## CURTIS'S

## Botanical Magazine;

## OR, <br> FLOWER-GARDEN DISPLAYED:

IN WHICH

The most Ornamental Foreign Plants, cultivated in the Open Ground, the Green-House, and the Stove, are accurately represented in their natural Colours.

> TO WHich are added,

Their Names, Class, Order, Generic and Specific Characters, according to the celebrated Linneus; their Places of Growth, and Times of Flowering;
Together with the most approved Methods of Culture.

## A WORK

Intended for the Use of such Ladies, Gentlemen, and Gardeners, as wish to become scientifically acquainted with the Plants they cultivate.

## By JOHN SIMS, M.D.

Fellow of the Royal and Linnean Societies.

## VOL XLIV.

Being the Second of the New Series.

> The Flowers, which grace their native beds,
> Awhile put forth their blushing heads,
> But, e'er the close of parting day,
> They wither, shrink, and die away:
> But these, which mimic skill hath made, Nor scorched by suns, nor killed by shade, Shall blush with less inconstant hue,
> Which art at pleasure can renew.
> LLoyd.

## 30ndon:

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## ( 1860 )

## Stachytarpheta Jamaicensis. Jamaica <br> Bastard-Vervain.

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Class and Order.

## Diandria Monogynia.

## Generic Character.

Cal. tubulosus, 4 -dentatus. Cor. hypocrateriformis, inæqualis, 5 -fida, curva. Stam. 4: 2 sterilia. Sem. 9.

## Specific Character and Synonyms.

Stachytarpheta jamaicensis; foliis oblongo-ovatís sursum dentato-serratis basi elongato-integerrimis, bracteis ovatis calyce brevioribus.
Stachytarpheta jamaicensis; foliis oblongo-ovatis dentatoserratis glabris, ramis hirtis, bracteis ovatis calyce brevioribus. Vahl Enum. 1. p. 206. Hort. Kew. ed. alt. 1. p. 46. excluso synonymo Salisburii.

Verbena jamaicensis; diandra, spicis longissimis carnosis nudis, foliis spathulato-ovatis serratis, caule hirto. Jacq. Obs. 4. p. 6. t. 85. Syst. Veg. 66. Willd. Sp. Pl. 1. p. 115. Mart. Mill. Dict. n. 3 .

Verbena folio subrotundo serrato, flore ceruleo. Sloane Hist. t. 171. f. 1.
Valerianelloides. Boerh. Lugd.alt. 2. p. 270.

This plant is altogether more robust and of lower growth than Stachytarpheta urticifolia, No. 1848, its leaves are more fleshy, more coarsely and bluntly sawed, and quite entire from a little below the middle, with their base gradually elongated into a footstalk. The stems and branches, we observe, vary with respect to hairiness; the pubescence in the plant from which our drawing was taken was hardly visible to the naked eye. We have not seen any ciliæ at the base of
the leaf, a character first added in the 13th edition of the Systema Vegetabilium, by Gmelin, and continued both in Reichard's and Wilidenow's editions of the Species Plantarum.

That our plant is the same as that described and figured by Jacquin, in his Observations, above quoted, we see no reason to doubt; at the same time, the figure of Stachytarpheta dichotoma, in the Flora Peruviana, hardly differs in any other respect than the greater hairiness of the stem and branches.

This plant, though shrubby, seldom lives more than two or three years. Is propagated by cuttings. Being a native of the West-Indies, it requires to be kept in the the stove, during the winter at least. Communicated by Messrs. Loddiges and Sons. Flowers most part of the summer.


## ( 1861 )

## Stevia hyssopifolia. Hyssop-leaved

## Stevia.

## 

Class and Order.
Syngenesia Polygamia Aqualis.
Generic Character.
Recept. nudum. Pappus paleaceus. Calyx cylindraceus, ex simplici foliorum serie.

Specific Character and Synonyms.
Stevia hyssopifolia; foliis oblongo-ovatis integerrimis, corymbis patentibus, pappo aristato corollam æquante. Stevia hyssopifolia. Herbar. Banks.

This species of Stevia is different from any that has been noticed by Professor Cavanilles. It was brought from Spain by Lady Holland, some years ago, and our drawing was taken at Holland-House. A specimen of the same plant was sent to Sir Joseph Banks, and is preserved in his Herbarium, under the title which we have adopted.

We suppose it to be a native of Mexico, and, as well as Stevia Eupatoria, may be considered as a hardy herbaceous perennial. Flowers in August and September.


# 1862 ) 

## Phyllanthus turbinatus. Shining-leaved Phyllanthus.

Class and Order.
Monascia Monapelphia.

## Generic Character.

Masc. Cal. 6-partitus. Cor. 0. Filam. columnare. Anth. 3.
Fem. Cal. 6-partitus. Cor. 0. Nect margo 12-angulatus. Styli 3. Caps. 3-cocca.

## Specific Character.

Phyllanthus turbinatus; foliis simplicibus orbiculato-ovatis lucidis, floribus axillaribus; masculis turbinatis nutantibus.

Descr. Stem shrubby. Branches angular, alternate, zig-zag. Leaves simple, alternate, on very short petioles, round-oval, smooth and shining bright green on the upper surface ; minutely tomentose, and pale, on the under. Stipules two, small, acute. Peduncles axillary, both aggregate and solitary, nodding. Male flower. Calyx top-shaped; limb six-cleft, inflected. Filament columnar, capitate; anthers three, oblong, affixed to the side of the column. Female. Calyx rotate; limb six-cleft; segments rounded, spreading. Germen globular, obscurely three-cornered. Styles three, spreading, with bifid extremities,

Our drawing was taken some years ago, at the collection of the right honourable Charles Greville, at Paddington. But, as at that time we had not an opportunity of seeing the original, our description was taken from a recent speci-
men, sent us in July last, by Robert Barclay, Esq. of Berry-Hill, who raised it from seeds received from China.

The leaves in the specimen were not near so large as in Mr. Grevilee's plant, from which our drawing was taken. The male flowers, for the most part, grew two, or three, from the same axil, and the female flowers solitary, contrary to what is seen in the drawing; but sometimes both a male and female flower grew from the same axil.

In Dr. Kgenig's manuscripts, in the possession of Sir Joseph Banks, we find the description of a species of Phyllanthus, with the name of turbinatus affixed to it. It is a native of the East-Indies, and if not the same species as the one now treating of, is very nearly allied to it.

Fig. 1. Represents a perpendicular section of the male flower, shewing the inflection of the segments of the calyx and the situation of the anthers.

Fig. 2. The columnar filament with two of the three anthers.
Fig. 3. A front view of a female flower, shewing the spreading segments of the calyx, the three styles, and bifid stigmas.


## ( 1863 )

# Anemone pratensis (ß.) obsoleta. Paleflowered Meadow Pasque-flower. 

## $\boldsymbol{*} * * * * * * * * * * * * * * * * ~$

## Class and Order.

Polyandria Polygynia.

## Generic Character.

Cal. 0. Petala 6-9. Sem. plura.
Specific Character and Synonyms.
** Pulsatillæ, pedunculo involucrato, seminibus caudatis.
Anemone pratensis; petalis apice reflexis, foliis bipinnatis. Willd. Sp. Pl. 2. p. 1274. Hort. Kev. ed. alt. 3. p. 337.
(a.) flore nigricante, foliis tenuiter dissectis.

Anemone pratensis. Flor. Dan. t. 611.
Pulsatilla flore minore nigricante. Bauh. Pin. 177. Helo. Pulsat. p. 66. t. 17.
( $\beta$.) flore majore pallido, pinnularum lobis latioribus aristatis.
Pulatilla flore clauso obsoleto, petalis reflexis. Helwing Pulsat. p. 65. t. 11.

Anemone Pulsatilla, the Common Pulsatilla, or Pasqueflower, varies considerably in size and in colour. Anemone pratensis is distinguished by having smaller flowers, of a very deep purple colour approaching to black, the petals of which never fully expand, but are reflected at the tips only. The leaves of the latter kind are described as being more finely cut. There is a figure of this in Helwing's Monograph on the Pulsatilla, which appears to us to be better than that in the Flora Danica.

Our plant resembles the above in the form but not in the colour of the flower, which is likewise larger. The segment
of the leafiets are considerably wider, and are terminated with a bristle or arista. We do not find that it is mentioned in any modern author/ nor by any of the older Botanists; except by Helwing, whose figure, above quoted, we think, is undoubtedly intended for the same. He received it from Breynius, who represents it as being very common, though not noticed by any preceding author; and says, it differs from the black-flowered species, more especially, in the larger size and paler colour of the flower, and its larger and broader leaves.
From the more compounded as well as wider leaves, composing the involucre, perhaps we might, with propriety, have considered this a distinct species from pratensis; but recollecting how very much Anemone Pulsatilla varies in regard to the size of the flowers and leaves, especially in cultivation, we thought it safer to rank it as a variety only of pratensis.
A hardy perennial. Flowers in May. Communicated by Mr. Biggs, Curator of the Botanic Garden at Cambridge; who informed us, that it has been several years in the garden, but that it never opened its blossoms more than an represented in our figure.



## Chelone major. Lyons's Chelone.



Class and Order.
Didynamia Angiospermia.

## Generic Character.

Cal. 5-partitus. Cor ringens; ventricosa. Rudimentum filamenti quinti inter suprema stamina, glabrum. Caps. 2locularis.

## Specific Character.

Chelone major; foliis petiolatis patentibus cordato-acuminatis subtus tomentosis, spicis axillaribus terminalibusque sæpius aggregatis.

This undescribed species of Chelone was introduced by the late Mr. Lyons, from Carolina. It differs from Chelone obliqua in its greater size, longer horizontal petioles, broader and more cordate leaves, tomentose underneath, and peachblossom coloured flowers; but more especially in the number of spikes, which grow from the axils of the leaves as well as at the extremities of the branches, and are frequently crowded several together. The rudiment of the fifth filament is not half the length of the others, and perfectly smooth; in obliqua we have sometimes found them hairy at the base.

It is considered as a hardy perennial, and may be propagated by dividing its roots. Flowers in August and September. Communicated by Mr. Lambert, from Boyton, and Mr. Wilinan Kent, of Clapton.


## Nerium coronarium Broad-leated

Rosebay.

## *******************

Class and Order.
Pentandria Monogynia.

## Generic Character.

Contorta. Folliculi 2, erecti. Sem. plumosa. Cor. tubus terminatus corona lacera.

## Specific Character and Synonyms.

Nerium coronarium; foliis ellipticis, pedunculis ex dichotomia ramorum geminis bifloris. Hort. Kew. ed. $1^{\text {ma. }} 1$. p. 297. Willd. Sp. Pl. 1. p. 1236. Mart. Mill. Dict. n. 8, Pers. Syn. 1. p. 269.

Nerium coronarium; foliis lanceolatis, caule dichotomo, pedunculis unifloris, ex ramorum dichotomia geminis. Jacq. Collect. 1. p. 138. Ic. Rar. 1. t. 52.
Tabernemontana coronatia; foliis ellipticis, pedunculis ex dichotomia ramorum geminis. Hort. Kew. ed. alt. 2. p. 72.

Jasminum zeylanicum, folio oblongo, flore albo pleno odoratissimo. Burm. Zeyl. p. 129. t. 59.
Flos Manilhanus. Rumph. Amb. 4. p. 87. t. 39.
Nandi-Ervatam major. Hort. Malab. 2. p. 105. t. 54.
Nerium divaricatum. Willd. Sp. Pl. 1. p. 1236. ex auctoritate Dryandri in Horto Kewensi.
Apocynum zeylanicum indicum frutescens Nerii flore candidissimo. Herm. Parad. p. 40.

In the first edition of Arton's Hortus Kewensis, Dr. Solander associated this plant with the genus Nerium; but noted
noted in his manuscript account of it preserved in the Banksian library, that he was led to do this from its habit and sweet-scented flowers, though he could not detect any crown at the end of the tube, and was consequently uncertain whether it properly belonged to this genus or not.

Since the publication of the Hortus Kewensis, this fine shrub has been universally arranged with Nerium, till the publication of the last edition of this work; where we find it removed to Tabenemontana. This appears to have been done upon the information of Dr. Buchanan, that it was really a species of that genus. The authority is certainly good; but as at present all the genera of the natural family of Contorta are not satisfactorily settled; we are jealous that in a revision of the order it will come to be again removed from Tabernemontana. We think it best therefore, for the present, to retain the name by which it is already known to botanists in general.

Native of the East-Indies. Requires the protection of the stove. Cultivated in 1770 by Mr. James Gordon. Communicated by John Waleer, Esq. of Arno's Grove.

## N. 1866



Mesembryanthemum depressum. Depressed

## Tongue Fig-Marigold.

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Class and Order.
Icosandria Pentagynia.

## Generic Character.

Cal. 5-fidus. Petala numerosa, linearia, basi cohærentia. Caps. carnosa infera, polysperma.

## Specific Character and Synonyms.

Mesembryanthemum depressum; subacaule, foliis linguæformibus obtusis humi valde adpressis pallide viridibus. Haworth Misc. Nat. p. 34. ejusd. Succul. p. 221. Hort. Kerv. ed. alt. 3. p. 219.
Mesembryanthemum folio linguiformi angustiore. Hort. Eltham, 237. t. 184. f. 226.

Mr. Haworth has for many years paid great attention to this extensive genus, and his names and characters have been almost entirely adopted in the new editions of the Hortus Kewensis. We cannot but suspect, however, that this gentleman has made species of what, in many cases, had been better considered as varieties only. But as cultivators can alone determine, by careful observation, what are permanently distinct species, and as Mr. Haworth has himself been a considerable cultivator of these plants, we cannot do better, perhaps, at present, than to adhere to his names. We find, however, a great difficulty, in the present instance, in determining to which our present plant belongs. Mr. George Graves, to whom we are indebted for the communication of this plant, and who possesses a large number
of the species, is persuaded that it was propagated from an individual, named longum, by Mr. Haworth himself; but if it be really his longum, then the length of the peduncle can afford no character: for he expressly says, the peduncle is longer than the calyz : and in the figures which he, doubtingly indeed, quotes, they are represented as much longer. We consider the figure of Dillenius, quoted as a synonym of depressum, as pretty certainly belonging to our plant, though the flower is not quite sessile, as in our figure, and we have been thence induced to determine its name.
-We have, however, strong suspicions, that nearly the whole section will be found, if propagated by seed, to run into one another, which will bring us back to rank them all as varieties of linguiforme, as Linneus has done.

We are informed by Mr. George Graves, that it is not yery shy of flowering in the summer time, and that the blossoms expand in the forenoon, if the sun shine; but in cloudy weather, not at all. The leaves are remarkably brittle, and, when viewed through a lens, are observed to be covered with minute pellucid dots. Flowers in July and August.


# Hypericum olympicum (ß.) latifolium. Broad-leaved Olympian St. John's Wort. 

## 

## Class and Order.

## Polyadelphia Polyandria.

## Generic Character.

Cal. 5-partitus. Petala 5. Filamenta multa, in quinque phalanges basi connata.

## Specific Character and Synonyms.

Hypericum olympicum ; trigynum, calycinis foliolis inæqualibus ovato-acuminatis integerrimis, staminibus corolla brevioribus, foliis elliptico-lanceolatis sessilibus pellucidopunctatis. Smith Exot. Bot. 2. p. 71. t. 96.
Hypericum olympicum; floribus trigynis, calicibus acutis, staminibus corolla brevioribus, caule fruticoso. Sp. Pl . 1102. Reich. 3. p. 592. Hort. Cliff. 380. Mill. Icon. t. 151. f. 1. Mart. Mill. Dict. n. 14.

Hypericum olympicum. Willd. Sp. Pl. 3. p. 1446. Hort. Kew. ed. alt. 4. p. 422.
Hypericum Montis Olympi. Wheeler Itin. 229. Dillen. Elth. 182. t. 151. fig. 183. Raj. Hist. 1017.
Hypericum orientale flore magno. Tournef. Cor. 19.
(a.) foliis angustioribus, floribus paucis subcongestis.
( $\beta$.) foliis latioribus floribus plurimis subdichotome corymbosis.

This is a very handsome species of Hypericum ; it more usually bears fewer flowers, and, except one or two, on very short footstalks, and leaves, sometimes, considerably smaller than those of the common St. John's Wort. But we have
seen specimens with leaves of every intermediate size ; so that the difference is probably the mere effect of cultivation.

Native of the Levant. Sufficiently hardy, in a warm sheltered situation, to survive our winters out of doors; but, as it is liable to be destroyed by severe cold, it is proper to preserve some plants under a frame. Propagated by parting the roots in the autumn ; or, if raised from seed, which are rarely ripened with us, Miller directs that they should be sown in light earth soon after they are ripe, and placed under a frame during the winter. In the spring the plants will appear, and, when fit to remove, may be planted in a warm border.

Flowers in July till September. Cultivated in ChelseaGarden, in 1706. Communicated by Messrs. Whitley, Brame, and Milne.
N.1868.


# Melaleuca thymifolia, Thyme-leaved Melaleuca. 

***************** Class and Order.

Polyadelphia Icosandria.

## Generic Character.

Staminum phalanges 5, petalis oppositæ, elongatæ. Anth. incumbentes. Caps. 3 -locularis, polysperma, connata et inclusa calycis tubo incrassato basi adnato (ramo). Brown.

## Specific Character and Synonyms.

Melaleuca thymifolia; foliis oppositis lanceolatis enervibus, spicis paucifloris, phalangibus polyandris: unguibus intus medium usque ramosis. Br. in Hort. Kew. ed. alt. 4. p. 414.

Melaleuca thymifolia; foliis oppositis elliptico-lanceolatis enerviis, ramulis floriferis lateralibus brevissimis paucifloris, filamentis medium usque ramosis. Smith in Linn. Trans. 3. p. 278. Exotic Bot. 1. p. 69. t.36. Willd. Sp. Pl. 3. p. 1432.
Melaleuca gnidiæfolia. Venten. Malmais. 4.
Melaleuca coronata. Bot. Repos. 278.
Metrosideros calycina; foliis oppositis enerviis punctatis lanceolatis, calycibus persistentibus. Cav. Ic. 4. p. 20. t. 336. f. 2. in fructu.

The Melaleuca thymifolia was first recorded by our friend Sir James Edward Smith, in the third volume of the Transactions of the Linnean Society. It is an elegant little shrub, with delicate branches, which take an elegant form. The flowers are not produced in great abundance, but are scattered
scattered here and there in small spikes over the whole plant, and from their singular form and fine purple colour, varying much in intensity in different specimens, make a very pleasing appearance. The leaves, which also vary considerably in width, are studded all over with minute pellucid glands, containing an aromatic essential oil.

A greenhouse shrub. Native of New South-Wales, where it was first collected by the Right Hon. Sir Joseph Banks, Bart. K. B. Flowers all the summer. Propagated by cuttings. Introduced in 1792, by Mr. John Fairbairn. Communicated by Mr. Joseph Knight, of the Exotic Nursery, King's-Road.


## Cineraria sibirica. Siberinn Cineraria.

> ******************

## Class and Order.

Syngenesia Polygamia Super̀flua.

## Generic Character.

Recept. nudum. Pappus simplex. Calyx simplex, polyphyllus, æqualis.

## Specific Character and Synonyms.

Cineraria sibirica; racemo simplici, foliis cordatis obtusis denticulatis lævibus, caule simplicissimo monophyllo. Spec. Pl. 1242. Willd. 3. p. 2079. Waldst. et Kitaib. Hung. 1. p. 15. t. 16. Hort. Kew. alt. 5. p. 73.
Cineraria sibirica. Picot-Lapeyrouse Flor. Pyren. 1.p. 5. t.7.?

Othonna foliis cordatis, caule subnudo simplicissimo. Hort. Upsal. 273.
Jacobeastrum cacaliæ folio Gmelini. Amm. Ruth. n. 221. t. 24.

Solidago foliis cordatis, subrotundis, dentatis, petiolatis, Gmel. Sib. 2. p. 169.
Jacobea orientalis cacaliæ folio. Tourn. Cor. 37.
Jacobeoides Ari crenato folio. Vaill. Act. 1730. p. 30.

A hardy perennial, usually growing from a foot to three feet high, in one simple undivided stem, fluted and smooth. In cultivation sometimes reaches the height of a man, The flowers grow at the extremity of the stem in a compact thyrse.

The plant figured by M. Picot Lapeyrouse, in his Flora of the Pyrenees, under this name, is probably a different species, having leaves much more glaucous, not sharply crenate,
crenate, but merely repand, and the florets of the Radius quite entire.

Native of Siberia and Hungary. Requires no particular management. Flowers from June to August. Introduced in 1784, by John Bell, Esq. Communicated by Messrs. Loddiges and Sons.

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## Class and Order.

## Diandria Monogynia.

## Generic Character.

Cal. simplex vel duplex. Corolla irregularis vel subregularis. Caps. 2-valvis 2-locularis : dissepimentum valvis contrarium : retinaculis seminum uncinulatis.

## Specific Character and Synonyms.

*** calyce simplici, corollis bilabiatis: labiis divisis.
Justicis picta; racemis axillaribus terminalibusque, floribus verticillatis, foliis ellipticis pictis. Vahl Enum. 1. p. 128. Symb. Bot. 2. p. 14. Hort. Kew. alt. 1. p. 37.
Justicis picta. Sp. Pl. 21. Willd. 1. p. 86. Lour. Cochin. p. 24? Mart. Mill. Dict. n. 28.

Tsjude-maram. Rheede Malab. 6. p. 111. t. 60.
Folium bracteatum. Rumpli. Amb. 4. p. 73. t. 30.
Periclymenum indicum foliis maculatis latioribus laurinis. Burm. Zeyl. p. 186?
(a.) alba ; humilior, foliis macula alba sinuata pictis.
( $\beta$.) lurido-sanguinea ; excelsior, foliis lurido-sanguincis venosissimis.
( $\gamma$.) ignea; foliis macula suaverubente et quasi ignea pictis.

At first sight the present plant will hardly be acknowledged as a variety of Justicia picta, which has been so long known in our stoves, but whoever will take the trouble to examine the figure in the Hortus Malabaricus, and the description of Rumphius, compared with that of Vahl, will perceive the difficulty of fixing upon any true specific characters, which
may serve to distinguish them. The marking in the leaf, it is evident, is not at all constant. Rumphius describes two sorts; the first he calls white, from the white marking along' the midrib; the other the red, taller, with larger leaves five or six inches long and three broad, of a lively brown (late fusca) on the under surface mixed with green on the upper; the flowers of both are alike, except that those of the red sort are larger. Of this last kind, he says, there is still a variety, which some consider as a third species, with leaves in shape and size like those of the red, but marked in the middle with a broad spot of a bright red, or, as it were, fiery colour.

The specimen of Justicia picta, preserved in the Banksian Herbarium, is very similar to our present plant, but has a broad spot near the middle of the leaf, which does not appear to us to have been white; and Dr. Solander's description makes no mention of the white marking, which, we suppose, is too subject to vary to afford any specific distinction.

Whether Loureiro's plant be really the picta, is rendered doubtful, by his describing the upper lip of the corolla as quite entire and the lower lip as bifid.

The native country of Justicia picta is somewhat uncertain ; for, although said to be a native of the East-Indies, both Rumphius and Rheede speak of it as cultivated in the gardens, but not indigenous, either on the Malabar coast or in Amboyna; and the circumstance of its never perfecting seeds there, renders it probable that it has been brought from a different climate. Rheede expressly says, that it was imported from China or the Manillas.

The common variety was culivated before the year 1780, by the late Dr. John Fothergile, in his garden at Upton. Our plant was kindly communicated by the Right Hon. the Marchioness of Bath, from Long-Leet garden, in May last ; and may certainly be considered as a very great rarity.

## ( 1871 )

Seriatula quinquerolia. Five-leaved SAw-wort.
> *********************

## Class and Order.

Syngenesia Polygamia Equalis.

## Generic Character.

Recept. paleaceum s. villosum. Cal. imbricatus, eylindraceus, inermis. Pappus plumosus s. dentatus.

## Specific Character and Synonyms.

Serratula quinquefolia; foliis serratis impari-pinnatis subbijugis: pinnis confluentibus, pedunculis unifloris, squamis calycinis interioribus elongatis coloratis. Willd. Sp. Pl. 3. p. 1639. Hort. Kew. ed. alt. 4. p. 472. Marsch. a Bieb. Flor. Taur.-Cauc. 2. p. 264.

The Serratula quinquefolia, in habit and general appearance, resembles very much Serratula tinctoria; but is of considerably larger growth ; the leaves are pinnate, consisting generally of two pair of leaflets and an odd one, which is much larger than the others; the flowers are not only larger, but are more conspicuous from the great length of the styles; but it differs more especially in the elongation of the internal scales of the calyx, which make an imperfect scarious radius to the capitulum.

We believe, no figure has ever been published of this species; which, we are told by Mr. Arton, was introduced by Joseph Bush, Esq. from the North of Persia, in 1804. The author of the Flora Taurico-Caucasica says, it is frequent in the woods of Caucasus, from which country seeds of it were received by Messrs. Loddiges and Sons, by whom the plant from which our drawing was taken was communicated some years ago.

A hardy perennial. Flowers in August. Propagated by seeds or by parting its roots.
N. 1871 .


## N. 1872.




## Eugenia elliptica. Round-fruited

## Eugenia.

******************

## Class and Order.

Icosandria Monogynia.

## Generic Character.

Cal. 4-partitus, superus. Petala A. Bacea 1-locularis, 1 -sperma.

## Specific Character and Synonyms.

Eugenia elliptica; foliis ellipticis acuminatis, flotibus paniculatis, calyce repando, bacca globosa. Smith in Act Soc. Linn. 3. p. 281.
Eugenia elliptica; foliis integerrimis ellipticis acuminatis, pedunculis paniculatis axillaribus et terminalibus, calyce repando, fructibus globosis. Willd. Sp. Pl. 2. p. 966. Hort. Kew. ed. alt. 3. p. 188.
Metrosideros floribunda. Vent. Malmais. 75.

Eugenia elliptica has a fruit, in some respect, different from the rest of the genus; the seed is surrounded by a softish pulp, which rises so high as to conceal the persistent calyx within its hollow crown. The style and stamens are also persistent.

The flowers are small, white, and not at all shewy ; but, when the fruit is ripe, the shrub makes a lively appearance. The berries, which are nearly round, are, upon their first ripening, perfectly white, but they soon acquire a delicate tinge of carmine, especially at the parts most exposed to the light. The taste of the berry is acid without aroma; but the leaves are aromatic.

Native of New South-Wales, from whence it was introduced into the Kew Garden, by the Right Hon. Sir Josepp Banks, Bart. about the year 1790.

Requires

Requires the protection of the greenhouse, and as the flowers are produced in May, June, and July, and the fruit. does not ripen till the following spring, it is, perhaps, necessary to keep it in a temperature raised by artificial heat, through the winter, to bring its berries to maturity.

Propagated by cuttings. Communicated by Messrs. Whirley, Brame, and Milne, from their very extensive collection at Fulham, with ripe fruit in March 1815, and in flower in August 1816.

Fig. 1. Represents a perpendicular section of the berry.
Fig. 2. A front view of the crown of the fruit, shewing the persistent calyx and stamens.

Fig. 3. Sstamens separated from the ripe fruit.
Fig. 4. A portion of the panicle of flowers.


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## Class and Order.

Pentandria Monogynia.

## Generic Character.

Contorta. Folliculi 2, erecti. Sem. nuda. Cor. infundibuliformis.

## Specific Character and Synonym.

Ansonis salicifolia; caule glabro stricto, panicula terminali multifloro, foliis lineari-lanceolatis glabris.
Amsonia salicifolia; caule lævigato, foliis lineari-lanceolatis. utrinque acutis glaberrimis. Pursh Fl. Am. Sept. p. 184.

The broad-leaved species of Amsonia was first discovered in Virginia, by Clayton, who gave it its present name. But Linneus united it to Tabernemontana; from which genus. it differs, in having seed-vessels and seeds not immersed in pulp.

Walter and Michaux restored Amsonia as a genus, and this has been since adopted by all Botanists. Only one species appears to have been known to Linnzus, a second was added by Walter, and our present plant makes a third, which was first brought to this country by the late Mr. Lyons, and was inserted by Pursh in his Flora of NorthAmerica, above quoted.

It is considered as a hardy perennial, but being a native of South-Carolina and Georgia, should have a warm situation and some protection from very severe frost. All the Amsonias like a light soil, but in dry weather require frequent watering. They seldom produce seeds with us, and are therefore propagated by offsets, which are but sparingly produced. Flowers in June and July. Communicated by Mr. Wilham Kent, of Clapton.


# Solandra grandiflora. Great-flowered 

 Solandra.********************

> Class and Order.

Pentandria Monogynia.

## Generic Character.

Cal. rumpens. Cor. clavato-infundibuliformis, maxima. Bacca 4-locularis, polysperma.

> Specific Name and Synonyms.

Solandra grandiflora. Scoartz Act. Holm. 1787. p. 300. t. 11. Flor. Ind. Occid. 1. p. 387. t. 9. Willd. Sp. Pl. 1. p. 936. Hort. Kew. alt. 1. p. 388. Jacq. Hort. Schonbr. 1. p. 21. t. 45. Salisb. in Act. Soc. Lin. 99. t. 6. Mart. Mill. Dict. Meen Exot. Bot. t. 6 .
Datura sarmentosa. Lamarck Ill. n. 2295.
Stramonium scandens flore luteo. Plum. Ic. ined.

Solandra grandiflora with us is a fine climbing stove shrub, with large shining laurel-like leaves, and magnificent flower, of a cream-colour and agreeable scent. In Jamaica; where it is indigenous, the flowers are of a pale flesh-colour, and the shrub is called the Peach-blossomed Trumpet-flower: cultivated in the stove at Vienna, according to Jacquin ; the inside of the tube is tinged with purple, but the flower is otherwise white; from whence it would appear, that it requires a greater intensity of light to bring out the red colour. So the fruit, which is a conical white berry the size of a hen's egg, is filled with a red pulp in the West-Indies, which was white at Vienna ; with us we have not heard that it has ever produced any ripe fruit, except perhaps in Mr. Salisbury's garden at Mill-Hill, who describes the pulp as green.

The name of Solandra was given to this plant by Prof. Swartz, in honour of the late Dr. Solander, pupil of Linneus, the intimate friend and fellow-traveller of Sir Joseph Banks, in his voyage to the South-Seas. Athough the author of very few publications, Dr. Solander was celebrated for his knowledge of natural history throughout Europe, and every Botanist, who has had the inestimable privilege of using the library of his right honourable friend and patron, has been indebted to his labours: a source from whence was even derived almost the whole of the information respecting this plant, given by Swartz, in the Swedish Transactions above referred to. He was born at Abo, in Finland, and died in London, at the age of forty six, in the year 1782.
There seems to have been difficulty in deciding on the natural affinities of this plant ; Swartz thought it nearly allied to Portlandia, Solander to Besleria; Jussieu and Lamarck make it a species of Datura; and Salisbury, contrary to Swartz, allows it to have the fruit of Datura, not granting any weight to the circumstance of its being a succulent berry instead of a dry capsule. At the same time he asserts, that the leaves being constantly alternate, never becoming opposite in the flowering branches, the nature of the inflorescence, the irregularity of the corolla, with the æstivation of the limb, are points by which it recedes so far from the Solance, that he proposes to erect it into a distinct order, together with Brunsfelsia and Crescentia.
In Jamaica, it grows from out of old trees and the fissurea of rocks. Is propagated by cuttings. Flowers at uncertain periods of the year. Mr. Salisbury fixes on January and February ; the Hortus Kewensis on March. Our specimen was kindly communicated by Mr. Aiton, in July last, from the Royal Gardens at Kew.


*****************

> Class and Order.

Octandria Monogynia.

## Generic Character.

Cal. 0. Cor. 4 -fida, marcescens, stamina includens. Drupa 1-sperma.

## Specific Charaeter and Synomyms.

Daphese altaica; floribus terminalibus sessilibus subquinis, foliis ovato-lanceolatis glabris.
Daphne altaica; floribus fasciculatis terminalibus sessilibus, foliis oblongo-ovatis glabris. Pall. Ross. 1. p. 53. t. 35.
Daphne altaica; floribus terminalibus subsessilibus, foliis oppositis oblongo-lanceolatis obtusis basi angustatis glabris. Willd. Sp. Pl. 2. p. 422.

A pretty shrub, of low stature, with reddish-brown bark; leaves alternate, oblong, broader towards the upper extremity and narrowed downwards, of a somewhat glancous and yellowish-green, the latter colour prevailing most while they are young. Flowers in a sessile umbel, gencrally five together, white, with the laciniæ revolute; we did not observe that they had any scent. Anthers in two rows upon very short filaments within the tube of the corolla. Germen oval: stigma sessile, shining, flattened-orbicular.

Native of the Altaic Alps, where it was discovered by M. Patrin, a friend of Pallas, to whom he communicated dried specimens, from which the figure and description in the Flora Rossica were apparently taken. Willdenow, who acknowledges to have seen the plant only in a dry state, has erroneously added to the character that it has opposite leaves, though not only in 'Pallas's figure are they represented alternate, but in his description are said to be always so.

Flowers in May and June. Communicated by Mr. Biges, curator of the Botanic Garden at Cambridge, and the Worthy successor of Donn.

## Dianthus Campestris (\%.) Field Pink.

******************** Class and Order. Decandria Digynia.

Generic Character.
Cal. cylindricus, 1-phyllus: basi squamis 4 acutus. Petala 5, unguiculata. Caps. cylindrica, 1 -locularis.

## Specific Character and Synonyms.

Dianthus campestris; floribus solitariis, squamis calycinis ovatis acutis brevibus (subsenis) foliis subulatis cauleque paniculato subhirsutis. Marschall a Bieb. Fl. Taur. Cauc. 1. p. 326.
(a.) caule basi simplici pubescenti-scabro, squamis calycinis subaristatis.
(ß.) caule basi ramoso subdichotomo minus pubescente.
( $\gamma$ ) caule basi ramoso flaccido foliisque hirsutis.

In our plant, the four scales at the base of the calyx were short, but the two accessory ones were longer, so as nearly to conceal the internal ones. The external or accessory scales are described in the Flora Taurico-Caucasica, as being the last pair of leaves, become smaller and sometimes applied so close to the calyx, as to resemble a third pair of scales : in our specimen they were not only shorter, but were dilated at the base and coloured like the calyx.

We are not certain whether we have fixed upon the proper variety. The most remarkable features of the species, are the creeping stolones with hairy leaves; the intensity of colour in the petals, and their singular indentation, not towards the tip only, as in many species of Dianthus, but along the margins of the whole limb.

A hardy perennial, propagated by offsets. Native of Tauria. Flowers in July and August. Communicated by Messrs. Whitley, Brame, and Milee, of the Fulham Nursery, who raised it from Russian seeds, given them by Mr. Hunneman two years ago.


# Pelargonium rapaceum, var. $\beta$. luteum, Yellow Fumitory-flowered 

## Crane's-Bill.

## *******************

## Class and Order.

Monadelphia Pentandria.

## Generic Character.

Cal. 5-partitus: lacinia suprema desinente in tubulum capillarem, nectariferum, secus pedunculum decurrentem. Cor. 5-petala, irregularis. Filamenta 10, inæqualia, quorum 3-6 sterilia. Arilli 5 , monospermi, aristati, ad basin receptaculi rostrati : aristis spiralibus introrsum barbatis.

## Specific Character and Synonyms.

Pelargonium rapaceum; acaule, umbella composita, foliis bipinnatis villosis, petalis superioribus refractis : inferioribus conniventibus. Hort. Kew. ed. alt. 4. p. 164.
Pelargoniem rapaceum; acaule, umbella composita, foliis decomposite laciniatis villosis. Hort. Kew. ed. 1 ma. 2. p. 418. Willd. Sp. Pl. 3. p. 649.

Geranicm rapaceum. Syst. Nat. ed. Gmel. p. 1141.
Geranium prolificum, a. Sp. Pl. 949.
(a.) incarnatum ; corollis purpurascentibus.

Pelargonium rapaceum; acaule, radice rapacea multicipite, foliis bipinnatis villosis incisis, filamentis decem, quinque fertilibus. Jacq. Ic. Rar. 3. t. 510. Collect. A. p. 190.

Geranium selinum. Bot. Repos. 239.
Geranium africanum myrthidis folio flore albicante, radice rapacea. Commel. Hort. p. 125, t. 63.
( $\beta$.) luteum; corollis flavescentibus, petalis superioribus minus refractis impunctatis.

In this species the three lowermost petals are connivent, and the two upper ones more or less bent back, which
gives the flower somewhat the appearance of that of some species of Fumitory. This variety differs from the one figured in the Botanist's Repository and by Jacquin, not only in the colour of the corolla, which is altogether of a pale yellow, but in the upper petals being but slightly reflected and having no spoting at their base. Perhaps it may be a distinct species, but it is not the flavum of Hortus Kewensis, under which name we received it.

All the tuberous-rooted species are rather tender, and are best preserved in the dry stove.

Native of the Cape of Good-Hope. Communicated by Thomas Edwards, Esq. F.L.S. Paradise-Row, Stockwell,


# Pentstemon campanulata. Bell-flowered 

## Pentstemon.

## 

Class and Order.
Didynamia Angiospermia.

## Generic Character.

Cal. 5-partitus. Cor. bilabiata, ventricosa. Rudimentum filamenti quinti superne barbatum. Caps. bilocularis.

## Specific Character and Synonyms.

Pentstemon campanulata; caule glabro, filamento sterili superne barbato, foliis lanceolatis acuminatis omnibus argute serratis, calycis laciniis lineari-lanceolatis. Hort. Kew. alt. 4. p. 8.
Pentstemon campanulata; caule glabro, filamento sterili superne barbato, foliis lanceolatis acuminatis omnibus argute serratis. Willd. Sp. Pl. 3. p.228. Jacq. Hort. Scheenbr. 3. 6. 59. t. 362.
Chelone campanuloides; foliis oppositis sessilibus acuminatis profunde serratis, corollis campanulatis purpureis. Bot. Repos. 40.

Descr. Stem upright, very obtusely angular. Leaves smooth, opposite, sharply serrate; lower ones linear-lanceolate: upper ones broader at the base, half-stem-embracing, acuminate. Bractes opposite, leaf-like, pubescent. Flowers in a verticillate raceme looking one way. Peduncles opposite, generally bearing two flowers on pedicles longer than the peduncles. Calycine lacinia lanceolate, acute. Corolla bell-shaped, with bilabiate limb: upper lip two-lobed: lower lip three-lobed. Stamens four, with curved filaments: sterile rudiment straight, reflected at the apex, bearded with
long white hairs towards the top. Anthers two-lobed, purple. Germen ovate, acute, bilocular: style the length of the stamens : stigma truncated.

A hardy perennial. Native of Mexico. Flowers throughout the summer. Introduced in 1794, by the Right Hon. Sir Joseph Banks, Bart. K. B.

## ADDENDUM.

No. 1864. Chelone major. Add the following Synonym.
Chelone lyoni; glabra, ramosa, folis petiolatis cordatoovatis, spicis terminalibus dentifloris. Pursh Fl. Am. Sept. Suppl.. p. 737.


Pancratium distichum. Fan-leaved
Pancratium.
***************

## Class and Order.

Hexandria Monogysia.

## Generic Character.

Petala 6: nectario 12-fido. Stam. nectario imposita.

## Specific Character.

Pancratium distichum; spatha subsexflora, nectarii infundibuliformis dentibus interstamineis irregularibus laciniis revolutis tubum æquantibus, foliis lanceolato-loratis striatis distichis.

Our drawing of this plant was taken in August 1814, at - Messrs. Lee and Kennedy's, where it went by the name of mexicanum, with which species it in no respect corresponds, if the figure quoted from Dilienius is a representation of the one intended.

In September last, the Hon. Wiliam Herbert kindly transmitted to us a specimen and particular description of the same species, which he considers to be hitherto undescribed. The bulb came from Rio de Janeiro, but, perhaps, may not be a native of that country. Mr. Herbert considers it as most nearly allied to caribaum and rotatum.

The leaves grow exactly distichwise, spreading out like a fan, in which character it differs from all the known species of Pancratium; for even in rotatum, the leaves are not so regularly distich as in this, on which account we have given it the name distichum. The lower leaves are seventeen inches long, the upper ones gradually diminish; they are linear-lanceolate or thong-like, of a tough consistence, from an inch to an inch and half wide at the broadest part, which is rather nearer the point than the base, where it is somewhat contrasted. They differ from the leaves of littorale, says Mr. Herbert, in being much narrower, of a more uniform width, regular fan-shaped arrangement, paler colour, and less fleshy substance : from those of rotatum, in being:
of a much harder texture, less flesliy, paler coloured, more strongly nerved, sharper and not at all spathula-shaped at the point, more regularly distich, and much less erect. From those of caribæum they differ in being harder, thicker, longer, and narrower, in having their greatest breadth nearer the point, and in being arranged regularly distich wise, instead of clustering irregularly. The tube of the corolla is the same length as the laciniæ of the limb, each from four to four and a half inches long. The nectarium or crown is more funnel-shaped than in rotatum, and of smaller dimensions; it is unequally toothed, and is not extended along the filaments, which are twice its length, considering them as beginning from the bottom of the nectarium, though connate with it; or equal in length, if considered as beginning from its margin.

Pancratium distichum is much hardier than rotatum, and not nearly so liable to suffer from wet on the leaves, which is so fatal to the latter; but otherwise, Mr. Herbert informs us, that the bulb of rotatum is not apt to perish after flowering (see No. 827) nor does it produce abundance of offsets, a plant in his possession having produced but one in four years, in which space it has blossomed several times; but when the mother bulb by accident perishes, it may, as often happens in similar circumstances, throw out a numerous offspring.

The honourable William Herbert having long been a careful observer of these plants under cultivation, we pay re highest respect to his opinion ; and, for the foregoing observations, we acknowledge ourselves entirely indebted to him.

Whether the comparative length of the tube with the limb of the corolla be a character altogether to be depended upon, our figure even may lead to some doubt, for though in the perfect blossom these are equal in length, yet in the faded flower, the tube appears to have shot out to a greater length; in which state it may have approached too near, perhaps, to Pancratium litorale, a. a variety not published in the Botanical Magazine.


# Phlox acuminata. Cross-leaved Palox, or- 

## Lychnidea.

## *******************

Class and Order.

Pentandria Monogynia.

## Generic Character.

Cor. hypocrateriformis. Filam. inæqualia. Stigma 3fidum. Cal. prismaticus. Caps. 3-locularis 1-sperma.

## Specific Character and Synonym.

Phlox acuminata; caule obtusangulo pubescente, foliis lan-ceolato-ovatis acuminatis subtus villosis decussatis corymbis paniculatis, calycibus aristatis.
Phlox acuminata; erecta, pubescens; caule angulato, foliis ovato-lanceolatis acuminatis inferne angustatis subpetiolatis subtus pubescentibus, floralibus subcordatis, corymbis paniculatis, corolle laciniis rotundatis, tubo pubescente, calycibus aristatis. Pursh Fl. Am. Sept. Suppl. p. 730.
Phlox decussata. Lyons's Catal. 1812.

Descr. Stem erect, three feet high, square with rounded angles, pubescent, spotted. Leaves in distant pairs, exactly decassate, lanceolate-oval, acuminate, villous on the under surface and roughish on the upper: floral leaves subcordate, acuminate, coloured at the margin. Flowers in a panicled corymb, growing several together on very short pedicles. Calyx coloured, villous; teeth subulate. Tube of Corolla nearly straight, twice the length of the limb, villous: laciniæ smooth, obcordate, variegated with different shades of purple, lilac-coloured underneath.

The leaves of this speciea growing in distant pairs regularly crosswise, we think the name of decussata was more characteristic than that of acuminata. It is nearly related to Phlox Carolina.

Native of Georgia and South-Carolina. Rather more tender than many other species. Flowers in August and September. Introduced by the late Mr. Lyons, in 1812. Communicated by Mr. Wiliam Kent, of Clapton, in September 1815.

Hzs8.

# Thunbergia fragrans. Twining Thunbergia. 


Class and Order.
Didynamia Angiospermia.
Generic Character.
Cal. duplex : exterior diphyllus: interior 12-dentatus.

## Specific Character and Synonyms.

Thunbergia fragrans; foliis cordatis açuminatis basi sub-angulato-dentatis, caule scaudente. Willd. Sp. Pl. 3. p. 388. Hort. Kewo, ed. alt. 4. p. 66. Mart. Mill. Diet. n. 2.
Thunbergia fragrans. Roxb. Cotom. 1. p. 47. t. 67. Bot. Repos. 63,

Thunrergin fragrans has a climbing shrubby stem, which in the East-Indies reaches the length of from four to six yards, but we have never seen it exceed that of a few feet in our hot-houses, where, however, it well deserves a place, being almost constantly in blossom.

The flowers are quite scentless, nor have we observed any fragrance in any part of the plant; but Dr. Roxburgh in his "Plants of the Coast of Coromandel," states positively, that " the plant possesses a peculiar and agrecable fragrance, and the beauty of its flowers, although not fragrant, entitle it to a place in the flower-garden ;" so that the absurd notion, prevailing among the Nurserymen, which originated perhaps in the Botanist's Repository, that Dr. Roxburgh gave it the name of fragrans, because the place where it grew was sweet scented, though the plant was not so, seems to be entirely void of foundation. Perhaps the heat of a tropical sun is necessary to bring forth its odour.

Native of the East-Indies; growing plentifully in the hedges and bushes on the banks of the water courses near Samulcotah, on the Coromandel coast. With us it is an inhabitant of the bark-stove. Is propagated by cuttings or by seeds, which sometimes come to maturity in this country. Introduced into the Kew Garden by Mr. Peter Good, in the year 1796; but we believe it first flowered in the Dowager Lady De Curford's stove, at Paddington.


# Piper acuminatum. Dwarf Pointedleaved Pepper. 

 *****************Class and Order.
Diandria Trigynia.

Generic Character.
Cal. 0. Cor. 0. Bacca 1-sperma.

Specific Character and Synonyms.
Piper acuminatum; herbaceum, foliis alternis ovatis acuminatis carnosis pellucidis quinquenerviis, ramis semicylindricis.
Piper acuminatum; herbaceum, foliis lanceolato-ovatis nervosis caule erectiusculo. Swartz Obs. 20. Willd. Sp. Pl. 1. p. 164.
Piper acuminatum; foliis lanceolato-ovatis nervosis carnosis. Sp. Pl. 43. Syst. Veg. 74.
Saururus alius humilis folio carnoso acuminato. Plum. Amer. 54, t. 71.
Piper longum humilius e summitate caulis prodeunte. Sloane Jam. 45. Hist. 1. p. 136.

Native of South-America and the West-Indies, growing in moist woods frequently on the rotten trunks of trees. Not recorded in the last edition of Aiton's Hortus Kewensis. Piperomia acuminata of the Flora Peruviana appears to be quite a different species.

Communicated by John Walker, Esq. Arno's-Grove, Southgate, in whose stove it flowered in September 1815.


## Pharnaceivm incanum. Hoary

## Pharnaceum.

Class and Order.

Pentandila Trigynia.

Generic Character.
Cal. 5-phyllts. Cor. 0. Caps. 3-locularis, polysperma.

Specific Character and Synonyms.
Pharnaceum incanum; pedunculis proliferis, folits subulatis aristatis in nodulos congestis, stipulis setaceis, stigmatibus petaliformibus.
Pharnaceum incanum; pedunculis communibus longissimis, foliis linearibus, stipulis pilosis. Linn. Suppl. 186. Willd. Sp. Pl. 1. 1510. Hort. Kew. ed. alt. 2. p. 174.
Pharaceum pedunculis communibus longissimis. Hort. Cliff. 499. foliis linearibus. Mant. 358.
Pharnaceum incanum; foliis teretibus mucronatis stipulis setaceis, umbellis terminalibus. Thunb. Prodr. 54.
Alsine forte, seu Lychnis africana, foliis lariceis tenuissime divisis, floribus fere umbellatis. Pluk. Alm. p. 23. Phyt. t. 304. f. 4.

Descr. Stem shrubby, dwarf; branches white, by the remains of the hair-like stipules. Leaves at first scattered, but these soon fall off and leave the stems bare, except at the ends and about the divisions of the branches, where they are awl-shaped, smooth, terminated with a bristle or awn, and collected into round nodules with hair-like stipules intermixed. From these nodules proceed the long filiform peduncles, dividing into proliferous umbels. Calyx 5-leaved, green externally with a membranaceous margin, and white within.

Corolla none, or connate with the calyx. Stamens 5: filaments somewhat shorter than the calyx, alternating with its leaflets, inserted into the receptacle : anthers yellow, bifid at the base. Germen conical: style none: stigmas 3, concave, obtuse, undulated, petal-like, of a fine crimson colour. Surrounding the base of the germen there are 5 small yellow glands.

The flowers expand in the afternoon, if the weather is fine, and close again before sun-set. Their principal beauty consists in the singular large crimson stigmas, of which we find no mention made by any author. Can they be an accidental monstrosity? In Schreber's edition of the Genera plantarum the pistil is doscribed as having 3 filiform styles, the length of the stamens, with obtuse stigmas.

Perhaps the Cape species of Pharmaceum form a genus distinct from those of the East-Indies.

Native of the Cape of Good Hope. Flowers most part of the summer. Introduced in 1782, by George $\mathbf{W r n c h}^{\text {y }}$, Esq. Communicated by Messrs. Whitley, Braye, and Milne, of the Fulham Nursery.


## Cactus triangularis. Triangular Creeping

## Cerels, or Strawberry Pear.

## ****************

## Class and Order.

Icosandiia Monogynia.

## Generic Character.

Cal. 1-phyllus, superus, imbricatus. Cor. multiplex. Bacca 1-locularis, polysperma.

## Specific Character and Synonyms.

Cactes triangularis; repens triangularis.' Willd. Sp. Pl. \&. p. 942. Jacq. Amer. 152. Risler in Act. Helv. 5. p. 268. t. 2. Hort. Kerv. ed. alt. 3. p. 178. Mart. Mill. Dict. n. 16.

Cactus triangularis scandens articulatus. Hort. Cliff. 182.
Cactus debilis brachiatus requalis triquetrus scandens s. repens, spinis brevissimis confertis, Brown Jam. 238.
Cereus americanus triangularis radicosus. Bradl. Succ. I.
p. 4. t. 3. Trew in Act. Nat. Cur. v. 9. App. 199. t. 10. f. 14. et v. 10. App. 349. t. 3.

Cereus scandens minor. The Prickly Pear-Vine. Hughes Barbad. p. 186.?
Jamacaru 1. Pis. Ind. Hist. p. 188. cum figura pessima. Melocactus trigonus, brevibus aculeis munitus, flore albo, fructu coccineo. Plum. Ic. p. 193. t. 200. fig. 1. Plum. Catal. Pl. p. 19.

We are indebted to Mr. Stonrer, of Storrer-Park, near Henley-upon-Thames, for the opportunity of giving our readers a figure of this plant, which is so rarely known to blossom out of the tropical countries, of which it is a native, that in most places it has been cultivated above twenty years before it shewed the least disposition to produce flowers.

As this flower is so very transitory, lasting during one night only, there is no chance of any opportunity of taking a drawing, unless the artist is at hand. To afford us this opportunity Mr. Storrer very liberally cut off the joint, a few
days before the bud was expected to open, and sent it to us; which being set in water, the flowers began to open in the evening, and by midnight was fully expanded.

The first account we have of one of these plants flowering in Europe, is by Dr. Trew, in the ninth volume of the Acta Nature Curiosorum ; where there is an incorrect figure of one which flowered in the garden of the university of Altorf, in the Canton of Uri, in the year 1747; but it had flowered many years before in Germany, and about the same time at Vienna, in the garden of Prince Eugene. A better figure is given in the tenth volume of the same work. But the best representation of the flower, is by Dr. Risler, from a plant which had been many years in his father's stove, but at the time of its blossoming, was in the possession of the Syndic Hofer, of Muhlhausen.

In this country it first flowered at Hampton-Court, and at the Marquis of Rockingham's: in the former place it appears to have been cultivated seventy years, before it produced any flowers, being in the collection there in 1690, and not having blossomed in England, according to Mieerr, in 1759.

Perhaps the reason of its having been more shy of flowering here than on the Continent is, that the wetness of our summers have hardly admitted of the plant's being entirely exposed to the open air during the summer months; which Dr. Risler recommends, and so all the flowering plants, above mentioned, appear to have been treated.

As most or all of this family grow naturally in a poor arid soil, theyshould be planted in a mixture of lime, rubbish, and sand, with a small proportion of loam, and the bottom of the pot to one-third of its whole depth should be covered with broken potsherds in layers, gradually finer towards the top. They are propagated by cuttings, which should be kept in a dry place for a month before they are planted. In the winter, the dry stove is recommended, and, if in the bark-stove, they should be not watered at all. When the weather is dry and warm, it is far better that they should be entirely exposed to the open air. Flowers in July, August, or September.



## Dahlia superflua. Fertile-rayed Dahlia.

## ******************

A. Crimson-flowered. B. Double purple-flowered.

## Class and Order.

Syngenesia Polygamia Superifua.

## Generic Character.

Recept. paleaceum. Pappus nullus. Cal. duplex: exterior polyphyllus: interior 1-phyllus, 8 -partitus.

Specific Character and Synonyms.
Dahlia superflua; caule non pruinoso, ligulis fæemineis. Hort. Kezo. ed. alt. 5. p. 87.
Georgina superflua. Decandolle in Annales du Muséum, 15. p. 310.

Georgina variabilis. Willd Enum. 899.

This species varies so much, not only in the colour of the flowers, but also in the form of the leaves and in general stature, that, at first sight, it might be supposed to be readily separated into several distinct ones. But attentive observation has shewn that the seminal varieties are, like those of the China Aster, almost endless.

In the last edition of Aiton's Hortus Kewensis, three varieties are considered as deserving to be distinguished by names, viz. the purple (purpurea) the rose, or lilac-coloured (lilacina) and the dwarf (nana). Our friend, M. Decandolle, in the Annales du Muséum, above quoted, reckons five varieties, all from the colour of the flower.-1. The red-flowered. 2. The purple. 3. The lilac. 4. The pale. 5. The yellowish. Of the two varieties we have here given, and which are certainly among the handsomest as yet recorded, A. will rank with the 1st. and $B$. with the 2 d .

The variety with yellowish flowers gives M. Decandolle an opportunity of making a very curious observation, viz. that it may be inferred with a degree of probability approaching to certainty, that no blue variety of Dahlia superflua will ever be found; because blue and yellow being the two primitive colours of flowers, and always exclusive of each other, no blue flower ever changes to yellow nor yellow to blue. Agreeable to this observation, we believe, no China Aster was ever seen to vary to yellow. If other similar laws respecting the interchange of colours should be discovered, this character in flowers may come to be as truly distinctive, in certain cases, as any other, although hitherto, by modern Botanists, generally considered of so little value.

Only two species of the genus Dahlia are at present acknowledged, viz. Dahlia superflua and fiustranea (coccinea of Bot. Mag. No. 762).

They have all large tuberous roots, not unlike those of Helinnthus tuberosus; which should be taken np after the stem perishes, and preserved in sand or dry mould, protected from frost during the winter; and in the spring be planted out in the open border : or, in a warm situation and dry soil, they may be left, without removal, only covering the bordet with dead leaves to defend them from severe frost. Plants raised from seeds in a hot-bed early in the spring, will sometimes flower the following autumn ; but not so fine nor so early as the second year; when the flowers will begin to open early in September, and continue in succession till overtaken by frost.

Native of Mexico. Introduced in 1789, by the Marchioness of Bute.

Both our drawings were made from specimens communicated by the Comte de Vandes, who imported these with several other varieties from France, where these plants have been cultivated for some years with great assiduity, particularly by M. Lelievr, at Sévre, near Paris,


## Robinia Caragana ( $\beta$, arenaria. Sand Robinia, or Pea-tree.

********************
Class and Order.
Diadelphia Decandia.

## Generic Character.

Cal. 4-fdus, lacinia superiore 8-partita. Legumen gibbum, elongatum.

## Specific Character and Synonyms.

Robinia Caragana; pedunculis simplicibus, stipulis subspinescentibus, foliis abrupte pinnatis, petiolis inermibus. (a.) arborea ; folits subquadrijugis : foliolis ellipticis, pedunculis aggregatis flore longioribus.
Robinia Caragana. Willd. Sp. Pl. 3. p. 1135.-Arb. 299*. L'Herit. Stirp. 160. Kniph. Cent. 5. n. 76. Gmel. Sib. 4. p. 17. n. 22. Hort. Kezv. ed. alt. 4. 324.

Robinia Altagana. Pall. Ross. 68. t. 42. fig. intermedia. Roy. Lugdb. 537.
Caragana sibirica. Fabr. Helmst. 421.
Aspalathus arborescens, pinnis foliorum crebrioribus, oblongis. Amm. Ruth. 283.
( 3.$)$ arenaria; foliis subquadrijugis: foliolis obcordatis, pedunculis subgeminis flore brevioribus.
Robinia Caragana. Banks Herbar.
Robinia arenaria. Donn Hort. Cant.
( $\gamma$.) Altagana; folius suboctojugis, pedunculis solitariis. Robinia Altagana. L'Herit. Stirp. 159. t. 76. Willd. Sp. Pl. 3. p. 1135. Hort. Kew. ed. alt. 4. p. 324. Pall. Ross. 69. t. 42. fig. laterales.

Desc. Stem shrubby : branches smooth and not villous. Leaves abruptly pinnate, growing several together from a projected
projected tubercle armed at the base with a pair of spinescent stipules: leaflets four or sometimes five pair, obcordate or obovate, with a minute mucro, covered with a silky pubescence on both sides. Peduncles growing from the same tubercle as the leaves, sometimes singly, more generally two, and now and then three together, shorter than the flower, villous, jointed, and having a pair of small bractes. Calyx subcylindric, gibbous at the base: limb five-toothed, the two upper teeth very small and approximate. Corolla papilionaceous: vexillum cordate with the sides reflected, closed at the base : ala of the same length, lanceolate : carina somewhat shorter, boat-shaped, with its petals united towards the tip. Stamens diadelphous, 1-9. Germen flattened-cylindric, very smooth : style ascendent : stigma simple.

If Robinia Caragana and Altagana are to be held as distinct species, then this must be considered as different from both, and may retain the name of arenaria. But we are inclined to regard them all three as varieties of the same species; as Pallas asserts that the low shrubby kind, in a richer soil, will become arborescent ; the number and form of the leaflets seem very subject to vary; in Pallas's figures, referred to by L'Heritier, they are obcordate ; in his own, oval ; but in his description, said to be sometimes obovate or wedge-shaped.

A hardy shrub, native of Siberia. Flowers in June and July. Communicated from the Cambridge-Garden, by the worthy curator, Mr. Biggs.

## ( 1887 )

## Polemonium reptans. Creeping Greek-

## Valerian.

****************

## Class and Order.

## Pentandria Monogyita.

## Generic Character.

Cor. 5-partita, fundo clauso valvis staminiferis. Stigma 3fidum. Caps. 3-locularis, supera.

## Specific Character and Synonyms.

Polemonium reptans; foliis pinnatis septenis; floribns terminalibus nutantibus. Syst. Veg. 179. Willd. Sp. Pl. 1. p. 886. Hort. Kew. ed. alt. 1. p. 342. Michaux Fl. Am. Bor. 1. p. 142. Pursh Fl. Am. Sept. 1. p. 151. Mill. Ic. 2. t. 209. Mart. Mill. Dict. n. 2.
Polemonium foliis pinnatis, radicibus reptatricibus. Clayton in Grom. Virg. 22, 29.

Polemoniem reptans, is a native of North-America, and was taken by Grovovies, who was the publisher of Claytov's Herbarium, to be the same species as the common Greek-Valerian, from which it differs by its creeping roots, its more diffuse panicle, the flowers standing on longer peduncles, being somewhat nodding, and by the smaller number of its leaflets. In our specimen, these were of a wider oval shape than we have generally seen.

It is a native of North-America, growing on the sides of hills, where the soil is rich, from Pensylvania to Carolina.

With us, it is cultivated in the open ground, and is easily increased by its creeping roots. Flowers in April, May, and June. Communicated by N. S. Hodson, Esq. of the WarOffice.

## ERRATUM.

In No. 1834, for "we are indebted to Mr. Storker, of Storter-Park," read "to Thomas Sroxor, Esq. of Stonor-Parke"



# Rhododendron dahuricum ( $\beta$.) sempervirens. Evergreen Daurian Rhododendron. 

## 

Class and Order.
Decandria Monogynia.
Generic Character,
Cal. 5-partitus. Cor. infundibuliformis. Stam. declinata. Caps. 5-locularis.

## Specific Character and Synonyms.

Rhododendron dahuricum; foliis glabris punctatis nudis, corollis rotatis. Sp. Pl. 562. Willd. 2. p. 604. Hort. Kew. ed. alt. 3. p. 49.
(a.) foliis deciduis, supra $\mathrm{N}^{\circ} \cdot 636$.
( $\beta$.) foliis sempervirentibus.

This variety of Rhodonendron dahuricum*, is a more desirable plant than the one formerly figured in this work; having been found to be much less liable to be injured by our late frosts. It is also much handsomer, growing more compact and bushy, has its foliage perfect at the time of flowering; and its blossoms are of a deeper colour.

Communicated by Messrs. Whitley, Brame, and Milee, from the Fulham Nursery. Flowers in February and March.

[^0]
## Jasminum azoricum. Azorian Jasmine.

## 

## Class and Order.

Diandila Monoginia.

## Generic Character.

Cor. hypocrateriformis, 5-8-fida. Bacca dicocca. Semina solitaria, arillata.

## Specific Character and Synonyms.

Jasminum azoricum; foliis oppositis ternatis: foliolis ovatis subcordatisque undulatis, ramulis glabris teretibus, corollæ laciniis tuho æqualibus. Hort. Kew. ed. 1. v. 1. p. 9. ed. alt. 1. p. 17. Willd. Sp. Pl, 1, p. 39. excluso synonymo Plukenetii.
Jasminum azoricum; foliis ternatis: foliolis ovatis subcordatisque, calycibus campanulatis glabris, corolla laciniis tubo æqualibus. Vahl Enum. 1. p. 31.- Bot. Regist. 89.
Jasminum azoricum, trifoliatum, flore albo, odoratissimo. Commel. Hort. 1. p. 159. t. 82.
Jasminum azoricum flore albo. Grisl. Vir. Lusit.
Jasminem catalonicum. Weinm. Phyt.t. 602. quoad figuram: que folia ternata, non pinnata, representat.
Jasminum sylvestre triphyllum floribus rubellis umbellatis. Burm. Zeyl. p. 127. 1. 58. f. 1.?

The Azorian Jasmine is a native of the Island of Madeira; has been long cultivated in our greenhouses, and is still held in high esteem, both for its fine shining ever-green foliage, and the charming fragrance of its flowers, which, under favourable circumstances, it will continue to produce nearly through the whole year It is seen to best advantage when planted in the border of the conservatory, and its branches properly trained to a trellis. Propagated by cuttings.

Compunicated by Messrs. Loddiges and Sons.

$N_{189}$.


## ( 1890 )

## Stapelia deflexa. Bent-flowered

 Stapelia.*****************

Class and Order.
Pentandria Digynia.
Generic Character.
Asclepindea. Nectar. duplici stellula tegente genitalia.

## Specific Character and Synonym.

Stapelia deflexa; corollis rugosis ciliatis centro pubescentibus, laciniis margine revolutis totis recta deflexis; rostris subulatis, alis vix ullis. Jacq. Stap.
Stapelia deflexa. Donn Hort. Cant.

The lacinix of the corolla are ciliated with thick-set long hairs, which are at first of a pale brick-dust red, but soon change to white. These hairs occupy the whole of the central parts, but are there more thinly scattered. The colour of the flower within, varies from a brick-dust red to a dark brown, and is variegated by transverse rugose streaks; externally, it is pale green, with longitudunal reddish streaks. The corolla is divided rather more than half-way down, and as the bases of the lacinim are considerably wider than the entire part of the corolla immediately below, this occasions them to overlap one another, and appears to us to be the cause of their being frequently bent straight back at this part, which has given occasion to Jacquin's name.

Our drawing was made from a plant communicated by Mr. George Graves, in July 1815; and we were favoured with the same species, by Messis. Whitley, Brame, and Milne, last summer.



# $* * * * * * * * * * * * * * * * * * * *$ 

## Class and Order.

## Didynamia Gymnospermia.

## Generic Character.

Cal. 5 -gonus, 5 -dentatus. Cor. galea incumbens, carinatocompressa, barbata, emarginata vel incisa : labium inferius proportionatum : lobo medio majore. Stigmatis labium superius brevius.

## Specific Character and Synonyms.

Phlomis samia; foliis cordatis crenatis subtus tomentosis, bracteis tripartitis subulatis mucronatis calycem æquantibus. Desf. Atl. 2. p. 25. Willd. Sp. Pl. 3. p. 120. Hort. Kezo. ed. alt. 3. p. 408. Venten. Choix des Pl. 4.
Phlomis samia: foliis ovatis subtus tomentosis involucris subulatis strictis tripartitis. $\$ p$. Pl. 819.
Phlomis involucri radiis subulatis strictis. Hort. Cliff. 315. Phlomis samia. Flor. Grac. t. 580. Prodrom. p. 44. Phlomis gigantea. Donn Hort. Cant. ed. Pursh 191.

There appears to be some doubt, whether this be really the Phlomis samia of Linnisus or not; we are, however, quite satisfied, that it is the same species as the one described by Desfontaines, in his Flora Atlantica, and consequently it is Willdenow's plant. It is also the Phlomis samia of $V_{\text {entenat, }}$ of the Hortus Kewensis, and of the Flora Græca. We do not hesitate, therefore, to retain the name of samia, though the Phlomis samia herbacea folio lunarice of Tournefort is said by Desfontaines to belong to another and very different species.

The Samian Phlomis is a hardy herbaceous perennial, with erect strong stems, from two to four feet high, with large
cordate, obtuse, crenate, radical leaves, cottony on the under surface, as are the cauline leaves also.

Native of the North of Africa. Caltivated in the Chelsea Garden, in 1.714, and was many years in the Botanic Garden, at Oxford; from whence it was distributed to several other collcctions; but is in some danger of being again lost, being, we have reason to believe, at present no where to be met with in this country, but in the collection of our friend, Mr. Lambert, at Boyton, by whom it was communicated to us. Flowers in June and July.

# Clematis críspa. Curled-rlowered <br> <br> Virgin's-bower. 

 <br> <br> Virgin's-bower.}

## 

Class and Order.

## Polyandria Polygynia.

## Generic Character.

Cal. 0. Petala 4, rarius 5. Sem. caudata.

## Specific Character and Synonyms.

Clematrs crispa; foliolis ovatis acutis integerrimis, pedunculis petiolis fere brevioribus cernuis, laciniis apice revolutis crispatis, aristis seminum subnudis.
Clematis crispa; foliis pinnatis ternatisque : foliolis ovatolanceolatis trilobisve integerrimis, corollis campanulatis acuminatis margine undulatis, aristis seminum subulatis nudis. Willd. Sp. Pl. 2. p. 1289. Hort. Kero. ed. alt. 3. p. 344. Pursh Flor: An. Sept. 384.

Clematis crispa; foliis simplicibus ternatisque: foliolis integris trilobisve. Sp. Pl. 765.
Clematis flore crispo. Dill. Elth. 86. 1. 73.f. 84,

Though the plant here figured is generally believed to be the Clematis crispa of Livnieus, we are not quite satisfied that it is so. There is a considerable difference between the foliage of this and the one figured by Dillevies; nor have we ever observed any of the leaflets regularly three-lobed: some disposition to a lobed irregularity in the margin of the leaflets, is more or less common in almost every species of this genus,

Our present plant has considerable affinity with the one figured at No. 1816, under the name of cordata, a name which,
which, we did not observe at the time, had been applied by Mr. Pursh to a very different species. Our present plant differs from cordata, No. 1816, in its leaflets being not at all cordate, and footstalks less divaricate; peduncles much shorter and less strict ; corolla more crisped at the margin, and of a less leathery consistence. The aristæ of the seeds are not naked, but clothed with short adpressed silky hairs; as Willdenow remarks of crispa.

We received what we take to be a variety of this, with smaller, very pale bluish purple flowers, from Mr. Whitley, some years ago.

Native of Carolina. Flowers from July to September. Communicated by N. S. Hodson, Esq. of the War-Office.

## ERRATUM.

No. 1816, 1.11, and 1.16, for Clematis cordata, read Clematts reticulatia.


## ( 1893 )

## Zizyphus Paliurus. Christ's Tiorn.

## *********米******** <br> Class and Order. <br> Pentandria Monogynia.

## Generic Character.

Cal. tubulosus. Cor. squamæ stamina munientes calyci inserte. Drupa nuce mono- vel disperma.

## Specific Character and Synonyms.

Zizyphus Paliurus; foliis ovatis denticulatis venosissimis, floribus trigynis, aculeis geminis, drupa coriacea margine alata.
Zizyphus Paliurus; aculeis geminis, inferiore reflexo, floribus trigynis, drupa coriacea margine alato. Willd. $\mathbf{S p}$. Pl. 1. p. 1103. Arb. 415̆. Hort. Kew. ed. alt. 2. p. 18.
Rhamnus Paliurus; aculeis geminatis: inferiore reflexo. floribus trigynis. Sp. Pl. 291. Hort. Cliff. 69. Hort. Ups. 47. Pall. Ross. part 2. p. 27. t. 64. Mart. Mill. Dict. Villars Dauph. 2. p. 539. Scop. Carniol. 1. p. 164.

Rhamnus seu Pallerus folio jujubino. Bauh. Hist. v. 1. part 2. p. 35.
Rhamnus folio subrotundo, fructu compresso. Bauh. Pin. 477.

Rhamnus tertius. Camer. Epit. p. 80. fig.bona.
Paliunus. Hort. Eyst. Autumn. Ord. 3. t. 9. f. 1. Gerard. emac. 1336. Dod. Pempt. 756. Park. Theatr. 1006. Lob. Ic. 2. 179. f. 1
Paliurus aculeatus, Desf. Atl. 1. p. 199. Lam. Illustr. 1. 210.

Palidrus Spina Christi. Mill. Dict.
Paliurus australis. Gartn. Sem. 1.p. 203. t. 43. f. 5.

Rhamnus, Zizyphus, Paliurus, and Alaternus, were cohsidered by Tournerort as distinct genera, but united by

Linnkus under Rhamnus. More modern Botanists have been inclined again to separate them; Lamarce has restored all four genera; Willdenow, whose footsteps are followed in the Hortus Kewensis, unites Paliurus and Zizyphus; thongh, to us, they appear to differ as materially as any two of the above genera.

Zizyphus Paliurus, Lotus, and oulgaris, have all three double thorns; and we have, in most specimens that we have seen, found the smaller one to be recurved in Paliurus, as well as in the other two species.

This plant is said to be very common in all Judea, and the crown of thorns, in which our Saviour was crucified, is supposed to haye been made of it, from whence the name of Christ's Thorn.

Native of Spain, South of France, Italy, Carniolia, and of Taurian Caucasus.
Propagated by seeds or cuttings. Flowers in June and July. Communicated by John Walker, Esq: of Arno's: Grove.


# Hamelia ventricosa. Large-flowered 

Hamelia.
*******************

## Class and Order.

## Pentandria Monogynia.

## Generic Character.

Cor. 5-fida. Bacca 5 -locularis, infera, polysperma.

## Specific Character and Synonyms.

Hamela ventricosa; racemis terminalibus axillaribusque, corollis campanulatis ventricosis, foliis ternis. Swartz Prodr. 46. Fl. Ind. Occid. 1. p. 446. Willd. Sp. Pl. 1. p. 446. Hort. Kew. ed. alt. 1. p. 375.

Himelia grandifora; foliis lavigatis, tubo corolla ventricoso. L'Herit. Sert. Angl. 4. t. 7. Hort. Kew. ed. $1^{\text {me }}$ 1. 229. Parad. Lond. 55. Mart. Mill. Dict. n. 2.

Duhamelia ventricosa. Persoon Syn. 1. p. 203.
Campanula arborescens foliis ovato-acuminatis verticillatim ternatis, stipulis acuminatis interpositis, capsulis quinquelocnlaribus. Brown Jam. 166.
Nerio affinis arbor versicolora materie, lauri folio lucido, flore pentapetaloide sulphureo amplo. Sloane Hist. 2. p. 63. t. 183. f. 2.?

Desc. Leaves mostly three, sometimes four, in a whorl, lanceolate, very smooth, veined underneath, quite entire, but a little undulate at the margin. In the axil of each leaf is a truncate gland or bud, and between each a warted bidentate stipule. Flowers in a terminal, few-flowered panicle. Calyx very small. Corolla tubular, with a fivecleft border. Filaments spatula-shaped, extended beyond

[^1]of the filament. Germen inferior, globular; five-celled, many-seeded : style simple.

The name of Hamelia; of which there are several species, was given in honour of M. Henry Louis* Du Hamel Du Monceav, Inspector-General of the French Marine, and author of several esteemed works on Trees, by Professor Jacquin.

Brown, in his History of Jamaica, assigns an altitude of eight or ten feet to this tree; but if the synonym of Sloane, generally quoted, but which, we very much suspect, belongs to some other species, be correct, it becomes a very large and stately tree, affording broad planks, of which there were formerly exported great quantities for the use of cabinetmakers, under the names of Spanish Elm and Princes Wood. With us, it must be cultivated in the bark-stove, where it forms a flowering shrub, producing its yellow blossoms from September to November. Propagated by cuttings. Introduced in 1778, by Dr. Thomas Clark. Communicated by the Comtesse de $V_{\text {andes, }}$ from her extensive collection at Bays-Water.

[^2]

## Galinsogea trilobata. Tiree-lobed

## Galinsogea.

## *****************

## Class and Order.

Syrgenesia Polygamia Superflua.

## Generic Character.

Receptaculum paleaceum. Pappus polyphyllus, paleaceus.
Cal. imbricatus. Ruiz et Pavon Prodr.

## Specific Character and Synonyms.

Galinsogen trilobata; foliis oblongo-lanceolatis dentatis triplinerviis: inferioribus hastato-trilobis. Willd. Sp. Pl. 3. p. 2228. Hort. Kew. ed. alt. v. 5. p. 122.
Galinsoga trilobata; caule herbaceo, foliis trilobis, lobo medio productiore, floribus subcorymbosis. Cav. Icon. 3. p. 42. t. 282. Persoon Syn. 2. p.421,

Native of Peru. A hardy annual. May be cultivated in the open border, which it will tend to adorn with its bright yellow flowers, from August till October.

The name was given to the genus in honour of Dr. Marian Martin de Galinsoga, at that time first Physician to the Queen of Spain and Prefect of the Royal Botanic Garden at Madrid, by Messrs. Ruiz and Pavon, authors of the very splendid Flora Peruviana, the publication of which has been interrupted by the misfortunes of the kingdom; and it must be now very doubtful when it will be resumed.
Our drawing was taken several years ago, at Lord Holland's garden at Kensington, raised from seeds brought by Lady Howand from Madrid.
Introduced, according to Arrox's Hortus Kewensis, by the Marchioness of Bute.

Lobelia ilicifolia. Holly-leaved
Lobelia.
*******************

## Class and Order. <br> Pentandria Monogynia.

## Generic Character.

Cal. 5-fidus. Cor. 1-petala, irregularis. Anth. cohærentes. Caps. infera, 2-3-locularis.

## Specific Character.

Lobelis ilicifolia; (glabra) caulibus simplicibus decumbentibus, foliis ovatis undulato dentatis rigidiusculis, pedunculis solitariis subterminalibus recurvis unifloris longissimis.

Desc. Root creeping. Stems nearly simple, or sometimes divided near the base, decumbent, smooth. Leaves alternate, ovate, undulated and toothed in the manner of holly, inclined to rigid, but not spinous, on short foot-stalks, smooth. Peduncle usually one, near the extremity, sometimes two, or even three : on the same stem, axillary, solitary, three times the length of the leaf, naked, recurved, oneflowered. Calyx 5 -cleft: segments toothed, spreading, equal. Corolla irregular, resupinate, the two upper lacinia (lowermost by the resupination of the corolla) narrow, acute, and very divaricate, the lateral ones obtuse, broad, the lower one (by resupination the uppermost) broader than the two upper. Unripe capsule globular, fleshy, two-celled.

A herbaceous, greenhouse plant, and one of the smallest and least shewy in this too extensive genus, of which we do not find any notice has been hitherto taken. Propagated by dividing its roots. Native of the Cape of Good Hope: Communicated by Joнs Walker, Esq. of Arno's-Grove,


## (1897)

Anchiusa angustifolia ( $\beta$, Purple-flowered narrow-leaved Bugloss.
********************

## Class and Order.

## Pentandria Monogrila.

## Generic Character.

Cor. infundibuliformis, fance clausa fornicibus. Sem. basi insculpta.

## Specific Character and Synonyms.

Anchuss angustifolia; foliis oblongo-lanceolatis integris racemis supremis bipartitis basi diphyllis, calycibus quinquefidis : fructiferis crectis.
Anchusa angustifolia; folitis oblongo-lanceolatis integris, floribus spicatis, calycibus quinquefidis. Hort. Kew. ed. $1^{\text {mact } 1 . ~ p . ~ 178 . ~ e d . ~ a l t . ~ 1 . ~ p . ~ 289 . ~ W i l l d . ~ S p . ~ P l . ~ 1 . ~ p . ~ 757 . ~}$ Flor. Grac. v. 2. p. 55. t. 164. Smith Prodr. ejusdem 1. p. 115.

Axchusa angustifolia; racemis subnudis conjugatis. Sp. Pl. 191. Pollich Pal. n. 187.

Buglossum sylvestre majus nigrum. Zanoni Rar. Stirp. Hist. ed. 2. p. 57. t. 39.
Buglossum angustifolium minus. Bauh. Pin. 256. Moris. 3. p. 438. §. 11. t. 26. f. 4.?

Echir facie Buglossum minimum, flore rubente. Lob. Ic. 576.

Descr. Stem erect, hispid. Leaves oblong-lanceolate or rather ligulate, hispid when young, when old much more harsh. Branclies alternate, axillary, the upper ones terminating in a double raceme, with a solitary flower in the division, and two ovate-acuminate, opposite, sessile leaves at the base ; the lower branches generally terminate in a single raceme. Pedicles shorter than the calyx. Calyx five-cleft, erect, turgid when in fruit. Corolla funnel-shaped: tube
the length of the calyx, red : limb equal : lacinice rounded, quite entire, violet-purple, more or less mixed with red : faux closed with arched villous scales. Anthers sessile, erect, alternating with the scales. Germens four, but one or two, sometimes three of them, abortive: style shorter than the túbe: stigma capitate.

Anchusa italica, officinalis, and angustifolia, seem to be much confused in their synonymy. From the first our plant is distinguished, by its smaller size, and more especially by the scales of the faux being only villous and not bearded with pencils of hairs ; from officinalis, by the doubie less crowded racemes, in which Retzus remarks, that both italica and angustifolia agree, and by the fruit-bearing calyx being upright.
The figure of Zanoni, referred to as a synonym of angustifolia in the Hortus Kewensis, corresponds well with our plant upon the whole, though the calyx is represented as not nearly so deeply divided, and the racemes are entirely without leaves or bractes, except the two at their base: and the excellent one in the Flora Greca evidently represents the present species.

Native of the South of Europe. Flowers in May and June. Propagated by seeds, being only biennial. Communicated by Mr. Joseph Kniget, of the Exotic Nursery, King's-Road, Chelsea,


## Rusces androgynus. Climbing Butcher's*

## Broom.



Masc, CaI. 6-phyllus. Cor. 0. Nectarium centrale, vatum, apice perforatum.

Fem. Cal. Cor et Nectarium maris. Stylus 1. Bacea trilocularis. Sem. 2.

## Specific Character and Synonyms.

Ruscus androgymus; foliis margine floriferis. Willd. Sp. Pl. 4. p. 875. Hort. Kezv. ed. 1 ma. 3. p. 429. ed. alt. 5. p. 421. Mart. Mill. Dict. n. 4. Persoon Syn. 2. p. 636. Hort. Cliff. 466. 4.
(a.) foliis subcordato acuminatis, florihus subsessilibus in capitulum multiflorum congestis.
Ruscus latifolius e foliorum sinu florifer et baccifer. Dill. Hort. Elth. p. 832. t. 250. f. 322.
( $\beta$.) foliis ovato-oblongis acuminatis, floribus longius pedicellatis in capitula paucifora congestas. Herb. Banks. ex Hort. Gordon.
( $\gamma$.) foliis ovato-oblongis acuminatis, floribus solitariis, pedicellis florem aquantibus. Heic depicta.
(১.) foliis crassioribus altius sinuatis, capitulis pauciforis.

Herb. Banks. ex Horto R. Collinson.
(n.)? foliis rotundato-ovalibus bullatis. Herb. Banks. sine flore.

Whether some of the varieties, above enumerated, may not be more properly considered as distinct species, we
will not take upon us to determine. The first variety (a.) which is marked in the Banksian Herbarium, as agreeing with the one in the Limnean, and was originally in that of Miller, exactly corresponds with Dillenius's figure, and has a great number of nearly sessile flowers, crowded together into one capitulum, and seldom more than one of these heads of flowers on one leaf. In our plant ( $\boldsymbol{y}$.) the flowers were solitary, growing along the margin, several on the same leaf, which is much larger. This appears sufficiently distinct from Dilienius's plant, but $\beta$ and $\delta$ making intermediate links, we think it safer to unite them under one. Of the last variety ( ) we know nothing but from the specimen above quoted, the species of which, from the defect of flowers, cannot be certainly ascertained.

A climbing plant, which, if planted in the border of the conservatory, will extend many feet. Flowers most part of the summer. Native of the Canary-Islands. Communicated by John Walker, Esq. of Arno'b-Groye.


Nusgg.


## Spielmannia africana. Ilex-leaved Spielmannia.

## *******************

Class and Order.
Didynamia Angiospermia.
Tetrandria Monogynia Persoon,

## Generic Character.

Cal. 5-fidus. Corollc limbus, 5 -fidus : faux villis clausa, Sligma uncinatum. Drupa nuce 2-loculari, tuberculata.

Specific Name and Synonyms.
Spielmannia africana. Willd. Sp. Pl. 3. p. 321. Hort. Kece. ed. alt. 4. p. 45. Persoon Syn. 1. p. 141. Lam. Ill, 1. p. 336. t. S5. Martyn Mill. Dict.

Spielmannia Jasminum; foliis alternis sessilibus decurrentibus, floribus sessilibus. Medic. in Act. Palat. v. 3. Phys. p. 198.

Lantana? africana; foliis alternis sessilibus, floribus solitariis, Sp. Pl. 875. Reich. 3. p. 167. Hort. Cliff. p. 320. Hort. Kew. ed. $1^{\text {m̌4 }}$ 2. p. 353.

Jasminum africanum ilicis folio flore solitario ex alis foliorum proveniente. Commel. Rar. p. 6. t.6.

Descr. Stem shrubby : Uranches succulent, opposite, rounded, with four jagged wings from the decurrent leaves, Leaves ovate, acute, rigid, unequally sawed: serratures subpungent, lower ones opposite, upper ones alternate. Flowers white, solitary, axillary; according to Commelen, fragrant, like common Jasmine ; but Miluer takes no notice of this scent, nor do we remember to have observed it. Calyx fivepartite: leaflets subulate Corolla salver-shaped: tube dilated
at the base, longer than the calyx, hairy : limb deeply fivecleft, lacinice flat, rounded at the end, somewhat undulatetoothed at the margin, marked with a blue streak at their base: faux closed with villi, not quite equal, and bilabiately arranged. Stamens four within the tube: filaments equal. Germen ovate, smooth: style shorter than tube: stigma hooked.

Linneus himself expressed a doubt, whether this plant belonged to the genus Lantana, and left it uncertain, till the fruit should be examined; this has been since done by Medicus; who. in consequence, established it as a distinct genus, which he named Spielmannia, in honour of Dr. James Reinbold Spielmany, Professor of Botany, at Strasburgh.

On account of the equality of the stamens, Lamarce and Persoon have removed Spielmannia to the Class Tetrandria; but by so doing, they have separated it from the plants to which it is nearly allied. It may be observed too, that afthough the stamens are not didynamous, the bilabiate arrangement of the laciniæ of the corolla and its whole habit shew its approach to that class; and many others of the Verbenacea, to which natural family both Lantana and it belong, have their stamens equal.

Native of the Cape of Good-Hope. A hardy greenhouse shrub, requiring only to be protected from frost; and easily propagated by cuttings. It appears to have been cultivated in England in 1710. Flowers from February to November. Communicated by John Walker, Esq. of Arno's-Grove.


# Alpinia cernua. Drooping Alpinia. 

********************
Class and Order.
Monandia Monogynia. Generic Character.
Anthera duplex. Filam. extra antheram non elongatum. Stylus longitudine filamenti, in sulco anthere receptus. Stigma obsolete trigonum. Caps. carnosa.

## Specific Character and Synonyms.

Alpinin cernua; racemo terminali cernuo, nectario apice bifido, foliis lanceolatis acuminatis spinuloso-denticulatis, germine villoso.
Alpinin calcarata. Rot. Regist. 141. ?
Globba erecta. Redouté Liliac. 174.?
Alpinis cernua is smaller in all its parts than nutans, to which it is very closely allied, but is considerably stouter than Lambert's calcarata, figured in the Botanist's Repository. Leaves lanceolate, smooth, with oblique parallel veins, margin irregularly toothed with small spinescent teeth, apex elongated, linear : petiole sheathing with a dark-coloured stipular process or ligula of Curtis. Inforescence a terminal compound raceme; common peduncle cernuous, villous, articulate; partial peduncles very short, villous, one, two, or three-flowered. Bractes boat-shaped, membranaceous, subdiaphanous, smaller than the flower, deciduous. Calyx (outer perianthium of Brown) tubular, three-toothed, month oblique. Corolla (inner perianthium of Brown) having the three outer laciniæ equal, shining ivory white, connected at the base into a curved tube : inner lacinia unequal, consisting chiefly of one large (nectarium of Linneus, Labellam of some authors) and two very small spur-like processes at its base (lateral lacinic of Brows) : nectarium oblong, somewhat boat-shaped, beautifully streaked with red and orange; apex purple, curled, bifid. Filaments nearly the length of, the nectarium. Germen villous, style the length of the filament, in the dorsal groove of which it is concealed : stigma funnel-shaped, fringed with hair.

Upon consulting Mr Lambert's herbarium, we find the very specimen after which the drawing of Renealmia calcarata in the Botanist's Repository was made, from which we are satisfied that our plant is very different from it; the leaves of calcarata being narrower, more linear, smooth at the edge, and without any subulate elongation of the point. At the same time we must acknowledge that Alpinia calcarata of the Botanical Register, the Globba erecta of Redoute, may be a mere variety of our plant with an upright instead of a drooping peduncle. We believe too that the calcarata of Roxburgh, though not the one figured in the Botanist's Repository, may be only a variety of our plant; for although he describes it as having an erect raceme, yet we find in Mr. Lambert's herbarium a specimen from Roxburgh himself of calcarata, which has a drooping raceme, and appears to be in no respect different from our pinnt. That this bending of the peduncle is not, however, an accidental circumstance, we are satisfied from the number of specimens we have seen in the same condition. In the Banksian herbarium is a specimen, sent from the East-Indies by Dr. Roxburgh, under the name of Amomum racemosum, which, though imperfect, appears to be evidently the same species as our plant. To this is affixed a note by Mr. Salissury, signifying that it is a congener of Alpinis'nutans, than which it has been a longer time in our gardens, having been introduced by the late Mr. Sliten, when he first began to collect. This must have been before the year 1790 .

The spur-like processes at the base of the nectarium, supposed by Brown to be the rudiments of the lateral lacinie, are not peculiar to calcarata, but common to most, if not all of the species of the genus; and are indeed found, more or less, in most of the natural order, where the two lateral lacinia are defective. In Alpinis mutica, however, to which species we were at one time inclined to refer our plant, and
from which perther from which, perhaps, it may not be specifically distinct; these processes are said by Roxburge to be entirely wanting. It also differs from the present subject, in liaving a larger hiree-lobed nectarium and an erect raceme.

We have, on the authority of Mr. Salisbury, already stated, that this plant was introduced by the late G. SLater, Esq. before the year 1790. Propagated by suckers. Flowers in June. Native of the East-Indies. Communicated by John Waleer, Esq. of Arno's-Grove.



## ( 1901 )

## Correa virens. Green-flowered

## Correa.

## 

## Class and Order.

Octandria Monogynia.

## Generic Character.

Cal. campanulatus, 4-dentatus. Cor. 4-petala, petalis apice reflexis. Caps. 4 -locularis, 4 -valvis, loculis monospermis.

## Specific Character and Synonyms.

Correa virens; foliis oblongis basi cordatis, floribus pendulis, dentibus calycinis elongatis. Smith Exot. Bot. 2. p. 25. t. 72. Hort. Kew. ed. alt. 2. p. 349.

Correa virens; foliis oblongo-cordatis; corolla cylindrica, pendula : petalis cohærentibus; acuminibus discretis, patulisque. Bot. Regist. 3.
Correa viridiflora. Bot. Repos. 436.
Correa reflexa. Vent. Malm. 13. Pers. Syn. 1. p. 419. Mazeutoxeron reflexum. Labillard. Voyage à la Recherche de la Peyrouse, 2. p. 11. t. 19.

Though the flowers of this species are far less shewy than those of Correa speciosa, No. 1746, yet from its brighter green foliage and a certain singularity of aspect, arising principally from the terminal leaves of the flowering branches being reflected over the pendulous flower, so as frequently to conceal it when young from the eye, the virens is hardly a less desirable shrub. Like speciosa, it is covered with a stellated pubescence, which disappears from the upper surface on the adult leaves.

Being a native of Van Diemen's Island as well as of New South-Wales, it is tolerably hardy, and would probably bear our milder winters at least without shelter; but at present it is cultivated as a greenhouse shrub. Thrives best in peat mould. Flowers at very different seasons of the year.

Our drawing was made at Messrs. Whitley and Co.'s in April. Introduced about the year 1800, by George Hibbert, Esq.


## (1902)

Gnidin oppositifolia. Opposite-leaved
Gnidia.

## $* * * * * * * * * * * * * * * * * * * *$

## Class and Order.

Octandria Monogynia.

## Generic Character.

Cal. 0. Cor. 4-fida : Squamulae 4 vel 8 supra faucem. Nux subdrupacea.

## Specific Character and Synonyms.

Gnidis oppositifolia; foliis oppositis lanceolatis ovatisve acutis glabris, squamulis quatuor. Hort. Kew. ed. alt. 2. p. 413.

Gmidia oppositifolia; foliis oppositis lanceolatis. Linn. Mant. 375. Syst. Veget. ed. 13. p. 302.
Gnidin oppositifolia. Bot. Regist. 2.
Gnidia levigata. Thunb.Prodr.67. Bot.Repos.89. Wendl. Obs. 17. t. 2. f. 14.
Thymelea africana Sanamundæ prioris Clusii facie. Pluk. Alm. 367. t. 323. f. 7.
$\beta$. Passerina levigata; foliis ovatis glabris acutis, coma et floribus purpureis, Sp. Pl. 513.
Thymelea foliis planis acutis, coma et floribus purpureis.

- Burm. Afr. 137. t. 49.f. 3.

Nectandra lavigata; foliis oppositis ovatis acutis glabris, summitatibus coloratis, floribus aggregatis terminalibus, nectariis quaternis. Berg. Cap. 134.

When much exposed to the air and a powerful sun, the Gxidia oppositifolia shews a good deal of purple colour at the extremities of the branches, which extends, at least in the dried plant, to the flowers. But we have such various gradations of this colour, that we consider variety $\beta$ of LisNEUS scarcely worthy to be distinguished even as a variety, being
being an accidental change arising purely from exposure to a greater intensity of light.

There is a grod deal of confusion in the synonymy of this species, which has been happily elucidated by Mr. Bellenden Ker, in the first number of the Botanical Register.

Young Botanists are liable to be exceedingly puzzled by the four bodies so nearly resembling anthers inserted in the margin of the corolla (calyx of Jussieu) and alternating with its laciniæ. These bodies are called nectaria by Bergius, upon Linnean principles, though designated as petals by Linneus, who has, in this instance, deviated from his usual language, in terming that part a calyx, which, throughout the whole natural order, he had elsewhere termed a corolla. The real anthers in this genus are concealed within the tube of the flower.

A handsome greenhouse shrub. Native of the Cape of Good-Hope. Propagated by cuttings, which strike readily. Flowers from May to October. Introduced by Mr. Francis Masson in 1783. Communicated by Messrs. Loddiges and Sons.


Alpinia nutans. Large Ditooping Alpinia.

## *******************

Class and Order.
Monindria Monogynia .

## Generic Character.

Anthera duplex. Filam. extra antheram non elongatum. Stylus longitudine filamenti, in sulco anthere receptus. Stigma obsolete trigonum. Caps. carnosa.

## Specific Character and Synonyms.

Alpinis nutans; nectario obsolete trilobato margine involuto, foliis lanceolatis, capsula membranacea lanuginosa. Roscoe in Linn. Soc. Trans. 8. p. 346. Smith Exot. Bot. 2. p. 93. t. 106.
Glonna nutans. Persoon Syn. 1. p. 3. Redouté Liliac. 60. Willd. Sp. Pl. 1. 153.?
Globsa sylvestris. Rumph. Amboyn. v. 6. p. 140. t. 62. et 63.?

Renealmia nutans. Bot. Repos. 360. Single plate, by Syd. Edvoards. Willd. Enum. p. 3.
Zerumiet speciosum. Wendl. Sert. Hannov. p. 3. t. 18.

Linneus having himself had very little opportunity of examining living plants of very few of the natural order of Scitaminere, left them established by such vague characters, that no Botanist has been able to arrange the several species since detected under his genera, which has induced the greatest confusion in the synonymy. Retzios attempted to establish better defined genera from the descriptions of Kosnig, but from the insufficiency of his materials could not be expected to be very successful. It was not till the publication of Roscoe's Dissertation upon the Scitaminea, in the 8th volume of the Transactions of the Linnean Society, that the
the different genera of this order were established upon any thing like permanent characters. Since this publication, the labours of Roxburgho of Dryander, and Rrown, have vastly increased our knowledge of the species, and facilitated our right understanding of the parts of fructification upon which the genevic distinctions must be founded.

The synonym of Globsa sylvestris of Rumphius, above referred to, though always quoted as belonging to our plant, appears to us extremely dubious; neither the laboured description nor the figures seeming to us to apply to it.

This species, as well as calcarata, has the spur-like appendixes at the base of the nectarium or labellum ; indeed Mr. Brown observes, that these are generally if not always present in the one-lipped plants of this order, and are considered by him as the rudiments of the two lateral lacinie of the internal limb of the corolla. In Alpivis mutica of Roxburgh, however, they are said to be entirely wanting.

This very beautiful plant is a native of China, and of the East-Indies. In-usually considered as a stove plant, but should be allowed plenty of air; nor does it cequire mach artificial heat, except to bring it into flower: Propagated by the tubers of the roots. Flowers in the epring and summer. Introduced about the year 1792, by the Right Hon. Sir Josefa Banks, Bart.

## CORRIGENDUM.

No. 1900, 1. 1, fer Diloopisa, read Smale pisooping.


# Gardenia ameena. Crimson-tipped Gardenia. 

## 

## Class and Order

Pentandria Monogynia.

## Generic Character.

Bacca infera, 2-locularis polysperma. Anthere sessiles in fauce corollæ. Stigma bilamellatum:

## Specific Character.

Gardenta amana; spinis axillaribus rectis folio ovali acuto glabro brevioribus, calyce campanulato denticulato, floribus terminalibus solitariis.

This species of Gardenia, desirable for the fragrance as well as beauty of its flowers, does not appear to have been described in any systematic work; nor are we aware that it has been hitherto noticed by any author.

It was communicated to us some years ago, by Messrs. Londiges and Sons, in whose stove it flowered in June. Being obtained from the collection of the Marquis of BlandFord, at White-Knights, its native country was unknown to them, but supposed to be the East-Indies or China.

It is pretty generally known in the principal nurseries, by the name of G. spinosa, but is certainly totally distinct from that species, which has spines longer than the leaves.

## (1905)

## Bocconia cordata. Heart-leaved

## Bocconia.

*******************
Class and Order.
Dodecandria Monogynia.
${ }^{6}$ Generic Character.
Cal. diphyllus. Cor. 0. Stylus bifidus. Caps. 2-valvis, 1-4-sperma.

## Specific Character and Synonyms.

Bocconis cordata; foliis cordatis sublobatis. Hort. Kew. ed. alt. 3. p. 141. Willd. Sp. Pl. 2. p. 841. Persoon Syn. 2. p. 1. Jacq. fragm. 63. t. 93. f. 1.

The Bocconia cordata is a hardy herbaceous perennial, which, for the singularity of its foliage and fine large feathery panicles of flowers, is well deserving a place in every large garden. It is, when viewed at a distance, that its peculiar appearance is more especially striking.
The stamens are very numerous, about 30, and the capsule according to Jacquis, contains four seeds inserted in the margin; in the germen we have observed sometimes four and sometimes six ovula. The filaments are long and hair-like; stigma sessile, 2 -lobed.

In all these circumstances it differs from its supposed congener, Bocconia frutescens, with which in other respects it very much corresponds. But some of the above characters seem to us so important, as to render it doubtful how far these plants should be considered as belonging to the same genus.

Native of China, from whence it was introduced into this country by Sir George Staunton, Bart. in 1795. Is propagated by dividing its roots, and thrives best in a light loamy soil. Flowers in August and September. Our drawing was taken some years ago in the Botanic Garden of Mr. Wiliam Salisbury, at Brompton.



## Grislea tomentosa. Woodford’s Grislea.

## *******************

## Class and Order.

Dodecandria Monogynia.

## Generic Character.

Cal. 4-fidus. Petala 4, ex incisuris calycis. Filamenta 8-12, longissima, adscendentia. Caps. globosa, supera, 1-locularis, polysperma.

## Specific Character and Synonyms.

Grislea tomentosa; foliis sessilibus subtus tomentosis, corymbis axillaribus patulis. Willd. Sp. Pl. 2. p. 321. Hort. Kew. ed. alt. 2. p. 320. Bot. Regist. 30.
Grislea tomentosa. Roxb. Corom. 1. p. 29. t. 31.
Woodfordia floribunda. Salisb. in Parad. Lond. 42.
Lythrum fruticosum; folis oppositis subtus tomentosis, floribus decandris, corollis calyce, calyceque genitalibus brevioribus. Sp. Pl. 641. Reich. 2. p. 427. Bot. Repos. 467.

This beautiful shrub was considered by Linnseus as a species of Lythrum, to which genus it is certainly allied. Dryander, in Roxburgh's Coromandel Plants, made it a species of Grislea, in which he has been followed in the Hortus Kewensis. Mr. Salisbury, in the Paradisus Londinensis, has thought proper to raise it to the rank of a genus, to which he gave the name of Woodrordia, in hơnour of Emp. John Alexander Woodford, Esq- who was formerly a great cultivator of rare plants at Vauxhall, and to whom our gardens are still indebted for several beautiful acquisitions from the Brazils. If it be really a species of Grislea, we think that genus should be removed into the class of Dodecandria, where it would stand in company with Lythrem and Cuphea, its nearest relatives.

Native of China and of the East-Indies; growing in the hilly country in the northern provinces. Propagated by cuttings. Requires to be kept in the stove. Introduced in 1804, by Mr. Willam Salisbury, of the Botanic Garden, in Sloane-Street. Flowers in May and June.


## Inula glandulosa. Glandulous Inula.

## ******************

## Class and Order.

## Syngenesia Polygamia Superflea.

## Generic Character.

Recept. nudum. Pappus pilosus. Anthere basi in setas duas desinentes.

## Specific Character and Synonyms.

Inula glandulosa; foliis sessilibus oblongis obsolete serratis, serraturis glandulosis, caule hirsuto unifloro, calycinis squamis lanceolatis villosis. Willd. Sp. Pl. 3. p. 2097. Enum. 896. Marsch. à Bieb. Fl. Taur. Cauc. 2. p. 319. Hort. Kew. ed. alt. 5. p. 78.
Inula glandulosa; hirta; foliis ovalibus sessilibus glandulosis, caule simplicissimo unifloro, calycinis squamis subulatis hirsutis nigricantibus. Adam apud Weber et Mohr Catal. 1. p. 68. n. 40.
Inula orientalis. Lam. Dict. 3. p. 255. n. 6.
ß. Inula grandiflora. Willd. Sp. Pl. 3. p. 2096.
Aster orientalis conyza folio, flore luteo maximo. Tourn. Carol. 36.

The glands along the margin of the leaf, which afford the name to this plant, are in some specimens much less evident than in others; and, in the radical leaves, for the most part, entirely wanting.

In the specimen from which our drawing was made, communicated in July 1813, by Messrs. Loddiges and Sons, the black glands were extremely distinct along the margins of the upper leaves; but in one communicated in June, the fallowing year, they were very indistinct.

To us the leaves appeared to be quite entire, except that the glands gave them a denticulate appearance, but

Wilcdenow observes, that, when closely inspected, they may be observed to be obsoletely serrate, bearing the glands on the points of the serratures. As, therefore, grandiflora is distinguished from glandulosa, only by having serrated leaves with the glands terminating the serratures; the two may be safely concluded to be only varieties of the same species.

A hardy perennial. Native of Georgia and the Caucasian Alps. Flowers in June and July. Propagated by parting its roots or by seeds. Cultivated in 1804 . Communicated by Messrs. Lodnuges and Sons.


## Cytisus proliferus. Siley Cytisus.

## 

## Class and Order.

## Diadelphia Decandria.

## Generic Character.

Cal. 2-labiatus: $\frac{2}{3}$. Legumen basi attenuatum.

## Specific Character and Synonyms.

Crxisus proliferus; floribus umbellatis lateralibus, canlibus erectis, foliis ellipticis acutis subtus sericeis, calycibus lanatis. Hort. Kew. ed. $1^{\text {ma. } 3 . ~ p . ~ 51 .-e d . ~ a l l . ~ 4 . ~ p . ~} 322$. Willd. Sp. Pl. 3. p. 1126. Persoon Syn. 2. p. 310. Bot. Regist. 121.
Cytisus proliferus; umbellis axillaribus sessilibus proliferis, foliis ternatis petiolatis: foliolis lanceolatis sericeis, bracteis filiformibus. Linn. Suppl. 328.
Cytisus proliferus; floribus in medio gemmarum verticillatis, foliolis ovali-lanceolatis sericeis, staminibus monadelphis. Ventenat Hort. Cels. 13.

Descr. Stem arborescent, with slender drooping branches. Leaves ternate on short footstalks: leafets oval-lanceolate, pointed at both extremities, clothed on the underside with silky adpressed hairs. Flowers white, growing in sessile umbels, on long slender pedicles of a reddish colour. After flowering, the bud in the centre of the umbel is elongated into a branch, whence the umbel is said to be proliferous. Two small opposite bractes near the calyx are deciduous very early, and therefore frequently wanting. Calys reddishi, two-lipped : upper-lip shortest with two divaricate teeth: lower-lip longer, acute, and apparently quite entire ; but, when closely examined, found to be divided into three very short teeth, lying close together, and so concealed by the woolly pubescence as to be difficultly detected. Corolla
papilionaceous, snow-white : vexillum orbicular, emarginate, clawed, folded back at the sides : ala projecting forward, plain, the size of the vexillum : carina considerably shorter. Stamens monadelphous, or having all the filaments connected: anthers incumbent : germen oblong, villous: style longer than the stamens : stigma capitate. The pedicles, calyxes, and young shoots, are covered with a soft woolly pubescence.

The name of proliferus was given to this plant, from the circumstance of young shoots springing from the centre of the umbel.

In a roomy greenhouse, when grown into a small tree, with its pendulous branches covered with a profusion of snowwhite blossoms, as it usually is early in the spring, there are few more ornamental inmates.

Propagated by cuttings. Our drawing was taken several years ago, at Malcolm's nursery, Stockwell-Common, where the beautiful appearance of a fine old tree, accompanied by one of equal size of Mimosa verticillata, both in full bloom at the same time, still remains impressed on our memory.

Our description was taken from a specimen communicated lately by Messrs. Whitley, Brame, and Mile. Native of the Canary Islands. Introduced in 1779.


## Menyanthes ovata. Oval-leaved Cape

Buck-bean.

## *米*****************

## Class and Order.

Pentandria Monogynia.

## Generic Character.

Cor. hirsuta. Stigma bifidum. Caps. 1-locularis.

## Specific Character and Synonyms.

Menyanthes ovata; foliis ovatis petiolatis, caule paniculato. Hort. Kero. ed. $1^{\text {muc. }}$ 1. p. 196. ed. alt. 1. p. 312. Linn. Suppl. 133. Willd. Sp. Pl. 1. p. 811. Persoon Syn. 1. p. 171. Mart. Mill. Dict. 3.

Villarsia ovata. Vent. Choix. 9.
Menyanthes capensis; foliis ovatis, caule paniculato. Thunb. Prodr. 34.
Renealmia capensis. Houtt. Hist. Nat. 8. p. 335. 6.47. f. I. Houtt. Linn. Pfl. Syst. 6. p. 319. t. 47. f. 1.

The oval-leaved or Cape Buck-bean is a handsome water plant, which requires the protection of the greenhouse in the winter. If planted in a common garden-pot in bog-earth, with a slight admixture of loam, set in a deepish pan, constantly supplied with water, and exposed to the open air in a warm situation, it will flower much stronger than when kept in the cistern of the stove. Flowers in May and June. Communicated by Mr. Wrison, of Islington. Native of the Cape of Good-Hope. Introduced by Mr. Francls Masson, in 1786.


# Menispermum canadense. Canadian Moon-seed. 

********************
Class and Order.
Diecia Dodecandria.
Generic Character.
Masc. Cal. 2-phyllus. Petala 4, s. 6, exteriora; 6 interiora. Stam. 16.

Fem. Cor. maris. Stam. 8, sterilia. Germina 2, s. 3. Bacce binæ, 1-spermæ.

## Specific Character and Synonyms.

Menispermum canadense; foliis peltatis cordatis subrotundoangulatis (racemis compositis). Sp. Pl. 1468. Hort. Cliff. 140. Reich. 4. p. 272. Willd. 4. p. 824. Persoon Syn. 2. p. 627. Hort. Kew. ed. alt. 5. p. 404. Willich Obs. 14. Medicus in Obs. Soc. Econ. Lutr. 1774. p. 226. Miller Illustr. Gmel. Sib. 3. p. 107. n. 86. Gronov. Virg. Ato. p.56. 8vo. p. 153. Schkuhr Handb. 3. p. 492. t. 337. Pursh Amer. Sept. 2. p. 370.

Menispermum canadense; foliis peltatis subreniformibus angulosis, racemis longe pedunculatis. Michaux Fl. Bor. Amer. 2. p. 241.
Menispermum canadense scandens, umbilicato folio. Tournef. Act. 1705. p. 237. t. 4.
Hedera monophyllos convolvuli folio virginiana. Pluk. Alm. 181. t. 36.f. 2.

Cissampelos sive Melaccocissos. Rupp. Fl. Jen. ed. 2. p. 53. ed. Haller. p. 67.
Cissampelos smilacina. Jaeq. Icon. 3. t. 629. Collect. 4. p. 128. Hort. Kew. ed. alt. ©. p. 413.

Menispermem canadense is a hardy climbing shrub, which varies considerably in the angles of its leaves being more or less acute, and sometimes nearly or quite obsolete; and this circumstance
circumstance has probably been the cause of the great confusion that occurs in the synonymy of the three supposed species, canadense, virginianum, and carolinianum.

Mr. Punsh makes the second only a variety of the first, excluding the synonym of Dillenius, which he refers to the last, the Wendlandia populifolia of Willdenow ; Michaux likewise omits virginianum altogether. If Dillenius had not described the berries as black, which in carolinianum are agreed to be red, there appears to us to be no objection to this, Dillenius's description of the female flower agreeing exactly with Wendland's figure. But then Pursh has also referred Cissampelos smilacina of Jacquin to the same, which we cannot hesitate in pronouncing to be a good representation of our plant, and totally different from the figures of Dillenics, Wendland, and Catesby. Upon the whole, we are inclined to believe that there are only two species, and that probably Cissampelos smilacina should be expunged altogether, and more certainly from the Hortus Kewensis.

The Canadian Moon-seed has been long cultivated in our gardens, but we have never seen any but male plants; Jacquin's plant was also male ; but the one examined by Medicus at Lautern, was a female, and the male was unknown to him.

These plants grow naturally in North-America, on the banks of rivers and on the sides of fertile hills, climbing among other shrubs. Propagated by layers. Communicated by John Walker, Esq. in July 1815.


## Hibiscus radiatus. Rayed Hibiscus.

## *******-************

## Class and Order.

## Monadelphia Polyandria.

## Generic Character.

Cal. duplex : exterior polyphyllus. Stigmata 5. Caps. 1locularis, polysperma.

## Specific Character and Synonyms.

Hibiscus radiatus; aculeatus, foliis palmato-digitatis quinquepartitis serratis, stipulis lanceolatis, calycibus ciliatis eglandulosis : externo decem-radiato, caule fruticoso.
Hibiscus radiatus; caule frutescente viridi aculeato, foliis palmatis digitationibus lanceolatis dentatis, floribus breviter pedunculatis. Cavan. Diss. 3. p. 150. t. 54. f. 2.
Hiniscus radiatus; foliis serratis septem-s. quinque-partitis palmatis, laciniis lanceolatis acuminatis, caule petiolis pedunculis calycibusque aculeatis, calycibus exterioribus decaphyllis aristato-ciliatis. Willd. Sp. Pl. 3. 824.

Hibiscus radiatus was raised in the garden, at Madrid, by Professor Cavanilles, from seeds sent him by Sir Josepri Banks. It differs trom cannabinus, with which it has been confounded, in being shrubby, not an annual; in its leaves being more deeply divided into five segments, and wanting the gland at the base of the midrib; in having the outer calyx the length of the inner, ten-rayed, more spreading, and the inner calyx without glands. It has the same acid taste as cannabinus. Like surattensis (1356) each segment of the outer calyx is furnished with a little appendix near the tip, but not nearly so remarkable as in that, and indeed sometimes scarcely visible, and often not at all in the dried plant.

Native of the East-Indies. Requires to be kept in the stove. Flowers in September and October. Communicated

a. The two calyres in fruit, - . The ripe capsule, c. $\mathbf{A}$ sced.


# Hibiscus cannabinus. Hemp-leaved <br> Hibiscus. 

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## Class and Order.

## Monadelphia Polyandria.

Generic Character.
Cal. duplex : exterior polyphyllus. Stigmata 5. Caps. 5-locularis, polysperma.

## Specific Character and Synonyms.

Hibiscus cannabinus; foliis serratis : superioribus palmatis quinquepartitis subtus uniglandulosis, caule aculeato, floribus sessilibus. Sp. Pl. 979. Willd. 3. p. 822. Reich. 3. p. 362. Persoon Syn. 2. p. 256. n. 44. Martyn Mill. Dict. n. 26. Hort. Kew. ed.alt. 4. p. 228. Roxb. Corom. 2. p. 48. t. 190. Burm. Ind. p. 152.

Hibiscus cannabinus : caule herbaceo glabro, foliis superioribus palmatis serratis uniglandulosis, floribus sessilibus, calycibus glandulosis. Cav. Diss. 3. p. 148. t. 52.f. 1 .
Hibiscus vitifolius. Mill. Dict. ed. 8. n. 18.
Alcea benghalensis spinosissima, acetosæ sapore, flore luteo pallido: umbone purpurascente. Commel. Hort. 1. p. 35. t. 18.

Ketmia indica, foliis digitatis, flore magno sulphureo: umbone atro-purpureo, petiolis spinosis. Ehret.t.6.f. 1.
Ketma indica vitis folio, magno flore. Tournef. Inst. 100.?
Ketmia indica cannabinis foliis, Bangue dicta. Burm. Zeyl. 135. Rejectis synonymis plaribus; non est quidem planta, ex qua Bangue Indorum paratur.
Gong-Kura of the Talingas.

This plant is cultivated in the East-Indies, both as a potherb and for the manufacture of a coarse kind of hemp ; the leaves having a pleasant acid taste, not unlike sorrel, and the
stalks containing a fibrous substance, capable of being made into cordage, but which is neither so strong nor so durable as that made from hemp.

It has been probably owing to the circumstance of its being applied to the same purpose and of the similarity of its foliage with that of the hemp, that it has by some authors been mistaken for the plant producing the Bang, an intoxicating substance made use of in the East, the principal ingredient of which appears to be a species of hemp.

Our plant was very similar to the figiure of Сомmelin, above quoted; but Roxburgh's representation has a different aspect, being taken from a very young plant, in which the lower leaves are simple and heart-shaped, those on the middle of the stem three-lobed, and only a few at the top deeply divided into five segments.

It is a tender annual, requiring to be kept constantly in the stove, where it will attain the height of five or six feet.

Flowers with us in September and October, and will ripen its seeds by the end of the year.
a. A ripe capsule. b. The interior calyx, shewing the large glands on the
inner side. c. $\boldsymbol{A}$ seed.


## ( 1912 )

Symphytum orientale. Eastern Comprey.

## *****************

## Class and Order.

Pextandria Monogrila.

> Generic Character.

Corolle limbus tubulato-ventricosus: fuuce clausa radis subulatis.

## Specific Character and Synomyms.

Sxmphytum orientale; foliis lanceolato ovatis undulatis in petiolum decurrentibus: floralibus porrectis, limbo corollæ infundibuliformi acutiusculo.
Symphytum orientale; foliis ovatis subpetiolatis. Sp. Pl. 195. Willd. 1. p. 771. excluso synonymo Tournefortii. Symphytum constantinopolitanum, Boraginis folio et facie, flore albo. Buxb. Cent.5. p. 36. t.68. pessima.

We have given a figure of Symphytum tauricum (No. 1787) by comparing which with the present, the difference will at once be seen. This is a taller plant, less branched, leaves longer, more lance-shaped, and not at all cordate, as the lower ones in taurica are; we have said there, that the leaves of orientale were less undulated, but in that we were deceived by examining dried specimens. The floral leaves do not spread horizontally as in tauricum, but stand upright or pointed forward. The racemes grow on shorter peduncles and not in pairs as in that, and the flowers are more numerous and more crowded together; the limb of the corolla does not widen suddenly from the tube in the form of a cup, with the points of the laciniæ rolled back, but gradually widen from the tube upwards. The style in tauricum scarcely equals the corolla, but is exserted considerably beyond it in orientale. Flowers in the spring, but somewhat later than tauricum. Is quite hardy. Native of Turkey.

Communicated by Messrs. Whitley, Brame, and Milie, of the Fulham Nursery.

# [Dionandes far dufixat $1 q^{\prime} 2$ ] ( 1912 ) 

## Symphytum tauricum. Taurian Comfrey.

## 

Class and Order.
Pentandra Monggynia.

## Generic Character.

Corolle limbus tubulato-ventricosus: fauce clausa radiis subulatis.

Specific Character and Synonyms.
Symphytum tauricum ; foliis cordato-ovatis hirtis: floralibus oppositis sessilibus, laciniis limbi corolle obtusis, caule ramoso. Willd. Enum. p. 184.
Symphytum foliis cordatis crenulatis basi inæqualibus petiolatis. Willd. in Nov. Act. Soc. Nat. Scrut. Berol. 3. p. 120. t. 6. f. 1.

Symphytum orientale; caule folisque cordato-ovatis petiolatis hirsutis summis oppositis sessilibus, corollæ limbo campanulato. Bieberst. Fl. Taur. Caucas. p. 129.
Symphytum constantinopolitanum, Boraginis folio et facie, flore albo. Tournef. Cor. 7. Ejusd. Iter ed. Angl. v. 2. p. 207. cum tab.

Symphytum tauricum was first distinguished from the orientale of Linneus by Wildeenow, in the Memoirs of the Natural History Society of Berlin. In Marschall v. Bieberstein's Flora Taurico-Caucasica, this plant is, however, again referred to the orientale of Linsmes. But in his Enameration of the Plants of the Berlin Garden, Wildenow still maintains that this plant differs from the orientale in the lacinix of the limb of the corolla being obtuse, which in the latter are acute. Linnees, in the second edition of his Species Plantarum,

Plantarum, quotes two of Tournefort's plants as synonyms of his orientale, the first of which belongs to Symphytum asperrimum of the Botanical Magazine, and the other, according to Willdenow, to our present plant; his definition is so short and so vague that it may apply to either.

A hardy biennial or perennial. Native of Southern Tauria, growing in shady situations. Flowers in May; but our drawing was taken in September, from a plant that flowered the first year it was sown, and, perhaps, on this account the margins of the leaves were more undulated than is nsual. Communicated by Mr. Joseph Knight, of the Exotic Garden, King's-Road.


Crotalaria purpurea. Crimson-flowered

## Crotalaria.

> ****************

Class and Order.
Diadelphia Dectindria.

## Generic Character:

Legumen, inflatum, pedicellatum. Filam. connata, cum fissura dorsali.

## Specific Character and Synonyms.

Crotalaria purpurea; foliis ternatis: foliolis obovatis retusis, racemis terminalibus, floribus saturate purpureis. Ventenat Malmuis. 66. Hort. Kezo. ed. alt. 4. p. 973. Persoon Syn. 2. p 285. Bat. Regist. 128.
Crotalaria elegans. Donn Hort. Cantab.

The Crotalaria purpurea is a small shrub, growing very erect, and generally producing but few branches, and a terminal raceme of fine crimson flowers.

Our drawing was taken, several years ago, at Mr. Whitley's. It was known in our gardens prioc to the publication by Ventenat, and inserted in the earlier editions of Donn's Catalogue, under the name of Crotalaria elegans; and, in the last edition of that work, this name is still continued, though it ought to have been expunged, as purpurea of Ventenat was admitted.
Native of the Cape of Good-Hope, where it was found by Mr. Francis Masson, and introduced into this country in 1790. Flowers early in the spring and during great part of the summer. Propagated by cuttings. Requires the shelter of the greenhouse.


# Momordica Elaterium. Squirting <br> Cucumber. 

## ****************

## Class and Order.

Mongecia Monadelphia.

## Generic Character.

Masc. Cal. 5-fidus. Cor. 5-partita. Filamenta 3.
Fem. Cal. 5-fidus. Cor. 5-partita. Stylus 3-fidus. Pepo elastice dissiliens.

Specific Character and Synonyms.
Momordica Elaterium; pomis ellipticis hispidis, foliis cordatis hispidis obtusis dentatis, cirrhis nullis. Willd. Sp. Pl. 4. p. 605. Hort. Kew. ed. alt. 5. p. 342. Persoon Syn. 2. p. 593.
Momordica Elaterium ; pomis hispidis, cirrhis nullis. Sp. Pl. 1434. Reich.4. p. 202. Woodv. Med. Bot. 121. t. 43. Regn. Bot. Martyn Mill. Dict. n. 8.
Cucumis agrestis. Blackzo. t. 108.
Cucumis sylvestris asininus dictus, Bauh. Pin. 314. Raj. Hist. 647.
Cucumis sylvestris. Cam. Epit. 946.
Cucumis asininus. Ger. Emac. 912. Park. Theatr. 161. Ic. 162.

The Squirting Cucumber has acquired this name from the power it possesses, when the fruit is ripe, of ejecting its seeds, together with a quantity of juice, with considerable force, from a small orifice made by its separation from the footstalk.

It is this singular property that alone can recommend this plant to a place in a garden, except for its medicinal virtues,
few plants having a viler aspeet. Nature has provided the capsules of many plants with a power of scattering their contained seeds to a distance, which is mostly effected by some of the parts of which they are composed contracting by their elasticity, and suddenly separating the moment their continuity is interrupted, of which a species of Balsam, hence called Touch me not, affords a notable instance; but the fruit of this cucumber, having a tough leathery covering, keeps the same form, after it has completely emptied itself of its contents, as it before possessed.

It affords young people amusement to set a person, ignorant of its properties, to gather the fruit, which, when quite ripe, will, upon the first attempt to pull it from its stalk, discharge a volly of seeds and juice, perhaps, into the face of the unsuspecting object of mirth.

From the liquor spontaneously discharged from the fruit, a medicine is prepared of very ancient celebrity, known by the name of Elaterium, which is of so active a nature, that a single grain will often occasion violent effects; but, in proper hands, is nevertheless considered as a powerful and useful remedy, particularly in certain dropsies.

Propagated by seeds, and generally considered as an annual, but if the soil is dry and the situation sheltered, the root will survive two or three winters, and the plants will Hower earlier and spread farther than those of the same year.

Communicated by John Walker, Esq- of Arño's-Grove.



## (1915)

## Erica Monsonie. Lady Ann Monson's

## Heati.

## 

## Class and Order.

Octandria Monogynia.

## Generic Character.

Cal. A-phyllus. Cor. persistens: limbo quadrifido. Antherie ante anthesin per foramina 2 lateralia connexæ. Caps. 4-8locularis, 4-8-valvis.

Specific Character and Synonyms.
Sect. III. Coniflore grandes A. Antheris aristatis.
Erica Monsonice; bracteis oblongis calyci proximis, corollis duplo longioribus calyce. Hort. Kew. ed. alt. 2. p. 381. Icon. Hort. Kew. 7.
Erica Monsoniana; foliis ternis, stylo incluso, corolla oblonga inflata calyce calyculato, floribus terminalibus ramulorum obtusorum. Linn. Suppl. 223. Hort. Kew. ed. $1^{\text {mas }}$ 2. p. 15.
Erica Monsoniana; antheris aristatis inclusis, stylo incluso, corollis oblongo-ovatis, calyce duplici colorato, floribus terminalibus subsolitariis, foliis ternis oblongis obtusis. Willd. Sp. Pl. 2. p. 358.
Erica Monsoniana; aristata, foliis ternis ovatis glabris, floribus solitariis, caule erecto. Thunb. Prod. 72. Diss. n. 52. $\boldsymbol{t}$. 1.f. 2.

Erica Monsoniana; foliis ternis, stylo incluso, corolla oblonga inflata, calyce calyculato, floribus terminalibus ramulorum obtusorum. Linn. Suppl. 223.
Erica Monsoniana. Andrews's Heaths, v. 2. Wendl. Eric. 10. p. 9. cum Icone.

Erica variifolia; foliorum laminis lineari-attenuatis ovatisque: calyce recurvo patente: corolla 7-9-lineari; pericarpio globoso, 4 -angulo. Salish. in Lin. Soc. Trans. 6. p. 353.

Of the astonishing number of Erice brought from the Cape of Good-Hope, there are few species more beautiful than the one here given, being of upright growth, and, in the season, generally covered with a profusion of blossoms. It varies considerably in the breadth of the leaves, which in some specimens are oval, in others nearly linear ; they grow by threes, but so close together as to appear at first sight more numerous. The leatlets of the calyx are large, oblong, obtuse, and recurved at the upper extremity, in the fullgrown flower, only half the length of the tube of the corolla, but as they are expanded before the corolla is fully grown, they sometimes equal it in size, and, if examined in that state only, this species might readily be supposed to belong to the division of calycince, in the late Mr. Dryander's excellent arrangement of this extensive genus. At the base of the calyx are four bractes similar to the calycine leaflets, but only about half the length, making what has been called a double calyx. In the beautiful and accurate figure, by Mr. Bacer, in his "Delineations of Exotic Plants, cultivated in the Royal Garden at Kew," the anthers are entirely included within the tube of the corolla, which in our specimen were exserted, and being of a black-purple colour, add by the contrast to the beauty of the flower, but at the same time tend to puzzle the arrangement, by making the species appear to belong to the division of Macrostemones. But in all the plants of that division the anthers are naked, which in our plant are awned, the awns or spur-like appendages having serrulate margins.

The species was named by Professor Thunberg and the younger Linneus, in honour of Lady Ann Monson.

Iniroduced in 1787, by Mr. Francis Masson. Flowers most part of the spring and summer. Our drawing was taken several years ago, at the late Mr. Grinwood's.


# Althea caribea. West-Indian 

## Holey-hock.

## 

> Class and Order.

## Monadelphia Polyandria.

Generic Characler.
Cal. duplex : exterior 6- s. 9-fidus. Capsule plurimæ, monospermæ.

## Specific Character.

Althea caribca; caule stricto, foliis rotundato-lobatis crenulato-serratis, floribus solitariis subsessilibus, unguibus petalorum barbatis, stigmatibus diffusis.
Obs. Althææ rosece nimis affinis.

This undescribed Holly-hock was communicated by our friend, John Walker, Esq. of Arno's-Grove, who raised it from seeds received from the West-Indies. It required to be kept in the stove, and seemed remarkably impatient of cold. It grew with an upright hispid stem about three feet high. Leaves bright green, paler underneath, cordate at the base, and obsoletely five-lobed: lobes rounded, between crenulate and serrate : petioles erect, longer than the membranous part of the leaf, thickened towards the base, hairy. Stipules one on each side the petiole, scariose, four-cleft: segments unequal, spreading out like fingers. Flowers solitary, alternate on very short footstalks, pale rose-coloured. External Calyx nine- sometimes eight-cleft : internal five-cleft. Petals five, obcordate, somewhat undulate. Clazvs united at the base and thickly bearded. Stamens very many, collected into a globular form, surmounted by many long, capillary, diffuse stigmas. Capsules about thirty-six.

In many respects this plant much resembles the Avthes rosea, or common Holly-hock, but seems to differ, besides in diminished stature, in the more uniform rounded lobes of the leaf, more neatly sawed at the edge; in the flowers being always solitary, which in the latter grow mostly two or more from the same axil; in the bearded claws of the petals; and, perhaps, in the four-cleft palmate stipules.

Flowers in March and April. Propagated by seeds.



## Daphne oleoldes. Cretan Daphne.

## ************-********

Class and Order.
Octandria Monogynia.
Generic Character.
Cal. 0. Cor. 4 -fida, marcescens, stamina includens. Drupa 1-sperma.

## Specific Character and Synonyms.

Daphne oleoides; floribus terminalibus paucis sessilibus, foliis obovato-lanceolatis utrinque glabris mucronulatis circa flores congestis.
$\mathrm{D}_{\text {aphne }}$ oleoides; floribus geminis terminalibus sessilibus, foliis elliptico-lanceolatis glabris. Linn.Mant.66. Schreb. Dec. 13. t. 7. Willd. Sp. Pl. 2. p. 423. Reich. 2. p. 194.
Daphne salicifolia; floribus aggregatis perpaucis sessilibus terminalibus, foliis lineari-lanceolatis utrinque glabris. Lam. Encycl. 3. p. 423.
Thymelea cretica olea folio utrinque glabro. Tournef. Cor. 41.
Chamedaphnoides cretica. Alpin. Exot. 44. t. 43.

Descr. A low shrub, not much branched. Stem and branches villous, brown. Leaves narrowed at the base, widening upwards beyond the middle, then tapering off to a sharp point, terminated in a minute mucro, quite entire, margin reflected, smooth on both sides, paler on the under, scattered, and crowded about the ends of the branches, serving as an involucrum. Flovers from two to five, terminal, sessile, purple, but covered with a white pubescence. Germen inferior, ovate : stigma large, globular, hollowed at the apex, sessile.

This

This species approaches to collina; but, besides being much smaller, differs in the form and colour of the leaves, not villous underneath.

A small piece of a leaf chewed with great caution, from Prosper Alpinus's account of its acrimony, at first excited very little sensation ; in a little time the throat began to tingle, then gradually to burn more and more, till the heat became almost intolerable, and lasted several hours, notwithstanding the frequent swallowing of milk with a view of soothing it.

Our drawing was made from a plant communicated by Messrs. Loddiges and Sons, in October 1815; and we received a specimen of the same last March, from Messrs. Whitley and Co. which is probably the more natural time of flowering. Native of Crete.


## ( 1918 )

## Stylidium graminifolium. Grass-leaved

## Stylidium.


#### Abstract

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## Class and Order.

Gynandria Diakdria.

## Generic Character.

Cal. 2-labiatus, 5 -fidus: lacinia quinta (Labello) dissimili minore, deflexa (raro porrecta), reliquis patentibus (raro geminatim cohærentibus). Columna reclinata duplici flexura. Antheris bilobis, lobis divaricatissimis : stigmate obtuso indiviso. Capsula bilocularis, dissepimento superne quandoque incompleto. Brown.

## Specific Character and Synonyms.

Sect. I. Capsula ventricosa, subovata, nune spherica v. oblonga. B. Folia radicalia conferta squamis nullis interstinctis. Calycis labia $\frac{2}{3}$ dentata. Scapi aphylli.
Stylidium graminifolium; foliis linearibus margine denticulatis, racemo subspicato simplici scapoque glandulosopiloso, labello basi appendiculato. Brown Prodr. Fl. Nov. Holl. 568. Hort. Kew. ed. alt. 5. p. 222. Bot, Reg. 90.
Stylidium graminifolium. Szartz in Nov. Act. Soc. Nat, Scrut. Berol. 1807. 49, t. 1. f. 1. Willd. ibid. 55. Ejusdem Sp. Pl.A. p. 146. Labillard. Nov. Holl. 2. p. 65. t. 215.

Stylidium serrulatum. Persoon Syn. 2. p. 210.
Ventenatia major. Smith Exot. Bot. 2. p. 13. t. 66.
Candollea serrulata. Labillard. in Annal. du Mus. 6.p.454. t. 74. f. 2.

Descr. Root fibrous, annual? Leaves radical, erect, linear-lanceolate, rigid, minutely denticulate, having a herbaceous somewhat acid taste. Scape a foot or more in height,
without leaves or scales, clothed with glandular hairs. Inflorescence a spiked raceme. Bractes three at the base of each pedicle longer than it: external lower one largest, ovalacuminate, with a round gland at its base; two internal ones shorter, linear. Calyx persistent, superior, bilabiate: lips divaricate, when the flower first opens apparently quite entire, but, after the blossom is fallen, the one evidently two- the other three-toothed. Limb of Corolla five-cleft, four of the lacinice ovate, spreading, two upper ones somewhat larger than the lower: the fifth (or labellum) smaller, linear, recurved, having two small, subulate, upright appendices at its base : tube longer than calyx : faux beset with eight thread-like, glandular processes, erect, unequal. Column flattened-cylindrical sigmoid, bearing at its extremity two two-lobed anthers with lobes extremely divaricate; and between them the green stigma, more evident after the anthers have discharged their pollen; the margin of the receptacle of the anthers is surrounded by lucid hairs, when magnified resembling icicles. Germen after the fall of the corolla ovate, inflated, two-celled, cells parted by a very thin dissepiment; ovula many, attached to the centre of the dissepiment.

There are several species of Stylidium which possess a singular irritability of the column, and, perhaps, this property is in none more remarkable than in the present plant; in which the column is, in its natural state, bent over the reflected labellum, so as to bring the capitulum, containing the anthers and stigma, nearly in contact with the germen; when slightly touched near the base, the column suddenly springs up, carrying the capitulum with a sudden jirk over to the opposite side of the flower. When left quiet, after a short time the column gradually resumes its former position, ready to spring again when exposed to any irritation, but probably with diminished force every time.

That the real stigma is situate in the centre of the capitulum, terminating the column, is, we believe, now generally admitted, though for some time warmly disputed. The use of the above mechanism is not very evident; to us it appears most probable, that it is intended to disperse the pollen, to insure the fertilization of the ovary, which, notwithstanding the close approximation of the anthers and stigma, is, perhaps, impossible to be effected by its own individual anthers, from the stigma not being exposed till after the bursting of these.

Our drawing was made from a plant kindly communicated by Mr. Lee, of the Hammersmith Nursery, in December last, at which time they were generally in blossom, though not forced by artificial licat, but merely protected from frost.


Echites caryophyllata. Clove-scented Echites.

## 

# Class and Order. <br> Pentandria Monogynia. 

## Generic Character.

Contorta. Folliculi 2, erecti. Sem. extremitate superiore comosa. Cor. hypocrateriformis, faux nuda. Anthere medio cum stigmate cohærentes. Brown.

## Specific Character and Synonyms.

Echites caryophyllata; panicula terminali, calycibus patentibus corollam æquantibus, foliis ovatis mucronulatis. Echites caryophyllata. Roxb. Icon. inedit.

- Tsjeria-pu-pal-valli. Hort. Malabar. 7.p. 103. t. 55.

Descr. Leaves opposite, petioled, cordate-ovate, quite entire, obtuse, with a small mucro, yellowish-green, shining, nerve and large veins red, interstices reticulate-veined, paler underneath. Flowers in a terminal, trichotomous panicle, yellowish-pale-green. Bractes small, deciduous. Calyx fivecleft : segments lanceolate, spreading, villous on the outside, equalling the corolla, of which the tube is five-angled, contracted towards the base, hairy within: lacinice of the limb contorted. Anthers arrow-shaped, connivent, adhering to the stigma. From Roxburgr's manuscript we learn, that the stem is woody, climbing, as thick as a man's thigh, with dark rust-coloured bark, rough with fissures and scabrous specks; and that the follicles are cylindrical, spreading, containing a few large seeds crowned with down.

The flowers are very agreeably fragrant, somewhat aromatic ; but, in our opinion, the scent does not resemble that of cloves.

Echitès

Echites belongs to the natural order of Apocinea of Brown, who has separated the Asclepiadeæ from this order, and is the first genus in his division having a coma at the umbilical or superior extremity of the seed; and the plant which he has especially recommended to be re-examined. Vide Memoirs of the Wernerian Society, v. 1. p. 60.

Native of the East-Indies. Requires to be kept in the stove. For an opportunity of giving a drawing of this very rare plant, we are indebted to Sir Abraham Hume, of Wormly-Bury, Herts, in whose stove it flowered, in October 1815.


## Smilax herbacea. Herbaceous Smilax.

## *****************

## Class and Order.

## Digecia Hexandria.

Generic Character.
Masc. Cal. 6-phyllus. Cor. 0.
Fem. Cal. 6-phyllus. Cor.0. Styli 3. Bacca 3-locularis. Sem. 9.

## Specific Character and Synonyms.

Smilax herbacea; caule inermi angulato, foliis ovatis acuminatis septemnerviis, pedunculo communi umbellæ folio longiore. Willd. Sp. Pl. 4. p. 789. Hort. Kew. ed. alt. 5. p. 390. Persoon Syn. 2. p. 619.

Smilax herbacea; caule inermi angulato, foliis inermibus ovatis septemnerviis. Sp. Pl. 1460, rejecto synonymo Plukenetii.
Smilax herbacea; caule angulato erecto simplici, foliis longe petiolatis ovalibus septemnervibus, umbellis longissime pedunculatis, pedunculo compresso, baccis depresso globosis. Pursh Flor. Amer. Sept. 1. 251.
Smilax herbacea; caule herbaceo, erecto, simplici; foliis longe petiolatis, ovalibus, septemnerviis; umbellulis longissime pedunculatis; pedunculo compresso ; baccis depresso-globosis. Michaux Flor. Bor.-Am. 2. p. 238.
Smilax lævis marilandica, foliis hederæ nervosis prælongis pediculis insidentibus, flosculis minimis in umbellam parvam congestis. Raj. Suppl. 345 ?

The number of nerves in the leaves of this species is not to be entirely depended upon, as affording a specific difference; we have observed seven and nine on the same plant ; and thence we are inclined to doubt, whether S. herbacea and peduncularis
peduncularis be really distinct; or, if they be, to which of them our plant ought to be referred. Both Pursh and Michaux describe herbacea as having an erect angular stem, and peduncularis a climbing rounded stem: our plant has a climbing and an angular stem. Ray's plant, in the specimen he saw, had no tendrils, and a stem too straight and robust to look like a climbing plant. Plukenet's figure, quoted by Linneus, is rejected by Michaux, but referred to by Pursh. Neither it, nor the one quoted by Gronovius, can throw any light upon the distinction of the species.

A hardy herbaceous plant. Native of North-America. Propagated by dividing its roots. Communicated by Messrs. Loddiges and Sons.


## Solanum giganteum. Tall Nightshade.

## 

Class and Order.

## Pentandria Monogynia.

## Generic Character.

Cor rotata. Anthera subcoalite, apice poro gemino dehiscentes. Bacca 2 -locularis.

## Specific Character and Synonyms.

Solanum giganteum; caule aculeato fruticoso: aculeis tomentosis, foliis lanceolatis acutis inermibus supra glabris subtus tomentosis et incanis, racemis dichotomis cymosis terminalibus. Willd. Sp. Pl. 1. p. 1046. Hort. Kezo ed. alt. 1. p. 404. Jacq. Collect. 4. p. 105. Icon. Rar. 2. t. 328. Dunal Solan. p. 202.
Solanum niecum; caule fruticoso aculeato, foliis ellipticis integerrimis inermibus subtus tomentosis niveis. Vahl Symb. 2. p. 41.
Solanua niveum; caule aculeato fruticoso, foliis ovatis subtus tomentoso-niveis integris, panicula decomposita. Thunb. Prodr. 36. Persoon Syn. 1. p. 229.

Said to grow in its native country to the height of sixteen feet, with a stem as thick as, a man's arm, furnished with stout short prickles. The plant from which our drawing was taken was little more than four feet high, upright, little branched aculeate; prickles thickset, conical, short, tomentose towards their base, naked and yellow at the point: branches covered with white hoary tomentum. Leaves oblongelliptical, narrowed at both ends, unarmed, smooth on the upper surface, tomentose, white underneath. Flowers paleviolet, small, not unlike those of Dulcamara, growing in a compound cyme, nearly terminal, but becoming lateral by
the branch shooting beyond it. Pedicles crowded, looking one way, hoary, nodding when in flower, but in fruit erect. Calyx small, hoary, five-cleft : segments unequal, one being longer than the rest. Berries said by Jacquin to be about the size of a pea, round, and, when ripe, red.

Native of the Cape of Good-Hope. With us properly an inhabitant of the conservatory. Flowers in June and July. Propagated by cuttings. Communicated by Messrs. Jenkins and Gwyther, from their very extensive collection, at the Portman Nursery, in the New-Road.


# Primula decora, Comely Auricula. 



> Class and Order.

Pentandria Monogynia.

Generic Character.
Involucr, umbellulæ. Corolla tubus cylindricus ore patulo.

## Specific Character and Synonyms.

Primula decora; foliis planis grosse serratis acutis, calycibus viscidulis, pedicellis scapo longioribus.

This plant is nearly allied to Primula villosa, of which we have already given two very distinct varieties, and are acquainted with a third, the helvetica of Dons's Hortus Cantabrigiensis; but we think it is specifically different from all of these, in which the leaves are rounded at the extremity, and the serratures or crenæ are continued uniformly over the end. In our plant, the serratures are larger and much fewer, being usually about four on each side, and occupy the sides of the leaf only, leaving the apex pointed and entire; or, in other words, the terminal tooth is larger and more acute than the others.

In the late Mr. Zier's Herbarium, now in our possession, is a specimen of our plant from the Kew Garden, where it was then called decora, which name we have adopted; being: convinced that, although frequently taken for glutinosa, it is quite distinct from that species, which has nearly or altogether sessile flowers, and narrow, minutely-sawed, and clammy leaves.

We are not acquainted with the country from which it came. It was communicated by N. S. Hodson, Esq. of the War-Office.

Flowers in April. Is as hardy as the common Auricula, and requires the same treatment.

## ( 1923 )

## Podalyria Sericea. Silky Podalyria.

## *****************

## Class and Order.

Decandria Monogynia.

## Generic Character.

Cal. 5 -fidus, inæqualis, basi intrusa.. Cor.papilionacea, vexillo majore. Stamina persistentia, basi connata. Legumen ventricosum, polyspermum.

## Specific Character and Synonyms.

Podalyria sericea; foliis obovatis mucronatis utrinque sericeis, pedunculis axillaribus solitariis unifloris brevissimis.
Podalyria sericea; foliis oblongo-obovatis utrinque calyceque sericeis, pedunculo unilloro, aliquoties longioribus. Brown in Hort. Kew. ed. alt. 3. p. 7.
Sophora sericea. Rot. Repos. 440.

Descr. Stem shrubby, branched. Leaves simple, alternate, subsessile, entire, ovate or obovate, with a recurved mucro, covered on both sides with closely-adpressed silky hairs, veined underneath. Stipules subulate, erect, falling. Peduncles axillary, solitary, one-flowered, several times shorter than the leaf. Bracte one on each peduncle. Calyx scarcely intruded at the base, bilabiate $\frac{\frac{3}{3}}{3}$ : the two segments of the upper-lip united to near the tips, three lower segments subulate; the middle one longer than the rest (vide fig. 6.) Corolla papilionaceous, pale rose-coloured: Vexillum or Standard (f. 1.) roundish, emarginate, with a short reflected claw: Ala or Wings (f. 2. 2.) shorter than vexillum, with a claw nearly the length of the limb of the petal. Carina or Keel (f. 3.) shorter than the alæ, of two petals similar to the alæ, cohering at the point, base and claws distinct. Stamens ten (f. 4.)
filaments distinct. Pistil (f. 5.) Ciermen oblong, silky; style the length of the stamens; sligma quite simple.

The figures, shewing the different parts of the flower, will serve as an example of the decandrous papilionaceous flowers in general, which differ but little from the diadelphous, except that the filaments in the latter are united into a sheath surrounding the germen, whereas in these they are distinct.

The Podalyria sericea is not an uncommon shrub in our greenhouses, and recommends itself by its fine silky foliage; but does not very often blossom : when it does so, it is always, as far as we have seen, in the winter months, from November to February. Native of the Cape of Good-Hope. Propagated by cuttings. Communicated by our friends Messrs. Lodpices and Sons.


# Bletia Tankervillie. Lady Tankerville's 

## Bletia.

## ***************** <br> Class and Order.

Grnandria Monandria.

## Generic Character.

Labellum sessile, cucullatum; nunc basi calcaratum. Petala 5, distincta. Columna libera. Masse pollinis 8 , vel 4 bilobæ. Brown.

## Specific Character and Synonyms.

Bletia Tankervillice ; labello calcarato indiviso : cornu abbreviato, foliis radicalibus ovato-lanceolatis. Brozon in Hort. Kew. ed. alt. 5. p. 205. Loddiges's Cabinet of Botany, No. 20.
Limodorum Tankervillia; floribus racemosis imberbibus. Hort. Kew. ed. $1^{\text {ma. }}$ v. 3. p. 302. tab. 12. L'Herit, Sert. Angl. 28.
Limodorum Tankervillice; foliis radicalibus ovato-lanceolatis nervosis,' scapo simplici multifloro, labello cucullato integro, cornu abbreviato. Szoartz Nov. Act. Ups. 6. p. 79. Willd. Sp. Pl. 4. p. 122. Redouté Liliac. 43. Schneev. Ic. 5. Bot. Repos. 426.
Limodorum Incarvillei. Persoon Syn. 2. p. 520.
Phaius grandifolius; foliis lanceolatis plicato-sulcatis, scapo nudo polyfloro. Loureiro Cochin. ed. Ulys. 2. p. 529. ed. Willd. 2. p. 647.

This very beautiful plant, a great ornament to our stoves, was introduced from China, by our much respected friend, the late Dr. John Fothergill, about the year 1778.

The scape grows quite erect, sometimes three feet high, and the spike of flowers will extend to two feet. The singular chesnut-brown
chesnut-brown colour of the inside of the petals, contrasted with the perfect white of their outsides, and the fine white nectarium shaded and streaked with crimson, give the flower a striking and beautiful appearance.

The specific name was, we believe, first published by M. L'Heritier, in his Sertum Anglicum, from an engraving in Sir Joseph Banks's Museum, bearing this denomination, and probably the same that was given to the public the following year, in Arton's Hortus Kewensis. It was proposed in honour of Lady Tankervilie, an encourager of Botany. We are at a loss, therefore, to account for the assertion in Persoon's Synopsis, that the name of Tankervillice was improperly given to this plant, by Mr. Arton, and that it should have been Incarvillei, being dedicated to the memory of Father Incarvilew.

It is by no means a tender plant, and should be allowed a good deal of air, but will not flower well out of the stove. Propagated by separating its bulbs, by which it multiplies pretty fast. Flowers in March and April. Communicated by John Walker, Esq. of Arno's-Grove.

[^3]

# Callistachys ovata. Oval-leaved 

Callistachys.

## *********************

## Class and Order.

## Decandria Monogynia.

## Generic Character.

Cal. 2-labiatus: labium superius semibifidum. Cor. papilionacea. Stam. distincta disco inserta. Stigma simplex. Legumen stipitatum, lignosum, apice dehiscens, [ante maturitatem multiloculare,] polyspermum. Ventenat.

## Specific Character and Synonyms.

Callistachys ovata; foliis ternatis obovatis mucronulatis subtus sericeis.
Callistachys elliptica; foliis ellipticis obtusis. Ventenat Malmais.2.p.115.b? Smith Linn.Soc.Trans.9.p.266?

The genus Callistachys has been established by M. Ventenat, in the second volume of the Jardin de Malmaison, where he has given a full description and figure of one species, under the name of lanceolata, and has slightly mentioned a second, which he presumed to belong to the same genus; but, as it had not at that time flowered, its place could not be positively ascertained. This last has been since referred by Mr. Brown, in the Hortus Kewensis, to Oxylobium, a genus to which Callistachys seems very nearly allied; but our plant is doubtless a congener of Ventenat's Callistachys lanceolata, and is totally different from Gompholobium ellipticum of Labillardiere; it was received from Paris, by Messrs. Loddiges and Sons, at the same time with the latter, under the name which we have adopted. Ventenat's account of his Callistachys elliptica
is too imperfect to determine whether it may have been really our plant or Oxylobivm ellipticum of Hortus Kewensis.

Callistachys ovatia differs but very little from lanceolata, except in the form of its leaves and their being more generally, though not constantly, ternate ; in lanceolata they grow sometimes opposite, sometimes by fours or by threes, and not unfrequently without any order. The calyx, and particularly the germen in both, are covered with long silky hairs. Perhaps the legumen was not far enough advanced to determine it accurately, but, in the early stage, it did not appear to me to be properly multilocular ; but, being very fleshy, and the seeds partly imbedded in it, the substance of the pod runs some way between the seeds, but not so as to make a complete septum. The ripe legumen is certainly unilocular.

Our plant, as well as Callistachys lanccolata, was, we believe, raised in the garden of the late Empress Josepaine, at Malmaison, from seeds brought from New-Holland by Captain Baudin.

It is by no means tender, but requires to be protected from frost in the winter season. Propagated by cuttings. Flowers in July and August.

Communicated last year by Messrs. Loddiges and Song, and we have been favoured with flowering specimens of both species at the present time, by the same liberal friends.


## ( 1926 )

Maranta zebrina. Striped-leaved

## Maranta.

## 

## Class and Order.

Monandria Monogynia.
Generic Character.
Anthera simplex filamento adnata. Stylus petaliformis. Stigma subtrigonum:

## Specific Character.

Maranta zebrina; acaulis, spica ovata compacta, spathis obtusissimis imbricatis multifloris, folliis ellipticis acuminatis striatis.

This very fine plant was sent some years ago from Brasil to the Apothecaries Garden at Chelsea, by Emp. Alex. John Woodford, Esq. late of Belfont-House, Vauxhall. It has been long admired for the beauty and singularity of its foliage, and its flowering has been anxiously expected, which took place in May last, and a succession of blossoms continued for several weeks.

Scape radical, short, involved in the sheathing petiole of a young leaf. Flowering spike round-oval, compact; outer bractes very obtuse, with a short acumen, rigid, imbricate : within each of these was a number of oblong purple-coloured, delicate bractes, involving one another, from amongst which the flowers came forth by pairs, proceeding from the bottom of the spike gradually to the top; but as the flowers dropt off, fresh pairs proceeded from the same bracte, so that the bottom series continued to put forth blossoms long after the top of the spike began to be in flower; and the whole number of blossoms produced must have been very great. Calyx
consists of three distinct, ovate, concave, petal-like segments, of a pale violet colour* : tube of corolla filiform, the length of the calyx, external laciniæ of the limb nearly equal, deep violet : internal laciniæ unequal, whitish, tinged with purple. Those parts put on such different appearances at different periods, that it is not easy to describe them: at the first coming of the flower, the larger lacinia covers the column like a hood, and has a thumb-like appendix with which it embraces the filament: this part is afterwards reflected. The other two laciniæ are very narrow, and if we understand Mr. Brown, he is inclined to consider these as barren filaments, and that the two laciniæ of the internal series are wanting. The style is a thick column somewhat incurved, has a two-lobed extremity, somewhat of the form of a hammer, the upper end of which is obtuse and rounded, the lower end concave, and, from its secreting surface, must be considered as the true stigma; before the column escapes from the hooded petal, the anther discharges its pollen mass, consisting of a congeries of globules, which are uniformly lodged, not on the secreting surface, turned with its cavity downwards, but in a slight depression in the face of the hammer. After efflorescence, the column is lengthened and curled inwards.

Being a native of Brazil, it requires to be kept constantly in the bark stove.

[^4]

# Antivllis Barba Jovis. Silver-leaved Antiyllis, or Jupiter's-Beard. 



Class and Order. Diadelphia Decandria.

Generic Character.
Cal. ventricosus. Legzmen subrotundum, tectum, monos. tri-spermum.

## Specific Character and Symonyms.

Anthyllis Barba Jovis; fruticosa, foliis pinnatis æqualibus sericeo-tomentosis, bracteis capitula globosa muitiftora æquantibus. Willd. Sp. Pl. 3. p. 1018. Hort. Kew. ed. alt. 4. p. 283.
Anthyllis Barba Jovis; fruticosa, foliis pinnatis æqualibus tomentosis, floribus capitatis. Sp. Pl. 1013. Hort: Cliff: 371. Hort. Ups. 221. Mart. Mill. Dict. n. 10. Mill. Ic. 1. t. 41.f. 2. Desf. Fl. Atl. 2. p. 149. Allion. P'edem. 1. p. 312. Gertn. Fruct. 2. p. 308. t. 145. f. 3.

Barda Jovis. Bauh. Pì. 397. Raj. Hist. 1721. Riv. Tetr. 5. Weinm. Phyt. t. 230. a.

Jovis Barba pulchre lucens. Bauh. Hist. 1. b. p. 385. Jovis Barba frutex. The Silver-Bush. Park. Theatr. 1459. Vulneraria argentea. Lam. Fl. Franc. v. 2. p. 631. Anthyllis Barba Jovis. Lam. et Decand. Fl. Franç. v. 3. p. 517.

This beautiful silvery-leaved shrub was known in our gardens in the time of Parkinson; but being impatient of cold, and at the same time requiring a pure air, it is not so commonly met with in our greenhouses as it deserves.
It grows sometimes to the height of ten or twelve feet, with
with numerous branches. Miler, with most authors, describes the flowers as being of a bright yellow colour; but in his Icones they are represented of a pale yellow, and we have never seen them otherwise than nearly white.

Native of the South of Europe and the Levant. Flowers in the spring. Propagated by seeds or by cuttings. Com= municated by Messrs. Loddiges and Co.


## Solanum marginatum. White-margined Nightshabe.

## ********************

> Class and Order.

Pentandria Monogynia.

## Generic Character.

Cal. 1-phyllus, persistens. Cor. 1-petala, rotata. Anthera oblongæ, apice poris duobus dehiscentes. Bacca 2-3-4locularis. Dunal.

## Specific Character and Synonyms.

Solanum marginatum; (aculeatum) caule fruticoso, foliis subcordatis sinuato-lobatis subtus tomentoso incanis supra margine albis, baccis trilocularibus. Dunal Solan. p. 215. cum figura fructîs, t. 3. A. Ejusdem Synops. Sol. p. 40. n. 245.
Solanum marginatum; aculeatum, foliis cordatis repandis margine albis. Linn. Suppl. 147. Jacq. Collect. 1. p. 50. Ejusdem Ic. Rar. 1. t. 45. Hort. Kew. ed. alt. 1. p. 403.
Solanum marginatum; aculeatum, foliis sinuato-angulatis subtus omnino superne margine tomentosis, calycibus tripartitis. Murray Comm. Gott. 1783. p. 11. t. 4 .

The name of marginatum was given to this species, from a broadish white irregular stripe along the margin on the upper surface, which, however, is not always evident, either in the younger leaves, which are at first covered all over with a woolly powdery pubescence, or when they are grown old, but is most remarkable in the intermediate stage; for the white tomentum disappearing gradually from the upper surface, remains longer near the edge than on the rest of the leaf, and thus produces the white margin.

This shrub grows three or four feet high, and bears racemes of large flowers, not unlike those of the Potatoe The calyx is never reflexed, and has on the fruit the same kind of yellowish straight prickles as grow on the stem and on both sides of the leaves. The flower is white with a pale purple star, the rays of which proceed from the centre along the course of the lacinix of the pubescent corolla. The three cells of the berry are not very accurately defined.

Native of Palestine. Requires the protection of a good greenhouse. Introduced in 1775. Propagated by seeds, which are ripened with us in favourable seasons. Flowers most part of the summer. Communicated by John Walkers, Esq. of Arno's-Grove.


# Cynanchum viridiflorum. Greenflowered Cynanchum. 

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## Class and Order.

Pentandria Digynia.

## Generic Character.

Asclepiadea. Masse pollinis læves, 10, pendulæ. Corona staminea simplex, j-20-loba. Cor. subrotata. Folliculi laves.

Specific Character.
Crnanchum viridiforum; volubile, foliis cordato-ovatis acuminatis, umbellis subsimplicibus solitariis, pedicellis, pedunculo communi longioribus.

We have not been able to find a description of any species of Cynanchum, that agrees with our plant, nor is there any one in the very extensive Herbarium of Sir Joseph Banks, that corresponds with it. We are therefore constrained to take it up as an undescribed one.

It has a twining stem extending several feet, producing umbels of green flowers with a flesh-coloured ring in centre, which grow from the middle of the stem between the petioles. The proper pedicles supporting the flower are mostly simple, but sometimes divided, unequal, longer than the petiole or common footstalk. Lacinia of the corolla recurved. Native country not quite certain, but believed to be the East-Indies. Requires to be kept in the stove, where, if it can find support, it will extend many feet. May be propagated by cuttings.

We have not seen this plant any where but in the collection of the Comtesse de Vandes, at Bays-Water, by whom it was communicated in November 1815.


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# Ophrys tenthredinifera. Saw-fly 

## Opurys.

#  

Class and Order.
Gynandria Monandria.

## Generic Character.

Corolla subpatens. Labellum ecalcaratum. Glandula pollinis cucullis distinctis inclusad. Brown.

## Specific Character and Synonyms.

Ophrys tenthredinifera; caule folioso, labello villoso obovato bilobo appendiculato, petalis patentibus: tribus exterioribus oblongis obtusis : binis interioribus brevissimis. Willd. Sp. Pl.4. p. 67. Sm. Prodr. Fl. Grac. Sibth.v.2. p. 217. nondum editus. Bot. Reg. 205.

Ophrys insectifera. A. rosea; labello villoso oblongo-obovato, apice bilobo appendiculato. Desfont. Atl. 2. p. 320.
Ophrys villosa. Desjont. in Annales du Muséum 10. 220. $t .14$.
Orchis orientalis fucum referens, flore parvo, villosissimo, scuto azureo. Tourn. Cor. 30. Vélins du Mus.

It is very remarkable how many forms of different insects are more or less accurately represented by the flowers of this genus. Linneus, who had no opportunity of examining but a few of them, in a living state, was induced to consider most of them as mere varieties of the same species. Later Botanists have, apparently with good reason, described them as distinct, but have found it not a little difficult to find good discriminative characters.

That our present plant is distinct from Ophrys aranifera of the British Flora, is sufficiently evident; it has indeed a
greater affinity with our Opurys apifera, but whether it can properly be separated from the Ophrys arachnites of Willdenow, is not so clear ; having, however, no opportunity of comparing it with living specimens of the latter, we acquiesce in the authority quoted.

The colour of the corolla varies considerably in different individuals of this species. We have given in the upper figure, a representation of one, in which the outer lacinie were of a bright rose-colour, in others they were nearly white: the blue mark at the base of the labellum also varies in size ; and the colour of the same flower changes by age.

Our plant was sent, with other Orchideæ, from Sicily, by W. Swainson, Esq. A. L. S. to the President of the Linnean Society, by whom they were transmitted to the care of Mr. Anderson, the worthy Curator of the ApothecariesGarden, at Chelsea, expressly for the use of the Botanical Magazine. These roots were treated by Mr. Swainson, as directed in Smith's Introduction to Botany (see Rad. tuberosa) and came over in great perfection.

Flowers in April and May. Native of Barbary and Sicily. Requires to be protected from frost in the winter.


## ( 1931 )

## Cuphea procumbens. Procumbent Cuphea.

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## Class and Order.

Dodecandria Monogynia,

## Generic Character.

Cal. 6-12-dentatus ; basi hinc gibbosa. Petala 6, calyci inserta. Caps. 1-locularis, hinc cum calyce longitudinaliter dehiscens.

## Specific Character and Synonyms.

Cuphea procumbens; floribus solitariis, foliis ovato-lanceolatis subhispidis, caule assurgente glanduloso-piloso, filamentis duobus longioribus apice ultra antheram lanatis.
Cuphea procumbens; caule herbaceo, ramis procumbentibus viscosis, foliis ovato-lanceolatis subhispidis breviter petiolatis. Cav. Ic. 4. p. 55. t. 380. Persoon Syn. 2. p. 8. Bot. Regist. 189.
Cuphea lanceolata; floribus axillaribus solitariis, foliis lanceolatis pilosiusculis, caule erecto hirto, stylo glabro, filamentis duobus longioribus apice lana exserta antheras superante. Hort. Kew. ed. alt. 3. p. 150?

Descr. Root biennial or annual. Stem. rounded, covered with reddish hairs, tipped with viscid glands, nearly erect : lower branches procumbent. Leaves opposite, ovate-lanceolate, margin quite entire, somewhat undulate, clothed with roughish hairs, which are longer on the younger ones. Flozeers solitary, growing on short nodding peduncles, not from the axils of the leaves, but from the side of the stem between the leaves. Calyx hairy, viscid, tubular, upper side projected at the base into a kind of blunt spur, divided at the top into six unequal teeth; three upper ones larger than the three lower. Petals 6, inserted into the calyx, ovate, clawed: two upper ones twice as large as the rest. Stamens 12, inserted
inserted in two rows into the tube of the calyx, two in the upper row longer than the rest, projecting beyond the anther in a dense woolly termination. Germen oblong. Style smooth, or having only a few straggling hairs.

This is probably the same species that is called lanceolata in the Hortus Kewensis; at least it has two of the filaments lengthened in the same manner beyond the rest, and terminated in a woolly tussock above the anthers. The main stem is usually nearly erect, but the lower branches are procumbent.

Native of Mexico. Propagated by seeds, and should be treated as the tenderer annuals, raised under a frame in the spring, and planted out in the open border by the latter end of May. Introduced in 1796 by Mr. W. Anderson, Curator to the Apothecaries-Garden at Chelsea. Communicated by Messrs. Whitley, Brame, and Milne, of the Fulham Nursery.


# Orchis acuminata. Pointed-flowered 

## Orchis.



> Class and Order.

Gynardria Monandria.

## Generic Character.

Cor. ringens. Labellum basi subtus calcaratum. Glandula (1-2) pedicellorum pollinis inclusæ cucullo unico. Brown.

## Specific Character and Synonyms.

Orchis acuminata; (bulbis indivisis) labello trifido, corolle laciniis omnibus erectis conniventibus : externis subulatoacuminatis confluentibus, cornu germine duplo breviori.
Orchis acuminata; bulbis indivisis; floribus dense spicatis; laciniis conniventibus; tribus exterioribus apice subulatis; labello trilobo; lobo intermedio latiore. Desf. Atl. 2. p. 318. t. 247.
Orehis acuminata. Willd. Sp. Pl. 4. p. 17.

Descr. Leaves ovate-lanceolate, streaked, sometimes, but not always, spotted. Stem scarcely a span high, with three sheathing leaves. Inflorescence a dense oval spike. Bractes lanceolate; lower ones somewhat longer, the upper ones shorter than the germen. Corolla pale flesh-coloured, outer lacinia confluent at the base, terminated in a long subulate point, two inner smaller, alternating with the outer, all erect, connivent; labellum or nectary spotted, three-lobed; middle lobe rounded, crenulate, sometimes emarginate; side lobes narrow, obliquely truncate. Spur shorter by half than germen, obtuse, incurved. Column helmet-shaped, glands of the pollen masses united in one cell, which diverges into two branches upwards.

This very rare plant came from the same source as Ophars tenthredinifera, being sent by W. Swainson, Esq. to Sir James Edward Smith, from Sicily, and nurtured by Mr. Anderson, of the Chelsea Garden. Native of the hills about Algiers. It flowered in April.

It appears to us to approach nearest to ustulata and fusca, but is easily distinguished from both, by the subulately elongated outer laciniæ of the corolla.


# Crotalaria fenestrata. Window-calyxed 

## Crotalaria.



Class and Order.
Decandria Monogynia.

Generic Character.
Legumen turgidum, inflatum, pedicellatum. Filamenta connata cum fissura dorsali.

## Specific Character.

Crotalaria fenestrata; foliis simplicibus ovato-lanceolatis subtus sericeis ciliatis, vexillo suborbiculato acuminato, foliolis calycinis inferioribus apice cohærentibus.

A native of the East-Indies, and very nearly allied to Crotalaria juncea, (No. 422) from which it differs, in having leaves more acute, silky underneath, smooth above, and ciliated. The vexillum is remarkably large, streaked, margin slightly undulate and somewhat acuminate : it does not seem disposed to roll back from the apex towards the base, in the manier of Crotalaria juncea. The three lower leaflets of the calyx remain firmly united at the point, even till the flower fades, and by contracting lengthwise open at the sides. This effect has given occasion for the name.

Communicated in flower, in September 1816, by the Honourable William Herbert, from his collection at Spofforth in Yorkshire, who raised it from seeds received from the East-Indies.

We suppose it is only of one year's duration, and should be treated like other tender annuals.


## Echium creticum. Cretan Viper's-

Bugloss.

## ********************

## Class and Order.

Pentandria Monogynia.

> Generic Character.

Cor. irregularis, fauce nuda.

## Specific Character and Synonyms.

Echium creticum; caule herbaceo echinato, foliis oblongolanceolatis hispidis basi parum angustatis, staminibus corollam subæquantibus, calycibus fructiferis distantibus. Willd. Enum. p. 187.
Echum creticum ; caule procumbente, calycibus frutescentibus distantibus. Hort. Ups. 35. Sp. Pl. 200. ed. Willd. 1. p. 788. Hort. Kew. ed. alt. 1. p. 202. Kniph. Cent. 10. n. 39.

Echum creticum latifolium et angustifolium rubrum. Bauh. Pin. 254.
Echum creticum 1 et 2. Clus. Hist. 2. p. 165.

Descr. Stem rounded, hispid, branched: lower branches procumbent. Radical leaves petioled, oblong, elliptic, obtuse, quite entire, veined and rugose underneath, hispid: cauline leaves tongue-shaped, obtuse, hispid. Flowers secund in spike-like racemes. Bractes like the leaves, gradually decreasing in size upwards. Peduncles several times shorter than calyx, solitary. Calyx hairy : segments lanceolate, longer than the tube and faux of the corolla, whose border is more deeply divided and more bilabiate-like than in most of the genus; of a bright red when first opened, but changing to blue. Stamens scarcely the length of the corolla. Style exserted : stigma bifid.

We have not been able to detect any representation of this plant, but the one printed from a specimen by Kniphof, as above quoted, which appears to us to be the same species.

Native of Crete and the Levant. Flowers in July. Propagated by seeds, being annual, or at most biennial. Communicated by Messrs. Loddiges and Sons.


## Melaleuca squarrosa. Myrtle-leaved

## Melaleuca.

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## Class and Order.

Polyadelphia Icosandria.

## Generic Character.

Staminum phalanges 5, petalis oppositæ elongatæ. Anthera incumbentes. Caps. 3-locularis polysperma, connata et inclusa calycis tubo incrassato basi adnato (ramo). Brown.

## Specific Character and Synonyms.

Melaleuca squarrosa; foliis oppositis ovatis acutis 5-7nerviis petiolatis, spicis oblongis ovalibusque, bracteis foliaceis, calycis laciniis enervibus obtusis, phalangium unguibus brevissimis. Br. in Hort. Kez. ed. alt. 4. p. 416.

Melalevca squarrosa; foliis sparsis oppositisve ovatis muticis quinquenervibus, floribus lateralibus dentibus calycinis lævibus. Smith in Linn. Soc. Trans. 6. p. 300. Willd. spp. Pl. 3. p. 1430. Persoon Syn. 2. p. 26. b. Labill. Nov. Holl. 2. p. 28. t. 169.
Melaleuca myrtifolia. Venten. Malmais. 47.

The leaves of this plant are described by Mr. Brown, as opposite; by Sir James Smith, as both opposite and scattered, as they were in the one from which our drawing was made. In most specimens, however, that we have seen, they were entirely opposite and decussate; they are usually obscurely five-nerved, and the broader ones seven-nerved. Some leaves, or bractes like leaves, grow among the flowers, which generally shew more or less a disposition to become verticillate; but the whorls are seldom so distinct as they were in the plant from which our drawing was taken.

The filaments are collected into five bundles, connected at the base only, and so slightly, that Smith has observed that it is not very easy to decide whether it belongs to Melaleuca, or to the very nearly-related genus, Metrosideros; between which genera; the distinction, he remarks, is more artificial than natural.

Our drawing was taken from a specimen communicated by John Walker, Esq. in May 1815, from a plant that had stood two winters against a south wall, with no other protection than a mat during frost. A very fine spreading shrub, nearly three feet high, was sent us last summer, by Messrs. Barr and Brookes, of the Northampton Nursery, NewingtonGreen.

Native of New South-Wales and of Van Diemen's-Island, and is generally treated as a hardy greenhouse shrub. Flowers most part of the summer. Introduced about the year 1794, Propagated by cuttings.

The whole plant is aromatic and pungent, and the dried flowers, when rubbed, have a particularly grateful aromatic scent.

# Veronica perfoliata. Perfoliate 

## Speedwell.

## 

Class and Order.
Diandria Monogynia.
Generic Character.
Cor. limbo 4-partito: lacinia infima angustiore. Caps. 2locularis.

## Specific Character and Synonym.

Veronica perfoliata; racemis lateralibus pedunculatis multifloris, foliis integerrimis glaberrimis ovatis acuminatis basi connatis, capsulis bipartilibus. Brown Prod. Flora Nov. Holl. p. 434,

Descr. Stem about two feet high, with few branches, simple, upright. Leaves ovate-acuminate, decussate, connate at their base, of a glaucous green. Raceme lateral, long, many-flowered; flowers looking one way; pedicles alternate; scarcely the length of the calyx. Calyx fourparted, unequal, one segment being considerably longer than the rest, persistent. Corolla violet-purple : upper lacinia largest, streaked : faux villous. Stamens shorter than corolla, spreading. Style declined. Capsule oblong-oval, two-celled, many-seeded.

Jussieu places the genus Veronica in his order of Pediculares; Brown in that of Scrophularinc; who observes, " that the relation of the dissepiment, with respect to the valves of the capsule, as being contrary to or parallel therewith, is a character always esteemed by Jussiev, of great value in the formation of natural orders; and he has, upon this ground, separated his order of Rhododendra from his Erica, and Pediculares from Scrophularia; but, by so doing, he has frequently
frequently separated genera that are very closely allied; for although this character is for the most part (not universally) of great use in determining genera, it is not sufficient, when unaccompanied by others, to separate them into distinct orders, as is clearly proved by several genera of this family, and especially by the genus Veronica, in the various species of which, almost every kind of dehiscence may be observed."

This very rare plant, which did not occur to Mr. Brown, except in a dried state, was raised from seeds received from New South-Wales, by Mr. Jenkins, at his Botanical Garden, Gloucester-Place, New-Road.

Native of the country in the neighbourhood of PortJackson, and will require the protection of the greenhouse in the winter. Propagated by seeds, and perhaps by cuttings; though the stem appears to be rather herbaceoous than fruticose. Flowers in July and August.


## Gloxinia.

## ******************

## Class and Order.

## Didynamia Angiospermia.

## Generic Character.

Cal. superus, 5 -phyllus. Cor. campanulata: limbo obliquo. Filamenta cum rudimento quinti imo tubo corollæ inserta. Caps. 1-locularis? recept. 2, biloba, lateribus inserta.

## Specific Character and Synonyms.

Gloxifin speciosa; subacaulis, foliis hispidis crenatis, pedunculis erectis flore longioribus*.
Gloxinia speciosa. Loddiges Bot. Cab. 28. Bot. Reg. No. 213.

Descr. Stem veryshort. Leaves opposite, oval, very hairy on both sides, when full-grown seven inches long and five wide. Peduncles axillary, villous, rounded, three or four inches long, upright : from the shortness of the stem, concealed amid the leaves, and the very erect position of the long peduncles, these latter appear, at first sight, like scapes rising immediately from the roots without intervening stem. Calyx adherent to the germen : border five-cleft: segments ovateacuminate, nearly equal, sub-bilabiately arranged, five-nerved, very hairy. Corolla ringent, tube refracted, faux open, limb bilabiate $\frac{2}{3}$ : laciniæ rounded. Stamens four : filaments incurved, inserted into the base of the tube of the corolla, with which they fall off: anthers united together. There is a small rudiment of a fifth filament placed at the back of the

[^5]style, very little larger than the glands of the nectary, but not, like them, persistent. Nectaries five glandular bodies surrounding the style and alternating with the filaments, persistent. Germen inferior, one-celled, with two lateral branched receptacles : style longer than stamens, stigma capitate, compressed, gaping.

This very valuable acquisition to our stoves, is a native of Brazil, of late introduction, but already to be found in most of the large collections about town. We received it first from Messrs. Barr and Brookes, Newington-Green, but not in a perfect state. Our drawing was taken from a plant communicated by Messrs. Whitley, Brame, and Milne, of the Fulham Nursery. It does not appear to be very tender, and, perhaps, may hereafter be found to do in the greenhouse.


# Lathyrus grandiflorus. <br> Perenvial 

Sweet-Pea.
$* * * * * * * * * * * * * * * * * * *$

## Class and Order.

Diadelphia Decandria.

## Generic Character.

Stylus planus, supra villosus superne latior. Cal. lacinis superiores 2 breviores.

## Specific Character.

Lathyrus grandiforus; caulibus rigidis tetragonis pedunculis bifloris nudis, cirrhis diphyllis: foliolis obovatis undulatis.

Descr. Root perennial. Stem branched, climbing: branches square, with rounded angles, rigid, not at all winged, nor hairy. Claspers generally twice ternate, with two oval leaves rather broadest towards the point, veined, undulated at the margin. Stipules very narrow, semisagittate, the part below nearly as long as the part above their insertion. Peduncles axillary, solitary, somewhat longer than the petioles, twoflowered. Pedicles nearly equal, united to the peduncle by a joint. Calyx campanulate, sub-bilabiate : upper-lip consisting of two subulate teeth: lower-lip of three, longer than the upper, and of these the middle one is the longest. Corolla like Lathyrus odoratus, but larger. Vexillum orbicular, fully expanded, emarginate, callous at the base, with a very short channelled claw, veined, of a blueish crimson colour : ala dark purple, oblong. Carina somewhat boat-shaped, nearly semicircular, having its petals united, from the bottom of the claw to the apex. Germen oblong, somewhat flattened, and a little widest in the middle: style reflexed at right angles; stigma pubescent, compressed, minutely villous.

Legumen not seen; but as the germen is not clothed with long hairs, as in Lathyrus odoratus, it will probably prove far less hairy than in the latter species.

This plant is in many respects very similar to Lathyrvs odoratus, but differs in having a perennial root; stalks not at all winged nor flattened; leaves oval, not lanceolate-oval; peduncles shorter and flowers considerably larger.

Native country uncertain, probably Italy or Sicily. Messrs. Chandler and Buckingham, by whom it was communicated to us, believe that they raised it from seeds received from Leghorn; but, as it did not flower the first year, they paid little attention to it, and are not quite certain of its origin. We do not know that the plant is to be met with in any other garden round the metropolis. They have increased it by parting its roots, but it has not as yet produced any seeds, though it has flowered two summers, and bears our winters in the open ground without protection.


## Bindweed.

## ****************

## Class and Order.

Pentandria Monogynia.

## Generic Character.

Cor. campanulata, plicata. Stigmata 2. Caps. 2-locularis : loculis dispermis.

## Specific Character and Synonyms.

Convolvulus panduratus; pubescens, folis cordato-pandureformibus acuminatis, calycibus lævibus enerviis, pedunculis axillaribus subunifloris petiolum æquantibus.
Convolvulus panduratus; foliis cordatis integris panduriformibus, calycibus levibus. Sp. Pl. 219. Willd. I. p. 850. Hort. Kezo. ed. alt. 1. p. 329.

Convolvulus panduratus; radice crasse napacea; caule volubili puberulo: foliis pubescentibus, lato-cordatis; rarius subtrilobis repandisve : pedunculis longis fasciculifloris: calycibus glabris, submuticis : corolla tubulatocampanulata. Michaux Fl. Bor.-Amer. 1. p. 138.? Persoon Syn. 1. p. 178.? ?
Convolvulus panduratus; volubilis, pubescens; foliis latocordatis integris lobatisve panduriformibus, pedunculis longis, floribus fasciculatis, calycibus glabris muticis, corollis tubulato-campanulatis. Pursh Fl. Am. Sept. 1. p. 144.? ?

Convolvulus megalorhizos flore amplo lacteo; fundo purpureo. Dillen. Elth. 101. t. 85. f. 99.
$\beta$. Convolvulus major floridanus, folio incano Ari quodammodo referens, auriculis magnis subrotundis. Pluk. Amalth. p. 63. t. 385. f. 3.

The Convolvules panduratus of Michaux and of Pursh more probably belong to Convolvulus candicans than to our present species; so in our account of the former (vide No.1603)
we have, with a mark of doubt, inserted Michaux's plant as a synonym. We have cited both here, more with a view of facilitating the comparison of their characters, than from conviction of their belonging to the panduratus of Linneus.

In panduratus, the peduncles are scarcely longer than the footstalk of the leaf, and rarely produce more than one flower, though there are vestiges of two opposite pedicles, which generally, if not always, abort; the peduncles of candicans seldom bear fewer than three and often more flowers, which are much larger and more even at the border, and open wider. The outer lacinix of the calyx in panduratus is smooth and even, having none of the wrinkled nerves, so conspicuous in those of candicans; and there is a remarkable difference in their mode of growth. Both have large tuberous roots, but those of candicans have eyes like the potatoe, and if cut into pieces, every eye will grow; but the root of panduratus produces no eyes, nor could cuttings of it be made to shoot, though kept in the greatest heat of the bark bed for upwards of a year. The stems of candicans die quite down to the root every year, and fresh stems are produced from the eyes; but that of panduratus grows from the crown of the root, and, though inclined to die back in the winter, remains woody towards the battom, where fresh buds are formed, from which the stems shoot again in the spring; but, was the stem to be cut down close to the root, fresh shoots could not without great difficulty be produced, and most probably the plant would perish.

Native of South-Carolina, Georgia, and Florida, and is too impatient of cold to be trusted out of the stove; for want of due attention to this, we believe this plant is generally lost, and, perhaps, the only one now living in this country is at the Honourable William Herbert's, at Spofforth, near Wetherby, in Yorkshire; to whom we are indebted for the specimen from which our drawing was taken, as well as for most of the above particulars respecting it.


## ( 1940 )

## Crassula cultrata. Sharp-leaved

## Crassula.

*******************
Class and Order.

## Pentandria Pentagynia.

Generic Character.
Cal. 5-phyllus. Petala 5, Squame 5, nectariferæ ad basin germinis. Capsula 5.

## Specific Character and Synonyms.

Crassula cultrata; foliis oppositis obovatis subcultratis obliquis connatis integerrimis. Hort. Kew.ed. $1^{\text {mac }} 1$. n. 393. ed. alt. 2. p. 192. Willd. Sp. Pl. 1. p. 1552. Mart. Mill. Dict. n. 11. Trew. Pl. Rar. 2. p. 3. t. 12.
Crassula cultrata. Syst. Vegetab. ed. 14. p. 305. Thunb. Prod. 56. Sp. Pl. 405.
Crassula anacampserotis folio. Dill. Elth. 115. t. 97. f. 114.

Globulea cultrata. Hazoorth Succul. p. 60.

The flowers of Crassula cultrata never expand, and the petals bear a globular gland at their apex : on account of which character, Mr. Haworth, in his Synopsis Plantarum Succulentarum, has thought fit to separate this species with three others from Crassula, under the name of Globulea.

Crassula cultrata comes under the division of frutescentes. Native of the Cape of Good-Hope. Cultivated in Dr.Sherard's garden, at Eltham, in 1732 . Is usually kept in the dry stove. Propagated by cuttings. Flowers in August, September, and October. Our drawing was taken some years ago from a plant in the possession of Mr. Sydeniam Edwards.


# Pancratium expansum. Expandedflowered Pancratium. 

## ****************

Class and Order.
Hexandria Monogynia.

## Generic Character.

Petala 6. Nectario 6-12-fido. Stam. nectario imposita.
Specific Character and Synonyms.
Pancratium expansum; folis lineari-lanceolatis striatis irregulariter circumpositis, laciniis patentissimis tubo longioribus, coronæ sinubus unidentatis.
Pancratium patens. Ker in Journal of Science and the Arts, v. 3. p. 329.? Redouté Liliac. 7. fol. 414.?

Pancratium declinatum. Redouté Liliac. 6. t. 380. quoad iconem. ?

It is extremely difficult to find satisfactory distinguishing characters between some of the species of Pancratium; and, perhaps, it is only from cultivation, or by having an opportunity of comparing the living specimens together, that any certainty can be derived. The Hon. William Herbert, of Spofforth, Yorkshire, has paid great attention to this genus; and to this gentleman we are indebted, not only for the specimen from which our drawing was taken, but for most of the particulars respecting it, which we are able to adduce.

It has a near affinity with Pancratium caribcum; and, as in that, the leaves grow irregularly, not distichwise, but are less acute, of a duller green, and more channelled, they are a foot and a half long, and about two inches and a quarter wide at the broadest part ; they rise successively throughout the year, and not altogether, as in speciosum. The scape
is between four and five and twenty inches high. Flowers sessile; tube obsoletely three-cornered, pale-green, four inches and a quarter long: lacinice linear, an inch and half longer than the tube, the whole length of the corolla being ten inches; they expand wider than in any other species of Pancratium; leaving the funnel-shaped nectary or crown quite exposed, whence the name: crown rather more than an inch and quarter long, regularly pointed between each stamen: style rises nearly four inches above the crown. Flozoers in the specimen ten, expanding by pairs, according to a regular and remarkable arrangement, of which Mr. Herbert sent a sketch, omitted by the draughtsman; but may be easily understood, by placing the tips of the four fingers of both hands together, to represent the eight flower-buds in the circumference, and bringing both thumbs in a line between the fore or first, and little or fourth fingers, to represent the two central flowers. The expansion of the first pair will then be marked by the second finger of the right-hand and the third of the left; the second pair by the second finger of the lefthand and the third of the right ; the third pair by the first of the left-hand and the fourth of the right ; the fourth pair by the first of the right-hand and the fourth of the left ; and the central pair, which open last, by the thumbs.

It is possible that this may be the patens of Redoute and Ker, but we have not ventured to fix it as such; because that is described as having leaves very much narrower than those of caribcum, and flowers more powerfully scented; whereas the former, in our plant, were nearly of the same width as those of caribcum, and the scent was weaker thai in any other of the related species.

Mr. Ker, in his Monograph on Pancratium (Journal of Science and Arts, v. 3. p. 326) has referred our distichum, No. 1879, to Pancratium littorale; but, if so, theie is little or no dependence to be put upon the comparative length of the tube and laciniæ, the former being said to be twice the length of the latter in littorale; whereas in distichum they are of the same length; the tube in the one decayed flower, in the figure, being inadvertently lengthened to get the upper part within the prescribed limits of the plate.

Native country unknown. Flowers regularly in November. Produces few offsets, and is, therefore, not readily propagated.


In which the Latin Names of the Plants contained in the FortyFourth Volume are alphabetically arranged.

Pl.
1900 Alpinia cernua. 1903 - nutans. 1916 Althra caribæa. 1873 Amsonia salicifolia.
1897 Anchusa angustifolia.
1863 Anemone pratensis, $\beta$. obsoleta.
1927 Anthyllis Barba Jovis.
1924 Bletia Tankervillix.
1905 Bocconia cordata.
1884 Cactus triangularis.
1925 Callistachys ovata.
Wantik 1864 Chelone Lyoni.

1869 Cineraria sibirica.
1892 Clematis crispa.
1939 Convolvulus panduratus.
1901 Corræa virens.
1940 Crassula cultrata.
1933 Crotalaria fenestrata.
1913 parpurea.
1931 Cuphea procumbens.
1929 Cynanchum viridiflorum.
1908 Cytisus proliferus.
1885 A Dahlia superfina.
B- flore multiplici.
1875 Daphne altaica.
1917 - oleoides.
1876 Dianthus campestris, $\gamma$.
1919 Echites caryophyllata.
1934 Echium creticum.
1915 Erica monsonix.
1872 Eugenia elliptica.
1895 Galinsogea trilobata.

1937 Gloxinia speciosa.
1902 Guidia oppositifolia.
1906 Grislea tomentosa.
1894 Hamelia ventricosa.
1911 Hibiscus radiatus.
vanitis 1867 Hypericum olympicum, $\beta$. latifolium.
1889 Jasminum azoricum.
1907 Inula glandulosa.
1870 Justicia picta, B. lurido-sanguinea.

## Pl.

1938 Lathyrus grandiflorus.
1896 Lobelia ilicifolia.
1926 Maranta zebrina.
1935 Melaleuca squarrosa.
1868 ——thymifolia. Wanth
1910 Menispermum canadense.
1909 Menyanthes ovata.
1866 Mesembryanthemum depres:
sum. Wanitrig
1914 Momordica Elaterium.
1865 Nerium coronarium. Wanting
1930 Ophrys tenthredinifera.
1932 Orchis acuminata.
1879 Pancratium distichum.
1941 expansum.
1877 Pelargonium rapaceum, B. luteum.
1878 Penstemon campanulata.
1883 Pharnaceum incanum.
1891 Phlomis samia.
1880 Phlox acuminata.
1862 Phyllanthus turbinatus. Wa9itmag
1882 Piper acuminatum.
1923 Podalyria sericea.
1887 Polemonium reptans.
1922 Primula decora.
1888 Rhododendron dahuricum, $\beta$. semperviens.
1886 Robinia caragana, v. arenaria.
1898 Ruscus androgynus, $\boldsymbol{\gamma}$.
1871 Serratula quinquefolia.
1920 Smilax herbacea.
1874 Solandra grandiflora.
1921 Solanum giganteum.
1928 marginatum.
1899 Spielmannia africana.
1860 Stachytarpheta Jamaicensis, Wan Thng
1890 Stapelia deflexa.
1861 Stevia hyssopifolia.
1918 Stylidium graminifolium.
1912 Symphytum tauricum.
1881 Thunbergia fragrans.
1936 Veronica perfoliata.
1893 Ziziphus Paliurus.

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In which the English Names of the Plants contained in the FortyFourth Volume are alphabetically arranged.
$P l$.
1903 Alpinia, large drooping.
1900 small drooping.
1873 Amsonia, willow-leaved.
1927 Anthyliis, silver-leaved, or Jupiter's beard.
1922 Auricula, comely.
1860 Bastard-vervain, Jamaica.
1939 Bindweed, fiddle-leaved.
1924. Bletia, Lady Tankerville's.

1905 Bocconia, heart-leaved.
1909 Buck-bean, oval-leaved Cape.
1897 Bugloss, purple-flowered nar-row-leaved.
1898 Butcher's-Broom, climbing.
1925 Callistachys, oval-leaved.
1864 Chelone, Lyons's.
1893 Christ's-Thorn.
1869 Cincraria, Siberian.
1912 Comfrey, Taurian.
1901 Corræa, green-flowered.
1877 Crane's-Bill, yellow, fumitoryflowered.
1940 Crassula, sharp-leaved.
1913 Crotalaria, crimson-flowered.
1933 window-calyxed.
1884 Creeping-Cereus, triangular, or Strawberry-Pear.
1914 Cucumber, squirting.
1931 Cuphea, procumbent.
1929 Cynanchum, green-flowered.
1908 Cytisus, silky.
1885 A Dahlia, fertile-rayed.
1885 - B double-flowered, fer-tile-rayed.
1875 Daphne, altaic.
1917 - Cretan.
1919 Echites, clove-scented.
1872 Eugenia, round-fruited.
1866 Fig-Marigold, depressed, tongue.
1895 Galinsogea, three-lobed.
1904 Gardenia, crimson-tipped.
1937 Gloxinia, rough-leaved.
1902 Gnidia, opposite-leaved.
1887 Greek-Valerian, creeping.
1906 Grislea, Woodford's.
1894 Hamelia, large-flowered.
$P l$.
1915 Heath, Lady Ann Monson's.
1911 Hibiscus, radiated.
1916 Hollyhock, West-Indian.
1889 Jasmine, Azorian.
1907 Inula, glandulous.
1870 Justicia, bloody-veined.
1896 Lobelia, holly-leaved.
1926 Marânta, striped-leaved.
1935 Melaleuca, myttle-leaved.
1868 _ thyme-leaved.
1910 Moonseed, Canadian.
1921 Nightshade, tall.
1928 white-margined.
1980 Ophrys, Saw-Fly.
1932 Orchis, pointed-Howered.
1879 Pancratium, fan-leaved.
1941 - spreading-flowered.
1863 Pasque-Flower, pale-flowered, meadow.
1878 Penstemon, bell-flowered.
1883 Pharnaceum, hoary.
1891 Phlomis, Samian.
1880 Phlox, cross-leaved, or Lychnidea.
1862 Phyllanthus, shining-leaved.
1882 Pepper, dwarf, pointed-leaved.
1876 Pink, field.
1923 Podalyria, silky:
1888 Rhododendron, evergreen, Daurian.
1886 Robinia, Sand, or Pea-Tree.
1865 Rosebay, broad-leaved.
1871 Saw-Wort, five-leaved.
1920 Smilax, herbaceous.
1874 Solandra, great-flowered.
1936 Speedwell, perfoliate.
1899 Spielmannia, ilex-leaved.
1890 Stapelia, bent-flowered.
1861 Stevia, hyssop-leaved.
1867 St. John's-Wort, broad-leaved, Olympian.
1918 Stylidium, grass-leaved.
1938 Sweet-Pea, perennial.
1881 Thunbergia, twining.
1934 Viper's-Bugloss, Cretan.
1892 Virgin's-Bower, curled- Howered.


[^0]:    2n writing this name dahuricum, rather than dauricum, we follow Professor F. Fischer, of Moscow; who observes, that there ought to be an aspiration between the $a$ and $u$, and Dauria (properly Daüria) when Written without an $k$, should be pronounced in four syllables, not in three. The want of attending to this, Dr. Fiscrer remarks, has sometimes occasioned German Botanists to confound the country with Tauria.

[^1]:    the anthers : anthers two distinct lines imbedded in the sides

[^2]:    * John Baptist Du Hamex, was not Inspector of the Marine, nor botanical writer; and, therefore, was not the person to whose memory Jaceuin intended to dedicate the genus Hamelia, corrupted by Lineeus to Hameliia, and more properly changed by Persoon to Duramelia.

[^3]:    - Hze species minus recte Tankervillia fuit denominata a b. Aiton, cum memorix Patris Incarville dedicata sit. Persoon Syn. lic.

[^4]:    - In the true Scitaminea, this part is tubular, with an oblique, threelobed opening; but in the Canna, as separated by Mr. Brown, it is divided into three distinct segments.

[^5]:    * The other species may be distinguished as under:

    Gloxinia maculata; foliis glabriusculis, peduncalis horizontalibus flore brevioribus.

