907, the Rev. W. R. Linton told me that it was *H. pinnatifidum*, Lönnr., var. *vivarium*, Lönnr. I believe, however, that there is some doubt about this, and that it may be an undescribed plant.—E. S. MARSHALL.

*Hieracium scanicum*, Dahlst. 1. Symonds Yat, W. Glos., 22nd June 1908. 2. Gilwern, Brecon, 2nd July 1908.—A. LEY.

*Hieracium* —? [ref. No. 3198]. Origin, Culbone Woods, v.-c. 5, S. Somerset, 2nd July 1908. Cult. West Monkton Rectory, 2nd July 1908. Styles yellow. Ligules glabrous. In October 1907, Rev. W. R. Linton wrote of it:—"Features: 3 to 4 large, coarsely toothed stem-leaves; peduncles and heads *floccose* and *glandular*. Resembles in general cut *irriguum*; but *irriguum* has little slender black nearly effloccose heads—hence it is apparently a new form."—E. S. MARSHALL.

*H. sciaphilum*, Uechtr. Titley, Hereford, 1st July 1908. 2. Gilwern, Brecon, 2nd July 1908. A few specimens are sent of what I suppose to be the typical plant, as a contrast to the plant I have ventured to publish as var. *transiens*, nov. var. (See 'Journ. Bot.' 1909, p. 49).—A. LEY.

*Hieracium sciaphilum*, Uechtr., var. *transiens* (nov. var., see 'Journ. Bot.' 1909, p. 49). Torpanton (on hedge bank), Brecon, 13th July 1908. This is the plant which has been issued as *H.*

*cacuminatum*, Dahlst., forma, to the Club (see 'Report' 1906, p. 234, and 1907, p. 300), and is certainly more common than the type in all the counties in which I have botanised. The present plants are neat and small, and probably represent 1st or 2nd year seedlings.—A. LEY.

*Hieracium* —? [ref. No. 3197]. Root from Porlock Weir, v.-c. 5, S. Somerset, 1907. Flower Garden, West Monkton Rectory, 25th June 1908. Root-leaves numerous, deep green. Ligules very ciliate. Styles pure yellow. In October 1907, Rev. W. R. Linton wrote:—"This is very like my *H. euryphyllum*, new species. I have sent several sheets from different localities to Euander, and await his and Dahlstadt's notes. It is related, I think, to *H. cacuminatum*." It may be the same as a plant found in this neighbourhood some years ago by Mr. C. E. Salmon, and then referred to a form of *sciaphilum*; I have not seen specimens.—E. S. MARSHALL.

*Hieracium strumosum*, Ley. Woods, Mellte Glen, Brecon, 18th and 19th July 1908. Certainly, in my judgment, identical with the plant on which I founded my var. *strumosum* of *H. sciaphilum*: but unfortunately for the approximateness of the name, this plant exhibits no stromose bracteoles! Under cultivation the original plant fully retains these organs. For the separation of this plant from *H. sciaphilum*, see 'Journ. Bot.' 1909, p. 49).—A. LEY.

*Hieracium septentrionale*, Arv. Touv. Abercrave, Brecon, 7th July 1908.—A. LEY.

*Hieracium cacuminatum*, Dahlst. Llanilar, Cardiganshire, 30th July 1908. New County record.—W. H. PAINTER. A nice set.—A. LEY.

*Hieracium scanicum*, Dahlst. Symonds Yat, W. Glos., 22nd June 1908.—A. LEY.

*Hieracium strictophyllum*, Dahlst. Oykell Bridge, E. Sutherland, v.-c. 107, 12th July 1908.—W. A. SHOOLBRED. The prevailing form at Oykell Bridge is the typical one with spotted leaves. This gathering which Mr. Shoolbred found by the Einig River, near its junction with the Oykell, appears to differ only by its concolorous foliage.—E. S. M.

*Hieracium tridentatum*, Fr., var. *acrifolium*, Dahlst. Compton's Lane, Horsham, W. Sussex, 1st July 1908.—J. W. WHITE. This has the heads too small and too numerous for var. *acrifolium*; nor does the foliage agree at all with any of my specimens so named. I believe it to be remarkably fine and strongly developed type.—E. S. M.

*Hieracium rigidum*, Hartm., var. *scabrescens*, Dahlst. Glyn Collwng (on a railway bank), (at 1,450 ft.), Brecon, 15th July 1908. So named by the Rev. W. R. Linton, in 1900.—A. LEY.

*Hieracium strictum*, Fr. Ettrick Bridge End, Selkirkshire, 8th Aug. 1908. Styles with dark hairs.—I. M. HAWWARD. On the sheet sent to me there are two exceedingly different plants. The larger has very floccose peduncles, with a few small glands; broadish heads with few glands; glabrous tipped ligules; and a corymbose inflorescence. I believe it to be *H. corymbosum*, Fr., var. *salicifolium* (Lindeb.). The smaller (without lower leaves) has both peduncles and heads clothed with numerous long-stalked black glands; very ciliate ligules; and cordate-based upper leaves. So far as the material goes I should think it a weak, probably shade-grown *H. prenanthoides*, Vill., rather than any form of *H. strictum*, Fr.; under which, in my opinion at least three distinct species are combined in our British lists. *H. reticulatum*, Lindeb., and *H. augustum*, Lindeb., are quite as worthy of separation as most of our segregates.—E. S. M.

*Hieracium umbellatum*, L., var. *linariifolium*, Wallr. Canal bank, near Melling, S. Lancs., Aug. 1908. Also from Sand dunes, Birkdale, S. Lancs., Aug. 1908. Frequent on the coast, but quite rare inland in Lancashire. Most of our specimens have been referred to var. *coronopifolium*, Fr., but these appear to be unsatisfactory under that name. Apparently a new County record.—J. A. WHELDON.

*Hieracium umbellatum*, L. Forma, origin, West Yorks., cult. 4th Aug. 1908. I cannot identify this with any described British form.—A. LEY.

*Sonchus palustris*, L. Marsh by the Medway, near Snodlands, Kent, 3rd Aug. 1908.—H. and J. GROVES. These beautiful specimens are well worth incorporating into the herbarium. The Oxfordshire locality for this species is nearly destroyed by a tremendous overgrowth of bramble, thorn, &c., which not only chokes the growth of the plant, but keeps the ditch dry.—H. J. R. Two plants only left in Oxon in 1908.—G. C. DRUCE.

*Phyteuma spicatum*, L. Tilehurst Wood, Hailsham, E. Sussex, v.-c. 14, June 1908.—Coll. Miss E. BRAY; Comm. F. L. FOORD-KELCEY.

*Erica lusitanica*, Rudolph. On the heathy ground in Lord Eustace Cecil's house at Lytchett Heath, Dorset, where it is seeding rapidly, Aug. 1908.—G. CLARIDGE DRUCE. See 'Exchange Report' 1905, p. 147.

*Pyrola rotundifolia*, L., var. *maritima* (Kenyon). Damp sand dunes, Ainsdale, S. Lancs., v.-c. 59, Sept. 1908.—J. A. WHELDON.

*Amsinckia lycopsoides*, Lehm. On an old fowl-run on the northerly side of Devonshire Road, St. Anne's-on-Sea, W. Lancashire, 20th July 1907.—C. BAILEY. *A. lycopsoides*, Lehm.—G. C. DRUCE.

*Centaureum capitatum* (*E. capitata*, Willd., var. *sphærocephala*, Towns.). Limestone grassland at foot of Warton Crag, W. Lancs., July 1908. New to v.-c. 60. The stamens are free.—J. A. WHELDON. Correct, and very interesting. On the east coast I have found it as far north as Cheviotland; but on the west its farthest known range was previously Glamorgan.—E. S. M.

*Symphytum asperrimum*, Bieb. Hedge, Fairford, v.-c. 33, 8th July 1908. The true plant; not that which was for years called *asperrimum* in England. Note the small leaves, predominantly blue flowers, blunt calyx segments.—H. J. RIDDELSDELL.

*Pulmonaria angustifolia*, L. Plentiful on a small area on a heath near Beaulieu, S. Hants, v.-c. 11, 17th April 1908.—J. F. RAYNER and A. B. JACKSON.

*Asperugo procumbens*, L. Whitehawk Down, Brighton, East Sussex, Oct. 1908. Alien.—T. HILTON.

*Myosotis Balbisiana*, Jord. Ockham Common, Surrey, 15th May 1907. There are at least three forms of *M. versicolor* growing on Ockham Common. The one sent, which I take to be *M. Balbisiana*, Jord., with flowers of a rather light unvarying yellow; a second form with dull yellow flowers occasionally turning a dingy blue as they fade; and a third form with yellow flowers turning to a brighter blue, which I suppose represents the normal form.—C. E. BRITTON. One of my plants has a blue flower, and appears to be *versicolor*; the rest seem right. I do not think this more than a variety.—E. S. M. *M. versicolor*, Sm., var. *Balbisiana* (Jord.), a whitish flowered form, also occurs.—G. C. DRUCE.

*Lithospermum officinale*, L., var. *pseudo-latifolium*, C. F. S. Origin, near St. Lawrence, I. of W., 1900. Hort., Reigate, 2nd June 1908. These specimens shew the spreading character and green colouring of the leaf of my variety; but are too young to illustrate the shape of the leaf as figured in 'Journ. Bot.' 1906, tab. 482. This would appear in the 3rd year: these specimens are two years old.—C. E. SALMON.

*Verbascum nigrum*, L., var. Origin, Port Talbot, v.-c. 41, cult. Llandaff, 1908. It differs from the ordinary British *V. nigrum* in

being very luxuriantly branched. The stem is very leafy up to the base of the flower-spike; the lowest leaves are not cordate but are narrowed into the petiole, the leaf-edge being boldly and irregularly sinuate. The middle leaves gradually merge into the upper sessile clasping roundly ovate long pointed leaves and bracts. The groups of flowers are less approximate than in ordinary *V. nigrum*. The style is purple, and thickens upwards to an orange stigma. I have not been able to find any good match at S Kensington. If this is a *V. nigrum* form, it is only thus that the species occurs in Glamorgan, I believe; and it is in every locality open to suspicion of introduction.—H. J. RIDDELSDELL.

*Mimulus guttatus*, DC. Banks of the Caddon, near Galashiels, Selkirkshire, 27th June 1908—I. M. HAYWARD. This is the colour-variety of *M. Langsdorffii*, Donn., usually so called. In the 'Prodrromus,' X. 1846, p. 370, De Candolle made his *M. guttatus* ('Cat. Hort. Monsp.' p. 127) a synonym of *M. "luteus,"* L.; and I suspect that the name *M. guttatus*, DC., ought to displace *M. Langsdorffii* for the typical plant, which normally has the corollas somewhat spotted. But I do not know the date of Donn's publication.—E. S. M. By the Vienna Rules *M. Langsdorffii*, Donn., a name quoted in synonymy (Sims, 'Bot. Mag.' t. 1501, 1812), is not valid. *M. guttatus*, DC., would thus be revived with var., or forma, *concolor* for the more frequent wholly yellow-flowered plant.—G. C. DRUCE.

*Euphrasia nemorosa*, Pers., large form, between Scaleber and Attermire, W. Yorks., Aug. 1891.—J. A. WHELDON. *E. curta*, var. *glabrescens*; exactly like several of my gatherings so named by Prof. von Wettstein. Mr. Townsend referred them to *E. nemorosa*; but I believe they are *curta* forms, though in some respects simulating *nemorosa*.—E. S. M. Also from Rhydymynn, Flintshire, Sept. 1906.—A. A. DALLMAN and J. A. WHELDON.

*E. curta*, Fr., forma. Sand dunes, near Freshfield, S. Lancs., v. c. 59, Aug. 1908. It only differs from var. *glabrescens*, Wetts., in its capsule being shorter than the calyx.—J. A. WHELDON. Var. *glabrescens*, Wettst.—E. S. M.

*E.* —? Great Ormes Head, North Wales, 16th Aug. 1892. This appears to be a distinct variety of *Euphrasia*, remarkable for its compact habit, dark violet flowers, and the copper colour of the leaves when fresh. It agrees with *E. cuprea*, Jord., in everything but the villous calyx. I take it to be a varietal form of *nemorosa*. It was very abundant amongst short turf, and was associated with *E. curta*, var. *glabrescens*, Wettst.—J. A. WHELDON. Poor starved-looking material. I believe it belongs to *E. curta*, Wettst., var. *glabrescens*, Wettst.; more glabrous than usual.—E. S. M.

*E. Rostkoviana*, Hayne. Near Aviemore, v.-c. 96, E. Inverness, July 1908.—J. A. WHELDON and A. WILSON. This seems to be rightly named, the clothing and habit being rather those of *Rostkoviana* than of *brevipila*; but it is not quite our south-country *Rostkoviana*, which has the upper part of the stem densely clothed with long-stalked glands. Here the stem pubescence is mostly eglandular, as in other Scottish examples of *Rostkoviana* which I have seen.—E. S. M.

*E. Vigursii*, Davy. Near Shepherds, Cornwall, Aug. 1908. In great plenty over a limited area of the moor, and in good flower on that date.—G. CLARIDGE DRUCE. Three of my specimens are characteristic *E. Vigursii*; two are totally different, being eglandular and glabrous-leaved, with much paler flowers. I believe these to be a form of *E. borealis*, Towns. The remaining plant has the violet blue flowers of *E. Vigursii*; the leaves are very slightly glandular, and I consider it to be a hybrid between the other two.—E. S. M. Mr. F. H. Davy, to whom I sent my specimens, says they include *E. brevipila*. *E. Vigursii* has larger flowers and is more glandular, but I certainly noticed intermediate forms.—G. C. DRUCE.

*E. salisburgensis*, Funck. On limestone, Ballynort, near Arkeaton, Co. Limerick, July 1908. This is the same as some I had verified from this locality collected in 1905.—C. H. WADDELL. Excellent specimens; but they have not been kindly treated.—E. S. M.

*Bartsia Odontites*, Huds. Near Fairford, v.-c. 33, 14th July 1908. This is, I believe, the type form; the bracts are longer than the flowers, while in var. *serotina* they are shorter; though I think this rule falls short of universality. The type is, in my experience, much less common than var. *serotina*; but it occurs in large quantities round Fairford.—H. J. RIDDELSDELL.

*Mentha rotundifolia*, Huds., ? var. *Bauhini*, Ten. Whitchurch, v.-c. 41, 7th Aug. 1908. I do not know var. *Bauhini*; but the form sent is not typical.—H. J. RIDDELSDELL.

*M. alopecuroides*, Hull. Rubble, Wirksworth Quarries, Derbyshire, v.-c. 57, Aug. 1908.—W. BELL. Teste C. E. SALMON. Very good *alopecuroides*, I should say; spikelets longer and less sessile than most of my Bossington (S. Somerset) examples. The considerable variability of this species greatly favours the theory of Rev. E. F. Linton that it may be a hybrid between *M. aquatica* and *M. rotundifolia*. Mr. Bell's specimen shows the strongest possible indications of *aquatica* in its leaves and clothing, especially of the stem and rachis; while the inflorescence closely approaches *rotundifolia*.—E. S. M.

*M. alopecuroides* × *rotundifolia*? [ref. No. 3336]. Bossington, v.-c. 5, S. Somerset, 17th Aug. 1908. Nearer to *M. rotundifolia* in habit; but inflorescence tending towards *M. alopecuroides*. The supposed parents grow together at this station.—E. S. MARSHALL.

*M. longifolia*, Huds., var. *Nicholsoniana* (Strail). Boughrood, Radnor, Aug. 1908. This appears to be the common form of *longifolia* in the Brecon area. I saw it near Hay, Brecon, in Mr. Ley's locality, near the Three Cocks Junction, and at Boughrood, Radnor, where these specimens were collected.—G. CLARIDGE DRUCE. Strail's description mentions—"leaves distinctly petiolate; bracts very long, setaceous." I fail to find these characters in my examples of Mr. Druce's; and it is unlike other specimens of *Nicholsoniana* from Herefordshire and Brecon in my herbarium.—C. E. S. Some specimens from Boughrood had petiolate and sessile leaves on the same plant, the lateral branches more frequently showing petiolation. That is the case too with Mr. Ley's specimens, 'Report' 1899, near Hereford. Mr. Reeves' *Nicholsoniana* from Whitney, 1890, has the bracts not longer than the flowers, whereas in Mr. Ley's from the "Three Cocks" locality they are decidedly longer. I think Mr. Salmon is right in limiting the name *Nicholsoniana* to the plant having all the leaves distinctly petiolate, and long setaceous, plumose bracts, as given by the Abbe Strail, 'Report' 1887, p. 186, with which my specimens do not agree. It will be obvious that some of the plants distributed in previous years do not comply with these characters. It was from the fact of my specimens being identical with some gathered in the "Three Cocks" locality that led me to name them as above.—G. C. DRUCE.

*M. citrata*, Ehrh. Roadside, near Priddy, Nine Barrows, on Mendip, N. Somerset, 850 ft., 16th Sept. 1908. (See 'Journ. Bot.' 1906, p. 32.)—J. W. WHITE. This matches well a plant I collected in Surrey in 1899, and which the Rev. W. R. Linton named *M. rubra*. The receipt of Mr. White's plant caused me to examine my specimen afresh with some care, for I had always thought that it was very unlike my other herbarium examples of *M. rubra*. The result of an examination seems to lead to the conclusion that Mr. White's and my plants are both *M. piperita*, L. *M. rubra* they cannot be as that has interrupted whorls of flowers, broad bracts, calyx more hairy, &c. The lanceolate-subulate red calyx-teeth, the glandular calyx, the leaves being hairy on the veins beneath and glandular also, all point to *piperita*; as regards the shape of the leaf this varies considerably in *piperita*, being either long and rather narrow, or ovate-lanceolate or even ovate-subcordate, as in the var. *vulgaris* (Sole). I think it will be found that the true *M. citrata*, Ehrh., is a much more glabrous plant in leaf, calyx, &c., and that it has the triangular-based calyx-teeth of *M. aquatica*, L., under which some

botanists place it as a glabrous variety.—C. E. S. Mr. White's *Mint* is peculiar. I cannot name it *piperita* because of its odour, which is said to be *Bergamot* not *Peppermint*; again none of my 30 specimens of *piperita* from different British localities have leaves so short as these. Is it then *M. odorata*, Sole, which Syme says is synonymous with *M. citrata*, Ehrh.? Sole ('Menth. Brit.' p. 21) dwells upon the concave, ovate leaves, but makes no mention of the glabrous pedicels and calyx, although the plate represents the calyx teeth as long, gradually pointed, without hairs, and a much shorter, broader capitate inflorescence than Mr. White's plant. Syme ('E. B.' vii., p. 12, t. 1029), says of the calyx, "teeth triangular abruptly acuminate into long subulate points, two thirds the length of the tube, glabrous," but the figure of the calyx shows the teeth only about a third of the length. The Somerset plant has a strongly ciliate calyx, with teeth above a third the length of the tube, abruptly narrowed. As Mr. White says, doubtless the *Bergamot Mint* varies greatly in its inflorescence degrees of hairiness, &c. And this leads us to ask whether M. Briquet ('Les Labiées des Alpes Maritimes,' p. 73) has not made the right suggestion when he puts *M. citrata*, Ehrh. (which he considers to be a hybrid of *aquatica*) with *viridis* as a sub-species of *M. piperita* (a plan I have followed in 'British Plant List'); the super-species itself being a hybrid of the same species. Briquet dwells upon the oval or oval-oblong leaves obtuse at the top, sub-cordate at base, and he goes on to say that it is united with *M. piperita*, var. *officinalis*, by a continuous series of intermediate forms. Taking this view we may follow Mr. White's lead, and name it *M. citrata*, Ehrh., but add "forma *ciliata*," since the ciliate calyx, &c., prevent us considering it to be typical. Strail ('Class. de Menthes,' p. 46) keeps *M. citrata*, Ehrh., in a separate section, i.e. "Calyx glabrous, tube of the corolla glabrous within. Leaves largely oval, sub-obtuse and sub-cordate. The whorls very obtuse, often hemispherical;" while the *Mint* distributed as *M. citrata*, Ehrh., by Schultz (Herb. Normale 581), looks like a glabrous *aquatica* with more distinctly triangular calyx-teeth.—G. C. DRUCE.

*M. hirsuta* (Huds.). Wet ditch, Waterworks Lane, Cropston, Leicestershire, v.-c. 55, Sept. 1908. In great plenty, foliage of a pale yellowish green, 3 to 4 feet high.—W. BELL. Yes, I think *M. aquatica*, L., and *hirsuta* (Huds.).—C. E. S. A state of *M. aquatica*, L. (*hirsuta*, Huds.). Looks as if it had been grown in shade, and under difficulties.—E. S. M.

*M. hirsuta*, Huds. Hockley Hole, Leicester, v.-c. 55, Sept. 1908. Plentiful and extending for upwards of 100 yards on the margin of a small streamlet by the roadside; foliage very dark and inclining to a bronzy hue, flowering plants few.—W. BELL. Seems

a good deal more glabrous than our usual form, and is probably *M. aquatica*, L.,  $\beta$  *sub-glabra*, Baker.—C. E. S. There is plenty of pubescence here; to me it looks like a mere shade-form of *aquatica* (*hirsuta*) not worthy of a special name.—E. S. M.

*Mentha?* Waterworks Lane, Cropston, Leicestershire, v.-c. 55, Sept. 1908. Growing in a wet ditch.—W. BELL. I believe *M. aquatica*  $\times$  *arvensis* (= *sativa*, L., and *rivalis*, Wats.).—C. E. S. The specimen sent is poor and weak; but it looks right.—E. S. M. A form of  $\times$  *M. verticillata*, Huds. = *aquatica*  $\times$  *arvensis*.—G. C. D.

*Mentha pubescens*, Willd., var. *palustris*, Sole. Origin, roadside ditch, St. Columb Minor, cult. Ledbury, 21st Aug. 1908.—S. H. BICKHAM. Must go to that, I believe; i.e., *aquatica*  $\times$  *longifolia*. In this instance *aquatica* is the predominant partner; though the influence of *longifolia* is plain.—E. S. M. Sole described *palustris* as a species. His figure fairly corresponds with Mr. Bickham's plant except the three lower whorls are distinct. He lays stress on this, for in his MS. addition in his own copy of 'Menth. Brit.' now in my possession, Sole quotes from Smith *in lit.* May 1798, "I think your No. 6 is certainly a distinct species and I would advise you to call it *laxiflora*." Sole adds, "if the Plate had not been worked off at the time the letter came I should have obeyed the Dr.'s advice with pleasure and thanks." The variety of the hybrid is rather remarkable if indeed it is only a binary combination. It may indeed be that in this plant we have a ternary hybrid, i.e. *M. longifolia*  $\times$  *M. verticillata* (*M. aquatica*  $\times$  *arvensis*).—G. C. DRUCE.

*M. arvensis*, Linn., var. —? Braunstone, Leicester, Sept. 1908. On stiff clay, plentiful in the damper parts of the field. I am quite unacquainted with the numerous forms of *arvensis* so do not venture a name.—W. BELL. Fits best, I think, Syme's description of "*genuina*" rather than any other form, although the calyx is rather less hairy and the upper bracts rather smaller than is usual for that.—C. E. S.

*Hyssopus officinalis*, L. Beaulieu Abbey, Hants., Aug. 1908. Quite naturalized on the walls here.—G. C. DRUCE.

*Scutellaria minor*, Huds. Marshy place on coast sandhills, near Drigg, Cumberland, v.-c. 70, Sept. 1908.—A. WILSON.

*Teucrium Botrys*, L. Rough chalky hillside, near Sanderstead, Surrey, 15th July. 1903.—O. MONK and J. GROVES. Beautifully prepared specimens.—W. B.

*Plantago Coronopus*, Linn., var. *pygmæa*, Lange. Braunton Burrows, N. Devon, v.-c. 4, 28th Aug. 1908.—S. H. BICKHAM.

Yes. But I doubt it coming true from seed; I have seen it in various stations, always in poor and exposed soils.—E. S. M.

*Chenopodium polyspermum*, L., var. *cymosum*, Moq. Linden Drive, Evington, Leicester, Sept. 1908.—W. BELL. Very good *cymosum*.—E. S. M. Yes: good and typical, and well prepared.—H. J. R.

*Chenopodium opulifolium*, Schrad. Orig. Aberdare, Cult. Llandaff, 1908. Is this right? I could not tell when I first gathered it, and so grew it from seed.—H. J. RIDDELSDELL. Yes: agrees with specimens; I hold so named, except that the foliage of Mr. Riddelsdell's plants is rather smaller.—W. B. Yes.—G. C. D.

*Atriplex spongiosa*, F. von Mueller. This is a "wool introduction" found by me growing on alluvial soil at the junction of the Gala and the Tweed. A native of South Australia; and the first record for Great Britain. This is a much branched herb or under-shrub, with numerous ascending or erect stems, not above 9 inches high, more or less mealy-white, becoming glabrous when old. The berry-like spongy fruit of the plants found at Galafoot turned from pale green colour to dull red. The testa came off leaving the inner membrane with ripe seeds. It may be at this stage the seeds adhere to the wool. I am sorry not to have more specimens; but hope next year to have better and more to send.—I. M. HAYWARD.

*Polygonum aviculare*, L., var. *microspermum* (Jord.). Abundant at Trent Station, Derbyshire, v.-c. 57, August, 1908.—F. L. FOORD-KELCEY. Certainly small-seeded; but the whole plant is evidently starved. Not *P. microspermum*, Jord., I should say.—E. S. M. [This remark applies to the next plant, though less decidedly.—E. S. M.] The late Rev. W. R. Linton informed me some time ago that *microspermum* has small "included" fruit. This description will not suit the Trent Station plant, which comes best, I think, under var. *arenastrum* (Bor.). Corbière makes this a form of var. *humifusum* (Jord., Bor.), differing from it by its small oval-oblong leaves, which in *humifusum* are oblong-lanceolate.—C. E. S.

*P. microspermum*, Jord. Malpas Station, Cheshire, 5th Aug. 1908. Growing on a cinder platform, mixed with a small quantity of *P. agrestinum*, but keeping quite distinct from it. Absolutely prostrate.—A. H. WOLLEY-DOD.

*Rumex crispus*, L., var. *triangulatus*, Syme. Sea cliffs, near the Lighthouse, Langness, Isle of Man, Sept. 1908. New to the Manx Flora.—J. A. WHELDON. Yes; but not very strongly marked. The var. is not quoted in 'Lond. Cat.,' Ed. X.; it is difficult to see why it is omitted.—H. J. R.

*Rumex sanguineus*, L. Hort., Oxon. Root from St. Sampson's, Guernsey, Aug. 1908. This plant originally came from Guernsey, where it appears to be frequent, and perhaps a native species. I have sent it as a seedling and as fruiting from my garden. It is closely allied to *R. nemorosus*, Schrad., of which it is usually treated as the type; but it certainly differs in several respects besides the leaf-colouration. For topographical purposes the advantages of keeping the two plants separate are great, since the names are so often used in the wrong sense. According to *Hieracia* standard they are good enough species.—G. CLARIDGE DRUCE.

*Euphorbia Cyparissias*, L. Hillside, near Hillsley, W. Glos., 5th Aug. 1908.—J. W. WHITE.

*Ulmus campestris*, L., in part, var. *cornubiense*, Loudon, *U. stricta*, Lind. The prevailing elm about Trelossick and Truro, v.-c. 1, Aug. 1908.—A. B. JACKSON. It is difficult to see why this should be connected with *U. campestris*, L., Sp., Pl. and Herb., although perhaps equally difficult to find the specific name under which it should be put.—G. C. DRUCE.

*Urtica dioica*, L., var. *angustifolia*, W. and G. Glen Collwng, Brecon, at about 850 ft., 24th Sept. 1908. Apparently a very distinct variety.—A. LEY. Not good, I believe, even for this slight variety: the lower leaves on my specimen at any rate are decidedly cordate.—H. J. R. The leaves much too broad for *angustifolia*.—G. C. D.

*Salix fragilis*, L., forma. Pond near Quenby, Leicester, v.-c. 55, 10th May, and leaves August 1908. This differs from type in the catkins, which are much more compact, and very much more downy and erect than is usual in typical *S. fragilis*. The leaves also are more downy. Perhaps it is a hybrid of *S. fragilis* and *S. alba*, with less of the latter than is found in *S. viridis*, Fr.—A. R. HORWOOD.

*S. Myrsinites*, L., forma *procumbens* (Forbes). Near Inchnadamph, W. Sutherland, v.-c. 108, 15th July 1908.—W. A. SHOOLBRED.

*Orchis* (?) [ref. No. 3240]. Plentiful on a limited area on limestone, at Inchnadamph, v.-c. 108, W. Sutherland, 21st July 1908. Allied to *O. maculata*, L.; but very distinct-looking when fresh. Plants more slender, leaves unspotted, or very rarely indeed with a few faint ringlike markings. Spikes usually narrow, often elongate. Flowers pure white or more often with some rose-coloured lines and spots on the labellum, which has three sub-equal

lobes, the central sub-acute. Spur very slender, white, straight. Not an albinism.—ED. S. MARSHALL. Also from W. A. Shoobred, who remarks the leaves are narrower, and hooded and smaller flowers, also gathered near Kyleskin, W. Sutherland.

*Romulea Columnae*, Seb. and Maur. The Warren, Dawlish, South Devon, v.-c. 3, 4th May 1908. Coll. Rev. H. H. Harvey; Comm. C. C. Vigurs. This plant seems very easily missed; a friend living near has tried to find it five consecutive years without success. Under my instructions Mr. Harvey took care to destroy as few corms as possible; these are, as Hooker states, the size of a pea.—C. C. V. Very acceptable.—W. BELL.

*Allium Ampeloprasum*, L. Origin, Minehead Warren, South Somerset, v.-c. 5. Cult. 10th July 1908. Cultivated specimens of this plant may be acceptable to some members. It does not have much chance to flower in the original station, being browsed by animals.—E. S. MARSHALL.

*A. Scorodoprasum*, L. On the banks of the Whitadder, near its junction with the Tweed. Shown to me by Mr. A. H. Evans growing in a thicket in considerable quantity. August 1907.—G. CLARIDGE DRUCE.

*J. sylvaticus*, Reichard, forma. This abnormal form (too young I am afraid for critical decision) grows on Lytchett Heath, Dorset, Aug. 1908. At first I rather thought it might be *sylvaticus* × *articulatus*.—G. CLARIDGE DRUCE.

*Juncus compressus*, Jacq. Park Fields, Castle Donington, Leicestershire, v.-c. 55, July 1908. Growing in large patches in the moist parts of meadow, the dark foliage could be seen at a considerable distance.—W. BELL. Good *compressus* I consider.—C. E. S.

*J. alpinus*, Vill. Shore of L. Assynt, W. Sutherland, v.-c. 108, 18th July 1908.—W. A. SHOOLBRED. We found this mostly in too young a state for accurate determination; but I have capsules far enough advanced for tolerable certainty. The habit is stiffer and more slender than that of *J. articulatus*, L. (*lamprocarpus*, Ehrh.).—E. S. M. Not *J. alpinus*, which has obtuse perianth-segments and conspicuously ascending panicle-branches. No doubt a state of *J. lamprocarpus*, H. and J. Groves. Certainly not *J. alpinus*, Vill., but a form of *J. articulatus*, L.—G. C. DRUCE.

*J. tenuis*, Willd. Roadside in a wood, Crowborough Warren, E. Sussex, Sept. 1908.—T. HILTON. Mr. Hilton thinks it may be

native here ; but is not there a chance of its being introduced with game food?—G. C. DRUCE.

*Sparganium neglectum*, Beeby. Large pool north of Falfield, W. Glos., 22nd July 1908. A very puzzling plant, inasmuch as it has the habit and facies of *S. neglectum*, and yet the fruit—which have no marked shoulders—are smaller and more numerous than is usual in that species. The heads might well pass for those of var. *microcarpum* of *ramosum*. Mr. C. E. Salmon had mature fruiting specimens from one not long ago, and through them I am looking for Mr Beeby's kind determination.—J. W. WHITE. Probably correct, but we should like to have seen a more mature specimen.—H. and J. GROVES.

*Sagittaria heterophylla*, Pursh, var. *iscana*, Hiérn. River Exe, Exeter, Aug. 1908. See 'Journal of Botany,' 1908, page 273. In some considerable quantity, close to the Children's playground, on the muddy margin of the River Exe, at Exeter. It also grows in several large patches near the bridge ; but I was unable to see any in the river *above* the Paper Mill. *Mimulus Langsdorfii* also occurs in the stream. As to the manner of introduction into the Exe of this North American species, one can only, at present, conjecture. I found that American wood pulp has been used at the mill, and heard that American logs had been brought to the river at Exeter : whether the seeds came with them we have no evidence. It is evidently not of quite recent origin, although I suspect it is a very rapid grower. Unfortunately at the date I gathered it no trace of flowering stalks were visible ; but on the principle that "half a loaf is better than no bread," I have ventured to send leaves only. These, as it will be seen, resemble *Alisma Plantago-aquatica* more than those of our native *Sagittaria*, and have undoubtedly misled the local botanists, who failed to notice this alien in their midst. The very succulent leaf-bases were not promising subjects for drying paper.—G. CLARIDGE DRUCE.

*Potamogeton pensylvanicus*, Cham. et Schum. (wrongly spelt *pensylvanica* on labels). Canal, Salterhebble, Halifax, S. W. Yorks, v.-c. 63, June and July 1908. Coll. Miss A. E. VIGURS ; Comm. C. C. VIGURS. The double sheets, showing the plant before the flowering and in the fruiting stage, will, I hope, give members a good idea of the characters of this beautiful plant ; though the preparation, for which I am responsible, leaves much to be desired. It seems to have flowered later this year than last, when there was good fruit by the end of June. This year my sister found a second patch in another part of the canal, so we hope it is spreading. The first report of the plant in Britain was given by Mr. A. Bennett in

the 'Naturalist' for January 1908.—C. C. V. Also sent by S. H. Bickham and E. C. Salmon from the same station :—

*Potamogeton epihydrum*, Rafinesque (1808).

*pensylvanicus*, Chamisso (1827).

*pumilus*, Wolfgang (1827).

*Claytonii*, Tuckerman (1843).

*fluitans*, Pursh (now Roth.) (1814).

*Nuttalii*, Chamisso (1827) teste Morong in N. Am.  
Naiadaceæ.

There is little doubt that Rafinesque's name published in 'Medical Repository,' 2 Hex. 5, 354 (1808) belongs to this plant, but I have seen no specimens so named by him, and so use *pensylvanicus*, of which I have seen specimens named by Chamisso in the Berlin herb., but in the Delessert herb. at Geneva there is a specimen from Rafinesque named *fluitans*; but with no date unfortunately, and it is this plant. It is distributed fairly well in N. America. I have seen specimens from 22 of the States (U.S.A.) and from 6 of the Provinces of Canada.—A. BENNETT.

*P. coloratus*, Hornem, form. Fen Ditch, St. Mary's, Ramsey, Hunts., v.-c. 31, 20th July 1908. Coll. E. W. HUNNYBUN; Comm. S. H. BICKHAM. This form is one that often occurs; and there is no special name for it.—A. BENNETT.

*P. nitens*, Webw., var. *involutus*, Fryer. Black Bush Drain, Pond's Bridge, Hunts., v.-c. 31, 3rd Aug. 1908. Coll. E. W. HUNNYBUN; Comm. S. H. BICKHAM. Ascherson and Graebner in their 'Syn. Fl. Mitteleurop' 1—325 (1897) make this *P. nitens*, Web., v. *lacustris*  $\beta$  *involutus*.—A. B.

*P. Billupsii*, Fryer. Fen ditch, St. Mary's, Ramsey, Hunts., v.-c. 31, 20th July 1908. Coll. E. W. HUNNYBUN; Comm. S. H. BICKHAM. So named by Mr. Fryer; but I understand that he declines to agree to it being *P. angustifolius*  $\times$  *coloratus* as given in 'Lond. Cat.' 10th Edit.—S. H. B. On a sheet given to me by Mr. Fryer he names it as above; and = *P. coriaceus*  $\times$  *plantagineus*, so that strictly he is right in denying it comes under *angustifolius* as he understands it. It is my fault that it is so placed, and although I consider *coriaceus* comes under *P. angustifolius*, and most do, perhaps he does not. Ascherson and Graebner call it  $\times$  *P. Billupsii*  $\times$  *Zizii*, var. *coriaceus*.—A. BENNETT. I was with Mr. Hunnybun when  $\times$  *P. Billupsii* was found at Wood Walton. *P. coloratus* grew near.—G. C. DRUCE.

*Naias flexilis*, R. and S. Loch Fada, Colonsay, v.c. 102, July 1908. Coll. M. McNeill; Comm. A. BENNETT and C. E. SALMON.

*Cyperus longus*, L. Victoria Public Gardens, Newquay, W. Cornwall, v.-c. 1, Sept. 1907 and 1908. I expect it is an unique thing for a Public Garden to have an indigenous patch of this plant. There is another patch in the same valley, and there are at least three other patches (one of half an acre) within six miles. Strangely it appears to be very rare in East Cornwall.—C. CORKER VIGURS. It is good to know that there is a prospect of this handsome plant being protected and preserved in one of its indigenous habitats.—W. BELL.

*E. latifolium*, Hoppe. Whitewell Bottom, West Gloucestershire, 28th July 1908 (N. C. R.).—J. W. WHITE.

*Eriophorum angustifolium*, Roth., var. *elatius*, Koch (var. *longifolium*, Hoppe, in 'Lond. Cat.,' Ed. IX.). Newlyn Downs, W. Cornwall, v.-c. 1, 27th June 1908. From a bog in one corner of this large Downs; very conspicuous with its long leaves. Named by Mr. A. Bennett.—C. CORKER VIGURS. According to Koch, *E. angustifolium* proper (his *vulgare*) has leaves two lines broad, while his var.  $\beta$  *elatius* has them three lines broad. My specimens from Dr. Vigurs have the leaves two lines broad, so seem to come under *angustifolium* proper.—C. E. S. Most of the plants sent by Dr. Vigurs had foliage answering to Koch's *elatius*: but in a few it was rather narrower. Probably Mr. Salmon received an extreme form of the latter.—W. BELL.

*C. Pseudo-Cyperus*, L. S'y Nyll, Cardiff, v.-c. 41, July and Aug. 1908. A very welcome confirmation for Glamorgan of Lightfoot's 1773 record, which (as with *strigosa*) comes from Swansea.—H. J. RIDDELSDELL.

*C. vesicaria*, L. Banks of the River Frome, near Iron Acton, W. Gloucester, 29th May 1908.—J. W. WHITE. A very fine set.—W. BELL.

*C. vesicaria*, forma, *intermedia*. Beinn Laiogh, 2nd Aug. 1908; and *C. Grahmi*, Boott, Beinn Laiogh, Mid Perth, 2nd Aug. 1908.—P. EWING. The first is very good *Grahmi* (Boott); the other plant, named *Grahmi* by Mr. Ewing, cannot be separated from it, being merely somewhat younger and smaller headed.—E. S. M. *C. Grahmi* is put as a var. of *C. vesicaria*, L., by Kükenthal, not a hybrid as many authorities have thought, and as it is given in my 'List.' Curiously the only sub-species given by Kükenthal in his *Monograph* is *C. saxatilis*, L., probably because of the intermediate stages, i.e. var. *Grahmi* and *alpigena*. The var. *dichroa*, And., he treats as synonymous with *Grahmi*, although I think they are not identical. He correctly uses the name *C. saxatilis*, L., instead

of *C. pulla*, Good.—G. C. DRUCE. The first of these is we think rightly referred to *C. vesicaria*, the second may perhaps be a hybrid between that species and *C. pulla*. We should not label either of them *C. Grahami*, which more nearly resembles *C. pulla*, of which species the late Mr. C. B. Clarke considered it a variety.—H. and J. GROVES.

*C. strigosa*, Huds. Curtyrala Woods, near Cardiff, v.-c. 41, 3rd and 9th June 1908. The only previous trustworthy records refer to Swansea, and do not come down later than 1842. These sheets are sent as a confirmation of the record.—H. J. RIDDELSDELL.

*C. limosa*, L. Near Oykell Bridge, E. Sutherland, v. c. 107, 9th July 1908—W. A. SHOOLBRED.

*C. elata*, All. Cunswick Tarn, Westmoreland, v.-c. 69, June 1908.—A. WILSON.

*C. gracilis*, Curt., var. *gracilescens* (Almq.). Marshy wood by the River Wharfe, near Ilkley, Mid-West Yorks, v.-c. 64, 15th Aug. 1908. Mr. Arthur Bennett refers this to var. *gracilescens* (Almq.). The date seems rather late for it not to have shed its fruit, but the specimens are shade grown. The plant is sub-sterile; very few of the spikelets containing any nuts; but this may perhaps be accounted for by the shady locality. There is no other evidence of its being of hybrid origin.—A. WILSON. Kükenthal makes no reference to Almqvist's variety, even in synonymy.—G. C. DRUCE.

*C. Goodenowii*, Gay, forma. 600 ft., Millstone Grit, Baildon Moor, Yorks, July 1908. A considerable patch of the above was growing with the type. The Rev. E. S. Marshall suggests that "it is a weak attempt at a separate stem."—J. CRYER. This must, we think, come down to *Goodenowii*. The production of the one spike from so low down the stem, with its very long slender stalk, is curious if present in a number of specimens.—H. and J. GROVES. This peculiarity is applicable to all the specimens distributed.—W. BELL. This peculiarity is by no means confined to *Goodenowii*. I have seen it in other species.—G. C. DRUCE.

*C. axillaris*, Good., *C. vulpina* × *remota*, with parents. Wet ditch by roadside, near Stanwell Moor, Middlesex, v.-c. 17, June 1908.—C. B. GREEN and A. B. JACKSON. Yes, *C. remota* × *vulpina*; much nearer *remota* than usual, the spikelets being slender and none of them compound, at least in the specimen sent to me.—E. S. M.

*C. divisa*, Huds. St. Philip's Marsh, Bristol, West Gloucester, 18th June 1908. Absent hitherto from the Gloucestershire

lists. An increasing patch of it has for some years been under observation in St. Philip's Marsh, not far from the tidal Avon. Its foliage and stems are well developed to a height approaching two feet, but the spikes are unusually small, owing possibly to poor nourishment afforded by the dry ashes into which the plant's roots have now spread. It may be that the sedge is of alien introduction, but I am rather inclined to look on it as a survival from the ancient salt-marsh vegetation of the place. In any case it must shortly disappear, unfortunately, from the extension of works and factories over the ground.—J. W. WHITE. I have never seen such extremely long, slender leaves in *divisa*, though it varies considerably in this respect. The otherwise excellent specimen received is only in flower. This plant should be collected again, later in the year, to make sure whether it may not be *C. chetophylla*, Steudel, already found in Sussex. Nyman makes it a sub-species, Kükenthal a variety of *divisa*. To judge by the points of divergence which Mr. C. E. Salmon mentions in 'Jour. Bot.' 1909, p. 95, its true rank would appear to be specific rather than varietal. My English specimens, collected by Mr. H. S. Thompson, have very slender foliage, but nothing like so long as in Mr. White's plant.—E. S. M. The characters of var. *chetophylla*, Daveau, as given by Kükenthal in his excellent Monograph in Engler's 'Pflanzenreich,' p. 126, are culms short, slender, leaves convolute-filiform, spike short, dense, Perigynium ellipsoid. In the type the culms 10—50 cm. strict, leaves 2 mm. broad, flat. Spikelets oblong, lower often remote. Perigynium ovate plano-convex. None of these specimens quite agree with my Spanish *chetophylla* which I gathered in several places.—G. C. DRUCE.

*C. divisa*, Huds., var. *chetophylla*, Steud. Golf-links, Seaford, E. Sussex, dry margin of pond, Sept. 1908.—T. HILTON. Daveau is the authority for the varietal name, but I doubt its applicability to these plants.—G. C. DRUCE.

*Panicum Crus-Galli*, L. Lower Morden, Surrey, 6th Sept. 1908—C. E. BRITTON. *P. Crus-Galli*, L., var. *submuticum*, Parl.? Fl. H.—E. HACKEL.

*P. miliaceum*, L. Rawdykes, Leicester, Sept. 1907. An alien which appeared for several seasons; but was absent last year.—W. BELL. Yes.—E. HACKEL.

*Phleum pratense*, Linn., var. *majus*, Sinclair. Road between Brinklow and Austrey, Warwickshire, 15th Aug. 1908. I know nothing of this plant except through Mr. Bagnall's 'Flora of Warwickshire.' He adds this note (p. 291): "This is a tall form often four feet high, with spikes six or more inches long, with an erect (not ascending) stem; awns of the florets shorter in proportion

to size of the glumes than in the type, and curving outwards. See Sinclair, 'Hort. Gram. Woburn.' pp. 195—197. Mr. Sinclair grew both this var. and the type together, and found the distinctive characters constant. The plants sent were in full flower, as several shew, on Aug. 15th this year.—L. CUMMINGS. Only a robust specimen of typical *P. pratense*, L.—E. HACKEL.

*Anthoxanthum aristatum*, Boiss. Hedge-bank, Leatherhead, Surrey, 8th Aug. 1908. Usually not persistent in its habitats in England, and chiefly occurs, I believe, in pastures. May it not spread to hedge-banks and become permanent, as it certainly seemed to be in this station?—C. E. SALMON. Yes.—E. HACKEL.

*Agrostis nigra* (?). South Knighton, Leicester, Aug. 1908. This has been referred to the above, in its general characters it agrees with specimens I hold under that name, but in habit it is much more procumbent.—W. BELL. Not *A. nigra*, Will., but a form of *A. alba*, L.—G. C. DRUCE. *A. alba*, L., var. *prorepens*, Koch.—E. HACKEL.

*Calamagrostis canescens*, Druce. In considerable quantity, for some distance, in marshy places along the bottom of Raincliff Wood, Scarborough, July 1908.—J. CRYER. = *C. lanceolata*, Roth.—E. H. These names are synonymous, but *Calamagrostis canescens*, (Gmel.) retains the earliest trivial known to me.—G. C. DRUCE.

*Koehleria britannica*, Domin. Heathy ground near Aviemore, E. Inverness-shire, July 1908. Leg. A. Wilson and J. A. Wheldon. Forma *glabriflora*, Domin in lit. This is an approach to *K. gracilis* typica, and really very little distinct from it.—E. HACKEL.

*Molinia cœrulea*, Moench, var. *major*, Roth. Rough pasture on Walton Moor, North Somerset, 15th Sept. 1908.—J. W. WHITE. This is var. *genuina*, Syme (var. *major*, Roth.) is a form with long spreading panicle-branches, while the present specimen shews the panicle *coarctata* which Linnaeus attributes to his true *cœrulea*.—E. HACKEL.

*Poa nemoralis*, L., var. *glauca*, DC. (non Al.). Meole Brace, Shrewsbury, July 1908. A glaucous strong-growing form which I found in July 1908, under a wall covered with a thick growth of ivy, and to some extent under shade. The ordinary form of typical *nemoralis* grew in profusion in beech shade some little distance away. I have compared this with the many named forms I possess from various parts of the Sub-Arctic region, and can find nothing nearer than De Candolle's *glauca* ('Nyman's Consp. Fl. Eur.', p. 834). I hope to obtain more specimens next season.—J. COSMO MELVILL. The dried specimen looks not at all glaucous, but fairly

green ; it is *P. nemoralis* — *vulgaris*, Gaud.—E. H. I have just the same glaucous form growing in shady places in Mag. Coll. grounds, Oxford.—G. C. DRUCE.

*Festuca heterophylla*, Lam. Wilcote, Oxon, July 1908. Quite abundant in a plantation. Here its indigenuity is, of course, greatly open to doubt, since planted shrubs, &c., are frequent ; and the whole of the present woodland is artificial. It is in the ancient Wychwood area ; but I have been unable as yet to see any trace of the grass in the aboriginal woodland.—G. CLARIDGE DRUCE. Yes.—E. HACKEL.

*F. elatior*, L., a form or state [ref. No. 3237]. Stony ground near Loch Assynt, Inchnadamph, v.-c. 108, W. Sutherland, 13 July 1908. Inflorescence often tinged with red-brown ; plant reduced in size. I suspect that the situation alone caused the difference.—E. S. MARSHALL. *F. elatior*, sub-species *pratensis* (Huds.) Hack.—E. HACKEL.

*F. ciliata*, Danth. On the Railway, Newhaven, E. Sussex, July 1908. Alien.—T. HILTON. This name is invalidated by *F. ciliata*, Link (1799), a well-known Portuguese and Spanish grass (= *F. alopecurus*, Schrad.). Asch. et Graebn. have created the new name *F. Danthonii* ; I prefer with Briquet the name *F. barbata*, Gaud., 'Fl. Helv. I.,' 274 (1828). See Hack. et Briq. in 'Ann. Conserv. et Jard. bot. Genève,' p. 80 (1907).—E. HACKEL. Mr. Hilton showed it me this year, when it was in great abundance.—G. C. D.

*Lolium perenne*, L., var. *multiflorum*, forma. Growing most luxuriantly on sewage-tip near Bradford, Yorks, 300 ft., July 1908.—J. CRYER. *L. multiflorum*, Lam., forma *cristata*, Timm., in 'Deutsch. IV.,' p. clxix. (1887).—E. HACKEL.

*Bromus tectorum*, L. Whitehawk Down, Brighton, E. Sussex, Aug. 1908. Alien.—T. HILTON. Yes.—E. HACKEL.

*Agropyron repens*, Beauv., var. *barbatum* Duval Jouve (!) Malpas station, Cheshire, 15th Aug. 1908. Varieties with conspicuous awns to the palæ are not uncommon ; but all I have seen hitherto have been large coarse plants, often growing under hedges. These which were growing in cindery ballast were in tufts rather like those of *Lolium italicum* ; and not only the habit, but the general colouring were quite unlike any form of *A. repens* I have observed before. They were rather dark, almost shining green, and, as a rule, showed no trace of running at the root.—A. H. WOLLEY-DOD. Why not *A. caninum*, Beauv. ?—E. S. M. Is *A. repens*, Beauv., var. *Leersianum*, Reichb.—E. HACKEL.

*Agropyron caninum*, Beauv. South Stoke, W. Sussex, June 1908.—T. HILTON. II. Foremark, Derbyshire, July 1908.—T. E. ROUTH and W. BELL. Yes, quite typical from both localities.—E. HACKEL.

*Scolopendrium vulgare*, Symons. Root from an ancient hedge-row above Shipham-on-Mendip, N. Som., 31st Mar. 1905. A most peculiar form, having the frond-margin frilled, and the frill appears to be seamed on.—J. W. WHITE. This appears to agree with forma *S. papillosa* (Moore), described and figured in Lowe's 'Native Ferns,' p. 234, Fig. 597, as found in Guernsey by Mr. Jackson. The distinctive feature is a series of distinct wartlike excrescences on the upper surface of the frond near the margin forming a kind of border. Sori oval; fronds 6 to 18 in. in length.—W. B. = *Phyllitis Scolopendrium*, Newm.—G. C. DRUCE.

*Polypodium vulgare*, L., var. *serratum*, Willd. Cwrtyrala Estate, Cardiff, v.-c. 41, 1908. Growing with var. *cambricum*, Willd. I suppose this is what is meant by var. *serratum*. It is not recorded from Glamorgan till now.—H. J. RIDDLESDALL. I think this is correctly named. The *serration* in some of the specimens has a leaning towards *crenatiou*.—W. BELL.

*Polypodium vulgare*, L., var. *cambricum*, Willd. Still growing in Ray's old locality, near Cardiff, 14th Sept. 1908. Only sent on account of the historic interest. The fronds are at their best in April.—H. J. RIDDLESDALL. This and the var. *serratum* are very acceptable contributions as one so seldom sees them except in cultivation.—W. BELL.

*Phlegopteris Robertiana*, Braun. 1. Plentiful on steep slope in broken limestone ground amongst bushwood, 750 ft., Gt. Scar, Grassington, Aug. 1908.—J. CRYER. 2. Steep, stony, shady bank, Avening Wood, W. Glos., v.-c. 34.—F. L. FOORD-KELCEY.

*Equisetum arvense*, L., var. *nemorosum*, Braun. [Ref. No. 3236.] Damp, bushy bank of the Corriemulzie River, Glen Eining, near Oykell Bridge, E. Sutherland, v.-c. 107, 11th July 1908, erect, 2 to 3 ft. high.—E. S. MARSHALL. Also sent by W. A. Shoobred from the same locality.

*Chara fragifera*, Dur. Downs above the Lizard, Cornwall, June 1902.—G. CLARIDGE DRUCE.

## NOTE TO MEMBERS.

It appears to me that in some ways the Club might be made more useful if its bounds were widened and its activities extended so as to make it a Society of Field Botanists as well as an Exchange Club. The proposed Society might be organised on the plan of the old Botanic Society of London, which did such excellent work for many years. There can be little doubt that Systematic Botany in this country is, in certain directions, languishing through the want of some central organization.

At present, many really good botanists hesitate to join us, some because they think it wrong to collect large quantities of specimens, and others because they think exchange clubs lead to the extirpation of rare plants. These are, to a large degree, mistaken views, but they obtain; and the inclusion of certain very rare plants in some lists of desiderata undoubtedly tends to foster such views. It is highly probable that many of the botanists in question would join a Society whose activities were many-sided, even though they cannot be persuaded to join an Exchange Club.

With an enlarged membership, British systematists would be kept more *in touch* with each other, and would be able to illustrate more fully and to describe in greater detail the results of their labours in the field. Critical plants would be more widely studied, and botanists only partially interested in the subject would be made keener. Comparative culture of critical forms would be stimulated; and, in view of much recent work in plant-breeding and the establishment of experimental gardens, it seems probable that at last this much-needed work will be taken up in this country. Academic systematists would doubtless be pleased to join the new organization, and to contribute to a knowledge of the ecology, physiology, structure and development of critical genera. Such work is now being done, and field-botanists would profit by being in touch with such workers.

A yearly meeting might be held in winter and a joint field excursion made in summer; the value of such gatherings need not be enlarged upon.

I should like to know if this proposed scheme is acceptable or not to the members. The primary objects of the Club could still be prosecuted; and both contributing and non-contributing members would gain much and lose nothing by the proposed change, nor do I think the extra burden thrown upon the Distributor would be a serious difficulty. May I ask members to let me know their views on the subject.

G. CLARIDGE DRUCE.



THE  
BOTANICAL EXCHANGE CLUB  
AND SOCIETY OF THE BRITISH ISLES.

---

REPORT FOR 1909.



The Subscription, 7/6 per annum, and Non-contributing Members' Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE,  
YARDLEY LODGE,  
9 CRICK ROAD, OXFORD.

---

Parcels for 1910 should be sent post paid by the 7th of December to C. E. Moss, Esq., D.Sc., The Botany School, Cambridge.

---

PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD.

1910.

*HONORARY MEMBERS.*

SIR JOSEPH DALTON HOOKER, G.C.S.I., F.R.S.

PROFESSOR E. HACKEL.

DR. G. RITTER BECK VON MANNAGETTA.

DR. W. O. FOCKE.

DR. K. DOMIN.

DR. J. VON STERNECK.

PFARRER G. KÜKENTHAL.

DR. R. VON WETTSTEIN.

DR. C. H. OSTENFELD.

DR. W. BECKER.

DR. S. MURBECK.

PROF. C. H. FERNALD.

DR. N. L. BRITTON.

J. G. BAKER, ESQ., F.R.S.

*CORRESPONDING MEMBERS.*

A. FRYER, ESQ., A.L.S.

J. E. BAGNALL, ESQ., A.L.S.

F. ARNOLD LEES, ESQ., M.R.C.S.

S. A. STEWART, ESQ., A.L.S.

RICHARD F. TOWNDROW.

# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

## THE REPORT OF THE TREASURER AND SECRETARY FOR 1909.

### BALANCE SHEET FOR 1908.

	£	s.	d.		£	s.	d.
By Subscriptions received	18	15	0	Expenses of Distribution	1	3	0
Sale of Reports	0	9	6	Postages, &c.	2	19	4
Balance from 1907	2	16	3	Printing	19	15	0
Do. due to Treasurer	1	16	7				
	<hr/>				<hr/>		
	£23	17	4		£23	17	4
	<hr/>				<hr/>		

Balance due to the Treasurer, G. Claridge Druce, Yardley Lodge, Oxford, £1 16s. 7d., to whom all subscriptions should be paid on the first of January in each year, so that the **trouble** and **expense** of applying for them may be avoided; of 7s. 6d. for each member who contributes and receives specimens; of 5s. for each non-contributing or corresponding member, who receives the *Reports* only, but who may send specimens for identification, or as records of interesting plants.

Members may have a complete set of the *Reports* for the years 1879—1900 for 12s. 6d. post free, odd copies 1s. each, three for 2s. 6d., and from 1901-6 at 1s. 6d. each post free.

### NEW OR CRITICAL BRITISH PLANTS.

Among the chief items of interest to British Botanists in the past year are:—

11. ANEMONE FULGENS, Gay. Recorded from an orchard at Ombersley in 'Fl. Worcest.,' p. 2, 1909. Scarcely worth insertion,

20. *RANUNCULUS ACRIS*, L., var. *FRIESIANUS*, Rouy and Fouc., and var. *RECTUS* (Jord.) may be included in the 'List' as native varieties.

73. *BERBERIS ARISTATA*, DC. A Himalayan species, established in Somerset. See 'Rep.' 358, 1908.

112. *FUMARIA DENSIFLORA* × *VAILLANTII*, Kent. Herb. Druce teste H. W. Pugsley.

124. *RADICULA SYLVESTRIS* × *PALUSTRIS*, from the Tweed side. Gathered near Perth in 1902.

125. *R. AMPHIBIA* × *PALUSTRIS* = *R. ERYTHROCAULIS* (Borbás), described in Rouy and Foucaud as *Roripa*, "Flore de France," ii. 196 (not indexed). From the Thames side, Surrey. Found by our member, C. E. Britton. See 'Journ. Bot.' p. 430, 1909.

131. *BARBAREA TAURICA* DC. Systema, ii. 207. Our members, Messrs. Jackson and Drummond, identify the plant sent to our Club ('Rep.' 1907, p. 273) as *B. vulgaris*, Br. f., as the above. It came from colliery debris at Glais, Glamorgan, collected by the Rev. A. Ley. It is an Alien species, native of Cashmere, extending to Eastern Europe, but both Boissier, Nyman, and the 'Index Kewensis' make it synonymous with *B. arcuata*, Reichb.

177. *WILCKIA CHIA* (DC.), South European. Found by Mr. Fraser at Edinburgh. It is the *Malcomia Chia* DC.

Dr. Eric Drabble has contributed to the 'Journal of Botany' as a *Supplement* an important account of the *British Pansies*.

In this paper the genus is divided first into the section *ARVENSES*, which includes *Viola agrestis*, Jord., *V. segetalis*, Jord., *V. subtilis*, Jord., *V. Deseglisei*, Jord., *V. obtusifolia*, Jord., and \* × *hortensis*, *V. ruralis*, Jord., with \*var. *glabra*, Drabble, *V. arvatica*, Jord., and *V. derelicta*, Jord. Second Section, *TRICOLORS*, with *V. Lloydii*, Jord., \*var. *insignis*, Drabble, and \* × *hortensis*, *V. variata*, Jord., \*var. *sulphurea*, Drabble, and \* *V. cantiana*, Drabble, a new species from Kent. Third Section, *SAXATILES*, with *V. macedonica*, Boiss. and Heldr., *V. alpestris*, Jord., *V. lepida*, Jord., *V. polychroma*, Kern. (from the Peak

district), and \* × *Lloydii* (Eyam, Derbyshire), *V. Provostii*, Bor., *V. calaminaria*, Lej. (= *multicaulis*, Koch.), and *V. carpatica*, Borbás. Fourth Section, LUTEAE, with *V. lutea*, Huds., \*var. *Murrayi*, Drabble (from Loch Muick, S. Aberdeen). Fifth Section, CURTISÆ, with *V. Curtisii*, Forst., *V. Pesneaui*, Lloyd, and *V. sabulosa*, Bor. Sixth Section, NANAE, *Viola nana*, Corbiere. Those marked \* are new to our List.

Of the other *Violas* mentioned in our British works, Dr. Drabble includes under *V. alpestris*, *Viola Paillouxi*, Jord., and *V. Sagoti*, Jord. *V. banatica*, Kit., is at present uncertain; some British plants so named come under *V. variata*, Jord. *V. monticola*, Jord., requires further study. *V. gracilescens* and *V. flavescens*, Jord., have been wrongly identified. *V. Timbali*, Jord., is put under *V. subtilis*, as, in part, is *V. mentita*, Jord. British *V. contempta*, Jord., is referred to *V. ruralis*, Jord.

368. CERASTIUM ALPINUM × VULGATUM = *C. alpinum*, L., var. *pubescens*, Syme, pp.

369. *C. NIGRESCENS* × VULGATUM. Snowdon.

370. *C. VULGATUM* × NIGRESCENS (arcticum) = *C. BLYTTII*, Baenitz.

382. STELLARIA PALUSTRIS, Retz., var. VIRIDIS, Fr., Nov. Fl. Suec. Mant. iii. p. 191, 1842. Discovered by Dr. F. N. Williams in Middlesex, 1909.

403. SAGINA SAGINOIDES, Dalla Torre, var. MACROCARPA (Reichb.), Glas Mheal.

406. SAGINA APETALA × REUTERI. This very critical hybrid is reported as having been found growing with its reputed parents at Malvern by R. F. Towndrow and S. H. Bickham. There is no description in the 'Flora of Worcestershire,' p. 56, 1909, where it is published. Mr. Hunnybun has drawn the plant. A hybrid between such close allies requires very careful investigation.

439 bis. MALOPE MALACOIDES, L. An European species found near Windsor, Berks, by Mr. Everett, 1909.

489 *bis.* GERANIUM MACULATUM, L. A North American species, found in Salop by Mr. Cosmo Melvill.

490 *bis.* ERODIUM BOTRYS, Bert. A South European species, found by Miss Ida Hayward by the Tweed. One of the wool-aliens.

513 *b.* IMPATIENS GLANDULIFERA, Royle, var. MACROCHILA (Lindley). Recorded in the 'Victoria County History' and in 'Fl. Worcestershire,' p. 75, 1909.

564 *bis.* MEDICAGO PROSTRATA, Jacq. A native of South and Eastern Europe, found by Mr. J. Cryer on refuse at Bradford, Yorkshire, 1909.

599 *g.* TRIFOLIUM PRATENSE, L., var. VILLOSUM, Wahl. On shingle at Stranraer, Wigton, so perhaps not native. It has something of the look of *T. ochroleucon*, Huds., which has also been reported as a Casual for Wigton, and may have been mistaken for it.

640 *bis.* T. ALBIDUM, Retz, var. RAMOSUM, Stapf. Falmouth. See 'Fl. Cornwall,' p. 119.

690 *b.* VICIA NARBONENSIS, L., var. SERRATIFOLIA, Jacq. Aldrington, Sussex. See Hilton and Ellman, 'Journ. Bot.' p. 21, 1909.

895 *c.* POTENTILLA ARGENTEA, L., var. DECUMBENS (Jord.).

899. POTENTILLA CRANTZII × VERNALIS. Herr Wolf suggests that this may be the Grassington plant, but careful search for the parents should be made. Both species have been recorded for the district.

1006. TILLAEA VAILLANTII, Willd. An European species, found by Miss Ida Hayward by the Tweed.

986. SAXIFRAGA NIVALIS × STELLARIS = S. CRAUFORDII, E. S. Marshall, from Cairngorm, Easternness. See 'Journ. Bot.' p. 98, 1909. Discovered by our late member, Mr. F. C. Crawford.

1126 *b*. ANTHRISCUS SYLVESTRIS, Hoffm., var. ABORTIVUS (Jord.). Perth. See Hayward, 'Bot. Pocket Book,' p. 196, 1907.

ABELIA UNIFLORA, Br., in 'Abel China App.,' 376, 1818, ii. 4. A China species said to be established in Norfolk. See 'Victoria County History.'

1209. ASPERULA GALIOIDES, Bréb. Alien. Mirfield, Yorks. An European species. F. A. LEES.

1236. SCABIOSA COLUMBARIA  $\times$  SUCCISA. See 'Flora Derby,' p. 177. Also in York, *teste* F. A. LEES.

1262 *bis.* ERIGERON LINIFOLIUS, Willd. A native of tropical countries which is abundant in Ceylon; has been found by Miss Ida Hayward by the Tweed.

1292 *bis.* FRANSERIA ACANTHICARPA (Hook). *F. Hookeriana*, Nutt = *Ambrosia acanthicarpa*, Hook. A North American species; found in Lancashire.

1334. ACHILLEA FILIPENDULINA, Lam. An Eastern species, cultivated in England; occurred on waste ground near Ware, Herts.

1365. COTULA AUSTRALIS, Hook. f. An Australian species, found by Mr. Fraser and Miss I. Hayward by the Tweed.

C. INTEGRIFOLIA, Hook. f. A Tasmanian species found by Mr. Fraser at Leith.

1395. SENECIO ERUCIFOLIUS  $\times$  JACOBAEA. Found in Yorkshire by Mr. Pickard, and having the facies of an intermediate.

S. SYLVATICUS  $\times$  VISCOSUS. Recorded in 'Flora of Worcestershire,' p. 206, as having been found by Mr. Amphlett at Saltwells Wood, near Dudley. This wants very careful examination.

1484. LAPSANA COMMUNIS, L., var. PUBESCENS, Reichb. Co. Clare. See Druce in 'Irish Nat.' p. 253, 1909.

HIERACIA—In 'Journ. Bot.' pp. 8-16 and 47-55. The Rev. A. Ley has a paper on Brecon and West York Hawkweeds, in which H. DECOLOR, Ley, H. REPANDUM, Ley, H. LINTONI (*vice*

*H. sagittatum*, var. *maculigerum*), *H. AMPLIATUM*, Ley, *H. MUTABILE*, Ley, *H. STRUMOSUM*, Ley, *H. CACUMINUM*, Ley, and *H. TAVENSE*, Ley, are raised from varietal to specific rank.

*H. BOREALE*, Fr. (*H. sabaudum*), *QUERCETORUM* (Jord.) var. *EMINENS* (Jord.), and *OBLIQUUM* (Jord.) are additional to the 'List.'

1646. *TARAXACUM SPECTABILE*, Dahlst., var. *GEIRHILDAE*, Beeby, as sub-species. See 'Ann. Scot. Nat. Hist.' 1909, p. 105. From Loch of Girlsta, Shetland.—W. H. BEEBY.

1660 *b*. *TRAGOPOGON PORRIFOLIUS*, L., var. *PARVIFLORUS*, Syme. A not uncommon form, which should have been inserted in the 'List,' notwithstanding, as in the case of the Yellow Goat's beard, many gradations are found.

1790. *PYROLA MINOR*, L., var. *ARENARIA*, Lantz.-Ben., Arder, Ayr. See 'Journ. Bot.' p. 373, 1893.

1722. *STATICE ALPINA*, Poir. See 'Ann. Scot. Nat. Hist.' p. 249, 1908. Ben Lawers, Gardiner, 1842; Snowdon, Young, 1839; Carn Tual, Ridley, 1883, in 'Herb. Brit. Mus.' are all three referred to *Armeria alpina*, Willd., by Mr. Williams in 'Prod.'

1789 *bis*. *ERITRICHIUM AUSTRALASICUM* A.DC. An Australasian species found by the Tweed in 1909 by Miss Hayward. A wool-alien.

1831. *VOLVULUS SYLVATICUM* (Spreng), Maly. A South European species naturalised in Devon at Kingswear. See 'Vic. County Hist.,' Devon.

1856 *b*. *HYOSCYAMUS NIGER* L., var. *PALLIDUS* (W. and K.). Oxon., &c.

1866. *VERBASCUM LYCHNITIS* × *FLOCCOSUM*, (?) = *PULVINATUM*, Thuill. An European species recorded from Devon in 'Vict. County Hist.'

1870 *bis*. *V. OLYMPICUM*, Boiss. An Eastern species cultivated in gardens; occurred on waste ground near Oxford, in 1909.

1908. *VERONICA CHAMAEDRYIS*, L., var. *PROCERA*, Willk. See Williams, 'Prod.' p. 295, from Isle of Wight: "A much larger

plant than the type with a raceme 24 ctm. and flowers more numerous." Var. *INCISA*, G. Fröl. "Folia latiora magis rotundata, incis, puberula, elevatius rugosa, obtusa," F. N. Williams, 'Prod.,' l.c. A subalpine form from Aberdeenshire, Hb. Smith, Banff, 'Hb. Kew.', and Carnarvonshire 'Hb. Br. Mus.'

1911. *V. BECCABUNGA*, L., var. *LONGIBRACTEATA*, Schur. The pink or flesh-flowered form, said by Mr. Williams to be identical with *V. limosa*, Lej., var. *tenerrima*, Beck. "Omnino minor, nana, haud excedens 2 dcm. Racemi reducti, floribus paucioribus. Pedicelli filiformes, bracteis lanceolatis multum longiores," Williams, l.c., p. 293.

2000. *MENTHA ARVENSIS* × *GENTILIS*. Said to have been found with both parents by Mr. Towndrow at Powick Weir. See 'Fl. Worcester,' p. 285, 1909.

2007. *THYMUS LOEVYANUS*, Opiz (*T. collinum*, M.B.) Naturalientausch ix. 105: Caule repente, ramis adscendentibus, pilis patentibus; foliis oblongo-ovatis, petiolatis, glabris, basi ciliatis, floralibus sessilibus, oblongis obtusis, ramorum steriliorum obovatis, longe petiolatis; floribus verticillato-capitatis, pedunculis pilis brevissimis reflexis obtectis, calycibus pilis patentibus concoloribus; corollis calyce aequalibus; staminibus inclusis.

Intermedius inter *T. praecox* et *T. serpens*, Opiz, sed differt a priori, foliis floralibus oblongis, nec obovatis, apice rotundatis, foliis ramorum, steriliorum angustioribus et corollis calyce aequalibus nec longioribus: a *T. serpente*, Opiz, foliis ramorum steriliorum obovatis nec lanceolatis, corollis calyce aequalibus nec longioribus. Near Rossmore, Lough Dearg. E. F. Linton in 'Journ. Bot.' p. 347, 1909.

2026. *SALVIA VERBENACA*, L., var. *INCISA* DC. Salisbury Crags. See 'Journ. Bot.,' p. 87, 1909.

2042. *SCUTELLARIA GALERICULATA*, L., var. *PUBESCENS*, Benth., 'Labiatae,' p. 437 (1832-6): Caule, foliorum pagina inferiore, calycibus corollisque pubescentibus. Shingle on the coast at East Tarbert, Wigton, Aug. 1909.—G. C. DRUCE.

2070. *LAMIUM BITHYNICUM*, Benth. An Eastern species, found by Mr. J. Cryer at Bradford, Yorks.

2077 *d.* *BALLOTA NIGRA*, L., var. *MEMBRANACEA*, Druce. This is the large thin-leaved and often very hairy *Ballota* from the Western Counties. See 'Rep.,' 1908, p. 353.

2090 *bis.* *PLANTAGO SERRARIA*, L., from Steep Holmes, T. Butler, 1845, *teste* F. N. Williams, in lit.

2091. *PLANTAGO MARITIMA*, L., var. *ALPINA* (L.). Widdy Bank, Durham. See Williams, 'Prod.,' p. 362. Var. *SERPENTINA*, Brand, forma *ciliata*, Ben Laiogh, Perth, Williams, l.c.

2090. *P. LANCEOLATA*, L., var. *SYLVATICA* Pers. (var. *major*, Syme), Williams, l.c., 358, var. *ERIOPHORA*, Rapin, Bressay, Shetland Isles, 'Hb. Brit. Mus.,' Williams, l.c., var. *MINOR*, Rapin. Caithness, Williams, l.c.

2124. *CHENOPODIUM ALBUM* × *SEROTINUM*. Near Eye, Peterborough, with both parents.

2205. *RUMEX PULCHER*, L., var. *ANADONTA*, Hausskn. Ware, Herts, perhaps alien. See 'Reichb. Ic. Germ.' xxiv. p. 39.

2250. *URTICA DIOICA*, L., var. *ATROVIRENS*, Gren. and Godr.

2245. *ULMUS GLABRA* × *U. MONTANA* = *U. VEGETA* (Loudon). The Huntingdon Elm. Common in the Eastern Counties; probably *U. hollandica*, Miller.

2255. *BETULA ALBA* × *TOMENTOSA* = *B. HYBRIDA*, Bechst., in 'Diana,' i. 80, 1797. See Elwes and Henry, 'Trees,' vol. iv., p. 964, 1909.

2256. *B. TOMENTOSA*, Reith, var. *PARVIFOLIA*, E. S. Marsh.

2316. *HELLEBORINE LATIFOLIA*, Druce, var. *ANGUSTIFOLIA*, Druce. A narrow acute leaved form of true *latifolia* with smooth basal bosses. See Hayward's 'Bot. Pocket Book,' p. xlv., 1909.

2317. *H. MEDIA* (Fries), var. *PLATYPHYLLA*, Druce, l.c. Leaves broadly-orbicular ovate, bluntish, almost encircling stem, Yorks and Bucks.

2319 *b.* *H. ATRORUBENS*, var. *CROWTHERI*, Druce. Plant robust, 3 feet high; leaves very broad and blunt. ? *H. atrorubens* × *media*, Grassington, Yorks. See 'Naturalist,' p. 128, 1910.

2326. *ORCHIS INCARNATA* × *MACULATA*, var. *PRAECOX*. One specimen of the hybrid of *incarnata* with *ericetorum* is reported by Rev. E. F. Linton at Edmondsham, Dorset, 'Journ. Bot.' p. 419. It must be borne in mind that Mr. Linton's idea of *incarnata* apparently differs from that of the Rev. E. S. Marshall. See 'Report,' p. 310, 1907.

2327. *O. MACULATA*, L., var. *O'KELLYI*, Druce, in 'Irish Naturalist,' p. 211, 1909. Discovered by P. B. O'Kelly and common on the Burren, Co. Clare.

2329. *ORCHIS MASCULA*, L., var. *OBTUSIFLORA*, Koch. Syn. 686, 1837, perianth laciniis obtusis. See 'Reichb. Ic. Fl. Germ.' xiii., p. 42, t. cccxc. f. ij. 'Anglia,' Co. Clare, etc. See 'Irish Nat.' l.c.

*COLCHICUM AUTUMNALE*, L., var. *ALBUM*. See Wats, 'B.E.C. Rep.' p. 205, 1909, where it is referred by Messrs. Drummond and Bruce Jackson to *C. candidum*, Schott & Kotschy. From Bredfield near Woodbridge, Suffolk, Mrs. Foord-Kelcey. There is no reference in 'Fl. Suff.' to a white-flowered form. Drummond and Jackson suggest, l.c., that the *Colchicum* has 'in all probability been originally introduced, but since established in Britain.' Surely we need not doubt that it is indigenous; as it grows so abundantly in the aboriginal woods in the western midlands, and in pastures and meadows in many counties, no more suspicion should arise concerning its being native than that of the Bluebell, or Lady's Smock. Its continental distribution, too, is all in favour of its being a true native of Britain. In Gerarde's 'Herbal' it is stated not only to grow in meadows but 'in Nobottle Wood,' in Northamptonshire.

2429. *JUNCUS EFFUSUS*, L., var. *SPIRALIS*, McNab, North Ireland; a monstrosity rather than a true variety, but keeping

constant from seed in cultivation. See 'Bot. Soc. Edin.' p. 503, 1873.

2508. POTAMOGETOM PUSILLUS, L., var. ACUTUS, Fisch. In 'Ber. Bay. Bot. Ges.' xi., 1907, p. 116. River Bann, Co. Antrim.

ZANNICHELLIA GIBBEROSA, Reichb. Fen ditches, Eye, Northants, Marcham, Berks. A more slender plant with narrower leaves and apparently of earlier growth than *palustris*, since it was decaying in early September and had quite disappeared in November, when *Z. palustris* was still green and flowering. It is described and figured in 'Reichb. Icones Bot.' viii. p. 24, t. dcclix., No. 1,006, "Foliis tenuissimis, nuculis stipitatis divergentibus utrinque cristatis repando dentatis." See also 'Reichb. Fl. Germ. Excurs.' p. 7, 1833: "Folia fere capillaria et fructus majusculis macrostyli speciem imprimis distinguunt." Fruits practically identical were shewn at the Linnean Society by Mr. Clement Reid, from the Cromer Forest Bed at Pakefield, Suffolk, thus proving it is a native plant. It has been recorded from the Elbe near Hamburgh; specimens exactly matching the Northants plant are in 'Herb. Brit. Mus.'

2650. PHALARIS ANGUSTA, Nees. A South American species, found at Slough, Bucks.

ORYZOPSIS TRICHOTOMA (Nees). A South American species, found on wool refuse at Meanwood, Leeds, by F. A. Lees. It is the *Nussella trichotoma*, Hackel = *Stipa trichotoma*, Nees.

2697. DEVEUXIA RETROFACTA (Willd.), *vice D. retrofacta*, Kunth. 'Rep.' 1909, p. 351.

2689. AGROSTIS LACHNANTHA, Nees. A South African wool-alien, found by Miss Ida Hayward by the Tweed.

2690. POLYPOGON LINEARIS, Trin. A Chillian species, found at Meanwood, Leeds, and by the Tweed by Miss I. Hayward.

2692. P. ELONGATUS, H. B. K. A South American wool-alien, Meanwood, Leeds. F. A. Lees.

2706 *d.* AIRA CARYOPHYLLEA, L., var. AGGREGATA, Tim.

2760 *b*. POA PALUSTRIS, L., var. EFFUSA, Asch. & Graeb. By the Severn, Rev. H. J. Riddelsdell. See 'Journ. Bot.' p. 73; possibly native.

2785. FESTUCA RUBRA, L., var. GLAUCA, Koch. Alien, near Reading, Dr. Stansfield.

2793. FESTUCA MARITIMA, L. Found at Littlestone on Sea, Kent, in the Spring, by Mrs. Davy, with other native species, and here giving it more claims to be considered native than it previously possessed. Mr. F. A. Lees, however, considers it to be native in Lincolnshire, an opinion not shared by the Rev. A. Woodruff-Peacock.

2802. BROMUS INERMIS, Leysser, var. ARISTATUS, Schur, Mr. Fraser. Leith.

2848. HORDEUM VIOLACEUM, Boiss. & Hohen. A native of Asia Minor, found by Mr. F. A. Lees at Meanwood, Leeds.

#### RECENT PUBLICATIONS.

Among these may be noted:—

CYPERACEAE-CARICOIDEAE, Geo. Kükenthal, in 'Das Pflanzenreich,' pp. 824. Price 41 marks 20 pf. May 18th, 1909.

Our Honorary Member and Referee, who has for so long kindly examined and reported on our *Carices*, has in this important work on this somewhat difficult group most successfully and in a masterly manner brought his labours to completion. The Ffarrer Kükenthal has clearly described, and illustrated by numerous dissections, 29 species of *Kobresia* (spelled *Cobresia*), 23 species of *Uncinia*, and 798 species (exclusive of hybrids) of *Carex*. Very numerous varieties are also described, but the author has been quite reticent in admitting plants to the full grade of varieties, reducing many of the varieties of our floras to "forms."

The nomenclature adopted agrees very closely with that of the 'List,' the following being exceptions:—*Carex lagopina*, Wahl., instead of *C. Lachenalii*, Schkuhr, which is an older name. *C. stellulata*, Good., wrongly replaces *C. echinata*, Murray. *C. intermedia*, Good., instead of *C. disticha*, Huds., an earlier authority overlooked by Kükenthal. *C. Hudsonii*, Benn., instead of *C. elata*, All. (which

Kükenthal queries as *C. gracilis*), *C. alpina*, Swartz, instead of *C. Halleri*, Gunn. (an identification which he also queries), *C. Buxbaumii*, Wahl., instead of *C. fusca*, All. (which is also queried), *C. glauca*, Murray, instead of *C. flacca*, Schreb. (but Kükenthal has overlooked the fact that in Murray's 'Prodromus' the name *glauca* is not given). *Carex lepidocarpa*, Tausch, is kept as a distinct species. Under *C. Oederi*, Retz, is put *C. flava*, var. *minor*, Towns. *C. rostrata*, Stokes, is given instead of the earlier *C. inflata*, Huds., *C. echinata*, Murr., is used in the sense of *C. Pairaei*, Schultz (but see 'Journ. Bot.' p. 163, where Britten shows that *C. echinata*, Murray = *C. stellulata*, Good.). *C. Leersii* is put under this as a variety. *C. Hornschuchiana*, Hoppe, instead of *C. fulva*, Host, and *C. contigua*, Hoppe, instead of *C. muricata*, L.

Several additional varieties to the British Flora (already in the Desiderata list) are described, the chief of which are the following :—

*Carex flava*, var. *pygmaea*, Anders. 'Culmus humilis. Spiculae subglobosae parvulae confertae, Utriculi minores.' (Lange by a *lapsus calami* named my specimens var. *pumila*, Anders., as given in my *List*.) *C. extensa*, var. *Ecklonii*, Kükenth., p. 667 (antedated by var. *latifolia*, Boeck.). 'Culmus robustior. Folia ad 5mm. lata. Spiculae omnes approximatae, terminalis non raro gynaeandra. Utriculi subovati 4-5 mm. long.' from Wigton *C. Bailey* and Strangford Lough, Co. Down! *C. binervis*, var. *alpina*, Drejer. Under this Kükenthal unites *C. Sadleri*, Linton, and var. *nigrescens*, Druce; *C. gracilis*, Curt., var. *sphaerocarpa* (Uechtr.), Kükenth., p. 323: 'Utriculi parvuli orbiculati vix 2 mm. longi.' Sussex, E. S. Marshall, n. 2610. *C. Goodenowii*, Gay (spelled *Goode-noughii*), var. *subcaespitosa*, Kükenth., p. 316: 'Rhizoma dense caespitosum et stoloniferum. Culmus 45 cm. altus ad basin vaginis atropurpureis marcidis dense obtectus. Folia culmum subaequantia 2mm. lata plana. Spiculae 3-4 approximatae sessiles. Utriculi compressi abortivi.' Rosslare, Wexford, E. S. Marshall, n. 1969. Var. *tornata* (Fries), Kükenth.: 'Rhizomata magis caespitans. Culmus 30-45 cm. altus rigidulus Folia 3-4 mm. lata plana rigidula. Spiculae cylindricae crassae sub approximatae.' Cors Bodeilio, Anglesey, Loch Tummel, Perth. Var. *strictiformis* (L. H. Bailey) Kükenth.: 'Culmus gracilis ad 75 cm. altus.

Folia longa angusta canaliculata. Spiculae foem. cylindricae crassae sub-approximatae. Utriculi magis nervosi evidenter stipitati.' Altnaharra, Sutherland, E. S. Marshall. Also from Toome Bridge, Antrim. Var. *stenocarpa*, Kükenth. : 'Spiculae angustatae saepe breves nigricantes. Squamae foem. saepe acutiusculae. Utriculi oblongo-elliptici.' Glen Fiagh, *Druce*, Thurso, Tay side, Perth, Llanberris, Carnarvon. *Carex helvola*, Blytt (as a hybrid), is given from Ben Lawers and Loch Na Gar, *Druce*, Clova *Balfour*, and the hybrid *C. canescens* × *stellulata* = *C. biharica* from Lawers and Canlochan. × *C. tetrastachya* = *C. helvola*, Blytt, var. —*Druce*, 'Rep. of Exc. Club,' p. 571, 1897, from Lawers.

Four Carices, *C. ligerica*, *C. brizoides*, *C. caespitosa*, and *C. elytroides*, which have been reported as British, are not given for Britain in the *Monograph*. The second from Yorkshire may have been introduced.

The heartiest thanks of all British Botanists are due to the author for this very valuable and important volume.

THE 'TREES OF GREAT BRITAIN AND IRELAND, by H. J. Elwes, F.R.S., and A. Henry, M.A. Volume IV., Edinburgh, 1909, pp. viii., 713—1000, tt. 63. The British trees included in this volume are *Castanea sativa*, Mill., which the authors think was introduced by the Romans, although natural seedlings occur, and the tree is naturalised in Devon, &c.; *Fraxinus excelsior*, L., with its variety *monophylla*, Kuntze, the older name of which is var. *diversifolia*, Aiton.; *Alnus glutinosa*, as it is wrongly called, with its varieties *laciniata*, Willd., and *incisa*, Willd.; *Betula pubescens*, Ehrh., and its var. *denudata*, Gren. & Godr., the hybrid with the next species × *B. hybrida*, Bechst., and *B. verrucosa* Ehrh., an older name of which is *B. pendula*, Roth, but for which *B. alba*, L., is retained in the *List*. The plates as usual are interesting.

PRODROMUS FLORAE BRITANNICAE, by F. N. Williams. Part V., pp. 207—258, Brentford, C. Stutter, March, 1909. Price 2s. 8d. This instalment gives an account and description of 59 species. *Galium asperum*, Schreber, is the name given to the southern form of *G. sylvestre*, Poll. *G. austriacum*, Jacq., supersedes *G. umbellatum*, Lam., or *sylvestre*, Poll. *Myosotis palustris*, Hill, var. *caespititia* DC., is said to be an earlier name than *hirsuta*, Braun.

Part VI, October, 1909, pp. 259—362. Price 5s., post free.

This part describes 99 species, from *Myosotis arvensis* to *Plantago maritima*. *Veronica fruticulosa*, L., is said to have been found on Ben Cruachan, Argyll, Ben Lawers, Craig Mhor, Glen Loehay, Mid Perth. (Is our pink-flowered plant really this species<sup>a</sup>?) *V. Becabunga* has a var. *tenerrima* (Schmidt). *V. Chamaedrys* has var. *procera*, Willk., and var. *incisa*, G. Fröl. The var. *hirsuta* (Hopk.) of *V. officinalis*, only previously recorded from Ayrshire, is said to occur in Surrey, Essex, Norfolk, and Perth. It is doubtful however if these are identical with the Ayrshire plant. Under *Plantago maritima*, a var. *serpentini*, Brand, is recorded from Ben Laoigh, Argyll, and from Snowdonia. Also Mr. Williams identifies without hesitation the plant from Widdy Bank, Durham, as *P. alpina*, L., which he reduces to a var. of *P. maritima*. The *Prodromus* will probably extend to 1,420 pages.

FLORA OF CORNWALL, being an account of the Flowering Plants and Ferns found in the County of Cornwall, including the Scilly Isles, by F. Hamilton Davey, F.L.S. F. Chegwidden, Lower Market Street, Penrhyn, 1909, pp. lxxxviii, 570. This useful work on one of the most interesting counties in Britain has filled up an important gap in our county Floras, and Mr. Davey is to be congratulated at the completion of an excellent work.

Twenty species are said to occur in no other county in Britain, but *Artemisia Stelleriana*, an alien, also has been found by me in Forfar; *Pinguicula grandiflora* was introduced to Cornwall, and the claims to indigenuity of *Narcissus odorus*<sup>b</sup>, *Scabiosa maritima*, *Echium plantagineum*, and *Bromus maximus* too are open to considerable suspicion.

*Artemisia biennis*, Willd., may be added for Par. The variety *parvifolia*, Druce, is wrongly given under *Silene latifolia*, R. & B.; it should be put under *S. maritima*.

THE FLORA OF GLAMORGAN, edited by our member, A. H. Trow, D.Sc., F.L.S., Sect. ii., Calyciflorae; Sect. iii., Corolliflorae,

<sup>a</sup> W. B. Boyd writes to me that his Glen Loehay plant (referred to above) is only pink-flowered *saxatilis*, and quite different from *V. fruticulosa*, which he has never seen native in Scotland.

<sup>b</sup> Our member, Mr. Evans, has visited the locality and believes it to have been certainly introduced; he says it is not type *odorus* but the var. *heminalis*, Hort.

pp. 45--132, Lewes, Cardiff, contains many very suggestive notes, and much general information.

THE BOTANY OF WORCESTERSHIRE: an Account of the Flowering Plants, Ferns, Mosses, Hepatics, Lichens, Fungi and Freshwater Algae which grow or have grown spontaneously in the County of Worcester. With an Introduction and a Map. By John Amphlett, M.A., S.C.L. (of Clent), and Carleton Rea, M.A., B.C.L., with the assistance of many friends; the Mosses and Hepatics contributed by J. E. Bagnall, A.L.S., with later additions. Pp. viii, 651. Cornish, Ltd., Birmingham. Price 25s. 1909. The authors (who have recently joined this Club) are to be congratulated on completing this portly volume, which contains such a complete list of the Fungi and lower cryptogams. A feature of the work is the popular account of the species, the derivation of the classical name, and other interesting details.

*Vallisneria spiralis* is recorded for a single locality. How was it introduced? Other hybrids included besides those already mentioned in these pages, are *Senecio sylvaticus* x *viscosus*, and *Mentha gentilis* x *arvensis*.

HAYWARD'S BOTANIST'S POCKET-BOOK. Thirteenth edition, revised and enlarged by G. Claridge Druce. George Bell and Sons. Fcap. 8vo., pp. xlv, 280. Price 4s. 6d. November, 1909. Containing in a tabulated form the chief characteristics of British plants; with the botanical name, common name, soil or situation, colour, growth, and time of flowering of every plant, arranged under its own order.

NOTES ON NOTTINGHAMSHIRE BOTANY, by J. W. Carr, 'Journ. Bot.' pp. 134—139, contains a very large number of New Records for that county.

A TOURIST'S FLORA OF THE WEST OF IRELAND. Robert L. Praeger, pp. xii, 243. Price 3s. 6d. Hodges, Figgis and Co., Dublin. An excellent account of the flora of an interesting district, with beautiful photographs of local plants in their natural habitats.

During 1908 the Botany of the following three VICTORIA COUNTY HISTORIES appeared :—

RUTLAND, by Howard Candler, in which the flora of the smallest county is inadequately described. 665 species are enumerated, of which the extraordinary number of 129 are said to be doubtful; *Cardamine impatiens* is more than doubtful, as probably is *Myosotis sylvatica*. Contemporary botanical literature is practically ignored, and for the purpose of comparison, the *Rubus* records are taken from the archaic list in 'Top. Bot.,' so that five only are cited for the neighbouring county of Northants, although 23 are enumerated in the Botany of that county in the 'Victoria County History.'

SHROPSHIRE, the flowering plants, by R. de G. Benson, edited by W. P. Hamilton. A much more satisfactory account of a very interesting county, 954 species being enumerated and 121 naturalised or casual species. 192 varieties and hybrids are also included, and seven Characeae.

STAFFORDSHIRE, by our valued member, Mr. J. Bagnall, is excellently done, 948 species being included; of these 168 are said not to occur in Derbyshire; the Derby *Flora* contains 911 species besides 123 Aliens and Casuals.

FLORE DE FRANCE. G. Rouy. Tome xi., Scrofulariacées-Labiées, pp. 430. July, 1909. This part contains much interesting matter. The author keeps as two distinct races *Veronica humifusa*, Dicks., and *V. tenella*, All. Under the hybrid *Linaria sepium* four varieties are described, two, *intermedia* and *ochroleuca*, at least of which occur in Britain. The *Euphrasia* are reduced to eight species, of which five are British. Under *Scutellaria galericulata*, Benth., the variety *pubescens* (wrongly attributed to Mutel) is said to be rare. *Salvia Verbenaca*, on account of its great range of variation, is as an aggregate called *S. Linnaei*, Rouy, with five sub-species :—

1. *S. Verbenaca*. Feuilles rad. sinuées ou dentées à dents allongées et irrégulières. This includes the British *S. Verbenaca*.

2. *S. oblongata* (Vahl). Feuilles rad. ovales, obtuses, crénelées, à dents obtuses et régulières. Some plants from the Channel Isles would be included in this.

3. *S. clandestina* (L.). Feuilles rad. incisées ou pinnatilobées a lobes irrég<sup>t</sup> crénelés, étroites, oblongues ou sublancéolées. The corolla of this is not so long as *S. Marquandi*, and the leaves are more cut.

4. *S. horminoides* (Pourr.). Feuilles rad. profond<sup>t</sup> pinnatifides ou pinnatipartites, ovales aiguës. Coteaux secs du Midi et du sud-ouest. Not the *S. horminoides* as described by Coste.

5. *S. multifida* (Sibth. and Sm.). Feuilles rad. profond<sup>t</sup> pinnatipartites ou subpinnatséquées, a segments ou div. incisés-laciniés. Not British.

The treatment of *Galeopsis Tetrahit*, *G. Ladanum*, and the *Menthae* offer many points of interest.

SYNOPSIS DER MITTELEUROPAISCHEN FLORA. Paul Ascherson and Paul Graebner. SALICACEAE, Parts 6—15, and LEGUMINOSAE, Parts 44—58, Mar.—Oct., 1909. The Leguminosae includes the groups Loteae, Galegeae, Hedysareae, and Viciae.

DIE NORDISCHEN ALCHEMILLA VULGARIS-FORMEN, by Harald Lindberg. Helsingfors, 1909, ex Acta Societatis Scientiarum Fennicae, Tom. XXXVII. no. 10. In this critical account of the northern forms of *Alchemilla vulgaris* the author has described and illustrated by most excellent photographic reproductions 14 species. Three of these are British,—1. *A. pratensis*, Schmidt (the *vulgaris* sensu stricto of Buser and of my 'List'), more frequent in the South of England. 2. *A. minor*, Huds. (originally described as a species) was in the second edition of the 'Flora Anglica' reduced to a variety of *A. vulgaris*. This is for the greater part the *A. filicaulis* of Buser and of British authors, as in my 'List'); it is widely spread in the British Isles. Lindberg gives the common British plant as *filicaulis*, Buser, \**vestita*, Buser. Of this he has a \**filicaulis* (Buser), Lindb., f., which occurs in Forfar, W. Inverness, and Shetland. 3. *A. alpestris*, Schmidt, which although more frequent in Northern Britain is found as far south in England as Sussex, and is widely spread in Ireland. Very copious localities from the area treated of by Lindberg are given, as well as maps showing the distribution of each species. Dr. Lindberg is to be congratulated upon an excellent piece of critical systematic work.

In THE JOURNAL OF BOTANY for 1909, besides other items

already noticed, may be mentioned a useful paper on the 'Collection and Identification of Roses,' by the Rev. Augustin Ley and Major Wolley-Dod (pp. 247—255). A full description of *Euphrasia minima* with plate (t. 197a), p. 165, from Devon, by W. P. Hiern, F.R.S. Notes on the 'Plants of Derbyshire,' E. Drabble (p. 199), of Sutherland (p. 220), and of Somerset, E. S. Marshall. 'The Nomenclature of the British *Melicae*,' Dr. C. E. Moss (p. 333). Dorset Plants, Rev. E. F. Linton. Two very interesting new county records are published in 'Journ. Bot.'—*Saxifraga aizoides*, L., Carnarvon, p. 32 (new to Wales) and *Selinum Carvifolia*, L., near Mansfield, Notts. (p. 71).

Other new records of the year include *Cerastium pumilum*, Curt., and *C. tetrandrum*, Curt., Berks, *Rumex limosus*, Thuill., Northants, *Crataegus oxyacanthoides*, Thuill., Selkirk (new to Scotland), *Festuca heterophylla*, Lam., Peebles, *Potamogeton involutus*, Fryer, *P. coloratus*, Hornem., and *P. angustifolius*, Presl., for Northants.

Mr. Pickard has sent a specimen from Yorkshire, which, although small and immature, is strongly suggestive of *Epilobium collinum*, Gmel.

ENGLER'S DAS PFLANZENREICH . . . PAPAVERACEAE, by Friedrich Fedde, 21 Dec. 1909. Price Mk. 21.60. This important monograph differs in many respects from that on the *Carices* by the 'Pfarrer Kükenthal.' The 'forms' of the latter work (to which so many of our *Carex* vars. had been reduced) have no counterpart in this, but 'sub-vars.' are given. The colour forms of *Papaver Rhoeas* for instance are termed 'vars.' *P. strigosum*, Boenn., is kept as a distinct species, as are *P. setigerum* DC., *P. Roubaei*, Vig., and *P. modestum*, Jord., neither being cited for Britain. *P. Lecoqii* (spelt *Lecoquii*) and *P. collinum*, Bogenh., are reduced to vars. of *P. dubium*, Fedde putting his own name as the authority for this gradè, but of course wrongly, the reduction being previously used by numerous writers. Fedde does not appear to have made himself acquainted with British authors, since no notice is taken of *P. somniferum*, var. *hispidum*, H. C. Wats.; and Adanson is wrongly cited for the genus *Glaucium*, which dates from Hill, 'British Herbal' of 1756. It is somewhat to be regretted that more uniformity should not exist between the various Monographs

in this vast and excellent work, but the botanist has to be grateful for the advantage of having such comprehensive descriptions of the plants of the world which is being gradually issued under Professor Engler's supervision.

Perhaps members would collect good examples of the British var. *strigosum*, &c., so that we may submit them to Dr. Fedde in order to clear up the doubt of their occurrence in Britain, or whether their omission by Dr. Fedde is due to an oversight on the part of the monographer.

### OBITUARY.

The year 1909 has dealt very lightly with us, the only botanist of eminence whose loss we have to deplore is that of Sir George King, K.C.I.E., F.R.S., LL.D., born at Peterhead, April 12th, 1840, died Feb. 12th, 1909, at San Remo. Had charge of the Calcutta Botanical Garden in 1871; in 1891 appointed Director of the Botanical Survey of India. Founded the Annals of the Royal Botanic Garden of Calcutta. In 1899 was President of Section K. at the Dover Meeting of the British Association, when he delivered an address on 'The History of Indian Botany,' of considerable value but curiously containing no reference to the pioneers Charles and Daniel Du Bois, whose large herbarium, now at Oxford, of Indian plants collected *circa* 1690—1700 has been overlooked by all workers at the flora of that great country. See 'Gard. Chron.' and 'Journ. Bot.' p. 122.

### CORRECTIONS AND ADDITIONS TO REPORT, 1908.

GERANIUM ROBERTIANUM, L., var. MODESTUM (Jord.). West Monkton, Somerset.—E. S. MARSHALL. "I think that the reference must be to *purpureum*, which has dark anthers. *G. modestum* occurs in profusion over three separate areas in Cornwall, all near the sea. There are no intermediates between it and *Robertianum*. It has a rose-coloured corolla just half the width of *G. Robertianum* mixed with it; corolla is more irregular, petals narrower and not overlapping, anthers bright yellow, not red, peduncles short, thick, and densely glandular-hairy, carpels blunt above, covered with raised lines and dots. I have tabulated the differences after examining many hundreds of the living plants at each locality, and

*G. modestum* appears to be a perfectly good species, which is steadily spreading from three well-defined centres in Cornwall. *G. purpureum* I only know as a ballast casual at Par; it has purple anthers, and a curious elongated zig-zag panicle in fruit. Mr. E. G. Baker carefully examined my specimens with authentically named specimens from France of *G. modestum*."—CLEMENT REID.

C. E. Moss, Esq. D.Sc., the Botanical School, Cambridge, has kindly undertaken to act as Distributor this year. Parcels should be sent post paid before Dec. 7, 1910. This earlier date will much advance the distribution and issue of Report.

Mr. E. W. Hunnybun, Mill Common, Huntingdon, who is making a most beautiful series of drawings of British plants, would be very much obliged if members would assist him in obtaining some of his *desiderata*, a list of which, with other information, will be gladly supplied by him. He will defray the cost of transmission and supply tins for the plants.

Mrs. Reid, 26 Ardilaun, Highbury, will be glad to receive seeds of British Plants. Members wishing to assist her are asked to communicate with her as to what species are needed.

Mrs. Adams, 14 Vernon Road, Edgbaston, is painting British Plants. Would members who are willing to assist in supplying specimens kindly let her know.

G. CLARIDGE DRUCE.

*REPORT OF THE DISTRIBUTOR FOR 1909.*

My first duty is to gratefully acknowledge the help I have received from the Rev. Augustin Ley, to whom I am indebted for the greater part of the critical work connected with last year's distribution, as he spent a week with me in examining the specimens. Mr. G. C. Druce also in like manner helped me much.

Though the number of sheets contributed has not been quite equal to that of recent years the plants represented have, I believe, been of general interest and have been on the whole well prepared—those of several contributors exceptionally so; one or two members, however, dry the specimens too brittle—a fault which militates against their preservation in the future. May I, in the interest of future Distributors, suggest that an additional label should be sent with each set, and especially that the boards in which the plants are sent should be  $18 \times 12$  ins.; many contributors use boards which just cover the plants they send, ignoring the fact that their return parcel will in all probability require boards of the maximum size—on this occasion I had to find no less than 20 boards to prevent injury to the specimens. It has been pointed out to me how very desirable it is that a reference number should be given to all specimens of the least critical character; several of the members already do this, and it would be well if we all followed their example.

The Club is greatly indebted to the following botanists for assistance :—

Messrs. W. Barclay, A. Bennett, C. Bucknall, Major A. H. Wolley-Dod, Dr. E. Drabble, A. B. Jackson, Rev. E. S. Marshall, Dr. C. E. Moss, Rev. E. F. Linton, H. W. Pugsley, Rev. W. M. Rogers, C. E. Salmon, F. N. Williams, J. W. White, and Professor Hackel and Pfarrer Kükenthal.

SPENCER H. BICKHAM,  
*Distributor, 1909.*

*March, 1910.*

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.
Bailey, C., <i>M.Sc.</i> , <i>F.L.S.</i> , Haymesgarth, Cleeve Hill, Glos. ... ..	55
Bell, W., Knighton Road, Leicester ... ..	57
Bickham, S. H., <i>F.L.S.</i> , Underdown, Ledbury ... ..	211
Britton, C. E., Limpsfield, Adela Avenue, New Malden, Surrey ... ..	130
Cryer, John, 182 Cliffe Wood Mount, Shipley, Yorks ... ..	266
Drabble, Eric, <i>D.Sc.</i> , 13 Claverley Grove, Church End, Finchley, N. ... ..	152
Druce, G. C., <i>J.P.</i> , <i>M.A.</i> , <i>F.L.S.</i> , Yardley Lodge, Oxford ... ..	434
Horwood, A. R., Corporation Museum, Leicester ... ..	78
Jackson, A. B., 1 The Avenue, Kew Gardens ... ..	33
Lcy, Rev. A., <i>M.A.</i> , Netherton, Brampton Abbots, Ross-on-Wye ... ..	517
Marshall, Rev. E. S., <i>M.A.</i> , <i>F.L.S.</i> , West Monkton Rectory, Taunton ... ..	165
Melvill, J. Cosmo, <i>M.A.</i> , <i>M.Sc.</i> , <i>F.L.S.</i> , Meole Brace Hall, Shrewsbury ... ..	74
Moss, C. E., <i>D.Sc.</i> , The Botany School, Cambridge ... ..	30
Riddelsdell, Rev. H. J., <i>M.A.</i> , St. Michael's College, Llandaff ... ..	560
Salmon, C. E., <i>F.L.S.</i> , Pilgrim's Way, Reigate ... ..	57
Shoolbred, W. A., <i>M.R.C.S.</i> , <i>F.L.S.</i> , St. Ann's, Chepstow ... ..	557
Travis, W. G., 9 Barton Road, Liverpool ... ..	31
Vigers, C. C., <i>M.D.</i> , Newquay, Cornwall ... ..	45
Waddell, Rev. C. H., <i>B.D.</i> , Vicarage, Saintfield, Co. Down ... ..	53
Wheldon, J. A., <i>F.L.S.</i> , 60 Hornby Road, Walton, Liverpool ... ..	135
White, J. W., <i>F.L.S.</i> , Warnham, Woodland Road, Clifton, Bristol ... ..	89
Wilson, A., <i>F.L.S.</i> , <i>F.R.M.S.</i> , 28 St. James' Road, Ilkley ... ..	76
Wolley-Dod, Major A. H., Pymont, Walton-on-Thames ... ..	101
Total	3,906

## NON-CONTRIBUTING MEMBERS.

- Adams, Mrs., 18 Vernon Road, Edgbaston.  
 Amphlett, John, *M.A.*, Clent Cottage, Stourbridge.  
 Babington, Mrs., Brookside, Cambridge.  
 Bayley-Balfour, Prof., *F.R.S.*, Royal Botanic Garden, Edinburgh.  
 Beeby, W. H., *A.L.S.*, Hildasay, Portsmouth Road, Thames Ditton.  
 Bromwich, Joseph, 19 Hamilton Gardens, St. John's Wood, N.W.  
 Bull, H., Lord Street, Southport.  
 Bullock-Webster, Rev. Canon G. R., Canford, Parkstone S.O., Dorset.  
 Butt, Rev. Walter, Oakwood, near Chepstow.  
 Carr, Prof. J. W., University College, Nottingham.  
 Comber, John, High Steep, Jarvis Brook, Sussex.  
 Crisp, Sir Frank, *F.L.S.*, Friar's Park, Henley-on-Thames.  
 Drummond, J. R., 11 Ennerdale Road, Kew Gardens.  
 Elwes, H. J., *F.R.S.*, Colesborne Park, Cheltenham.  
 Evans, A. H., *M.A.*, 9 Harvey Road, Cambridge.

- Cumming, J., Eastfield House, Rugby.  
 Ewing, P. S., The Frond, Uddingston.  
 Farr, E. H., *F.C.S.*, The Laboratory, Uckfield.  
 Foggit, T. J., Thirsk, Yorkshire.  
 Fortescue, W. Irvine, *J.P.*, 7 Bon Accord Square, Aberdeen.  
 Foster, H., 48 Ridge Mount, Upper Armley, Leeds.  
 Fox, Lee P., Lowood, Dewsbury.  
 Fraser, James, 18 Park Road, Leith.  
 Gasking, Rev. Samuel, *B.A.*, *F.L.S.*, *F.G.S.*, 26 Yew Tree Road, Walton, Liverpool.  
 Geldart, Miss, Colman Row, Norwich.  
 Gregory, Mrs., 34 Montagu Road, Cambridge.  
 Groves, J., 1 Sibella Road, Clapham.  
 Hanbury, F. Janson, *F.L.S.*, Brockhurst, East Grinstead.  
 Harford, W. A., Petty France, Badminton, S.O., Glos.  
 Hayward, Miss Ida, 7 Abbotsford Road, Galashiels.  
 Hilton, T., 1 Clifton Street, Brighton.  
 Hirst, C. P., Lockyer's Private Hotel, Llandudno.  
 Holland, Rev. M., Coventry Road, Coleshill, near Birmingham.  
 Hunnybun, E. W., Mill Common, Huntingdon.  
 Johnston, Lieut.-Col. Henry Halcro, Orphir House, Kirkwall, Orkney.  
 Joint, F. L., 56 South Street, Exeter.  
 Kelcey, Mrs. Foord, Kimble Rectory, Butler's Cross, S.O., Bucks.  
 Laidlaw, F. F., Ivanhoe Hotel, Great Russell Street, W.C.  
 Lester Garland, L.V., *M.A.*, *F.L.S.*, The School House, Victoria College, Jersey.  
 Mackenzie, Roderick, Sunnyclose, Henley-on-Thames.  
 Milne, R. M., Devon Lodge, Dartmouth, S. Devon.  
 Moss, C. E., *D.Sc.*, The University Herbarium, Cambridge.  
 Painter, Rev. W. H., 3 Lexden Gardens, Shrewsbury.  
 Palmer, Miss C. E., The Yews, Odiham.  
 Patey, W., c/o Roberts & Co., New Bond Street, London.  
 Peck, Miss C. L., Mairncombe House, St. Mary Church, S. Devon.  
 Pugsley, H. W., 81 Alexandra Road, Wimbledon, S.W.  
 Rea, Carleton, *M.A.*, *B.C.L.*, 34 Foregate Street, Worcester.  
 Reynolds, B., 18 Maxilla Gardens, W.  
 Rogers, Rev. W. Moyle, Chetnole, Grosvenor Road, Bournemouth W.  
 Trow, Prof. A. H., Glanhafren, Penarth.  
 Turrill, B., 1 The Avenue, Kew Gardens.  
 Vines, Prof. S., *F.R.S.*, *D.Sc.*, University Herbarium, Oxford.  
 Waterfall, C. B., 1 Hymer's Avenue, Hull.  
 Watkin, E. T., New College, Oxford.  
 Webster, Alfred, Billingshurst, Sussex.  
 Webster, George, Merton Cottage, Holgate, York.  
 Williams, F. N., *F.L.S.*, 181 High Street, Brentford.

*Adonis annua*, L. In a cornfield in the parish of Telcombe, East Sussex, v.-c. 14, in great quantity. Shown me by Mr. T. Hilton, July, 1909. Although not given for Sussex in 'Top. Bot.,' the above locality has been long known to Sussex botanists. It is one in which the plant is in as natural conditions as anywhere in England. Colonist is doubtless its correct designation.—G. C. DRUCE.

*Ranunculus Flammula*, L., var. Gravelly north shore of Ullswater, Cumberland, v.-c. 70. Quite prostrate and occasionally rooting; growing with *R. reptans*, L., Aug. 31, 1909.—S. H. BICKHAM. A frequent state of *R. Flammula* in such situations; scarcely nodal-rooting, and not var. *radicans*, Nolte (*pseudo-reptans*, Syme). The fruit is that of *Flammula*, and quite different from that of Mr. Bickham's *reptans* from the same station.—E. S. MARSHALL.

*Ranunculus reptans*, Linn. Gravelly north shore of Ullswater, Cumberland, v.-c. 70, Aug. 31, 1909.—S. H. BICKHAM. This was accepted, I believe, and then denied as the same as the Loch Leven plant. Certainly it is quite away from any of the procumbent forms of *Flammula*, and I think must pass.—A. BENNETT. This has the arching internodes and the fruit of *R. reptans*, though the leaves remind one rather of extreme *R. Flammula*, var. *radicans*, Nolte. I have not seen *reptans* growing in Britain; the plant which I once found plentifully on the muddy shore of a mountain-lake in Switzerland, at 6,000 feet, was much more slender and brittle, and more clearly a distinct species from *Flammula*.—E. S. MARSHALL.

*Ranunculus Borœauus*, Jord. Whitewell Bottom, Cotteswolds, West Gloucester, v.-c. 34, June 30, 1909. A few specimens of an exceptionally good strain of *Borœauus*. I have never seen it more characteristic. This form of *acris* is not abundant in the Bristol district, as it never constitutes the bulk of *acris* plants in a meadow, but is found only in field-corners and by waysides. Stems comparatively glabrous with very long lower internodes. Leaves finely divided and the segments interlacing.—JAS. W. WHITE.

*Ranunculus tomophyllus*, Jord. Pastures, Henbury, West Gloucester, v.-c. 34, June 14, 1909.—JAS. W. WHITE. This agrees well enough with the short description in Rouy and Foucaud, 'Fl. de France,' I., 102. But the name *tomophyllus* clearly points to a plant with deeply cut leaves; here they have broad and rather short segments. I therefore hesitate to accept them as Jordan's segregate.—E. S. MARSHALL. Kerner, who grew many forms of *R. acris*, told me he could place no reliance on the relative width of the leaf-segments. That is, a plant with them narrow might in

cultivation produce leaves with broad leaf-segments. Some of my plants from the Scottish coast with broad segments both Kerner and Freyn named *tomophyllus*, Jord.—G. C. DRUCE.

*Ranunculus acris*, L., var. Rocks at head of Glen Eunach, alt. 2,600 ft., E. Inverness, v.-c. 96. July, 1909 —ALBERT WILSON and J. A. WHELDON. This is too young to be certain about, but I believe it to be the same plant which Herr Freyn named *R. Nathorstii*, Berlin, the No. 20e of my 'List' (it is not the var. *pumilus*, Wahl.). *Nathorstii* has a wide range of variation, some large flowered forms from Lawers approaching *R. stipatus*, Jord., as was noticed by Herr Freyn, who remarked how much the specimens suggested the high-alpine *stipatus*, Jord. He believed *Nathorstii* to be the boreal form of *R. vulgatus*, Jord., and probably limited to Northern Britain. The very long curved beak of *Nathorstii* is a distinguishing feature.—G. C. DRUCE. Perhaps *R. acris*, var. *Nathorstii*, A. Berlin, the leaves being like those of plants from Ben Lawers and Ben Laiogh, but it is not unlike specimens of *R. acris*, var. *stipatus*, Jord., from Dauphiny, especially in the petioluled segments of the stem-leaf.—C. BUCKNALL. I have exactly the same thing from two neighbouring stations, viz., near the top of Cairntoul, at 4,000 feet, and on Braeriach, at fully 3,500 feet; specimens of the latter gathering were shown by Mr. Schoolbred in 1899 to Mr. E. G. Baker, who inclined to place them under *R. borealis*, Trautvetter. The horizontal rhizome is that of *R. Steveni*, Andrz.—E. S. MARSHALL.

*Ranunculus acris*, L., var. —? Rocks at head of Glen Eunach, Easterness, July, 1909.—J. A. WHELDON and A. WILSON. This may be *R. acris*, var. *Nathorstii*, A. Berlin, but it is not possible to say with certainty in the absence of fruit. In specimens so named from Ben Lawers and Ben Laiogh the carpels have long beaks generally spirally involute, the flowers are large, and the segments of the leaves are broader and less deeply divided. It may be, however, only a mountain form of var. *rectus*—sub.-var. *pumilus*, Rouy and Fouc. (*R. parvulus*, Clairv. non L.)—C. BUCKNALL.

*Ranunculus Ficaria*, L., forma. Weed in garden, Chepstow, Monmouth, v.-c. 35, April, 1909. This plant was noticed by several botanists as looking abnormal. It produces from the base long shoots with many leaves at some of the nodes which later on produce small tubers like the rootstock and sometimes a few rootlets.—W. A. SCHOOLBRED. Very different from the common form of poorer soils like the coal measures, where the Pilewort (as far as my experience goes) develops numerous nearly erect stems, much less branched, shows the characteristic leaf-bulbils very rarely, and

ripens fruit frequently. The specimens sent show the form frequent in the richer soil, e.g. of gardens, or in ditches on the clay.—H. J. RIDDELSDELL. All states of this plant may be seen in my garden; on dry banks the lobes of the leaf are so davaricate that the leaf is triangular, while in fat soil under a damp wall grows the best var. *incumbens* I ever saw—the nodal rooting tuber forming is common.—S. H. BICKHAM.

*Fumaria Boræi*, Jord.? Waste ground, near Kivernells, Milford-on-Sea, S. Hants, v.-c. 11, August, 1909—J. C. MELVILL. A form of *F. Boræi*, Jord., gathered late, and intermediate between the type and var. *serotina*, Clavaud.—H. W. PUGSLEY.

*Radicula amphibia* × *R. palustris*. By River 'Thames between Putney and Barnes, Surrey, v.-c. 17.—C. E. BRITTON.

In 'Journal of Botany,' p. 430, 1909, I record the occurrence of this hybrid, and briefly point out its characteristics. The series sent for distribution will enable the members to judge for themselves as to its origin. I suppose its affinity is most marked towards *Radicula palustris*, but the influence of *R. amphibia* is unmistakable.

The following notes were made from the living plants—

Stems many, erect, branched above, tall, almost as stout as those of *Radicula amphibia*. Leaves lanceolate in outline deeply pinnatifid, lateral lobes linear-lanceolate, irregularly lobed or almost entire, four to six pairs in number, terminal lobe almost half the length of leaf, tapering and shallowly irregularly lobed.

The flowers of the hybrid and the parent species are contrasted below.

<i>R. amphibia.</i>	<i>R. amphibia</i> × <i>palustris.</i>	<i>R. palustris.</i>
Petals about twice as long as sepals, spreading in upper part.	Petals one-fourth or one-third longer than sepals, ultimately spreading in upper part.	Petals erect shorter or as long as sepals.
Stamens prominent, longer than the petals or pistil and first protruded from the opening flower.	Stamens included, scarcely as long as pistil, which is first protruded from the opening flower.	Stamens included, as long as pistil, and with the stigma simultaneously protruded from the opening flower.
Flowers adapted for cross-fertilisation and frequently failing to set seed.	Flowers infertile, anthers not dehiscing and pollen grains not formed.	Flowers apparently self-fertile and seed abundantly produced.

The hybrid is very noticeable owing to the much-branched inflorescence with its abundant aborted silicules which are intermediate in shape between those of *R. amphibia* and *R. palustris*.

The style is well marked and almost as long as that of *R. amphibia*.—C. E. B.

Mr. Britton kindly sent me living specimens of this interesting plant, which I agreed with him in thinking to be the suggested hybrid. The fruit is too young to afford much evidence, but looks as if it would be sterile.—E. S. MARSHALL. A very interesting hybrid, and presumably correctly identified; the  $\times$  *R. erythrocaulis* (Borbás), teste Rouy and Fouc., 'Fl. de Fr.'—G. C. DRUCE. Hybrids are always more difficult to determine when dried than when growing, and no doubt Mr. Britton is right. The fruit seems that of *amphibia*, and the leaves might do for var. *variifolia*. Is this "variety" really a hybrid?—C. E. SALMON.

*Barbarea intermedia*, Bor. Clover Field, Lower Morden, Surrey, v.-c. 17, May 12, 1909. Correct.—S. H. BICKHAM, A. LEY, E. S. MARSHALL and C. E. SALMON.

*Erophila* —? Covering a gravel walk in a garden, Brampton Abbots, Herefordshire, v.-c. 36, April 6, 1909.—AUGUSTIN LEY. These specimens hardly do justice to the very distinct look of the growing plants, which caught my attention during a visit to Mr. Ley, soon after he had collected them. Broadly speaking, they must be referred to *E. verna*, E. Meyer; the foliage is not that of our usual form, and the capsules rather reminded me of *E. majuscula*, Jord., but the petals were not veined as in that segregate. We have in Britain at least two or three *Erophilæ* still to be worked out, for which French botanists' assistance is desirable.—E. S. MARSHALL.

*Sisymbrium orientale*, Linn. (*S. Columnæ*, Jacq.). Docks, Birkenhead, Cheshire, v.-c. 58, Aug., 1909.—J. A. WHELDON. Correct.—G. C. DRUCE.

*Brassica* —? Cliffs of the Steep Holmes, Somerset N., v.-c. 6, May, 1909. In some abundance, and as it occurs on the same cliff as the Peony, it has some bearing upon the status of the latter plant in our flora.—G. C. DRUCE. The stem-leaves are remarkably hispid with long, stiff hairs. It is not *Briggsii*, Wats., and seems to fit *B. Rapa*, a. *sativa*, Wats., best of our British plants; but I have much doubt about its proper name—E. S. MARSHALL. No ripe fruit. Seems to be *B. Rapa*, L.—C. E. SALMON.

*Lepidium campestre*, R. Br., var. *longistylum*, More. Ivory Hill, near Frampton Cotterell, West Glouc., v.-c. 34, July 29, 1909. A very distinct form that simulates *L. Smithii*, but the pouches are scaly. Stems many from the root, very leafy; styles twice as long as the notch. It agrees well with Rouy and Foucaud's description of their var. *foliosum*.

Since writing the above I have heard from Dr. A. Thellung, of Zurich, the monographer of *Lepidium*. He has noted a recent paper by Mr. Bucknall and myself in 'Journ. Bot.' (Bristol Plants); and points out that this plant is quite possibly the *L. heterophyllum*, var. *papillosum* (Dunn) Thell. in 'Journ. Bot.' 1896, p. 477. Mr. Dunn's note is instructive; and, had I referred to it earlier, I should probably have gleaned Dr. Thellung's idea independently. He suggests further the probability of More's plant being really the same thing; but as he has not been able to obtain a specimen the matter must stand over.—J. W. WHITE. It has a very different habit and clothing from the Kingsthorpe, Northants, plant collected by Messrs. Jackson and Dixon in 1905; which Rev. E. F. Linton, in the 'Watson Exch. Club Report,' determined as *L. campestre*, var. *longistylum*, More.—E. S. MARSHALL. There is *no doubt* that my *Lepidium* is the *papillosum* of *heterophyllum* and not a *campestre* form; but Dr. Thellung has not yet sent a formal note on it.—J. W. WHITE. With regard to the Kingsthorpe plant referred to, I may say that I cannot agree with Mr. Linton. My specimens were yellow-anthered *Smithii*, and lacked the characters which distinguish *campestre*. Whether Jackson's plants were quite identical with mine I am not quite sure. I agree that these specimens are a *Smithii* form.—G. C. DRUCE. I am inclined to name your plant *L. heterophyllum* (DC.) Benth. var. *leiocarpum*, Thell. (*Monogr.* 1906, p. 99), "silicula laevis vel minutissime papillosa," rather than var. *papillosum* (Dunn), Thell. *l.c.* p. 100, "silicula papillis squamiformibus concavis distinctius asperulae;" as the papillae on the fruit of your specimen are not sufficiently prominent for the latter. I certainly consider the *L. campestre*, var. *longistylum*, More (ex H. and J. Graves in 'Bab. Man. Brit. Bot.' ed. 9 (1904), p. 38), to be really *L. heterophyllum*.—A. THELLUNG.

*Hutchinsia petraea*, Br. Dunes of St. Oucens on the Quenvais, Jersey, April, 1906.—G. C. DRUCE.

*Viola palustris*, L. Coed Fynnon, near Pandy Mill, Carnarvonshire, v.-c. 49, June, 1909. Miss C. E. Palmer gathered this plant many years ago in the locality, and when Mrs. Gregory saw the specimens in my herbarium, she thought there was a strain of *epipsila* in them. This too was the opinion of a foreign expert. I therefore visited the locality this June, in order to collect a series. They must, however, be referred to *V. palustris*, L. The leaves in some instances were of considerable size.—G. C. DRUCE.

*Viola hirta*, L., type. North Leigh, Oxon., v.-c. 23, May, 1909.—G. C. DRUCE. *Viola hirta*, L.—E. S. GREGORY.

*Viola arvensis*, Murr., var. *subtilis* (Jord.). Plantation, Stow Rd., nr. Ford, v.-c. 33, E. Glos., July 21, 1909.—H. J. RIDDELS-

DELL. This plant should be called *V. segetalis*, Jord. It differs from *V. subtilis* in its larger size and broader mid-lobes of the stipules. In my specimen the mid-lobes of the upper stipules are certainly rather narrower than usual, but there is no doubt that it should come under *V. segetalis*.—E. DRABBLE.

*Viola* ——. Cultivated fields near Cwm, Flintshire, v.-c. 51, July 3, 1909.—J. A. WHELDON. This specimen is incomplete. The lower parts are absolutely necessary for correct diagnosis. This plant, however, appears to agree with specimens collected and received from several parts of England, which are without doubt *Viola contempta*, Jordan. It agrees well with C. Martin's "Pl. des Env. de Lyons, 1851, *Viola contempta*, Jord. ! Pl. nov. pug. (Jord.). Champs près de Mt. Pilar (Loire) 19 Juil." This sheet of C. Martin's Lyons plant is undoubtedly authentic *contempta*, Jordan, and it is very interesting to find this plant in Great Britain. The specimens in my own herbarium named "*Viola contempta*, Jordan, Boreau ! Cultivated fields, Sowerby, coll. J. G. Baker" (Baker's Plants of North Yorkshire, No. 17), do not agree with the Lyons plants.—E. DRABBLE.

*Viola agrestis*, Jord. Boythorpe, Derbyshire, v.-c. 57, July, 1908.—E. and H. DRABBLE.

*Viola agrestis*, Jordan. Boythorpe, Derbyshire, v.-c. 57. These specimens are poorly prepared, but they may be of interest to some members. They are very typical *agrestis*.—E. DRABBLE.

*Viola obtusifolia*, Jordan. Ince Blundell, S. Lancs., v.-c. 59 June, 1908 (E. D.) ; Spital, Chesterfield, Derbyshire, v.-c. 57, July, 1908 (E. and H. D.) ; Duckmanton, Derbyshire, July, 1909 (E. and H. D.). This is the common cornfield pansy of North-East Derbyshire.—E. DRABBLE.

*Viola polychroma*, Kerner, near Eyam, Derbyshire, v.-c. 57, July, 1908, E. and H. D. These plants are smaller flowered than usual, and the tints are paler. More typically the colours are brilliant blue and yellow. They are in other respects typical. A piece flowering in the first year is given with each sheet, as well as a later-flowering branch.—E. DRABBLE.

*Viola polychroma*, Kerner. Yellow-flowered plants, near Eyam, Derbyshire, July, 1908 (E. and H. D.).—E. DRABBLE.

*Viola saxatilis* Schmidt, var. *lepida* (Jord.). Bank by road, near Achilty Inn, E. Ross., v.-c. 106, July 15, 1909.—W. A. SHOOLBRED. Rev. E. S. Marshall sent me a more complete speci-

men from the same locality. The plant is certainly *V. lepida*, Jord. I named it thus for Mr. Marshall last summer.—E. DRABBLE.

*Viola Curtisii*, Forst., var. *Symeii*? Sand dunes of Rockfield, Wicklow; also seen near Black Head, Co. Clare, June, 1909, with petals bright golden-yellow, broader than those of the pale flowered Braunton Burrows plant, and in some instances the flowers one inch long. Some of the plants were of very large size, and a mass of blossoms.—G. C. DRUCE. This is *Viola Curtisii*, Forster (*Viola Curtisii*, Forst., var. *Forsteri*, H. C. Watson, 'Comp. Cybele Brit.' 1870. The flowers are brighter yellow than usual, but the plant seems to be fairly typical *Curtisii*.—E. DRABBLE. I consider this quite typical *V. Curtisii* = a. *Forsteri*, Wats. Syme says that *V. Symei* has flowers an inch long, and unusually large stipules, which does not fit Mr. Druce's plants; he adds that he does not think *V. Symei* really distinct from the original Braunton Burrows plant, on which Forster founded the species.—E. S. MARSHALL. Forster's description of *V. Curtisii* is, "flowers small, petals scarcely longer than calyx, yellow, with blackish branching radiating lines, the lateral paler than the lower, the upper whitish," which does not agree with the Irish plant.—G. C. DRUCE.

*Polygala grandiflora* (Bab.). Cliffs of Ben Bulben, Sligo, June, 1909. I have written this as above because it well appears to deserve sub-specific rank. The plant is curiously constant in its main feature along a considerable range of limestone cliffs. On the limestone and maritime cliffs of Clare a form of *P. vulgaris* occurs, but it does not approach this in the size and texture of the leaves, or indeed in the flower-characters.—G. C. DRUCE.

*Tunica Saxifraga*, Scop. At the foot of a land-cliff on ground adjoining a public path near the railway station, Tenby, Pembroke-shire, v.-c. 45, September 2, 1909. Last year I sent to the Club a single example of this alien, which had been collected in Tenby, in the summer of 1908, by a Manchester botanist, Mr. George Ginger, of Longsight. He had sent it to me to get its name, and mentioned that it grew in profusion near the railway station. I visited the locality the following year, and am able to send a good supply to the members. It had evidently been an escape from a garden at the top of the cliff, and had subsequently sown itself. Mr. Spencer H. Bickham tells me that he had noticed the same plant at Tenby two or three years ago. It is a widely-spread European species, its head-quarters being in the south-east of the continent.—CHARLES BAILEY. Right.—S. H. BICKHAM.

*Silene dichotoma*, Ehrh. On a sloping field formerly under cultivation, near Guitinghill Farm, Ford, E. Gloucester, v.-c. 33. July

21, 1909. The plant was in large quantity, and in two forms, both of which are here represented. The only difference which I could trace was in the size of the flowers: in one form the petals were about intermediate between those of the other form and those of *Lychnis alba*, L., which also grew close at hand.—H. J. RIDDELSDELL. Correct.—G. C. DRUCE, S. H. BICKHAM.

*Cerastium tetrandrum*, Curtis. Bromsberrow Heath, v.c. 34, June 28, 1909.—H. J. RIDDELSDELL. All the bracts in *C. tetrandrum* should be herbaceous, these are not.—S. H. BICKHAM. Surely *C. semidecandrum*, L. Flowers much smaller than in *C. tetrandrum*; capsules slightly curved; sepals broadly membranous at their margins and tips; bracts with their upper half membranous, instead of being wholly herbaceous.—E. S. MARSHALL. A rather large plant of *C. semidecandrum*, L.—H. W. PUGSLEY. The specimens sent me are *C. semidecandrum*; the viscid-glandular form.—J. W. WHITE. Certainly *C. semidecandrum*, note bracts.—G. C. DRUCE.

*Cerastium arvense*, L., var. *Andrewsii*, Syme. Limestone slopes of Cappanawalla, Co. Clare, June, 1909. Differs from the ordinary Midland plant by being greener, rigid and brittle, and the leaves being more recurved. It resembles specimens sent by H. C. Levinge in 1892 and 1894 from the same locality, passed as above by the Club, but as Syme himself says, "it is connected with the typical form by all intermedial stages."—G. C. DRUCE. "It is much more glabrous than the usual forms, and though the calyx and stem are both slightly hairy, yet the hairs are very short, and on the latter reflexed," 'Eng. Bot.,' p. 89, ii., 1864. How can this apply to these specimens, the peduncles, stems and calices are as hairy as the normal form—the leaves certainly are less so than usual, and do answer fairly well—but strange to say, Linnaeus 'Sp. Pl.,' ed. 1. 1, 428, 1753, says, "foliis lineari-lanceolatis obtusis glabris." I do not think Dr. Boswell would have put his name to this. Dr. Boswell says this plant has been named *C. strictum*, L., but agrees better with his *C. suffruticosum*, L. I think these specimens do come near a N. American form *C. arvense*, var. *oblongifolium*, n. var. ('Bull Torrey Bot. Club' xiv., 1887, p. 47 t. 68), Hollich and Britton. Of the smaller forms described under that as f. *Serpentina* these specimens seem to accord fairly well. The authors reduce Dr. Torrey's *C. oblongifolium*, 'Fl. U. S.' i. 460 = 'Fl. New York' i. 99, to the above variety. Then again these specimens are mostly 3—5 fl. Syme's plant usually one-flowered, rarely 2 fl.—A. BENNETT. It seems likely that Mr. Druce collected both the type and var. *Andrewsii*; the specimen forwarded to me for inspection has decidedly hairy leaves, and is, therefore, only the former, with somewhat rigid foliage, doubt-

less due to exposure on limestone.—E. S. MARSHALL. My specimens are abundantly pubescent and several flowered (excepting one small piece), so I should say it is nothing more than the type.—H. W. PUGSLEY.

*Arenaria tenuifolia*, L. Railway ballast, Lydney, v.-c. 34, June 17, 1909. Glabrous.—H. J. RIDDELSDELL. Yes, type.—S. H. BICKHAM, A. LEY and G. C. DRUCE.

*A. tenuifolia*, L. Minchinhampton Common, v.-c. 34, July 30, 1909. Calyx glandular; var. *hybrida* (Vill.). This is native.—H. J. RIDDELSDELL. Yes, var. *hybrida* (Vill.).—S. H. B. I agree.—E. S. M. This is var. *hybrida* (Vill.).—G. C. DRUCE. This seems to have the broad-based calyx which Rev. E. F. Linton ('Rep.' 1885, p. 124) said is characteristic of *hybrida*, Vill., but it does not agree very well with the description of that variety in 'Eng. Bot.' ed. 3, which would lead one to expect to see a plant much more glandular-hairy. These Minchinhampton specimens appear to be sparingly setose—glandular practically on the calyx alone. Corbière ('Fl. Norm.', p. 105) says he has seen authentic examples of *A. hybrida*, Jord., and it seems to him to be the same as *A. viscosa*, Schreb., which he (Corbière) describes as "toute couverte, surtout dans le haut, de poils glanduleux visqueux." Corbière also notes that the number of stamens and length of capsule are not reliable characters for distinguishing these varieties.—C. E. SALMON.

*Sagina Reuteri*, Boiss., var. *glabra*, Ingh. and Wheldon. Holt Lane Quarry, Whiston, S. Lancs., v.-c. 59. Leg. Rev. M. Toohey, S. J., November, 1909. Comm. W. G. Travis. Although Mr. J. A. Wheldon and I agree that the specimens doubtfully submitted last year under the above name are referable to *S. procumbens*, L., yet it should be pointed out that they differ from the description of that plant in having the central stem lengthening and flowering, and this therefore does not seem to be a constant character of *S. procumbens*. The present specimens are quite different, and evidently belong rather to *S. Reuteri*, Boiss., and, as they are entirely eglandular, Mr. Wheldon thinks they should be referred to the var. *glabra*, Ingh. and Wheldon, although they are rather more robust than the Yorkshire specimens first described under that name. While having the gracile habit of *S. apetala*, they cannot be referred to that species because the sepals do not spread, nor can they be referred to *S. procumbens* because all the stems lengthen and flower, and the pedicels are not nodding.—W. G. TRAVIS. Looks to me like unhealthy *S. apetala*—note the late date of gathering.—S. H. BICKHAM. I doubt this identification; is it not a weak form of *S. apetala*?—G. C. DRUCE.—This is type *apetala*.—C. BUCKNALL and J. W. WHITE. These

two specimens have the leaves somewhat ciliate, and are thus not glabrous; I think that I can also detect one or two minute stalked glands. They appear to me to be starved and rather drawn-out *S. Reuteri*; restricted *S. apetala* seems to be always much more glandular, with larger flowers.—EDWARD S. MARSHALL. Sepals seem right; material poor but I think correctly named.—C. E. SALMON.

*Montia fontana*, L., Herb. and Spec. Plant. *M. lamprosperma*, Chamisso. Near Pandy Mill, Carnarvonshire, v.-c. 49, June, 1909. Some specimens come under var. *boreo-rivularis* (Lindb.), other are the drier land form, but in all the seeds are reticulate and shiny, not dull-black and sharply tubercled as is the case in *M. verna*, Necker, which is the common form of southern England. See 'Rep.' for 1908, p. 331 ("*reticulate*" should be "*tuberculate*" in line 6 from bottom) as the character of *M. verna*, Necker.—G. CLARIDGE DRUCE.

*Tilia platyphyllos*, Scop. Wenlock Edge, near Longville, Salop, v.-c. 40, July 23, and September 2, 1909. See 'Journal of Botany,' 1909, p. 356. The situation of the tree was near the top of a steep wooded bank, where it was quite unlikely to have been planted. A second tree of this species was found in a similar situation at about two miles distance, near Presthope. The fruits appear very hairy for this species, and I regret that they are not mature enough to shew the specific characters plainly.—AUGUSTIN LEY. Apparently right, if the foliage may be made the test: the characteristic five-angled fruit is not, however, developed even in the September specimens.—H. J. RIDDELSDELL.

*Erodium cicutarium*, L'Hérit, var. *glandulosum*, Bosch. Broad Sands, S. Devon, v.-c. 3, Aug. 23, 1909, No. 1845. Named for me by Mr. Marshall. A very frequent form in sandy turf by the shore. It is always prostrate and much more grey-green than the type, besides being glandular and having much closer, more obtuse pinnæ and lobes. Its flowers seem to be almost as frequently rose as they are white. The petals are unspotted. It is not the same, I think, as my No. 1351 garden grown in 1905, from seed of a Shoeburyness plant and distributed through this Club, but I am growing the two side by side for comparison.—A. H. WOLLEY-DOD. I think that this comes under the variety as understood in Britian.—E. S. MARSHALL. Agreeing very well with specimens so named, from Deal, and from various parts of the Glamorgan coast. The glandular and jointed hairs which supply the form with its name are numerous and are mingled with the ordinary eglandular hairs of the species.—H. J. RIDDELSDELL.

*Erodium cicutarium*, L'Hérit, var. *glandulosum*, Bosch. Sandy ground, Hall Road, S. Lancs., v.-c. 59, Aug. 1909.—W. G. TRAVIS.

*Erodium cicutarium*, L'Hérit, var. *glandulosum*, Bosch. Sandy ground, Freshfield, S. Lancs., v.-c. 59, Aug., 1909.—W. G. TRAVIS. This interesting little Storks-bill, though densely glandular, is quite different in habit from the Deal (E. Kent) plant, originally named for me by Mr. Arthur Bennett as *E. cicutarium*, var. *glandulosum*, Bosch., and seems very near what has been called by British botanists *E. chærophyllum*, Cav. ; it may deserve a special name. Our forms of aggregate *cutarium* need a thorough revision.—E. S. MARSHALL. All these three lots of specimens (37, 38 and 39) are much alike, varying but little in the amount of glandular material. They represent a common coast form of the species.—J. W. WHITE.

*Impatiens glandulifera*, Royle. Established in quantity by the River Taff, at and above Llandaff, Glam., v.-c. 41, Sept., 1909. The flowers vary in colour. Fruiting freely.—H. J. RIDDELSDELL. As far as I can see, this plant is quite *eglandular* and glabrous. I have no particular knowledge of the garden plant so called ; but this looks much smaller and more slender than my recollection of it, and I suspect that it is distinct.—E. S. MARSHALL. Carleton Rea (' Journ. Bot.' p. 88, 1900) says the glandular petioled plant is var. *macrochila*.—G. C. DRUCE.

*Acer campestre*, L., var. *leiocarpon*, Wallr. In a wood between Radyr and St. Fagan's, Glam., v.-c. 41, June 4, 1909. I have not observed this variety in Glamorganshire until now.—H. J. RIDDELSDELL.

*Medicago sylvestris*, Fries. Railway bank, near Warrington, flowers July, 1908, fruit Oct., 1908. Collected by Mr. Guy Dunlop and sent to me for identification. The flowers are typically yellow or greenish with dark stripes. Very little of the fruit was received, but I have sent enough with each sheet for identification purposes. The legume forms from half to one complete circle.—E. DRABBLE. Yes.—E. S. MARSHALL and J. W. WHITE.

*Medicago lupulina*, L., var. *Willdenovii*, Boenn. Wingerworth, Derbyshire, v.-c. 57, August, 1909.—E. and H. DRABBLE. The glands on the fruit, and often also on the peduncles, are still well shown, though not so plentifully as in the fresh state.—E. DRABBLE. Yes ; with glandular hairs on the fruit. It would be interesting to know if these specimens came from cultivated ground or an apparently native habitat. The variety is said to be an introduction in Britain.—H. J. RIDDELSDELL. Correct. As doubts have been expressed about the status of this variety, I may mention

that it is abundant and unquestionably native about Pagham Harbour, W. Sussex.—E. S. MARSHALL. The variety is as native as the type in Britain.—G. C. DRUCE.

*Trifolium pratense*, L., var. Lydney, W. Glos., v.-c. 34, June, 1909.—H. J. RIDDELSDELL. Is it not var. *parviflorum*, Bab.?—G. C. DRUCE. We think under *parviflorum*.—S. H. BICKHAM and A. LEY.

*Trifolium arvense*, Linn., var. *perpusillum*, DC. Grassy roadside, Freshfield, S. Lancs., v.-c. 59, Oct., 1909.—W. G. TRAVIS. In good *perpusillum* the heads should be sub-globular, a few of these are elongated.—G. C. DRUCE. I think it may pass.—S. H. BICKHAM. Yes. A variable species; I doubt this being more than a form, at best.—E. S. MARSHALL.

*Trifolium procumbens*, L., var. *majus*, Koch (*T. campestre*, Schreb.). Fallow field, Ham, Surrey, v.-c. 17. Abundant in a weedy field between Ham and the River Thames. Very luxuriant plants, noticeable on account of the heads of bright golden flowers. Sep., 1909.—C. E. BRITTON. This has the larger heads (of a deeper colour) of *majus* with the long peduncles of *minus*.—C. E. SALMON. Yes. By no means always a large plant; on the cliffs of the Lizard district, where Rev. R. P. Murray and I first found it in 1886, it was much dwarfed.—E. S. MARSHALL. Yes, I have gathered the same thing in Carinthia.—J. W. WHITE.

*Lotus corniculatus*, L., forma *crassifolius*, Pers. Sand hills, New Brighton, Cheshire, v.-c. 58, June, 1908.—E. and H. D. Leaves very fleshy when fresh. I think it is generally admitted that *crassifolius* is a mere state and not a true variety.—E. DRABBLE. Yes—not very extreme.—G. C. DRUCE.

*Lotus tenuis*, Waldst. and Kit. Bourton Downs, E. Glos. v.-c. 33, July 17, 1909. This species usually occurs in localities where the possibility or probability of introduction is present. Bourton Downs is a remote and desolate grassy upland, some 800 ft. above the sea, where the plant occurs in quantity, and looks thoroughly native.—H. J. RIDDELSDELL.

*Lotus tenuis*, Waldst. and Kit. Lane near Kingscliff, Northants., v.-c. 12, July 17, 1909.—A. B. JACKSON and H. N. DIXON.

*Vicia sylvatica*, L., var. *condensata*, Druce, in 'Naturalist,' 1884, pp. 85, 6, and 'Rep. of Bot. Exc. Club,' 1883, p. 85. Originally found on the shingly shore of Port William, Wigton, v.-c. 74. This year I saw it in great quantities on the shingle about two miles north

of Drummore, in the same county, and nearly opposite the original station. It grew in compact masses a foot or two across; the leaves were firm in texture, often glaucous and smaller than the type, the flowers were in sub-capitate racemes of larger and darker coloured flowers. I am trying to grow it to see if the characters persist. Aug., 1909. It occurred also on the Kirkcudbrightshire coast.—G. C. DRUCE. Cultivation should prove whether this is a true variety. At present I incline to consider it only a starved *state*; a very similar form occurs on the exposed coast near Minehead, S. Somerset, whereas in more sheltered places it is quite normal.—E. S. MARSHALL.

*Vicia sepium*, Linn., var. *ochroleuca*, Bast. Near the Gas Works, Broadway, Worcestershire, v.-c. 37, July 14 and 21, 1909. I presume this is the variety included in Druce's 'List' under No. 688<sup>b</sup>. There were several roots growing with the type, but the flowering examples were few. The flowers were full primrose-colour, shading off into bright orange.—CHARLES BAILEY. Correct.—G. C. DRUCE.

*Vicia melanops*, Sibth and Sm. Rubble ground, near Ledbury, Hereford, v.-c. 36, April 30, 1909.—S. H. BICKHAM. From Eastern Europe.—G. C. DRUCE.

*Rubus suberectus*, Anders., form? Bushy margin of Lake Castlewellan, Co. Down, Sept. 17, 1894.—Coll. S. A. STEWART. Comm. C. H. WADDELL. This gathering was prepared for the Club by Mr. Stewart but not sent. The plant grows close to a thicket of *R. idaeus* near the lake. *R. suberectus* has not been found for many years in N.E. Ireland, but this was so named by Focke. It does not seem typical.—C. H. WADDELL. I see nothing to separate this from *R. suberectus*, Anders.—W. M. ROGERS.

*Rubus plicatus*, Wh. and N., *f. umbrosa* (or *subumbrosa*). Wood near Whitchurch, Glam., v.-c. 41, Aug. 3, 1909. Fide W. M. ROGERS, who adds: 'Most beautiful material, but I believe distinctly nearer to type *plicatus* (just as one gets it in semi-shade) than to var. *Bertramii*.' Basal lft. distinctly stalked.—H. J. RIDDELSDELL.

*R. robustus* × *rusticanus*. Tumbledown Hill, Glam., v.-c. 41, about five miles from Cardiff towards Cowbridge, Aug. 6, 1909.—H. J. RIDDELSDELL. Fl. pale red, i.e. intermediate. Sep. rising. Barren. Whole plant showing two-fold influence. Your suggestion must be right, I should think. It seems, as you say, just intermediate and quite barren.—W. M. ROGERS.

*Rubus iricus*, Rogers. Goonhaven, West Cornwall, v.-c. 1, August, 1909. Coll. W. TRESIDDER. I would like to call attention

to the very truncate and sometimes concave topped panicle, and to the concave leaflets, the latter character making the leaves not easy to press nicely. Mr. Tresidder tells me it is a particularly shade-loving plant. It will be also noticed that the leaves are much attacked by insects.—Comm. C. C. VIGURS. This looks like a rank state or form of *R. Schlechtendalii*, Weihe. It is considerably different from other West Cornwall plants which I have named *R. iricus* for Mr. Tresidder in both stem and panicle; and a comparison of the stem leaves with the description in my 'Handbook Brit. Rub.' shows conclusively that it cannot go under that species.—W. M. ROGERS.

*Rubus lasiocladus*, Focke. Under type. Llandewi-Skirrid, Monmouth, v.-c. 35, August 29, 1909. New County record.—AUGUSTIN LEY. I suppose best under *R. lasiocladus*, Focke, because of the pruinose stem and curved panicle-prickles suggesting a certain degree of relationship with *R. rusticanus*; but in leaves and panicle-outline it is nearer to *R. leucostachys* than Focke's plant.—W. M. ROGERS.

*Rubus lasiocladus*, Focke, var. *longus*, Rogers and Ley. With the last, at Llandewi-Skirrid, Monmouth, v.-c. 35, August 29, 1909. One large clump of each form was found; there appeared to be no intermediate forms. New County record.—AUGUSTIN LEY. I agree.—W. M. ROGERS.

*Rubus Borœanus*, Genev. Open ground in St. Leonard's Forest, Horsham, Sussex, v.-c. 14, July 17, 1909.—J. W. WHITE. Typical specimens of *R. Borœanus*, Genev., and as such very distinct from all allied species.—W. M. ROGERS.

*Rubus mucronatoides*, Ley. Edge of a coppice under Vron Hill, New Radnor, v.-c. 43, Aug. 11, 1909.—S. H. BICKHAM. Yes.—A. LEY. Beautiful examples of Mr. Ley's species, which of course require no confirmation from me.—W. M. ROGERS.

*R. anglosaxonicus*, Gelert., var. *vestitifomis* (Rogers). Lane at Radyr, Glam., v.-c. 41, Aug. 4, 1909. Yes, just my *vestitifomis*, though rather weaker than usual.—W. M. ROGERS. I cannot call this at all typical *vestitifomis*.—A. LEY.

*Rubus Radula*, Weihe. Ling Ground, near Taddington, E. Glos., v.-c. 33, July 25, 1909. In quantity over a considerable area on the high ground of the Cotswolds.—H. J. RIDDELSDELL, N. C. R., W. M. ROGERS.

*R. oigocladus*, Muell. and Lefv. Radyr, Glam., v.-c. 41, Aug. 4, 1909.—H. J. RIDDELSDELL. I agree with you in putting this

to *R. oigocladus*, Muell. and Lefv., as an aggregate species. It is especially interesting as being nearest to var. *Bloxamianus*, Colcm., in the shape of its lts. and perhaps in the colour and clothing of its stem and to my var. *Newbouldii* in the leaf-toothing, while in other respects most like our type as it occurs abundantly in Devon and Herefordshire.—W. M. ROGERS.

*Rubus Griffithianus*, Rogers. Scattered about at several stations near Marshbrook, Salop, v.-c. 40, picked in company with Rev. W. M. Rogers. New County record.—AUGUSTIN LEY.

*R. melanodermis*, Focke. Radyr, Glam., v.-c. 41, Aug. 4, 1909. Not uncommon in this neighbourhood.—H. J. RIDDELSDELL. Identical with the Dorset and Hants type.—W. M. ROGERS.

*R. dumetorum*, Wh. and N., var. *britannicus* (Rogers). Old Post Road, Bonvilstone, Glam., v.-c. 41, Aug. 6, 1909. It also occurs further on, along and near the Cowbridge Road.—H. J. RIDDELSDELL. I think a very strong form of my var. *britannicus*, though perhaps going off slightly from that towards var. *ferox*, Weihe. "It must always be remembered that in these *dumetorum* forms we have a series, with many intermediates."—W. M. ROGERS.

*Potentilla verna*, L. Grassington, Mid-West Yorks, v.-c. 64, May 17, 1909. This plant grows in abundance on limestone rocks (alt. 570 ft.) on the banks of the Wharfe near Grassington. It was first recorded for this district by the Contributor, May 15, 1902.—JOHN CRYER. A somewhat intermediate plant. Specimens still nearer *Crantzii*, which I gathered at Grassington, were suggested by Dr. Domin to be *alpestris* × *verna*, while the monographer of the genus, Herr. Th. Wolf says "Mc judice est forma (foliis brevidentatis) *Pot. alpestris*, Hall., f. (an forsā *P. alpestris* × *verna* ?)" I have it in cultivation.—G. C. DRUCE. Rightly named.—E. F. LINTON and J. W. WHITE. Seems correct, but looks different from the Bristol limestone plant I have gathered.—A. BENNETT. Yes. Not *P. Crantzii*; which also flowers much later, in Yorks.—E. S. MARSHALL. I should say *P. alpestris*, Haller fil. (*rubens*, Vill.).—C. E. SALMON. I believe this to be *P. Crantzii*, Beck (= *P. alpestris*, Hall. f.). The terminal tooth of the leaflets is not smaller than the others, as in *P. verna*, and, so far as can be seen from the specimens, the stipules of the radical leaves are ovate and not linear. Moreover, the flowers are too few and too large, with too long peduncles, for *P. verna*. This is no doubt smaller and somewhat different from the usual form of *P. Crantzii* as seen in Britain, but Swiss examples are sometimes still smaller, and there is a similar form to this in 'Herb. Mus. Brit.,' labelled—"Little Craigindal, S. Aberdeen, E. S. Marshall, July, 1886." With re-

gard to the date of flowering *P. Crantzii* is out in Switzerland in June, and a British specimen in 'Herb. Mus. Brit.' from Craig Breidden, Montgomery (alt. 1,000 ft.) is dated June 1, 1871. These specimens are apparently only just beginning to flower.—H. W. PUGSLEY.

*Potentilla norvegica*, L. Finchley, v.-c. 21, July 1909.—E. and H. D. Abundant on waste ground, which will be built upon before next season.—E. DRABBLE. Certainly not *norvegica*, which belongs to a ternate-leaved section of the genus. This must be *P. intermedia*, L., as is shown by the peculiar character of the lower stem-leaves. They have a tendency to become pinnate by trifid division of the terminal leaflet. "End Blättchen an dem mittleren StgB. manchmal 3 schnittig (Übergang zur Fiederung)"—'Koch Syn.' ed. iii. p. 810.—C. BUCKNALL and J. W. WHITE.

*Rosa hibernica*, Templeton, var. *glabra*, Baker. In shade, Tillysburn, Co. Down, July 23, 1909.—C. H. WADDELL. In the 'Supplement to Flora N. E. Ireland,' p. 165, it is stated M. Crépin places it under this variety, adding "un peu pubescente"! The situation is a shady one, and this may account for the want of pubescence. The flowers as a rule drop off, and fruit is not ripened.—C. H. WADDELL. Not var. *glabra*, but under type *hibernica*, differing only in being a little less hairy beneath the leaves. They are by no means glabrous; they should be absolutely so in var. *glabra*, in which moreover the shape of the leaflet differs considerably from these.—A. H. WOLLEY-DOD. Not var. *glabra*, but showing many leaflets nearly or quite glabrous below, whilst others have the midrib and some veins, and occasionally the surface more or less clothed with long hairs. In my specimens from Templeton's original station, the same seemingly glabrescent tendency is shown. This form is probably identical with that of the original station.—W. BARCLAY.

*Rosa pomifera*, Herrm. Mountain Rocks at Taren-'r-Esgob, Brecon, v.-c. 42, July 20, 1909.—AUGUSTIN LEY. Rather *R. Grenierii* or even *mollis*, to judge from the pinnate sepals, small fruits and eglandular not parallel-sided leaflets.—A. H. WOLLEY-DOD. I agree, not typical *pomifera*: *R. Grenierii*, Déség., is, I believe, placed under *R. pomifera*, Herrm., by most continental authors; the leaflets vary much in shape in my plant, often showing greater parallelism of the sides than I believe to be consistent with *R. mollis*, Sm.—The leaflets are not quite glandless.—A. LEY. The very small fruit contrasts greatly with (*e.g.*) the Tidenham, E. Gloster, plant; it seems to deserve a varietal name.—E. S. MARSHALL. I see nothing here but a variation of *R. mollis*, Sm.—W. BARCLAY.

*Rosa* — [ref. Nos. 680 A and 681 A]. Garve, E. Ross, v.-c. 106, July 23, 1909.—W. A. SHOOLBRED. A form of *suberecta*, Ley.—A. H. W.-DOD. *Suberecta*.—A. LEY. *R. pomifera*, var. *vogesiaca*, Rouy.—SUDRE.

*Rosa omissa*, Déség. Hordersley (on the road to Marshbrook), Salop, v.-c. 40, July 9 and Sept. 3, 1909.—A. LEY. Both peduncles and sepals are long for *omissa* and the leaflets are much less glandular beneath than usual. It seems to me to be between *submollis*, Ley, and *resinosoides*, Crép.—A. H. W.-DOD. This plant does not quite come up to the *best omissa* no doubt, but in my opinion the naked fruit often nearly globose and the large bracts mostly hiding the peduncles bring it much nearer to *omissa*, Déség., than to *resinosoides*, Crép., while the same characters joined to the glandular leaf-back effectually bar *submollis*, Ley; the glands of the leaf-back are unevenly developed as often.—A. LEY. Would like to see it in ripe fruit. It certainly is not typical *omissa*.—W. BARCLAY.

*Rosa omissa*, Déség., form. Hedge at Longville, Salop, v.-c. 40, July 14 and Sept. 1, 1909.—A. LEY. "Hardly *omissa*, the peduncles seem much too long and the leaflets quite eglandular. Either *R. Sherardi*, Davies, or *R. submollis*, Ley."—A. H. W.-DOD. I accept the correction and assent to its being *R. Sherardi*, Davies (not *submollis*, Ley); the subfoliar glands I thought I had spied seem all to have disappeared.—A. LEY. Not *omissa* certainly. Seemingly it would fit Mr. Ley's *Pseudo-mollis*, *Sherardi* or *Andrzeiowii* about equally well.—W. BARCLAY.

*Rosa omissa*, Déség., var. *resinosoides*, Crép. Sutton Walls, Herefordshire, v.-c. 36, Sept. 14, 1909.—A. LEY. "This reminds me strongly of *R. submollis*, as represented at South Kensington, in its large ellipsoid fruit and moderately long peduncles, but I suppose the subfoliar glands make it nearer *R. resinosoides*, Crép."—A. H. W.-DOD. The sepals fully persistent on the soft fruit transgress the character of the sub-group.—A. LEY. I should like to see more and better specimens to make sure that this is not a form of *R. mollis*, Sm., which I am inclined to think it is.—W. BARCLAY.

*Rosa omissa*, Déség., var. *submollis*, Ley. Presthope, Salop, v.-c. 40, July 14 and Sept. 2, 1909.—A. LEY. "Either that or *pseudo-mollis*, but I see no particular objection to *R. Sherardi*, Davies."—A. H. W.-DOD. The fruit not globular enough (especially the primordial fruit of a cluster) for *Sherardi*: the acicular fruit militates against *pseudo-mollis*: the prickle characters are inconclusive: it fits best to *submollis*.—A. LEY. This is a totally different plant from what Mr. Ley formerly sent me under the same name.—W. BARCLAY.

*Rosa suberecta*, Ley. 1. Kylesku, v.-c. 108, W. Sutherland. July 20, 1908 [ref. No. 3261]. 2. Inchnadamph, v.-c. 108, W. Sutherland, July 25, 1908 [ref. No. 3255]. A beautiful, characteristic plant, evidently common in that neighbourhood, and also seen at Invershin, v.-c. 107, E. Sutherland. Leaves hairy, very glandular beneath.—E. S. MARSHALL. Characteristic *suberecta*.—A. LEY. Certainly *R. suberecta*, Ley.—A. H. W.-DOD.

*Rosa* —. Garve, E. Ross, v.-c. 106, July 23, 1909 [ref. No. 682 A].—W. A. SHOOLBRED. "*R. suberecta*, Ley, showing some vinous colour but less than usual."—A. LEY. I agree.—A. H. W.-DOD. "*Rosa pomifera*, var. *vogesiaca*, Rouy."—SUDRE.

*Rosa* —. Near Achilty Inn, E. Ross, v.-c. 106, July 15, 1909 [ref. No. 672 A].—W. A. SHOOLBRED. "Under *suberecta*."—A. LEY. "A *suberecta* form more towards *mollis* than usual."—A. H. W.-DOD. "*Rosa pomifera*, var. *vogesiaca*, Rouy."—M. SUDRE.

*Rosa* — [ref. No. 676 A]. Kyle of Loch Alsh, W. Ross, v.-c. 105, July 21, 1909.—W. A. SHOOLBRED. *R. suberecta*, form.—A. LEY. I think a *suberecta* form.—A. H. W.-DOD. *R. pomifera*, Herrm., var. *vogesiaca*, Rouy.—SUDRE. These are the first specimens which I have seen of Mr. Ley's *suberecta*. They all agree well enough with his description, which is wide enough to include many other forms. Only I should like to see these in ripe fruit to make sure that the sepals persist long enough to come into the *omissa* group. I have doubts also as to whether the fruits of these would when mature be 'quite globose.'—W. BARCLAY.

*Rosa* — [ref. No. 677 and 678 A]. Kyle of Loch Alsh, W. Ross, v.-c. 105, July 21, 1909.—W. A. SHOOLBRED. *R. suberecta*, var. *glabrata* form with few glands.—A. LEY. I agree.—A. H. W.-DOD. *R. Jundzillii*, Bess., var. *trachyphylla* (Rau.).—SUDRE.

*Rosa Andrzejovii*, Déség., var. *pseudo-mollis*, Ley. Cwm-y-oy, Monmouth, v.-c. 35, in a mountain valley, July 1 and Aug. 30, 1909.—A. LEY. Not *pseudo-mollis*. I see no objection to var. *submollis*, Ley.—A. H. W.-DOD. This has curved thorns and practically eglandular leaflets, hence my name for it is *pseudo-mollis*, upon which, as Major Wolley-Dod has lately determined, sub-foliar glands are permissible.—A. LEY. I do not believe this can come into the *omissa* group, as the sepals are disarticulating on the fruit still far from ripe. It answers well enough to *R. Andrzejovii*, Ley, though it is certainly not Steven's plant.—W. BARCLAY.

*Rosa uncinata*, Ley. Marshbrook, Salop, v.-c. 40, July 19 and Sept. 3, 1909.—A. LEY. I agree that it must be near this,

though the leaflets are eglandular beneath.—A. H. W.-DOD. The leaflets are glandular, though not very so (glands vary much in number in this form); the main prickles show the true curve of *R. uncinata*.—A. LEY. This is the first specimen I have seen of *R. uncinata*, Ley. It does not show main prickles except three, two of which are not uncinata, and the third is doubtful. They are, however, stouter and broader based than in ordinary *tomentosa* forms. In one respect this specimen differs widely from Mr. Ley's description, i.e. the sepals are anything but nearly simple.—W. BARCLAY.

*Rosa scabriuscula*, Sm. [ref. No. 3395]. Wooded coast near Minehead, v.-c. 5, S. Somerset, Aug. 27, 1909. So named at the time by Major Wolley-Dod, confirmed by Sudre, who remarked that it appears also to correspond to *R. tomentosa*, var. *ovoidea*, Rouy.—E. S. MARSHALL. I should accept this as a variation of *R. scabriuscula*, Sm. I suppose the pressing has made the sepals appear more erect than they really are.—W. BARCLAY.

*Rosa scabriuscula*, Sm., var. *sylvestris* (Lindl.). Marshbrook, Salop, v.-c. 40, July 19, and Sept. 3, 1909. The leaf glands vary in quantity, but are often numerous. In my judgment quite over the border of *scabriuscula* into *sylvestris*, to which it answers also in the shape and size of the leaflets.—A. LEY. Between var. *sylvestris* and *R. scabriuscula*, and perhaps rather nearer the former, which differs from *scabriuscula* chiefly in its more glandular and more glabrous leaflets, but they are also often somewhat smaller and narrower, and the prickles more numerous, stouter and more falcate.—A. H. W.-DOD. I agree that this comes under *R. sylvestris*, Lindl.—W. BARCLAY.

*Rosa micrantha*, Sm., var. *permixta* (Déségl.). [ref. No. 3396]. Coast near Minehead, v.-c. 5, S. Somerset, Aug. 27, 1909. Gathered with Major Wolley-Dod. The same or a neighbouring bush had been so named last year by Prof. Dingler; and the present gathering is confirmed by Sudre. It appears to be distinguished from type by the smooth fruit and prickly flowering branches. Hardly what has been understood by *R. permixta*, Déséglise, in England, I think—seems to be a slight variety.—E. S. MARSHALL. *R. permixta* is hardly separable from *R. micrantha*. Besides the two characters pointed out by Mr. Marshall, more glabrous leaflets are attributed to it. I have not been able to discover exactly what British authors have hitherto meant by *R. permixta*, but it has been assumed to be an *Eglantheria* form, not a *micrantha*.—A. H. W.-DOD.

*Rosa under lutetiana*, Léman. Sutton Walls, Herefordshire, v.-c. 36, Sept. 14, 1909. Leaves elliptic, narrowed at both ends

shining.—A. LEY. “*Lutetiana*, Lém., var. *nitens*, Desv., or perhaps *fallens*, Déség., from the pubescent petioles.”—A. H. W.-DOD.

*Rosa biserrata*, Mérat. Brampton Abbots, Herefordshire, v.-c. 36, Aug. 13, 1909.—AUGUSTIN LEY. I should so label it.—A. H. W.-DOD. I should say *R. dumalis*, Bechst.—W. BARCLAY.

*Rosa Burnati*, Christ. Coughton, Herefordshire, v.-c. 36, Aug. 7, 1909. Gathered by me for *R. Déséglisei*, Bor.—A. LEY. This name has been given by M. Sudre to specimens from three or four British localities which this closely resembles, though none of them agree very well with Christ's description. It should be a member of the *dumetorum* group. Lanky, small, irregularly or slightly biserrate leaflet, very slightly hairy beneath, and usually yellowish green in colour. The prickle should be long and straightish, and the styles villous. I should like to have got the name of this gathering confirmed before circulating it.—A. H. W.-DOD.

*Rosa inconspicua*, Déség. Mordiford, Herefordshire, v.-c. 36, Sept. 14, 1909.—A. LEY. I cannot make this out to be anything but a form of *R. inconspicua*, Déség., differing from the type in its smaller less biserrate leaflets, its subglobose glandular-hispid fruit and its very hispid almost woolly styles. The hispid fruit suggests *R. aspernata*, Déség., but in that species it is usually much more strongly armed and all the above objections equally apply.—A. H. W.-DOD. This is what I have understood as *R. verticillacantha*, Mérat.—W. BARCLAY.

*Rosa agraria*, Rip. Coughton, Herefordshire, v.-c. 36, Aug. 7, 1909. The name is Major Wolley-Dod's; I had supposed it to be *R. Lematrei*, Rip.—AUGUSTIN LEY. “A small leaved form with ill-developed fruit.”—A. H. W.-DOD. “This cannot be *R. agraria*, Rip., if descriptions are worth anything. *R. agraria* should have simple teeth, whilst this plant has them irregularly double with many of the secondary teeth gland-tipped. If you take into account the one or two glands on one or two of the peduncles, you might call it a very weak form of *R. verticillacantha*, Mérat.”—W. BARCLAY.

*Rosa rhynchocarpa*, Rip. Mountain-side, Crickhowell, Brecon, v.-c. 42, August 23, 1909. I found a very similar plant last year at a mountain station about eight miles from this one; this 1908 plant was sent both to Sudre and Dingler, and they did not think it *exactly* Ripart's rose.—AUGUSTIN LEY. I think correctly named, but much smaller in all its parts than usual. It is a variety of the *lutetiana* sub-group, named from its peculiar shaped fruit.—A. H. W.-DOD.

*Rosa hispidula*, Rip. Glewstone, Herefordshire, v.-c. 36, September 13, 1909. The present plant was characterised by very stout, sharp uncinatè prickles.—AUGUSTIN LEY. Certainly appears nearest this, but it is a very unsatisfactory and ill-defined species. These seem to be at least equally near *R. incerta*, Déség.—A. H. W.-DOD. Seems to me to come into the group of *R. Déséglisei*, Bor. Perhaps it might be considered as a sub-variety of that under the name of *incerta*, Déség., owing to the deciduous villosity, though in some minor points it does not agree with the description of *incerta*.—W. BARCLAY.

*Rosa Déséglisei*, Bor. Brampton Abbots, Herefordshire, v.-c. 36, August 12, 1909.—AUGUSTIN LEY. Quite correct I think. In this species the stalked glands on the peduncles are few and weak, and often almost entirely absent on many of them.—A. H. W.-DOD. Yes.—W. BARCLAY.

*Rosa* ——. Garve, E. Ross, v.-c. 106, July 23, 1909 [ref. No. 683 A].—W. A. SHOOLBRED. "*R. subcristata* (Baker)."—A. LEY. "I think near *complicata*, Gren., but that is almost identical with *subcristata*." If the identity can be proved, Grenier's name must fall, Baker's being 11 years older.—A. H. W.-DOD. "*R. glauca*, var. *venosa*, Déség."—SUDRE. *R. glauca*, Vill., var. *subcristata* (Baker).—W. BARCLAY.

*Rosa* ——. Garve, E. Ross, v.-c. 106, July 23, 1909 [ref. No. 679 A].—W. A. SHOOLBRED. "*Rosa Bakeri* (Déség.), extreme form."—A. LEY. Like No. 684 A, this is one of those forms which connect the groups of *R. coriifolia* and *R. tomentosa*, of which *R. Bakeri*, Déség., is one. I see no objection to that name but it appears equally near *R. tomentosa*, var. *obovata*, Baker, which I now think is really a *coriifolia* form, as Crépin has already asserted. It differs from Mr. Baker's type in its leaflets being smaller, its prickles longer, more slender, and less hooked, and in its glandular sepals, in all of which points it recedes from the *coriifolia* group towards that of *R. tomentosa*. M. Sudre labelled this "*R. tomentosa*, Sm., var. *très curieuse*."—A. H. W.-DOD. This certainly comes into that group of *R. coriifolia*, Fr., of which var. *Bakeri* of the Monograph forms a part. It is doubtful, I think, if Déséglise's plant belonged to the same group.—W. BARCLAY.

*Rosa coriifolia*, Fr., var. Garve, E. Ross, v.-c. 106, July 23, 1909 [ref. No. 684 A].—W. A. SHOOLBRED. "*Rosa Bakeri*!"—A. LEY. "I think perhaps nearest *R. Bakeri* or *Watsoni*."—A. H. W.-DOD. "A form of *coriifolia* near *pseudo-cinerea*, Rouy."—SUDRE.

*Rosa seposita*, Déségl.? [ref. No. 1855]. Slopes near Pebblecombe Hill, Surrey, v.-c. 17, Sept. 17, 1909. A very curious species of the *Stylosa* group. Mons. Sudre labelled it *R. stylosa* var. *parvula*, Sanz. and Maill. (as a species), but that should have its toothing mostly simple, though I have seen an authentic specimen equally unarmed. *R. anceps*, Bout., has biserrate leaflets and a weak flaccid habit, but has hispid glandular peduncles, though I believe smooth peduncled forms of it are known in Central Europe. On the whole it agrees best with *R. seposita*, Déségl., which has biserrate leaflets, smooth peduncles and hispid styles, as in the Pebblecombe plant, though many of the styles are glabrous.—A. H. WOLLEY-DOD. I don't know anything of *R. seposita*, Déségl., but this seems to come pretty near *R. hemitricha*, Rip.—W. BARCLAY.

*Pyrus Malus*, L., var. *sylvestris* [ref. No. 695]. Native in wood, near Loch Achilty, E. Ross, v.-c. 106, July 15, 1908. New County record.—W. A. SHOOLBRED. Is not this the common form in Scotland?—G. C. DRUCE. The really wild Crab-tree; distinct from the progeny of cultivated apples. I believe that, if carefully looked for, this will prove to be more common than is generally supposed.—J. W. WHITE.

*Pyrus latifolia*, Syme (*Sorbus latifolia*, Pers.). [ref. No. 3370]. Near Conan, v.-c. 106, E. Ross, July 16, 1909. A single tree, which I first found in this station in 1892; about 40 feet high, vigorous, and fruiting freely. Dr. T. Hedlund, the monographer of *Sorbus*, names it *S. latifolia*. Status uncertain; it may have been planted, though not obviously introduced. The European distribution of the species is against its occurrence as a native in Scotland; but I have not seen it in gardens.—E. S. MARSHALL. *Sorbus latifolia*, Hedlund.—A. LEY. Excellent *latifolia*, akin to the Minehead plant rather than to that of Bristol.—J. W. WHITE. Also sent by W. A. SHOOLBRED [ref. No. 694].

*Pyrus Aria*, Ehrh., var. Hill between Farmcote and Ford, E. Glos., v.-c. 33, July 19, 1909. "I believe this to be what Hedlund calls *Sorbus Aria sensu stricto*."—A. LEY. Leaves small and narrow, deeply serrate-lobed, cuneate-based.—H. J. RIDDELSDELL. Hedlund must not be quoted as pronouncing this to be "*S. Aria sensu stricto*." He now (Dec. 1909) writes that he has never seen *S. Aria sensu stricto* from Britain.—A. LEY. This is not typical *P. Aria* as I have learnt it, but a variation (trivial it may be) of a most variable tree.—J. W. WHITE.

*Pyrus Aria*, Ehrh., *forma*. Great Doward, Herefordshire, v.-c. 36, July 26, 1909. "One of the forms lying between *Sorbus Aria sensu stricto* and var. *incisa* (Reichb.)," Hedlund.—A. LEY. Not typical *P. Aria* as I understand it.—J. W. WHITE.

*Pyrus Aria*, Ehrh., *forma*. Cheddar, Somerset, v.-c. 6, June 28, 1909. I believe this to be equivalent with plants sent to Prof. Hedlund in 1908, and pronounced by him to be "*Sorbus Aria sensu stricto*."—AUGUSTIN LEY. Although Cheddar is in my district of the Bristol coal-fields, Mr. Ley knows its critical plants far better than I do. I can only say that this gathering seems to be another of the numerous variations in leaf-texture and outline that occur on our limestone hills.—J. W. WHITE.

*Pyrus Aria*, Ehrh., var. *incisa* (Reichb.). Cheddar Gorge, Somerset, June 28, 1909. Confirmed by Professor Hedlund. *Two trees*.—AUGUSTIN LEY. This at any rate appears to be a variety worthy of distinction. I am glad to have some authentic specimens.—J. W. WHITE. Just this plant was found by me near Ewelme in 1882. See 'Flora Oxford.' p. 114, but Syme would only name it 'a form of *Aria*.'—G. C. DRUCE.

*Pyrus Aria*, Ehrh., var. *rupicola*, Syme? Great Doward, Herefordshire, July 26, 1909. Mountain rocks, Taren-r-Esgob, Monmouthshire portion; July 1, 1909. In a long and interesting note on these plants, Prof. Hedlund pronounces them to differ widely from *Sorbus Aria* in conformation of the pollen, and to stand much nearer to *Sorbus obtusifolia* and *S. salicifolia*. He believes that Syme placed them along with *S. salicifolia* in his var. *rupicola* of *Pyrus Aria*, and accepts, provisionally, Syme's name of *rupicola* for them. *S. salicifolia* has longer, narrower cuneate-based leaves, and may be known from the plant in question by the much darker colour of the sepal underneath the loose floccum. I have been used to join these two plants together as falling under Syme's var. *rupicola*, and I believe Syme has so named specimens of the plant in question for me; but he certainly included in his variety the plant named *Sorbus salicifolia* by Hedlund. The difference in the colour of the sepal works out true in my herbarium.—AUGUSTIN LEY. Later (January, 1910), Hedlund writes that further investigation has satisfied him that Syme's *P. Aria*, var. *rupicola*, is identical with *S. salicifolia*, Hedlund, and cannot be taken to include the present plant.—A. LEY.

*Pyrus intermedia*, Ehrh. Cheddar, Somerset, v.-c. 6, June 28, 1909. The plant we have been calling *intermedia*, Ehrh., in Britain is about to be described by Prof. Hedlund under another name, as a sub-species very close to *Sorbus Mougeoti*, Soy. et Godr. It will be better to await his description before saying more about it. These specimens have greyer felt than is usual with *P. intermedia*.—AUGUSTIN LEY. The authorities for the name are Godron and Soyer-Willemot. It is the *Pyrus intermedia*, var. *Mougeoti* of my 'List.'—G. C. DRUCE.

*Pyrus scandica*, Asch. (*Sorbus scandica*, Fr.). Near Garve, E. Ross, v.-c. 106, July 10, 1909 [ref. No. 3372 A]; and also sent by W. A. Shoolbred [ref. No. 692]. Named by Dr. T. Hedlund (through Rev. A. Ley) as *Sorbus scandica*. Mr. Shoolbred and I found six trees in all, one of them (my 3372 A) evidently of great age, and fruiting abundantly. So far as we can judge, the plant is native there; it grows in uncultivated ground, and we did not see it in gardens. It very closely resembles Mr. N. E. Brown's figure of *P. intermedia*, Ehrh., in 'E. B.' ed. 3, Supplement. Syme's illustration of *P. scandica* represents quite a different plant, probably *P. decipiens*, Bechst. I believe that the Arran *P. scandica*, Bab., is *Sorbus arranensis*, Hedlund, to which Mr. Ley, at first sight, inclined to refer our gatherings. Whether *P. intermedia*, Ehrh. (the oldest name) is really the same as *P. scandica*, Asch., I do not know. Anthers brownish pink.—E. S. MARSHALL. Yes.—A. LEY. Prof. Hedlund (in lit. Jan. 1910) acknowledges *S. intermedia*, Ehrh., to be the name which has to be adopted under the Vienna rules.—A. LEY. Did Ehrhart establish *Sorbus intermedia*; if so, where?—G. C. DRUCE.

*Saxifraga*, [ref. No. 540]. Brandon Mountain, Co. Kerry, at about 3,000 feet, growing in dense cushions on vertical rock faces, Sept. 10, 1906. It was of course much over flower. I suspect this is what has been recorded as *S. groenlandica* or *S. caespitosa* from that mountain. There are two species growing in these cushions, one with much more pubescent foliage when young, with shorter flower-stalks, and flowering earlier. Hitherto I have been unable to obtain Dr. Engler's opinion on them. I strongly suspect their alliance with Pyrenean rather than with northern species.—G. C. DRUCE. The specimen before me is without inflorescence, and therefore not properly determinable. As far as foliage goes, it very well matches a plant which I gathered low down on Brandon Mountain (bad weather prevented my reaching the top) in 1902, though that was much more closely tufted. I have made a careful comparison with the descriptions in Engler's Monograph (1872), and believe that both are more probably referable to *S. groenlandica*, L., than to *S. mixta*, Lapeyr., or *S. Iratiana*, F. Schultz (*S. groenlandica*, Lapeyr., non Linn.), which is there treated as a variety of *S. mixta*. The acute leaf-segments seem to be quite decisive against these, as well as against true *S. groenlandica*, L. It is highly probable that the second tufted plant mentioned by Mr. Druce may be *S. groenlandica* × *rosacea* (*decipiens*), as the species of this section hybridize very readily.—E. S. MARSHALL.

*Saxifraga Sternbergii*, Willd. Origin, Black Head, Co. Clare; cult. Ledbury, May 21, 1909.—S. H. BICKHAM.

*Callitriche palustris*, Linn. Old brickpit, Church Stretton, Salop, v.-c. 40, July 18, 1909.—S. H. BICKHAM. In *C. vernalis*, Koch, the fruit is longer than broad; here it is broader than long, and the lower leaves have the emarginate hooked tip characteristic of *C. intermedia*, Hoffm. (*hamulata*, Kuetz.), to which I feel sure that Mr. Bickham's plant must be referred. The name *C. palustris*, L., should be dropped, as being quite vague and uncertain of application; just as in the case of *Rosa villosa*, L., cited as an example in the Vienna Code.—E. S. MARSHALL. Hegelmaier in his monograph of the genus insists that *ripe* fruit is essential for correct determination of specimens—the fruit on these is not ripe. *C. palustris* has the fruit distinctly contracted from the middle to the base, and the section is very different. I agree with Mr. Marshall that it is *C. intermedia*, Hoffm.—A. BENNETT.

*Astrantia major*, Linn. Wood near Stokesay, Salop, v.-c. 40, July 20, 1909.—S. H. BICKHAM. I see no reason against its being native; apparently it occurs plentifully in two or three woods of long standing.—E. S. MARSHALL. I doubt its being native.—G. C. DRUCE.

*Ammi majus*, L. Near Letcombe Camp, on the downs above Wantage, Berks., v.-c. 22, Oct. 16, 1909.—H. J. RIDDELSDELL. Correct.—S. H. BICKHAM, A. LEY, G. C. DRUCE.

*Daucus Carota*, L. Pasture near Seer Green, Bucks., v.-c. 24, Sept., 1908. I thought this autumnal condition might be acceptable to members.—G. C. DRUCE.

*Sambucus nigra*, Linn. Seedlings, to show the simple early leaves. Walton, S. Lancs., v.-c. 59, Sept. 1909.—J. A. WHELDON.

*Galium verum*, L., var. *littorale*, Bréb. Sand hills, Wallasey, Cheshire, v.-c. 58, July, 1909, and sands, Cleethorpes, Lincs., July, 1909.—E. and H. D. This is the usual sand-dune and seaside form and is I think correctly named as above. Whether it is var. *maritimum*, DC. I am not sure, but suspect it is not extreme enough.—E. DRABBLE. This agrees exactly with Rouy's description; but it also corresponds with the description in the *Prodromus* of var. *maritimum*, DC. ('Fl. Fr.', iv. 248), first observed in Brittany, which is an earlier synonym, and supersedes de Brébisson's name.—E. S. MARSHALL. Correct.—G. C. DRUCE, A. LEY.

*Galium erectum* × *verum*. Woodwalton Fen, Hunts., v.-c. 31, Coll. E. W. HUNNYBUN, Aug. 26, 1909; Comm. S. H. BICKHAM. Mr. Hunnybun states that *G. Mollugo* does not grow there. Mr. Druce passed all the sheets.—S. H. BICKHAM.

*Galium Mollugo* × *verum*. Hinchwick and Ford, E. Glos., v.-c. 33, July, 1909. In each case growing with the parents, and making a good intermediate.—H. J. RIDDELSDELL.

*Galium Vaillantii*, DC. Waste ground, Oxford, v.-c. 23, with *Erigeron canadense*, *Vicia villosa* and other casuals and aliens, Sept. 1909. Seen also near Rye House, S. Essex, in 1907.—G. C. DRUCE. Correct. Besides the different habit, and the smaller, greenish flowers, this species is readily distinguishable from *G. Aparine* by its much smaller fruit, without tubercles at the base of the hooked prickles.—E. S. MARSHALL.

*Valeriana pyrenaica*, L. By the Rea Brook, near Shrewsbury, Salop, v.-c. 40. Getting naturalized there, June, 1909.—J. COSMO MELVILL.

*Filago spathulata*, Presl. Chalky field, Chipstead, Surrey, v.-c. 17, Aug. 14, 1909.—C. E. SALMON. Correct.—G. C. DRUCE.

*Bidens cernua*, L. Margam Moors, Glam., v.-c. 41, Sept. 19, 1909. A rare plant in Glamorganshire, the first time I have gathered it there. Close by also grows in very small quantity *Catabrosa aquatica*, a N. C. R.—H. J. RIDDELSDELL.

*Senecio Cineraria* × *Jacobaea*. Garden origin; Brampton Abbots, Herefordshire, v.-c. 36, August 11 and September 11, 1909. In 1908 I observed seedlings coming up in a garden where *S. Cineraria*, DC., had been cultivated for some years, looking different from the parent. These developed in 1909 into large bushy plants, of very vigorous growth, in habit, leaves and flowers just midway between *S. Cineraria* and *S. Jacobaea*.—AUGUSTIN LEY. These species readily hybridise. The offspring is × *S. albescens*, Burb. and Colgan. It was first noticed in Britain by Borrer in 1836 at Bishop's Castle, Salop. He 'thought it might be a hybrid between some wild *Senecio* and *Cineraria maritima*.' See Herb. Babington at Cambridge.—G. C. DRUCE. I have seen it near Torquay, where *S. Cineraria* grows freely.—S. H. BICKHAM.

*Cnicus tuberosus*, Roth. Origin, Avebury, Wilts., cult. Llandaff, 1909. These are sent to complete the series sent last year.—H. J. RIDDELSDELL.

*Crepis fatida*, L. Waste ground near the railway, Newhaven, E. Sussex, v.-c. 14, July, 1909, in countless numbers, shown me by Mr. T. Hilton. The conspicuous white pappus is a good mark of distinction, but in the flesh it could scarcely be mistaken for any other British species.—G. C. DRUCE.

*Hieracium pratense*, Tausch. In crevices of wall and on bank near Shrewsbury, Salop, v.-c. 40, July, 1909.—J. C. MELVILL.

*Hieracium anglicum*, Fr., var. *acutifolium*, Backh. [ref. No. 707]. Cliffs, Glas Carnoch Burn, E. Ross, v.-c. 106, July 24, 1909.—W. A. SHOOLBRED. A form under *anglicum*, intermediate and not a distinct variety.—E. F. LINTON. I agree with Mr. Linton's remark.—A. LEY.

*Hieracium anglicum*, Fr. × *H. hypochæroides*, Gibs., var. *lancifolium*, W. R. Linton, v.-c. 64. Linton near Skipton, June 20, Kettlewell, July 4, and Gordale, July 11, 1909, Yorks. Found growing amongst limestone crags in each locality with both parents.—JOHN CRYER. Yes; these specimens seem all to be intermediate between the parents suggested, although some shew predominating influence of the *anglicum* parentage.—A. LEY. The specimen I have is fairly intermediate between the var. *lancifolium* and *H. anglicum*, Fr.—E. F. LINTON. The beautifully prepared specimen received by me has a great look of *H. anglicum*, at first sight; but W. R. Linton, in his 'British Hieracia,' remarks that *H. hypochæroides*, var. *lancifolium*, is "apparently the *H. anglicum*, var.  $\eta$  of 'Bab. Man.,' ed. 9, p. 241" [as *anglicum* × *hypochæroides*], and Mr. Cryer's plant seems to me practically the same as an authentic specimen of var. *lancifolium* from Kettlewell. The head-clothing is almost identical, and unlike what hybridity with *H. anglicum* would produce; the ligule-tips, also, are perfectly glabrous, whereas in *anglicum* they are very ciliate. I therefore name it *hypochæroides*, var. *lancifolium*, without doubt.—E. S. MARSHALL.

*Hieracium rubicundum*, F. J. Hanb. Glascarnoch River, near Aultguish Inn, v.-c. 106, E. Ross, July 6 [ref. No. 3348], and 24 [ref. No. 3445], 1909. Styles dingy yellow; ligule-tips glabrous. Confirmed by Rev. E. F. Linton.—E. S. MARSHALL. Also sent by W. A. Shoolbred [ref. No. 711]. I agree.—A. LEY.

*Hieracium caledonicum*, F. J. H. [ref. No. 731]. Garbad Burn, Strath Garve, E. Ross, v.-c. 106, July 17, 1909.—W. A. SHOOLBRED, "Yes, *caledonicum*."—A. LEY. "*H. rubicundum*."—E. F. LINTON.

*Hieracium nitidum*, Backh. Allt Guibhas Beg, E. Ross, v.-c. 106, Rocky gorge, July 6, 1909 [ref. No. 718], and by stream, July 24, 1909 [ref. No. 725].—W. A. SHOOLBRED. Yes.—A. LEY and E. F. LINTON.

*Hieracium Carenorum*, F. J. H. [ref. No. 704]. Beallach Corrie, Strath Garve, E. Ross, v.-c. 106, July 22, 1909.—W. A. SHOOLBRED. "Why not *argenteum*, var. *septentrionale*? An

Oread."—A. LEY. Very near *septentrionale* but even nearer *Carenorum*.—F. F. LINTON. A reduced Alpine state of *Carenorum*.—E. S. MARSHALL.

*Hieracium hypochæroides*, Gibs., var. *saxorum*, F. J. H. [ref. No. 747]. Cliff and railway cutting, Ravens Crag, near Achterneed, E. Ross, v.-c. 106, July 7, 1909.—W. A. SHOOLBRED. Correct. *H. hypochæroides*, var. *saxorum*, often loses the blotches of the leaf in the flowering stage: but they are always seen in seedlings. I consider this good *saxorum*.—A. LEY and E. S. MARSHALL.

*Hieracium callistophyllum*, F. J. H., var. *cremnanthes*, F. J. H. [ref. No. 716]. Cliffs, Glas Carnoch Burn, E. Ross, v.-c. 106, July 24, 1909.—W. A. SHOOLBRED. "? near *H. euprepes*."—A. LEY. "I much doubt being *euprepes*; no geminate heads, &c."—E. S. MARSHALL. "*H. callistophyllum*, var. *cremnanthes*."—E. F. LINTON. "Which I accept. Heads exactly right, foliage rather less strongly and irregularly toothed than in my original specimen, but a lowland station may cause slight modification."—E. S. MARSHALL.

*Hieracium* — [ref. No. 734]. Cliffs near Rogie Falls, E. Ross, v.-c. 106, July 1, 1909. Herbage yellow-green, glabrous above; styles rather livid yellow; ligules glabrous.—W. A. SHOOLBRED. "Under *silvaticum*, not unlike large *subcyaneum*," which variety varies with glandular or nearly eglandular, darker or lighter phyllaries, and livid or yellow styles (See 'Journ. of Bot.' 1909, p. 12). This plant is a dark glandular var.—A. LEY. This will not do for *H. silvaticum*, var. *subcyaneum*. The specimen sent me is a very poor one, with injured heads, but having better specimens of the Rev. E. S. Marshall's from the same district, I name it (like his) *H. Pictorum*, Linton, without doubt.—E. F. LINTON.

*Hieracium* — [ref. No. 724]. Beallach Corrie, Strath Garve, E. Ross, v.-c. 106, July 22, 1909. Heads small, narrow; peduncles long; ligules glabrous; styles yellow.—W. A. SHOOLBRED. Mr. Ley suggested *H. nigrescens*, var. *gracilifolium*. "Not *nigrescens*; I think it comes in *silvatica* or *subvulgata* somewhere."—E. F. LINTON.

*Hieracium silvaticum*, Gouan [ref. No. 703]. (1) Cliffs by stream, Allt Guibhas, July 6. (2) By stream, Strath Garve, July 8. Stream bank, Sgur na Mhullin, July 19, 1909, E. Ross, v.-c. 106.—W. A. SHOOLBRED. Yes.—A. LEY. These three gatherings are all what we have been calling *H. micracladium*, Dahlst., since my brother got Dr. Dahlstedt's modified assent to their being near his

plant; but they are not identical with the Swedish form. The Sgurna Mhullin plant is more off type than the other two. On the Strath Garve sheet was a specimen of another species, heads almost glandular.—E. F. LINTON.

*Hieracium silvaticum*, Gouan, var. *microcladium*, Dahlst. [ref. No. 3453]. Stream (Allt Bad an Fhliuchaidh) descending from the north side of Sgurr a' Mhullin (Scur Vuillin), near Achanalt, v.-c. 106, E. Ross, July 19, 1909. Styles livid; ligules very ciliate. In this district the leaves are rather frequently blotched, which I do not remember to have seen elsewhere in this plant.—E. S. MARSHALL. See remarks on last specimens.—S. H. BICKHAM.

*Hieracium silvaticum*, Gouan, var. *subtenue*, W. R. L. (1) By stream, Strath Garve, July 8 [ref. No. 728]. (2) North side of Sgurna Mhullin, July 8 and 17, 1909 [ref. No. 732], E. Ross, v.-c. 106.—W. A. SHOOLBRED. Yes.—A. LEY. These both represent var. *subtenue*, W. R. Linton, very well.—E. F. LINTON.

*Hieracium serratifrons*, Almq., var. *caliginosum*, Dahlst. [ref. No. 2327]. Grassy slopes near the sea-shore, Skerray, v.-c. 108, W. Sutherland, June 23, 1900. Determined by Rev. W. R. Linton. Flowers deep golden yellow; styles yellow; ligule-tips glabrous; heads campanulate, with appressed phyllaries. Leaves more or less hairy, dull green above.—E. S. MARSHALL.

*Hieracium serratifrons*, Almq., var. *crassiceps*, Dahlst. Parkend, Chalford, and Symond's Yat, W. Gos., v.-c. 34; and rocks near Aberedw, Radnor, v.-c. 43, 1909. All named by Mr. Ley.—H. J. RIDDELSDELL. The Aberedw and Parkend specimens are the same as the Welsh plant Mr. Ley has called *H. crassiceps* for some time; and it may be rightly named; it is not the same as the Forfarshire and Perthshire plants to which the account in 'Brit. Hier.' p. 46, belongs; plants which Dahlstedt only agreed were like *H. crassiceps* in the heads but with different leaves. So the Welsh plant may be the best *H. crassiceps*.—E. F. LINTON.

*Hieracium serratifrons*, Almq., var. *grandidens*, Dahlst. About Radyr, Glam., v.-c. 41, Aug., 1909; near Rudry, v.-c. 41, June 5, 1909; road-sides about Selsley, W. Gos., v.-c. 34, July 7, 1909; railway bank, Machen, Monmouth, v.-c. 35, June 5, 1909. All named by Mr. Ley.—H. J. RIDDELSDELL. I am content to follow Mr. Ley's naming here, but I have not seen type specimens.—E. F. LINTON.

*Hieracium serratifrons*, Almq., var. *torticeps*, Dahlst. Wood, Wotton-under-Edge, W. Gos., v.-c. 34, July 11, 1909; and from

various localities in W. Glos. and Brecon. All named by Mr. Ley.  
—H. J. RIDDELSDELL.

*Hieracium cymbifolium*, Purchas. On limestone rocks above river Wharfe near Grassington, Mid-west Yorks., v.-c. 64, June 20, 1909.—JOHN CRYER. Yes.—A. LEY. This has neither the narrower oblong leaves nor the much more glandular peduncles and phyllaries nor the ciliate ligules of *H. cymbifolium*. I place it in *H. silvaticum*, var. *tricolor*, W. R. Linton, some (typical) specimens of which have the same clothing, and these are typical leaves.—E. F. LINTON.

*Hieracium sarcophyllum*, Stenstr., var. *expallidiforme*, Dahlst. On the banks of river Wharfe, near Grassington and Linton, Mid-west Yorks., v.-c. 64, June 19, 1909.—JOHN CRYER. Right.—A. LEY and E. F. LINTON.

*Hieracium rotundatum*, Kit. [ref. No. 737]. Beallach Corrie, Strath Garve, E. Ross, v.-c. 106, July 22, 1909.—W. A. SHOOLBRED. I believe right.—A. LEY. So I named specimens of this gathering for Rev. E. S. Marshall.—E. F. LINTON.

*Hieracium vulgatum*, Fr.; best placed under var. *sejunctum*, W. R. L. Wooded road bank near Hordersley, Salop, v.-c. 40, July 10, 1909. New County record. The plant was in great abundance in a restricted area. It has recently occurred at Downton Gorge, in Herefordshire, within a quarter of a mile from the Salop boundary.—AUGUSTIN LEY.

*Hieracium vulgatum*, Fr., var. *sejunctum*, W. R. L. [ref. No. 702]. Near Kyle of Loch Alsh, West Ross, v.-c. 105, July 9, 1909.—W. A. SHOOLBRED. Yes.—A. LEY and E. F. LINTON.

*Hieracium vulgatum*, Fr., var. *subfasciculare*, W. R. L. Near Aviemore Station, Easternness, v.-c. 96, alt. 700 ft., July, 1909.—J. A. WHELDON and ALBERT WILSON. Correct.—A. LEY and E. F. LINTON.

*Hieracium vulgatum*, Fr., var. *subrauosculum*, W. R. Linton. In great abundance amongst gorse bushes on a rounded knoll near Raincliffe Wood, Scarboro', N.-E. Yorks., v.-c. 62, Aug. 4, 1909.—JOHN CRYER. Not the var. *subrauosculum* of W. R. Linton; phyllaries too glandular, and too little hairy. This must be left, in my judgment, under type for the present, since it does not fit well with any British described variety.—A. LEY. *H. vulgatum*, Fr., form.—E. F. LINTON.

*Hieracium strumosum*, Ley. Steep limestone bank to the south of Stroud, West Glos., v.-c. 34, August 3, 1909. I thought this

plant at first to be *H. diaphanoides*, Lindeb., var. *divisum*, Jord., from which however it differs in having 5—6 instead of 1—2 stem leaves.—AUGUSTIN LEY.

*Hieracium sciaphilum*, Uechtr., var. *transiens*, Ley. Near Ford, E. Glos., v.-c. 33; Chalford, v.-c. 33; Wotton-under-Edge, v.-c. 34; Radyr, Glam., v.-c. 41, 1909. Named by Mr. Ley.—H. J. RIDDELS-DELL.

*Hieracium sciaphilum*, Uechtr., Mid-West Yorks, v.-c. 64. The specimens sent are from various districts. It appears to be well distributed both on the limestone and millstone grit formations. Hitherto I cannot find that it has been recorded for any locality in Yorkshire except Dent Dale.—JOHN CRYER. This packet is a mixture; 6 sheets (Newlay) are *H. cacuminatum*, Dahlst.; 3 sheets (Newlay) *sciaphilum*, Uech., var. *transiens*, Ley; 9 sheets (Wharfe, Malham and Clapham) are type *sciaphilum*, Uech.—A. LEY.

*Hieracium sciaphilum*, Uechtr., var. *transiens*, nov. var. Mid-West Yorks, v.-c. 64. Twenty-eight examples, gathered on different dates, and on different geological formations in the West Riding of Yorkshire.—JOHN CRYER. This also is a mixture: 3 sheets (Gordale, Malham, Ribbleshead) are type *sciaphilum*; 2 sheets (ShIPLEY and Ribbleshead) are *cacuminatum*, Dahlst. The 23 which remain must not be taken as well representing the var. *transiens* of *sciaphilum*. Those from Milcar are remarkable for the obtuseness of their phyllaries. Place under *sciaphilum*, sp. coll.—A. LEY.

*Hieracium sparsifolium*, Lindeb., var. *grandescens*, Dahlst. This grows in and amongst gorse bushes on a round knoll near Raincliffe Wood, Scarboro', along with *H. vulgatum*, Fr., var. *subtricusulum*, W. R. Linton. N.-E. Yorks., v.-c. 62, Aug. 4, 1909.—JOHN CRYER. This Raincliffe Wood plant is a remarkable one. In general appearance it agrees well with var. *grandescens* of *H. sparsifolium*, Lindeb., but it has less hair than that plant both on peduncles and phyllaries. I understand Rev. E. F. Linton to refer it to *H. rigidum* variety, but the large heads as well as their clothing and the general cut of the plant point to *sparsifolium*, Lindeb. It may be a state of *grandescens* induced by the peculiar situation; *grandescens* being usually a plant of riverside rocks.—A. LEY. Not a *H. sparsifolium* variety to my mind. I hope to get Dr. Dahlstedt's opinion on it.—E. F. LINTON.

*Hieracium tridentatum*, Fr., var. *acrisolium*, Dahlst. Growing by R. Wharfe, near Grassington, Mid-West York, v.-c. 64, Aug. 11, 1909. Record for Yorkshire.—JOHN CRYER. This may be *H. tridentatum*, Fr., var. *decipiens*, Ley; but if so it is a state with larger heads and broader based upper stem leaves than I ever saw. The specimens

do not shew the pseudo-phyllipodous habit which is necessary to bring the plant under *tridentatum*, Fr.; and the plant should be cultivated to enable this point to be proved. It is not var. *acri-folium*, Dahlst., on account of the dark style.—A. LEY.

*Hieracium rigidum*, Hartm., var. *Friesii*, Dahlst. Growing abundantly on the banks of the Wharfe between Burnsall and Barden Tower, Mid-West Yorks, v.-c. 64, Aug. 11, 1909. Named by the Rev. A. Ley, M.A., who in his record of Yorkshire hawk-weeds only records the above for "Ingleborough, T. A. Cotton, 1889." See 'Journal of Botany,' Feb., 1909.—JOHN CRYER. Yes; the leaf bark exhibits the characteristic tomentum of the variety; but the phyllaries are too fully clothed to call it *typical* var. *Friesii*.—A. LEY. Not identical with the Yorkshire plant (leg. T. A. Cotton) which Lindeberg pronounced true *Friesii*, with normal heads; nor quite like the Welsh or Shetland plants which the Rev. W. R. Linton put under this variety. I think it cannot pass.—E. F. LINTON.

*Hieracium umbellatum*, L., var. ? Wood bank in large quantity, near Marshbrook, Salop, v.-c. 40, Sept. 3, 1909. Plants often very tall; leaves long, broad, deeply toothed; panicle as in var. *paniculatum*, Cariot, compound, elongate; but styles dark livid, and phyllaries not reflexed when fresh. Near var. *paniculatum*, Cariot; but I believe it to be undescribed so far as British varieties of this species go.—AUGUSTIN LEY. The foliage of this plant is variable, differing much in this specimen from what Mr. Ley sent me before (under another name), and which I then suggested was a *H. umbellatum* variety. It is in fact very like one from Morfa Bychan, Carnarvon, which I have thought of describing, hardly differing from it except by the colour of the styles. It is not var. *paniculatum* (Cariot), nor var. *coronopifolium*, Fr., which it also resembles; and may be a yet undescribed variety.—E. F. LINTON.

*Hypochaeris glabra*, L. Chase End Hill, in the Malvern Range, just within v.-c. 34, June 28, 1909. Within a few yards occurred *Trifolium striatum*, *T. filiforme*, *Trigonella ornithopodioides*, *Mænchia erecta*, etc., N. C. R.—H. J. RIDDELSDELL. Yes, type.—A. LEY.

*Hypochaeris maculata*, L. On the grassy slopes on the sea-cliffs near Grosnez Castle, Jersey, June, 1909.—G. C. DRUCE.

*Taraxacum erythrospermum*, Andrz. Colley Hill, Reigate, Surrey, v.-c. 17, May 9, 1909. Confirmed by the late Mr. W. H. Beeby.—C. E. SALMON. Agrees well with the description. Excellent specimens.—H. J. RIDDELSDELL. Yes.—E. S. MARSHALL.

This is now put by Handel-Mazzetti under *T. laevigatum*, DC. The British *T. laevigatum* is chiefly *T. obliquum*, Dahlst., according to the same author. See 'Rep.,' p. 341, 1908.—G. C. DRUCE.

*Taraxacum spectabile*, Dahlst. Strath Garve, E. Ross, v.-c. 106, July, 1909.—W. A. SHOOLBRED.

*Limonium vulgare*, Mill., var. *pyramidale*, Druce [ref. Nos. 3404, 3405]. By the Teign estuary, between Teignmouth and Newton Abbot, v.-c. 3, S. Devon, August 16, 1909. These grew with typical *L. vulgare*, and shaded off into it; shewing that Mr. Salmon is right in considering Syme's variety as a mere form. The specimens agree well enough with the figure in 'English Botany,' ed. 3.—E. S. MARSHALL. Yes, *f. pyramidale* but not an extreme example of that.—C. E. SALMON.

*Centaurion pulchellum*, Druce, forma. *littoralis typica*, Wittrock. Churchtown, S. Lancs., v.-c. 59, Sept. 1909.—W. G. TRAVIS and J. A. WHELDON. Yes; just like Mr. C. Bailey's Southport plants of 1892. Not varietally separable.—E. S. MARSHALL.

*Centaurion pulchellum*, Druce, forma. *subelongata*, Wittrock. Near Churchtown, S. Lancs., v.-c. 59, Sept., 1909.—W. G. TRAVIS and J. A. WHELDON. A rather small state of the plant called by Wittrock *Erythraca pulchella*, forma., *subelongata*, according to specimens from S.W. Lancs., distributed by Mr. C. Bailey in 1892. Merely a *state*, I believe.—E. S. MARSHALL. Yes, I believe this form.—C. E. SALMON.

*Amsinckia angustifolia*, Lehm. On mill-refuse at Portishead, North Somerset, v.-c. 6, June 2, 1909.—J. W. WHITE.

*Verbascum nigrum*, L., var. Origin, Port Talbot, Glam., v.-c. 41; cult. Llandaff, Aug. 2, 1909.—H. J. RIDDELSDELL. It departs from type (being more glabrous than usual) in the opposite direction to var. *tomentosum*, Bab., which I have gathered near Tilford, Surrey (confirmed by Babington).—E. S. MARSHALL. Var. *thapsiforme*, Schrader, *teste* Kew.

*Verbascum virgatum*, Stokes. Near Brixham, S. Devon, v.-c. 3, Aug. 19, 1909.—A. H. WOLLEY-DOD. Yes.—A. LEY and G. C. DRUCE.

*Veronica Anagallis-aquatica*, L., var. *anagalliformis* (Bor.), Lathkil Dale, Derby, v.-c. 57, very densely glandular when fresh.—E. DRABBLE.

*Euphrasia Kernerii*, Wettst., Chipstead, Surrey, v.-c. 17, on the chalk, Aug. 14, 1909.—C. E. SALMON. Very characteristic *E. Kernerii*.—E. S. MARSHALL. Beautiful specimens of the true plant.—C. BUCKNALL and J. W. WHITE. Yes.—F. N. WILLIAMS.

*Euphrasia nemorosa*, H. Mart. Saltby, Leicester, v.-c. 55, Aug. 27, 1909. Oolitic soil, differing in habit from the plant of clayey ground. Doubtless a form due to difference of soil and habitat.—A. R. HORWOOD. Correct, I believe; though some of the specimens have the upright branching of *E. stricta*, Host.—E. S. MARSHALL. All *E. nemorosa* I believe, but badly grown specimens.—C. BUCKNALL. Not different from type.—F. N. WILLIAMS.

*Euphrasia* — ? Landudno, Carnarvon, v.-c. 49, Sept., 1909.—W. G. TRAVIS. Very much like a plant named by Townsend *Euphrasia curta*, var. *glabrescens*, Watts., from a similar locality. It seems to me, however, to approach *E. borealis*, Towns.—C. BUCKNALL. Material very indifferent; but I have little doubt that it is *E. curta*, Wettst., var. *glabrescens*, Wettst.—E. S. MARSHALL. The material insufficient to express an opinion upon.—F. N. WILLIAMS.

*Bartsia Odontites*, Huds., var. *serotina*, Dum. Pasture, Lower Morden, Surrey, v.-c. 17, Sept. 2, 1909.—C. E. BRITTON. I believe that this is rightly named; although the calyx-teeth are not "narrowed below," which they should be in *Odontites serotina*, Dum., according to 'Bab. Man.,' ed. 9.—EDWARD S. MARSHALL. Correct.—F. N. WILLIAMS.

*Rhinanthus stenophyllus*, Schur. On the top of a remote grassy down, Bourton Downs, E. Glos., v.-c. 33, July 17, 1909.—H. J. RIDDELSDELL. Yes. In the south of England, June and July are its usual months for flowering.—E. S. MARSHALL. Yes.—G. C. DRUCE.

*Melampyrum pratense*, L., var. *purpureum*, C. J. Hartm.? Damp, sandy, turfy ground over granite below the crags at the head of Glen Eunach, at 2,400 ft. Also slope of Geal-charn, Glen Feshie, at 2,200 ft., v.-c. 96, Easternness, July, 1909. The dried specimens unfortunately give but a very imperfect impression of the fresh plant. This has a peculiarly neat, erect and compact, rigid habit, and the flowers which are tipped with a rich purple or magenta, give it a striking and beautiful appearance. These characters are however less marked in the plant from Glen Feshie, which may perhaps be accounted for by the locality there being less alpine and the aspect less bleak.—J. A. WHELDON and A. WILSON. This is

described as follows in Hartman's 'Skandinaviens Flora,' ed. xi., p. 121, 1879:—"Corollas dark red; the lower lip yellow within." The present plant still shews traces of a deep crimson colouring; so it is probably correct. I have often seen var. *montanum* (Johnst.), to which—as a colour-form—it clearly belongs, with the flowers beautifully rose-tinged, but never quite like this.—E. S. MARSHALL. I have gathered this plant in Scotland, and am glad to have its name.—A. LEY. Correctly named. It is the var. f. of my 'List.'—G. C. DRUCE.

*Orobanche purpurea*, Jacq. Braye Bay, Alderney, July, 1906. I gathered a great series in the Island, but Dr. Beck referred all the plants to *purpurea*, not *O. Millefolii*. This latter is called a race by Rouy and Fouc., 'Fl. de Fr.' xi., p. 162, differing from the type by "Bractee ord. plus longue que le calice (et non plus courte); corolle a lobes plus arrondis, obtus ou brusquement et tres brievement acumines." Beck keeps it under *O. purpurea*. We lack certain evidence of the occurrence either of *O. Millefolii* or *O. arenaria*, in the Channel Isles.—G. C. DRUCE.

*Mentha rotundifolia*, Huds., var. *Bauhini*, Ten. Origin: Wells, Norfolk, v.-c. 28, cult.: Ledbury, Aug. 20, 1909.—S. H. BICKHAM.

*Mentha arvensis*, L., var. Origin: Tidenham Chase, W. Glos., v.-c. 34, cult.: Llandaff, Aug. 17, 1909.—H. J. RIDDELSDELL. This fits Syme's description of var. *praecox* better than the other varieties, as the calyx-teeth seem right, but the uppermost bracts should be smaller in that variety. I think cultivation often alters the growth of mints.—C. E. SALMON. I should place to *M. praecox*, Sole.—E. F. LINTON. My type spec. of *praecox* is very different from this.—G. C. DRUCE.

*Calamintha Acinos*, Clairv., fl. albo. Near Ford, E. Glos., v.-c. 33, July 21, 1909. Growing in a fallow field, near Guiting-hill Farm.—H. J. RIDDELSDELL. The white flowered *Satureija Acinos* comes true from seed in my garden; of dozens of seedlings no coloured one has appeared.—G. C. DRUCE.

*Scutellaria galericulata*, L., var. *pubescens*, Mutel. 'Fl. Fr.' p. 53, 1836. Shingle, East Tarbert, Wigton, v.-c. 74, Aug., 1909. See p. 417.—G. C. DRUCE. More hairy, no doubt, than usual; but my herbarium specimens shew a gradual transition in this respect, and I cannot think it worthy of varietal distinction.—E. S. MARSHALL. Even Bentham described it as a variety in his monograph.

*Stachys germanica*, L. Green lane between Woodstock and Rousham Gap, Oxon, on the limestone, v.-c. 23, July 31, 1909.—

A. B. JACKSON and W. B. TURRILL. A most beautiful set.—S. H. BICKHAM.

*Lamium amplexicaule*, L. With cleistogamous flowers. Leasowe, Cheshire, May, 1908.—E. DRABBLE.

*Lamium maculatum*, L. Quite naturalized upon an old wall at Meole Brace, Salop, v.-c. 40, June, 1909.—J. COSMO MELVILL.

*Plantago lanceolata*, L., var. *sphaerostachya*, M. and K. Limestone rocks, Moel Horaddug, near Cwm, Flint, v.-c. 51, July 3, 1909.—J. A. WHELDON. Yes. Will any one cultivate this as a check experiment? The older botanists said it reverted to type. I doubt its being a true variety.—G. C. DRUCE. These plants look thoroughly starved; I suspect that the alleged variety is nothing more than a state of situation.—E. S. MARSHALL. Yes, good for the variety, I should say.—C. E. SALMON and F. N. WILLIAMS.

*Corrigiola littoralis*, Linn. Slapton Sands, S. Devon, v.-c. 3, Aug. 13, 1909.—A. H. WOLLEY-DOD.

*Chenopodium urbicum*, Linn., var. *intermedium*, Moq.—A. H. W.-DOD. Treludderow, St. Newlyn East, West Cornwall, v.-c. 1, Sept. 25 and Oct. 1, 1909.—C. C. VIGURS. Yes.—A. LEY.

*Salicornia ramosissima*, Woods, forma. Salt marsh, between Dymchurch and New Romney, Kent, September 12, 1909. Determined by Dr. Moss and the Rev. E. S. Marshall.—J. COSMO MELVILL.

*Rumex limosus*, Thuill. Eye Green, Northants, v.-c. 32, Sept., 1909.—N. C. R., G. C. DRUCE.

*Aristolochia Clematitis*, L. By a ditch near Godstow, Oxon, v.-c. 23, Aug. 2, 1909. (locus classicus) a relic of cultivation.—A. B. JACKSON and G. C. DRUCE.

*Euphorbia Cyparissias*, Linn. Walton Downs, Surrey, v.-c. 17, May 16, 1909. Seen when in company with Mr. C. E. Salmon in this locality. Here, among the gorse, the Spurge is quite abundant in one spot. I suppose this species must be an introduction here, having regard to its accepted status in most of its reported localities. There are no houses in the vicinity, from the gardens of which it may have been an outcast. The chief objection against it being a genuine native on Walton Downs lies in the fact that a plant so conspicuous when in flower would surely have attracted attention

long ago.—C. E. BRITTON. This is not the plant I grow as *E. Cyparissias*, L. Is it not rather *E. Esula*, L., var. *pseudo-Cyparissias*, Jord.?—S. H. BICKHAM. *E. Esula*, L., var. *pseudo-Cyparissias*, Jord.—H. J. RIDDELSDELL, J. W. WHITE, A. LEY. This agrees much better with my specimens of *E. pseudo-Cyparissias*, Jord., than with true *E. Cyparissias*, L. I think, however, that it is quite as near to *E. Cyparissias* as to *E. Esula*, L., which has a much coarser habit and strongly mucronate bracts. In all probability, *E. pseudo-Cyparissias* deserves the specific rank assigned to it by Jordan; its reduction to a variety of either *Esula* or *Cyparissias* appears to be somewhat arbitrary.—E. S. MARSHALL.

*Mercurialis annua*, L. Hedge-bank, main road, Freeman's Common, Leicester, v.-c. 55, Aug. 28, 1909. Plentiful. Probably a new County record, as there is no specimen or note in the County Herbarium.—W. BELL.

*Urtica dioica*, L., var. —? Kerne Bridge, Herefordshire, v.-c. 36, August 7, 1909. I cannot match this variety in my herbarium.—AUGUSTIN LEY. Var. *microphylla*, Hausmann, *Fl. Tirol.*, I believe.—E. S. MARSHALL. A slender, graceful state of the Common Nettle.—J. W. WHITE. Not my idea of *microphylla*, Hausm.—G. C. DRUCE.

*Ulmus scabra*, Mill. (*montana*, Stokes), var. — Upton Bishop, Herefordshire, v.-c. 36, probably planted, June 6, 1908. A variety with narrow elongate leaf, and rounded, often obovate samara. I know no varietal name; and it is probably of garden origin.—AUGUSTIN LEY. Yes; under *U. montana*, Stokes.—A. B. JACKSON.

*Ulmus scabra*, Mill. (*montana*, Stokes). Sellack, Herefordshire, v.-c. 36, May 10 and August 14, 1909. For the nomenclature of this and other Elms sent, see 'Journ. of Bot.' 1910, p. 65, *et seq.* This variety of the Wych Elm is notable for the samara being narrowed more than usual to the obtuse apex. I know no varietal name.—AUGUSTIN LEY. *U. montana*, Stokes.—A. B. JACKSON.

*Ulmus surculosa*, Stokes. Trees (planted) near Ross, Herefordshire, May 21 and July 20, 1909. This is the "English Elm;" samaras this year larger as well as much more numerous than usual.—AUGUSTIN LEY. Yes; but the leaves seem smoother above than is usually the case in the English Elm.—A. B. JACKSON. Mr. Druce is calling this *U. sativa*, MILL., 'Gard. Dict.,' ed. 8, 1768.—C. E. MOSS. My reason for using Miller's name *sativa* is because his description "foliis ovatis acuminatis duplicato-serratis, basi inequalibus" agrees with this tree, and because he calls *U.*

*campestris* "the common rough or broad-leaved Wych Elm," while he gives the name the small-leaved or English Elm to *U. sativa*, which he says is not a native of England, and that as it is well known it requires no description. He could never observe any seeds upon it. His description of the habitat of *U. campestris* precludes it from being the English Elm, which must have been well-known to him, and no other of his six elms, except *sativa*, seems to be applicable.—G. C. DRUCE.

*Ulmus major*, Smith. Road-side trees  $1\frac{1}{4}$  miles from Monmouth, on the Rockfields road, Monmouthshire, v.-c. 35, May 10 and August 26, 1909. Occurring at irregular intervals in the hedgerows; no evidence whether spontaneous or no.—AUGUSTIN LEY. The name *Ulmus major*, Sm. ('Eng. Bot.' t. 2,542, 1814), has no standing, as on Smith's own showing (*loc. cit.*), it is synonymous with *U. hollandicus*, Mill. ('Gard. Dict.,' ed. 8, 1868). I take the large-leaved specimen on this sheet to be the elm known in Cambs. as the "Huntingdon Elm," which is not improbably *U. glabra*, Mill.  $\times$  *U. scabra*, Mill.—C. E. MOSS. Specimens from Plukenet in Hb. Sloane of *U. hollandica* (Hb. Br. Mus.) prove this to be *U. scabra*, Miller. On the other hand type specimens of *U. major*, Sm. (Hb. Br. Mus.) are the suberous plant described and figured by Smith under this name. Smith was therefore in error in quoting *U. hollandica* as synonymous with his *major*. The plant sent from Monmouth is *U. major*, not *vegeta*.—AUGUSTIN LEY. There are several typical examples of this Elm in Kew Gardens, where it is labelled *U. glabra*. It is also common in the grounds at Hampton Court. It comes into leaf about three weeks later than the English Elm. The suggestion by more than one authority that this is *U. glabra*  $\times$  *montana* is a reasonable idea of its origin, as the tree is exactly intermediate in character, in bark, leaf and habit. Mr. Ley's citation of *U. major*, Sm. in 'Jour. Bot.' p. 7, 1910, is inaccurate. It should read *Ulmus major*, Sm., 'Eng. Bot.' t. 2,542, 1813; 'Lindl. Syn.' 226, 1829.—A. B. JACKSON.

*Ulmus surculosa*, Stokes. Hedge, Upton Bishop, Herefordshire, October 17, 1909. Sent to illustrate the occasional suberosity of the suckers and small twigs at the base of the bole; the rest of the tree being non-suberous. As a rule this tree exhibits no suberosity on any part, in this differing from *U. major*, Sm., which is always I believe suberous on the suckers and small bole-twigs; the suberosity when it does occur is very unevenly produced.—AUGUSTIN LEY. I am not sure that this is the same species as the other specimen so named by Mr. Ley. It is absolutely impossible at present to determine Elms from sucker-shoots alone; and every such shoot sent out should be accompanied by a normal shoot also.—C. E. MOSS. Typical *U. campestris*, auct. angl. for which the name

*U. surculosa*, Stokes, has been adopted in the 'Lond. Cat.' Mr. Ley omits all reference to the name *U. campestris* in his description of *surculosa*, 'Jour. Bot.' p. 72, 1910.—A. B. JACKSON.

*Ulmus campestris*, L., var. *glabra* (Mill.) form. Launde, Leics., v.-c. 55, May 7, and Sept. 24, 1909.—Rev. H. P. READER and A. R. HORWOOD. Yes.—A. B. JACKSON. Rightly referred to *U. glabra*, Mill. form: but differing from almost any form I have hitherto seen in having the leaves nearly (not quite) always equal and cordate at the base. In *U. glabra*, Mill., they are usually very unequal. The leaf surface in this form is nearly or quite smooth. The fruiting pieces would have been much more useful if gathered when the samara was ripe: still the basal angle of the sinus when visible is that of *U. glabra*, Mill.—A. LEY. Certainly nearer *U. glabra*, Mill., than to any other species.—C. E. MOSS.

*Ulmus glabra*, Huds., var. Near Bulmer, Essex, N., v.-c. 19, Sept. 1908. Differing from the ordinary *glabra* by the habit and by the darker green of the leaves.—G. C. DRUCE. Certainly *U. glabra*, Miller (not Huds.): a form resembling var. *stricta*, Lindley, in the perfectly smooth leaf-surface. One or two of the sheets have leaves slightly scabrous above; these are probably from a sucker or from a cut surface of the bole.—A. LEY. Nearest to *U. glabra*, Mill.—C. E. MOSS. Yes, a *glabra* form, but whether Miller's plant or not it is impossible to say, as his description is too vague. There is no specimen in Miller's Herb. at the British Museum.—A. B. JACKSON. All the specimens were from branches; not suckers.—G. C. DRUCE.

*Ulmus glabra*, Miller. Planted trees on the Ledbury road near Ross, Herefordshire, May 7 and July 28, 1909. Never (in my experience) found native, or even spontaneous, in Herefordshire.—AUGUSTIN LEY. This is one of the hairy forms of *U. glabra*, Mill., called *U. glabra* (*U. campestris*, auct. pl.): b. *pubescens* by Schneider in his 'Handbuch der Laubholzkunde.' *U. glabra*, Mill., appears to be native in woods in the eastern Midlands and in the south-eastern counties of England.—C. E. MOSS. Under *U. glabra*, Miller.—A. B. JACKSON.

*Betula alba*, L. (*verrucosa*, Ehrh.), form *B. pendula*, Roth. [ref. No. 3380]. Near Achilty, E. Ross, v.-c. 106, July 15, 1909. The "weeping birch" is abundant and often very fine in the district around Garve and Strathpeffer. The vertically drooping branches make it a striking and beautiful feature of the scenery. These specimens came from the outskirts of Torrachilty Wood, in the valley of the Conan River.—E. S. MARSHALL. Also sent by W. A. SHOOLBRED [ref. No. 689].

*Betula alba* (*verrucosa*) × *tomentosa* [ref. No. 3381]. Garve, E. Ross, v.-c. 106, July 20, 1909. This, from its characters, I believe to be a hybrid between the "weeping" form of *B. alba* (*B. pendula*, Roth.) and *B. tomentosa* (*pubescens*, Ehrh.). Branches drooping; intermediate in foliage and catkins. Lateral lobes of female catkin-scales mostly spreading, sometimes rather recurved. It occurred in two different forms.—E. S. MARSHALL. Also sent by W. A. SHOOLBRED [ref. Nos. 686 A and 688 A]. We cannot satisfy ourselves that this is a hybrid. The leaves are entirely those of *verrucosa*, with just a few scattered hairs on their margins. And the fruit is not broadly oboval. The catkin-scales are perhaps intermediate in shape between those of the two species; but we have reason to think that little reliance should be placed on this distinctive feature. In Koch's descriptions (ed. iij.) no prominent place is given to the catkin-scales.—C. BUCKNALL and J. W. WHITE.

*Betula tomentosa*, Reith & Abel, var. *parvifolia*, E. S. Marshall [ref. No. 687 A]. Garve, E. Ross, v.-c. 106, July 20, 1909.—W. A. SHOOLBRED.

*Betula nana*, L. Alpine gorge, by stream, N. side of Sgur na Mhullin, E. Ross, v.-c. 106, July 19, 1909.—W. A. SHOOLBRED.

*Alnus rotundifolia*, Mill., var. *incisa*. Two or three fine trees by the Cherwell in the Parks, Oxford, Sept., 1909. Doubtless planted; one tree near Wolvercote is stated to have been planted by William Cobbett.—G. C. DRUCE. This plant is probably the var. *incisa*, Syme, 'E. B.' viii. 179, but not of Willdenow, 'Sp. Pl.' iv. 335, 1805. The correct name is *A. rotundifolia*, Mill., var. *laciniata* (Willd. l. c.). Druce, 'Brit. Pl. List,' p. 64, 1908 = *A. laciniata*, 'Ehrh. Beit.' iii. 82. The var. *incisa*, Willd., has a much smaller leaf. See Elwes and Henry, 'Trees,' vol. iv.—G. C. DRUCE. This is not var. *incisa*, but a typical example of *A. glutinosa*, Gaertn., var. *laciniata*, Willd., which according to Duhamel occurs wild in the north of France. There are fine trees of this in cultivation in England.—A. B. JACKSON.

*Quercus Robur* (= *pedunculata*) × *sessiliflora*. White Wood, Gamlingay, Cambs., May 20 and Oct. 27, 1909, from same tree. See 'Journ. of Bot.,' 1910, p. 34.—C. E. MOSS. Most carefully prepared specimens of an interesting plant, of which Dr. Moss has carefully explained the origin.—G. C. DRUCE.

× *Salix hippophaëfolia*, Thuill. Low bushes on the right bank of the Wye near Ross, Herefordshire, May 8 and August 6, 1909.—AUGUSTIN LEY. This is a good intermediate between *S. tri-*

*andra*, L., and *S. viminalis*, L., and represents very well the middle form of the hybrid, *S. hippophaëfolia*, Thuill., which is placed by Anderson between *S. Trevirani* and *S. mollissima*, the more one-sided forms. It has the peculiarity of catkins which are male in the lower and female in the upper-half. It is not uncommon to find hybrid willows which are androgynous, the stamens aborted and producing small ovaries on the top of the filaments in place of anthers; in this River Wye plant both kinds of flowers are perfectly developed in the order above mentioned.—E. F. LINTON.

*Salix alba*, L., × ? Right bank of the Wye, Foy, Herefordshire, a single bush, May 25 and September 6, 1909. Close beside a single bush of *S. viridis*, Fr., and strikingly contrasting with it in habit; *S. viridis* having the spreading stiff branches of *S. fragilis*, the present plant being of close upright growth with slender twigs; flowering very little, and the incipient capsules withering early and falling off.—AUGUSTIN LEY. A very interesting form of *S. viridis*, Fr., with the habit and slender twigs of *S. alba*, L., and leaves, catkins, &c., fairly intermediate between *S. alba* and *S. fragilis*. The leaves are too glabrescent for any form of *S. alba*, and the ovaries too slender or long in proportion to their breadth. The short styles and the coequal nectaries and pedicels are fairly normal for the hybrid. The adjoining bush of *S. viridis* appears to have the *habit* of *S. fragilis*, but probably has some compensating leaning in other particulars towards the other parents.—E. F. LINTON.

*Salix Doniana*, Sm. = *S. purpurea* × *repens*? By the Cherwell, the Parks, Oxford, Sept., 1909. Formerly grown in the Salicetum at the Botanic Gardens, then removed to this locality. The labels of these Willows are now mostly lost or misplaced. I thought members might like to have this rare plant which was shewn me by the late Mr. W. H. Baxter as being the one sent by Borrer to his father Mr. W. Baxter, the author of 'Phaenogamous Botany.'—G. C. DRUCE. A leaf specimen only. If this were the plant received by Mr. Borrer through Geo. Anderson from G. Don, and supplied by the former to Sir J. E. Smith for description, good specimens would no doubt be welcome. The descriptions of that plant are very precise from 'Sm. Engl. Fl.,' iv. 213 to 'Syme, E. B.' (3rd ed.), viii. 219; garden specimens are preserved in Hb. Borrer at Kew; and also widely distributed through well-known sets, for there can, I think, be no doubt that Leefe's, 'Sal. Exs.,' iv. 99, and our 'Set of British Willows,' N. 6, are actual descendants of Borrer's plant. I have garden specimens by me from four different gardens, and can make allowance for such variation as can be caused by wet and dry ground, exposure and shade: but it is impossible to identify the Oxford plants with *S. Doniana*, Sm., nor do I think there is any *S. repens* in it, but only *S. purpurea*,

L., of which the flowers would probably show that it is a fairly typical form. Botanical Gardens want their labels overhauling every ten years by experts in the critical genera: I could give some curious instances in proof.—E. F. LINTON.

*Salix daphnoides*, var. *pulchra*, Ascherson. In hedge, planted; origin, nursery, Saintfield, Co. Down, April and August, 1909. Rev. E. F. Linton has seen specimens of this and suggests it may be *Salix pulchra*, Wimmer (= *S. daphnoides*, var. *pulchra*, Ascherson).—C. H. WADDELL. Former specimens submitted to me showed leaves rather narrow for *S. daphnoides*, in the direction of *S. acutifolia*, Willd. These fuller specimens show that the foliage is well within the limits of the leaf-variation of *S. daphnoides*, and that is what I call it.—E. F. LINTON.

*Salix caprea* × *viminalis*. King's Norton, Leics., v.-c. 55, July 11, 1908 and September 1, 1909.—A. R. HORWOOD. Yes.—E. F. LINTON.

*Salix caprea* × *cinerea* [ref. No. 3386]. Roadside near Garve, v.-c. 106, E. Ross, July 14, 1909. This, when dry, looks nearer to *S. cinerea*, but Rev. E. F. Linton has no doubt that it is a hybrid with *S. caprea*, confirming my original opinion. Apparently sterile.—E. S. MARSHALL. Also sent by W. A. SHOOLBRED [ref. No. 697]. Yes.—E. F. LINTON.

*Helleborine violacea*, Druce. Copse, Reigate Hill, Surrey, v.-c. 17, Aug. 21, 1909.—C. E. SALMON. Yes, the plant which is doubtless identical with *Epipactis purpurata*, Sm. = *H. purpurata*.—G. C. DRUCE.

*Allium vineale*, Linn., var. *bulbiferum*, Syme. Teign estuary, S. Devon, v.-c. 3, Aug. 16, 1909.—A. H. WOLLEY-DOD.

*Scilla autumnalis*, Linn. Mudstone Bay, S. Devon, v.-c. 3, Aug. 9, 1909.—A. H. WOLLEY-DOD. And from Lizard Head, W. Cornwall, v.-c. 1, July, 1909.—A. WILSON.

*Lilium Martagon*, L. Wood at Broken Dike, Tidenham Chase, W. Glos., v.-c. 34, July 5, 1909. I agree with Mr. Shoolbred as to the high probability of the species being native in this and other localities in the neighbourhood.—H. J. RIDDELSDELL. Sent also from same locality, June 16, 1909, by W. A. Shoolbred.

*Juncus compressus*, Jacq. Brickpits at Sandhurst, E. Glos., v.-c. 33, July 10, 1909.—H. J. RIDDELSDELL. Correct.—A. LEV.

*Potamogeton coloratus*, Hornem. Fen ditches, Eye, Northants,

v.-c. <sup>3</sup>12, Nov., 1909. A new County record. Name passed by A. Fryer.—G. C. DRUCE.

*Potamogeton lanceolatus*, Sm., var. *hibernicus*, Ar. Benn. Cahir River, Co. Clare, Ireland, June 11, 1909. Coll. PAT. O'KELLY. Comm. S. H. BICKHAM. The variety only occurs in one place (so far as I know), and is a much larger plant than this.—A. BENNETT. Yes; the specimen is rightly named.—ALFRED FRYER. Mr. P. B. O'Kelly showed me this plant in the Cahir River, Co. Clare (locus classicus) in June last, but it was then immature, so I induced the discoverer to send more matured examples to Mr. Hunnybun. It did not strike me as being identical with the Anglesey plant. Mr. O'Kelly tells me it is a very rapid grower, and alters much in appearance. Perhaps it is the older and more luxuriant plant which has been named var. *hibernicus*. Whether type or variety it is limited to a very restricted area.—G. C. DRUCE.

*Potamogeton lucens*, Linn., var. *acuminatus*, Fries. Wood-Walton Fen, Hunts., v.-c. 31, August 5, 1909. Coll. E. W. HUNNYBUN. Comm. S. H. BICKHAM. This is the plant so named here and on the Continent. The best specimens I ever saw were gathered by me at Surlingham Ferry, Norfolk, but Mr. Fryer will not have it that there is any variety in any of them.—A. BENNETT.

*Potamogeton varians*, Fryer. Drain ditch, Witcham Medlands, Cambs., v.-c. 29, September 9, 1909. Coll. E. W. HUNNYBUN. Comm. S. H. BICKHAM. Yes; small neat specimens, smaller than the American specimens, which however vary so that had not Dr. Morong himself gathered them off the same root I could not have believed it. Certainly species have been made on lesser grounds.—A. BENNETT.

*Potamogeton trichoides*, Cham. Drain ditch, Hammond's Eau, Cambs., v.-c. 29, September 9, 1909. Coll. E. W. HUNNYBUN. Comm. S. H. BICKHAM. Yes; but having no fruit one cannot specify the variety. Usually our British plants fall under Caspary's var. *Trimmeri*, the typical plant in the Berlin Herbarium being without those corrugations of the back of the fruit which ours has when ripe; but it varies greatly, the most extreme form being found in Bohemia as *P. condlyocarpus*, Tausch.—A. BENNETT. Curiously the plant of Tausch in 'Index Kewensis' is made synonymous with *P. densus*! a huge discrepancy.—G. C. DRUCE.

*Scirpus compressus*, Pers. King's Norton, Leics., v.-c. 55. September 1, 1909. This is sent as a new record for Leics. (See 'Journ. Bot.' pp. 430, 431, 1909.)—A. R. HORWOOD.

*Scirpus rufus*, Schrad. (Blysmus). On the coast of Sligo Bay, locally plentiful, occasionally bracteate, June, 1909.—G. C. DRUCE.

*Carex diandra*, Schrank. (*C. teretiusecula*, Good.) Peat moor, Shapwick, North Somerset, v.-c. 6, June 18, 1909.—J. W. WHITE. Small state.—A. BENNETT. *C. diandra*, Schrank, forma *tenella*, Beckm.—KÜKENTHAL.

*Carex vulpina*, L., var. Old brick pits, Pebworth, E. Glos., v.-c. 33, July 18, 1909. I doubt very much if this determination will hold. The foliage seems not to suggest hybridity; but the spikes and glumes and the apparent barrenness of the fruit do. *C. vulpina* and *C. contigua* grew on the spot, and I feel pretty sure that the specimens distributed are a hybrid between those two species.—H. J. RIDDELSDELL. The influence of *C. contigua*, Hoppe, is (to my mind) quite unmistakable, here; and that of *C. vulpina* is equally clear. *C. contigua* × *vulpina*.—E. S. MARSHALL. *C. vulpina*, L., forma *elongata*, Anderss.—KÜKENTHAL.

*C. contigua* × *remota*? Hailes, E. Glos., v.-c. 33, July 19, 1909. This grew with *C. vulpina*, *C. remota*, *C. contigua*, and *C. vulpina* × *remota* (*C. axillaris*). I am not sure that it is not simply a paler form of the last named; but there is some likelihood of the name given on the labels being right.—H. J. RIDDELSDELL. A weak *C. remota* × *vulpina* (*C. axillaris*, Good.); the pale glumes are due to the preponderating influence of *C. remota*. I have hitherto seen *C. contigua* × *remota* only from Bucks, collected in June, 1904, by Mr. Druce.—E. S. MARSHALL. There seems to be evidence of hybridity here, *C. remota* being one parent. The stems are too slender, and the spikelets too simple to justify the suspicion of *C. vulpina*; but there is nothing against *C. contigua*. Better specimens (than my sheet) and a knowledge of the carices that grew near should make a diagnosis easy. The four or five features that take this off *C. remota* are all favourable to *C. contigua*, Hoppe.—E. F. LINTON. "*C. remota* × *vulpina*. A somewhat lax form, but the very rough stem with its concave lateral surfaces and the compound lower spikelets do not admit of *C. contigua* as a parent species."—KÜKENTHAL.

*Carex muricata*, L., var. *Leersii* (F. Schultz)? Taddington, E. Glos., v.-c. 33, July 20, 1909.—H. J. RIDDELSDELL. Surely only *C. muricata*, L. (*C. contigua*, Hoppe), the beak appears far too long for *Leersii*, which Kükenenthal puts as a variety of *C. Pairaei* (called by him *C. echinata*, Murr.).—G. C. DRUCE. No; this is *C. contigua*, Hoppe. In *C. muricata*, L. (Herb. Linn. et Spec. Plant.) and its variety, or sub-species, *C. Leersii*, F. Schultz, the fruit is much more patent, with a shorter beak; and the female

glumes are shorter and less acuminate.—E. S. MARSHALL. Seems to me *C. contigua*, Hoppe, our former *C. muricata*, Auct. Angl.—E. F. LINTON. I do not accept the statement that *Pairaei* is the *C. muricata* of the 'Species Plantarum,' although it represents *C. muricata* in the Linnean Herbarium.—G. C. DRUCE. *C. contigua*, Hoppe, "utriculos inferne valde spongiosos et ligulam elongatum."—KÜKENTHAL.

*Carex muricata*, L. Bank, roadside, Saffron Lane, Knighton, Leicester, v.-c. 55, June, 1909. One very large tuft of this sedge was growing high and dry on a sandy bank by the roadside. I took the enclosed specimens intending to obtain fruiting ones later; but when I went to the place again it had all been cut or eaten off. I have named it *C. muricata* with some misgivings, as the foliage is much finer and considerably longer proportionately than our local common form.—W. BELL. Gathered much too early to shew the decisive fruit-characters; hardly even in good flower. I think, however, from the habit, glumes, foliage, and very long ligules, that it is true *C. muricata* (Linn. Herb. and Spec. Plant.) = *C. Pairaei*, F. Schultz, rather than *C. contigua*, Hoppe (*muricata*, Koch, and Auct. Angl.).—E. S. MARSHALL.

*Carex remota* × *vulpina* = *C. axillaris*. Lydney, W. Glos., v.-c. 34, June 17, 1909; Hailes, E. Glos., v.-c. 33, July 19, 1909. The Hailes plant is a good intermediate; the Lydney plant is nearer *C. remota*.—H. J. RIDDELSDELL. *remota* × *vulpina*.—KÜKENTHAL.

*Carex elata*, All. (*C. stricta*, Good.). Spring-head, near Tickenham, North Somerset, v.-c. 6, June 16, 1909.—J. W. WHITE. Yes. *C. Hudsonii*, Ar. Benn.—KÜKENTHAL. Right; the three flowering-stems submitted to me have each only two female spikelets, the male being sub-solitary—an unusual condition, I believe.—E. S. MARSHALL.

*Carex aquatilis*, Wahl. Bank of the Spey at 685 ft., E. Inverness, v.-c. 96, July, 1909.—ALBERT WILSON and J. A. WHELDON. *C. aquatilis*, Wahl., *typica*.—KÜKENTHAL. Two most interesting specimens showing the species in two conditions—(1.) Var. *virescens*, Anders., with *short broad* fruit and shorter glumes arranged very regularly. (2.) Var. nearly typical as to floral characters, except that the type of Wahlenberg is about four times as high—probably this comes near the var. *minor* of Boott.—A. BENNETT.

*Carex flacca*, Schreber, forma *gracilis*, C. B. Clarke, MS. *in litt.* 1901. Spontaneously occurring at Sedgley, Prestwich, S.-E. Lancashire, during several years, 1898—1903, but locality was built over

and destroyed.—J. COSMO MELVILL. I have never seen *C. flacca* before with such a slender, weak habit. The persistence of this character mentioned by Mr. Melvill would perhaps justify a varietal name.—E. S. MARSHALL. *C. glauca*, Murray, forma *pallida*, Beck.—KÜKENTHAL.

*Carex limosa*, L. Peat bog, near Loch Bhreach, E. Ross, v.-c. 106, July 13, 1909.—W. A. SHOOLBRED. *C. limosa*, L., *typica*.—KÜKENTHAL.

*Carex acuta*, L., var. — Millpond, Hoby, Leicester, v.-c. 55, July, 1909. About this part the River Wreake is very prolific of sedges, *C. acuta* being one of the most noticeable. Those plants on the river banks are quite typical—one specimen enclosed; but those on a small ait are large and lush, with branching spikelets. Messrs. H. and J. Groves state *in litt.*, "We have several times seen similar forms, with branching spikelets; but do not know of any name for it. We should leave it under type."—W. BELL. *Carex prolixa*, Fries., Mant., iii. (1842), 150. *C. strictifolia*, Opiz! (1846). *C. acuta*, L., var. *strictifolia*, Uechtritz. *C. gracilis*, Curt., var. *strictifolia*, Asch. Fl. Brand. (1864). *C. acuta*, L., var. *prolixa*, Hartmann. In the specimen said to be type I see only a young specimen of the above.—A. BENNETT. I do not see how it can be separated from *acuta* type as I understand it.—A. B. JACKSON.

*Carex riparia*, Curt. (small var., or form) [ref. No. 3417]. Damp, sandy, coast, about a mile north of Berrow Church, N. Somerset, v.-c. 6. Height 12 to 20 inches. Foliage green, only slightly glaucous. A very different-looking plant from the type, which I did not see thereabouts; smaller and much more slender. Mr. C. E. Salmon does not consider it to be the var. *humilis*, Uechtr., which is still smaller, and is said to resemble *C. distans* in habit.—E. S. MARSHALL. It is quite likely that soil or situation would account for the look of this plant. I see no variety in it.—E. F. LINTON. "*C. riparia*, Curt., var. *humilis*, Uechtritz."—KÜKENTHAL.

*Carex inflata* × *vesicaria* [ref. No. 3388]. Near Conan, E. Ross., v.-c. 106. July 16, 1909. This grew with both parents in a swamp on an island in the Conan River and is a good intermediate. I believe that *C. involuta*, Bab., is a different form of the same hybrid, with narrower leaves; being descended from a narrow-leaved *C. inflata* (*ampullacea*), such as I have seen at Wybunbury Moss, Cheshire, &c.—E. S. MARSHALL. Yes, *C. rostrata* × *vesicaria*.—KÜKENTHAL. Is probably what Mr. Marshall names it and so the × *Pannewitziana*, Figert.; most certainly not *involuta*, which you were one of the first to distribute after G. E. Hunt from Cheshire, where it was denied to be a hybrid. Mr. J. Sidebotham wrote to H. C.

Watson that one of the supposed parents did not occur for miles.—A. BENNETT *in litt.* to S. H. BICKHAM. Though at first sight intermediate-looking, this sedge does not appear to me to have clear evidence of *C. inflata*. The fruit is just that of *C. vesicaria*, including the *nut* (my specimen is not sterile, only partially so); the spikelets are rather small compared with S. of England *C. vesicaria*, but are not unfrequently so in Scotland, and the leaves are, in my herbarium, sometimes as narrow; when a hybrid is crossed by one of its parents, the result is a very one-sided cross and often fertile, and this may be such a cross. But I cannot think it is an intermediate form of the hybrid, and have always found clear hybrids sterile. I prefer to leave this under *C. vesicaria*.—E. F. LINTON.

*Savastana odorata*, Scribner, *Hierochloe borealis*, R. and S., May, 1908. By the roadside between Nikko and Chuzenji, Japan. It was pleasing to see Dick's Holy Grass in this remote situation. I also noticed it in the Selkirk and Rocky Mountains in our own dominions.—G. C. DRUCE.

*Deyeuxia neglecta*, Kunth., var. *Hookeri* (Syme). By the shores of Lough Neagh, Co. Antrim. Locally common, one of our few apparently endemic plants—*teste* Hackel. Aug., 1909.—G. C. DRUCE. This very interesting plant is not noticed by either Nyman, Richter, or Ascherson and Graebner. In ed. 5 of his 'Brit. Flora,' Sir W. J. Hooker (1842), p. 385, described it as "*C. lapponica*, Hartmann"; but Wahlenberg's *Arundo lapponica* was a different plant, and Syme first took it up and named it under *stricta* = *Deyeuxia neglecta*, Kunth. Unfortunately it has become extinct in some of its former stations. It seems to be an *absolute endemic variety*; I once thought it might occur in British North America, but I had a beautiful series of Canadian *Calamagrostis* from Prof. Macoun and could not match it with any. The specimens kindly sent are the darkest in colour I have seen, and look as though the water level was low at the place of gathering.—A. BENNETT.

*Deschampsia setacea*, Richter (*D. discolor*, R. and S.). In a very wet, peaty bog between Achilty Inn and the Conan River, E. Ross., v.-c. 106, July 13, 1909.—E. S. MARSHALL. Also sent by W. A. Shoobred from same place. Correct.—G. C. DRUCE. Yes.—E. HACKEL.

*Avena fatua*, L. (a) *pilosissima*, Gray, Chesterfield, Derby, v.-c. 57, Aug., 1908.—E. and H. DRABBLE. "Lower pales densely hairy, becoming dark brown" (H. and J. Groves in 'Bab. Man.' ed. 9). I think *pilosissima* is the commonest variety,—it certainly is so in Derbyshire, but I am anxious to know how far this is true

for Great Britain generally. Mr. John Garton, who has used *Avena fatua* extensively in his hybridizing work with oats, tells me that more than two varieties of this species occur in England.—E. DRABBLE. This is *A. fatua*, var. *pilosa* ('B. E. C. Rep.,' 1872, p. 246) not *pilosissima*, Gray. Wats. ('Journ. Bot.').—E. HACKEL. The above statement requires a slight correction. The plants criticised were sent by Mr. H. C. Watson to the B. E. Club in 1871, and in the Report for that year, p. 20, the Editor, Boswell Syme, wrote they "include a series connecting *pilosissima* with var. *intermedia*. They may be placed under three heads, *A. pilosissima*, Gray, lower pale ultimately dark-brown, densely clothed with fulvous hairs from the base to the point where the awn is inserted. Var. *B. pilosa*, lower pale ultimately pale yellowish-olive rather thinly clothed with yellowish-white hairs from the base nearly to the point where the awn is inserted. This form I had not seen when I wrote the 'Grass' volume of 'English Botany.' Var. *C. intermedia*, lower pale ultimately pale yellowish-olive, glabrous, except at the base or in the lowest floret, also with a few widely-scattered hairs about the insertion of the awn." Therefore we should read *A. fatua*, L., var. *pilosa*, Syme, in 'Rep. Exch. Club,' 1871, p. 20, if it be kept as a distinct variety. In my 'List' I have made it the type, with var. *glabrata*, Peterm. = *intermedia*, and var. *pilosissima*, Gray. I think the glabrous form is much the rarer in Britain.—G. C. DRUCE.

*Koeleria albescens*, DC. [ref. No. 31021]. Braye Bay, Alderney, July, 1906. Named by Dr. Domin.—G. C. DRUCE.

*Koeleria albescens*, DC. [ref. No. 31028]. St. Ouen's Bay, Jersey, June, 1906. Named by Dr. Domin.—G. C. DRUCE.

*Koeleria albescens*, DC. [ref. No. 31020]. Cobo, Guernsey, July, 1906.—G. C. DRUCE.

*Koeleria gracilis*, Pers., v.-c. 64, July 27, 1909. Growing in great abundance in the upland pastures above Grassington. So named by Dr. Domin through the kindness of Mr. G. C. Druce from examples submitted in 1907. Not hitherto recorded for above vice-county as far as I can learn.—JOHN CRYER. Yes; but the sub-species *britannica*, Domin, with narrower leaves than usual. Flowers and rachis very hairy.—E. S. MARSHALL. This specimen is not *gracilis*, but the sub-species *K. britannica*, Domin. Many intermediates occur.—G. C. DRUCE. *britannica*, Domin.—E. HACKEL.

*Poa palustris*, L., var. *effusa*, Asch. and Graebn. 'Syn. Mitteleurop. Fl.,' II. 1. 418—*teste* Hackel. In old brickpits, by the Severn,

above Gloucester, v.-c. 33. The vice-county is E. Gloster, not W. Gloster, as was stated in 'Journ. Bot.,' 1909, p. 73. It occurs in great quantity in at least two extensive brickpits at Sandhurst. Further search may establish its occurrence up the Severn in other spots. It is not likely to be introduced in this locality: its surroundings are against that idea. The only difficulty in the way of accepting it as native is that it was not discovered till 1908.—H. J. RIDDELSDELL. *Poa palustris*, var. *effusa*, Aschers. and Graebn. Synop. II. 1. 418. Aehrchen 2 bis 3 (bis 4) blüthig. *effusa*. Locker. Stengel und Laubtriebe dünn, ziemlich lang niederliegend. Rispe locker, die Rispenäste ziemlich dünn, verlängert, meist nicht über 8 Aehrchen tragend. Aehrchen klein, meist 3-blüthig. Nicht selten an wassenzügigen Orten. This is the description of the above grass from Aschers. and Graebner.—H. J. RIDDELSDELL.

*Glyceria festuciformis*, Heyn., var. This plant grew in considerable quantity on the western side of Strangford Lough, Co. Down, near Killclagh, Aug. 1909. It differs from the continental type, approaching, says Prof. Hackel, the plant he has named *in litt.* *Atropis Foucaudii*, but it differs from the French *Foucaudii* by the somewhat convolute leaves, smaller and more contracted panicle with fewer spikelets, and appears to be a distinct local form, to which the varietal name *hibernica* may be given.—G. C. DRUCE.

*Glyceria festuciformis*, Heynh. On shore of Strangford Lough, Delamont, Co. Down, Aug. 9, 1909.—C. H. WADDELL.

*Glyceria Borreri*, Bab. Cardiff Docks, v.-c. 41, June, 1905.—H. J. RIDDELSDELL. We think correct.—A. LEY, S. H. BICKHAM, E. S. MARSHALL. Yes.—E. HACKEL.

*Festuca heterophylla*, Lam. By the Tweed, about two miles below Peebles, Aug. 1909. I am not certain whether this has been previously published as occurring in Scotland. Mr. Brothers-ton found it many years ago by the roadside near Kelso (see Herb. Brit. Mus.). He says probably Alien, since it was included in certain Seed Lists; thus supporting Mr. Carruthers' statement that it was a commercial grass, which is challenged in 'Flora of Hampshire,' p. 506, 1904. Here in the Peebles' station its indiginity was made suspicious by the presence of planted shrubs, &c., although thoroughly established and likely to spread.—G. C. DRUCE. This species was found near Kelso, many years since. From its geographical distribution, an unlikely native of Scotland.—E. S. MARSHALL.

*Brachypodium pinnatum*, Beauv., forma, Mid-West Yorks., v.-c. 64, July 27, 1909. This plant is to be found growing in con-

siderable abundance in shade and under trees in a dark corner of Grass Wood, Grassington. It was first noticed by me Aug. 1900.—JOHN CRYER. Var. *loaliaceum*, Asch. et Graeb., Syn. Fl. Mitteleurop. (1901) ii. 633 = *B. loaliaceum*, R. et S. Syst ii. (1817) 740.—A. BENNETT. Is var. *pubescens*, Syme, surely.—C. E. SALMON. The flowers are softly hairy; so I suppose it to be the var. *pubescens*, Gray, reduced in size, owing to the situation.—E. S. MARSHALL. *B. pinnatum*, Beauv., var. *vulgare*, Koch.—E. HACKEL.

*Bromus unioloides*, H. B. & K. River-side, Belgrave, Leicester, v.-c. 55, Aug. 1909. Many interesting casuals have found a temporary home on the banks beside the river Soar, below Leicester. The seeds may have been brought to the town with raw material of some kind and have been washed down by the current.—W. BELL.

*Equisetum palustre*, L., var. *nudum*, Newman. In a wet meadow, near Drumcliffe, Co. Sligo. Also observed in wet places in the sand-dunes near Rockfield, Co. Wicklow. In the Sligo locality it was extremely abundant and distinct, but as it grew with the normal form, it could scarcely be the influence of soil or date which causes the *nudum* condition. Intermediate forms occurred. I am not certain whether S. Gibson is not the authority for the varietal name.—G. C. DRUCE. Not quite the variety, I think, though tending towards it.—E. S. MARSHALL. Not at all my idea of var. *nudum*, which is a smaller plant throughout with slender stems. Besides, I see young branchlets appearing at most of the whorls. Why is this not *palustre* in a young state (i.e. May)?—C. E. SALMON. To Mr. C. E. Salmon's enquiry it may be answered that the plant grew with the ordinary form of *palustre*, so that it was not the age of the plants which gave rise to the variation, but I think it perhaps owes the non-development of its branches to some defective root-absorption. It is the var. *nudum*, Duby, Botanicon Gallic. p. 535, 1829, as described by Milde in his 'Monograph' of *Equisetorum*, published in 1865, i.e. "Caulis validus, 8—11 angulus, 12—16 [inches] altus, erectus nudus." Newman however published in the 'Phytologist,' vol. ii. p. 627, 1844, a "var. *nudum*, Gibs. MSS." which he says "differs principally from the normal form in being without branches, or nearly so, the occurrence of a few scattered ones being occasional only, and constituting the exception rather than the rule. . . . The specimens vary considerably in size as well as in general appearance; those from Scotland, Yorkshire and Lancashire are very small—two inches; those from Devonshire are somewhat larger [the figure is nearly 4 inches], and I have seen others of more luxuriant growth. Some of the examples are erect, others prostrate." The figure shows some of the stems with branches, but considering the rather

wide range of plants he puts under it, it evidently covers more than Mr. Salmon's idea of the plant, and indeed would appear to be the var. *nanum*, Milde, as are most of Newman's plants. If Milde is correct, the Irish plants are var. *nudum*, Duby. The smaller and more slender forms are *nanum*, Milde, "caulis procumbens vel apice ascendens, tenuissimus 6 in. longus, 4-5 angulus, nudus." While the very slender plant "Caulis 6-8 angulus, 2-8 in. altus, erectus nudus l. vage ramosus" is var. *tenue*, Döll, 'Rhein Fl.' p. 29, 1843.—G. C. DRUCE.

*Equisetum palustre*, L., forma *longiramosa*, Kling. Bog, near Walton Junction, S. Lancs., v.-c. 59, Sept. 1907.—J. A. WHELDON.

*Equisetum limosum*, L., var. *fluviatile*, L. Magdalen Meadow, Oxford, June 6, 1893.—G. C. DRUCE.

*Equisetum hyemale*, L., var. *Moorei*, Newman. Sand banks, near Rockfield, Co. Wicklow, June, 1909.—G. C. DRUCE. Correct. The material before me is, however, rather poor. A good species I believe.—E. S. MARSHALL.

*Equisetum trachyodon*, Braun. In one station in a wet hedge bottom, Glen Car, Co. Sligo, June, 1909.—G. C. DRUCE. Somewhat stouter than my two sheets of *E. trachyodon* from Colin Glen, Belfast; but otherwise matches them well.—E. S. MARSHALL.

*Lycopodium alpinum*, Linn, var. S.-W. slope of Geal-Charn at 2,700 ft., Glen Feshie, E. Inverness, v.-c. 96, July, 1909.—ALBERT WILSON and J. A. WHELDON. This plant when growing looks very distinct from ordinary *L. alpinum*, which occurs more sparingly on the same hill. The flabellate branches have (taken with the leaves) a very compressed selaginella-like appearance, and are as robust as those of *L. annotinum*, which also grows in the vicinity. When fresh the main stems of the variety are very distinctly angular, whereas those of *L. alpinum* are only feebly so, in fact practically terete. This difference is less apparent in the dried plant, but a distinctly raised decurrent line may still be traced below the junction of most of the branches with the main stem.—A. WILSON and J. A. WHELDON. This is the *L. alpinum*, var. *decipiens*, of my 'List,' and what at one time was thought by Mr. J. G. Baker, Sir Joseph Hooker, Dr. Carruthers, &c., to be *L. complanatum*, L. (see 'Ann. Scot. Nat. Hist.' p. 182, 1892). Curiously enough Dr. Syme, who was the first to doubt the identity of Mr. Baker's *complanatum* with the Linnean type, omitted to describe it when treating of *L. alpinum* in the third edition of 'English Botany,' but there is a plate (1834) drawn from my Gloucestershire specimen which is lettered *L. alpinum*, var. *decipiens*, strictly therefore a nomen solum, but I have a letter from Dr. Syme in which he says of my Gloucester specimen,

"I have named it in *E. B.* plate *L. alpinum*, var. *decipiens*," therefore we may safely identify the plant from Gloucestershire (which was found by Father Reader), and which I sent to Dr. Syme with the plate. Mr. Wilson's specimens are to be referred to this variety.—G. C. DRUCE. Excellent *L. alpinum*, L., var. *decipiens*, Syme; I have exactly the same plant from the Cairngorms. It was formerly mistaken for *L. complanatum*, L. In this extreme form it is usually barren, according to my experience.—E. S. MARSHALL.

*Chara fragilis*, Desv., var. *verrucosa*, Itz. In the river at Toome Bridge, especially in shallow water near the weir, in great quantity, and singularly constant in character, Co. Antrim and Londonderry. Named for me by Messrs. Groves, Aug., 1909.—G. C. DRUCE. Right, I believe. This name was substituted for var. *delicatula*, Braun in 'Lond. Cat.' ed. 10; but Messrs. Groves retained the name *delicatula* for some of our Sutherland gatherings of 1908, so that the two names do not appear to be quite synonymous.—E. S. MARSHALL.

---



# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

---

## REGULATIONS, &c.

**OBJECTS.**—The objects of the Club are to facilitate the exchange of dried specimens of British Plants, and to stimulate the study of critical species and varieties. But in addition it offers the advantage of intercourse between British Botanists, and encourages the interchange of ideas. It may be found desirable to extend the scope of the Club at some future time.

The Annual 'Report' contains the opinions of specialists on the more interesting and critical plants contributed for exchange, and also notices of the chief additions to the 'British Flora' during the year, and of recent publications of importance relating to British Botany.

**MEMBERSHIP.**—The membership is open to all botanists. Members who contribute dried specimens receive others in exchange. The annual subscription for such members is 7*s.* 6*d.*, including three copies of the 'Report.' Non-contributing members, who receive two copies of the 'Report,' pay 5*s.* per annum. They may send in a single specimen as a voucher for an addition to the county in which it was gathered, or for the purpose of its being correctly identified. Subscriptions are due on January 1 in each year, and should be paid to the Treasurer, G. Claridge Druce, Yardley Lodge, 9 Crick Road, Oxford.

**REGULATIONS.**—Specimens must be carefully selected and well dried (bad specimens will be destroyed), and must not exceed 18 by 11 inches. Not less than ten sheets of each plant should be sent. No specimens should be gathered of any plant the existence of which might thereby be endangered or materially harmed. Each sheet should adequately represent the species. Every sheet must have a clearly printed, typed, or written label, bearing the name of the plant, collector, habitat, locality, date, and county or vice-county in which it was collected. Also a reference number relative to the special gathering is very desirable

in the case of critical specimens. The following form is recommended:—

“CERASTIUM VULGATUM, L. Ref. no. 1289.  
var. HOLOSTEOIDES (Fries).  
Among long grass on wet alluvium,  
Tay-side near Perth (Mid-Perth), v.-c. 88.  
June 18, 1909, John Smith.”

An extra label for the use of the Editor in preparing the ‘Report’ should be included. If thought desirable, additional particulars may be sent; and these must be clearly written or typed on one side only of a separate sheet of paper, which should be dated and signed by the writer. The additional particulars may be entered in the ‘Report.’

Seeds (with plants), seedlings, examples of perennation, abnormal states and climatic or soil variations, especially if accompanied by notes, are very acceptable. Separately dried examples of the flowers of many plants, notably the Orchids, Labiates, &c., so that the shape of the corolla can be seen, might with advantage be included. Each parcel should be accompanied by a list of the member’s special *desiderata*. This list may be made by marking a copy of the current edition of the ‘London Catalogue,’ or Druce’s ‘List of British Plants.’ Parcels should be sent, carriage paid, to the Distributor for the year not later than Dec. 30. Members who send the more valuable parcels will have their return parcels selected before the others.

The Editor and Secretary in compiling the ‘Report’ have full discretion to insert or omit any notices that may be contributed.

THE  
BOTANICAL EXCHANGE CLUB  
AND SOCIETY OF THE BRITISH ISLES.

REPORT FOR 1910.



The Subscription, 7/6 per annum, and Non-contributing Members' Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE,  
YARDLEY LODGE,  
9 CRICK ROAD, OXFORD.

Parcels for 1911 should be sent post paid by the 30th of December to J. A. Wheldon, Esq., 60 Hornby Road, Walton, Liverpool.

PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD.

1911.

*HONORARY MEMBERS.*

SIR JOSEPH DALTON HOOKER, G.C.S.I., F.R.S.

PROFESSOR E. HACKEL.

DR. G. RITTER BECK VON MANNAGETTA.

DR. W. O. FOCKE.

DR. K. DOMIN.

DR. J. VON STERNECK.

PFARRER G. KÜKENTHAL.

DR. R. VON WETTSTEIN.

DR. C. H. OSTENFELD.

DR. W. BECKER.

DR. S. MURBECK.

DR. HUGO GLÜCK.

PROF. C. H. FERNALD.

DR. N. L. BRITTON.

J. G. BAKER, ESQ., F.R.S.

*CORRESPONDING MEMBERS.*

A. FRYER, ESQ., A.L.S.

J. E. BAGNALL, ESQ., A.L.S.

F. ARNOLD LEES, ESQ., M.R.C.S.

RICHARD F. TOWNDROW.

ARTHUR BENNETT, A.L.S.

## LIST OF MEMBERS.

---

- Adams, Mrs., 18 Vernon Road, Edgbaston.  
Amphlett, John, *M.A.*, Clent Cottage, Stourbridge.  
Babington, Mrs., Brookside, Cambridge.  
Bailey, C., *M.Sc.*, *F.L.S.*, Haymesgarth, Cleeve Hill, Glos.  
Bayley-Balfour, Prof., *F.R.S.*, Royal Botanic Garden, Edinburgh.  
Bell, W., Knighton Road, Leicester.  
Bickham, S. H., *F.L.S.*, Underdown, Ledbury.  
Branson, F. W., *F.C.S.*, Wynneholme, Far Headingley, Leeds.  
Britton, C. E., Limpsfield, Adela Avenue, New Malden, Surrey.  
Bromwich, Joseph, 19 Hamilton Gardens, St. John's Wood, N.W.  
Bullock-Webster, Rev. Canon G. R., 17 Gordon Square, London, W.C.  
Butt, Rev. Walter, *M.A.*, Oakwood, near Chepstow.  
Caldecott, Dr. C., Earlswood Asylum, Redhill, Surrey.  
Carr, Prof. J. W., University College, Nottingham.  
Comber, John, High Steep, Jarvis Brook, Sussex.  
Costorphine, R. D., Hill Side House, Arbroath.  
Costorphine, Mrs., Hill Side House, Arbroath.  
Cowan, McTaggart, 40 Great King Street, Edinburgh.  
Crisp, Sir Frank, *F.L.S.*, Friar's Park, Henley-on-Thames.  
Cryer, John, 182 Cliffe Wood Mount, Shipley, Yorks.  
Cumming, J., *M.A.*, Eastfield House, Rugby.  
Drabble, Eric, *D.Sc.*, 13 Claverley Grove, Church End, Finchley, N.  
Druce, G. C., *J.P.*, *M.A.*, *F.L.S.*, Yardley Lodge, Oxford.  
Drummond, J. R., 4 Eversfield Road, Richmond.  
Elwes, H. J., *F.R.S.*, Colesborne Park, Cheltenham.  
Evans, A. H., *M.A.*, 9 Harvey Road, Cambridge.  
Ewing, P., *F.L.S.*; The Frond, Uddingston.  
Farr, E. H., *F.C.S.*, The Laboratory, Uckfield.  
Foggitt, T. J., Thirsk, Yorkshire.  
Fortescue, W. Irvine, *J.P.*, Kingcausic House, Maryculter, Aberdeen.  
Foster, H., 48 Ridge Mount, Upper Armley, Leeds.  
Fowler, Rev. Canon, Liversidge Vicarage, York.  
Fox, Rev. H. E., *M.A.*, The Croft, Leyton Grove, Putney Hill, S.W.  
Fox, Lee P., Lowood, Dewsbury.  
Fraser, James, 18 Park Road, Leith.  
Gasking, Rev. Samuel, *B.A.*, *F.L.S.*, *F.G.S.*, 26 Yew Tree Road, Walton,  
Liverpool.  
Geldart, Miss, Colman Road, Norwich.  
Graveson, W., Selborne, Queen's Road, Hertford.

- Gray Herbarium, Harvard University, Cambridge, Mass, U.S.A.  
 Gregory, Mrs., 34 Montague Road, Cambridge.  
 Grenfell, Miss, Bacres, Henley-on-Thames.  
 Groves, J., *F.L.S.*, 1 Sibella Road, Clapham.  
 Hanbury, F. Janson, *F.L.S.*, Brockhurst, East Grinstead.  
 Harford, W. A., Petty France, Badminton, S.O., Glos.  
 Hayward, Miss Ida, *F.L.S.*, 7 Abbotsford Road, Galashiels.  
 Hilton, T., 1 Clifton Street, Brighton.  
 Hodge, W., 35 The Crescent, Northwich, Cheshire.  
 Holland, Rev. M., *F.L.S.*, Coventry Road, Coleshill, near Birmingham.  
 Horwood, A. R., Corporation Museum, Leicester.  
 Hunnybun, E. W., Mill Common, Huntingdon.  
 Hurst, C. P., Lockyer's Private Hotel, Llandudno.  
 Jackson, A. Bruce, 13 Scarle Road, Wembley.  
 Johnston, Col. Henry Halcro, Orphir House, Kirkwall, Orkney.  
 Kelcey, Mrs. Foord, Kimble Rectory, Butler's Cross, S.O., Bucks.  
 Lacaita, C. C., *F.L.S.*, Selham House, Petworth, Sussex.  
 Laidlaw, F. F., Ivanhoe Hotel, Great Russell Street, W.C.  
 Lester-Garland, L. V., *M.A.*, *F.L.S.*, Victoria College, Jersey.  
 Ley, Rev. A., *M.A.*, Netherton, Brampton Abbots, Ross-on-Wye.  
 Mackenzie, Roderick, *M.A.*, Sunnyclose, Henley-on-Thames.  
 Marshall, Rev. E. S., *M.A.*, *F.L.S.*, West Monkton Rectory, Taunton.  
 Melvill, J. Cosmo, *M.A.*, *D.Sc.*, *F.L.S.*, Meole Brace Hall, Shrewsbury.  
 Milne, R. M., Devon Lodge, Dartmouth, S. Devon.  
 Moss, C. E., *B.A.*, *D.Sc.*, *F.R.G.S.*, The Botany School, Cambridge.  
 Pallis, Miss Marietta, Peile Hall, Newnham, Cambridge.  
 Palmer, Miss C. E., The Yews, Odiham, Hants.  
 Patey, W., c/o Roberts & Co., New Bond Street, London.  
 Peacock, Rev. E. A. Woodruffe, Cadney Vicarage, Brigg, Lincolnshire.  
 Peck, Miss C. L., Maidencombe House, St. Mary Church, S. Devon.  
 Percival, Prof. J., The Pyghtle, Northcourt Avenue, Reading.  
 Pugsley, H. W., 81 Alexandra Road, Wimbledon, S.W.  
 Ransom, F., *F.C.S.*, The Chilterns, Hitchin.  
 Rea, Carleton, *M.A.*, *B.C.L.*, 34 Foregate Street, Worcester.  
 Reid, Miss Bertha, 26 Ardilaun Road, Highbury, N.  
 Riddelsdell, Rev. H. J., *M.A.*, Old Registry, Llandaff.  
 Rogers, Rev. W. Moyle, *F.L.S.*, Chetnole, Grosvenor Road, Bournemouth W.  
 Rothschild, Hon. N. C., Arundel House, Kensington Gardens, W.  
 Salmon, C. E., *F.L.S.*, Pilgrim's Way, Reigate.  
 Scully, R. W., Rockfield, co. Dublin.  
 Shoolbred, W. A., *M.R.C.S.*, *F.L.S.*, St. Ann's, Chepstow.  
 Smith, F. J., *M.D.*, 138 Harley Street, London, W.  
 Stansfield, F. W., *M.B.*, 120 Oxford Road, Reading.  
 Stapledon, R. Y., *M.A.*, Royal Agricultural College, Cirencester.  
 Travis, W. G., 9 Barton Road, Liverpool.  
 Trow, Prof. A. H., Glanhafren, Penarth.

- Trower, Miss Alice, Stansteadbury, Ware, Herts.  
Turrill, B., 1 The Avenue, Kew Gardens.  
Vigurs, C. C., *M.D.*, Newquay, Cornwall.  
Vines, Prof. S., *D.Sc.*, *F.R.S.*, University Herbarium, Oxford.  
Waddell, Rev. C. H., *B.D.*, Vicarage, Saintfield, Co. Down.  
Walker, H., 2 Brownswood Park, Green Lanes, London, N.  
Waterfall, Charles, Dalmeny, Shavington Avenue, Chester.  
Watkin, E. T., New College, Oxford.  
Way, Arthur G., Woodleigh, Leigh Woods, near Bristol.  
Webster, Alfred, Billingshurst, Sussex.  
Webster, George, Merton Cottage, Holgate, York.  
Wheldon, J. A., *F.L.S.*, 60 Hornby Road, Walton, Liverpool.  
White, J. W., *F.L.S.*, Warnham, Woodland Road, Clifton, Bristol.  
Williams, F. N., *F.L.S.*, 181 High Street, Brentford.  
Wilson, A., *F.L.S.*, *F.R.M.S.*, 28 St. James' Road, Ilkley.  
Wolley-Dod, Major A. H., Pymont, Walton-on-Thames. *Hotel Bristol 205*  
Yapp, Prof., University College, Aberystwith.

# THE BOTANICAL EXCHANGE CLUB AND SOCIETY OF THE BRITISH ISLES.

## THE REPORT OF THE TREASURER AND SECRETARY FOR 1910.

### *BALANCE SHEET FOR 1909.*

	<i>£</i>	<i>s.</i>	<i>d.</i>		<i>£</i>	<i>s.</i>	<i>d.</i>
By Subscriptions received . . . . .	24	8	0	Balance from 1907 . . . . .	1	16	7
Sale of Reports . . . . .	2	12	6	Expenses of Distribution . . . . .	1	12	2
Do. due to Treasurer . . . . .	1	4	1	Postages, Stationery, &c. . . . .	2	14	3
				Printing Report . . . . .	21	2	1
				,, Rules, &c. . . . .	0	19	6
	<u>28</u>	<u>4</u>	<u>7</u>		<u>28</u>	<u>4</u>	<u>7</u>

Balance due to the Treasurer, G. Claridge Druce, Yardley Lodge, Oxford, *£*1 4*s.* 1*d.*, to whom all subscriptions should be paid on the first of January in each year, so that the trouble and expense of applying for them may be avoided; of 7*s.* 6*d.* for each member who contributes and receives specimens; of 5*s.* for each non-contributing or corresponding member, who receives the *Reports* only, but who may send specimens for identification, or as records of interesting plants, or as notes for the *Report*. Payment in advance for two or more years may be made if preferred.

Members may have a complete set of the *Reports* for the years 1879—1900 for 12*s.* 6*d.*, 1901-10, 14*s.*, post free, odd copies 1*s.* each, three for 2*s.* 6*d.*, from 1901-6 at 1*s.* 6*d.*, and from 1907-10, 2*s.* each post free.

## PLANT NOTES FOR 1910, ETC.

22 *d.* RANUNCULUS BULBOSUS, L., \*var. DUNENSE, Druce. Planta 5-10 ctm. alta. Radicibus plurimis ad perpendiculum directis. Corno robusto, vaginis veterum foliorum dense cooperto. Folia capillis longis albis hirtis densius vestita, praecipue petiolis. Pedunculi breviores 3—5 ctm. Flores magni 2·5—2·8 ctm.

Near to *R. valdepubens*, Jord., of which it may be a dune-form. Differs from *R. bulbosus* by its shorter growth and larger flowers, its corm being more densely clothed, and the leaves and petioles being covered with long shaggy hairs. Sand dunes, St. Ouen's Bay, Jersey, April, 1910. G. CLARIDGE DRUCE.

63 *bis.* \*DELPHINIUM ADDENDUM, McNab. 'Bot. Soc. Ed.' ix. 337, 1868 [Cantab.].

84 *bis.* \*PAPAVER LAEVIGATUM, M. Bieb. 'B.E.C.' 199, 1888 [Warwick]. Eur. or.

140 *d.* ARABIS PETRAEA, Lam., \*var. GLABRA, Edmonston. 'Fl. Shetl.' 25, 1845. "Leaves wholly radical, rigid, glabrous." Balta Sound, Shetland.

× 143. \*CARDAMINE AMARA × PRATENSIS. 'Fl. Oxf.' 28, 1886. Heyford, Oxford. G. CLARIDGE DRUCE.

161 *c.* DRABA INCANA, L., \*var. GRACILIS, Ledeb. Caithness. 'Ann. Scot. Nat. Hist.' 227, 1910. ARTHUR BENNETT.

172 *bis.* \*COCHLEARIA GLASTIFOLIA, L. Europa [Musselburgh]. J. FRASER, in lit.

196 *bis.* \*ERYSIMUM CANESCENS, Roth. Eur. or. [Musselburgh]. J. FRASER, in lit. 1910.

202 *c.* CAMELINA FOETIDA, Crantz, \*var. C. INTEGRIFOLIA, Wallr. Eur. [Bucks.]. 'B.E.C.' 697, 1899. G. CLARIDGE DRUCE.

247 *bis.* \*LEPIDIUM ALYSSOIDES, A. Gray. Amer. bor. [Tweedside]. MISS IDA HAYWARD, in lit.

247 *ter.* L. APETALUM, Willd. Amer. bor. [Tweedside]. MISS IDA HAYWARD, in lit.

252 *ter.* \*IBERIS INTERMEDIA, Guersent. Gallia [Edinburgh]. 'Ann. Sc. Nat. Hist.' 43, 1910. J. FRASER.

256 *bis.* ISATIS ALEPPICA, Scop. var. PAMPHYLICA, Boiss. Oriens [Edinb.]. 'Ann. Scot. Nat. Hist.' 43, 1910. J. FRASER.

281 *b.* RESEDA ALBA, L., \*var. SUFFRUTICULOSA (L.). Eur. [Bucks, &c.] G. CLARIDGE DRUCE.

284 *b.* R. LUTEA, L., \*var. LAXA, Lange. Eur. [Edinb.]. J. FRASER.

294 *g.* VIOLA RIVINIANA, Reichb., \*var. DIVERSA, Gregory. During a visit to the South of Scotland (Galashiels, Selkirksh.), in April, 1910, my attention was arrested by a violet which was quite new to me. Clusters of tiny flowers, variously coloured,—from almost white to reddish-violet, the spurs also diversified in tint, many of them greenish—appeared on the hill-sides, scarcely exceeding in height the turf among which they grew. At that stage their appearance gave the impression of their belonging to the *acaulescent* series of violets. On closer examination they were seen to be distinctly *caulescent*, with characters suggesting—about equally—*V. silvestris* and *V. Riviniana*, though much smaller than either. From this humble start in life they developed, until by the end of May—a month later—one involuntarily exclaimed "Ah! *Viola Riviniana!*" Not quite, however, even then! A parvenu, perhaps, but a fairly modest one, possessing smaller leaves, less staring, square-shaped blossoms than its congener, the opulent *V. Riviniana*. A summer's searching failed to reveal any other violet in that part of Scotland. When I spoke of it later to Dr. Moss, who knew it well, he produced W. B. Crump's excellent flora of Halifax, where the same violet, after having posed as *V. canina* alternately with *V. Riviniana*, has now crystallized into shape under the latter name. *Borealis* seemed a suitable varietal appellation, until the same plant turned up from various more southerly

habitats (not as the prevailing type, but here and there in small quantities), for which reason the varietal name *diversa*—suggestive of the plant's unexpected development—may be more appropriate.  
E. S. GREGORY.

296 *e.* VIOLA CANINA, L., \*var. E. LANCEOLATA, Martini Donos. 'Pl. Crit. du Tarn,' Fragm. i. 13, and 'Florule du Tarn,' 81, 1864. The upper leaves are lanceolate, truncate at base or only slightly cordiform, the lower oval cordiform. This plant has the facies of *V. lancifolia*, Thore, but differs in the leaves not rounded at base, but truncate or cordiform, more obtuse at apex, and in the truncate apiculate capsules. Marshy ground, Menmarsh, Oxford, May 1910. G. CLARIDGE DRUCE. Identified by Mrs. Gregory.

298 *g.* VIOLA ODORATA, L., var. TENERRIMA (Weisb.). Surrey. 'Journ, Bot.' 67, 1892.

301 *bis.* \*VIOLA EPIPSILA, Ledebour. 'Ind. Sem. Hort. Dorpat,' 5, 1820. After much searching, three unmistakable specimens have been recently detected in the Herbarium of Mr. W. F. Miller of Winscombe, Somerset. They were gathered in 1885 with *V. palustris* near Widdicombe, S. Devon. Curiously enough, specimens of a plant gathered on Dartmoor, near Okehampton, were named *epipsila* × *palustris* by Dr. Neuman three or four years ago, but in the apparent absence of one of the parents, on which some botanists laid much stress, the plant was not admitted to the 'List.' These plants gathered by Mr. Miller are the first record of this species in Britain. From *V. palustris* it differs by (1) its more robust growth; (2) by its secondary leaves being more or less ovate-cordate and having short points at the apex; (3) by having scattered hairs on the underside of its leaves as well as on the petiole; (4) by its bracts being always *above* the middle of the peduncle; (5) by its much larger fruit, the capsule in dehiscence averaging about 1 ctm. in length. Nyman gives its European distribution as Ross., Med., Fenn., Suec., Norv., Dan., Germ. bor., Salisb. So its occurrence in Britain was expected. E. S. GREGORY.

332 *c.* SAPONARIA OFFICINALIS, L., var. C. HYBRIDA, L. [Northants, extinct], a monstrosity. ? Lancashire.

× 368. *CERASTIUM ALPINUM* × *NIGRESCENS* = *C. BLYTTII*, Baenitz. Plant less woolly, leaves more acute and greener, with shorter pubescence; upper bracts with distinct membranous margin; seed often (always?) abortive = *C. alpinum*, var. *pubescens* Syme, p.p.

Planta minus lanata, foliis acutioribus et viridioribus, pubescentia brevior, bracteis superioribus cum marginibus plane membranaceis. Seminibus saepe (semper?) abortivis. Ben Heasgarnich, Ben Lawers, Scotch Mountains. G. CLARIDGE DRUCE.

× 368. *C. ALPINUM* × *VULGATUM* = × *C. SYMEI*, Druce, in 'Ann. Scot. Nat. Hist.' 43, 1911. Plant less caespitose, usually more erect, with narrower leaves, which are less hairy, the hairs shorter, and nearly eglandular. Planta minus caespitosa, plerumque erectior, foliis angustioribus et minus hirsutis, capillis brevioribus et paene glandulosis. Ben Lawers, 88; Ben Laoigh, 98; Aonach Mor, 97; Braeriach, 96; Glen Aan, 94 = *C. alpinum*, var. *pubescens*, Syme, p.p. G. CLARIDGE DRUCE.

× 369. *C. NIGRESCENS* × *VULGATUM* = × *C. RICHARDSONII*, Druce. Plant prostrate, ascending; leaves narrow, acute, pubescence sparse, sparingly glandular; flowers large. Planta prostrata, ascendens; foliis angustis acutis, pubescentia rariore, vix glandulosa. Flores magni. Clogwyn, Snowdon.

There is no type specimen of Boswell-Syme's var. *pubescens* in his herbarium, now in the possession of Mr. F. J. Hanbury. G. CLARIDGE DRUCE.

374 *b*. *CERASTIUM TETRANDRUM*, Curtis, var. *ZETLANDICUM*, Murbeck, in 'Studier Ofver Kritiska Kärl variformes,' p. 258. Recedit a planta typica internodiis praesertim inflorescentia abbreviatis pedunculo fructu maturo paullo brevioribus. Shetland. S. MURBECK.

370 *i*. *CERASTIUM VULGATUM*, L., \*var. *NEMORALE*, Uechtritz, in 'Oester. Bot. Zeit.' 79, 1868. Plant robust, 3—5 dcm., leaves large and rather broadly oval, more or less hairy; peduncles, pedicels, and calyces clothed with glandular hairs. See Rouy & Fouc., 'Fl. Fr.' iii. 207. Plants well coming under this description grew on the Fen dyke between Peakirk and Crowland, Northants. G. CLARIDGE DRUCE.

376 *b.* *C. CERASTOIDES*, Britton, \*var. *NIVALE* (Don). Scotland. Mr. Clement Reid kindly draws my attention to the following interesting addition to the English flora:—"An interesting find was made by me on Cross Fell, Cumberland, at an alt. of about 450 m. I namely found *C. trigynum*, which seems not to have before been met with in England." GUNNAR SAMUELSSON, "Scottish Peat Mosses" in 'Bull. Geol. Inst. Upsala,' x., pp. 197—260, p. 232 foot-note.

382. *STELLARIA DILLENIANA*, Moench. See 'Rep.' 1909, p. 413 and Dr. Williams in 'Journ. Bot.' 223, 1910. Middlesex. Specimens now distributed. G. CLARIDGE DRUCE.

× 434. \**HYPERICUM ACUTUM* × *PERFORATUM* = \**H. INTERMEDIUM*, Retz. Distinguished from *acutum* by the wings of the stem not being membranous, and by the flowers being much longer than the calyx.

× 437. \**H. HUMIFUSUM* × *LINARIIFOLIUM*. See 'Syme E. B.' ii. 156. Jersey.

473 *bis.* \**GERANIUM TUBEROSUM*, L. Eur. mer. [Lawers, Perth.] SIR ALEX. HEPBURN, 1910, in lit.

479 *bis.* \**G. ENDRESSI*, Gay. Pyrenees. [Dunoon]. J. FRASER, in lit. [Salop] MELVILL. [Bristol] ROPER in 'Journ. Bot.' 259, 1910. This is the correct name for the plant recorded on p. 414 of the 'Report,' 1909, as *G. maculatum*.

519 *bis.* \**RHAMNUS ALATERNUS*, L. Eur. [Somerset North, near Clifton.] J. WALTER WHITE, in lit., 1910.

552 *bis.* \**TRIGONELLA MARITIMA*, Delile. Eur. mer. [Hull.]

556 *bis.* \**T. CAELISYRIACA*, Boiss. Oriens. [Edin.] J. FRASER in 'Ann. Scot. Nat. Hist.' 44, 1910.

\*578 *bis.* *MEDICAGO PRAECOX*, DC. Eur. Galashiels. Miss I. HAYWARD.

581 *b.* *MEDICAGO MINIMA*, Desr., var. *MOLLISSIMA* (Roth). *Mollissima*, foliolis . . . stipulis basi latioribus apice dentatis, pedunculis bifloris, leguminibus cochleatis 5-gyrosis, spinulis longis apice

hamatis, 'Roth. Cat.' 3, 74. Put under *M. minima* as var. *longiseta*, DC., 'Prod.' ii. 178, by Rouy & Fouc., and defined: Epines des spires médianes sensiblement plus longues que le diamètre de celles-ci; plante ordinairement velue-blanchâtres, non glanduleuses. Found at Galashiels, 79, abundantly by Miss Ida Hayward. This differs from type *minima*, by its soft and whitish pubescence, and by its longer and straighter spines. De Candolle's *longiseta* is said to have longer peduncles bearing several flowers. The Galashiels plant would be put by many botanists as a sub-species. G. CLARIDGE DRUCE.

593. MELILOTUS OFFICINALIS, Lam., \*var. UNGUICULATA, Seringe, ms., DC., 'Prod.' ii. 187, 1828 = leguminibus elongatis sterilibus unguiformibus pedicellatis. Oxford. G. CLARIDGE DRUCE.

595. M. ALBA, Desv., \*var. UNGUICULATA (Seringe, in DC., 'Prod.' ii. 187, 1825, under *M. leucantha*), leguminibus elongatis sterilibus unguiformibus pedicellatis. Oxford. G. CLARIDGE DRUCE.

635. \*TRIFOLIUM AUREUM, Poll. Eur. [J. G. Baker, Surrey, 'B.E.C.' 47, 1881.]

704 c. VICIA HIRSUTA, S. F. Gray, \*var. GLABRESCENS. See Borrer in 'Fl. Hampshire,' 109, 1904.

717 bis. \*LATHYRUS CILIATUS, Guss. Eur. mer. [Lancashire, St. Anne's.] See 'Manch. Mem.' 6, 1910. C. BAILEY.

883 b. GEUM RIVALE, L., \*var. PALLIDUM, C. A. Meyer. With pale greenish flowers, growing over a considerable area in East Lothian. S. ANDERSON, in lit.

884 bis. \*GEUM STRICTUM, Ait. Reg. bor. [Blair Adam Scot.] 'Tr. Bot. Soc. Ed.' 154, 1891.

892 bis. \*POTENTILLA PEDATA, Willd. Eur. [Oxford], 1909. G. CLARIDGE DRUCE.

893 bis. P. THURINGIACA, Bernh. Eur. Reported as well established in Forfar. Mr. and Mrs. COSTORPHINE. Described and figured in 'Reichb. Ic. Fl. Germ. et Helv.' xxv. t. 34.

917 *bis.* \**ACAENA ADSCENDENS*, Vahl. Australia. [Musselburgh], 1910. J. FRASER, in lit.

923 *g.h.* *ROSA ARVENSIS*, Huds., \*var. *g. ERRONEA*, Rip. and \*var. *h. SCABRA*, Baker. Wolley-Dod, 'Brit. Roses,' pp. 4-5, 1910.

925 *h.* *R. STYLOSA*, Desv., \*var. *h. CORYMBOSA*, Desv. Wolley-Dod, l.c. p. 11.

941. *R. MOLLISSIMA*, Willd. \*var. *JUNDZILLIANA* (Baker). See Wolley-Dod, l.c. p. 96.

\*Var. *PSEUDO-CUSPIDATA* (Crépin). Wolley-Dod, l.c. p. 91.

× 950. \*× *R. BITURIGENSIS*, Bor. 2. = *R. PIMPINELLIFOLIA* × *EGLANTERIA*. Wolley-Dod, l.c. 48.

× 950. \**R. SPINOSISSIMA* × *VILLOSA*, Banff. 'Ann. Scot. Nat. Hist.' 56, 1909. W. BARCLAY.

950 *f.* *R. SPINOSISSIMA*, L., \*var. *f. MITISSIMA* (Gmel.). Wales. Wolley-Dod, l.c. p. 23.

958. *PYRUS PINNATIFIDA*, Ehrh., var. *ARRANENSIS* (Hedl.). Glen Sannox, Isle of Arran ; by some botanists considered a distinct species.

966 *e.* *CRATAEGUS OXYACANTHA*, L., var. *CUNEATA*, Druce, in 'Journ. Bot.' 272, 1910. Stylus i. Calyx pubescens. Folia cuneata, angusta, ovato-oblonga, a vertice 3-vel 4 brevibus segmentis divisa. Middlesex. Distinguished from type by the narrower cuneate leaves.

967 *f.* *CRATAEGUS OXYACANTHA*, L., var. *QUERCIFOLIA*, Druce. Styl. i. Calyces et pedunculi densius hirsuti ; foliis pallide virentibus pubescentibus, in textura molliter—papyraceis, rhomboidis ad bases late cuneatis ; foliorum marginibus in 5—7 segmentis inequaliter divisis, segmentis obscure et diverse crenatis ; ramis floriferis contortis. Kirkcudbright. G. CLARIDGE DRUCE.

972 *bis.* \**COTONEASTER SIMONSI*, Baker. Khasia. A middle-sized bush, with a few elongated erecto-patent branches. Fully grown leaves 1 in. by  $\frac{5}{8}$  in., oblong ; deltoidly narrowed from above

the middle to a mucronate apex, the lower half slightly rounded, the upper surface a duller green, thinly silky when young, but nearly or quite naked when mature. Berries bright scarlet, turbinate  $\frac{3}{8}$  in. deep by  $\frac{1}{4}$  in. broad. Bird-sown on a British fort near Galashiels—Miss Hayward; in wild heathy country near Aldershot—Mrs. Gibson, in lit.; and in Oxford. G. CLARIDGE DRUCE.

× 991. *SAXIFRAGA GEUM* × *HIRSUTA*, Engler. See 'B.E.C.' (1887), 181. From Connor Hill and Brandon Mt., collected by Rev. AUGUSTIN LEY, 1887.

993 *bis*. \**SAXIFRAGA SARMENTOSA*, Linn. f. China. [Bonny Crag, 'Bot. Soc. Ed.' 249, 1876.]

993 *ter*. \*[*S. PEDATIFIDA*, Sm. 'Journ. Bot.' (1883), 152, 181, 'B.E.C.' 1882, 72.]

993 *quat*. \*[*S. ANDREWSII*, Haw. 'B.E.C.' (1882), 72.]

1006 *ter*. *TILLAEA PHARNACEOIDES*, Hochst. Trop. Afr. [Galafoot, 79], 1910. J. FRASER, in lit.

1017 *bis*. *SEDUM LYDIUM*, Boissier Diagn. Ser. 1. 3, p. 17. *Glabrum cespitosum caudiculis repentibus, caulibus ascendentibus, sterilibus abbreviatis dense foliosis, foliis linearibus obtusis, cyma corymboso-capitata radiis brevissimis densifloris scorpioideis, pedicellis calyce brevioribus, petalis roseis lanceolatis obtusiusculis calycis laciniis oblongis obtusis subduplo longioribus.* Perennial. Boiss., "Fl. Oriens," ii. 782. In some plenty by the stream at the base of a wall at Clovenfords, Selkirk, and well established; discovered by Miss Ida Hayward and the Secretary in 1909. In 1910 it was much injured by alterations to the wall. The plant is very conspicuous in late summer by the rich crimson tint of its foliage. A native of Lydia and Mount Cadmo, &c. It has been introduced by Horticulturists, and as it is cultivated in gardens at Clovenfords its origin is explained.

*Gen.* 205 *bis*. \**BLUMENBACHIA*, Schrader in Goett. Gel. Anz., 1705, 1825.

1075 *bis*. \**B. INSIGNIS*, Schrader. Chili, Argentina. [On rubbish at Marston Brickyards, Oxford, 1909.] G. CLARIDGE DRUCE.

*Gen.* 206 *bis.* CUCUMIS, [Tourn.], L. [Edin., Bucks, etc.]!

1075 *ter.* \*C. SATIVUS, L. Ind. or.

1151 *bis.* \*PEUCEDANUM GRAVEOLENS, B. and H. f. (Anethum) Oriens.

1160 *b.* DAUCUS CAROTA, L. \*var. CILIATUS, Forbes, 'Bot. Gaz.' i. 292, 1849, Petalis ciliatis.

1163 *b.* \*D. BRACHIATUS, Sieber. Australia [Galafoot]. MISS HAYWARD, 1909!

1174. CORNUS SUECICA, L. Near Bolton and Darwen, on a moor with *Andromeda*, 1910, N. C. R. S. Lancashire, 59. J. A. WHELDON, in lit.

1175 *ter.* \*CORNUS ALBA, L. Sibiria [Flint]. A. DALLMAN. See 'Journ. Bot.' 52, 1910.

1198 *g.* GALIUM PALUSTRE, L., \*var. SERRULATUM. Planta 45 ctm. alta: caule glabro. Folia parva in verticillis 5—6 foliorum ipsa anguste lanceolata 5—8 mm., margine minute serrulata. Ramis floriferis divaricatis. Near Sandford Mill, Berks, 1910. Specimens now distributed. G. CLARIDGE DRUCE.

1198 *h.* GALIUM PALUSTRE, L., forma ANGUSTIFOLIA. Planta 20—30 ctm. alta, caule tenuo, verticillis 5 vel 6 foliorum. Folia parva 5—8 mm. longa 1—2 mm. lata, anguste lanceolata, glabra, margine integra. Rami floriferi diffusi, divergentes. Near Marsh Gibbon, Bucks, 1910. Specimens now distributed. G. CLARIDGE DRUCE.

1236. \*SCABIOSA COLUMBARIA × S. SUCCISA ? See 'Fl. Derby,' 177, and F. A. LEES, in lit.

1236 *b.* SCABIOSA COLUMBARIA, L., \*var. GLABRA. Pennard Castle, 41. 'Bot. Gaz.' i. 108, 149? JOHN BALL.

1278. GNAPHALIUM UNDULATUM, L., Tweedside. Already recorded for Jersey. Miss IDA HAYWARD.

*Gen.* 289 *ter.* MILLOTIA, Cass, in 'Ann. Sc. Nat. Sér.' I., xvii. 416, 1829.

1278 *quat.* \*HELIPTERUM FLORIBUNDUM, DC. Australia [Tweedside]. Miss IDA HAYWARD, in lit.

1278 *sext.* \*M. DEPAUPERATA, Stapf. in 'Kew Bull.' 22, 1910 <Austr.> [Galafoot]. Miss IDA HAYWARD.

1295 *bis.* \*XANTHIUM AMBROSIOIDES, Hook. and Arn. Argentina [Tweedside]. Miss IDA HAYWARD, in lit.

1297. RUDBECKIA LACINIATA, L. Quite naturalised in Forfarshire; shewn to me by R. D. COSTORPHINE.

1363 *bis.* \*MATRICARIA CORYMBIFERA, DC., Oriens [Edinb.]. J. FRASER, in lit.

1424 *d.* CARDUUS CRISPUS, L., \*var. VIVARIENSIS (Jord.) Eur. [Mangotsfield, Gloster.] 'Journ. Bot.' 478, 1896. S. T. DUNN.

× 1433. \*CIRSIUM ARVENSE × LANCEOLATUM. Billingshurst, Sussex, 1903. A WEBSTER, in lit. A good intermediate.

1447 *bis.* \*AMBERBOI LIPPII, DC. (Volutarella Lippii Cass.) S. Amer. [Edin.]. Fraser in 'Ann. Scot. Nat. Hist.' 45, 1910.

*Gen.* 344 *bis.* CRUPINA, [Dill.] Cass., 'Dict. Sc. Nat.' xii. 67, 1818.

1447 *ter.* \*C. VULGARIS, Cass. Eur. [Essex], C. NICHOLSON, in lit., 1910.

1459 *bis.* \*CENTAUREA SPINOSA, L. Eur. or. [Cleethorpes, Lincoln]. Rev. H. FRIEND, in lit.

1565. HIERACIUM SILVATICUM, Gouan, \*var. CRASSUM, Ley, nov. var. The "H. silvaticum, var. tricolor," as distributed by Mr. Ley through the Club in 1908 from Pwll Byffre, W. Brecon.

H. SPARSIDENS, var. \*ELATIUS, Ley, nov. var. Taffechan, Brecon.

1598 *bis.* \*H. RECTULUM, Ley, sp. nov. Llangadoc, Carmarthen. The above three *Hieracia* described in 'Journ. Bot.' 327, 1910, by Rev. A. LEY.

X 1657. \*SONCHUS ASPER × OLERACEUS. Dumbarton, 'Scotch Nat.' 268, 1890, teste ARTHUR BENNETT.

X 1660. \*TRAGOPOGON PORRIFOLIUS × PRATENSIS. Surrey, BRITTON and DODD 'Journ. Bot.' 204, 1910, and WALLIS, Cambr., l.c., p.

1663 var. c. T. PRATENSIS, L., \*var. TORTILIS, Meyer. See 'Fl. Berks,' 323, 1897.

X 1694. \*ERICA CINEREA × VAGANS = *E. vagans* × *cinerea*, Davey in 'Journ. Bot.' 334, 1910. Cornwall, discovered by Mr. Williams, but previously found fifty years ago by Mr. R. Davey, M P.

1704 *ter*. \*KALMIA GLAUCA, Aiton, Amer. bor. [Surrey]. C. E. BRITTON, 'Journ. Bot.' 204, 1910. Specimens now distributed.

1714 *b*. LIMONIUM HUMILE, \*var. RARIFLORUM. Williams, 'Prod.' 440, 1910.

1743 *c*. ANAGALLIS ARVENSIS, L., \*var. VERTICILLATA, A. Diard. Berks! etc. (var. *ternata* Williams, 'Prod.' 7, 428, 1910).

1780 *bis*. \*PHACELIA CAMPANULARIA, A. Gray. Amer. bor. [Edin.]. J. FRASER, in 'Ann. Scot. Nat. Hist.' 45, 1910.

1789 *bis*. \*ERITRICHIMUM NANUM, Schrader. Eur. [Carnarvon]. See 'Fl. Anglesey,' 99.

X 1864. \*VERBASCUM BLATTARIA × NIGRUM. Ingoldmel's, Lincolnshire. ('Journ. Bot.' 57, 1910.) B. REYNOLDS.

1867. Var. c. \*THAPSIFORME, Schrader. [Port Talbot.] See 'Rep.' 466, 1909. Mr. Bruce Jackson, in lit. Jan. 12, 1910, would refer Mr. Riddelsdell's plant to *V. Chaixii*, Vill.

1911. VERONICA BECCABUNGA, L., \*var. TENERRIMA (Schmidt), Will. 'Prod.' 6, 293, 1909.

1912 *bis*. Our British plant appears (teste Prof. Hugo Glück) to be *Veronica aquatica*, S. F. Gray, 'Nat. Coll. Br. Pl.' ii. 306, 1821, distinguished from *V. Anagallis* by its less crowded racemes and its patent or reflexed peduncles.

1917. *VERONICA FRUTICULOSA*, L. The opinion expressed in the 'Prodromus Fl. Brit.' v. 286 of this being native in Britain or identical with pink flowered *V. saxatilis* is open to considerable doubt. The Glen Lochay plant of Mr. Boyd cited for it by Mr. Williams is said by Mr. Boyd to be quite different from *V. fruticulosa*, and is indeed only a colour form of *saxatilis*.

*Gen.* 458 *bis.* \**ORTHOCARPUS*. 'Nutt. Gen. Ann.' ii. 56, 1818.

1930 *bis.* \**O. PURPURASCENS*, Benth. Calif. [Edin.] Fraser in 'Ann. Scot. Nat. Hist.' 45, 1910.

1974 *bis.* \**Lathraea Clandestina*, L. This European species, so conspicuous from its violet colouring, grows, like its British ally, as a parasite on the roots of trees. Through the kindness of Mr. Dudding I was told of its occurrence in the grounds of Livermere Park, Suffolk, where it is quite established on the roots of Elm, &c., and has been known there for sixteen years. It was, however, originally planted there by Lady de Sausmarez, and it may be well to put this fact on record. G. CLARIDGE DRUCE.

2003. *LYCOPUS EUROPAEUS*, L., \*var. *DISSECTUS*, Stokes, in 'With. Nat. Arr.' i. 20, 1787. Leaves deeply cut; but the var. apparently grades imperceptibly into type.

2004. *ORIGANUM VULGARE*, L., \*var. *e. MACROSTACHYUM*, Williams, "as var. b. sed omnino glabrum," 'Prod.' 300, 1910.

2007 *d.* \**THYMUS OVATUS*, Mill., \*var. *VESTITUS* (Lange), (= *lanuginosus* Lond. Cat.). Williams, 'Prod.' 7, 377, 1910.

2033 *bis.* \* $\times$  *SALVIA ANDRZEJOWSKII*, Block, in 'Deutsche Bot. Monatschr.' x. 107, 1892. Galicia. [Lancashire, St. Anne's.] C. BAILEY.

2043 *bis.* \**SCUTELLARIA HASTIFOLIA*, L., Eur. [Tintagel.] See 'Bot. Gaz.' p. 97, 1850. Rev. W. T. BREE.

2059 *bis.* \**STACHYS RECTA*, L. Eur. [Chigwell, Essex.] 1910. C. NICHOLSON, in lit.

2060 *c.* *STACHYS OFFICINALIS*, Franchet, \*var. *GLABRATA*, Rouy. Williams, 'Prod.' 391, 1910.

2090 *bis.* (? *PLANTAGO SERRARIA*, L., Steep Holme Williams, 'Prod.' 7, 364, 1910. Corroborative determination is desirable.

2091 *g.* *PLANTAGO MARITIMA*, L., <\*var. *g. ALPINA* (L.). WILLIAMS, l.c. <var. *h. SERPENTINA*, Brand. \*var. *i. RECURVATA*, Williams.

2091 *bis.* \**PLANTAGO NOTATA*, La Gasca. *Hisp.* [Edin.] J. FRASER, in lit.

2092. *PLANTAGO LANCEOLATA*, L., var. *f. SYLVATICA*, Pers. (major, Syme). Var. *g. ERIOPHORA*, Rapin. Var. *h. MINOR*, Rapin. See Williams, 'Prod.' 6, 358, 1909. \*Var. *REPENS*, Lange. Shetland.

2099 *d.* *P. MAJOR*, L. \*var. *d. BRACHYSTACHYA*, Wallr., given as a full species in Williams 'Prodromus,' i.e. *P. uliginosa*, Schmidt.

2102 *b.* *ILLECEBRUM VERTICILLATUM*, L., var. *DENSUM*, Martr., 'Fl. Tarn.' p. 260. Upper fascicles of flower contiguous and flowering branches stout. Berkshire: perhaps a state rather than a true variety, but given varietal rank by Rouy in 'Flore de France,' xii. p. 2.

2109 *c.* *SCLERANTHUS ANNUUS*, L., var. *CAESPITOSUS*, Neill., 'Fl. Nied. Oester., 783.

Plant compact, with short stems, flowers in fastigate cymes. Internode short. Growing in turf on St. Peter's Mount, Jersey, and in turf on sea cliffs, Petit Bo, Guernsey, April, 1910. G. C. DRUCE.

*Gen.* 506 *bis.* *CYCLOCOMA*, Moq. 'Chen. Enum.' 17, 1840.

2116 *bis.* \**C. PLATYPHYLLUM*, Moq. I. K. Am. bor. (*C. atriplicifolium*, Coulter). [Lancashire, St. Anne's.] C. BAILEY, 1910.

2116 *quat.* *AMARANTHUS SYLVESTRIS*, Desf. Oriens. [E. Sussex.] 'Wats. B.E.C.' 252, 1909.

\**Gen.* 510 *bis.* *AXYRIS*, L.

2153 *bis.* \**A. AMARANTOIDES*, L. Am. bor. [Lancashire, St. Anne's.] C. BAILEY, 1910.

× 2244. *U. CAMPESTRIS*, L. (*montana*, Stokes) × *U. GLABRA*, Mill. = × *U. VEGETA* (Loudon). The Huntingdon Elm.

× 2319. \**HELLEBORINE ATRORUBENS* × *H. MEDIA*, var. *ATRO-VIRIDIS*, Suth. W. 'Ann. Scot. Nat. Hist.' 124, 1910. Rev. E. S. MARSHALL.

2328 *bis*. *ORCHIS PALUSTRIS*, Jacq. Eur. mer. [Hartlepool.] 'Journ. Bot.' 209, 1873, 1875.

2335 *c*. *OPHRYS APIFERA*, Huds., var. *FLAVESCENS*, Rost. 'Fl. Triev.' i. 182, 1880. Near Coln St. Aldwyn, Gloucestershire, &c. Plant with white sepals, and yellowish-green labellum. G. CLARIDGE DRUCE.

× 2338. *HABENARIA GYMNADENIA* × *H. VIRIDIS*, Br. In excellent condition on the Winchester Downs. R. QUIRK, in lit.

× 2343. \**HABENARIA BIFOLIA* × *H. VIRESCENS*. Sligachan, Skye. One specimen found growing among multitudes of its presumed parents, differing from *bifolia* by its longer spur and its pollen lobes being slightly divaricate; from *virescens* by its colour and shape of sepals and spur—on the whole nearer *bifolia*. With it was a specimen of *H. VIRESCENS*, \*var. *ECALCARATA*, with a regular flower, i.e. 5 petals of nearly equal size and no spur. G. CLARIDGE DRUCE.

2364. *NARCISSUS PSEUDO-NARCISSUS*, L., \*var. *c. EYSTETTENSIS*, Hort. [Devon, parish of Charles, 'Vict. County Hist' 73.] Miss Helen Saunders in 'Trans. Devon. Science, &c.' 424, 1910, suggests that this form may have been educed by constant self-fertilization.

583 *bis*. *PHORMIUM*, Forst., 'Char. Gen.' 47, 1776.

2389 *bis*. *P. TENAX*, Forst. New Zealand. [Near St. Anne's Bay, Jersey, 1910!] G. C. DRUCE.

2440 var. *b*. *JUNCUS GERARDI*, Lois., \*var. *6. SALSUGINOSUS*, Regel ex Ledeb., 'Fl. Ross.' iv. 1833, 230. Hebrides, teste A. BENNETT, 'Ann. Scot. Nat. Hist.' 234, 1910. "Much smaller than type (2.7 in. high), long creeping and rooting, sending up stems about every inch, perianth equalling capsule." Kirkibost Isle.

2465 *b.* SPARGANIUM NATANS, L., \*var. MICROCEPHALUM (Neum.). W. H. BEEBY.

\*2476 *c.* ALISMA PLANTAGO - AQUATICUM, L., \*var. LATIFOLIUM, Kunth. Planta robusta. Lamina plerumque magna, ovata, acuta, basi plerumque rotundata vel cordata. Oxford, Bucks, Berks, &c., in Hb. Druce, teste Dr. Hugo Glück; an analogous variety on the one side, as the variety *lanceolatum* is on the other side of the species. Professor Glück agrees with me, and he has been some years studying this group, in considering that *lanceolatum* is not specifically distinct. The var. *sparganiifolium*, Lond. Cat. (under *Elisma natans*), is also only a young state of the type.

2477 *c.* ECHINODORUS RANUNCULOIDES, var. ZOSTERIFOLIUS (Fries). This Dr. Glück says is only a state, and in cultivation reverts to type. Davies' *repens*, on the contrary, is a good variety.

2484. SCHEUCHZERIA PALUSTRIS, L. On Rannoch Moor in Argyll. See 'Ann. Scot. Nat. Hist.' 253, 1910. G. W. SCARTH, in lit. A most interesting discovery.

2562 *b.* C. SAXATILIS, L., var. COMPACTA (R. Br.) Dew. Ben Lawers, Glen Shee. Perigynia broadly ovate and inflated, darker and more shining than in the type. P. EWING, l.c. 179, 1910.

2562 *c.* C. SAXATILIS, L., var. GLOMERATA, Ewing. Spikelets 3-4 bluntly ovate-oblong, upper very shortly stalked, next sessile near its base, next shortly stalked, lowest on a long stalk so that they are all crowded; terminal spikelets may be all male, or all female, or partly both, and stamens may be often seen on the other spikelets; . . . . Glumes lanceolate, acuminate, dark purple with a lighter lip and slender mid-rib, visible only on some of the glumes; much like small *C. atrata*. Ben Lawers, Creag Mhor, Ben Heasgarnich, Ben Laoigh. P. EWING, l.c.

2564 *f.* C. ROSTRATA, Stokes, var. BOREALIS, Hartm. With long involute leaves, one or two spikelets always closely sessile = *C. inflata*, var. *borealis* (Hartm.). P. EWING, l.c.

2576. *CAREX FLAVA*, L. Some members may like to have Kükenthal's description of the three species, *C. flava*, L., *C. lepidocarpa*, Tausch, and *C. Oederi*, Retz :—

A. Stem tall. Perigynia long beaked = *C. flava* and *lepidocarpa*.

1. Leaves 3-5 mm. broad, yellowish green. Female spikelets ovate or sub-globose, not very compact. Perigynia 5-6 mm. long, all having a long beak which is gradually contracted and obliquely deflexed = *C. flava*.

2. Leaves 2 mm. broad, intensely green. Female spikelets oblong-oval, compact. Perigynia 4 mm. long with a long deflexed beak which is abruptly contracted = *C. lepidocarpa*.

B. Stem short. Perigynia 2-3 mm. long with very short, straight, abruptly contracted beak = *C. Oederi*.

Forma *oedocarpa* (Anders.) differs in its pedunculate male spike, and in the female spikelets being more or less remote bracts erect, patent, and perigynia with a long beak.

2602 *f.* *CAREX AQUATILIS*, Wahl., \*var. *RIGIDA*, Arthur Bennett in 'Ann. Scot. Nat. Hist.' 236, 1910. "Stems  $2\frac{1}{2}$  feet high, leaves broad and thick with strong nerves; male spikes 2-3 stout sessile, rigid, and where there are 3, the lower one with female flowers for a third. Fem. spikes generally 4, upper 3 sessile (lower 2 in. long, upper 1 in.), 6 mm. thick, fruit densely compacted, not interrupted. Fruit subrotund with a short entire beak, glumes unequal, greenish, with a brighter brown edge all round. Banks of Nith, Sanquhar, Dumfries, 1883, Dr. DAVIDSON, Kenmore Holm. New Galloway, 1887, J. MCANDREW."

[2568. *C. SYLVATICA*, Huds., var. *CAPILLARIFORMIS*, Arnold Lees in 'Naturalist,' p. 349, 1910. A form growing in open ground associated with *Equisetum palustre*, *Orchis maculata*, etc. I have sent it to Kükenthal, who considers it to be ordinary *Carex sylvatica*.

2682. *MIBORA MINIMA*, Desv. Usually described as flowering in spring, but a tuft brought home continued in flower at Oxford till August. Mr. F. J. Hanbury tells me it seeds plentifully in his Sussex garden.

2720. AVENA SATIVA, L., \*var. BRUNNER, Koern. [Lizard.]  
G. CLARIDGE DRUCE.

2722 *bis.* \*A. BROMOIDES, Gouan. Eur. mer. [Musselburgh.]  
J. FRASER, 1910.

2742 *bis.* \*KOELERIA SETACEA, DC. Eur. mer. [Musselburgh.]  
J. FRASER, 1910.

2750 *bis.* \*MELICA CILIATA, L. Eur. [Oxon.] W. BAXTER.

2751 *bis.* \*DACTYLIS HISPANICA, Roth. Eur. mer. [Musselburgh.]  
J. FRASER, 1910.

2762 *h.* Read POA NEMORALIS, L., var. *h. GLAUCA*, Gaud. Wales. (i. *divaricata*, Syme, is not separated from type being unknown to Hackel).

2787 *m.* FESTUCA OVINA, L., \*var. FIRMULA, Hackel. Co. Clare. G. CLARIDGE DRUCE.

2791 *e.* F. BROMOIDES, L., \*var. BROTERI (Boiss. and Rent.). Eur. mer. [Galashiels.] Miss HAYWARD.

2811 *b. and c.* The varieties of BROMUS HORDEACEUS, i.e. *giabratus*, Doell., and *leptostachys*, Pers., are too closely allied to be kept apart. Persoon's name appears to be the older.

2892 *f.* POLYSTICHUM ANGULARE, Presl, \*var. DUBIUM, Wollaston, Preston.

2893 *c.* P. ACULEATUM, Roth., \*var. LONCHITIOIDES, Deakin.

2904. CYSTOPTERIS FRAGILIS, Bernh. Ewhurst, N. Hants. 12, N.C.R. 1910. F. W. STANSFIELD, in lit.

#### UTRICULARIA.

This genus has been recently closely studied by Dr. Hugo Glück, who in his most interesting account of *U. ochroleuca* which appeared in the 'Deutschen Botanischen Gesellschaft,' 149—156, for 1902, gave some additional characters by which that species

may be distinguished from those previously known, and which enable the plant to be recognised in the barren state. Another very important contribution is that of Fr. Meister ('Memoires de l'Herbier Boissier,' n. 12, 1900). From these, and from verbal statements made to me by Dr. Glück, the following brief descriptions of the British forms have been drawn up, hoping that they may induce members to study more closely this interesting genus:—

## CLAVIS.

- A. Submerged floating plants with all shoots of similar form. Leaves provided with numerous bladders, and divided into numerous hair-shaped terminal segments, the leaf-tips toothed on margin. = 1. *U. vulgaris*. 2. *U. major*.
- B. Shoots differentiated into two forms: (1) green assimilating shoots which float in water, and (2) colourless shoots which are usually subterranean. Leaves divided into 7-20 segments. Leaf-tips distinctly flattened. Leaves furnished with 0-8 bladders. = 3. *U. intermedia*. 4. *U. ochroleuca*. 5. *U. minor*. 6. *U. Bremii*.

## B.

Bladders chiefly localised on subterranean shoots. The green leaves bear no, or only solitary bladders. Leaves with 7-15 segments. Subterranean leaves with 0-3 bladders. Leaf-tips toothed on margin. Winter bud wrapped in a thick whitish tomentum. Bud-leaves palmately divided. Segments indented on margin and armed with hair-bristles standing together in tufts. = 3. *U. intermedia*. 4. *U. ochroleuca*.

## BB.

Floating green assimilating, and colourless subterranean shoots about equally provided with bladders. Leaves ending in 14-20 segments and furnished with 0-8 bladders. Leaf-tip smooth on margin. Winter buds not covered with a hairy mantle. Bud-leaves palmate, with some dichotomous end-segments. The margin of the bud-leaves is neither indented nor provided with tufts of hair. = 5. *U. minor*. 6. *U. Bremii*.

## AA.

## 1. U. VULGARIS L.

*Pedicels* two to three times as long as calyx (7-12 mm.), recurved and reflexed after flowering.

*Corolla upper lip* about as long as the projecting bilobed palate.

*Lower lip* much larger than upper with reflexed margins which scarcely project beyond the palate which is marked with a few separate pale red lines.

*Anthers* connate.

*Spur* adpressed to lower lip.

*Leafy branches* often very long, somewhat coarse.

*Winter buds* large (10 mm.), nearly globular or globular ovoid.

## 2. U. MAJOR, Keller.

*Pedicels* four to six times as long as calyx (12-30 mm.) straight and ascending after flowering.

*Corolla upper lip* twice or thrice as long as the projecting bilobed palate.

*Lower lip* with a broad flat spreading margin which projects greatly beyond the palate, is not reflexed, and is marked with chocolate brown lines.

*Anthers* free.

*Spur* conical, sub-compressed not adpressed to lower lip.

*Leaf branches* usually slender.

*Winter buds.*

## B I.

## 3. U. INTERMEDIA, Hayne.

*Green assimilating leaves*, quite without bladders.

*Leaf tip* obtuse with a prickle set on the apical margin.

*Corolla* bright yellow, or yellowish white, striped with purple.

*Spur* subulate, yellow as corolla, as long as lower lip to which it is adpressed.

*Pedicels* erect.

*Winter bud* after germination retains its original ball-shaped or weakly elliptical form. The section is egg-shaped, obtuse.

*Prickles.* The tufts are either situated on an extremely reduced leaf-flap or directly on its margin.

## 4. U. OCHROLEUCA, Hartm.

*Green assimilating leaves*, always bearing sporadic bladders.

*Leaf tip* gradually attenuated into a long point which ends with a fine bristle.

*Corolla*, sulphur yellow with brown striae. Upper lip flat emarginate.

*Spur* conical gradually diminishing from a broad base to the blunt apex, half as long as and standing apart from the lower lip. Red-brown.

*Pedicels* patent.

*Winter bud* in germination extends to more than twice its original length. The leaves of the winter bud are pointed at the tip, and the indentation of the leaf margin is stronger than in *intermedia*.

*Prickles.* The tufts of prickles at edge of bud-leaves are less numerous and not so strong as in *intermedia* and are situated upon a distinct leaf-flap.

## B 2.

5. *U. MINOR*, L.

*Corolla* pale yellow.

*Upper lip* as long as the depressed and inconspicuous palate.

*Lower lip* 6 mm. broad with recurved margin.

*Spur* very minute, scarcely longer than broad.

6. *U. BREMII*, Heer.

*Corolla* yellow, and more conspicuous than *U. minor*.

*Upper lip* emarginate. Upper lip 5mm. broad and long.

*Lower lip* flat, not recurved at margin. 9-10 mm. broad.

*Spur* small ovate-conical.

1. *UTRICULARIA VULGARIS*, L., is reported from 86 British counties from Cornwall to Shetland, but as Watson points out, his enumeration includes *neglecta*. Therefore to be correct many counties require to be confirmed for the restricted plant, which I have seen in 6, 14, 22, 23, 24, 25, 26, 27, 28, 31, 32.

Probably some of the Scottish records may refer only to *major*.

2. *U. major*, Keller (*U. neglecta*, Lehm.), is reported in my 'List' for 29 'counties.' It is now on good authority reported from 1, 2, 6, 11, 12! 13, 15, 17! 19, 21, 22! 23! 24! 26, 41, 52, 58, 72, 73, 75, 79! 80, 88! 89! 90! 95! 96! 97, 98, 104, 105! 110, and with some doubt from 21, 99, 100, and 106.

The suggestion made in the 'Prodromus' that *major* is only a variety of *vulgaris* can scarcely be accepted, as it appears a quite distinct species, and I can scarcely imagine anyone seeing it growing with *U. vulgaris* when both are in flower venturing to place them in one species except on an archaic hyper-Benthamian standard.

3. *U. intermedia*, Hayne. The recent separation of *U. ochroleuca* throws a doubt over many of the records in 'Top. Bot.,' and these should all be carefully checked. It is recorded for 27 counties from Dorset to Shetland. Many of the Scottish localities it may be presumed will yield (if they do not represent) *ochroleuca*.

*U. intermedia*, vera, I have seen in 9, 11 New Forest. 89 Blair Athol. 96! 100! 105! If growing in very shallow water *intermedia* has the two kinds of shoots of about the same length; these if dried carelessly become much intermingled, and it is not always in herbarium specimens easy to disentangle them, so as to be certain if the green shoot really bears bladders<sup>1</sup>.

<sup>1</sup> The Bucks record in footnote ('Top. Bot.' p. 333) for *U. intermedia* refers to a record for Burnham Beeches, a locality which only yields *U. major*.

4. *U. ochroleuca*, Hartm. This plant, to which Prof. Trail thought some of the Scottish *intermedia* might be referred, is treated as being certainly Scottish by Dr. Williams ('Prod. Fl. Brit.' 348), and he gives Wigton, Kirkcudbright, Dumfries, Argyll, Sutherland and Skye; he also unhesitatingly adopts Neuman's ('Bot. Notiser,' 65—66, 1900) view that it is a hybrid of *intermedia* and *minor*, since "these two plants are always found in its vicinity."

Dr. Glück, who was at my house last autumn, has made a very special study of this group, and has been able to correct some of the statements made by Meister, and to give additional characters by which this species (as he holds it) is to be distinguished.

*U. ochroleuca*, first discovered by Hartman in Sweden, has been since found in Norway and France (Vosges) (to this perhaps is to be referred Celakovsky's *U. intermedia*, var. *brevicornis* from West Galicia), also in South Bohemia, Brandenburg, the Rhine Palatinate and some other places in North Germany. To these localities Glück fortunately added that of the Black Forest, where it occurs in the absence of *intermedia*, thus practically proving that it is not a hybrid. My query in the 'List' was as to its occurrence in Scotland, since the records made were suggestive rather than positive.

Dr. Glück recognised as *ochroleuca*, a specimen in my herbarium which I gathered in Loch Mallachie in Easternness in 1882, and I have also one collected near Aviemore in 1869 on my first visit to Scotland. The gradual attenuation of the leaf segments, and the presence of a few bladders on the assimilating shoots, offer ready means of identifying the plant in its usually barren state, as Dr. Glück ('Deutsch Bot. Gesells.' xx, 141, 1902) shows. This leaf character gives the plant a slightly more graceful habit. In dried specimens it is essential to observe if the assimilating shoot is not stuck down with an adhering subterranean shoot, or if the utricles have not been separated from the proper shoot and accidentally fastened to the green shoot. I have seen *ochroleuca* from 88 Coninish Valley, 1888, 89 Loch of Lowes (Hb. Hanbury), 96 Loch Mallachie, Aviemore, 107 and 112 (Beeby, 1890, Hb. Br. Mus.). Dr. Glück also named as *ochroleuca* my specimen collected in 1875, from Kylemore, Galway. Trail refers to specimens from 72, 74, 98, 104, and 108.

Another argument against *ochroleuca* being a hybrid is the rarity of the flowering stage in the two supposed parents, and

although the book-characters are remarkably intermediate, and as some botanists would say, "just what I should suspect a hybrid of the two species would be," yet really hybrids are not often such a complete half-way house, while it is said that the flowers of *ochroleuca* have quite a different appearance from those of *intermedia*<sup>1</sup>; nor although *U. vulgaris* and *U. major* grow together and flower freely, has any hybrid yet been observed between these two allied species, nor indeed has Focke described one in the genus.

It may be added that although *ochroleuca* appears to be the boreal or alpine species, yet it prefers open pools in sunny places, and in Baden grows in somewhat deep water (1 metre), and that Glück places great stress on the foliage characters as a means for specific distinction.

5. *U. minor*, L., has a census number of 71 (2), which is probably too high since *U. Bremii* and small barren states of *U. major* have been confused with it. The latter may be easily detected since *minor* has no bristly hairs on the leaf-segments. Barren states of *Bremii* however with our present knowledge cannot be safely separated. *U. minor* is reported from West Cornwall to the Orkneys, and in Scotland ascends to 2,250 feet ('Ann. Scot. Nat. Hist.' 122, 1907), and it also occurs in Guernsey.

6. *U. BREMII*, Heer. This has long been suspected as British; indeed Mr. F. M. Webb ('Journ. Bot.' 142, 1876) recorded it on faith of a specimen (in Herb. Kew.) gathered by Jas. B. Brechan in the Moss of Inshoch, Nairn. Mr. Webb also suggests that the flowerless examples from the Isle of Wight (Dr. Bromfield), Titchfield Common, Hants (also Bromfield in Hb. Kew.) (see 'Fl. Hants,' 329) should be looked to. Mr. F. N. Williams ('Prod.' 349) unhesitatingly refers all these with the plant from Gordon Bog, Berwick, and from the Loch of Spynie, Elgin (Hb. Winch) to *Bremii*, although he says of the Inshoch plant "the flowers are not recognisable," while the others are all, I believe, barren. But Dr. Glück tells me one cannot on our present knowledge trust to the leaf-characters to distinguish the two species, although the differences may be suggestive. Fortunately, however, he was able to find undoubted *U. Bremii* in my herbarium, the

<sup>1</sup> Professor Trail ('A.N.H.S.') has likewise drawn attention to the probable occurrence in Scotland of *ochroleuca*, and a paper on the British *Utricularias*, by the Rev. E. F. Linton, appeared in 'Trans. Bot. Soc. Edinb.'

specimens in good flower being gathered by me near the Gap of Dunloe, Co. Kerry, in 1875. I may add that although I have examined Loch Spynie, the Moss of Inshoch and Gordon Bog (where I found *U. minor*), I was unable to find *Bremii*; near the Loch of Spynie, young barren *major* was seen. If our members will carefully collect the Bladder-worts for a season or so there is good reason to believe that some of the old records may prove to be correct. Flowering specimens should if possible be put in spirit, notes on the flower in the fresh state being first made. *U. Bremii*. 10? ? Betn. Horrington and Newchurch<sup>1</sup>. 11? Titchfield Common. 81? Gordon Bog. 85? Loch of Spynie and Moss of Inshoch. All lowland stations.

Dr. Glück says the characters which distinguish *Bremii* from *minor* are specific, this species bearing much the same relation to *U. minor* as *U. major* does to *U. vulgaris*. The larger flowers of a darker yellow, with a much larger lip which stares at one, are easy marks of distinction, but in the barren state a greater or less amount of development of leaf-segments and a more sparing development of bladders are not sufficient for separation, although such an appearance may be suggestive.

As to the leaf-characters of the *Utriculariae* one may add that our British plants may be divided into three groups by the number of the leaf-tips: (1) very numerous *vulgaris* and *major*; (2) 7-15 *intermedia* and *ochroleuca*; (3) 14-20 *minor* and *Bremii*.

Since writing this account of the Utricularias, Dr. Glück has kindly drawn up the valuable Latin diagnoses of group B, which are here appended; he emphasises the impossibility of distinguishing sterile conditions of *U. Bremii* and *U. minor*; hence the British records of the former based on barren plants appear to be conjectural.

#### GROUP B, BY DR. HUGO GLÜCK.

##### *U. minor*, L.

*Caules submersi* virides 8-50 cm. longi; folia rotundata, late elliptica vel reniforma; 3-18 mm. longa et. 4-20 mm. lata; dichotoma in 7-22 lacinias lineatas; gerentia 1-7 utriculos.

<sup>1</sup> Townsend ('Fl. Hants,' 329) says he gathered this also in 1879. It was not in flower, 'and is certainly a coarser plant than any *U. minor* which I have seen, and differs from it in general appearance.'

*Caules hypogaei* sine chlorophyllo, pallidi; 3-13 mm. longi, non ramificati vel cum 1-4 ramis armati. Segmenta 1.2-11 mm. longa, reducta in 1-6 utriculos pediculatos. Utriculus 1-1.8 mm. longus et 0.6-1.5 mm. altus.

*Inflorescentia* 2.5-17 cm. alta, gerens 2-5 flores et infra flores, 2-5 bracteas steriles ovales vel triangulares. Corolla pallide flava; labium superius emarginatum, plerumque longitudine palati; labium inferius ovale lateribus reflexis.

*Hibernaculum* (turio) globosum vel irregulare, glabrum; 0.5-5 mm. crassum. Squamæ coriaceæ 2-10 mm. longæ et 2-14 mm. latæ, dichotome divisæ in 8-20 laciniæ lanceolatas.

*U. minor f. platyloba, Meister.*

Planta in vadis. Tota longitudo caulium viridum et submersorum 8-17 cm. Caules 6-32 foliis instructi. Folia ambitu orbicularia-rhombea, 4-13 mm. longa, in 5-17 terminales lobos excurrentia. Omnes foliorum rami dilatati, 0.3-1 mm. lati. Folia 1-5 utriculis instructa, nonnunquam sine utriculis.

*U. minor f. terrestris, Glück.*

Planta terrestris, semper sterilis. *Caules virides epigæi* 2-8 cm. longi. Folia minima 1-2.1 mm. longa atque 1.5-3 mm. lata, in 2-7 terminales lobos satis latos excurrentia, nullos utriculos aut utriculorum rudimenta, raro utriculum prorsus evolutum gerentia.

*Caules hypogæi* 1-3.5 cm. longi. Folia subterranea 1-2 utriculos ferunt, 0.65-0.8 mm. altos et 0.7-1 mm. longos.

*U. Bremii, Heer.*

*Caules submersi* virides, 6-60 cm. longi. Folia semicirculata usque rotundata; 2-20 mm. longa et 3.5-30 mm. lata; divisa in 9-25 (-50) laciniæ. Folium cm. 1-10 utriculis ornatum. Utriculus usque 2.8 mm. latus et usque 1.8 mm. altus.

*Caules hypogæi sine chlorophyllo pallidi*, 2.5-6 cm. longi, sine ramis vel 1-2 ramos gerentes. Segmenta reducta in 1-8 utriculos pediculatos. Utriculus 0.5-2, 5 mm. longus et 0.7-1.5 mm. altus.

*Inflorescentia*, 5-42 cm. alta; gerens 2-13 flores et 2-5 bracteas steriles infra flores. Flos major quam in *U. minore*; sulphureus. Labium superius emarginatum, longitudine palati. Labium inferius semper planum et rotundum.

*Hibernaculum* (= turio) globosum vel ovale, 0.3-5 mm. crassum. Squamæ coriaceæ, 1.2-7 mm. longæ et 1.5-12 mm. latæ.

Planta sterilis *U. Bremii* et *U. minoris* non certo distingui potest.

*U. Bremii f. platyloba, Meister.*

Planta in vadis. Tota longitudo caulium submersorum 7-12 cm. Folia semicirculata ad orbicularia vel prope rhombea, 3-8 mm. longa et 3-12 mm. lata. Folia paulum ramosa, in 5-16 lobos terminales excurrentia. Omnes foliorum rami dilatati, 0.2-0.8 mm. lati. Planta semper sterilis.

*U. Bremii f. terrestris, Glück.*

Planta terrestris aut muscicola, semper sterilis. Tota longitudo caulium viridium 2-8 cm.; intermedia caulium 1-3 mm. longa; folia minima, 1-3 mm. longa et in 3-8 lobos terminales excurrentia. Folia vulgo sine utriculis aut tantum rudimentis utriculorum instructa; rarorum prorsus evolutum utriculum gerentia.

*U. intermedia, Hayne.*

*Caules submersi*, 8-50 cm. longi. Folia semicirculata vel reniformia; dichotome divisa in 7-17 lacinias. Laciniaë terminales obtusæ et mucronatæ, in margine ornatae cum 2-10 aculeis. Caules submersi numquam utriculos gerunt.

*Caules hypogæi*, 3-20 cm. longi, sine chlorophyllo, pallidi. Segmenta 6-20 mm. longa, reducta in 1-5 utriculos pediculatos. Utriculi 1.5-4 mm. alti et 1.8-5 mm. longi.

*Inflorescentia*, 6-36 cm. alta, gerens 2-5 flores et 1-2 bracteas steriles infra flores. Flos sulphureus, magnitudine mediocri. Calcar longitudine labii inferioris. Pedunculi fructiferi erecti.

*Hibernaculum* (= turio) globosum, ovale, rarius reniforme, 1-6 mm. crassum, pilosum. Squamæ semicirculatæ, basi reniformes in (-12) lobos ovales divisæ. Lobi in margine 5-10 denticulos gerentes; denticuli cum 6-20 aculeis instructi.

*U. intermedia f. terrestris, Glück.*

Planta terrestris, semper sterilis, omnes partes ad extremum reductæ. *Caules virides* 1.18-6 cm. longi. Folia dense conferta, ambitu semicirculata, in 6-9 angustos lobos terminales excurrentia, 1.8-3.5 mm. longa et 2.2-5.5 mm. lata.

*Caules hypogæi*, 3-5 cm. longi, foliis 2-7 mm. longis et tantum 1-2 utriculos gerentibus ornati. Utriculi 0.8-2.2 mm. alti et 1.1-3.5 mm. longi.

*U. ochroleuca*, Hartman.

*Caules submersi* virides, 8-50 cm. longi. Folia semicirculata, 4-18 mm. longa et 7.5-25 mm. lata; dichotome divisa in 7-16 laciniis angustas. Laciniæ longe acuminatæ instructæ (in margine) cm. 1-6 denticulis; denticuli gerentes 1-3 aculeos. Caules submersi gerunt plerumque paucos utriculos.

*Caules hypogæi* sine chlorophyllo, pallidi; 4-25 cm. longi, plerumque non ramificati. Segmenta 5-12 mm. longa, reducta in 1-3 utriculos pediculatos. Utriculus 1.6-4 mm. longus et 1.2-3 mm. altus.

*Inflorescentia* 2-3 bracteas steriles gerentia. Flos pallide flavus magnitudine florem *U. intermediæ* subæquans. Calcar conicus descendens, brevior labio inferiore.

*Hibernaculum* (turio) globosum 1.2-5 mm. crassum; pilosum. Squamæ semicirculatæ usque reniformes, divisæ in 2-20 laciniis late ellipticas. Laciniæ acuminatæ in utroque latere 2-7 denticulos gerentes, instructos cum 2-8 aculeis.

*U. ochroleuca* est sterilis in permultis stationibus. Planta sterilis *U. ochroleucæ* et *U. intermediæ* semper certe distingui potest.

*U. ochroleuca*, f. *terrestris*, Glück.

Planta terrestris, semper sterilis. Habitu a forma terrestri *U. intermediæ* vix distingui potest.

*Caules epigæi* virides, 3.4-6 cm. longi; folia artissime conferta atque ad extremum imminuta. Folia ambitu semicirculata, 1.5-3.5 mm. longa et 2-5 mm. lata. In utroque latere lobi terminales 1-4 crenulati 1-2 aculeis armati. Lobi terminales nunquam tam acuminati quam foliorum submersorum.

*Caules hypogæi* 2-4 cm. longi; unum quodque folium in unum utriculum imminutum qui 2-3 mm. longus et 1.3-2 mm. altus fit.

IN addition to the previous notes the following new County records, among many others, may be noted:—

17. MYOSURUS MINIMUS, L. Som. N. 6. J. WHITE. ('J.B.' 17, 1910).

162. *DRABA MURALIS*, L. Wytham, Berks, 22. H. NAPIER.  
Perhaps originally introduced, now quite naturalised.

204. *SUBULARIA AQUATICA*, L. Skye 104. A. WALLIS.

366. *CERASTIUM ERECTUM*, Coss. and Germ. Llandderfel,  
Merioneth 48. PAMPLIN in Hb. Druce. Grange 69. Hb. C.  
BAILEY.

996. *CHRYSOSPLENIUM ALTERNIFOLIUM*, L. Riever Wood,  
Berks. C. P. HURST, in lit.

1118. *CHÆROPHYLLUM AUREUM*, L. Callander, W. Perth  
87. J. FRASER, in lit. 1909.

1676. *CAMPANULA PERSICIFOLIA*, L. Berks. Specimens  
distributed.

1764. *GENTIANA GERMANICA*, Willd. and × *G. PAMPLINII*,  
Druce. Shalbourn, N. Wilts. C. P. HURST, in lit.

1811. *PNEUMARIA MARITIMA*, Hill. Cley, Norfolk E. PROF.  
OLIVER.

1988. *MENTHA ROTUNDIFOLIA*, Huds. Wigton 74. (WATS.  
'B.E.C.' 250, 1909).

1989. *M. ALOPECUROIDES*, Hull. Essex S. H. W. PUGSLEY.  
(‘J.B.’ 285, 1910).

2301. *MALAXIS PALUDOSA*, Sw. Cornwall 2. DAVY (‘J.B.’  
259, 1910).

2306. *LISTERA CORDATA*, Br. Berwyn. 48! PAMPLIN. Flint  
51. DALLMAN (‘J. B.’ 95, 1910).

2321. *ORCHIS MILITARIS*, L. Deal, Kent E. W. HARRIS,  
in lit.

2326 *bis*. *ORCHIS CRUENTA*, O.F. Muell. Teesdale, Durham  
66. G. C. DRUCE.

2455. *JUNCOIDES PALLESCENS* (Bess.). On a lawn, Pyrford,  
Surrey, 19. Mrs. DAVY, in lit. !

2480. DAMASONIUM ALISMA, Mill. N. Hants 12. Specimens distributed.

2505. POTAMOGETON ACUTIFOLIUS, Link. P. BERCHTOLDI, Fieber. P. COLORATUS, Hornem. P. ANGUSTIFOLIUS, Presl. P. HETEROPHYLLUS, L. P. INVOLUTUS, Fryer. Northants 32. G. C. DRUCE.

2535. SCIRPUS TABERNÆMONTANI, Gmel. Oxon 23, Bucks 24. Specimens distributed.

2593. CAREX LIMOSA, L. East Ross 106. MARSHALL & SHOOLBRED ('J.B.' 139, 1910).

2793. FESTUCA MARITIMA, L. Littlestone-on-Sea, Kent E. Mrs. DAVY, in lit.

#### RECENT PUBLICATIONS.

Among these may be noted:—

BRITISH ROSES (excluding *eu-canina*). Major A. H. Wolley-Dod ('Suppl. to Journ. Bot.' pp. 141, 1910, 3s.). Our member is to be heartily congratulated upon a very thorough and helpful attempt to describe the forms of this puzzling genus, and it should be in the hands of every student of the group. Additions to the 'List,' which are marked with an asterisk, are *Rosa arvensis*, Huds., \*var. *erronea* (Rip.), \*var. *scabra*, Baker. *R. stylosa*, Desv., \*var. *corymbosa*, Desv. and ? var. *lanccolata*, Lindl. Hib. *R. spinosissima*, L., \*var. *mitissima* (Gmel.), Wales 2. The vars. *Moorei* and *Nicholsoni* (under  $\times$  *involuta* in the 'List') are put under *R. pimpinellifolia*  $\times$  *rubiginosa*; and to these are added \**R. biturigenensis*, Bor., E. Kent and E. Perth. The group *R. pomifera*, L., now includes *R. recondita*, Puget, *R. cœrulea*, Woods, *R. pseudo-rubiginosa*, Ley, \**R. Grenierii*, Déség., and *R. mollis*, Sm. [*R. Andrzejovii*, Stev. is given up as a British plant]. *R. Jundzilliana*, Baker, and *R. pseudo-cuspidata*, Crép., *R. micrantha*, Sm., var. *sylvicola*, Déség., Hunts, ? Norfolk. *R. agrestis*, Savi., var. *sepium*, Thuill. is kept distinct as having larger leaflets and fruit, and style occasionally slightly hispid, Yorks, Surrey, as is *inodora* (Fries.), Brean Down, and var. *belnensis* (Ozanon), Somerset.

WILD FLOWERS OF THE BRITISH ISLES. Illustrated and written by [our Member], H. Isabel Adams, F.L.S. Revised by J. Bagnall,

A.L.S. Vol. II., Order XLII. *Campanulaceæ* to Order LXXXV., *Araceæ*, 4to., pp. xi., 199 t. 62 Lond. W. Hienneman, 1910, 30s.

The plates are from very carefully executed and beautiful drawings by Mrs. Adams, and excellently reproduced; the whole work contrasting very favourably with that of its compeers.

PRODROMUS FLORÆ BRITANNICÆ, F. N. Williams. Part VII., pp. 363—458, June, 1910. G. Stutter, 110 High Street, Brentford, 4s. 6d. In this part of the *Prodromus* Mr. Williams finishes the Plantaginaceæ and describes Verbenaceæ, Lamiaceæ, Primulaceæ, Ericaceæ and Siphonandraceæ (*Vaccinium*).

The novelties marked \* are *P. maritima*, var. \**recurvata*, nov. var., Cornwall and Pembroke; \**P. Serraria*, L., Steep Holme (if a correct identification it is a new British species). The 5 *Menthæ* are described in less space than that occupied with *Plantago maritima*.

Two Thymes, *ovatus* and *Serpyllum*, are given, the former with \*var. *vestitus*; in the latter the hairy form is made the type with var. *glabratus*, Will. Of Mr. Linton's *T. Loevyanus* ('Rep.' 497, 1909), he says the evidence afforded is insufficient. *Origanum vulgare*, var. \**macrostachyum*, Will., similar to *megastachyum*, "sed omnino glabrum" from Tongland, Kirkcudbright. *Stachys officinalis*, \*var. *glabrata*, Rouy (*Ballota ruderalis* is omitted). *Anagallis arvensis*, L., \*var. *ternata*, Will. (its older name is *verticillata*, A. Diard.), but is this a *lusus* not a *variety*? \**Anagallis latifolia*, L., a somewhat doubtful determination, and *Limonium humile*, var. *rariflorum*, Will.

ELM-SEEDLINGS, Mr. A. Henry in 'Journ. Linn. Soc.' 200, 1910 (Oct.). A valuable contribution to the history of Elms—he gives as the two British species, *U. montana* With., and *U. glabra*, Miller, thus distinguished:—

<i>U. montana.</i>	<i>U. glabra.</i>
Branchlets stout, pubescent, remaining smooth in the second year.	Branchlets slender, nearly glabrous, becoming striated in the second year.
Leaves large, thick in texture, very pubescent, especially on the upper surface, with short stalks.	Leaves small, very thin in texture, glabrous on the upper surface, with long stalks.
Seed in the centre of the Samara.	Seed near the upper edge of the Samara.
The tree rarely suckers.	The tree suckers freely.

Both these are wide-branching trees, and are known by same name—Wych Elm—in the east of England."

The most remarkable of the other forms of Elm is the tree long and erroneously known as *U. campestris*. This Henry thinks is "one of the descendants of the first cross between the above species, and possibly due to a second hybridisation of some of these descendants with *U. montana*. The Huntingdon Elm (*U. vegeta*) he looks upon as a first cross of *U. montana* × *glabra*. It originated as a seedling at Huntingdon 1746—1756. It is nearer *glabra* than *montana*; there is no pubescence on the upper surface of the leaves, which are long stalked, but they are as thick as in *montana*; the branchlets are shorter and often do not become striated. The samaræ are intermediate. It suckers freely, and produces an abundance of fertile seeds, and is a very vigorous grower. The suberosity of Elms is of no varietal value. The seedling of *U. montana* has an unbranched stem drooping to one side with large leaves, only the first two of which are opposite. The seedling of *U. glabra* has a stiff unbranched erect stem, with *all* the leaves small in size and in opposite pairs. The result of cultivation of the Huntingdon seedlings closely follows the Mendelian ratio, eight different kinds being obtained.

The English Elm is usually barren. Henry's results induce him to believe that in Britain we have only two species, the other Elms being hybrids of these species.

With Poplars he gives the following interesting suggestions:—

*P. nigra*, L. The European Black Poplar which has long been in cultivation—Leaf: non-ciliate in margin; without glands at the base; cuneate at the base; long acuminate at apex. [Leaves of this were distributed by me from Christ Church Meadow, Oxford. See Rep. 309, 1907.]

*P. deltoidea*, Marsh. (North America.) Leaf: densely ciliate in margin; with two glands at the base on the upper surface; truncate at the base; cuspidate at the apex.

Soon after the American species was introduced in the eighteenth century into France, a first cross accidentally arose, which became known in France as *P. nigra helvetica*, and when imported into England was called the Black Italian Poplar. The single tree (male) has always been reproduced by cuttings. It is a most vigorous grower (characteristic of first crosses), amply distinct from either parent not only by its rapid growth but by its habit, slender ascending branches and straight cylindrical stem. He

characterises it as follows:—*P. nigra* × *deltoidea* (*P. serotina*, Hartwig). First cross. Leaf with a few cilia irregularly disposed on the margin; glands at the base variable 0, 1, or 2, on each leaf, in shape like *deltoidea*, but appreciably different.

This is the *P. deltoidea*, Marsh, var. *serotina* of my *British Plant List*.

Mr. Henry also suggests, though his investigations are not yet finished, that the cricket-bat willow *S. alba*, var. *cærulea*, which is known only as a female tree and originated in Norfolk about 1700, is the first cross between *S. alba* and *S. fragilis*, but, like most first crosses, much more strongly resembles one species than the other. "It is, in fact, so close to *alba*, that it is universally considered to be a variety of that, viz., *S. alba cærulea*."

ANATOMY OF THE BRITISH CARICES, by our late member, Francis E. Crawford. Large 8vo, pp. xiii. 124, tt. xx, Edinburgh, Oliver and Boyd, 1910. 7s. 6d. With a short biographical sketch by A. J. Pressland.

BOTANY OF TO-DAY. G. F. Scott Elliott [author of the Flora of Dumfries]. Seeley and Co., London, 1910, pp. xv. 352, 5s. A well written and suggestive work.

THE TREES OF GREAT BRITAIN AND IRELAND. By H. J. Elwes, F.R.S. and A. Henry, M.A. Vol. V., Edinburgh, pp. viii. 1001—1333. Contains 49 species of *Pinus* including *P. Pinaster*, 14 species of *Cupressus* and 62 species of *Quercus*.

THE LIGHTER STUDIES OF A COUNTRY RECTOR. The Rev. Canon J. Vaughan Pitman. 5s. Contains much matter of Botanical Interest.

NOVUS CONSPECTUS FLORÆ EUROPÆ. Michaele Gandoger. A. ZEERMANN, Paris, pp. 541, 1910.

CATALOGUE DES PLANTES VASCULAIRES DU TESSIN. Paul Chevenard, Geneva, 4to., pp. 552, 1910.

A HISTORY OF BOTANY, 1860—1900. J. Reynolds Green, Sc.D., F.R.S., 8vo., pp. 543, Oxford Clarendon Press, 1909. 9s. 6d. net. A worthy continuation of Sach's 'History of Botany,' but of course

rather dealing with morphology than the systematic side of Botanical research.

CATALOGUE OF HARDY TREES AND SHRUBS GROWING IN THE GROUNDS OF SYON HOUSE, Brentford, by our Member, A. Bruce Jackson. Newman and Co., London.

SYNOPSIS DER MITTELEUROPAISCHEN FLORA. Vol. IV. continued. Ascherson and Graebner. Salicaceæ—Betulaceæ, Aug. 2, 1910, pp. 321—400. In this the Birches stand as *Betula verrucosa*, Ehrh., and *B. pubescens*, Ehrh. (*B. alba*, L. = *B. tomentosa*, Reit and Abel). Vol. LXVI., Leguminosæ continued. March, 1910, pp. 1009—1093.

A CHECK LIST OF LINCOLNSHIRE PLANTS, by our member, Rev. E. A. Woodruffe Peacock. Goulding, 20 Mercer Row, Louth.

COMMON WEEDS OF THE FARM AND GARDEN, H. C. Long and Prof. J. Percival, 8vo., pp. xviii. 451, fig. 106. Smith, Elder and Co., London. 6s.

COLONSAY, ONE OF THE HEBRIDES, ITS PLANTS, ETC. Murdoch McNeill, D. Douglas, Edinburgh, sm. 8vo., pp. x. 216, 1910. 580 species, 70 varieties of plants noted. 2s. 6d. net.

A GUIDE TO THE NATURAL HISTORY OF THE ISLE OF WIGHT. Edited by Frank Money, F.L.S., pp. xx. 560. The County Press, Newport, 1909. 8s. 6d. net.

NEW PHYTOLOGIST, March and April, 1910. The Woodlands of England, C. E. Moss, W. M. Rankin and A. G. Tansley, 36 pages.

VIOLAE EUROPAEAE, Systematische Bearbeitung der Violeu Europas und seiner benachbarten Gebeite. Von Wilhelm Becker, Dresden, pp. 148, 1910.

This is a concise monograph of the European violets—much too concise in every way; probably some Reviewers would call it masterly, since it ignores many difficulties, sinking under one or two names all our Melanian Pansies. The distribution too is very imperfect, Britain being often ignored, even when the author has actually named specimens in my English herbarium. Nor does he once refer to Mrs. Gregory or indeed acknowledge having seen

British specimens except in a few instances. Again there seems a lack of consistency : under *Viola odorata*, L., he gives as varieties *alba*, auct. non Bess. ; *subcarnea* (Jord.) Parl. 1890 ; var. *sordida*, Zwanz. ; var. *sulfurea* (Cariot), R. and F. ; var. *lilacina* (Rossm.), Wiesb. ; var. *variegata*, DC. ; var. *hispidula*, Freyn (= *V. dumetorum*, Jord.) ; and var. *subodorata* (Borb.), Beck. But under *V. hirta*, L. (with which *V. calcarea* White (sic) is made synonymous) he gives 2 sub-species, *brevifimbriata*, Becker, and *longifimbriata* Becker, the latter having 3 varieties, *hirtifolia*, *pubescentifolia* and *glabrifolia*, all of Becker, the last having again 3 sub-varieties. So that in one case colour forms are made varieties, in the latter case they are not even put as forms although he mentions their occurrence. His arrangement of our British Plants is :—

1. *V. ODORATA*, L. (with the vars. already given).
- [2. *V. SUAVIS*, M. B. sp. coll. Under this is *V. sepincola*, Jord., not given as British.]
5. *V. HIRTA*, L. Sub-species *brevifimbriata*, Becker.  
 Stipulae integerrimae vel breviter fimbriatae, disparsae ciliatae vel glabrae. Eur. med. et bor.  
 Sub-species *longifimbriata*, Becker.  
 Stipulae longius fimbriatae, densius ciliatae interdum etiam cum fimbriis. Eur. merid.
11. *V. RUPESTRIS*, Schmidt. (*V. arenaria*, DC.), not given as British.
12. *V. SILVESTRIS* (Lam.), Reichb. (*V. Reichenbachiana*, Jord.).  
 Under this are 5 colour forms, and *f. villosa* and *f. albido-tomentosa*, one variety only being given, i.e. *rotundato-crenata* from the Faroes. There is also a sub-species from the Canaries and Teneriffe—rather out of place in a European monograph. For this widely distributed species “Banwell Wood, Loxton (Somerset)” only is cited for Britain.  
 He has 6 other species grouped under the spec. coll. from Asia, North America, &c.
13. *V. RIVINIANA*, Reichb.  
 Under this there is var. *nemorosa* N. W. M. with *f. villosa* and *f. albiflora*.

14. *V. CANINA*, L., spec. coll. (1. *V. canina*, Reichb.)  
 No varieties or forms are described! The British distribution given is Hampshire, Bournemouth, var. *dunensis*, W. Becker.  
 2. *V. montana*, L., "Huntingdon, Woodwalton."  
 3. *V. lactea*, Sm. "Cornwall."
15. *V. STAGNINA*. Kit. "Huntingdon." Another Irish grievance.
19. *V. PALUSTRIS*, L. "Nord Wales, Plymouth."
30. *V. PALAEO-CORNUTA*. Spec. Coll. with 16 species.  
 No. 12 being *V. lutea*, Huds., of which our British plant is made a sub-species *elegans* (Kirzschl.), Becker.
31. *V. TRICOLOR*. Spec. coll.  
 1. *V. arvensis*, Murr. "England."  
 7. *V. tricolor* (L.), Wittr. "Yorkshire."  
 a. Sub. sp. genuina, Wittr.  
 Var. a. *maritima*, Schweigg. (*V. Curtisii*, Forst.) St. Anne's-on-the-Sea.  
 [8. *V. alpestris* (DC.). Not given for Britain.]

After the species the hybrids are enumerated, but in no case can I find a reference to their occurrence in Britain.

5. *V. hirta* × *odorata*. a. *V. permixta*, Jord. But although Becker has himself thus named several plants in my British *Viola*, which I sent him, no allusion to its occurrence in England is made.
28. *V. Riviniana* × *silvestris*, Reichb.  
 30. *V. canina* × *Riviniana*.  
 31. *V. canina* × *silvestris*.  
 34. *V. canina* × *lactea*.  
 35. *V. canina* × *stagnina*.  
 2. *montana* × *stagnina*.

It will be observed that *V. nana*, DC., is not mentioned, but under *V. Kitaibeliana*, R. & S. itself put as a parallel species to *V. arvensis*, a *V. nana*, Sauze et Marill., Fl. Deux Sevres 429 is made synonymous.

The book may be useful to the Benthamites, but will scarcely give much assistance to critical workers.

CRONOLOGIA DELLA FLORA ITALIANA . . . . P. A. Saccardo, 4to., xxxvii., 390, 15 lire, Padova, in which 4,093 species, besides varieties, have the name and date, when and by whom each plant was first recorded for Italy.

THE CRAFTSMAN'S PLANT BOOK, or Figures of Plants selected from the Herbals of the Sixteenth Century. . . . R. G. Hatton, 4to., ix. 539. Chapman & Hall, Lond., 1909. 25s.

AGRICULTURAL BOTANY, Theoretical and Practical. John Percival, M.A., F.L.S., 4th edit., 8vo., pp. xiv., 828, fig. 265. Ducksworth, Lond., 1910. 7s. 6d. net. A most excellent and useful work.

THE JOURNAL OF BOTANY, 1910, contains a valuable paper on BRITISH OAKS, by C. E. Moss, D.Sc., in which the writer clearly describes and defines as British Trees—*Quercus Robur*, L.  $\times$  *sessiliflora* =  $\times$  *Q. rosacea*, Bechst. *Q. sessiliflora*, Salisb., and *Q. Cerris*, L. Europe. p. 1 and p. 33 with figure.

NOTES ON BRITISH ELMS, Rev. Augustin Ley. Plate 543 of fruits, p. 65.

NOTES ON THE FLORA OF FLINTSHIRE, A. A. Dallman, F.C.S., in which a new Alien to Britain, *Cornus alba*, L., is mentioned as being naturalised, pp. 53 and 73.

ROSS-SHIRE PLANTS, Rev. E. S. Marshall and W. A. Shoolbred, in which a hybrid *Betula* (see 'Report' 473) is mentioned, as well as several new County records are given. *Spiræa japonica*, Thunb., var. *Bumaldi*, Hort. and *S. opulifolia*, L., are reported from Conan 106, p. 132.

NOTES ON THE FLORA OF CHESHIRE, E. & H. Drabble, p. 152.

LATHYRUS TUBEROSUS, L., in England. Miller Christie, p. 170.

NATURAL SELECTION AND PLANT EVOLUTION, A. B. Horwood, p. 177.

FURTHER ADDITIONS TO THE BERKSHIRE FLORA, G. C. Druce, p. 195.

THE STUDY OF THE BRITISH FLORA, Prof. J. W. Trail, F.R.S., p. 241. Presidential address at Sheffield to section K, British Association.

STELLARIA DILLENIANA, Mœnch, F. N. Williams, p. 223.

NOTES ON SCOTTISH PLANTS, C. E. Salmon, p. 225.

NOTES ON SOUTH KERRY PLANTS, H. Stuart Thompson, p. 227.

DURHAM PLANTS (record of *Orchis cruenta*, etc.), G. C. Druce, p. 259.

MIDDLESEX PLANTS (*Crataegus Oxyacantha*, var. *cuneata*), G. C. Druce, p. 269.

ARMERIA ALPINA, Willd., in Britain? H. Stuart Thompson, p. 278.

The ANNALS OF SCOTTISH NATURAL HISTORY contains papers on *High Alpine Flora of Britain*, F. N. Williams, p. 34.

PLANTS OF SOME SOUTHERN SCOTTISH COUNTIES (*Crataegus oxyacanthoides*, Thuill., new to Scotland), p. 39 and p. 95, G. C. Druce.

ALIEN PLANTS adds about 5 new Aliens to our list, p. 43, J. Fraser.

CONTRIBUTIONS TO FLORA OF OUTER HEBRIDES, p. 170 and p. 229, Arthur Bennett.

FLORA OF CAITHNESS, l.c. 225, Arthur Bennett. Mr. Bennett here contends that the name *demersus* suggested for the Rescobie *Ranunculus* cannot stand.

NOTES ON CAREX, Rev. E. S. Marshall, p. 171.

#### OBITUARY.

This year has taken away from us three members. In Mr. W. H. Beeby we have lost one of our best British Botanists, and a member of thirty years' standing, who had twice acted as Editor of the 'Report.' Mr. S. A. Stewart had been a very active worker;

he knew the plants of North-East Ireland extremely well, as his *Flora* testifies; he too had been a member since 1875. The Rev. W. H. Painter was also an old and valued member, and a regular contributor of plants for Exchange. These three members are a real loss to the Club, and British Botany is the poorer for their death.

WILLIAM HADDEN BEEBY (1849—1910). Born June 9th, 1849, died at Thames Ditton, January 4th, 1910, Fellow of the Microscopical Society, and on May 5th, 1887, was elected an Associate of the Linnean Society, of which he became Fellow in 1890. He had been a member of this Club since 1879, and acted as Distributor and Editor in 1882 and 1895. His knowledge of British plants was extensive and accurate, his work at them was painstaking and minute, and his experience in field-work led him to be an exceedingly good judge not only as to the value of the variation of a plant but as to its status in our flora. Few botanists have been so rewarded by successful discoveries, but even allowing for luck, they testify to his careful and painstaking work. The western peninsula gave him *Juncus capitatus*, Weig., and *J. pygmaeus*, Rich. ('Journ. Bot.' 337, 1872); his own county, towards a Flora of which he had accumulated a large mass of material, yielded the hybrid *Equisetum litorale*, Kùhl. ('Journ. Bot.' 54, 1886), while he added as a new species to science *Sparganium neglectum* ('Journ. Bot.' 26, 1885). His researches are embodied in his able article on 'Botany' in the Victoria County History of Surrey.

He repeatedly visited the islands of the Shetland group, and there he made many interesting discoveries—among them *Cochlearia groenlandica*, L. ('Journ. Bot.' 235, 1895), *Rhinanthus groenlandicus*, Chab., and *Taraxacum spectabile*, Dahlst. ('Ann. Scot. Nat. Hist.' 234, 1907), *Potamogeton pectinatus*, var. *fluviatilis*, Sch. and Mart. (*P. vaginatus*, Turc.) ('Journ. Bot.' 172, 1907), besides new forms of Hieracia, — *H. breve*, *H. zetlandicum*, *H. subtruncatum*, *H. Schmidtii*, var. *fealense*, *H. dovreense*, var. *hethlandiae*, *H. demissum*, var. *australius*, *H. strictum*, var. *congestum*, and var. *vinaceum*, and *Taraxacum spectabile*, var. *Geirhildæ*.

At one time he studied the violets with much care; he proved the inconstancy of the leaf-colour in the Unst *Cerastium nigrescens*

under cultivation, showed that *Spiraea Ulmaria*, var. *denudata*, was a condition not due to soil variation, since it remains unchanged in greatly varying soils—a result which our member, Prof. Yapp, has recently corroborated. In one of his last papers, Beeby did something to unravel the tangled nomenclature and position of the British Burdocks. His herbarium has gone to the Horniman Museum. His loss to British Botany is very great, and this Club is much the poorer in that it has lost an astute critical referee and a valued member. (See also 'Journ. Bot.' 1910, Memoir by Rev. E. S. Marshall, with portrait.)

SAMUEL ALEXANDER STEWART (1826—1910), born Feb. 5, 1826, died Jan. 15, 1910, and was buried in the City Cemetery, Belfast. His father, W. Stewart, kept a trunk-maker's shop in North Street, Belfast, and for many years his son worked at the same business. He was a self-educated man, not having attended school or college. His attention was directed to geology and botany by some lectures given by Mr. Ralph Tate under the Science and Art Department. In 1880 he was appointed assistant-Curator of the Belfast Museum, and Curator some years later. He had a good knowledge of geology, but botany was his favourite subject. In 1888 he published his 'Flora of North-East Ireland,' and Appendix in 1895. In 1871, he became a member of the Botanical Exchange Club, and in the 'Report' for 1876, mention is made of *Zannichellia polycarpa*, Nolte, which he was the first to find in Britain in 1872. He studied mosses as well as the flowering plants, and was a good field botanist, and for many years gave assistance to all who were studying our native Flora in the north of Ireland. *Hieracium rigidum*, Hartm., var. *Stewartii*, F. J. Hanb., was named in his honour. C. H. WADDELL.

To the above testimony to the worth of our departed friend, who had been for a short time one of our Corresponding Members, I may add that Mr. Stewart was a Fellow of the Botanical Society of Edinburgh, and Hon. Assoc. of the Belfast Natural History and Philosophical Society. He was elected Associate of the Linnean Society, Feb. 18, 1904, and he contributed valuable Papers on the Irish Flora, including a visit to Dungiven and the Sperrin Mountains, to the Belfast Field Club Proceedings, Report on the Botany of the Isle of Rathlin, and of the mountainous portion of Fermanagh, of

Lough Allen and the Slieveancerin Mountains, and of South Clare and the Shannon to the R.I.A. Proceedings, besides papers on *Saxifraga Hirculus* in Ireland ('Journ. Bot.' 302, 1884), on *Carex aquatilis* in Ireland ('Journ. Bot.' 49, 1885), on *Irish Hieracia* ('Journ. Bot.' 83, 1886), and his "Flora of N.E. Ireland" is, as the author of *Cybele Hibernica* (whence the above information was extracted) says, "The most valuable local Irish Flora yet published." His colleague, T. H. Corry, met a tragic end while on his favourite pursuit. I have known him for many years, and always found him ready in any way to render assistance to a fellow-botanist. He had a very good knowledge of the native species, and also detected the alien *Hieracium Auricula* in a locality near Belfast.

THE REV. WILLIAM HUNT PAINTER (1835—1910) passed away, we regret to say, on October 12, 1910, at 3 Lexden Gardens, Shrewsbury, after an illness of nearly a year's duration. Born in 1835, he had nearly completed his seventy-sixth year. He had resigned the living of Stirchley, Shifnal, Salop, about ten months previously, having been instituted there in 1894. Previously to this he had been in charge of the parish of Biddulph, in Staffordshire, and Curate, amongst other places, of High Wycombe, 1865-66, and Holy Trinity, Derby, 1871-79. It was when in residence at this last place that he was able to collect material for his 'Flora of Derbyshire,' which though to some extent superseded by the late Rev. W. R. Linton's more ambitious work, was carefully compiled, and contained the Musci and Hepaticæ as well as the flowering plants. In Shropshire, where he resided the last seventeen years of his life, he took a very active part in the County Botany. For many years he was the Botanical Referee for the 'Bare Facts' of the Caraden and Severn Valley Field Club, of which Club he was a Vice-President; and he often read papers, both geological and botanical, at their evening meetings during the winter months. In company with the late William Philips Hamilton, of Shrewsbury (whose death in June last has deprived Shropshire of her leading Cryptogamist), he explored the county well for Mosses, and was one of the few survivors of the small band of local Botanists who had prepared materials for a new Flora of the County, a work not yet completed sufficiently to go to publication. He has left a widow, but no

family, to mourn his loss. His attainments as a Botanist are of a high order: and he amassed a fine Herbarium, which a short time before his death he presented intact to the University College, Aberystwyth. He was for many years an active member of the Botanical Exchange Club—paying particular attention to the ‘Rubi.’ J. COSMO MELVILL.

In 1889 he published ‘A Contribution to the Flora of Derbyshire,’ pp. 144, and a ‘Supplement’ in 1902, and had been a member of our Club since 1884, or perhaps earlier.

WILLIAM HILLHOUSE (1850—1910), was born Dec. 17, 1850 at Bedford, and died at Malvern, Jan. 27, 1910. Assisted in founding the Bedfordshire Natural History Society. Elected Fellow of the Linnean Society in 1876. Entered Trinity College, Cambridge, in 1877, and from 1878—1882 was assistant curator of the University Herbarium. He afterwards became connected with Mason College, Birmingham, and during his early tenure of office he worked under Prof. Strasburger of Bonn, and translated that botanist’s ‘Practical Botany.’ He was President of the Birmingham Natural History Society and Chairman of the Birmingham Botanical and Horticultural Society, designing the beautiful rock-gardens at Edgbaston Botanical Gardens. When at the Bedford Modern School in 1875-6 he did some work at the Botany of Bedfordshire, and compiled a list of the county plants, in which were several additions to the county. (See also ‘Journ. Bot.’ 105, 1910.)

---

Mr. J. A. WHELDON, F.L.S., 60 Hornby Road, Walton, Liverpool, has kindly consented to act as Distributor this year. Parcels should be sent post paid in December, 1910.

Mr. E. W. Hunnybun, Mill Common, Huntingdon, who is making a most beautiful series of drawings of British plants, would be much obliged if members would assist him in obtaining some of his *desiderata*, a list of which, with other information, will be gladly supplied by him. He will defray the cost of transmission and supply tins for the plants.

Miss BERTHA REID, 26 Ardilaun Road, Highbury, N., Prof. J. PERCIVAL, The Pyghtle, Northcourt Avenue, Reading, and R. Y.

STAPLEDON, Esq., Royal Agricultural College, Cirencester, would be much obliged if members would kindly supply seeds and fruits of British plants. Members willing to assist are asked to communicate with the foregoing members direct. Mr. Stapledon especially wishes for *Leguminosæ*, *Umbelliferæ*, *Compositæ* and *Scrophulariaceæ*.

Mrs. ADAMS, 14 Vernon Road, Edgbaston, and Miss TROWER, Stansteadbury, Ware, Herts, are painting British Plants. Would members who are willing to assist in supplying specimens kindly let them know?

#### NOTE ON REPORT, 1905.

*Fumaria major*, Badaro. With reference to the Fumitory from Gilly Tresamble (Cornwall) mentioned on p. 13 of the Report for 1905, Mr. F. H. Davey has shown me a communication he has just received from Prof. Hanz Schinz of Zurich, saying the plant is *F. major*, Bad., and that his opinion has been confirmed by Professors Ascherson and Gräbner, as well as by Dr. Fedde of Berlin, who is working out the genus *Fumaria* for Engler's "Pflanzenreich." Mr. Davey tells me the plant has occurred in abundance every year since its discovery in 1904, over about two miles of country. C. C. VIGURS.

This is kept as a distinct species in the 'Index Kewensis' and by Nyman, who in his 'Conspectus' gives the European distribution as Gall. mer. Ital. Istria, Dalmatia, Graecia, Rhodos and Creta. Therefore its occurrence in Britain is of special interest, since it is not recorded for Western France.

#### NOTE ON REPORT, 1909.

*Verbascum* ex Rev. H. J. Riddelsdell, p. 466. Mr. A. Bruce Jackson says, 'This plant is not I think *V. nigrum* at all but *V. Chaixii*, Vill. . . . distinguished by its laxer branched inflorescence, the radical leaves tapering at the base.'

*Carex muricata*, immature specimens from Saffron Lane, Knighton, Leicester, W. Bell. Suggested by a critic on p. 478 to be "true *C. muricata*, L. Herb. and Spec. Plant = *C. Pairæi*, F. Schultz." Doubting this I sent a specimen to Kükenthal, who says it is, as I thought, "*C. contigua*, Hoppe" = *C. muricata*, L., Sp. Pl.

For "Regulations" as to sending in parcels, &c., see end of "Report" for 1909.

May I add that any opinion expressed in the preceding pages is purely personal and necessarily in no way assumes to carry with it the authority of the Club.

I may take this opportunity of heartily thanking those members who subscribed to the Don Memorial. A sum of £125 was raised, Mr. John Knox of Forfar being treasurer, and a monument to George Don was erected in the Parish Churchyard, which at the request of the Local Committee I unveiled before the Provost and a large and representative attendance on Sept. 8th, 1910.

G. CLARIDGE DRUCE.

## REPORT OF THE DISTRIBUTOR FOR 1910.

THE specimens sent this year are, on the whole, of a very interesting nature, and have called forth many highly critical comments. I should like, however, to express a hope that members would only criticise those plants of which they have made a special study. I fear that some members will regret that the number of aliens is distressingly high. Most of the plants sent were exceedingly well preserved; but a few members have still much to learn in the matter of collecting and pressing plants. Several members sent in their parcels some weeks after the appointed date.

The Club is greatly indebted to the following botanists for examining and criticising specimens:—

Mr. E. G. Baker, Mr. W. Barclay, Mr. A. Bennett, Mr. A. Fryer, Mrs. E. R. Gregory, Messrs. H. and J. Groves, Professor P. Graebner, Dr. E. Hackel, Mr. A. Henry, Pfarrer Kükenthal, Rev. E. F. Linton, Mr. H. W. Pugsley, Rev. W. Moyle Rogers, Dr. O. Stapf, and Professor Trow.

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.
Bailey, Charles, <i>M.Sc.</i> , <i>F.L.S.</i> ... ..	75
Bickham, S. H., <i>F.L.S.</i> ... ..	128
Britton, C. E. ... ..	125
Cowan, McTaggart, jun. ... ..	403
Cryer, J. ... ..	194
Druce, G. Claridge, <i>M.A.</i> , <i>F.L.S.</i> ... ..	628
Foord-Kelcey, Mrs. F. L. ... ..	71
Fox, Rev. H. E., <i>M.A.</i> ... ..	58
Hayward, Miss Ida ... ..	98
Hodge, W. ... ..	126
Horwood, A. R. ... ..	90
Jackson, A. Bruce ... ..	57
Ley, Rev. Augustin, <i>M.A.</i> ... ..	432
Marshall, Rev. E. S., <i>M.A.</i> , <i>F.L.S.</i> ... ..	280
Melville, J. Cosmo, <i>M.A.</i> , <i>M.Sc.</i> , <i>F.L.S.</i> ... ..	105
Moss, C. E., <i>B.A.</i> , <i>D.Sc.</i> , <i>F.R.G.S.</i> ... ..	164
Riddelsdell, Rev. H. J., <i>M.A.</i> ... ..	286
Salmon, C. E., <i>F.L.S.</i> ... ..	21
Shoolbred, W. A., <i>M.R.C.S.</i> , <i>F.L.S.</i> ... ..	97
Travis, W. G. ... ..	68
Trower, Miss ... ..	10
Vigurs, C. C., <i>M.D.</i> ... ..	75
Waddell, Rev. C. H., <i>B.D.</i> ... ..	30
Waterfall, C., <i>F.L.S.</i> ... ..	48
Wheldon, J. A., <i>F.L.S.</i> ... ..	141
White, J. W., <i>F.L.S.</i> ... ..	76
Wilson, A., <i>F.L.S.</i> , <i>F.R.M.S.</i> ... ..	71
Wolley-Dod, Major A. H. ... ..	14
Total	4,011

C. E. Moss,

*Editor of the Report and Distributor  
for the Club, 1910.*

*Ranunculus acris*, L., var. — [ref. No. 2744]. Shingle, Sligachan, Skye, June 1910. Probably a northern form of *R. tomophyllus*, Jord.—G. CLARIDGE DRUCE. I think var. *tomophyllus*, Jord., would be the right name.—E. F. LINTON. One specimen received, which looks like depauperate *R. Borœanus*, Jord., form *tomophyllus* (Jord.).—EDWARD S. MARSHALL.

*Ranunculus bulbosus*, L., var. [ref. No. 3997]. St. Ouen's, Jersey, April 1910. Var. *dunensis*, mihi. See page 495.—G. CLARIDGE DRUCE. Dwarf, one-flowered specimens; very villous. The material sent to me is too young to base any valid opinion upon; as far as I can judge, it is nothing but a state due to the situation. Cultivation may prove the characters to be permanent. Rev. H. E. Fox has sent specimens to the "Watson Exchange Club," which appear to be just the same thing.—E. S. MARSHALL.

*Ranunculus Flammula*, Linn., var. *tenuifolius*, Wallr. This variety of *Ranunculus Flammula*, L., is very abundant on swampy parts of Epsom Common, Surrey. August 1910.—C. E. BRITTON. The above variety is defined as follows in Rouy and Foucaud, 'Fl. de France,' I. 83:—"Tige grêle, rampante; feuilles presque linéaires." They say that it is the *R. cœspiticius*, Dumort., *R. reptans*, Thuill., et bot. plur., non L. Though so striking in appearance, I believe it to be only a state of situation, which would revert at once to type, under normal conditions.—EDWARD S. MARSHALL. I can see nothing but ordinary *Flammula* in this. I understand that var. *tenuifolius*, Wallr., is synonymous with var. *radicans*, Nolte (= *pseudo-reptans*, Syme), to which this plant is not at all similar.—C. E. SALMON. Professor Glück ('Die Uferflora,' 1911, p. 492) states that var. *radicans*, Nolte = var. *gracilis*, G. F. W. Meyer = forma *reptans*, Nolte = var. *tenuifolius*, Wallroth = var. *reptans*, Neilreich = var. *reptans*, auct. Professor Glück also describes forma *natans*, Glück (p. 493), forma *submersus*, Glück (p. 495), and var. *alismifolius*, Glaab, in 'Deutsche botan. Monatschr.' xi. pp. 76-7 (p. 500). I agree with Mr. Marshall in regarding all these as *formae* due to special soil conditions.—C. E. MOSS.

*Nymphaea lutea*, Linn., var. *intermedia*, Ledeb. [ref. No. 303]. Chartners Loch, v.-c. 67 Northumberland, July 7, 1910.—Coll. J. KERR YOUNG. Comm. S. H. BICKHAM.

*Fumaria purpurea*, Pugsley [ref. No. 305]. Allotment gardens, Malvern, Worcester, September 9, 1910.—S. H. BICKHAM. Yes.—H. W. PUGSLEY.

*Fumaria occidentalis*, Pugs. N. Cornwall, August 1910.—H. E. FOX. Yes. I am glad to see this from a new locality.—H. W. PUGSLEY.

*Fumaria*, sp. Among potatoes, in a garden at Llandaff, v.-c. 41, September 10, 1910. I should think *F. Boræi*, var. *muraliformis*, Clavaud. Notes of the plant before drying are—"Flowers few, small, pale, weak. Sep.  $\frac{1}{3}$  to  $\frac{2}{5}$  as long as petal, ovate, toothed. Fruit small, narrow-necked, smooth, apiculate." This points towards *F. muralis*, Sonder: but the fr. when dry is obtuse: and so I suppose it is *F. Boræi* var.—H. J. RIDDELSDELL. A weak form of *F. Boræi*, Jord., near the variety that I have been naming var. *serotina*, Clavaud.—H. W. PUGSLEY.

*Fumaria Boræi*, Jord. In August 1910, I met Mr. Percy Garner, on Rothley Plain, and he asked me the name of a plant which he had gathered close by. This proved to be *F. Boræi*, Jord. I subsequently gathered a good supply and made enquiry as to its occurrence in the locality. A farm-hand said he "remembered it twenty years or so ago, and they called it the 'little dill.'" Mr. Pugsley has seen specimens and confirmed the naming. New county record.—W. BELL.

*Barbarea* ——. Marston Brickyards, Oxon, May 1910 [ref. No. 4119].—G. CLARIDGE DRUCE. Poor material, but I think *B. præcox*, Br., judging from the curved pod.—A. B. JACKSON. I believe *B. intermedia*, Bor., but my example has only immature pods which seem to spread. I think, however, that these with age would ascend and form a more or less close raceme.—C. E. SALMON.

*Arabis hirsuta*, Scop., var. ——. Sandy Cliff, Rhosili Bay, v.-c. 41, June 15, 1910. This is much like a plant got by Mr. Marshall on the sand hills at Newton Nottage in 1902, and named by M. Rouy *A. Retziana*, Beurling, var. *hispida*. Clearly not *A. ciliata*, R. Br.—H. J. RIDDELSDELL. This, though more advanced, is practically identical with my No. 2670, found by Mr. Shoolbred and myself on the sand hills at Newton Nottage, v.-c. 41 Glamorgan, July 1, 1902, which was identified by M. Rouy as *A. Retziana*, Beurling, var. *hispida*. The superficial resemblance to *A. ciliata*, Br., var. *hispida*, Syme, is very great; but the ciliation of the leaves is nothing like so long or so well marked. I have not seen the supposed Pembrokeshire *A. ciliata*; but I suspect that either the type—*Retziana*—or this plant was mistaken for true *ciliata*, which is confined to the west side of Ireland, and unknown on the Continent, according to Rouy.—EDWARD S. MARSHALL.

*Cochlearia* —? [ref. No. 47]. Rock, North Berwick, June 4, 1910. This somewhat striking plant grows on the islands in the Forth and in several places on the mainland, and seemed to me such an intermediate form, that I sent fresh specimens to Mr. Druce,

who remarked that the plant was curious, combining characters of both *C. danica*, L., and *C. officinalis*, L., and asked me to distribute specimens. I do not seem to have been the first to remark the plant, for recently, while going over some specimens in the Herbarium at the Royal Botanic Gardens, Edinburgh, I found the same plant in Herb. Col. James Brodie, M.P., F.R.S. (see Britton and Boulger, "Index of British and Irish Botanists," 1893, p. 23), labelled "*Cochlearia danica*, Linn., sp. pl. 903. Upon rocks on Inch Keith and other islands in the Firth of Forth and at Queensferry, with reddish flowers"; and on the label below the specimens, "*Cochlearia danica*, var.,"; and again in Herb. Greville, "*Cochlearia danica*, Linn. Near Kinghorn, Fife, 1837," upon which is written in pencil by a former Keeper of the herbarium. "Not *C. danica*, L., but I leave it in this folio for comparison with *C. officinalis*, var. new (Syme)." I hope to raise some specimens from seed and test it under cultivation.—MCTAGGART COWAN, jun. Excellent *C. grænlandica*, L.—EDWARD S. MARSHALL. *C. danica*, L. The ovoid pouch, as well as the foliage and habit, point to this species.—H. J. RIDDELSDELL.

*Cochlearia* —. Aberlady Bay, Haddingtonshire, June 22, 1910.—IDA M. HAYWARD. *C. alpina*, Wats. The pouch distinctly tapers at both ends. It may be var. *micacea*, but the ripe pouch does not seem narrow enough for that.—H. J. RIDDELSDELL. Specimens rather scrappy; but I believe it to be *C. grænlandica*, L.—EDWARD S. MARSHALL.

*Sisymbrium altissimum*, Linn. On the banks of a brook running from the Redbrook tinplate works, Forest of Dean, West Gloucestershire, v.c. 34, September 13, 1910.—CHARLES BAILEY. Yes; a very frequent alien.—G. CLARIDGE DRUCE.

*Brassica* [ref. No. 4116]. Blewbury Downs, Berkshire, May 1910. Is this not Kohl-Rabi? It occurred as a relic of cultivation, but was a new form to me. The growing plants had clear sulphur-yellow petals entirely different in tint and somewhat in shape from those of the Swede Turnip. The stem was not enlarged at the base, being cylindrical not tumid.—G. CLARIDGE DRUCE. This comes near *B. cretica*, Lam.; it should have a woody base, according to Boiss., 'Fl. Orient.' I. p. 391.—CHARLES BAILEY. From the pale buff colour of the dried flowers, I suppose it to be *B. Rutabaga*, DC.; in the 'Prodromus,' I. 214, De Candolle does not mention this point, and only distinguishes it (as *B. Rutabaga*) from his *a. communis* of *B. campestris*, L., *C. napo-brassica*, by the definition "radice floescente subglobosa." Apparently a relic from a swede-field.—EDWARD S. MARSHALL. Is *B. oleracea*, L. I should think probably stray plants of "Thousand-headed Kale." — JOHN PERCIVAL.

? *Brassica* —. Port Talbot Docks, v.-c. 41, July 31, 1910. This plant is quite strange to me, and looks more like a *Raphanus* than a *Brassica*; though I took it at first for *Brassica alba* with glabrous fruit.—H. J. RIDDELSDELL. I should call this a glaucous form of *Sinapis dissecta*, Lagasca; almost all my herbarium specimens are hispid.—C. BAILEY.

*Diplotaxis tenuifolia*, DC. Ballast mounds, Witton Brook, Northwich, v.-c. 58, August 1910.—W. HODGE.

*Diplotaxis muralis*, var. *Babingtonii*, Syme. Sand hills, Rhyl, v.-c. 51, August 1910.—W. HODGE.—No; the so-called variety is said to be biennial, and is a much larger plant; I consider it unworthy of distinction.—EDWARD S. MARSHALL. Not *Babingtonii*, but the annual (typical) form.—G. C. DRUCE. Also as a garden weed from Rock, W. Cornwall, August 1910.—H. E. FOX.

*Capsella Bursa-pastoris*, Med. A dwarf decumbent form. Dried-up pond, nr. Coverack, W. Cornwall, July 21, 1910.—H. E. FOX. This is, I believe, a small form of *C. Bursa-pastoris*, var. *densifolia* (Mott). I distributed a prostrate Shepherd's Purse from Port Meadow, Oxford, through the 'Bot. Exch. Club' (see 'Report,' 211, 1906), but having subsequently grown it from seed I found that while the leaf and fruit characters came true, the prostrate habit entirely disappeared.—G. CLARIDGE DRUCE. A reduced state of var. *cuneata*; which is, I think, the best-marked of Mott's 'varieties,' and may, perhaps, deserve that rank.—EDWARD S. MARSHALL.

*Lepidium ruderale*, Linn. Sandy ballast mounds, Witton Brook, Northwich, v.-c. 58, July 1910.—W. HODGE.

*Lepidium campestre*, Br. forma [ref. No. 6201]. Tidmarsh, Berks., in a wood recently cleared, July 1910. Reported on by Dr. Thellung as the type. The locality is unusual, and it only shows how quickly seeds may be blown from neighbouring corn-fields. Doubtless with the growth of underwood, the plant will soon be crowded out.—G. CLARIDGE DRUCE. Weak specimens; otherwise I see nothing remarkable about them.—EDWARD S. MARSHALL. This looks an interesting form of *campestre*, but the pods are too young. Silicles much less scaly than usual but possess numerous papillae, reminding one of *L. heterophyllum*, var. *papillosum*, Dunn. The leaves and style, however, place this plant of Mr. Druce's under *campestre*. Perhaps further examples, with more mature pods, can be obtained.—C. E. SALMON.

*Lepidium heterophyllum*, Benth., var. *canescens*, Gren. and Godr., forma *dubia*, Druce, in 'Rep. Bot. Exch. Club,' 10, 1903. Kings-thorpe, Northants, May 1910. This is sent in order to clear up some

confusion about its identity. The plant, which chiefly differs from typical *L. Smithii*, Hook., in having yellow anthers, I gathered at Kingsthorpe, Northants, and sent to the "Record Club" in 1877 (see 'Report,' p. 232), as a yellow-anthered form of *Smithii*. In 1905, Mr. A. Bruce Jackson sent up to another Club from the district, and then the Rev. E. F. Linton named them *L. campestre*, var. *longistylum*, More. What More's plant really was I have been unable to find out, or indeed where it was published. These plants have been submitted to Dr. A. Thellung, and he reports that they are "*L. heterophyllum*, Benth. (*L. Smithii*, Hook.), forma *antheris pallidis*," and adds, "I do not believe that in *L. heterophyllum* great importance can be given to the colour of the anthers. The colour seems to change exactly as it does also in *L. sativum*, which as a rule has violet, but sometimes also yellow anthers." One fact about this plant is that for over thirty years this same form has appeared at Kingsthorpe, without any very noticeable admixture of the violet-anthered form.—G. CLARIDGE DRUCE. More glabrous than is usual in *L. Smithii*, Hook. (which I suppose to be the character relied upon); fruit-character normal.—EDWARD S. MARSHALL. This plant is the var. *a leiocarpum*, Thell., which Dr. Thellung says in his "Monograph" is "Die häufigere Form." The same expression is used by him to describe var. *campestre*, Schultz (1840), which supercedes var. *canescens*, G. and G. (1848).—C. E. SALMON.

*Lepidium Draba*, Linn. On a waste heap in a field in the neighbourhood of Turkdean, North-east Gloucestershire, v.-c. 33, June 7, 1910.—CHARLES BAILEY.

[*Alien Crucifer.*] Lane from Hall Road Station to Little Crosby, August 2, 1909. Coll. DR. J. W. ELLIS; Comm. J. A. WHELDON. Although very young, and the fruit scarcely started, I think the plant may be identified as *Bunias Erucago*, L., No. 262 of my 'List.' In this condition it recalls *Brassica elongata*, from which the ripe fruit easily distinguishes it.—G. CLARIDGE DRUCE.

*Reseda lutea*, Linn. Ballast Mounds, Witton Brook, Northwich, v.-c. 58, July 1910.—W. HODGE.

*Viola Riviniana*, Reichb. [ref. No. 3998], var. *intermedia*, Le Grand. On the slopes of Petit Bo, Guernsey, April 10, 1910.—G. CLARIDGE DRUCE. A more robust habit and a coloured spur are the characters which separate *V. Riviniana*, var. *intermedia* from the type. The difference, therefore, between *V. Riviniana*, var. *intermedia*, Le Grand, and *V. Riviniana*, f. *nemorosa*, Neum., would appear to be one of size only. The form *nemorosa*, Neum., is described by Neuman as being a smaller plant than *V. Riviniana*,

as having shorter calycine appendages and a violet spur. Specimens of this form, in the Neuman, Wahlstedt and Murbeck set at the British Museum (Nat. Hist.), have a singularly graceful habit. The Guernsey plants vary considerably in height, but their robust habit accords better with descriptions of var. *intermedia*, Le Grand, than with that of f. *nemorosa*, Neuman.—E. S. GREGORY. Rouy and Foucaud ('Fl. France,' iii. 14) define this:—"Eperon un peu plus coloré; capsules moins aiguës; plante plus robuste à feuilles supérieures plus allongées. Variété analogue à la var. *lucorum* du *V. canina*." In my only specimen the leaves are all remarkably round and short, and the colour of the spur cannot be seen; no capsules are yet formed. It seems to me a very ordinary *V. Riviniana*, not so distinct as the var. *nemorosa*; but I have never been able to retain the colour, even with the greatest care in drying.—EDWARD S. MARSHALL.

*Viola Riviniana* × *sylvestris*. Wood bank, Great Doward Hill, Herefordshire, April and July 1910. Flowering abundantly at the earlier date, but almost or quite barren.—AUGUSTIN LEY. The influence of both parents seems obvious.—EDWARD S. MARSHALL. Mr. Ley's violet from the Great Doward and the Harpenden one (see below) should, I think, be classed together, as a distinct variety of *V. sylvestris*. I have had the var. under cultivation for 25 years; it has increased considerably, but has in nowise altered in any of its original characters. A furrowed spur is a constant feature, which no doubt gave rise to the impression of its being a hybrid. As such, I cannot, however, regard it, else why should it occur in districts where *V. sylvestris* is absent? It approaches—in some respects—to *V. arenicola*, Chabert, but breaks down in (1) lower leaves larger, not obtuse, nor wholly glabrous, (2) central rosette has often flowers, as well as leaves, (3) upper stipules do not exceed the petioles they subtend, nor are they entire. It is no doubt the sub-var. *punctata* of *V. sylvestris* given in Rouy et Foucaud ('Fl. Fr.,' p. 13), which is described as having "pétale inférieur marqué à la base d'une tache violette," and more fully described by Boeninghausen (Prodromus Monasteriensis, Westphalorum) under *V. canina*, L., *β. maculata*, in these terms:—"floribus minoribus pallidis ad basin petalorum maculis saturati-oribus."—E. S. GREGORY.

*Viola sylvestris*, Kit., var. —. Harpenden, Herts, April 29, 1910. Coll. E. J. SALISBURY and C. E. MOSS. This plant is very abundant in this locality. All the plants observed had a furrowed spur, and, in most cases, a distinctly furrowed spur. At first, I thought it might be *V. Riviniana* × *sylvestris*; but we could find no plants of the latter species with non-furrowed spurs in the locality. The plant has grown in Mr. Salisbury's garden for many years, and

it remains constant. I gathered the same variety in flower on March 27, 1911, in Mr. Linton's parish (Edmonsham, Dorset).—C. E. MOSS. Not *pure V. sylvestris*, by flowers and foliage.—EDWARD S. MARSHALL.

*Viola arvensis*, Murr., var. Branstone, Leics., September 23, 1910.—A. R. HORWOOD.

*Viola arvensis*, var. —. Swithland, Leics., September 2, 1910.—A. R. HORWOOD. Is *V. segetalis*, Jord.—H. J. RIDDELSDELL.

*Viola obtusifolia*, Jord.? Peaty ground near Cockerham, W. Lancs. (60), July 1910.—J. A. WHELDON.

*Viola saxatilis*, Schmidt. Roadside bank, S. of Loch Rannoch, Perthshire (88), July 1910.—A. WILSON and J. A. WHELDON. This plant has the underground perennating shoots of the *saxatiles*, although, owing to the nature of the ground, it was impossible to collect many examples exhibiting this feature.—J. A. WHELDON.

*Viola saxatilis*, Schmidt, var. *lepida* (Jordan). Weed in flax field, flowering after the flax was pulled. It grew in the same field the year before among oats, and was so named by Dr. Drabble.—C. H. WADDELL.

*Viola Curtisii*, Forst. Sand hills, Fairhaven, West Lancs. (60), May 1910.—J. A. WHELDON.

*Viola* —. Peat soil near Nately, W. Lancs. (60), July 1910.—J. A. WHELDON.

*Polygala vulgaris*, L., forma *rosea* [ref. No. 4121]. Bradenham, Bucks., May 1910. Rather plentiful, and a very pretty form.—G. CLARIDGE DRUCE. I have seen this magenta-coloured form in many stations in the south of England, both on chalk and limestone; but the colour of *P. vulgaris* is so variable that it seems hardly worth distinguishing.—EDWARD S. MARSHALL.

*Polygala oxyptera*, Reichb. [ref. No. 2730]. Lawers, Mid Perth, July 1910. This occurred in considerable quantity in a pasture about 400 feet alt., and was readily distinguishable from *P. vulgaris*, from which it has quite a distinct habit, which also occurred there. I am inclined to think it prefers limestone, as I found it also in Skye (n.c.r.), where limestone was present, and at Traquair, Peebles (n.c.r.).—G. CLARIDGE DRUCE. The sepals are too broad and blunt for this species, and the flowers too large; the foliage is that of *P. vulgaris*, to which I have no hesitation in referring my two specimens.—EDWARD S. MARSHALL.

*Dianthus* —. Waste ground, West Dock Reservation, Hull, E. Yks., v.-c. 61, August 1902.—C. WATERFALL. Is *D. guttatus*, M. Bieberstein, in 'Flora Taurico Caucasica,' i. p. 328, and iii. p. 300—an ally of *D. chinensis*, L., figured in Reichenbach's Icones, No. 462. This plant is a native of S. Russia, and was probably introduced with grain from Odessa.—H. W. P. (See Wats. 'B.E.C. Rep.' 8, 1902-3.)—C. WATERFALL.

*Silene latifolia*, Rendle and Britten, var. Port Talbot Docks, v.-c. 41, July 1910. A very striking form, limited to one or two spots in the Dock area. I do not know if it has a name: if not, it certainly deserves one. Since gathering it, I have had a very similar form sent me from Lydney, v.-c. 34: and there is a specimen from Aberdare in my herbarium which is nearly the same thing. Perennial; stem nearly erect, several from one root, *branched at inflorescence only*. Stem and ls. often with glaucous bloom. Habit rigid or strict: *stem tough*. *Ls. crowded, 'strict'*; broader than in type, narrowing below: most of base adhering to stem; only few largest ls. cordate. Ls. light coloured: *finely dentate ciliate, otherwise glabrous*; wavy-edged. Often purple-tinged: very often purple-edged and tipped: *tips frequently ustulate*. *Fls. smaller than in type*, white: *segments of petal narrower, less obovate*. *Throat more closed*. *Veining of calyx much fainter and simpler*. *Cal. of different shape, narrowly ovate*, not truncate except at very base: teeth triangular: *small, delicate* and not very papery in texture. Fil. long-extruded, purple: styles purplish: anth. oblong purplish-yellow.—H. J. RIDDELSDELL. This robust plant seems to agree rather well with the description 'Fl. de France,' iii. 104, under *S. Cucubalis*, Wibel, of *S. vesicaria*, Schrad. (*S. inflata*, Sm.), *β. latifolia*, Rouy and Fouc.:—"Feuilles très grandes, largement ovales ou ovales-oblongues, glabres; tiges épaisses; panicule pauciflore; calice largement vésiculeux."—EDWARD S. MARSHALL.

*Cerastium tetrandrum*, Curt.? var. Burry Holm, v.-c. 41, June 13, 1910. This seems to be right, though the very large leaves, and the larger fls., are peculiar. There did not seem to be anything in the soil or surroundings to account for the difference from type plant, which was also plentiful.—H. J. RIDDELSDELL. Clearly under *tetrandrum*, though at first sight recalling *C. vulgatum*, L. (*glomeratum*, Thuill.). It seems to agree best with Rouy and Foucaud's (*op. cit.* iii. 217) *β. alsinoides*, Pers. (*pro specie*), of which *C. subtetrandrum*, Murb., is given as a synonym:—"Pédicelles inférieurs 1-3 fois plus longs que le calice; bractées inférieures largement ovales ou suborbiculaires, aiguës; fleurs ordinairement pentandres, quelques-unes parfois tétrandres." I have authentic specimens of *C. subtetrandrum*, collected in 1888 near Malmö, Scania; they are much smaller and less luxuriant

than that from Glamorgan, but they agree in all essentials.—EDWARD S. MARSHALL. A stout form of *C. tetrandrum*, Curtis, I consider. There is a similar plant in the Br. Mus. Herb. collected at St. Aubin's Bay, Jersey, April 24, 1871, by Dr. Trimen. See 'Journ. Bot.,' ix. 1871, pp. 199, 371. The Jersey plant is more branched than the present specimens, but notwithstanding this there are strong points of resemblance.—A. B. JACKSON. Not *C. subtetrandrum*, Murbeck, in my opinion.—G. C. DRUCE.

*Stellaria Dilleniana*, Moench. [ref. No. 3127]. Walton Bridge meadow, Middlesex, Aug. 31, 1910. This interesting plant was described by Mr. F. N. Williams in 1909, and kindly allowed by him to be recorded in the 'Report B.E.C.' 413, 1909, as *S. palustris*, Retz., var. *viridis*, Fries. These specimens are from his locality, which I visited with William Davy last August, and found it to be plentiful, growing with *S. palustris*, from which it kept quite distinct, (i) as regards its time of flowering—on August 31—when no trace of the flowers of *palustris* could be seen; (ii) by its green colour being quite constant: I quite expected to have found it grade off, but such was not the case; even when a tangled mass suggested this, careful tracking showed two distinct plants, each coming from its own root, with the leaves all glaucous, or all green, as the case might be. This I think dispels the idea of a cross with *S. graminea* as being the cause of the variation; a suggestion, too, equally nullified by the paucity of flowers on the flowering cyme, and the absence of ciliation on the leaf-margin. Third, the cymes are 1-2 flowered only.

Now to discuss its position. In recent times botanists have ignored what Koch ('Syn.' 119, 1837), says of *Stellaria graminea*: "Occurrit floribus minoribus et duplo majoribus, quæ varietates, observante Schummelio, sexum polygamo-dioicum indicant; conf. 'Fl. Siles.' i. 417." Rouy and Foucaud and more recent writers have either ignored these differences or treated the large and small flowered forms as distinct varieties. But they cannot be considered as true varieties, if they are correlated with sexual factors. This fact was well pointed out on specimens of *S. graminea* by Mr. C. E. Britton in 'Rep. Bot. Exch. Club,' p. 364, 1908. Therefore the separation of the varieties of *S. palustris* as is done by Rouy and Foucaud ('Flore France,' iii. 233) into *a. communis*, Fenzl, with large flowers, and *β. parviflora*, Richt., with small flowers, can scarcely be maintained. If it were so, this plant would not be *S. Dilleniana*, Moench, which as figured ('Enum. Pl. Hass.,' t. 6) has quite small flowers not exceeding the calyx, and is described by Moench "calyx . . . petalis aequalibus," a character which misled some botanists, e.g. Leers ('Fl. Herborn.' 107, 1775), to refer it to a form of *S. uliginosa*, and Rouy and Foucaud, l.c., to write *S. palustris*, var. *parviflora*, Richt., s.v.

*viridis*, R. and F. If that view were adopted we should have to call our plant *S. palustris*, var. *viridis*, Fries. But it may be urged that the characters given at the outset—time of flowering, paucity of flowers, green colour of leaves—are of sufficient value to constitute a distinct species. I think not. Even splitters like Rouy and Foucaud, or able and critical botanists such as Koch, Fries and Nyman, do not so consider it. No continental botanist that I am aware of ventures to keep it a distinct species apart from *palustris*; perhaps on Jordanian lines or those of the modern "Hieraciarch" it might be so separated, but I think we shall do well to keep it as a *variety*; that it is a good variety I have no doubt, and not a soil variation. Therefore, as Moench first established *Stellaria Dilleniana* in 'Enum. Pl. Hass.' p. 214, 1777, notwithstanding it describes a less widely diffused plant than the one afterwards established by Retzius as *palustris*, we must according to 'The Actes' treat it as the type, and write *S. Dilleniana*, Moench, var. *palustris* (Retz. 'Fl. Scand.' ii. 106, 1795). Both variety and species having its two sizes of flowers, some botanists who ignore the sexual form of flowers might name our plant as they think more precisely *S. Dilleniana*, Moench, forma *macro-petala* (Krok. 'Bot. Not.' 1863). One character of *S. Dilleniana* and its var. *palustris*, which is not given in our Floras, is the *violet* anthers: in *S. Holostea* they are *yellow*.

This Middlesex plant is a very interesting addition to our flora, and as attention has now been directed to it we may expect to hear of its turning up in other localities, especially as Babington under *S. glauca* (*Man.* 58, 1874) says "plant usually glaucous. Flowers rarely solitary, petals sometimes much exceeding the calyx," which suggests he has seen the two plants, unless indeed he has abstracted this from the remark of Koch ('Syn.' 119, 1837): "variat intense glauca et viridis, floribus majoribus, et minoribus, petalis calycem acquantibus, et caule 1-2 floro, et 6-9 floro. Varietas fol. viridibus et caule 1-2 floro: *S. Dilleniana*, Moench." See also a paper by F. N. Williams ('Journ. Bot.' p. 223, 1910), where he speaks of the Middlesex plant as the *small-flowered* plant; but I saw no small-flowered plant when I was there, nor is the specimen which Mr. Williams kindly sent me of his gathering in Sept., 1909, a small-flowered one. It may be that the October plants of 1910 had small flowers; if so it supports the contention that I have advanced, that this character is of no varietal value. It is a pleasing fact too that Dillenius, who did so much work for the British flora, should be commemorated in this plant.—G. CLARIDGE DRUCE. This plant seems to deserve specific segregation from *S. palustris*, Retz. Besides the marked difference in foliage and in certain floral characters, its flowering season is very much later; Mr. Druce's examples, though gathered on the last day of August, are barely in full bloom, and Mr. Williams

could find no good fruit in (I think) the first week of October. Good specimens were sent fresh to me last year by Mr. James Britten. After reading Mr. Druce's careful note, I still incline to think this a distinct species.—E. S. MARSHALL.

*Stellaria apetala*, Opiz. Higham and Kennett Heaths, Suffolk, May 16, 1910. A characteristic, ephemeral, prostrate, apetalous plant on loose soil on the sandy heaths of west Norfolk and Suffolk, spreading along the sandy soils into east Cambridgeshire. In flower in the same locality on April 20, 1911.—C. E. Moss. I have collected exactly the same thing near Mildenhall, West Suffolk, in Surrey, and elsewhere; it differs much in habit from the usual coast-plant, which seems to be *a. major*, Rouy and Fouc. = *S. apetala*, Ucria (*vera*). I think that Ucria's name (also adopted by Mr. F. N. Williams) is earlier, but do not remember the date of his *Pl. ad Linn. sp. add.* These small, compact, inland specimens appear to be Rouy and Foucaud's (*l.c.*, p. 230) *δ. minor*, among the synonyms given for which are *S. Borœana*, Jord., and *Alsine pallida*, Dumort. It is thus described:—"Feuilles caulinaires plus ou moins rapprochées, petites ( $\frac{1}{2}$ -1 centimètre); plante basse (5-15 centimètres), à tiges grêles, vertes, glaucescentes; calice poilu, à sépales ovales-oblongs-obtus ou obtusiuscules; capsule ovoïde, dépassent peu le calice."—EDWARD S. MARSHALL.

*Stellaria umbrosa*, Opiz. Port Hill, near Shrewsbury, Salop, April 1908-10.—J. COSMO MELVILL. One of my specimens, with glabrous calyx and pedicels, is correct; the other two have these pubescent, the pedicels are much too short, and the petals do not exceed half the length of the calyx: they belong to *S. media*, Vill.—EDWARD S. MARSHALL.

*Sagina procumbens*, Lin., var. *spinosa*, Gibs. [ref. No. 64]. Near Killin, Mid Perth, v.-c. 88, September 24, 1910. Forming large cushions some two feet across on a shady roadside bank. The characters have in some cases been somewhat spoiled by pressing, but it was quite a distinct plant when fresh.—McTAGGART COWAN, Jun. Mr. McTaggart Cowan's beautiful specimens are not very characteristic, as the diaphanous bristles are only very sparingly produced on the leaf-margins. Gibson (*Phyt.* 179, 1842) gives a reference to Baines' 'Fl. Yorksh.,' but in my edition there is no mention of the variety; nor does F. A. Lees refer to it in his excellent 'Flora.'—G. CLARIDGE DRUCE. Crump in 'Fl. Halifax' (1904, p. 17), says "Gibson's variety, with 'the edges of the leaves margined with minute diaphanous spines,' is not uncommon. . . . Specimens in *Herb. Gibson.*" Gibson's herbarium is preserved in the Belle Vue Museum, Halifax.—C. E. Moss. Only a slender state of the type. There is an occasional cilia on some of the

specimens on my sheet received through the Watson Exchange Club; but the deviation from type is inconsiderable.—E. S. MARSHALL.

*Sagina subulata*, Presl. Sandy roadside, Brown Point, Arran, v.-c. 100, n.c.r., July 1910.—V. S. TRAVIS.

*Spersula arvensis*, L., var. *nana*, Linton. Jersey, Portelet Bay, April 16, 1910.—C. E. SALMON. This is a very distinct variety, which I saw in cultivation at Bournemouth, a good many years ago, and thought worthy of sub-specific rank. The description of sub-var. *glutinosa*, Lange (pro-var. = *S. laricina*, Wulf., non L.) in Rouy and Foucaud, *l.c.*, p. 297, agrees very closely with Mr. Linton's plant; it may be an earlier synonym:—"Plante basse, densément pubescenteglutineuse; feuilles courtes; cymes plus denses à pédicelles courtes; graines de la var.  $\beta$ ." [*i.e.* *S. vulgaris*, Boenn., which British botanists consider to be the true *S. arvensis*, L.]. Apparently a genuine native.—EDWARD S. MARSHALL.

*Claytonia perfoliata*, Don. Kennett Heath, Suffolk, May 16, 1910. Naturalised under Scots pines for two or three miles along the boundary of Suffolk and Cambridgeshire.—C. E. MOSS.

*Hypericum humifusum*, Linn., forma. Cauldshiels Loch, near Melrose, November 7, 1910. Sent as local botanists think it is a distinct variety. It grows in abundance on shingle by the side of the loch, the altitude of which is about 870 feet.—I. M. HAYWARD. Mr. W. A. Boyd, of Faldonside, whose opinion carries great weight, thought this plant had some distinctive characters, but I am unable, I am afraid, to differentiate them, but perhaps members will carefully examine their specimens.—G. CLARIDGE DRUCE. The material received by me is mostly burnt up, as though it had grown in sunny, rocky ground. The sepals are somewhat glandular-serrate and black-dotted beneath; this agrees with the description of var. *H. decumbens*, Peterm., in 'Bab. Man.,' p. 74, a plant which I do not know.—EDWARD S. MARSHALL. In spite of the sepals being rather more serrate than usual, I think this best left under type. It will not do for var. *decumbens*, Peterm. (which has usually serrate sepals), as that is a more straggling plant with stems "couchées-radicantes."—C. E. SALMON.

*Tilia* [? *platyphyllos*, Scop.]. Natural wood, near Ilnavair Discoed, Mon., v.-c. 35, June 23, 1910.—W. A. SHOOLBRED. The specimens are not typical, and are perhaps from shoots of suckers or of adventitious buds low down on the stems; and neither flowers nor fruits are sent. However, all the material belongs to the small-leaved lime, *T. cordata* (*T. parvifolia*, Ehrh., *T. ulmifolia*, Scop.),

and not to the large-leaved lime (*T. platyphylla*), nor to the common lime (*T. europaea*). It is not, I think, usually stated in the floras that the leaves of *T. cordata*, which are borne on suckers, &c., are relatively large (sometimes very large) and have relatively short petioles. *T. platyphylla* may always be distinguished by its hairy twigs, and *T. cordata* by its normal leaves having very long petioles. The cymes of *T. cordata* are not pendant like those of the two other limes; and they flower later than those of *T. europaea* and *T. platyphylla*. Last year, for example, near Cambridge, the flowers of *T. cordata* opened on July 16th, those of *T. europaea* on June 28th, on which latter date those of *T. platyphylla* were already fully out; and the flowers of *T. europaea* and of *T. platyphylla* were over when those of *T. cordata* appeared. It would be interesting to ascertain whether or not this is invariably the case, as some continental floras give *T. europaea* as a hybrid of *T. cordata* and *T. platyphylla*. *T. cordata* is also later in coming into leaf than its two allies.—C. E. MOSS. Certainly not *T. platyphyllos*.—H. J. RIDDELSDELL.

*Geranium modestum*, Jord. Shingle beach, Coverack, W. Cornwall, July, 1910.—H. E. FOX. Quite right. We have two distinguishable coast-shingle plants, one being more hairy and having dark-purplish anthers, which I understand to be Jordan's segregate; the other is a good step further from type—*G. Robertianum*, having orange or tawny anthers and a more rigid, glabrous, shining habit (was this *G. Raii*, Lindley?). Following Lloyd, 'Fl. de l'Ouest,' I have always believed the latter to be *G. purpureum*, Vill.; but Mr. Clement Reid is, I think, of a different opinion.—EDWARD S. MARSHALL. Mr. Fox's plant agrees in habit and in fruit characters with a specimen in the Herbarium at Cambridge named (in Jordan's handwriting) "*G. modestum*, Jord." It is not possible now to determine the colour of the anthers.—C. E. MOSS. Mr. Clement Reid has kindly drawn up a description of the plant he has identified as *G. modestum*, Jord., which he has not seen, more than a mile from the sea, over many acres at Crantock, near Newquay; near Padstow it occupies several square miles, and at Gorran Haven in South Cornwall it is found in profusion:—"Stems nearly smooth below, glandular above, lower leaves smooth below. Corolla  $\frac{3}{8}$  in. (half the size of *Robertianum*), petals rose-coloured, oval, narrow not overlapping, anthers bright green (not red), fruit glabrous or downy, carpels blunt above (not acute and merging into the beak), covered with raised lines and dots." The last characters in addition to other points would seem to support its specific distinction from *Robertianum*.—G. CLARIDGE DRUCE.

*Geranium Endressi*, J. Gay. See 'Journ. Bot.,' 258, 1910. Hedgerow at Hatton, Craven Arms, Salop, in some plenty. Dis-

covered by the Rev. E. H. Gilchrist de Castro. June 1910.—J. COSMO MELVILL. Agrees with type specimens in Br. Mus. Herb. and at Kew.—A. B. JACKSON and W. B. TURRILL.

*Geranium Endressi* × *striatum*. A spontaneous hybrid between these parents when grown together in a garden at Sellack Vicarage in 1906. Cultivated, it proved a more vigorous plant than either parent, producing abundant blossoms and fertile seed.—AUGUSTIN LEY. These two species are evidently prone to cross; for the same hybrid has occurred in my own garden, and in that of my cousin, Rev. C. F. Benthall, at Cofton Vicarage, S. Devon; he sent it up thence to Kew. In the West Monkton instance, *G. Endressi* is certainly the female parent, *G. versicolor (striatum)* being at some distance; the flowers are less distinctly veined than in Mr. Ley's plant, but the foliage is much the same.—EDWARD S. MARSHALL.

*Oxalis Acetosella*, Linn., var. *subpurpurascens*, DC. [ref. No. 33]. Arniston Woods, Gorebridge, v.-c. 83, May 14, 1910.—McTAGGART COWAN, Jun. Looks quite right, but is it more than a "state"? The vars. *cærulea*, DC., *lilacina*, Reichb., and *subpurpurascens*, DC., seem very close but are kept apart by Rouy ('Fl. France'). The two latter seem, by description, to be practically identical.—C. E. SALMON.

*Ononis reclinata*, L. Corbelets, Alderney, June 1909.—I. M. HAYWARD.

*Medicago falcata*, L. Waste heap, Bradford, Yorkshire, v.-c. 64, July 30, 1910. Several nice plants which bloomed freely.—JOHN CRYER. Correct.—C. E. MOSS. Yes. I use a capital letter for the specific name, for Rivinus designated it *Falcata*.—G. CLARIDGE DRUCE.

*Medicago [falcata, L.]*. Sewage Farm, Prescott, v.-c. 59, August 1910.—Leg. REV. M. TOOKEY, S.J. Comm. W. G. TRAVIS. Not *M. Falcata*.—C. E. MOSS. This is not *M. Falcata*, L., but I believe a monstrosity of *M. lupulina*, L., the var. *inguiculata*, Seringe, described by De Candolle ('Prod.' ii. 172, 1825) as "floribus apetalis leguminibus falcatis vix nervosis stipitatis unguiculatus . . . . *M. mniocarpa*, Wallr., in litt." It is an analogous form to Seringe's varieties of Melilots, and appears to be induced by growing in rank uncongenial soil.—G. CLARIDGE DRUCE. I do not know this alien; but it is certainly nowhere near *M. falcata*.—EDWARD S. MARSHALL.

*Medicago lupulina*, var. *Willdenowii*, Merat. Railway embankment, Saxon's Lane, Northwich, v.-c. 58, September 1910.—W.

HODGE. Yes, the hairs on the fruit are glandular; Mérat described his plant as a species in 'Fl. Paris,' which is distinct from the *Willdenowii* of Boenninghausen.—G. CLARIDGE DRUCE. Fruit glandular; correct. But Koch's name is *Willdenowiana*; he says (*Synopsis*, ed. 2, 177), that it is *M. Willdenowii*, Boenn. (not of Mérat), whose plant hardly deserves to rank as a variety.—EDWARD S. MARSHALL. Correct, I believe; fruit with glandular hairs.—A. B. JACKSON. This is var. *Willdenowiana*, Koch. = *Willdenowii*, Boenn., non MÉRAT. Rouy and Foucaud call it sub-var. *glandulosa*, Neilr. Mérat's plant is said by Koch to differ only from type by the stipules being "obsolete denticulis, vel integerrimis," and he considers it scarcely worth the name of a variety; however, Rouy and Foucaud do not discard it, but it survives in their 'Fl. France' as sub-var. *integrastipula*, R. and F., with the simple description "Stipules entières." I believe plants occur with the upper stipules entire, and the lower toothed. I do not recollect seeing such a glandular plant of *lupulina* before as that of Mr. Hodge's; not only are the legumes glandular-hairy, but glands occur on stem, leaves, petioles, &c.—C. E. SALMON. *Medicago lupulina*, Linn., var. *scabra*, Gray [ref. No. 306]. Wall-top, Malvern, Worcester, v.-c. 37, September 9, 1910.—S. H. BICKHAM. I have read somewhere that Gray's var. is not glandular; nor, so far as I can see, are the specimens before me. Hardly separable from type. In 'Lond. Cat.' var. b. should stand as *Willdenowiana*, Koch. I have not seen Gray's description.—EDWARD S. MARSHALL. This will not do for var. *scabra*, Gray, as that is considered a synonym of var. *glandulosa*, Neilr. (= var. *Willdenowii*, Boenn.), which has pods glandular-hairy. The fruits on Mr. Bickham's plant have hairs without glands, so it would come under the sub-var. *eriocarpa*, Rouy and Fouc.—C. E. SALMON. There are several forms or varieties of the black medick in cultivation; and I think an agriculturalist would be able to offer some illuminating comments on the forms or varieties of this species. Gray's plant, referred to above, is described as follows in his 'Nat. Arr.' 1821, p. 605:—"β. *scabra*. Legumen cochleate, about 10 on one peduncle, slightly compressed, rough, with many tubercles." The only synonym cited by Gray is "Raii Syn. 333, 4."—C. E. MOSS.

*Medicago lappacea*, Desr. Sewage tip by Canal-side, Frizinghall, Bradford, Yorkshire, v.-c. 64, July 3, 1910. Named by Mr. Turrill, Kew.—JOHN CRYER. Rather young; but it looks right.—EDWARD S. MARSHALL.

*Melilotus indica*, All. Ballast Mounds, Witton Brook, Northwich, v.-c. 58, August 1910.—W. HODGE.

*Coronilla varia*, L. Quarry Radyr, v.-c. 41, July 18, 1910.

Is this rightly named?—H. J. RIDDELSDELL.—Yes.—G. CLARIDGE DRUCE.

*Coronilla varia*, Linn. [ref. No. 42]. Dry bank, near Kirkliston, Linlithgow, v.-c. 84, July 1910.—McTAGGART COWAN, Jun.

—? [ref. No. 56]. Casual at the Docks, Birkenhead, v.-c. 58, August 1910.—W. G. TRAVIS. I think this is the narrow-leaved form of *Medicago Falcata*, L.—G. CLARIDGE DRUCE.

*Rubus rhamnifolius*, Wh. and N., var. *Bakeri* (F. A. Lees). Sheen Common, Surrey, August 28, 1910.—A. B. JACKSON and J. FRASER. Yes.—W. MOYLE ROGERS.

[*Rubus*. All the brambles I send have been seen and approved by Rev. W. M. Rogers.—AUGUSTIN LEY.]

*Rubus leucandrus*, Focke. Coughton Marsh, Ross, Herefordshire, August 8, 1909. This is the form of the species which exclusively obtains in Herefordshire; differing considerably from the Dorset plant.—AUGUSTIN LEY.

*Rubus thyrsoides*, Wimm. Bushy places in Kelsey pits, Burstwick, East Yorkshire, v.-c. 61, July 16, 1910.—C. WATERFALL. Yes.—W. M. ROGERS. ✓

*Rubus iricus*, Rogers. Abundant in open woodland on Tidenham Chase, West Gloucester, August 31, 1910. New county record.—AUGUSTIN LEY.

*Rubus lasiocladus*, Focke. Kowle Hill, Ross, Herefordshire, August 19, 1910. The only station known in the County.—AUGUSTIN LEY.

*Rubus Boræanus*, Genev. Stanford Park, Worcestershire, August 22, 1910. This form of *R. Boræanus* is abundant in the Teme Valley, both above and below Stanford Bridge, in both the counties of Worcester and Hereford.—AUGUSTIN LEY.

*Rubus mucronatoides*, Ley. New Radnor, July 11, 1909.—AUGUSTIN LEY.

*Rubus uncinatus*, P. J. Muell. Troy Park Wood, near Monmouth, August 16, 1910.—S. H. BICKHAM, A. B. JACKSON, A. LEY. This is the station at which the plant was first found in Britain, by Rev. E. F. Linton. Specimens less good than I could wish, owing to the dense coppice wood.—AUGUSTIN LEY.

*Rubus rudis*, W. and N. Woods in the neighbourhood of Wadenhoe, Northants, July 1910. Generally distributed in the woods of this district. New county record?—AUGUSTIN LEY.

*Rubus oigocladus*, Muell. and Lefv., var. *Bloxamianus* (Colem.). Woods in the neighbourhood of Wadenhoe, Northants, July 1910. Common in the district. New county record.—AUGUSTIN LEY.

*Rubus pallidus*, W. Westhide Wood, Herefordshire, August 17, 1910.—AUGUSTIN LEY.

*Rubus viridis*, Kalt. Geddington Chase, Northants, August 1, 1910. Very abundant in this place. New county record.—AUGUSTIN LEY.

*Rubus Bellardii*, W. and N. Wakerley Wood, Northants, August 8, 1910. New County record.—AUGUSTIN LEY. I recorded this species from Bedford Purlieus in the 'Victoria County History' for Northants some years ago, and from Wakerley in the 'Northampton Nat. Hist. Journ.'—G. CLARIDGE DRUCE.

*Rubus minutiflorus*, P. J. M. Woods, near Stanford, Worcester, and Hereford, August 22, 1910.—AUGUSTIN LEY.

*Rubus?* Stanford Park, Worcester, August 22, 1910.—AUGUSTIN LEY. I think this is a somewhat shade-grown form of my *R. Griffithianus*.—W. M. ROGERS. This bramble has had various names assigned to it. It was sent from the same neighbourhood to Dr. Focke in 1898, and was called by him *R. Griffithianus*, Rog. The Rev. W. M. Rogers at first agreed with Dr. Focke's determination; but in 1901 was inclined to place it to the so-called *R. præruptorum*, Boulay? found in Dorset. This Dorset plant now appears (from a drawing of the continental *præruptorum* kindly communicated to me by M. Sudre), not to be *præruptorum*, Boulay, nor is it the present plant. The Rev. W. M. Rogers on seeing the plant now sent again this year, attributed it with some confidence to *R. Babingtonii*, Bell. Salt., var. *phyllothyrsus*, Frider; and to this I believe it to be much more nearly allied; differing from it mainly in its strictly pyramidal, many-flowered panicle, and in the leaves more coarsely toothed, with terminal leaflet rounder.—AUGUSTIN LEY.

*Potentilla verna*, L. Abundant in turf of limestone cliffs near Mewslade Bay, v.-c. 41, June 16 and 23, 1910. A very rare plant with us, and only recorded before from similar spots close at hand. When I first saw it in Gower some years ago, a leading botanist who was with me told me he had never gathered it before, a fact which suggests that some members of the Club may be glad of a

supply.—H. J. RIDDELSDELL. A still dwarfer specimen from the limestone of the Gower peninsula, found by me in company with Messrs. Riddelsdell and Shoolbred, has grown in my garden into a luxuriant plant, fully a foot across.—EDWARD S. MARSHALL.

*Potentilla verna*, L. On calcareous pasture, the Gog Magogs, Cambridgeshire, May 1910. It is very rare now in Cambridgeshire; and only one specimen is sent for comparison with the Yorkshire plants.—C. E. MOSS.

*Potentilla Crantzii*, G. Beck. Grassington at an elevation of 800 to 1,000 ft. on exposed knolls of the Great Scar limestone, June 18, 1910, v.-c. 64. I have never found in this district *Potentilla verna*, L., at a higher elevation than 600 ft. This latter plant appears to love the hollows and always flowers in May. I sent a specimen of each to Mr. H. W. Pugsley; and in his acknowledgment of them he says, "I quite agree that the two specimens you send are *P. verna* and *P. Crantzii*, as you suppose."—JOHN CRYER. Typical and beautifully prepared specimens of the plant of the limestone uplands of the Pennines.—C. E. MOSS. Yes, rightly named I believe. Does *P. verna* occur at Grassington?—G. CLARIDGE DRUCE (1. iii. 1911). I sent through the "Bot. Exch. Club" ('Rep.' 1909, p. 448) a number of specimens of *P. verna* from Grassington for distribution. Messrs. Pugsley, C. E. Salmon, A. Bennett, E. F. Linton and J. W. White agreed to the name. It always flowers early in May, whereas *P. Crantzii* flowers in June at an elevation of 400 to 500 feet higher than the former; but both are at Grassington and on mountain limestone. *P. Crantzii* also occurs in Yorkshire on the Pennian limestone in abundance.—JOHN CRYER. Turning to the 'Report for 1909,' it will be seen that under Mr. Cryer's "*Potentilla verna*, L.," Mr. Druce says "a somewhat intermediate plant . . . . suggested by Dr. Domin to be *alpestris* x *verna* . . . . Herr Th. Wolf says . . . 'est forma . . *P. alpestris*, Hall., f. (an forsan *P. alpestris* x *verna*?)'" : Messrs. Linton and White say "rightly named" : Mr. Bennett says "seems correct, but . . ." Mr. Marshall says "Yes" : Mr. Salmon says *P. alpestris*, Hall. f., and Mr. Pugsley says "I believe this to be *P. Crantzii*, Beck = *P. alpestris*, Hall. f.," and gives reasons for his decision. The balance of evidence indicates that the plant sent in 1909 by Mr. Cryer was not typical *P. verna*, although he has since supplied true *P. verna* from Grassington.—C. E. MOSS.

*Alchemilla vulgaris*, Linn., var. *alpestris*, Pohl. [ref. No. 45]. Hoptown, Linlithgow, v.-c. 84, May 29, 1910. Not, I think, recorded from this county before; it seems to be locally abundant. There also seems to be a form fairly intermediate between *pratensis*, Pohl., and var. *alpestris*, Pohl., but of which I have unfortunately no

specimens to send.—MCTAGGART COWAN, jun. In his exhaustive monograph of the northern species of *Alchemilla* (Helsingfors, 1909), Lindberg fil. has pointed out on p. 12 that under the name of *A. vulgaris*, Linnæus combined *A. alpestris*, Schmidt, of south and central Sweden with *A. acutidens*, Buser, of Lapland, and asserts (p. 11) that Linnæus quite certainly never saw *A. minor*, Huds., nor *A. pratensis*, Schmidt, in Sweden; therefore he discards the name *A. vulgaris* altogether, in a definite specific sense. Mr. Cowan's specimen is not, I think, good *A. alpestris*; the flowers and upper part of the stems are glabrous, but the petioles and lower part of the stems have a good deal of appressed pubescence, and the young leaves, especially at their margins, are more or less silky-haired. It seems at least as near to *A. pratensis*; but I cannot venture to name it positively.—EDWARD S. MARSHALL. The discarding of Linnæan names for the reason above given is, as a rule, a very questionable procedure.—C. E. MOSS.

*Rosa arvensis*, Huds., var. Geddington Chase, Northants, August 1, 1910. "Not a named variety, though the densely finely pubescent petioles are unusual": Major Wolley-Dod.—AUGUSTIN LEY. Towards var. *major*, Coste, otherwise I see no reason for labelling this "var."—A. H. WOLLEY-DOD. Yes.—W. BARCLAY.

*Rosa stylosa*, var. *evanida*, Christ. Ham Common, Surrey, August 19, 1910. These specimens were gathered from several different bushes which I discovered this year on Ham Common. It is undoubtedly Christ's variety, though very unlike any other *stylosa* form known to me, except *R. leucochroa* of British authors. The bushes were all small and weak, which appear to be characteristic of the variety.—A. H. WOLLEY-DOD. A very curious form which I have not seen before.—W. BARCLAY.

*Rosa* [*systyla*, Bast.]. Woods, Dineham, Monmouth, June 23, 1910. "Yes."—A. H. WOLLEY-DOD. A form of *R. systyla*, Bast., differing from type in less strong based prickles, leaflets fully hairy beneath, and at times slightly so above: leaves shorter, less open. Sepals (as well as peduncles and calyx tube) glandular on the back: petals pink.—AUGUSTIN LEY. Correct; with leaflets more hairy than usual.—A. H. WOLLEY-DOD. Untypical; the leaflets being more or less hairy beneath, some of them thinly so over the whole surface. Prickles weak on the flowering-branch; no barren stem seen. I believe, however, that it is a *systyla* form.—EDWARD S. MARSHALL. Mr. Ley informs me that *R. stylosa* is a mistake, and that he sends both as forms of *R. systyla*, Bast., which doubtless they are.—W. BARCLAY.

*R. stylosa*, Desv. [*systyla*, Bast.]. Wood, Killpale, near Llanfair

Discoed, Monmouth, June 23, 1910.—A. LEY and W. A. SHOOLBRED. Not *R. stylosa*, Desv., which has much broader, very much more hairy leaflets, hairy above as well as beneath. It is typical *R. systyla*, Bast., though if the flowers were white (which is not stated on the labels), it may be the true *R. leucochroa* of Desvaux. It certainly is not the plant of the south-west of England so named by Déséglise.—A. H. WOLLEY-DOD. Dr. Shoolbred informs me that by a slip of the pen he wrote *stylosa* instead of *systyla*. I believe that this was so named on the spot by Mr. Ley. Too young; the flowers are not yet fully expanded, and no style-character is visible. Leaflets glabrous above; on one piece they are thinly pubescent beneath, on the other glabrate, excepting the almost villous midrib and sparsely hairy principal nerves. Petioles with scattered stalked glands. Pedicels short, with numerous stalked glands. No stem-prickles present. Probably under *stylosa*; but differing in several respects from Major Wolley-Dod's description of the type. It should be gathered again in more advanced condition.—EDWARD S. MARSHALL.

*Rosa jactata*, Déség. Wadenhoe, Northants, August 3, 1910. "Looks to me more like *R. ramealis*, Pugst; though the petioles are anything but unarmed." Major Wolley-Dod.—AUGUSTIN LEY. I think correct, though usually larger.—A. H. WOLLEY-DOD. A form of *R. dumetorum*, Thuill., with thinly hairy styles and occasional glands on the teeth.—W. BARCLAY.

*Rosa ramealis*, Pug.? Wadenhoe, Northants, July 1910.—AUGUSTIN LEY. Not *R. ramealis*, Pug., which has a decidedly obovoid-elongate fruit. This comes near *R. semiglabra*, Rip., differing mainly in its globose fruit, and may be placed, I think, to *R. globata*, Déségl., though that species has not yet been recorded from Britain.—A. H. WOLLEY-DOD. There are three specimens here, two in fruit and one a leafy shoot. One of the fruiting specimens belongs to *R. Déséglisei*, Bor., the other two seem to belong to a simple variation of *R. dumetorum*, Thuill., with rather longish acuminate leaflets.—W. BARCLAY.

*Rosa* ——. Near Wadenhoe, Northants, &c., August 1910.—AUGUSTIN LEY. Falls under the sub-group *Déséglisei*, and is between that species and *R. incerta*, Déségl.—A. H. WOLLEY-DOD. *R. Déséglisei*, Bor. Mr. Ley has not numbered his specimens, so I cannot make a distinction in the Report between specimens gathered in the same station. In this case, however, the label is marked 588, indicating *R. tomentosa*, while the last (*R. Déséglisei*) was marked 598, i.e., *R. dumetorum*.—A. H. WOLLEY-DOD. No. 588. Specimen too poor to hazard an opinion.—W. BARCLAY. No. 598. A form of *R. tomentella*, Lem., with subfoliar glands

almost confined to midrib, and some peduncles hispid.—W. BARCLAY.

*Rosa* [*Borreri*, Woods, var.]. Wadenhoe, Northants, July 1910. Two packets: nearly but not quite identical. On one Major Wolley-Dod remarks: "Group correct, but leaflets not broad enough, nor nearly hairy enough for *R. Borreri*, Woods. It seems to be at least as near to *R. sclerophylla*, Scheutz; but I cannot be quite sure what is meant by that." On the other his remark is "a little further removed both from *Borreri* and *sclerophylla*." The rose, whatever its correct name may be, was abundant in the neighbourhood of Wadenhoe, Northants. Peduncles slightly aciculate.—AUGUSTIN LEY. Not *R. Borreri*, Woods, which differs in being much more strongly biserrate, and in several other respects, nor is it, in my opinion, of that group. It belongs to the subgroup *Déséglisei*, but is on a much larger scale than Boreau's species, and has much stouter and more numerous glandular setae on the peduncles. It looks much like specimens which have been placed to *R. Burnati*, Burn. and Grem., for me from Cheshire, but it does not agree with Keller's description.—A. H. WOLLEY-DOD. Though not quite identical, both specimens evidently belong to the same variation. Probably they belong to *R. Borreri*, Woods (*tomentella*, Lém.), but are certainly aberrant forms. One specimen has a development of glands on the branches which is very unusual in this group.—W. BARCLAY.

*Rosa* ——. Northants and Hunts, August 1910. This rose is common in the neighbourhood of Huntingdon, and in various places in North Northampton. It is probably one of the plants placed by continental botanists under *R. subglobosa*, Sm. (= *R. Sherardi*, Davies), but is in my judgment much nearer to *R. tomentosa*, Sm., than to *R. Sherardi*, Davies. It differs from usual *R. tomentosa*, Sm., in the nearly globose fruits, which retain their calyx longer, the sepals assurgent and becoming horizontal before falling off. It forms a large and strong bush; the clusters of flower often large: habit of *R. tomentosa*. Mr. Hunnybun informs me that the flowers (in Hunts) are white. This is one of the forms which must eventually be given a name, unless previously fitted with one from the continent. Seen by Wolley-Dod, who however gives no definite opinion.—AUGUSTIN LEY. This would undoubtedly be labelled *R. subglobosa*, Sm., by continental botanists, as well as by most British ones; and though I have a decided leaning towards *R. Sherardi*, Dav. (its synonym), it is not quite like that species, while if really a member of the *Tomentosa* group, as Mr. Ley thinks, of course it cannot be Davies's species. I have not yet found a satisfactory name for the *Sherardi*-like members

of the *Tomentosa* group. I think this belongs to the *Sherardi* rather than to the *Tomentosa* group.—A. H. WOLLEY-DOD.

*R.* —. Mardale, Westmoreland, July 1st (fruit Sept.), 1910.—AUGUSTIN LEY. The smooth peduncles and calyx tubes suggest *R. farinosa*, Bechst., but my specimen is only in bud, which renders the determination of its group difficult. When fruit is gathered separately, some should be put on each sheet.—A. H. WOLLEY-DOD. My specimens are rather poor.—W. BARCLAY.

*Rosa* —. Cowleigh Park, Malvern, Herefordshire, August 23, 1910. "*R. scabriuscula*, Sm.:" Major Wolley-Dod.—AUGUSTIN LEY. I should have thought this a form of *R. suberecta*, Ley, though the sepals are more reflexed than usual. The species seems to me to be more at home in the *Tomentosa* than in the *Sherardi* group.—A. H. WOLLEY-DOD. *R. tomentosa*, Sm., var. *scabriuscula*, (Sm.), or near it. W. BARCLAY.

*R.* —. [ref. No. 1]. Bellair Hill, Carnlough, Co. Antrim, August 9th, 1910.—C. H. WADDELL. A member of the *Sherardi* group, which I cannot name. It looks most like *R. suberecta*, Ley, but is not that species. The next nearest is *R. tomentosa*, var. *Woodsiana*, Groves, but the leaflets are broader and much less narrowed below than in that variety; those of the barren shoots also are very much too densely pubescent, so much so indeed that they might have come from a different bush. The leaflets, as well as the prickles of barren shoots, are often misleading.—A. H. WOLLEY-DOD. This surely falls under *R. omissa*, Déség., but does not fit any of our described varieties.—A. LEY. Probably belongs to the *omissa* section of *R. tomentosa*, Sm. The fruit here on August 9 is not any better, hardly so well developed, as that of Mr. Ley's 584 *R. suberecta*, Ley, var. on July 6.—W. BARCLAY.

*Rosa pseudomollis*, Ley. Reeve's Hill, Herefordshire, August 29, 1910. Major Wolley-Dod agrees.—AUGUSTIN LEY.

*R. (Andrzejovii*, Déségl.) *pseudomollis*, Ley. Reeve's Hill, Hereford, August 29, 1910.—AUGUSTIN LEY. This may be *R. tomentosa*, var. *pseudomollis*, E. G. Baker, but that variety should be distinguished from *R. omissa*, var. *submollis*, Ley, by more decidedly falcate prickles and subfoliar glands, so that this example is nearer var. *submollis*. These two varieties, and one or two other members of the *Sherardi* group, seem too near one another for satisfactory distinction. I do not think that the name *R. Andrzejovii*, Déségl., should be kept up. It certainly does not represent Stevens' species, and I do not think it is synonymous with var. *pseudomollis*. It has, however, been so misapplied that it is

difficult to say what it really is.—A. H. WOLLEY-DOD. Doubtful, I think. This has the fruit less well developed on August 9 or 29 than the last on July 6; and yet both are supposed to belong to the *Sherardi* (*omissa*) group.—W. BARCLAY.

*Rosa suberecta*, Ley., varietas foliis subtus eglandulosis. Clearly to be placed under this rose, the leaves of which are usually highly glandular, but here almost or quite eglandular except on the midrib. This form was abundant in the neighbourhood (Mardale, Hartsop, and Patterdale): but the typical plant also occurred. Major Wolley-Dod agrees.—AUGUSTIN LEY. Correct.—A. H. WOLLEY-DOD. Leaflets apparently eglandular on both surfaces, as are the fruits and pedicels; but the petioles, leaf-margins, and sepals have a fair amount of glands, so that the expression is not quite accurate.—EDWARD S. MARSHALL. The material is scarcely good enough to form a safe judgment. I have never seen any form of *tomentosa* (agg.) with fruit anything like so well developed on July 6. Even for *mollis* it would be early. Red colouring and strongly armed petioles are given by Mr. Ley as marks almost constant of his *suberecta*. Here there is no red colouring, and the petioles are quite unarmed except in the case of one or two.—W. BARCLAY.

*Rosa* —, Sp. Hunstanton Downs, July 11, 1910. Appears to be a variation of *R. micrantha*, Sm., with somewhat highly coloured flowers.—W. BARCLAY.

*Rosa hibernica*, Templeton. At foot of basaltic escarpment, Bellair Hill, near Carnlough, County Antrim. This is a new locality for this species. There are several bushes of it, but it is not plentiful. *R. spinosissima* grows near by.—C. H. WADDELL. Not *R. hibernica*, Templ., which has hairy leaflets, but another member of the *Pimpinellifolie* × *Eu-caninæ*. In foliage it matches var. *Grovesii*, Baker, but the fruit is very different, on my specimen at least, being no doubt abortive, very small, and globose, instead of rather large and decidedly urceolate. I should however place it to var. *Grovesii* provisionally.—A. H. WOLLEY-DOD. Under var. *glabra*, Baker, leaves glabrous, eglandular, simply serrate; sepals loosely reflexed on the solitary fruit of my specimen; armature less mixed than usual. Probably *R. canina*, type (*i.e.*, *lutetiana*, or near it) × *spinosissima*, forma *pimpinellifolia*, as the pedicel is eglandular.—EDWARD S. MARSHALL. Yes, var. *glabra*, Baker.—W. BARCLAY.

*R. Sabini*, Woods. [ref. No. 2]. Quarry spoil banks, Straidkilly, Carnlough, County Antrim, August 18, 1910.—C. H. WADDELL. Of the group *pimpinellifolie* × *villosæ* certainly, and nearest *R. Sabini*,

Woods, but its precise parentage is, as usual, almost impossible to decide. The *villosa* parent is more likely to be one of the *tomentosa* than one of the *sherardi* group, and is not a *mollis* form.—A. H. WOLLEY-DOD. A hybrid of the *involuta* group; from the fruit-character and the slender, nearly straight prickles, I think that it may be a *mollis* × *spinosissima*.—E. S. MARSHALL. Probably *R. pimpinellifolia*, Linn. × *tomentosa*, Sm. (agg.)—W. BARCLAY.

*Pyrus communis*, var. *Achras*. [ref. No. 543]. Three trees in a hedge in a meadow at Kimble Marsh, Bucks, May 12 and June 15, 1910.—F. L. FOORD-KELCEY.

*Crataegus Oxyacantha*, L., var. *splendens*, Druce, Akeley, Bucks, May 1910, and fruits September. I have had difficulty in getting good flowers from the original bush whence fruit was sent to the Club in 1905 (see 'Rep.' 169), as a growth of Ivy had nearly strangled it. The farmer has, however, cut the Ivy away; as I expected, it was the unusual size of the fruit that led to his sparing the bush, so that it was not layered with the hedge. I have recently found it in three localities in Northants, and I strongly suspect it may be the *Oxyacantha folio et fructu majore* in Ricot Park and elsewhere in Oxfordshire of How's *Phytologia* of 1650, albeit the leaves of this are not conspicuously larger, although they have a somewhat different shape from the type.—G. CLARIDGE DRUCE. In the 'Lond. Cat.', ed. x., the name *Crataegus Oxyacantha*, L., is given to the glabrous-leaved and two-styled hawthorn; and yet Linnæus describes the plant as "subtus tomentosus."—C. E. MOSS. Moreover all the specimens in Herb. Linn. are this species.—G. CLARIDGE DRUCE.

*Saxifraga Geum*, L., var. *elegans* (Mackay) [ref. No. 3536]. Originally from Kerry, May 28, 1910. Given me by Mr. S. H. Bickham. Cultivated several years at West Monkton Rectory, it has changed but little, and remains much smaller than the usual Irish form (var. *serrata*, Syme), grown under similar conditions.—EDWARD S. MARSHALL.

*Saxifraga Hirculus*, Linn. [ref. No. 40]. Midwinhead, Pentland Hills, v.-c. 78, August 1, 1910. Only a few specimens sent as the plant is extremely local, although it flowered freely this year. Associated with it was *Cochlearia micacea*, E. S. Marshall, a new record which seemed to be equally local, and confined to one small spring, height 1,000 feet.—MCTAGGART COWAN, Jun.

*Ribes Grossularia*, Linn. Road between Galashiels and Selkirk, v.-c. 79. They are very plentiful in this neighbourhood, looking almost wild in the hedgerows and in the woods near the Tweed.—

I. M. HAYWARD. *R. Uva-ursi*, L., var. *Grossularia* (L.) with bristly fruits; *R. Uva-ursi* has the ripe fruits glabrous.—G. CLARIDGE DRUCE.

*Sedum album*, L. Railway bank, Thornillee, Peebles, July 2, 1910.—I. M. HAYWARD. Yes. It is also quite naturalised on rocky cliffs by the Gala, below Galashiels.—G. CLARIDGE DRUCE.

*Sedum lydium* Boiss. Near Clovenfords, Galashiels, June 1910. An Oriental species introduced a few years ago into English gardens. Probably this Clovenfords *Sedum* has been carried by the river from a garden above. Now it is quite naturalised, and is growing abundantly for 200 yards along a wall by the banks of the River Caddon, a tributary of the Tweed. The richness of the green to red colouring of its leaves and stalks forms quite an ornament to that side of the old wall. (See 'Rep.' p. 502.)—I. M. HAYWARD.

*Epilobium hirsutum* ♀ × *tetragonum* ♂. Artificial cross produced by R. H. COMPTON, B.A. Grown in a Cambridge garden, 1909-10.—C. E. MOSS. *E. hirsutum*, L., quite typical: *E. tetragonum*, Curt., the *E. adnatum*, forma *stenophylla* of Haussknecht. (Both parents identified with certainty by Rev. E. S. Marshall.) The hybrids were all perfectly uniform. Haussknecht identified as *adnatum* × *hirsutum*, a plant found once only, at Greussen in Thuringia; the present artificial hybrid differs from Haussknecht's description in the following points:—

- (1) The stem is quite terete towards the top.
- (2) The capsule never grows to more than 3-4 cm. long.
- (3) The leaves, though they half-clasp the stem below, do not do so in the upper branches.
- (4) The upper leaves are but little more hairy than the lower, and cannot be described as "allmählich beiderseits augedrückt grau behaart."
- (5) There are no long erect hairs such as are found in *E. hirsutum*, the hairs are longer than in *E. adnatum*, and are obliquely directed upwards, i.e., their position is intermediate between the closely appressed down of *E. adnatum* and the erect hairs of *E. hirsutum*.
- (6) The stigma is clavate, slightly notched at the tip, but larger than in *E. adnatum*, being 3 mm. long.

It appears difficult to attribute these differences to the fact that the forma *stenophylla* was used instead of the type *adnatum*; and further experiments are necessary before the identity of Haussknecht's plant can be accurately decided. No seeds were produced naturally in 1909 nor 1910; and attempts to fertilise with pollen from *E. hirsutum* and *E. adnatum* f. *stenophylla* were fruitless.—R. H. COMPTON.

*Epilobium montanum* ♂ × *tetragonum* ♀. Artificial cross produced by R. H. Compton, B.A. Grown in a garden at Tewkesbury, 1909—1910.—C. E. Moss. *E. montanum*, L., *E. tetragonum*, Curt. (*E. adnatum*, Grisebach). Both parents quite typical, agreeing well with Haussknecht's descriptions: self-sown in a garden at Tewkesbury, in which also the hybrid was cultivated in 1909—1910. The artificial hybrid corresponds on the whole with Haussknecht's description of the naturally occurring plants. The following points may be noted:—

- (1) The upper part of the stem is practically terete, only the lower part exhibiting decurrent lines.
- (2) A transverse commissure between the bases of opposite leaves is a character derived from *E. montanum*.
- (3) The stigmas are very shortly four-lobed, this being intermediate between the condition in the two parents (contrast *E. hirsutum* × *tetragonum*)\*.
- (4) The capsules appear well-formed, but all the seeds seem to be imperfect and without embryos.—R. H. COMPTON.

These hybrid plants, the results of careful experiments by Mr. Compton, will be very welcome to students of our willow herbs.—C. E. Moss.

*Epilobium hirsutum*, L., var. *subglabrum*, Koch. Streamside, Failand, North Somerset, August 10, 1910. A rather striking form in its extreme state—dark bright green in foliage on account of its being glabrescent (plante d'un beau, vert, Rouy). *E. hirsutum* is noteworthy for having a pilosity of two distinct kinds without intermediates, viz., long white hairs more or less sparsely set amid an extremely short glandular pubescence. In the variety the hairiness of the stem and leaves is remarkably feeble when compared with that of the ordinary plant; the long white hairs being absent from the calyces, fruit and uppermost leaves. It is stated in the French and German books that *subglabrum* occurs 'here and there' through the more northern and mountainous regions of Western Europe; and doubtless it is well distributed at home, but in this country little notice has been taken of it either in descriptive manuals or in local botany. Among those to which I have been able to refer, the *Floras* of Berks and Middlesex alone mention the variety as being 'not uncommon.' It does not appear that soils can influence these plants. At Failand the shaggiest and the most glabrescent grow side by side on the same stream, with many connecting intermediates.—JAMES W. WHITE. This does not agree with Koch's description; the leaves are not glabrous above, nor hairy only on the nerves beneath, and there are a good many long stem-hairs. This species varies indefinitely in its clothing. Nearest the forma *a. virescens* of Haussknecht's monograph.—EDWARD S. MARSHALL.

*Epilobium collinum*, Gmel. Orig. Argentière, Switzerland. Hort. Reigate, July 3, 1910.—C. E. SALMON. Much enlarged by cultivation; and thus looking a great deal nearer to *E. montanum* than the wild plant, as I have seen it in the Alps. Mr. J. F. Pickard lately sent me for examination some rather poorly developed specimens from Nant Francon, v.-c. 49 Carnarvon, which may belong here; I could not come to a definite conclusion from the material received, but it should be searched for in that district.—EDWARD S. MARSHALL.

*Epilobium roseum*, Schreb., var. (See Report, 1907, p. 251.) I send a few specimens of an *Epilobium*, to show the descendants in the third generation of an interesting plant I sent the Club in 1907. This plant was regarded by Mr. Marshall as perhaps a cross between *E. roseum* and *E. lanceolatum*; but the curious fact remains, that no typical *E. lanceolatum* has ever been known to grow near the place. The commonest willow-herb here is *E. hirsutum*, L. *E. parviflorum*, L., is also not infrequent. *E. montanum*, L., is a common weed. *E. tetragonum*, Curt. (*adnatum*, Griseb.), occurs but very rarely. I suggest that the specimens now sent are *E. lanceolatum* × *roseum* in the third generation, reverting back to the parent, *roseum*, conspicuous for their small whitish flowers, and the identical serration of leaf as the hybrid; but the narrow *lanceolatum* contour of foliage has disappeared, and that of *roseum* been reassumed. I shall continue watching the progeny of the plants in this spot, and expect next year they will be quite normal *roseum*.—J. COSMO MELVILL. I fear these plants and note by Mr. Melvill are not very convincing. In the first place, the identity of the original plant with *E. lanceolatum* × *roseum* cannot be regarded as thoroughly established; and secondly, as no actual breeding appears to have been done, we cannot be sure that the plants now sent are the descendants of the 1907 plant, whatever it was. *E. roseum* is in certain localities a common garden weed.—C. E. MOSS. Thoroughly typical *E. roseum*; no trace whatever of any other origin.—EDWARD S. MARSHALL.

*Apium nodiflorum*, Reichb. fil., var. [ref. No. 68]. Luffness, Haddington, v.-c. 82, August 6, 1910. A large series which I collected in the marshes here under different conditions: most of them seem to come under *longipedunculatum*, F. Schultz; but some may be placed as *ochreatum*, DC. As the series will show, the plants varied greatly according to the conditions in which they were found, and in some cases where the plant was growing amongst long herbage beside a ditch, the branches which extended out into the bare mud of the ditch varied so greatly from those which were amongst the long grass, &c., as to seem to come under a different

segregate; those on the mud rooting at every node and having quite different leaf characteristics from those which had to force their way up through the grass which only rooted at the base. The length of the peduncle also varied on the same plant from sessile to 2 or 3 inches long.—McTAGGART COWAN, jun. Three sheets of this species have come to hand, bearing very different looking plants, but the *same* reference No. If, as I suspect, they all come from within a short distance of one another, but growing under different surroundings, they only serve to illustrate more plainly the impossibility of distinguishing by name the protean forms which *A. nodiflorum* takes. It seems to be a plant peculiarly susceptible to surrounding influences.

1. One fairly large plant, 20 inches high, may be called var. *longipedunculatum*, Schultz. It agrees with description of that var., and with type specimen, in long slender stem, with remarkably long internodes, and a few roots at the lower nodes. The leaflets should be rather more coarsely serrate; but even here they show a tendency to small lobes. Leaves long-petioled. Leaflets should be 5-7: here they run to 9 in the lower leaves. Rays of umbels 4-7: involucre present. The most serious departure from Schultz's var. is in the peduncles being rather too short. But it is much nearer that than anything else, and may fairly go by the name.

2. Two small slender plants, about half the length of No. 1; parts reduced in proportion. They root rather more. But the petioles are not so long in proportion; involucre is not always present. It may be called *ochreatum*, DC., which however roots at more of the nodes. The specimens have, as in *ochreatum*, the well-marked dilatation of petiole, leaflets 5-7 sublanceolate, terminal longer than broad; peduncle shorter than rays: involucre bracts 0 or 1-2. Their most serious divergence from *ochreatum* lies in the slender habit, and long internodes.

3. Five small specimens, some rooting considerably, others not. All have a marked arching growth. I cannot place them to any of our named forms, though of course they show certain marked points of resemblance, especially in size, to *pseudo-repens*, Wats., but they are not that variety.—H. J. RIDDELSDELL. The larger of the two plants is var. *longipedunculatum*, Schultz; I have compared it with the type from Duddington Loch. The other comes nearer to var. *pseudo-repens*, H. C. Watson, than to any other named variety. It differs in having often rather more leaflets.—EDMUND BAKER. I cannot separate my specimens from weak type.—EDWARD S. MARSHALL.

*Carum verticillatum*, Koch. Surrey, near Woking, July 25, 1910. Some members may care to have an example of this from its most eastern locality in Britain. See 'Journ. Bot.' 1908, p. 300.—C. E. SALMON. Mrs. Davy showed me this from the Surrey

locality last autumn, where it appears to be native. Its discovery there, with that of *Carex tomentosa*, *Holosteum umbellatum*, *Stellaria Dilleniana*, *Juncoides pallescens*, and *Danaa cornubiensis* near the metropolis, show how much yet may have remained unrecorded.—G. CLARIDGE DRUCE.

*Sison Amomum*, L. Penton Gleze, N. Cornwall, August 1910. Not previously noted from this district. See H. Davy's 'Flora of Cornwall.'—H. E. FOX.

*Anthriscus vulgaris*, Bernh. Glamorgan, June 1910. No doubt native, though I doubted it when writing 'A Flora of Glamorganshire.' I have now seen it under varying conditions which remove doubt.—H. J. RIDDELSDELL.

*Sambucus racemosus*, L. Elibank Confines, Selkirk, v.-c. 79; Peebles, v.-c. 78, June 1910. This Swiss elder grows in the greatest abundance, and seeds freely near Elibank, covering with other trees the lower part of the hills on that side of the Tweed. Its profusion of scarlet berries in the early autumn is very beautiful. Birds are fond of these berries and assist to distribute it.—I. M. HAYWARD.

*Galium ochroleucum*, Wolf. On the side of the high road at Sevensprings, near Cheltenham, North-east Gloucestershire, v.-c. 33, July 16, 1910.—CHARLES BAILEY. A *G. Mollugo* × *verum*; leaf-veins translucent, which is against an *erectum* origin. The narrow foliage suggests that the *Mollugo* parent is var. *Bakeri*, Syme.—EDWARD S. MARSHALL. On this hybrid, see an interesting paper by Miss E. Armitage in the 'New Phytologist,' 1909, p. 351.—C. E. MOSS.

*Galium erectum*, Huds. Waste ground, Buildwas, Salop. July 1910.—J. COSMO MELVILL.

*Galium austriacum*, Jacq., var. *asperum*, Schreber. Wytham, Berks, June 1910. This occurred here in some plenty over a limited area of a piece of land recently broken up and sown with *Onobrychis*, &c., and doubtless thus introduced here as to so many other of its recently recorded localities in southern England.—G. CLARIDGE DRUCE. Yes, the more glabrous plant and the same as that on our Reigate Downs. It appears in 'Lond. Cat.' ed. x. as *G. asperum*, Schreb., *b. montanum* (Vill.).—C. E. SALMON.

*Galium Witheringii*, Smith? Sea-shore, near Fairhaven, W. Lancs., v.-c. 60, May 1910. The plants I have received from the Club under this name are tall and remain green when dry. Smith says his plant turns brown when drying, and is about a foot

high. Does not this rather imply that his plant was a form of *G. uliginosum*? 'Bab. Man.' states that the *latter* turns blackish when dry; but Smith in 'The English Flora' says it is "of a fresh green which it retains when dry."—J. A. WHELDON. I believe, correct, but material indifferent. I have always found that *G. uliginosum* dries fairly green, with proper care; the *G. palustre* group turns more or less dark brown or even black.—E. S. MARSHALL. Any plants which Mr. Wheldon has received from the Club, which remain green when dry, are not *G. Witheringii*, Sm. Smith originally described this plant in his 'Fl. Brit.' vol. i., p. 174 (1800), re-described and figured it in 'E. B.' t. 2206 (1810), and again described it in his 'Eng. Flo.' vol. i., p. 200 (1824). It is the *G. montanum*, With., *non* Linn. Smith's statement that it turns brown in drying is in his 'Eng. Flo.' i. (p. 201). The phrase "turning blackish when dry," alluded to by Mr. Wheldon as appearing in the 'Manual' (9th ed.), would seem to be placed under *G. uliginosum* owing to some misapprehension, as it does not occur in any one of the first eight editions of that work, and is in contradiction to the state of the specimens in Babington's herbarium at Cambridge. The plant I take for *G. Witheringii* is the *only* marsh bedstraw I have observed on the siliceous soils of the Pennines between Ingleborough and the Trent Valley (cf. Crump, in 'Flo. Halifax,' p. 52). The plant invariably turns dark on drying, has "leaves" 4-6 (Smith says five) in a whorl, a rough stem, and a smooth fruit. I have no doubt that it is Smith's plant. It cannot be a hybrid of *G. palustre* and *G. uliginosum*, as it occurs very abundantly on the soils and in the district mentioned, where both these species appear to be absent. It cannot be placed under *G. uliginosum* on account of the number of leaves in a whorl, and on account of the fruit. It seems to be distinct enough to be treated as a species, as Smith maintained. Smith ('Engl. Flo.' p. 201) says that "Professor Hooker judged this 'a very doubtful species,' but without seeing the plant, which may well excuse his mistake." Bentham ('Handb.' p. 275, 1858), erroneously places *G. Witheringii* under *G. uliginosum*; and it is possible that Smith's criticism of Hooker is also applicable to Bentham.—C. E. Moss. The above note has been submitted to Mr. Wheldon, and he says, "I entirely agree."—C. E. M.

*Galium palustre*, L., forma [ref. No. 6201]. Grendon Underwood, Bucks, May 1910. From its appearance this plant at first sight suggested a hybrid of *palustre* × *uliginosum*, but a closer examination failed to reveal any traces of the presence of the latter species. It is not *G. Witheringii*, Sm., because the stem is not rough, and the panicle is too diffuse. It appears to be separated from type *palustre* on one side as *elongatum* is on the other; that is smooth-stemmed, *narrow-leaved* (in sixes), each leaf flat, 5-8 mm.

long, and with smooth margins, the panicle somewhat diffuse, and the pedicels divergent. The plant is from 20-35 ctm. high. It is quite a pretty form and does not blacken in drying so much as the type. It grows in very marshy ground with a considerable layer of vegetable humus, on the Oxford clay. It may be worth while separating it from the type by the above characters as forma *angustifolia*.—G. CLARIDGE DRUCE. Leaves mostly six in a whorl, scabrid-ciliate; stems scabrid. A weak state of *Witheringii*, I think.—EDWARD S. MARSHALL.

*Galium palustre*, L., var. [ref. No. 2922]. Hurst, Berks, June 1910. This plant again is not *G. Witheringii*, Sm., on account of the diffuse panicles and smooth stem, characters also which take it away from *G. debile* or *constrictum*. Neither is it identical with 6201. We may call it var. *serrulatum*, mihi. Plant slender, 30-40 ctm. Leaves small 5-8 mm. long (5-6 in whorl), narrowly lanceolate, margin *minutely serrulate*, panicle diffuse, pedicels divergent.—G. CLARIDGE DRUCE. Neither typical *palustre* nor good *Witheringii*, but about half-way between the two.—EDWARD S. MARSHALL.

*Asperula taurina*, L. Banks of the Ettrick near Selkirk, v.-c. 79, May 1910.—I. M. HAYWARD.

*Asperula taurina*, Linn. [ref. No. 41]. Wood near Abercorn, Linlithgow, v.-c. 84. May 28, 1910.—MCTAGGART COWAN, jun.

*Bidens cernua*, Linn., var. *radiata* (DC). Swamp in field between Mickle Trafford Station and Plemstall Church, near Chester, v.-c. 58, Sept. 29, 1910.—CHARLES WATERFALL.

*Matricaria suaveolens*, Bueh. Waste ground, Pentre, N. Cornwall, August 1910.—H. E. FOX.

*Artemisia Stelleriana*, Bess. Sandy shore, Mount's Bay, W. Cornwall, August 1910.—H. E. FOX.

*Senecio vulgaris*, L., var. *radiatus*, Koch. Sand dunes, Freshfield, v.-c. 59 S. Lancs., May 1, 1910.—W. G. TRAVIS. Correct. The specimens are rather small, but otherwise quite typical. I have on several occasions seen the plant in this locality, where it is quite indigenous.—C. E. MOSS. No doubt correctly named, but depauperate. Also, I believe, coming near to *erectus*. Neither of these could be placed under *lanuginosus*, which is based on the very hairy radiate type of the Channel Islands.—A. H. TROW. I once found this dwarf state of the variety on coast cliffs near Bigbury, S. Devon, undoubtedly native.—EDWARD S. MARSHALL.

*Senecio vulgaris*, L., var. *lanuginosus* (Trow). St. Ouen's, Jersey, 3999. Quite the prevailing form about the Quenvais and on cliffs at Petit Bo, Guernsey. It is radiate.—G. CLARIDGE DRUCE. Excellent specimens. I can see no good grounds for ranking this as a species, and agree with Mr. Druce in considering it a well-marked variety, subject to the test of cultivation.—EDWARD S. MARSHALL. When testing the constancy of varieties from seed, it is important to remember that some plants, e.g., most *Hieracia*, produce seeds without pollination in a vegetative manner. Such plants will always be constant, just like plants reproduced in any other vegetative manner.—C. E. MOSS.

*Senecio squalidus*, Linn. Ballast mounds, Witton Brook, Northwich, v.-c. 58, August 1910.—W. HODGE. Yes, the type with hairy achenes.—G. CLARIDGE DRUCE.

*Senecio squalidus*, L. Seedlings, Oxford, July 1910. Locally, a very aggressive species in bare loose soil.—G. CLARIDGE DRUCE.

*Senecio* [*squalidus* × *vulgaris*]. Near Town Hall, Cardiff, v.-c. 41, August 23, 1910. This grew with *Senecio squalidus* and *S. vulgaris*, var. *radiatus*, which no doubt are the parents. Not only the general appearance, but also the foliage, and most of all the shape of the anthode, suggest hybridity. I have often seen probable hybrids of the two species about Cardiff, but never such a likely-looking form as this. I am sorry that the supply is small.—H. J. RIDDELSDELL. I think this is not a hybrid, but a state of *squalidus*. The specimens are side shoots from an old stock and therefore scarcely typical. The basal rosette and the main axis should if possible be sent. These plants about Cardiff are very puzzling. A specimen which I transferred to my own garden because I suspected it to be of this hybrid origin, proved to be a form of *Senecio Jacobæa*!—A. H. TROW. I see no evidence of *S. vulgaris*.—G. CLARIDGE DRUCE. My specimens look quite right, and excellent intermediates. Was the gathering a *mixed* one?—EDWARD S. MARSHALL.

*Senecio squalidus* × *vulgaris*? = *S. Baxterii*, Druce. Ballast mounds, Witton Brook, Northwich, v.-c. 58, September 1910. Is this correct? I found it growing in the same place and apparently under the same conditions as *S. squalidus* and *S. vulgaris*. *S. squalidus* seems, from the large quantity of it, to have been established in this Northwich station for some years. I submitted fresh specimens to Mr. Chas. Bailey, and he was of opinion that it was a starved form of *squalidus*.—W. HODGE. This is, I think, certainly *vulgaris*, L., var. *radiatus*, Koch., and apparently a form near to the one I name *crectus*, but probably quite distinct.—A. H. TROW.

I see no evidence of *squalidus*; it certainly is not  $\times$  *S. Baxterii*.—G. CLARIDGE DRUCE. *S. vulgaris*, L., only, I believe. The anthodes, in size, shape, and ligules, show only this influence. Leaves of this make are frequent in *S. vulgaris*. Of course, research on Mendelian lines warns us not to seek for "good intermediates" in hybrids: but in this case I think we have good *S. vulgaris*, L.—H. J. RIDDELSDELL. My specimen shows no traces of *S. squalidus*; it is just the ordinary groundsel.—EDWARD S. MARSHALL.

*Senecio sarracenicus*, Linn. River banks, left bank of R. Dee, Eccleston, near Chester, v.-c. 58, September, 1910.—W. HODGE.

*Arctium minus*  $\times$  *nemorosum*? Lower Morden, Surrey, July 27, 1910. I suggest that the Burdock I send is this hybrid. The small size of the heads favours *Arctium minus*, Bernh., and the way in which they are clustered together at the ends of the stems recalls *A. nemorosum*, Lej.—C. E. BRITTON. A weak immature specimen, apparently a side branch. Many years ago Mr. Beeby told me that the terminal inflorescence was indispensable. I see nothing whatever to take it off *A. minus*.—EDWARD S. MARSHALL. If this is not a side shoot (which is often untypical) of *minus*, I think there is nothing against the hybrid Mr. Britton suggests, the small heads indicating the *minus* side and *nemorosum* showing in the clustered inflorescence. Some plants that Mr. Beeby (with some doubt) named for me as this hybrid, show heads rather larger, but this feature might well vary in a hybrid.—C. E. SALMON.

*Cnicus arvensis*, var. *incanum*, Ledeb. = *C. vestitum*, Koch. [= *Cersium arvense*, var. *vestitum*, Koch., E. S. M.], *C. argenteum*, Payer. Unfortunately I discovered this plant rather too late in the year—September 23, 1910—to be able to obtain many good specimens, and there seems to be but one small patch of it. At first I thought it was the variety *setosus*, Bess, but the description as given in F. N. Williams' 'Prodromus Floræ Britannicæ,' Part II., pp. 51 and 52, "Folia plana amplexicaulia haud undulata neque decurrentia," for this variety ruled it out, and it seems to fall under *incanum*, "Folia sessilia oblonga subserrata setoso-ciliata supra scabriuscula subtus niveo tomentosa." I shall, if the plant is of sufficient interest to the members, obtain a further supply next season for distribution.—W. HODGE.

*Crepis capillaris*, Watts, var. *diffusa* (DC.). [ref. No. 308]. Malvern Link Common, September 9, 1910.—S. H. BICKHAM.

*Hieracium anglicum*, Fr., var. *jaculifolium*, F. J. Hanb., High Street, Mardale, Westm., June 29, 1910.—AUGUSTIN LEY.

*Hieracium anglicum*, Tr., var. *cerinthiforme*, Backh. High Street cliffs, and Mardale (Whelter Crag), Westmoreland, June 29, 1910. The Rev. E. F. Linton agrees with me in referring this to var. *cerinthiforme*, Backh.; but the stem-leaf is not often more than a single one.—AUGUSTIN LEY. Under the type; the two plants sent to me, at least, are certainly not var. *cerinthiforme*, but tend somewhat towards var. *acutifolium*, Backh.—EDWARD S. MARSHALL.

*Hieracium Leyi*, F. J. Hanb. Cliffs of High Street, Westmoreland, July 2, 1910. The plant sent is abundant (with much variation in size and leaf-toothing) not only on the cliffs of High Street, but also on those of Helvellyn, Westmoreland. The late Rev. W. R. Linton, who gathered it on Helvellyn and Fairfield, Westmoreland, in 1905, was inclined to ascribe it to a variety of *H. Sommerfeltii*, Lindeb.: but after studying it *in situ* this year, I believe it must be placed under *H. Leyi*, F. J. Hanb.—AUGUSTIN LEY.

*Hieracium lasiophyllum*, Koch, var. *euriodon*, F. J. H. Mardale, Westmoreland, June 30th, 1910.—AUGUSTIN LEY. The teeth are too sharp, narrow, and forward-pointing for var. *euriodon*. I rather think this an unusually hairy form of *H. Leyi* (it greatly resembles the specimen of that from High Street), and not *lasiophyllum*, though certainly allied to that species.—EDWARD S. MARSHALL.

*Hieracium Sommerfeltii*, Lindeb. Clefts in the north face of Craig Bridden, and upon the screes below, Montgomeryshire, North Wales, July 31, 1910.—J. COSMO MELVILL. Not *H. Sommerfeltii*. I call it *H. Leyi*, F. J. Hanbury.—E. F. LINTON.

*Hieracium pachyphyllum*, Purchas. Great Doward, v.-c. 36, June 1, 1910. I believe these are all the same.—H. J. RIDDELSDELL. My specimen is rightly named.—E. F. LINTON.

*Hieracium ciliatum*, Almq., var. *venosum*, Ley. West Brecon, June, 1910.—AUGUSTIN LEY.

*H. serratifrons*, Almq., var. In and about a quarry at Radyr, v.-c. 41, July 18, 1910. This probably belongs to var. *lepidoides*, Johanns., though the dark heads look like var. *crassiceps*, Dahlst.—H. J. RIDDELSDELL. Yes.—AUGUSTIN LEY.

*Hieracium sparsidens*, Dahlst., var. *clatius*, Ley. Vaynor, Taf-feehan Glen, Brecon, July 17, 1908.

*Hieracium rectulum*, Ley. Hills near Llangadoc, Carmarthen-shire, July 19, 1907.

On the above two plants, see 'Journal of Botany,' 1910, pp. 326, 327.—AUGUSTIN LEY.

*H. holophyllum*, W. R. Linton. Bank by river Wharfe, Linton, near Skipton, Yorkshire, v.-c. 64, June 26, 1910. In considerable abundance.—JOHN CRYER. Yes, the more glandular Yorkshire form.—E. F. LINTON.

*Hieracium caesium*, Fr., var. *insulare* (F. J. Hanb.). [ref. No. 3517]. Ben More, v.-c. 88, Mid-Perth, at about 3,000 feet, July 16, 1910. Very near the original station where Mr. Hanbury and I collected it in 1889. Styles slightly livid; ligule-tips glabrous; phyllaries floccose, senescent. Leaves rather glaucous, with impressed veins.—EDWARD S. MARSHALL. I agree.—E. F. LINTON.

*Hieracium anfractiforme*, E. S. Marshall. On granite. Ben a' Bhuiridh (July 12, 1910; ref. No. 3525) and Ben Eunaich (July 23, 1910; ref. No. 3524); at 1,800 to 2,000 feet. Styles dark; ligule-tips glabrous. Typical examples of this well-marked species.—EDWARD S. MARSHALL. Good specimens of the type.—E. F. LINTON.

*Hieracium acroleucum*, Stenstr., var. *dacdalolepium*, Dahlst. [ref. No. 3529]. Shingles of the Orchy, below Dalmally, v.-c. 98, Argyle, July 6, 1910. Styles dull yellow or livid; ligule-tips glabrous. Lower part of stem and underside of leaves often purplish. Very near *H. vulgatum*; but it agrees well with specimens so named by Rev. W. R. Linton from Glen Shee, E. Perth, and my determination is confidently endorsed by Rev. Augustin Ley.—EDWARD S. MARSHALL. The heads and peduncle are too hairy for this variety; very different from the Dent Dale and other specimens Mr. Ley named for me, which agree with the description in the glands of the inflorescence being numerous and "the hairs very few." In No. 3529 the hairs are many, often more than the glands. This plant may be the same as the Glen Shee plant Mr. Marshall refers to, but surely the Rev. W. R. Linton thought that *nearer the type* (on Mr. Shoolbred's specimens of the gathering 'B.E.C. Report,' 1906, p. 233).—E. F. LINTON.

*Hieracium scanicum*, Dahlst. Quarry, Radyr, v.-c. 41, July 18, 1910. I have doubts of this naming, for I cannot match the gathering among my *H. scanicum*.—H. J. RIDDELSDELL. This is a plant

of which I have several gatherings, and think of describing. It is not *H. scanicum*; Dr. Dahlstedt has refused that name for similar plants which have been submitted to him.—E. F. LINTON.

*Hieracium sciaphilum*, Uechtr., var. *transiens*, Ley. (Styles yellow, ligules glabrous.) Hedgerow, Kilgwrrwg, Mon., v.-c. 35, July 22, 1910.—W. A. SHOOLBRED. I agree.—E. F. LINTON.

*H. sciaphilum*, Uechtr., var. *transiens*, Ley. Radyr, v.-c. 41, July 18, 1910. Ligules moderately ciliate when young. Mr. Ley has not yet seen this gathering.—H. J. RIDDELSDELL. Intensely glandular, but I think right.—E. F. LINTON.

*Hieracium septentrionale*, Arv.-Touv. On the sands at Port Talbot, v.-c. 41, July 24, 1910. I am pretty sure this is right, and that there is no mixture, though the gathering has not yet been submitted to an expert. The leaves of some of the specimens look rather different, but the phyllaries, &c., show no variation.—H. J. RIDDELSDELL. The specimens on my sheet are correctly named; the lower leaves are rather prematurely withered, but their condition is probably due to situation.—E. F. LINTON.

*Hieracium Dewari*, Bosw. Dalmally, v.-c. 98 Argyle, June 30 and July 25, 1910. Styles sooty; ligule-tips ciliate.—EDWARD S. MARSHALL. Well-developed *H. Dewari*, as fine as some I have cultivated.—E. F. LINTON.

*Hieracium protractum*, Lindeb. Origin, South Brecon?, cult. July and August 1910. I am sorry to have to question whether this plant originated in Brecon or not; but I searched for it in the Breconshire glens in 1908 without result, and the balance of probability is now in favour of its having originally come from a more northern county.—AUGUSTIN LEY.

*Hieracium tavense*, Ley. Origin, Tawe Valley, West Brecon, cult. August 1910. For the true position of this plant, see 'Journal of Botany,' 1909, p. 54.—AUGUSTIN LEY.

*Hieracium rigidum*, Hartm., var. *trichocaulon*, Dahlst. Hedge bank, Hawellsfield, West Gloucester, v.-c. 34, August 13, 1910.—W. A. SHOOLBRED. This has been sent before, and I think determined as *trichocaulon*.—E. F. LINTON.

*Hieracium angustum*, Lindeb. [ref. No. 3533]. Dalmally, v.-c. 98 Argyle; more or less shade-grown, July 25, 1910. This species is well distinguished from *H. strictum*, Fr., by its pure

yellow styles, non-ciliate ligules, and much narrower leaves, which are floccose beneath. The specimens are rather weak and immature.—EDWARD S. MARSHALL. Though the leaves of No. 3533 are not so long and linear-lanceolate as the most typical British specimens or the Scandinavian type, this is good *H. angustum*, Lindeb., in all other respects. Mr. Marshall has some reason for distinguishing this from *H. strictum*, and replacing it as a species.—E. F. LINTON.

*Hieracium corymbosum*, Fr., var. *salicifolium* (Lindeb.). [ref. No. 3534]. Wooded banks of the Orchy, Dalnally, Argyle, v.-c. 98, July 25, 1910. Styles sooty; ligules pale lemon yellow, glabrous-tipped. Rev. Augustin Ley agrees with my suggested meaning; the absence of floccose clothing on the underside of the leaves is probably due to shade. Very unlike typical *corymbosum*, as I know it in Scotland; but Mr. Ley tells me that in Wales the two run into one another.—EDWARD S. MARSHALL. Agrees with some other plants we have so named; floccose and pilose clothing is often denuded by shade.—E. F. LINTON.

*Hieracium sabaudum*, L., var. *calvatum*, F. J. H. Origin, Aberedw, Radnor, cult. August 16, 1910. I must speak with doubt concerning the varietal name of this plant. It differs from the Carnarvonshire plant originally so named by Mr. Hanbury, in having its leaves oval or broadly oval, instead of broadly elliptic; but agrees in its glabrous stem, black phyllaries, and especially in the comparatively few leaves.—AUGUSTIN LEY. Mr. Hanbury describes this under *H. boreale*, Fr., which I think should be retained for our species. The existence of true *H. sabaudum*, L., in Britain has been freely disputed.—EDWARD S. MARSHALL.

*Taraxacum lævigatum*, DC. [ref. No. 2001]. Tubney, Berks, June 1909. This equals *T. erythrospermum*, Andr., according to Handel-Mazzetti 'Mon.' p. 100, the *T. lævigatum* of English authors being for the most part *T. obliquum*, Dahlst., which is the *Leontodon obliquum*, Fries., and not the *L. lævigatus*, Willd., sp. pl. iii. 1546, 1800.—G. CLARIDGE DRUCE. The essential fruit is absent from my two specimens. De Candolle ('Prodromus,' p. 146) gives his own name as the authority; and quotes *Leontodon lævigatus*, Willd., as a synonym. In his monograph Handel-Mazzetti says that Willdenow's original plant has red achenes, and substitutes *lævigatum* as the name for our *erythrospermum*; thus introducing an altogether unnecessary confusion, and adopting a course which is contrary to the Vienna Rules.—EDWARD S. MARSHALL. Where is the disobedience to the Vienna Rules?—G. CLARIDGE DRUCE.

*Taraxacum erythrospermum*, Andr., var. *laevigatum* (DC.). Hedge bank, Pickersleigh Road, near Malvern Link, Worcestershire, v.-c. 37, May 1903.—Coll. CHARLES WATERFALL.—Comm. R. F. TOWNDROW, Malvern Link. The fruit on my plant is immature, but looks right, as does the foliage. Mr. Beeby considered this species distinct from *T. erythrospermum*, as did De Candolle.—EDWARD S. MARSHALL. But is it not *T. obliquum*, Dahlst.?—G. CLARIDGE DRUCE.

*Taraxacum obliquum*, Dahlst. Amongst blown sand, Ainsdale, South Lancashire, v.-c. 59, June 1909. This is the plant recorded in 'Fl. West Lancs.' as *T. laevigatum*. It is abundant on the dunes of both South and West Lancashire. It keeps constantly distinct from the somewhat scarcer *T. erythrospermum* in its narrower outer phyllaries, much less dissected leaves, paler achenes, and time of flowering.—J. A. WHELDON. Achenes very pale; this is *T. laevigatum*, DC., of which Jordan's name is a later equivalent.—EDWARD S. MARSHALL.

*Taraxacum palustre*, DC. [ref. Nos. 309 and 310]. Port Holme, Huntingdon, v.-c. 31, May 10, 1910, and April 20, 1910.—Coll. E. W. HUNNYBUN. Comm. S. H. BICKHAM. There are two slightly different forms of this plant on Port Holme—one (310) flowering now (29, iv, 10), and the other (309) rather smaller, about ten days later. Mr. Beeby thought both were *T. udum* until I sent the fruit.—S. H. BICKHAM. This plant grows in a meadow which is flooded during the greater part of the late autumn, winter, and spring. I sent specimens to Mr. W. H. Beeby in the spring of 1909. At that time I was sending him *T. palustre* from Wicken Fen, and he thought that the Port Holme plant must be *T. udum* chiefly because of its runcinate leaves. Being, as all botanists know, a very careful man, he put off giving any definite opinion until I could send fruit. When I did so, he said it must go to *T. palustre*, DC. He had impressed on me that speaking generally the leaves of *Taraxaca* are more or less entire or runcinate according as they grow amongst herbage or on bare ground. At that time, he did not know of any British exception to that rule except *T. palustre* and his subsp. *Gierhildæ* of *T. spectabile*, Dahlst. The fruit of the Port Holme plant showed him that his rule applied to *T. palustre* also; and in his last letter to me, when sending me plants of his subspecies, he told me he was convinced of this. I have in my garden *T. palustre* from Wicken Fen. When growing there in the coarse grass, the leaves were nearly entire; whereas the leaves are now runcinate, though not so much so as in the Port Holme plants, which grow practically on bare land during all the year except the months of May and June.—E. W. HUNNYBUN. These have the outer phyllaries more or less membranous-edged,

a point which Mr. Beeby considered very important. The leaf-lobes are longer than usual, but mostly patent. Correct, though not quite typical in foliage.—EDWARD S. MARSHALL.

*Sonchus oleraceus*, Linn., var. *glandulosus*, Coss. and Germ. [ref. No. 311]. Garden weed, Underdown, Ledbury, v.-c. 36 Hereford, August 19, 1910.—S. H. BICKHAM. Yes, *glandulosus*, which Cosson and Germain described as a sub-variety.—G. CLARIDGE DRUCE.

*Lactuca saligna*, L. Sea-shore and waste places, Leigh-on-Sea, Essex. September 11th, 1910.—A. B. JACKSON.

*Kalmia glauca*, Aiton. Chobham Common, Surrey, June 19, 1910, the locality where it grows in the midst of a very wet bog, recorded by me in the 'Journal of Botany,' 1910, p. 205.—C. E. BRITTON.

*Campanula persicifolia*, L. On a common near Newbury, Berks, July 1910. Here it grows among furze bushes and looks quite native, but *Euphorbia Cyparissias* is found in large quantities on the same common, although not with the *Campanula*. I can find no trace of a cottage or any building here to account for the presence of either plant. Mr. J. R. W. B. Tomlin sent it me to name. Here if not native, it is completely naturalised, and if, as I am told, the Gloucestershire locality is destroyed, it makes the discovery more interesting.—G. CLARIDGE DRUCE.

*Limonium binervosum*, C. E. Salm. Border of Saltmarsh, near Preesall, W. Lancs. (60), July 1910. Although much smaller, this seems to resemble the Hilbre Island plant which has been referred to *L. intermedium*.—J. A. WHELDON. I should call this typical *binervosum*. I do not understand the arrangement in 'Lond. Cat.' ed. x. I gave reasons in 'Journ. Bot.' 1903, p. 70, why the name *intermedium* seemed too ambiguous to use. The variety *procerum* equals var. *intermedium pro parte*.—C. E. SALMON.

*Limonium* ——. Specimens originally collected near Hunstanton, and grown in the Botanic Gardens at Cambridge, are sent by Mr. R. I. Lynch.—C. E. MOSS. Mr. Lynch has sent some interesting sheets of this species, showing two forms, a "tall" and a "dwarf." The latter term is, however, not very distinctive, as the two "dwarf" specimens on my sheet are 16 in. and 17 in. high respectively, while the "tall" example sent me measures 22 in. high. Mr. Lynch remarks that these two forms (both from Hunstanton) keep distinct in cultivation in the Cambridge Botanic Garden, and differ in size of leaf, general appearance, and time of flowering (by a little), besides the size character. I have grown these two forms (Mr. Lynch kindly sending me roots) in my garden

at Reigate, and cannot find any differences in them as regards bracts, calyx, &c. The difference in time of flowering—which I shall observe more closely this year—is remarkable; may it be that the original roots came from different localities as regards moisture, causing this variation which is still kept up by the descendants?—C. E. SALMON.

*Armeria maritima*, Willd. Ben an Dothaidh, Argyllshire, (98), at 2,600 feet, July, 1910.—A. WILSON and J. A. WHELDON. There does not appear to be any distinct cleavage in the range of *A. maritima* and *A. alpina* in Britain. These specimens show no approach to the latter although from a sufficiently Alpine station.—J. A. WHELDON. This is the pleurotrichous *Statice linearifolia*, Later. var. *planifolia* (Syme), which I believe Mr. F. N. Williams has confused with the continental *Statice alpina*. I have not yet seen the holotrichous *Statice maritima*, Miller, on the mountains.—G. CLARIDGE DRUCE.

*Anagallis arvensis*, L. Native among furze, &c., Worms Head, v.-c. 41, June 24, 1910. This plant, the status of which is much disputed, occurs about the cliffs of W. Gower plentifully; it is not by any means confined to places where it is comparatively free from competition. On the Worms Head, it is a mile and more from the nearest cultivation: sheep are occasionally pastured there; but there is the minimum probability of introduction. I do not see any reason to doubt its native status.—H. J. RIDDELSDELL.

*Gentiana praecox*, Towns. Chalk downs, Freshwater, I. of Wight, June, 1910.—H. E. FOX. This plant is referred to *G. campestris* by Mr. Williams, and named by him *G. campestris*, L. *β. obtusifolia* ('Prodr. Flo. Brit.,' Part V. p. 235, 1909). I do not agree with Mr. Williams that the plant is related to *G. campestris*. I think the traditional view is correct that it belongs to *G. Amarella*. All the forms of *G. campestris* have *overlapping* calycine segments, not merely "the opposite segments of the calyx very unequal;" and *G. Amarella* varies greatly with regard to the number of its calycine segments.—C. E. MOSS. *G. Amarella*, var. *praecox*, Raf. I cannot agree with Mr. F. N. Williams in referring this to *G. campestris*, with which to me it has nothing in common.—G. CLARIDGE DRUCE. So far as I know, Mr. Townsend did not describe this as a species. It is *G. subsp. lingulata*, C. A. Agard, var. *praecox*, Towns. (Murbeck). Growing abundantly on the Wiltshire downs with *G. Amarella*, it keeps completely distinct from that.—EDWARD S. MARSHALL.

*Polemonium ceruleum*, L. Old gravel-pit near Ollerton, Peover, Cheshire, July 1910.—J. COSMO MELVILL.

*Symphytum peregrinum*, Ledeb. In view of the remarks made as to the identity of this comfrey, I send a copious supply of specimens in several stages in the hope of getting a decision as to its proper nomenclature. Near the stables, and on the outskirts of a wood on the north side of Southam House, between Prestbury, Bishop's Cleeve, near Cheltenham, North-east Gloucestershire, v.-c. 33. Flowering cymes, June 2 and 3; fruiting cymes, July 25; root leaves, Sept. 28 and Oct. 15, 1910. The October leaves had the thicker portion of their petioles sliced off, and, in consequence, they have dried better than the September leaves. It agrees with examples so named which I collected near Grange Mill, in the Via Gallia, Derbyshire, July 23, 1878, and June 26, 1880, and from Wiltshire, near Limpley Stoke, July 24, 1893, which were distributed to the members. The Derbyshire plant is fertile, and young seedlings have been frequently produced in Manchester and St. Anne's; but none were noticed in the Derbyshire plants cultivated at Cleeve Hill this year.—CHARLES BAILEY. Yes; what at one time we called *S. asperrimum*, a species which also grows (in one spot at least) in E. Gloucester. In *S. peregrinum* the calyx lobes are sub-acute: in the true *S. asperrimum* they are quite blunt, and the flowers are a truer blue.—H. J. RIDDELSDELL.

*Pulmonaria officinalis*, Linn. [ref. No. 79]. Woods near Kirkliston, Linlithgow, v.-c. 84, April 25, 1910.—MCTAGGART COWAN, Jun.

*Myosotis sylvatica*, Hoffm. [ref. No. 54]. Newbattle, Dalkeith, v.-c. 83, May 21, 1910.—MCTAGGART COWAN, Jun.

*Myosotis collina*, G. F. Hoffm., var. *Mittenii*, Baker. Littlestone-on-Sea, Kent, E., May, 1910. This grew in immense quantities over a wide range of sandy coast, but the variety is not mentioned in the 'Flora of Kent'; and I think some of these pale-flowered plants may be referred to it; but while some were distinctly bracteate others were not, and therefore while there was a distinct look about the plant, the presence or absence of bracts does not appear to afford a character of varietal value. This *Myosotis* may, however, prove to be a distinct form or variety from type *collina*, as the colour of the fresh flowers is very distinct and was quite uniform. As in some other cases, I have sent a representative gathering. It would have been easy to have selected purely bracteate forms, but that would have given a false idea of the plant, and I have followed the same plan in the so-called variety of *Veronica officinalis* and *Orchis maculata*, var. &c.—G. CLARIDGE DRUCE. Some of the specimens sent agree with the description of this variety. But Mr. J. G. Baker told me some years ago that he had given it up, as being of too slight a character.—H. J. RIDDELSDELL. The lowest

flower should be bracteate, which is not the case in the specimens sent to me; nor do the dried flowers look paler than usual. Only a starved type, I believe.—EDWARD S. MARSHALL.

*Myosotis collina*, Hoffm. [ref. No. 4118]. On the borders of Stow Wood, Oxfordshire, on light, sandy soil, in shelter but not shade, May 1910. It will be observed that the bract in some of the lower flowers is widely separate from the flower, but the presence of the bract is by no means constant; although some plants might be referred to *Mittenii*, the colour of the flowers was somewhat paler than those of *M. collina*, growing on more calcareous soil.—G. CLARIDGE DRUCE. This looks drawn-out, which may be due to its unusual woodland station; I see nothing else peculiar in the dry state—the flowers look normal.—EDWARD S. MARSHALL. The specimens sent to me are 14-20 cent. high, and thus taller than usual, but I do not see any other difference. It can, evidently, grow taller still, as Rouy and Foucaud ('Fl. France') give "5-30 cent." for this species. I imagine that Mr. Druce's plants were "drawn up" in the wood.—C. E. SALMON.

*Lithospermum officinale*, L., var. *pseudo-latifolium*, C. E. Salmon. Raised from seed of the Isle of Wight plant, given me by Mr. Salmon. After three or four seasons' growth it has become very characteristic, and agrees well with his description in 'Journ. Bot.' 1906, p. 367.—EDWARD S. MARSHALL.

*Verbascum olympicum*, Boiss. Waste ground, The Park, Oxford, September 1910.—G. CLARIDGE DRUCE.

*Linaria repens*, Mill. New record, Scalford, Leics., September 23, 1910.—H. P. READER and A. R. HORWOOD.

*Linaria minor*, Desf., forma. [ref. No. 81]. Old railway line, near Dalmeny, v.-c. 84, June 2, 1910. Differing from the type in the colour of the flowers; the lower lip of the corolla being a clear white, and the calyx being longer in relation to the fruit.—McTAGGART COWAN, Jun.

*Veronica hybrida*, L. Very fine among 'detritus,' north face of Craig Breidden, Montgomeryshire, North Wales, July 31, 1910.—J. COSMO MELVILL.

*Veronica officinalis*, L., var. [ref. No. 2731]. Elibank, Selkirk, July 1910. According to Mr. Williams ('Prod.' v. 297) this is var. *hirsuta* (Hopkirk) = *V. setigera*, D. Don., but I doubt if he is correct in so enlarging the original description as to take in this plant, which I should have rather ventured to describe as forma *integra*—"fructus indivisus, apice integer"—since this character

seemed fairly constant in the plants in the above locality, and I have seen others from Hazely Heath, S. Hants, *C. E. Palmer*; and to this I should put the plants from Surrey, Essex, and Norfolk which Mr. Williams (l.c.) names *hirsuta*. These capsules are fertile; but the notch is occasionally to be found in them. Hopkirk's plant is distinguished by its hairiness, its diminutive size, and its very narrow, almost strap-shaped leaves (see fig. in 'E. B.' 985). These characters Smith and Sir W. Hooker say remained constant in culture. Is this plant always barren? Sir J. Hooker ('Stud. Fl.' 301, 1884), says capsule seedless. Tracing this backwards we find that Arnott (Hook. and Arnott, 'Br. Fl.' 301, 1885) says capsule abortive, but Sir W. Hooker ('Brit. Fl.' p. 6, 1830) says the *flowers* are often abortive. The capsule as drawn in 'E. B.' appears well formed, and the entire top is not even truncate at the top as in *integra*. Since writing the above I find that Beeby ('Scotch Ann.' 36, 1889) met with "the form with truncate, not notched, capsule in plenty on rock at Hoofield, Shetland," but he adds "the withered flower stalk of the previous year bore deeply-notched capsules, indicating that the variation is due to some temporary cause." Hooker says Hopkirk's plant kept true in cultivation. This form should be tested in order to see if it reverts to type, or shows mixed characters on the same plant.—G. CLARIDGE DRUCE. Rachis and capsules with numerous stalked glands; capsules notched in two specimens, undivided in the third, which is younger. I have gathered the same form, but do not know of any special name for it.—EDWARD S. MARSHALL.

*Bartsia viscosa*, Linn. Wet places, Coverack, W. Cornwall, July 1910.—H. E. FOX.

*Euphrasia Rostkoviana*, Hayne. Meadows, Rosthwaite, Borrowdale, v.-c. 70 Cumberland. Altitude 320 feet. June 1910.—A. WILSON. This species is usually more branched: but I have gathered specimens from the hills near Aberdare which were quite simple. Mr. Townsend drew emphatic attention to the peculiarity, when he saw the Aberdare plant.—H. J. RIDDELSDELL. Yes.—EDWARD S. MARSHALL.

*Euphrasia brevipila*, Burn. and Grem. Penhallow Moor, Newlyn East, West Cornwall, v.-c. 1, September 1, 1910.—C. C. VIGURS. My specimens are not *brevipila*. They are not of the habit of that species; nor can I find any trace of glands—the latter point alone would not be enough guide, as there is a *f. eglandulosa* of *E. brevipila*. But the habit is decisive.—H. J. RIDDELSDELL. I can find no stalked glands, and the habit is not right. *E. borealis*, Towns., in my opinion.—EDWARD S. MARSHALL.

*Euphrasia brevipila*, Burnat and Greml. Marshy shore, Corriegills, Arran, v.-c. 100, July 1910.—V. S. TRAVIS. Yes; I have seen it in plenty near Loch Ranza, Arran.—EDWARD S. MARSHALL.

*Euphrasia gracilis* (Fr.). Slope of Ben Douran above Bridge of Orchy, Argyllshire (98), July 1910.—A. WILSON and J. A. WHELDON. Although the stem branches usually near the base, as in *E. scottica*, the essential characters appear to be those of *E. gracilis*.—J. A. WHELDON. Very weak and unbranched, so that their determination is more or less guess-work. Not, I think, *E. gracilis*, but depauperate alpine states of *E. scottica*.—EDWARD S. MARSHALL.

*Euphrasia* ——. I cannot exactly place this gathering with *E. nemorosa*, Mart. It occurred abundantly on shelves of flat rock, to some extent under shade, and with a fair amount of good soil, in company with *Veronica hybrida*, L., and other interesting plants, under the north face of the perpendicular precipice of Craig Breidden, Montgomeryshire. It appears to have some leaning towards forms of *E. curta*, Wettst., but the flowers are smaller. This last I have gathered on the mountain limestone at Much Wenlock, twenty miles or more away. The composition of the Breidden Hills is volcanic, porphyritical greenstone of the Upper Silurian. Its botanical richness has long been known.—J. COSMO MELVILL. I cannot name these with any confidence; they are in poor condition. But I think that they may be starved *E. curta*, var. *glabrescens*, from their combined characters.—EDWARD S. MARSHALL.

*Rhinanthus stenophyllus*, Schm. Marshy shore, Corriegills, Arran, v.-c. 100, July 1910.—V. S. TRAVIS. Yes.—G. CLARIDGE DRUCE. Young, but I believe correctly named.—EDWARD S. MARSHALL.

*Rhinanthus Drummond-Hayi*, Druce. (*Alectorolophus Drummond-Hayi*, Sterneck) [ref. No. 3466]. Meall nan Figearn, near Dalmally, v.-c. 98 Argyle, July 20, 1910.—EDWARD S. MARSHALL.

*Mentha* ——. Banks of Ettrick, near Selkirk, September 1909.—I. M. HAYWARD. This is, I believe, one of the hairy forms of *Mentha rubra*, Sm., a supposed hybrid of *M. aquatica* with *arvensis* and *spicata*.—G. CLARIDGE DRUCE. *M. rubra*, I consider.—A. B. JACKSON.

*Origanum vulgare*, L., *floribus albis*. In two places in old Quarry, at base of north-western face of Craig Breidden, Mont-

gomeryshire, August 1910.—J COSMO MELVILL. Described as var. *pallescens* by Martrin-Donos in 'Fl. Tarn.' 550, 1864—"Leaves yellowish-green, flowers white in compact heads, bracts pale green."—G. CLARIDGE DRUCE.

*Clinopodium vulgare*, L., fl. *albo*. Near St. Fagan's, v.-c. 41, August 22, 1910. Flowers of this colour of course often sport to white: but I do not remember seeing it in this species before.—H. J. RIDDELSDELL.

*Melissa officinalis*, L. Hedge by high road, Monk's Risborough, Bucks, September 1910.—F. L. FOORD-KELCEY. Yes. I gathered it there in 1898.—G. CLARIDGE DRUCE.

*Salvia pratensis*, L. Root from the Downs above Reigate, v.-c. 17 Surrey, 1908; fl. West Monkton Rectory, May 27, 1910. This was shown to me by Mr. C. E. Salmon, who discovered it in small quantity; a tiny piece of root was taken, which has grown into a large plant. Rev. E. F. Linton remarks that the flowers are much smaller than in his cultivated *S. pratensis*.—EDWARD S. MARSHALL.

*Galeopsis Tetrahit*, Linn., var. *nigricans*, Bréb. Tregenna, St. Columb Minor, West Cornwall, v.-c. 1, August 6, 1910. The ability to suggest this naming comes from Druce's valuable edition of 'Hayward's Botanist's Pocket Book.' The almost black calyces of these plants was very conspicuous when growing, and distinctly differentiated the variety from the type with pale green calyces with which they grew. Unfortunately the black coloration has faded a good deal.—C. C. VIGURS. Yes, var. *nigricans*, Bréb.—G. CLARIDGE DRUCE.

*Plantago lanceolata*, Linn., forma. On ballast at Par, East Cornwall, v.-c. 2, July 1909. These plants with very narrow leaves and short spikes seemed to me a good way off the type; I suppose they are approaching var. *sphaerostachya*.—C. C. VIGURS. Leaves linear-lanceolate; this is probably due to the situation. I can see no varietal character.—EDWARD S. MARSHALL.

*Plantago lanceolata*, L., forma. Dry sands, Ainsdale, S. Lancs., v.-c. 59, June 1910. Very near to the var. *sphaerostachya*, M. and K., sent from limestone hills in Wales last year. But this sandhill plant is evidently only a starved condition of the type, as it is very often larger, with a less wiry peduncle, and the leaves are frequently more than 3-nerved.—J. A. WHELDON. Two plants are round-headed; the third inflorescence is ovate-oblong. This confirms my previous opinion that the alleged variety is due to starvation, and

of no value.—EDWARD S. MARSHALL. Dillenius cultivated the small round-headed plant (*sphaerostachya*) from Insula Selsey and Llanberis, but adds, "in vulgarem transiit." An *individual plant*, however, kept true for one year in my garden. The second year it reverted to type.—G. CLARIDGE DRUCE.

*Plantago Coronopus*, Linn. ? var. *ceratophyllon*, Rapin. Newquay, West Cornwall, v.-c. 1, June 1907 and October 1910. This form is almost as common here as the type and var. *pygmaea*, and keeps fairly constant in character. Leaves very thick, not pinnatifid.—C. C. VIGURS. The larger of my two specimens looks right, or nearly so; the smaller has densely hairy leaves, and cannot pass.—EDWARD S. MARSHALL.

*Plantago macrorrhiza*, Poiret. Blackpool, W. Lancs., v.-c. 60, July 1910. This rare species, which is said to occur elsewhere in Britain only in Dorset, is very abundant in the Blackpool station, where it extends for nearly a mile. It varies a good deal according to age and situation, but always keeps distinct from *P. Coronopus*. In old plants the root divides at the crown, one root ultimately forming a colony of 15 to 20 plants. The leaves vary from nearly simple with a few teeth to bi- and even tripinnate, the latter being very rare and probably abnormal. The range of forms sent are cut from two or three large plants.—J. A. WHELDON. Not quite (I think) what we have been calling *P. Coronopus*, var. *ceratophyllon*, Rapin. Whether, as Mr. F. N. Williams believes, this is *P. macrorrhiza*—and, if so, whether that is a good species—I have considerable doubt.—EDWARD S. MARSHALL. The var. *ceratophyllon* occurs also on Abbott Cliff, Dover, &c.—G. CLARIDGE DRUCE.

*Illecebrum verticillatum*, L. Near Wellington College, Berks, August 1910. Still plentiful in this outlying station.—G. CLARIDGE DRUCE. See p. 507.

*Herniaria ciliata*, Bab. Headlands, Coverack, W. Cornwall, July 1910.—H. E. FOX. Of course, correct; but Rouy 'Fl de France,' xii. 8, 1910, names this *H. maritima*, Link, *apud* Schrad. 'Journ.,' i. p. 57,  $\beta$ . *ciliata*, Daveau, in 'Bot. Soc. Brot.,' 10, p. 91 = *H. ciliata*, Bab., *non* Clairv. It is the northern form, the type (*H. maritima*) being at present known only from Spain, Portugal, and south-west France.—EDWARD S. MARSHALL.

*Chenopodium glaucum*, L. Waste ground by River Lea, near Rye House, Herts., August 18, 1910.—ALICE TROWER.

*Salicornia annua*, Sm. Crouch Marshes, Essex, September 1910. Growing in great abundance and almost to the exclusion of

other forms; but I was able also to find in a longish walk in the district *S. radicans*, Sm., *S. lignosa*, Woods, and *S. ramosissima*, Woods.—G. CLARIDGE DRUCE. This erect, fastigate plant is the form named *S. stricta* by Du Mortier (in 'Bull. Soc. Roy. Belg. Bot.' p. 334, 1868), and agrees with Du Mortier's specimens. It is, however, not possible to separate this form from that named *S. annua* by Smith ('E. B.' t. 415, 1797), and from the specimens so named in Smith's herbarium! The former is, on the whole, the south European form, and the latter the northern form. Rendle and Britten ('Journ. Bot.' 104, 1907) favour the retention of the Linnæan name *S. europæa*, which occurs in the first edition of the 'Species Plantarum,' 1753. The name *S. herbacea* appears in the second edition (1762). The species, which is quite an "aggregate," is easily separated from the other annual erect species by its long terminal spikes. It is by far the commonest species in Europe. In Great Britain, it occurs from Jersey and the Isle of Wight to the Orkneys and Shetlands. It is frequently the only Phanerogam present on wet, muddy, salt marshes.—C. E. MOSS. Undoubtedly Smith's plant ('E. B.' t. 415), and what has been named for me as *S. stricta*, Dum., and with the short description of which it agrees well. I believe that, in accordance with Article 51 of the Vienna Rules, both *S. europæa*, L., of 'Sp. Pl.,' ed. i. and *S. herbacea*, L., of 'Sp. Pl.,' ed. ii., must be discarded, as being (like *Rosa villosa*, L.) *aggregate* names of uncertain application. Thus *S. annua*, Sm., appears to be the oldest definite name.—EDWARD S. MARSHALL. I am not wholly in agreement with Mr. Marshall with regard to the nomenclatorial matter which he here mentions. There would be an extraordinarily large number of accepted specific and even generic names to reject, if we followed Mr. Marshall's application of the rule in all cases like this.—C. E. MOSS.

*Salicornia stricta*, Drum. Mud flats by the Severn, near Beachley, W. Gos., v.-c. 34, September 15, 1910.—W. A. SHOOLBRED. Yes, the specimens with long terminal spikes are certainly *S. europæa*.—C. E. MOSS. Two forms occurred; one being typical *S. annua*, Sm. (*stricta*, Dum.), the other a modification caused by the plants being loosely rooted in soft mud, and washed about by the tides, thus becoming less erect and more dense in growth.—E. S. MARSHALL.

*Salicornia ramosissima*, Woods. Mud flats by the Severn between Sudbrook and Roggiatt, Mon., v.-c. 35, September 14, 1910.—W. A. SHOOLBRED. There are, perhaps, two forms in this gathering. Those with the shorter terminal spikes are typical specimens of *S. ramosissima*, Woods. The other is perhaps *S. europæa* × *ramosissima*, and, if so, would be included by Woods

in his little understood *S. intermedia*. Woods states that his *S. intermedia* includes three plants, all of which are erect. The first resembles *S. pusilla*, Woods, but has longer and redder spikes: the second approaches *S. herbacea* in its yellow-green colour and long cylindrical spikes; and the third approaches *S. ramosissima* in its bushy habit. It is the third of these that is Mr. Shoolbred's hybrid—if indeed it be a hybrid at all; but, of course, it is impossible to retain the name *S. intermedia*, Woods, for a medley of hybrids or other intermediate forms. I suppose the census number "1," which appears after this name in the 'L. C.' (10th ed.) refers to Woods' locality (Sussex) alone. Woods' account of *Salicornias* was read at the Linn. Soc. on January 21, 1851; and three accounts of it were published, differing only in slight verbal details. These accounts are in 'Bot. Gaz.' pp. 29—33, March 1851 (the first to be published); in 'Proc. Linn. Soc.' ii., pp. 109—113, dated 1855, but first published on April 15, 1851, and therefore later than the preceding; and in 'The Phyt.' iv., pp. 208—211, July (or later) 1851. The account in 'Proc. Linn. Soc.' was apparently revised by Mr. Kippist (the then Librarian of the Linn. Soc.), who adds some useful notes on the seeds of Woods' plants. Woods' plants are usually cited as from 'Proc. Linn. Soc.' I am indebted to Dr. B. Daydon Jackson, Sec. Linn. Soc., for help in ascertaining the order of the appearance of these three accounts.—C. E. Moss. We followed the Severn shore for about three miles without seeing *S. annua*; and I am pretty certain that *S. ramosissima* was the only species that occurred there, so that I cannot endorse the suggestion of hybridity in this gathering.—EDWARD S. MARSHALL.

*Salicornia ramosissima*, Woods. Mouth of the Nene, S. Lincs., September and October 1909. The trivial name of this plant is not a very suitable one, for, although when well-grown the plant is much-branched, forms occur which are little branched or even not branched at all. The specimens sent illustrate this range of variation. It will be seen that this species, like the preceding, has much wider limits than some botanists had supposed. All the annual and erect species vary from being much branched to not being branched at all.—C. E. Moss. No doubt correct, though the dried spikes seem unusually slender. As Dr. Moss has observed, along with the typical form may usually be found a good many dwarf plants which are with difficulty determinable, and which the beginner does well to leave alone. These are depauperate or starved states, probably due in part to overcrowding, and in part to a more exposed situation and a less genial soil. When well grown, this is a very marked species, often large and densely branched.—EDWARD S. MARSHALL.

*Salicornia* sp. nov. Holme salt marsh, Norfolk, October 16, 1910. This is a well-marked plant, characterized by *the ease with which the segments disarticulate* at or even before maturity. This peculiarity seems to be due to the narrow bases of the segments. It is a sturdy-looking, rigid, erect, much-branched plant, with *very short segments*, and *only one flower to each inflorescence*. The latter would seem to be a very important character, as all other species of *Salicornia* have three (or rarely more) such flowers to each inflorescence. It grows on the drier parts of salt marshes, sometimes among turf of *Glyceria maritima*, and sometimes associated with *S. gracillima* (Townsend). In habit, it comes between *S. ramosissima* and *S. pusilla*; but it is never even half so tall as good specimens of *S. ramosissima*; and it is not a graceful, comely plant like *S. pusilla*. However, the characters given above are very definite ones, and suffice to distinguish the new plant from all other species. So far, the new plant has been gathered in Brittany (!), in the Isle of Wight (!), in South Hampshire (!), at Cley (!) in Norfolk, at Holme Marsh, Norfolk, where the present specimens were collected. I propose to describe it elsewhere as a new species under the name of *Salicornia disarticulata*. (See 'Journ. of Bot.,' June 1911.)—C. E. MOSS. When staying near Yarmouth, I. of W., at the end of September 1905, I made many visits to the salt marsh there with the object of getting specimens of *Salicornia* for drawings. The plant Dr. Moss considers to be an undescribed species was very abundant, and puzzled me much. As it did not seem to fit in with any of the forms described in the appendix to Townsend's 'Flora of Hampshire' (1904), I concluded that it might perhaps be placed under *S. ramosissima*. Mr. E. S. Marshall assented, but with considerable doubt—remarking that the latter species, when well-grown, was considerably larger. I marked my drawing "?? *ramosissima*"; but I felt that if it were really this plant, then the *S. ramosissima* sent to me from Cornwall was not very similar. When I showed the drawing to Dr. Moss in 1908, he would not pass it as *S. ramosissima*; and when, in the autumn of 1909, he sent me from Hunstanton a specimen of his new Glasswort, it was palpable that it and the Yarmouth plant were identical.—E. W. HUNNYBUN. Dr. Moss kindly sent me fresh specimens of this gathering. Even the most careful handling did not prevent the disarticulation on which his prospective name is very justly based. I have specimens very like it, collected at Hamworthy, Dorset, by Rev. E. F. Linton; but whether or not they had disarticulating segments I am unable to say.—EDWARD S. MARSHALL. If the latter plants belong to my new species, they will be uniflorous. Mr. Marshall's No. 2510 is *S. disarticulata*.—C. E. MOSS.

*Salicornia procumbens*, auct., non Sm. Holme Salt Marsh,

Norfolk, September 10, 1910. The procumbent Glasswort which British botanists have recently been naming *S. procumbens*, Sm. ('E. B.' t. 2475), does not agree with Smith's description, figure, or specimen! Smith's plant, I am fully convinced, is merely a pseudo-procumbent state of his *S. annua*, due to being toppled over by the tides. Smith states that his *S. procumbens* has two stamens; but all the non-erect, annual Glassworts which I have seen have only one stamen. Then Smith (*l. c.*) states that his *S. procumbens* is "very common in salt marshes, where the ground is often covered with water." As a matter of fact, this truly procumbent Glasswort always occurs on the landward side of salt marshes which the tides seldom reach; but "where the ground is often covered with water" is just the place where pseudo-procumbent Glassworts are frequent. I propose to redescribe this Glasswort under the name of *S. Smithiana*. (See 'Journ. of Bot.,' June 1911.)—C. E. Moss. This was sent to me fresh, and agrees exactly with what I have gathered for *S. procumbens* in Somerset, S. Devon, and W. Gloucester. It is clearly different from Smith's figure ('E. B.' 2475), which I believe that Dr. Moss has rightly placed as a state of *S. annua*, Sm. The present plant is one of stations only covered by the highest spring tides. It is very red at maturity, and often quite prostrate, though perhaps as frequently more or less ascending from a prostrate base. It is a good species, in my opinion.—EDWARD S. MARSHALL.

*Salicornia procumbens*, Sm.? [ref. No. 3549]. Minehead, v.-c. 5 S. Somerset, October 3, 1910. This grew plentifully on dryish mud, about a quarter of a mile on the Greenaleigh side of Minehead Pier; it was quite prostrate, remarkably rigid, red-brown or somewhat beetroot-red, with short, blunt spikes. I believe it to be a large form of *S. procumbens*. Dr. Moss has it under examination; but I have not yet received his opinion.—EDWARD S. MARSHALL. The plants approach *S. appressa*, Dum., in habit; but I would like to see these plants growing before finally expressing any definite opinion.—C. E. Moss.

*Salicornia appressa*, Dum.? [ref. No. 3546]. On damp mud, about a quarter of a mile from Minehead Pier, towards Greenaleigh, v.-c. 5 S. Somerset, October 3, 1910. Quite prostrate; colour dull greyish-green, occasionally tinged with dull red. Habit of *S. appressa*; but the branching is less compound than usual. Associated with *S. ramosissima*; some plants occurred which I suspect may be hybrids between them. Dr. Moss has specimens under examination.—EDWARD S. MARSHALL. See my note above. There are two other annual prostrate Glassworts which may be expected to occur on our southern coasts, and which have not yet been definitely recorded from England. One is *S. prostrata*,

Pall., which occurs in Brittany. It differs from *S. appressa* in possessing obtuse flowering spikes, those of *S. appressa* being acute. Its branches also form wide angles with the main stems, not acute angles as in *S. appressa*. The *S. prostrata* figured by Pallas ('Ill. Pl.' p. 8, t. 3, 1803) is a green plant; and so is the plant I take to be this from Brittany. *S. appressa* as I know it is always more or less red, sometimes wholly crimson. Both *S. appressa* and *S. prostrata* are very prostrate plants. The other Glasswort I refer to also occurs in Brittany. It is apparently a new species; and I propose shortly to name it *S. Oliveri* in honour of its discoverer, Professor F. W. Oliver. (See 'Journ. of Bot.,' June 1911.) It is a much less branched plant than either *S. appressa* or *S. prostrata*, but as prostrate as either of them. It differs greatly from any other annual *Salicornia* in its colour, which is that of the perennial species. Its flowering spikes are large and blunt; and the plant grows in mobile sand which is frequently tidewashed.—C. E. Moss.

*Salicornia perennis*, Mill., 'Gard. Dict.' ed. 8, No. 2 (1768) = *S. radicans*, Sm., 'E. B.' t. 1691 (1807). Holme Salt Marsh, Norfolk, October 16, 1910. In I. K., *S. perennis*, Mill., is erroneously referred to *S. herbacea*, L. There can, however, be no room for doubt with regard to the identity of *S. perennis*, Mill. Miller gives two *Salicornias*. His first sort is curiously named *S. fruticosa*, L.; but as Miller states that "this is an annual plant," and as he cites 'Linn. Mat. Med. 8' (cited also in 'Sp. Pl.' ed. i.), the plant *S. fruticosa*, Mill., *non* Linn., must go to *S. annua*, Sm. (or *S. europæa*, L., if we retain the name of 'Sp. Pl.' ed. i.). In any event, *S. fruticosa*, L., takes precedence by six years over *S. fruticosa*, Mill. Miller's second sort, *S. perennis*, "hath a shrubby branching stalk," "they are perennial," and it "grows naturally in Sheepey [Sheppey] Island"; and hence it is *S. radicans*, Sm. Miller says this plant has stalks "which trail upon the ground"; and hence it is not *S. fruticosa*, Linn. 'Sp. Pl.' ed. ii., p. 5 (1762), which is characterised as "*Salicornia caule erecto fruticosa*," and which is not known to occur further north than the mouth of the Loire. It is true that Linnæus in his 'Flo. Angl.' (1754) refers Ray's plant ('Syn.' p. 136, no. 2, 1724) to *S. europæa*, var. *fruticosa*; and as Ray's plant is *S. perennis*, Mill. (= *S. radicans*, Sm.), it might be urged that *S. fruticosa* is therefore a British plant, and that the latter name must supersede *S. perennis*, Mill.; but the 'Flora Anglica' of Linnæus cannot be used to supersede an unmistakable diagnosis in the "Species Plantarum." Martyn ('Gard. and Bot. Dict.,' vol. ii., part ii., 1807) realised what Miller's two names signified. The specimen in Miller's herbarium (!) also agrees with *S. radicans*, Sm. E. B. et herb. (!)—C. E. Moss.

*Salicornia lignosa*, Woods. Brading Harbour, Isle of Wight, October 1909.—C. E. Moss. A. G. Moore ('Journ. of Bot.' 1871, p. 170) says of a form (doubtless *S. lignosa*, Woods) of *S. radicans*, Sm.:—"This, I believe, represents *S. fruticosa*, L., and *S. lignosa* of J. Woods"; and he then infers that "we may safely claim *S. fruticosa*, L., as an Isle of Wight plant." Mr. A. Bennett ('Report' for 1901, p. 25) dissents from this opinion; and I quite agree with the latter. The three plants *S. fruticosa*, L., *S. lignosa*, Woods, and *S. perennis*, Mill. (= *S. radicans*, Sm.) are quite distinct. *S. fruticosa* is more or less erect, and grows in rounded tufts. *S. lignosa* and *S. perennis* are at maturity prostrate: the former leaves the ground by a single stem, and the branches are not rooting; and the latter is a creeping plant with freely rooting branches. There are, of course, many other differences. Mr. Bennett, in his note in the 'Report' for 1901 (p. 25), says that *S. lignosa* = ? *S. sarmentosa*, Duv.-J. However, specimens named *S. sarmentosa* by Duval-Jouve (!) are *S. perennis*, Mill. (= *S. radicans*, Sm.). This is what one would expect from Duval-Jouve's description of his *S. sarmentosa*, 'Bull. Soc. bot. de France,' p. 174 (1868). The description reads:—"Tiges nombreuses, à peine ligneuses, sarmenteuses, très-divisées, grêles, couchées, ascendantes, radicales. . . ." Duval-Jouve's account of the perennial *Salicornias* is excellent; but he probably never found *S. lignosa*, Woods. In fact, *S. lignosa* was not known to occur out of England until last April, when I collected the plant in Algeria. I forwarded a specimen to Mr. A. Bennett, who replied:—"Yes! it seems to me to be absolutely identical with Wood's plant. A. B. 27, 7, 10." I have no doubt the plant will be found in other localities in the west Mediterranean region and on the shores of western Europe. It seems to belong to a select set of maritime Mediterranean and west European species which prefer the south and east coasts of England. Up to the present, *S. lignosa* has been recorded from the Isle of Wight, South Hampshire, West Sussex, Essex (G. C. Druce, *supra*), and Norfolk (A. Bennett, *in litt.*). *Suaeda fruticosa*, *Limonium reticulatum*, and *Frankenia lavis* are other species which belong to the same class which I have not seen alluded to in any work on geographical botany. Is it that these plants in their British distribution are really confined to the southern and eastern coast of England; or is it that the maritime tracts of Cornwall and of western and south-western Ireland have not yet been fully investigated?—C. E. Moss. Mr. Hunnybun sent me this fresh from the same locality, a few years ago. Probably owing to shrinkage in drying, the spikes of Dr. Moss's specimens sent to me are not nearly so stout as in my dried series from Hants and Sussex, and thus fail to show the marked difference in that respect from *S. perennis*. I am very glad that the Distributor agrees with my own opinion that these two are

distinct species.—E. S. MARSHALL. Mr. Marshall's remarks on the different appearances assumed by dried *Salicornias* are very much to the point. Moquin-Tandon (in 'DC. Prodr.' xiii. 2, p. 144), stated the matter thus:—"Species in herbariis incompletæ vel scrutatione perdifficili, iterum recognoscendæ et in vivo examinandæ."—C. E. MOSS.

*Polygonum Hydropiper*, L., *forma*. Rufford, S. Lancs., v.-c. 59, July 1909. A slender erect state, with single axillary flowers, which might be mistaken for *P. mite*, as the leaves are not at all undulate; but the perianths and ochreae are densely glandular.—J. A. WHELDON. Too weak and undeveloped to base any conclusion upon; apparently a starved state of dried-up ditches.—EDWARD S. MARSHALL.

*Rumex conglomeratus* × *crispus*. Ashstead Common, Surrey, August 28, 1910.—C. E. BRITTON. Yes, I think this is the hybrid, but the figure in 'Reichb. Ic. Fl. Germ.' xxv., t. 172, shows a plant in which the perianth segments are toothed; in these they are nearly entire. Reichenbach's plant is *R. Schulzei*, Haussknecht, but I think the Surrey plant must go under it.—G. CLARIDGE DRUCE. Intermediate in habit and characters; apparently sterile. Doubtless right.—EDWARD S. MARSHALL.

*Rumex sylvestris*, Wallr. Thames-side near Mortlake, Surrey, June 21, 1910. This dock appears of frequent occurrence by the Thames, where I have seen it at intervals between Putney and Walton-on-Thames. In the 'Journal of Botany,' 1907, the Rev. E. F. Linton expresses the view that *R. sylvestris*, Wallr., from the riverside at Kew, is the hybrid *R. conglomeratus* × *obtusifolius*. I am not able to see the influence of *R. conglomeratus* in the specimens I label *R. sylvestris*, though I am inclined to think the hybrid in question grows near Putney.—C. E. BRITTON. The fruit and habit agree well with Hooker's description. This is somewhat unaccountably omitted under *R. obtusifolius* in 'Lond. Cat.' ed. 10.—EDWARD S. MARSHALL. Yes, excellent specimens of the Surrey Thames-side plant, which has been suggested to be a hybrid, but although hybrid Docks are freely admitted by Dr. Beck von Mannagetta in 'Reichb. Ic. Fl. Germ.' vol. xxiv., he still retains this as *R. obtusifolius*, var. *sylvestris*, Koch,—the *Lapathum silvestre*, Lam., 'Fl. Fr.' iii., 4, 1778.—G. CLARIDGE DRUCE.

*Rumex limosus*, Thuill. Old Brick-ponds, 1st Mill Lane, Anlaby Road, Hull, E. Yorks., v.-c. 61, August 1903.—CHARLES WATERFALL. Correct.—EDWARD S. MARSHALL.

*Rumex crispus*, L., var. *elongatus*, Gussone. Tidal mud of the Wye near Tintern, but in West Gloucester, September 1, 1910. Poor specimens, but sent as a New County Record.—AUGUSTIN LEY. The divergence from type *may* be merely accidental, and due to the rich mud of tidal river-sides; it would be a good thing to collect ripe seed, and test its permanence by growing it in ordinary soil.—EDWARD S. MARSHALL. See 'Report,' p. 109, 1884. It is included in Babington's 'Manual,' 359, 1904, from the Wye, but I am not sure who identified it with Gussone's plant.—G. CLARIDGE DRUCE.

*Asarum europæum*, L. Rough plantation opposite reservoir, Halton, Bucks (no flower or fruit), v.-c. 24, July 23, 1910.—Col. G. CLARIDGE DRUCE. Comm. F. L. FOORD-KELCEY.

*Mercurialis annuus*, L. Seedlings. Weed in the garden at Holmleigh, Kew, June 3, 1910.—A. B. JACKSON. Seedling plants, such as these, are very useful plants to send to the Club.—C. E. MOSS.

*Euphorbia Cyparissias*, L. Brimpton Common, Berks., July 1910. In great abundance here and somewhat variable; looking native, but it is an aggressive species, spreading rapidly in suitable soil when once introduced. I can trace no source of introduction, as it is away from cultivation.—G. CLARIDGE DRUCE. I do not see to what else this can be referred; but the habit strikes me as being decidedly untypical.—EDWARD S. MARSHALL.

*Urtica dioica*, L., var. [ref. No. 711]. Ditch, Little Kimble, Bucks., v.-c. 24, September 13, 1910.—F. L. FOORD-KELCEY. Plentiful in hedges and ditches about Kimble, Bucks., on chalk soil. Not passing into type, but generally growing quite separately, almost free from sting. Where this was gathered, the hedge on one side of the road had all the nettles like this, on the other side the usual large-leaved kind.—F. L. FOORD-KELCEY. Approaches the var. *angustifolia*, Wimm. and Grab.—G. CLARIDGE DRUCE. Small-leaved; perhaps under var. *microphylla*, Hausmann, 'Fl. Tirol,' but I have not seen his description.—EDWARD S. MARSHALL.

*Ulmus* ——. [ref. No. 4701.] Stansteadbury, Herts., August 1910. A tree with somewhat coarser and rougher leaves than typical *glabra*.—G. CLARIDGE DRUCE. The upper surfaces of the leaves of this, the small-leaved elm, are usually rougher than is the case with typical *U. glabra*, Mill.—C. E. MOSS. ? *U. glabra*, Miller.—A. B. JACKSON.

*Ulmus* ——. Black Notley, Essex, N., September 1910 [ref. No. 4267]. From a beautiful tree very near to where Ray is buried. The leaves to me are rather too small for typical *glabra*.—G. CLARIDGE DRUCE. ? Under *U. glabra* —, Miller. Leaves resembling the Cornish elm in size and texture.—A. B. JACKSON.

*Ulmus* — [ref. No. 4820]. Wadenhoe, Northants., September 1910.—G. CLARIDGE DRUCE. ? Under *U. glabra*. Foliage like that of *U. stricta*, Lindl.—A. B. JACKSON.

*Ulmus* — [ref. No. 4703], with pendulous branches and smaller leaves than type *glabra*. Stansteadbury, Herts., August 1910.—G. CLARIDGE DRUCE. ? Under *U. glabra*, Miller.—A. B. JACKSON.

*Ulmus glabra*, Mill., var. *minor*, Mill.? Wadenhoe, Northants., July 1910. This variety was as common as the type in this part of North Northants.—AUGUSTIN LEY. Under *U. glabra*, Mill. I do not know var. *minor*. The foliage of this is very like the Cornish elm (*U. stricta*, Lindl.). There appear to be two distinct gatherings of this, but they are not distinguished on the labels. Some notes should have been furnished as to height and habit of tree; character of bark, size of bole, &c., which would have made the material more valuable and easier to report upon.—A. B. JACKSON. These are very typical examples of the plant which Mr. Ley in his papers on Elms ('Journ. of Bot.,' 1910) names *Ulmus glabra*, Mill., var. *minor*, Mill. However, I do not agree to its being *U. minor*, Mill. The tree is locally abundant in hedgerows near Cambridge, and occurs in woods in Cambridgeshire and Norfolk. I have also seen the plant in hedgerows in Hampshire, Leicestershire, and Lincolnshire. I believe that the tree, like *Carpinus*, *Fagus*, and some others, is indigenous in south-eastern England. It is apparently widespread on the continent of Europe, judging from its long list of synonyms. In its extreme form it has very small winter buds, and very thin and interlacing twigs which make a delicate tracery against the sky. In this state, it is easily distinguishable at a mere glance. Not only its leaves but its fruits also are smaller than those of *U. glabra*, Mill. It comes into flower near Cambridge some weeks later than *U. glabra*, Mill., and is the last elm to come into flower and foliage. Doubtless some specimens which in past years have been passed by the Club as *U. glabra*, Mill., belong to this small-leaved elm. Mr. A. Henry states (see 'Gard. Chron.,' xlvii., p. 257) that there are only two species (viz. *U. glabra*, Mill., and *U. montana*) of British elms which come true from seed. The mixed seedlings given by our elms have been a puzzle to botanists for more than a hundred years. Martyn

('Gard. and Bot. Dict.,' vol. ii., pt. ii., 1807) mentioned the matter; and the riddle will only be solved by careful experiments conducted after the manner of recent Mendelian workers. It will be remembered by those who have read his paper, that Mr. Henry did not self-pollinate any elms; but this procedure is necessary before it is safe to make far-reaching deductions regarding hybrid plants. Mr. Henry had seeds collected as they fell from the trees; and there is therefore no *proof* that his seedlings were pure, as a pure species will, if pollinated by a hybrid, give seeds which throw mixed seedlings.—C. E. Moss. At Castle Donington in Leicestershire, I have seen a hedgerow tree similar in habit to the one Dr. Moss describes, but its growth is different from that of the Cornish elm, being more pyramidal. On foliage characters alone, however, it seems difficult to separate it.—A. B. JACKSON. Judging from Mr. Jackson's remarks, it would appear that there must be two plants which are known as the Cornish elm; but this small-leaved elm is neither of them.—C. E. Moss. The tree, whatever be its true name, I feel convinced is a distinct species. It occurs also in Hunts., Beds., Bucks., Suffolk, E. and W., Essex, N. and S., &c.—G. CLARIDGE DRUCE.

*Ulmus glabra*, Mill., variety? Fineshade Abbey, Northants.; planted tree; August 8, 1910.—AUGUSTIN LEY. Type *U. glabra* as I understand it. I do not see why var. is added.—A. B. JACKSON. Mr. Jackson's comparison of the foliage of this, the small-leaved elm (*U. sativa*, Mill.), with that of the Cornish elm (*U. minor*, Mill. = *U. stricta*, Lindl.) is interesting; and the two plants caused some confusion in the minds of the earlier botanists. The confusion is due to its not having been realized that Miller made two species of Goodyer's *Ulmus minor*, *folio angusto*, *scabro*.—C. E. Moss.

*Ulmus glabra*, Mill., var. *glandulosa*, Lindley. Terraces of Ludlow Castle, Salop; several large trees; September 5, 1910. This is the *locus classicus* form which Lindley described his variety. Tree twigs and suckers sent.—AUGUSTIN LEY. Yes, agreeing with the specimens so named by Lindley himself in Herb. Univ. Cantab. The upper surface of the sucker-leaves of all our elms are scabrid. C. E. Moss. The leaves of this are minutely glandular beneath, like Lindley's specimens in Herb. Br. Mus. I think correct.—A. B. JACKSON.

*Ulmus vegeta*, Loudon, variety. Foy, Herefordshire, October 3, 1909; planted trees. Differing from usual *U. vegeta* in the perfectly smooth leaves; but agreeing with it in long straight ascending branches.—AUGUSTIN LEY. Loudon described the Huntingdon

elm as a variety, not as a species. I find that the upper surface of the normal leaves of this elm are *always* smooth, or practically so. As in the other glabrous-leaved elms, the sucker-leaves and the leaves produced on shoots formed in the height of summer are scabrid above. It has not, I think, been pointed out before, that immediately after the great fall of elm fruits in 1909, the various glabrous-leaved elms produced summer-shoots, that these shoots produced leaves which were scabrid above, and that these leaves in the autumn dropped from the trees before the normal leaves which had appeared in the spring. Many descriptions of the smoothness and roughness of elm-leaves are misleading through not distinguishing what I have here called sucker-leaves and normal leaves.—C. E. MOSS. Loudon named it *U. glabra*, var. *vegeta*, and Miller named his *minor* as a species (not a var. of *U. glabra*). The latter certainly seems to describe the rank given it by Miller.—G. CLARIDGE DRUCE. Mr. Henry points out to me that the name *U. vegeta* is given by Lindley in 'Hort. Cantab.' (1823). This, however, is a *nomen nudum*; and Lindley states that it is native in North America. In his 'Synopsis' (1829), Lindley does not use the name *vegeta*. Perhaps *U. glabra*, Mill., var. *latifolia*, Lindley (*l.c.*), is the Huntingdon elm, or, at all events, one form of the hybrid *U. glabra*, Mill.  $\times$  *montana*.—C. E. MOSS.

*Ulmus scabra*, Mill.  $\times$ . Bishopswood, Herefordshire (or West Gloucester), September 8, 1910. This was a single tree, clearly spontaneous; with large drooping branches, and narrow, short-petioled, glabrous leaves. Beyond the suggestion of *scabra*  $\times$ , I can suggest no name.—AUGUSTIN LEY. A hybrid of *U. glabra*, Huds. (= *U. scabra*, Mill. = *U. montana*, Stokes) with *U. glabra*, Mill. As Hudson's name appears to be perfectly valid, and as it ante-dates Miller's by six years, another name must be found to replace the latter. *U. procera*, Salisb. 'Prodr.' 391 (1796) = *U. glabra*, Mill.; but perhaps there is an earlier name. *Ulmus vulgaris*, Pallas, given in 'I. K.', in Richter and Gürke's 'Plantæ Europææ,' and in Rouy 'Fl. Fr.' xii. (1910) is a *nomen nudum*.—C. E. MOSS. Looks intermediate between *U. scabra* and *U. glabra*. The foliage is like the Wych Elm in texture, but the leaves favour *U. glabra* in their shape and smoothness. In the Br. Mus. Herb. there are specimens approaching this form labelled *U. montana*, var. *nitida*, Syme.—A. B. JACKSON. I take it (judging from the short description) that *U. montana*, var. *nitida*, Syme, is a hybrid of *U. glabra*, Mill., and *U. montana*; but there appears to be no specimen by Syme.—C. E. MOSS. I failed to find any specimens named *nitida* in Boswell Syme's herbarium, now in the possession of Mr. F. J. Hanbury.—G. CLARIDGE DRUCE.

*Ulmus* ——. [ref. No. 4824]. Wadenhoe, Northants., September 1910. This I suspect to be Lindley's *U. parvifolia*, but am doubtful if it is Miller's *U. minor*, since Miller dwells upon the erect branches which I think refer to *U. stricta*, Lindley. In this tree the branches are by no means erect. I am sorry the specimens are so poor.—G. CLARIDGE DRUCE. I agree that none of Mr. Druce's plants is *U. minor*, Mill.—C. E. MOSS.

Ref. Nos. 4267, 4824, 4707, 4703 (G. C. D.). All these are the plants called *U. glabra*, Mill., var. *minor*, Mill., by Mr. Ley (see my remarks above), unless it be No. 4267, which is perhaps a hybrid of this and the type.—C. E. MOSS.

*Quercus Robur* (= *pedunculata*) × *sessiliflora*. White Wood, Gamlingay, Cambs., May 20 and October 27, 1909. From same tree. (See 'Jour. Bot.' 1910.) A few members asked for this. One or two also asked for *Q. intermedia*, D. Don. I can only refer them to 'Journ. of Bot.' 1910, pp. 5, 6. I regret that Mr. Horwood ('Journ. of Bot.' 1911, p. 55) still uses Don's name. The remark there made by Mr. Horwood that I call "this" *Q. Robur* × *sessiliflora* must be interpreted as referring to the *plant* Mr. Horwood has in mind, and not to Don's *name*.—C. E. MOSS.

*Salix decipiens*, Hoffm. [ref. No. 3467]. Island in the River Orchy, below Dalmally, v.-c. 98 Argyle, July 6, 1910. A bush, about five or six feet high; sex unknown, but probably male. Rev. E. F. Linton tells me that it is new for the vice-county.—EDWARD S. MARSHALL. Male no doubt; undoubted female *S. decipiens* is still a desideratum for Britain.—E. F. LINTON.

*Salix alba* × *pentandra*. In marshy ground at the head of Haweswater, Mardale, Westmoreland, along with abundant *S. pentandra*, L.—AUGUSTIN LEY. This discovery of the Rev. A. Ley's is very interesting. But for a tree by the highroad between Shap and Keld in the adjoining county, of which there are specimens in Mr. C. E. Salmon's herbarium gathered by Mr. J. G. Baker in 1883, and<sup>a</sup> which is almost certainly this hybrid, *S. hexandra*, Ehrh., it is new to the whole north of England.—E. F. LINTON.

*Salix acuminata*, Sm. ? [ref. No. 49203]. Peakirk, Northants., July 1910. I suppose this is *S. cinerea* × *viminalis*, but may it not be *S. stipularis*, Sm. ?—G. CLARIDGE DRUCE. Three different names are here proposed by Mr. Druce for this willow foliage. It may very probably be *S. cinerea* × *viminalis* from a broad-leaved *S. cinerea*, *aquatica* (Sm.) parent; in which case it is not *S. acuminata*, Sm. Still less is it *S. stipularis*, Sm., which has much narrower leaves and quite different stipules.—E. F. LINTON. The leaves

are not acuminate; I believe it to be a *Caprea* × *viminalis* hybrid, fairly intermediate in foliage.—EDWARD S. MARSHALL.

*Salix* ——. [ref. No. 2627]. Tyndrum, Mid Perth, July 1910.—G. CLARIDGE DRUCE. A foliage specimen, from a bush that was apparently not in a healthy condition. *S. cinerea* is the only certain factor; but it is much modified, in the twigs, which are very slender, and in the glabrate narrow leaves. These last, which are crenate, crenate-serrate, or in places *very sharply serrate*, might be accounted for by the combination *S. cinerea* × *purpurea*, were it not for the stipules, which are quite against that simple explanation, and are the stipules of *S. lutescens*. *S. aurita* × *cinerea* × *purpurea* would fit the facts presented, but more than a bit of foliage is needed to name it certainly.—E. F. LINTON. No inflorescence is present; but I feel pretty sure that this is *S. aurita* × *purpurea*.—EDWARD S. MARSHALL. When I gathered it I felt confident that *purpurea* was one of the parents, and hoped it might be *Doniana*, but although *repens* was in the vicinity, I thought perhaps *aurita* or *cinerea* was the other parent. There was only one bush in a swampy place near the railway. Fruits there were none.—G. CLARIDGE DRUCE.

*Populus nigra*, L. Christ Church Meadow, Oxford, May 1910. The leaves from this locality were distributed in 1907 (see 'Rep.' p. 309), when the Rev. E. S. Marshall thought they were more probably *P. canadensis*. This is not the case, as it is true *P. nigra*, L., the European Black Poplar, as Mr. A. Bruce Jackson correctly pointed out. It is now much the rarer tree in Britain (see 'Report.' p. 524).—G. CLARIDGE DRUCE. *P. nigra*, L., is native by stream sides in eastern England. No one who has seen *P. nigra*, with its rough, gnarled, short bole, and its knotted and outstretching branches, could mistake it for the very common place "Black Italian Poplar," which is now so very abundantly planted in this country.—C. E. MOSS. Yes; the shoots are pubescent, which is never the case in the Black Italian Poplar, with which *P. nigra* is sometimes confused.—A. B. JACKSON. This is the English Black Poplar, which is pubescent. The tree of *P. nigra* planted at Upsala by Linnæus is perfectly glabrous, and the glabrous form is the common one on the continent.—A. HENRY. However, there are hairy forms of *P. nigra* on the continent.—C. E. M.

*Listera cordata*, Br. [ref. No. 89]. Loch an Eilan, Westernness, v.-c. 97, June 4, 1910.—MCTAGGART COWAN, Jun.

*Epipactis latifolia*, All. Grass-wood, Grassington, near Skipton, v.-c. 64, August 1908, 9, and 10. Mr. R. A. Rolfe of Kew has seen several of these specimens, all of which he names as above. Grass-wood is rich in Helleborines, *Epipactis latifolia*, All., being

the most abundant species. *Epipactis media*, Fries (Bab.), occurs but is very scarce. *Epipactis atro-rubens* can be found in three stations, but still is not plentiful. There are two or perhaps three states or varieties of *Epipactis atro-rubens*, or possibly hybrids of this and *E. latifolia*, All.—JOHN CRYER. Yes, *Helleborine latifolia*, beautifully prepared specimens. It would be useful to note whether the 'bosses' are smooth, or plicate-rugose—since Fries used these characters to separate *latifolia* from *media*, his *media* having plicate-rugose bosses.—G. CLARIDGE DRUCE. Yes; very typical *Helleborine latifolia*, Druce.—EDWARD S. MARSHALL.

*Epipactis media* (Fries) (Bab.). Raincliffe Woods, Scarborough, v.-c. 62, August 1907, 8, 9, and 10. The Rev. E. S. Marshall, on a specimen submitted to him, writes:—"I think that this comes under Babington's *media*. The leaves are narrower than in our typical *latifolia*; and they decrease rather gradually in size. I cannot separate your specimen from what Babington himself named for me, from Witley, Surrey, in 1889." EDWARD S. MARSHALL, 24 : 8 : 09. Mr. R. A. Rolfe of Kew, to whom I submitted the same specimen, endorses Mr. Marshall's opinion, by attaching his initials thus:—"R. A. R., 1—xi.—1910."—JOHN CRYER. Just Babington's *E. media*, and probably the plant of Fries, *pro minori parte*. In 'Lond. Cat.' ed. 10, I have placed it under *Helleborine latifolia*, in accordance with Freyn's opinion.—EDWARD S. MARSHALL. Yes, I believe so.—C. E. SALMON. Yes, *Helleborine media*, Fries; although, even in these beautifully dried flowers I was unable to see if the bosses were plicate-rugose; but I have seen similar specimens from the locality which show the important character.—G. CLARIDGE DRUCE.

*Herminium Monorchis*, Br. In turf, on slopes of chalky hill, Chequers Park, Bucks., June 25, 1910.—F. L. FOORD-KELCEY.

*Allium Scorodoprasum*, Linn. [ref. No. 53]. Between Donobristea and St. David's, v.-c. 85, August 20, 1910.—MCTAGGART COWAN, Jun.

*Allium vineale*, Linn. (c) *compactum*, Thuill. [ref. No. 88]. St. David's, Fife, v.-c. 85, August 12, 1910.—MCTAGGART COWAN, Jun.

*Allium carinatum*, Linn. [ref. No. 43]. Roadside near Carlowrie Castle, Linlithgowshire, v.-c. 84, August 12, 1910.—MCTAGGART COWAN, Jun.

*Juncus tenuis*, Willd. [ref. No. 3470]. On both sides of a by-road leading from Dalmally Bridge to Craig Farm, v.-c. 98 Argyle,

for nearly 100 yards, July 19, 1910. I found this species in three distinct localities in the Dalmally district; it was associated with other rushes which are undoubted natives, and may have spread from natural stations, though those in which I saw it are artificial.—EDWARD S. MARSHALL.

*Juncus tenuis*, Willd. [ref. No. 84]. Roadside in Glen Ogle, v.-c. 88, September 19, 1910.—McTAGGART COWAN, Jun. Yes, our Member, Mr. P. Ewing, has also sent it me from Ayrshire this year—a N.C.R. for 75.—G. CLARIDGE DRUCE.

*Juncus diffusus*, Hoppe. By the Leechpool, W. Gloucestershire, October 5, 1910.—J. W. WHITE. Sterile; pith continuous. Excellent *J. diffusus* = *effusus* × *inflexus* (*glaucus*, Ehrh.).—EDWARD S. MARSHALL.

*Juncus castaneus*, Sm. [ref. No. 63]. Ben Laoigh, Mid Perth, v.-c. 88, September 3, 1910.—McTAGGART COWAN, Jun.

*Juncoides multiflorum*, Druce, var. *pallescens* (Hoppe), not of Besser. This I take it is the ordinary shade-grown form of *multiflorum* which has been sometimes confused with Besser's plant. In a wood near Crianlarich, M. Perth, this was the prevailing form, July 1910 [ref. No. 2729].—G. CLARIDGE DRUCE. *Juncoides multiflorum*, var. [*Luzula*] *pallescens* (Hoppe), (Crianlarich, Druce; No. 2729). The Vienna Congress decided to retain *Luzula*, instead of the older generic name *Juncoides*. Mr. Druce's plant agrees with the description of *L. multiflora*, *b. pallescens*, Koch, 'Syn.' ed. 2, 847 (*L. pallescens*, Hoppe, non Besser):—"omnia varietatis *a.* [type], sed spicae multo dilutiore colore tinctae." It occurs here and there in Britain, usually, if not always, shade-grown; but it hardly deserves varietal rank, and I strongly suspect that it is a mere *state*, due to situation. The specimens now before me are very weak.—EDWARD S. MARSHALL.

*Damasonium Alisma*, Mill. Hook Common, N. Hants., August 1910, n.c.r. This rare and somewhat erratic species I found in considerable quantity in the above locality. It is not recorded for N. Hants. in Townsend's 'Flora,' ed. 2, and is described as very rare in S. Hants., two localities only being given. Here it also occurred as the forma *terrestris*, Glück, and *f. natans*, Glück.—G. CLARIDGE DRUCE.

*Potamogeton alpinus*, Balb. [ref. No. 4310]. Canal, Odiham, N. Hants. I send these sheets from the locality whence Mr. Arthur Bennett ('Journ. Bot.,' 174, 1907) named a plant of Miss C. E. Palmer's gathering as "*P. alpinus* × *praelongus*?" These specimens, however, seem all to come under the hybrid, nor could

I see *praelongus* in the Canal. Perhaps Mr. Bennett can say if they are identical with Miss Palmer's plants.—G. CLARIDGE DRUCE.

*Potamogeton gramineus*, L., sensu lato. [ref. No. U. 5]. Borough Fen, Northants., July 19, 1910. Very abundant in one drive in the Fens, where this and other species are peculiarly restricted in their distribution.—G. CLARIDGE DRUCE. The use of such ambiguous names was condemned by the Vienna Congress, and serves no good purpose. This plant looks like a form of *P. nitens*, Weber (*heterophyllus* × *perfoliatus*), from the short, shining, rather bright green, and sometimes semi-amplexicaul leaves.—EDWARD S. MARSHALL. *Potamogeton gramineus*, var. *heterophyllus*, Fr.—P. GRAEBNER. Mr. Marshall is not quite consistent, for in the works for which he is responsible he retains many names which are equally ambiguous. Wide and sweeping indeed would be the changes in nomenclature if he pressed his point to the logical conclusion; it will be observed that the continental authorities most in touch with the Vienna *Actes* do not suggest such a course; and indeed deliberately ignore it.—G. CLARIDGE DRUCE.

× *Potamogeton Cooperi*, Fryer (= *P. Jacksoni*, Lees). River Wharfe, near Ilkley, v.-c. 64, York, Mid-west, altitude 230 feet, August 1910. Named by Mr. Arthur Bennett. So far as I have observed, no other species occur along with it in the locality. It is fairly abundant in the river from Ilkley downwards, but flowers are only sparingly produced. Mr. Bennett and Mr. F. A. Lees inform me that it is the same plant as occurs in a small pool on Linton Common, near Wetherby, liable to be overflowed when the River Wharfe is in flood. It was first found there by Mr. J. Jackson, about the year 1880. See 'Bot. Record Club Rep.,' pp. 150-1, 1882 (1880).—A. WILSON. Correct.—P. GRAEBNER. Rightly named.—ARTHUR BENNETT.

*Potamogeton pusillus*, L. [ref. No. 4311]. Peakirk, Northants., September 1910. Plentiful and fruiting freely in one of the numerous fen ditches.—G. CLARIDGE DRUCE.

*Potamogeton* ——. Very brackish ditch, Brograve Level, Norfolk, August 1909.—C. E. MOSS. *P. pusillus*, var. *tenuissimus*, Mert. and Koch.—A. BENNETT. This is very like my sheet of Mr. Salmon's *P. rutilus* from Rye, E. Sussex, which unfortunately is in flower only. I have no description of that species handy; the fruit here is smaller and more regularly orbicular-ovate than in ordinary *P. pusillus*, and very unlike that of *P. trichoides*.—EDWARD S. MARSHALL. No ripe fruit on my example, but foliage indicates *pusillus*. Habit reminds one of *P. rutilus*; but the leaf-apex of that is more acuminate.—C. E. SALMON. *Potamogeton*

*pusillus*, L., var. *tenuissimus*, M. and K.—P. GRAEBNER. These Brograve plants have a much more flattened stem than typical *P. pusillus*. The form was quite new to me, and Mr. Fryer did not know it.—C. E. MOSS. This is very like a plant I gathered near Eye, and conspicuous by its flattened stem. Mr. Fryer thought it was new.—G. CLARIDGE DRUCE.

*Potamogeton interruptus*, Kit. Brograve Level, Norfolk. Very brackish ditch, August 1909.—C. E. MOSS. *P. pectinatus*, L., var. *tenuifolius*, M. and K.—P. GRAEBNER.

*Zannichellia gibberosa*, Reichb. Morden Common, Surrey, August 21, 1910. Examples collected at the locality recorded by me in 'Journ. of Botany,' 1910, p. 77.—C. E. BRITTON. A few only of the lower fruits on my specimen show the character.—G. CLARIDGE DRUCE. Not so characteristic as my Hascombe (W. Surrey) sheet, which has many of the fruits muricate on *both* edges; apparently this only occurs when they are nearly or quite ripe.—EDWARD S. MARSHALL.

*Zostera marina*, Linn. (b) *stenophylla*, Asch. and Good. [ref. No. 69]. Aberlady Bay, Haddington, v.-c. 82, August 13, 1910. McTAGGART COWAN, Jun. Correct, I believe.—EDWARD S. MARSHALL.

*Zostera nana*, Roth. [ref. No. 447]. Aberlady Bay, Haddington, v.-c. 82, August 13, 1910.—McTAGGART COWAN, Jun. Right.—EDWARD S. MARSHALL. Yes, apparently new to Haddington, v.-c. 82.—C. E. SALMON. Correct.—P. GRAEBNER.

*Scirpus Tabernaemontanus*, Gmel. Marsh Gibbon, Bucks., September 1910, Ambrosden, Oxon., August 1910. Both new county records and in stations (although in two counties) not more than 4 miles apart, and both in the marshy district on the Oxford Clay.—G. CLARIDGE DRUCE.

*Cladium Mariscus*, Br. Holme Moor, near Wiveliscombe, v. c. 5 S. Somerset, August 22, 1910. New for the vice-county. Plentiful over about an acre.—EDWARD S. MARSHALL.

*Carex divisa*, Huds. Meadow near tidal river. By the Wye near Beachley, W. Glos., v.-c. 34, September 15, 1910.—W. A. SHOOLBRED.

*C. leporina*, L., Rhizoma non repens; utriculi longe rostrati marginibus alati!—G. KÜENTHAL. I cannot at all understand this determination; our plant has no perceptible resemblance to *C. leporina (ovalis, Good.)*, from which the inflorescence and tough,

wiry, *creeping* rootstock distinguish it at a glance. "Aliquando bonus dormitat Homerus." It rooted extensively, and was very difficult to dig up. Gathered too late in the season, of course. I carefully compared it, fresh, with Mr. Shoolbred's herbarium-specimens. Can a plant of *C. leporina* collected by mistake have been sent to Herr Kükenthal?—EDWARD S. MARSHALL.

*Carex divisa*, L., var. ? In trenches, New Romney, Kent, in great abundance, May 1910. Matches some British so-called *chaetophylla*. Is *C. divisa*, forma *rivularis* (Schkuhr) teste Kükenthal.—G. CLARIDGE DRUCE. Just matches the Seaford plant sent out by Mr. H. S. Thompson as *C. chaetophylla*, Steudel = *C. divisa*, var. *chaetophylla*, Daveau. 'Rivularis' would be an extremely inappropriate name for any plant found in this Kentish station.—EDWARD S. MARSHALL.

*Carex Pairaei*, Schultz. [ref. No. 2924]. Loddon Bridge, Berks. Passed as correct by the Pfarrer Kükenthal.—G. CLARIDGE DRUCE. *C. echinata*, Murr. (= *C. Pairaei*).—G. KÜKENTHAL. Agrees with F. Schultz's own specimens, of which there are excellent examples in the Br. Mus. Herb.—A. B. JACKSON. As I pointed out ('Journ. Bot.' 1907, p. 364), the identification of *C. Pairaei*, F. Schultz, with *C. muricata*, L., is based not only upon the evidence of the Linnean herbarium-specimen, but also upon the short description in 'Species Plantarum,' which mentions the *spreading* fruit, an essential point of difference from *C. contigua*, Hoppe, which is the *muricata* of British authors, Koch, and others. The combined force of these facts has, I believe, been underestimated by Messrs. Rendle and Britten, as well as by Mr. Druce. A more valid objection to the use of the Linnean name at all, because of the previously existing confusion, is fairly tenable; but I do not think that it need be dropped, as there is no real ambiguity in the original authority's specimen and description. The Berkshire specimen which I have received through the Club is rather poor and undeveloped; but the best-grown spike agrees very closely, though it is less mature, with the shorter ones of my *C. Pairaei* (ref. No. 2550) from Pyle, v. c. 41 Glamorgan. I see nothing on which to separate it varietally. *C. contigua* varies much in habit and in the size of the fruit, which is sometimes nearly as large as in *C. vulpina*, and in the case of one of my own gatherings misled so very careful a critic as Mr. Beeby.—EDWARD S. MARSHALL. In my opinion the specific character which separates *C. Pairaei* from *C. muricata*, L. (*contigua*, Hoppe) is the size and shape of the fruit; but I will take another opportunity of discussing *Carex muricata*, L.—G. CLARIDGE DRUCE.

*Carex elongata*, L. [ref. No. 2921]. Near Hurst, Berks,

June 1910. From the locality given in my 'Flora of Berkshire.'—G. CLARIDGE DRUCE. Yes.—G. KÜKENTHAL.

[*Carex aquatilis* × *Goodenowii*; ref. No. 3474]. Plentiful in a bog on the east side of Ben More, v.-c. 88 Mid Perth, at nearly 3,000 feet, July 16, 1910.—EDWARD S. MARSHALL. Might I ask by what characters the presence of *C. aquatilis* is evidenced in these specimens?—G. CLARIDGE DRUCE. *C. rigida* × *aquatilis* potius quam *Goodenoughii* × *aquatilis*.—G. KÜKENTHAL. Mr. Druce has asked me where *aquatilis* comes in; and he is certainly right in questioning this. In this bog, besides the present plant, only *C. aquatilis*, *C. Goodenowii*, and *C. inflata* were observed. No. 3474 exactly matches my No. 2760, from a swamp near the head of the White Water, Clova, Forfarshire, at 2,300 feet (July 1904), which Herr Kükenthal confirmed as *C. Goodenowii* × *rigida*, "tending more towards *C. Goodenowii*." I have no doubt whatever that *C. Goodenowii* is the female and the predominant parent; I too hastily assumed that it must be the offspring of the two allied species with which it occurs.—EDWARD S. MARSHALL.

*Carex tomentosa*, L. Marston Measey, N. Wilts. June 1910. Noticed by Mrs. Davey and myself scattered over a considerable area of a meadow in its classical locality where it was discovered by Mr. Teesdale in 1799 ('Trans. Linn. Soc.' v. p. 369), but where it has been since said to be extinct. It is evidently somewhat uncertain in its appearance; as, in a field near Fairford, Gloucester E., where some few years ago it was very plentiful, I now can find no trace of it.—G. CLARIDGE DRUCE. Yes.—G. KÜKENTHAL.

*Carex* *Æderi*, Retz., var. *ødocarpa*, and (*C. flava*, *minor*, Towns.). Corriegills, Arran, v.-c. 100, July 1910.—V. S. TRAVIS. *C. Æderi*, Retz., forma *ødocarpa*, Anderss.—G. KÜKENTHAL. I am not fully convinced that this plant is more than a state of *C. flava*. It may be that the continental form is not quite the same as the British. There is no reason why such varieties or states as this should not be endemic. There is a scientific interest in closely studying, from the standpoint of variation and evolution, forms of this nature.—C. E. MOSS. Yes, but I think this variety is nearer *flava* than *Æderi*, although Kükenthal puts it under the latter. This form and *C. lepidocarpa* are by far the commoner segregates of *C. flava* in Britain. But I think a large series of specimens will show that *flava*, *lepidocarpa* and *ødocarpa* are not so distinct as some authors would lead us to believe. True *C. Æderi*, although varying much in size, is usually easily distinguished; and I prefer to keep it as a distinct species.—G. CLARIDGE DRUCE. Yes; a dwarf state of the variety. I dissent from Dr. Moss's and Mr. Druce's suggestions, as the result of many years' experience. Type-*flava* is

most rare, in this country; and var. *edocarpa* gradually shades off towards good *C. Oederi*, Retz.—EDWARD S. MARSHALL.

*C. hirta*, var. *hirtaeformis*, Pers. Cropstone, Leicestershire, July 28, 1910.—A. R. HORWOOD. Yes.—G. KÜKENTHAL. Very near *hirtaeformis*, though slightly hairy. I have, however, traced every gradation from type to *hirtaeformis* in a W. Sussex locality; and the latter (at least as regards Britain) is purely and simply a *state*, due to growing in water or very wet ground; the drier the soil, the greater the amount of pubescence.—EDWARD S. MARSHALL. The earliest varietal name for this plant appears to be *C. hirta*, var. *sublaevis*, Hornem., 'Fl. Dan.' t. 1711, 1821. Persoon described it as a species. Kükenthal ('Cyp. Caric.' p. 751) reduces it to a form, but I have retained it as a variety in my 'List.'—G. CLARIDGE DRUCE.

*Carex inflata*, Huds., forma. In old river bed of River Aire, near Skipton, Yorkshire, v.-c. 64, July 15, 1910. Growing in water about 12 inches in depth in considerable abundance along with *Carex acutiformis*, Ehrh., *C. Goodenowii*, Gay., *C. hirta*, L., and typical *C. inflata*, Huds. I looked for but did not find *C. vesicaria*, L.—JOHN CRYER. Typical *C. rostrata*, Stokes.—G. KÜKENTHAL. A pretty narrow-leaved small-fruited state, for which I cannot find a varietal name.—C. E. SALMON. A frequent form northwards, with narrow leaves and neat, slender, crowded spikelets. I do not know of any special name for this, though probably it may have received one from some Continental author. Mr. Cryer's specimens (mine, at least) are rather dark-spiked, and might perhaps be placed under var. *brunnescens*, And.—EDWARD S. MARSHALL.

*Carex inflata* × *vesicaria* [ref. No. 3476]. Near Dalmally, v.-c. 98 Argyle, June 30, 1910. The parents grow together in great abundance in the lower part of Strath Orchy, towards the head of Loch Awe, and hybrids are frequently produced. This gathering is very fairly intermediate; a specimen has been passed as correct by Rev. E. F. Linton.—EDWARD S. MARSHALL. *C. rostrata* × *vesicaria*.—G. KÜKENTHAL. Yes, there is little doubt that these excellent specimens are the hybrid indicated × *C. Pannewitziana*, Figg.—G. CLARIDGE DRUCE.

*Carex vesicaria*, L., forma? [ref. No. 3480]. In the lower part of Strath Orchy, near Dalmally (towards the head of Loch Awe), v.-c. 98 Argyle, June 30, 1910. *C. vesicaria* is remarkably constant in this neighbourhood; the female spikelets being broader and shorter than in the present plant, which grew among a large quantity of the normal form, and by its appearance suggested hybridity with *C. inflata*, Huds. (*ampullacea*, Good.). Nuts are

freely produced; but, on comparing them with those of ordinary *C. vesicaria*, I found them to be smaller and somewhat differently shaped. I am still not free from doubt; but Rev. E. F. Linton writes that it seems thoroughly fertile, and thinks it only a form of *C. vesicaria*.—EDWARD S. MARSHALL. *C. vesicaria*, L., forma utriculus oblongo-lanceolatis.—G. KÜKENTHAL.

*Carex inflata*, Huds. × *vesicaria*, L. [ref. No. 2740]. Banks of the Teith, Callander, Perth W., July 1910. Growing with both parents, and a good intermediate. = × *C. Pannerwitziana*, Figg.—G. CLARIDGE DRUCE. *C. rostrata* × *vesicaria*.—G. KÜKENTHAL. I feel sure that Mr. Druce is right.—EDWARD S. MARSHALL.

*Spartina Townsendi*, H. and J. Groves. Salt marshes between the "Sturt" Pond, Milford-on-Sea, and Hurst Castle, South Hants., September 1910.—J. COSMO MELVILL. "Yes; I had the *Spartina Townsendii* from the same locality from Professor F. W. Oliver not long ago."—OTTO STAPF. Dr. Stapf informs me that this interesting plant has recently been found on the opposite French coast.—C. E. MOSS. Correct.—E. HACKEL.

*Suvastana odorata*, Scribner (*Hierochloë borealis*, R. and S.). Kirkcudbright coast, very rare, May 23, 1910. So very restricted here as to make one doubt its indigenuity; but there were no alien species near. I think this is the first time specimens have been distributed from this locality. It is so rare that I dare not take roots.—G. CLARIDGE DRUCE. Correct.—E. HACKEL.

*Phleum pratense*, L., a bracteated variety. The Cairns, Prescott, S. Lancashire, v.-c. 59, August 1910.—REV. M. TOOKEY. A variety with a long bract at base of panicle, bract variable in length, sometimes nearly as long as panicle. Is this an abnormality, or some recognized variety?—W. G. TRAVIS. *Phleum pratense*, lusus (not var.) *bracteatum*, A. Br. in Aschers. and Graebn. 'Syn.' ii. 142.—E. HACKEL.

*Mibora verna*, Desv. Wall-top, near St. Breladc's, April 1910. A rather unusual locality for this local species. I brought a tuft home, and it continued flowering in my garden till the end of August.—G. CLARIDGE DRUCE. Correct.—E. HACKEL.

*Agrostis alba*, L., var. Sandy shore, Kildonan, Arran, v.-c. 100, July 1910.—W. G. TRAVIS. Apparently var. *maritima*, Meyer, or between that and var. *coarctata*, Hoffm. I question, however, whether this and several other so-called varieties are more than accidental states, due to situation.—EDWARD S. MARSHALL. *A. alba*, var. *condensata*, Hackel, med., var. *coarctata* auct. plur. non *A. coarctata*, Erh.—E. HACKEL.

*Apera Spica-venti*, Beauv. Brooklands Race-course, Weybridge, Surrey, July 14, 1910.—EDWARD FOORD-KELCEY. Correct.—E. HACKEL.

*Apera Spica-venti*, Beauv. Sandy fields, near Ham Conmore, Surrey, July 18, 1910.—A. B. JACKSON and W. B. TURRILL. Correct.—E. HACKEL.

*Corynephorus canescens*, Beauv. Sandy shore, Aberafan, v.-c. 41, July 2, 1910. A supply of this rare grass may be acceptable to some of our members. There is some danger to the locality from building operations.—H. J. RIDDELSDELL. Correct.—E. HACKEL.

*Deschampsia caespitosa*, ? var. Runston. Is this var. *argentea*, S. F. Gray?—W. A. SHOOLBRED. I believe this comes under *D. caespitosa*, var. (or forma) *argentea*, S. F. Gray, but from its smaller florets it is probably var. *parviflora*, Richter = *Aira parviflora*, Thuill. See 'Fl. Berks.', p. 566.—G. CLARIDGE DRUCE. This beautiful plant is, no doubt, var. *argentea*, Gray, (*pallida*, Koch). It occurs not infrequently, but differs from type only in the colouring, and is probably an albinism.—EDWARD S. MARSHALL. *D. caespitosa*,  $\beta$ . *pallida* (n. nom.), *Aira caespitosa*,  $\beta$ . *pallida*, Koch, Syn. *A. caespitosa*, var. *altissima*, Aschers and Graeb. Syn.—E. HACKEL.

*Cynodon Dactylon*, Pers. Penzance, West Cornwall, v.-c. 1, September 13, 1910. I was glad to see this plant plentiful on the shingle, and also on the road-side banks, where it formed the turf for a considerable distance.—C. C. VIGURS.

*Dactylis glomerata*, L., v. *congesta*, Gren. and Godr. ? Drumadon Point, Arran, v.-c. 100, July 1910.—W. G. TRAVIS. Yes; the var. *abbreviata*, Bernh., of my 'List.'—G. CLARIDGE DRUCE. This name is not in Gren. and Godron's 'Flora.' Only a starved state (f. *macra*) of *D. glomerata*; var. *congesta* 'Coss. and Germ. Fl. Paris' may be a similar state, but it is said to be red-coloured throughout.—E. HACKEL. Just like the Great Orme's Head plant which has been so called; but both of them are certainly extreme, starved states of dry, rocky coast hills. If they really represent Grenier and Godron's variety, it is valueless, and should be expunged from our lists.—EDWARD S. MARSHALL.

*Poa annua*, Linn. (b) *supina*, Gaud. [ref. No. 61]. (1) Ben Laoigh, (2) Ben Lawers, (3) Come Clodsan, v.-c. 88, September 3rd, 5th, 12th, 1910. I found this plant on most of the Mid-Perthshire hills. It almost invariably is found growing either

with its roots in the running water of small springs or in rock ledges upon which water is dripping from the cliffs above. In the latter place it assumes a larger and more robust form. It seems frequently not to be tinged with purple.—MCTAGGART COWAN, Jun. Correct.—E. HACKEL. The flowers are not sufficiently tinged with purplish or violet brown. I have a poor opinion of this variety, which occurs in high alpine bogs and rills, but shades off gradually, as is illustrated by these specimens.—EDWARD S. MARSHALL.

*Poa bulbosa*, L. Littlestone-on-Sea, E. Kent, May 1910.—G. CLARIDGE DRUCE. Correct.—E. HACKEL.

*Poa alpina*, Linn. [ref. No. 92]. Ben Lawers, Mid Perth, v.-c. 88, September 5, 1910.—MCTAGGART COWAN, Jun.

*Poa glauca*, Vahl. [ref. No. 76]. Between Ben More and Am Benein, v.-c. 88. September 9, 1910.—MCTAGGART COWAN, Jun.

*Poa glauca*, Vahl. [ref. No. 3484]. Ben More, v.-c. 88 Mid Perth; local, at about 3,000 feet, July 16, 1910.—EDWARD S. MARSHALL. With regard to the above plants of Messrs. Cowan and Marshall, Dr. Hackel writes:—" *P. caesia*, Sm., I am not quite sure of the identity of *P. glauca*, Vahl., with *P. caesia*, Sm., I therefore prefer the latter name."

*Poa nemoralis*, Linn., var. *angustifolia*, Parn. [ref. No. 85]. Old wall near Killin, Mid Perth, v.-c. 88, September 1910.—MCTAGGART COWAN, Jun. The uppermost knot should be near the panicle, which is not the case in my plants. Very weak, and evidently starved; certainly not worth a special name.—EDWARD S. MARSHALL. *P. nemoralis vulgaris*, Gaud.—E. HACKEL.

*Poa pratensis*, L., var. *subcærulea* (Sm.). On the Portsmouth road between Cobham and Esher, Surrey, June 5, 1910.—A. B. JACKSON and J. FRASER. Yes.—G. CLARIDGE DRUCE. Leaves too long and narrow; only tending towards var. *subcærulea*, I believe.—EDWARD S. MARSHALL. Correct.—E. HACKEL.

*Poa pratensis*, L., var. *subcærulea* (Sm.) [ref. No. 4201]. Coast of Ballyvaughan, Co. Clare, June 1909. A typical form of the coast. Prof. Hackel assents to the name. He tells me that the earliest name which conforms to the Vienna Rules seems to be *P. pratensis*, var. *minor*, Wahl., 'Fl. Upsala,' 33, 1820, but *P. pratensis*, var. *humilis*, Griseb., is very near to it,

but of later date.—G. CLARIDGE DRUCE. Very good indeed; a small form of it.—EDWARD S. MARSHALL.

*Glyceria plicata*, Fries. [ref. No. U. 4]. Burwell Fen (Bank of Wicken Lode), Cambridge, June 1909.—G. CLARIDGE DRUCE. Correct.—E. HACKEL. Lower sheaths only a little plicate, in my larger specimen; no anthers present, but the characters and habit suggest a small *G. pedicellata*, Towns. (*fluitans* × *plicata*). The smaller specimen is very glaucous; it has smooth sheaths, and a shorter, more branched inflorescence. Spikelets shorter; glumes more distinctly three-toothed. Rather too far advanced; perhaps only *G. declinata*, Bréb.—EDWARD S. MARSHALL.

*Festuca rubra*, L., var. *fallax*, Hackel. Coleman Road, Leicester, August 19, 1910.—A. R. HORWOOD. *Festuca rubra*, L., var. *vulgaris*, Gaud. The specimens show distinct runners.—E. HACKEL.

*Bromus arvensis*, L. Waste ground, Avonmouth, W. Gloucester, July 7, 1910.—J. W. WHITE. Yes.—OTTO STAPF. Correct.—E. HACKEL.

*Bromus inermis*, Leyss. Coombe, Surrey, June 27, 1910. This grass is quite naturalised at Coombe (near Kingston), where it is very abundant all over a roadside strip of waste now enclosed within posts and chains. It is a tall-growing grass, reaching a height of five feet or so.—C. E. BRITTON. Correct.—A. B. JACKSON and E. HACKEL.

*Bromus unioloides*, H. B. K. Ballast mounds, Witton Brook, Northwich, v.-c. 58, September 1910.—W. HODGE. Correct.—E. HACKEL.

*Bromus patulus*, M. and K. In a field of sainfoin, Milbury Heath, W. Gloucester, July 30, 1910.—J. W. WHITE. *Bromus arvensis*.—OTTO STAPF and E. HACKEL.

*Lolium perenne*, L., forma. Hall Road, v.-c. 59 S. Lancs., June 1910.—W. G. TRAVIS. *L. perenne*, var. *compressum*, Sibth., but not extreme.—G. C. DRUCE. I have seen this, better marked, in two or three English stations, and at Giessen, Hesse; it is a monstrosity, not a variety, and I think that it has been named, in its more extreme condition, forma *cristata*.—EDWARD S. MARSHALL. *Lolium perenne*, var. *cristatum*, Doell, 'Fl.' v. Bad. 116.—E. HACKEL.

*Agropyron repens*, Beauv., var. *arvense*, Reichb. = var. *muticum*, Johns. = (*Triticum repens*, var. *vulgare*, Doell. Growing on the South-west coast of Walney Island, Lancashire, with *A. junceum*, Beauv., and *A. repens*, Beauv., var. *Leersianum*, Gray, July 26, 1910.—JOHN CRYER. Correct.—E. HACKEL.

*Lepturus filiformis*, Trin. Salt marsh, Wallasey Pool, v.-c. 58, July 1910.—W. HODGE. Correct.—E. HACKEL.

*Hordeum marinum*, Huds. Coast, Roggiett, Mon., v.-c. 35, September 14, 1910.—W. A. SHOOLBRED. Yes, a new county record.—G. C. DRUCE. *Hordeum maritimum*, With. (1787) = *H. marinum*, Huds. (1778).—E. HACKEL.

*Elymus arenarius*, L. Sandy shore, Port Talbot, v.-c. 41, July 2, 1910. A very rare plant in Glamorganshire, but here there are several good patches of it. As it occurs in the dock area, it might be open to suspicion of introduction: but it has been recorded from other parts of the county, and at Port Talbot it looks natural enough. I think the record may stand for v.-c. 41.—H. J. RIDDELSDELL.

*Woodsia alpina*, Gray. Loch na Larige, Mid Perth, September 21, 1910. Very abundant this year, and the best specimens I have ever seen.—MCTAGGART COWAN, Jun.

*Cystopteris montana*, Desv. In several places on Meall nan Tigearn, near Dalmally, v.-c. 98 Argyle, July 5, 1910.—EDWARD S. MARSHALL.

*Lastrea rigida*, Presl. Twisleton Scars, about two miles south and west of Chapel-le-Dale, Yorkshire, v.-c. 64, August 2, 1910. A very fine colony, in abundance, amongst the rocks and scree for about a mile.—JOHN CRYER.

*Lastrea spinulosa* (Presl.) Cockerham Moss, v.-c. 60, July 1910; Burton Moss, v.-c. 59, July 1909. This mossland form has a facies differing from the usual form of wet woodlands. I should like to know which of the four forms of the 'London Catalogue' it comes under.—J. A. WHELDON. Dr. Stansfield writes me that they are correctly named; but the narrower fronds "slightly approach *uliginosa*."—G. CLARIDGE DRUCE.

*Equisetum sylvaticum*, Linn., b. *capillare*, Hoffm. [ref. No. 55]. Arniston, Gorebridge, v.-c. 83, June 2, 1910.—MCTAGGART

COWAN, Jun. Yes.—G. CLARIDGE DRUCE. This variety is, according to description, twice the height of the specimen sent.—H. J. RIDDELSDELL. Very good *capillare*. The size is of no importance; nor does Hoffmann mention it in his original diagnosis ('Deutschland Flora,' 1795, part ii., p. 3).—EDWARD S. MARSHALL.

*Azolla caroliniana*, Willd. Sunbury, Middlesex, August 1910. This hydropterid is abundant on a drain running from the direction of the water-works into the Thames. Wooden supports placed for the purpose of strengthening the sides of the drain prevent the *Azolla* from being carried into the river; nevertheless, as the plant produces organs of reproduction at this locality, it is quite likely to be found in some still part of the adjacent river. This species is quite naturalised in Middlesex, where, for years past, it has been known to grow at White Webbs, near Enfield.—C. E. BRITTON. Yes, but it was recorded by Mr. Odell from Pindon, Middlesex, in 'Science Gossip' for 1883. This year our member, Mr. W. A. Harford, sent it me from Norfolk; and Miss Ridley has also gathered it in the Thames, near Henley. In the Landes district of France it is a more aggressive species; and, covering the water as it does with its dense growth, it is very inimical to other aquatics.—G. CLARIDGE DRUCE.

*Chara fragilis*, Desv., var. *delicatula*, Braun. Pool in an old clay-pit between Rangeworthy and Hall End, West Gloucester, July 16, 1910.—JAMES W. WHITE. This is a form which might be called *Chara fragilis*, Desv., sub-sp. *delicatula*, forma *capillacea*.—H. and J. GROVES.

*Chara contraria*, Kuetz. In the abandoned canal near Dunkerton, North Somerset, June 25, 1910. Gathered in company with Mr. Cedric Bucknall. New to the county of Somerset. Two forms of the plant are represented here; one, from shallow water in full exposure to sun, is compact and full of fruit; the other, from a deep shaded pool, is diffuse, dark tinted and barren.—JAMES W. WHITE. This is *Chara vulgaris*, L., a somewhat "longebracteata" form. The larger and greener specimens are young, and the other smaller and more encrusted ones are older and have ripe fruit.—H. and J. GROVES.

---

Next year, which commences another volume of the "Reports," it is proposed to introduce a new feature, which will give experts additional time to make their criticisms, and by which they will have all the details before them, and which at the same time will save much correspondence relating to the issuing of the Report.

Therefore the Secretary suggests that with the return Parcels shall be included the printed Report, which will consist only of the yearly Review and a full list of the Plants, with the explanatory notes supplied by the Contributor.

The following year (1912) will consist of 3 parts, (1) the Review for 1912, (2) the Criticisms of the experts on the plants distributed in 1911, and (3) the list of plants sent in 1912.

The distributor for 1911 is J. WHELDON, ESQ., F.L.S.,

60 HORNBY ROAD,

WALTON, LIVERPOOL.

---

#### ADDITIONS AND CORRECTIONS.

- p. 497. *Viola epipsila* has been found in June by the Secretary in several places near Widdicombe, S. Devon, and at Burgfield, Berks, where he noticed the plant 18 years ago.
- p. 539. *Barbarea*. Fruiting specimens show that this plant is *B. verna*, Asch.
- p. 550. *Geranium modestum*. The colour of the anthers is misprinted green, it should be *yellow*. The specimens sent being without flowers are somewhat doubtfully determinable.
- p. 600. *Carex divisa*. Doubtless all the specimens distributed are this species.















