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PHANEROGAMIC FLORA
OF THE DIVISIONS OF
UITENHAGE and PORT ELIZABETH
-by-
S. SCHONLAND

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UNION OF SOUTH AFRICA.

BOTANICAL SURVEY OF SOUTH AFRICA.

MEMOIR No. 1.

PHANEROGAMIC FLORA

OF THE DIVISIONS OF

UITENHAGE and PORT ELIZABETH

(With a Sketch Map)

BY S. SCHONLAND.

*Contribution from the Herbarium of the Albany Museum,
Grahamstown.*

PRETORIA
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DIVISION OF BOTANY,
PRETORIA,

5th May, 1919.

SIR,

I have the honour to transmit herewith for publication the manuscript of a valuable paper by Prof. S. Schonland, of Rhodes University, Grahamstown, entitled: "On the Phanerogamic Flora of the Divisions of Uitenhage and Port Elizabeth," and I beg to recommend that the paper be printed as No. 1 of "The Memoirs of the Botanical Survey of South Africa."

Apart from the useful data given relating to the systematic components of the flora and its distribution in the divisions of Uitenhage and Port Elizabeth, Dr. Schonland's paper supplies valuable information regarding an area which comprises an important phytogeographical boundary and with respect to which more exact details have long been wanting.

I have the honour to be,
Sir,
Your obedient Servant,

I. B. POLE EVANS,
Director, Botanical Survey of S.A.

TO THE SECRETARY FOR AGRICULTURE,
DEPARTMENT OF AGRICULTURE,
PRETORIA.

474452

20 Sept 21

PREFACE.

THE present Memoir, the first of the "Memoirs of the Botanical Survey of South Africa," is published as the outcome of the Government's decision to establish a Botanical Survey of the Union; an undertaking which had long been advocated and urged by officers of this Department and more recently had also been recommended by the Scientific and Technical Committee.

In July, 1918, an Advisory Committee for the Botanical Survey of the Union was appointed by the Minister for Agriculture, consisting of botanists from each of the four Provinces, with the Chief of the Division of Botany and Plant Pathology as Director of the Survey. The botanists comprising the Advisory Committee are also each in charge of different administrative areas into which the Union has been divided for purposes of the Survey. These officers, it should be mentioned, are not Government officials, but include the most experienced botanists in the country, and who, as soon as the Survey was mooted, came forward and offered their services gratuitously and solely from their keen desire to further botanical research in South Africa.

Such co-operation on the part of private workers with a Government Department is most encouraging and augurs well for the future of the Survey. It must, however, be borne in mind that the time of these private workers is strictly limited, and progress at first in such an important and vast undertaking must necessarily be slow.

However, as time proceeds and as soon as the foundations are securely laid it is hoped that whole-time officers will be appointed in the different areas who will at first work under the direction of their more experienced colleagues, and will then later on become proficient and render valuable service on the Survey.

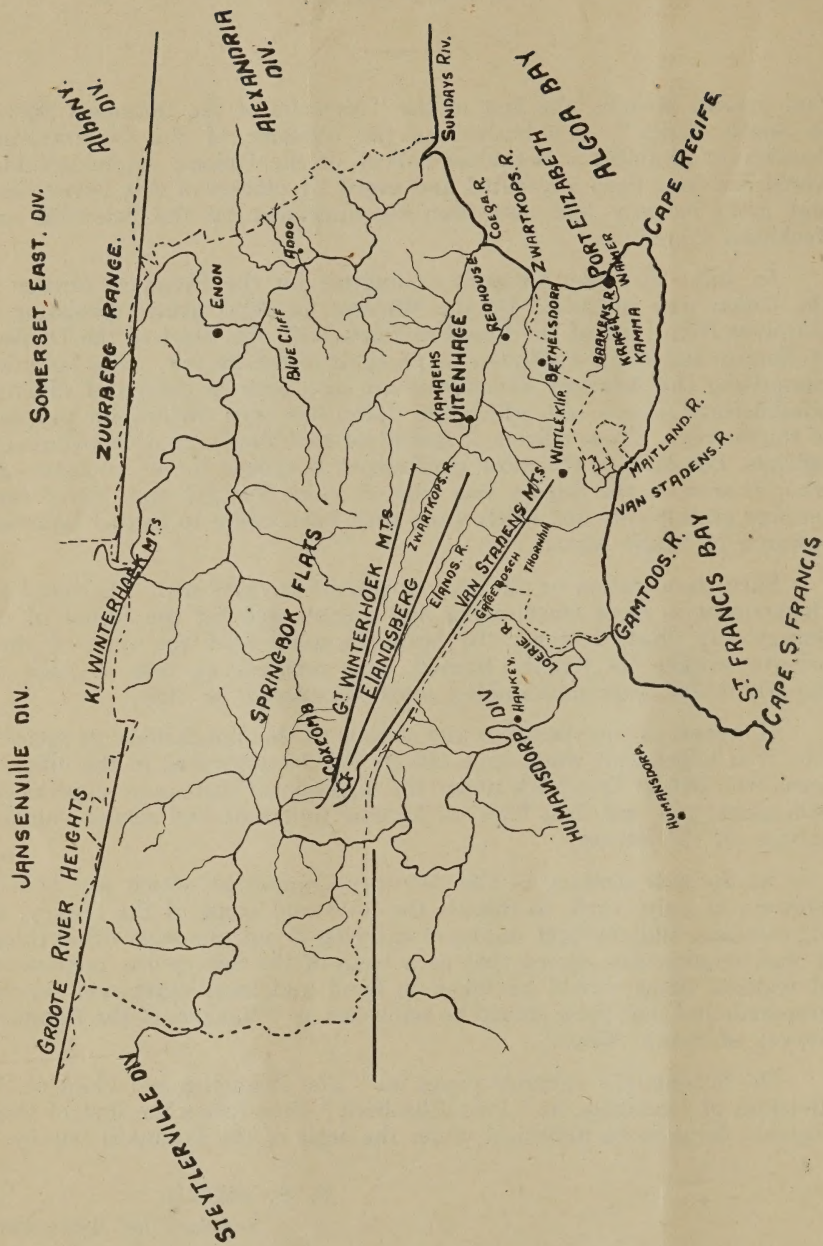
At the first meeting of the Advisory Committee, which was held in Pretoria in July, 1918, to discuss the aims and scope of the Survey, its organization and the best means of carrying it out, amongst other things it was unanimously agreed that as a basis of the Survey the preparation of regional floras should be taken in hand and local vegetation surveys prepared, and that these should be published as "Memoirs of the Botanical Survey of South Africa."

Dr. Schonland's valuable paper on "The Phanerogamic Flora of the divisions of Uitenhage and Port Elizabeth" thus forms the first of these regional floras to be published under the aegis of the Botanical Survey.

F. B. SMITH,

Secretary for Agriculture.

SKETCH MAP OF THE DIVISIONS OF UITENHAGE AND PORT ELIZABETH.



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INTRODUCTION.

THE account of the flowering plants of the divisions of Port Elizabeth and Uitenhage herewith presented is meant to form a companion to the lists, published by the South African Philosophical Society and the Royal Society of South Africa, of the plants of the Cape Peninsula (by Bolus and Wolley Dod) and of Natal (by J. Medley Wood). It is based to a certain extent on a large number of publications, amongst which the "Flora Capensis," started by Harvey and Sonder and continued at Kew by various botanists, of course takes first place, but, wherever possible, the records are based on the specimens in the herbarium of the Albany Museum collected by Ecklon and Zeyher, the late Dr. P. MacOwan, the late Dr. H. Bolus, Dr. R. Schlechter, Mr. J. L. Drege, Mr. W. C. Kemsley, Mr. F. H. Holland, Ven. Archdeacon Rogers, etc., but especially by Mrs. T. V. Paterson, of Redhouse, who has inherited from her father, the late Mr. Russell Hallack, an ardent love of the flora of her native country, and who has for a number of years indefatigably laboured in the exploration not only of the divisions of Uitenhage and Port Elizabeth, but also of other parts of South Africa which she has visited. Thus references from the literature were only entered if they added to our knowledge of the local distribution of the plants or if they referred to plants not again collected recently. Miss A. Daly and Miss J. Gane (now Mrs. Williamson) excerpted the greater part of the references in the "Flora Capensis." Much of the material received during recent years was provisionally determined by Miss M. Daly (now Mrs. Heny) and Miss J. Gane, but the whole material in the collection of the Albany Museum (with the exceptions noted later) was eventually revised by myself with the aid of Miss Gane. The greater part of the list was submitted in sections to Mrs. F. Bolus, who added data from the Bolus Herbarium, but it would have been very incomplete and to a certain extent faulty if Mrs. Bolus had further not had the kindness to determine a great many species which could not be accurately named with the resources of the Albany Museum. To her husband, Mr. F. Bolus, I am indebted for a critical revision of *Gladiolus*, *Oxalis*, and many grasses. I have also frequently received help from Sir David Prain, F.R.S., Director of Kew Gardens, and the members of his staff, which I wish to gratefully acknowledge.

Probably Thunberg was the first botanist who visited our area (in the year 1773). In his "Flora Capensis" (ed. Schultes, 1823) there are a number of references to plants collected on the Zwartkops River and at the Zwartkops Saltpan; Andreas Sparmann followed in 1776; Lichtenstein between 1803 and 1806. Burchell passed through it in 1814 and gives a careful record of his route on the map attached to the first volume of his "Travels in Southern Africa." His extensive collections are to this day not fully worked up or at all events only partly published. J. F. Drege traversed it during his travels in 1826-34, but does not seem

to have collected as extensively here as in other parts of South Africa. The richest collections were made by Ecklon and Zeyher. The latter, was for some years domiciled at Uitenhage whence he started on his famous trip to the Magaliesberg with Burke, who also collected near Uitenhage. Ecklon published "A list of the plants found in the district of Uitenhage between the months of July, 1829, and February, 1830, together with a description of some new species" (*S.A. Quart. Journ.*, 1830). I have made but little use of this list, since most of Ecklon's collections have been utilized in more recent monographic publications which I have consulted. Many of his names are moreover undoubtedly incorrect, which is only to be expected considering the circumstances under which he worked, though it is not always possible to judge him correctly. Further, both he and Zeyher were rather inclined to split up species much more than I am inclined to admit as justified. This was also the view of Harvey, Sonder, and other botanists. However, he was a keen and careful observer, and his paper will always demand respectful attention, which it has not always received, no doubt owing to its extreme scarcity.

Minor collections were made by Dr. Alexander Prior (who discovered *Sterculia Alexandri*), Ch. F. Bunbury (in 1838), and A. Krauss (about 1840). Bunbury gave some account of his travels in *Hook. Journal of Botany*, 1842-44, and in his "Journal of a residence at the Cape of Good Hope," which contains some graphic descriptions of the flora of our area. Dr. N. Wallich, so well known on account of his work on the flora of India, visited Uitenhage in 1843.

There was a gap of over thirty years before serious attention was again given to these parts. At the end of 1866 MacOwan and Bolus made a joint collecting trip from Grahamstown to Van Stadens, which lasted into January, 1867. Many of the species previously discovered were found again and others were newly discovered. Both visited the districts again in subsequent years. I myself have visited the two divisions frequently, but have not collected many plants in them. Large parts, especially the northern and north-western portions of the division of Uitenhage, are very little explored. Most of the stations from which we have records are in an area of about 600 square miles, while the total area is about 2500 square miles. Even taking the former only into consideration the flora cannot compare in richness with that of the Cape Peninsula, which only covers 197½ square miles, while it is relatively much richer than Natal with an area of 21,150 square miles.

TOPOGRAPHY.

The area under consideration is bounded in the south by the Indian Ocean. It is, therefore, under the influence of the warm Mozambique current. Algoa Bay marks the place where the southern coast of South Africa assumes a north-eastern direction. The western boundary of the coastline is marked by the Gamtoos River, the eastern by the mouth of the Sundays River. In the north it is bounded by the Klein Winterhoek Mountains and the Zuurberg Range. It will thus be seen that it extends approximately fifty miles inland. Most of the localities mentioned in the enumeration of plants lie between two lines almost due north of the mouths of the two rivers mentioned. Some plants mentioned from the Zuurberg and near Addo may have been collected in the adjoining Alexandria district, which, however, is not separated by a phyto-geographical boundary. The boundary between the divisions of Port

Elizabeth and Uitenhage need not concern us. From our point of view it is quite artificial. It has, however, been marked on the accompanying sketch-map, on which a number of the localities where specimens were collected were entered.

South of the Little Winterhoek are the Great Winterhoek Mountains, which in their western part, the Coxcomb, rise to an altitude of nearly 5000 feet. Towards the Coxcomb two other mountain ranges, the Elandsberg and the Van Stadens Mountains, with an eastern spur, the Witteklip, converge. The last comes to within about twenty miles from the sea and about twenty miles from Port Elizabeth. The altitude I judge to be about 2000 feet. The Great Winterhoek Mountains are continued eastwards by hills north of Uitenhage, the Addo heights being in the line of this continuation. South of the Van Stadens Mountains is a plateau of an altitude of about 700 feet, traversed by the Van Stadens River. East of it there is a similar plateau continuous with the former and ending somewhat abruptly in the Bethelsdorp hills. Towards Walmer and Port Elizabeth it diminishes gradually in altitude. It drops more or less abruptly to near sea-level within a variable but never considerable distance from the sea. North of Port Elizabeth is the mouth of the Zwartkops River, which takes its rise in the Great Winterhoek Mountains and is fed by the Elands River. East of it are the Zwartkops hills of an altitude of about 300 feet, forming the western boundary of another plateau. Between the Zwartkops and Sundays River mouths is the mouth of the Coega River, which arises on the eastern parts of the Great Winterhoek Mountains. Near this mouth is the Coega Kop. A feature of some importance is the plain on both banks of the Zwartkops River to a little beyond Zwartkops station and on its right bank to the neighbourhood of Uitenhage. In its lower parts it is frequently to a certain extent inundated at high tides. This plain is meant when, in connection with Ecklon and Zeyher plants, "fields by the Zwartkops River" have been mentioned as localities by them and subsequent authors. This term is somewhat misleading, as to this day only comparatively small patches are cultivated. North of the Great Winterhoek Mountains are the extensive Springbok Flats. The north-eastern part of the Uitenhage Division is rather hilly.

Apart from a few salt pans not far from the sea there are no large natural stretches of standing water. The upper reaches of the rivers have, however, a fair number of pools which contain water even if the rivers have otherwise run dry as happens only too frequently. All mountain ranges exhibit magnificent kloofs, of which the one traversed by the Van Stadens Pass, and the one leading to the "Hells Gates" on the farm Kamaehs north of Uitenhage, are the most familiar to local residents.

A few altitudes in addition to those already given may help to make the topography clearer to the reader :

- (a) Plateau south or south-east of Van Stadens Mountains. (The places mentioned are along the Avontuur-Port Elizabeth railway, except the two last): Gamtoos 23 feet, Loerie 108 feet, Summit 747 feet, Thornhill 724 feet, Van Stadens 816 feet, Witteklip 784 feet, Green Bushes 695 feet, Emerald Hill 262 feet, Valley Junction 191 feet, Humewood Road 62 feet, Kraggakamma 873 feet, Bethelsdorp 704 feet.
- (b) Port Elizabeth-Graaff Reinet railway line: Port Elizabeth 13 feet, New Brighton 37 feet, Zwartkops 17 feet, Redhouse 28 feet,

Despatch 85 feet, Uitenhage 169 feet, Sandfontein 490 feet, Bluecliff 405 feet, Glenconnor 722 feet. In the next eighteen miles the altitude rises to 1873 feet at Kleinpoort, and twenty miles further at Barroe it is 2257 feet. From the boundary of the Uitenhage Division to Graaff-Reinet, a distance of about eighty miles, it remains near this altitude.

- (c) Port Elizabeth-Kimberley railway line [this joins (b) at Zwartkops]: Aloes 154 feet, Coega 36 feet, Tankatara 247 feet, Barkly Bridge (Sundays River) 48 feet, Addo 116 feet, Coerney 463 feet. A few miles north of Coerney the Zuurberg rises somewhat abruptly. The Zuurberg Sanatorium has an altitude of about 2200 feet, which is approximately the average altitude of the Zuurberg range. Enon, which is almost due west of Coerney, has an altitude of 350 feet.

GEOLOGY.

In broad outline the geological features of the two divisions are as follows:—The western part to a distance of about thirty miles inland belongs largely to the Table Mountain Series. Then comes a strip about ten miles in width belonging to the Bokkeveld Series, then a narrow strip belonging to the Uitenhage Series, and when we come to the Klein Winterhoek and Zuurberg we find the Witteberg Series. There is a large exposure of the Uitenhage beds at the mouth of the Gamtoos River and a small exposure of Malmesbury beds between the Gamtoos River mouth and Port Elizabeth. The plateau south and east of Van Stadens Mountains belongs to the Table Mountain Series, which thus reaches the Bethelsdorp hills and reappears again on the Coega Kop. The remainder of the divisions belong to the Uitenhage Series, with the exception of stretches of volcanic rocks near Enon. The Uitenhage Series is in many places overlaid by younger formations (Pleistocene ?), and especially along the Sundays River there are large stretches of deep alluvial soil, mostly derived from the Karroo beds north of the Uitenhage Division. No doubt the soil derived from these various formations stamps to a certain extent the character of the vegetation, and it is interesting to note that as far as Port Elizabeth no serious break in the continuity of geological formations from the west occurs, but, on the whole, it will be seen that here, as in other parts of South Africa, climate, especially rainfall, is the most important factor in the determination of the distribution of plants.

CLIMATE.

Winds.—In the consideration of phytogeographical problems only violent winds need to be taken into consideration as being of importance in the dispersal of seeds. During the summer violent south-easters are of frequent occurrence. Pure eastern, and especially north-easterly, winds are much rarer. In winter, on the other hand, strong westerly winds are frequent. Strong northerly winds are rare. Thus the we tern types of plants are favoured in their dispersal by the winds.

Temperature.—The data at my disposal are scanty. The following are abstracted from a paper by F. Beutler, "Die Temperaturverhaeltnisse des aussertropischen Suedafrika," Jena, 1906. They refer to three localities which are also dealt with in the rainfall returns. They form the corners of a triangle, the sides of which are roughly twenty miles in length.

	Van Stadens.	Port Elizabeth.	Uitenhage.*	Van Stadens.	Port Elizabeth.	Uitenhage.
S. latitude...	33° 53'	33° 58'	33° 46'			
E. longitude.	25° 16'	25° 37'	25° 25'			
Altitude.....	1000'	200'	300'			
	Temperature in Degrees Centigrade.			Daily Average Temperature Latitude.		
Years.....	4	22	5½	4	22	5½
January.....	19·4	20·5	21·6	10·5	6·6	12·7
February....	20·6	20·8	22·0	11·3	6·6	13·2
March.....	20·1	19·6	20·7	12·4	7·0	12·6
April.....	17·9	17·9	19·0	12·4	7·6	14·9
May.....	15·8	16·2	16·3	13·4	8·7	15·9
June.....	13·4	15·0	13·9	13·0	9·3	16·0
July.....	13·6	14·0	13·5	13·3	9·8	17·4
August.....	13·7	14·4	14·9	12·2	8·7	16·9
September...	14·3	15·0	15·5	11·7	7·5	14·2
October.....	15·4	15·2	17·1	11·3	6·9	13·4
November...	16·5	17·6	18·6	11·2	7·0	12·9
December....	18·8	19·3	20·5	11·8	6·9	13·5
Year.....	16·6	17·2	17·8	12·0	7·7	14·5
Difference between summer and winter...	7·2	6·8	8·5			

It will be seen that Port Elizabeth has more even temperatures than Van Stadens and Uitenhage, that the summer temperature of Uitenhage is greater than that of either of the others, and that Van Stadens has lower winter temperatures than the others. The daily difference between maximum and minimum temperature is greater in Uitenhage than at Van Stadens and very much greater than at Port Elizabeth, warm days being frequently followed by cold nights, reminding us of the Karroo climate. In the north-eastern parts of the Uitenhage Division the contrasts are not so striking, as I know from personal experience, but no records are available. Frost is of frequent occurrence in winter nights at Uitenhage, but Port Elizabeth is free from it, though the greater part of the two towns have altitudes with so little difference that it need hardly be taken into consideration. According to Bolus (*"Science in South Africa,"* 1905, p. 209), at Van Stadens in five years the minimum temperature was 0° C., the maximum 40·8° C.

Rainfall.—Continuous records over long periods are only available for the three stations, for which I have quoted temperature records. I have selected for purposes of illustration the monthly records of the years 1897-1916. For each month the number of days on which rain fell are also given. I am indebted for these data to Mr. W. Stewart, Chief Meteorologist of the Union Government, and the Town Engineer's Department, Port Elizabeth.

RECORDS OF RAINFALL for VAN STADENS (alt. 1000 ft.), PORT ELIZABETH (alt. 200 ft.), and UITENHAGE (alt. 300 ft.), together with the records of the number of days during which rain fell in each month.

FOR THE YEARS 1897 TO 1901.

		1897.	1898.	1899.	1900.	1901.
		in. d.	in. d.	in. d.	in. d.	in. d.
Jan.	Van Stadens....	0·83 6	6·29 13	1·99 11	1·97 7	1·51 5
	Port Elizabeth..	0·20 1	4·88 9	0·98 4	3·46 6	0·50 4
	Uitenhage.....	0·46 4	3·93 13	0·60 3	1·20 4	0·49 2
Feb.	Van Stadens....	1·78 8	2·09 9	1·67 7	1·28 7	3·61 13
	Port Elizabeth..	0·66 3	1·28 6	0·30 6	0·74 2	1·03 12
	Uitenhage.....	0·25 1	1·41 6	0·87 4	0·52 2	2·30 9
Mar.	Van Stadens....	3·00 9	0·78 9	1·18 9	2·14 7	2·89 11
	Port Elizabeth..	0·66 6	0·45 3	0·94 5	1·83 5	1·51 8
	Uitenhage.....	0·97 4	0·67 3	0·84 4	3·18 6	1·44 6
Apr.	Van Stadens....	0·50 4	1·09 5	3·63 10	0·55 5	3·56 9
	Port Elizabeth..	0·73 5	1·38 6	2·05 6	0·48 3	1·92 9
	Uitenhage.....	0·03 2	1·32 3	3·35 8	0·97 3	1·33 7
May	Van Stadens....	7·39 7	2·34 9	2·03 5	1·09 5	1·33 7
	Port Elizabeth..	7·96 8	1·88 7	0·89 4	1·50 3	1·77 9
	Uitenhage.....	3·37 8	0·21 2	1·02 6	0·86 2	0·18 2
June	Van Stadens....	3·78 6	0·86 3	1·93 5	0·93 5	2·82 5
	Port Elizabeth..	2·71 6	0·66 5	0·99 5	0·23 2	2·43 5
	Uitenhage.....	1·54 4	0·07 2	0·40 6	0·19 1	2·79 4
July	Van Stadens....	2·88 6	1·60 5	0·38 3	0·67 8	0·73 3
	Port Elizabeth..	1·98 3	1·99 4	0·20 2	0·63 8	2·41 6
	Uitenhage.....	0·59 2	0·60 4	0·18 3	0·32 3	0·05 1
Aug.	Van Stadens....	2·03 9	1·18 5	0·45 3	2·79 11	1·11 5
	Port Elizabeth..	1·24 8	0·21 2	0·52 6	2·51 8	1·00 5
	Uitenhage.....	1·37 6	0·37 2	0·35 4	0·97 6	0·77 2
Sept.	Van Stadens....	6·67 9	2·59 8	1·68 8	1·14 3	7·98 13
	Port Elizabeth..	5·46 8	2·91 5	0·96 10	0·95 5	3·29 14
	Uitenhage.....	5·04 8	0·52 4	0·91 6	0·05 1	4·45 10
Oct.	Van Stadens....	3·93 11	3·70 13	1·76 9	2·69 6	3·93 11
	Port Elizabeth..	1·98 6	3·99 11	0·83 5	0·98 6	1·57 9
	Uitenhage.....	4·02 11	2·64 8	0·58 4	2·09 3	1·00 5
Nov.	Van Stadens....	2·95 6	2·59 9	1·51 10	1·70 11	4·52 11
	Port Elizabeth..	2·27 8	1·19 7	0·98 5	0·89 7	2·51 7
	Uitenhage.....	2·00 3	1·40 6	0·25 1	0·31 2	3·29 9
Dec.	Van Stadens....	0·71 7	2·98 9	2·01 9	5·91 11	1·27 8
	Port Elizabeth..	0·38 5	1·53 10	0·77 6	3·22 9	0·44 5
	Uitenhage.....	0·29 1	1·09 4	0·92 5	5·70 11	0·25 2
Totals	Van Stadens....	36·45 88	28·09 97	20·22 89	22·86 86	35·26 101
	Port Elizabeth..	26·23 67	22·35 77	10·41 64	17·42 64	20·38 93
	Uitenhage.....	19·93 54	14·23 57	10·27 54	16·36 44	18·34 59

RECORDS OF RAINFALL for VAN STADENS (alt. 1000 ft.), PORT ELIZABETH (alt. 200 ft.), and UITENHAGE (alt. 300 ft.), together with the records of the number of days during which rain fell in each month.—(contd.)

FOR THE YEARS 1902 TO 1906.

		1902.		1903.		1904.		1905.		1906.	
		in.	d.	in.	d.	in.	d.	in.	d.	in.	d.
Jan.	Van Stadens....	1·09	3	0·59	7	0·88	6	0·85	5	0·28	2
	Port Elizabeth..	0·48	8	0·22	4	0·22	3	0·35	3	0·42	4
	Uitenhage.....	0·19	1	0·27	4	0·57	4	0·13	3	0·32	4
Feb.	Van Stadens....	1·17	6	1·84	9	4·42	13	3·93	10	3·44	15
	Port Elizabeth..	1·35	5	0·95	8	0·95	10	2·12	9	1·38	11
	Uitenhage.....	1·54	5	0·44	5	3·32	9	2·63	8	1·05	7
Mar.	Van Stadens....	5·40	11	2·05	6	1·91	9	3·45	4	2·33	11
	Port Elizabeth..	2·87	10	2·26	7	1·45	5	1·15	6	2·30	14
	Uitenhage.....	3·33	7	0·97	5	1·37	9	2·65	8	1·45	10
Apr.	Van Stadens....	0·88	6	1·87	8	0·18	2	1·98	6	5·46	8
	Port Elizabeth..	0·97	3	3·58	10	0·22	4	1·09	4	3·57	8
	Uitenhage.....	0·53	5	0·49	7	0·12	2	1·73	7	2·28	7
May	Van Stadens....	0·42	3	0·79	3	0·50	5	2·66	10	4·44	11
	Port Elizabeth..	0·53	5	0·45	2	1·40	6	1·77	10	4·64	11
	Uitenhage.....	0·51	5	1·20	3	0·14	2	1·88	8	2·59	10
June	Van Stadens....	2·03	5	2·96	6	0·46	2	3·63	6	2·43	4
	Port Elizabeth..	2·30	4	3·29	8	1·69	4	1·21	6	2·21	5
	Uitenhage.....	1·39	3	1·07	5	0·29	4	1·85	8	1·45	5
July	Van Stadens....	1·55	9	1·89	7	3·16	4	0·48	3	0·44	4
	Port Elizabeth..	1·62	8	1·38	7	2·41	7	1·27	6	1·81	5
	Uitenhage.....	0·70	6	1·16	4	1·01	3	0·18	4	0·25	4
Aug.	Van Stadens....	11·64	18	2·13	7	3·28	8	3·23	11	0·63	4
	Port Elizabeth..	4·68	18	2·13	9	4·51	7	3·69	12	0·26	5
	Uitenhage.....	7·51	13	0·93	5	2·71	6	1·13	8	0·30	3
Sept.	Van Stadens....	4·47	9	0·99	6	3·54	10	19·64	9	2·24	6
	Port Elizabeth..	1·68	8	0·35	4	1·69	8	7·71	13	2·85	10
	Uitenhage.....	3·46	8	0·18	2	1·82	8	11·21	10	2·23	5
Oct.	Van Stadens....	1·61	8	5·96	8	7·24	15	6·22	6	4·31	10
	Port Elizabeth..	1·02	7	3·35	13	4·78	11	2·43	5	2·78	13
	Uitenhage.....	0·93	8	2·69	9	2·86	10	3·35	6	2·16	9
Nov.	Van Stadens....	1·48	5	12·07	12	0·86	6	1·16	6	0·93	5
	Port Elizabeth..	1·66	9	7·23	15	1·37	8	0·55	3	1·23	9
	Uitenhage.....	1·43	5	5·90	10	0·46	3	0·29	2	1·23	7
Dec.	Van Stadens....	2·90	6	1·20	5	2·93	12	0·93	7	8·46	13
	Port Elizabeth..	0·93	5	0·74	5	1·26	7	0·86	6	5·70	11
	Uitenhage.....	2·02	7	0·57	5	2·19	7	0·70	5	5·56	9
Totals	Van Stadens....	34·64	89	34·34	85	29·36	92	48·16	83	35·39	93
	Port Elizabeth..	20·09	90	25·93	92	21·95	80	24·20	83	29·15	106
	Uitenhage.....	23·54	73	15·87	64	16·86	67	27·73	77	20·87	80

RECORDS OF RAINFALL for VAN STADENS (alt. 1000 ft.), PORT ELIZABETH (alt. 200 ft.), and UITENHAGE (alt. 300 ft.), together with the records of the number of days during which rain fell in each month.—(contd.)

FOR THE YEARS 1907 TO 1911.

		1907.	1908.	1909.	1910.	1911.
		in. d.	in. d.	in. d.	in. d.	in. d.
Jan.	Van Stadens....	0.73 4	2.20 3	3.16 9	0.73 4	5.22 10
	Port Elizabeth..	0.52 6	0.88 3	2.55 9	0.68 5	3.41 9
	Uitenhage.....	0.82 4	0.61 3	2.47 10	0.58 5	3.09 9
Feb.	Van Stadens....	1.08 5	0.83 2	1.39 7	5.72 12	2.42 11
	Port Elizabeth..	0.86 5	0.91 3	0.98 12	4.05 13	0.94 6
	Uitenhage.....	0.86 4	0.58 2	1.47 6	5.13 12	1.11 6
Mar.	Van Stadens....	3.43 8	2.14 8	1.60 4	4.69 11	3.71 6
	Port Elizabeth..	2.56 6	1.11 7	1.07 6	1.88 9	1.68 8
	Uitenhage.....	4.09 7	2.31 9	1.06 8	2.53 8	2.42 4
Apr.	Van Stadens....	3.17 11	7.92 5	1.96 7	0.60 2	1.87 5
	Port Elizabeth..	3.09 13	5.49 6	2.89 10	2.13 5	2.40 10
	Uitenhage.....	1.62 11	4.54 6	1.39 7	0.48 5	1.62 7
May	Van Stadens....	5.30 7	0.40 3	1.13 5	5.22 4	3.65 7
	Port Elizabeth..	4.85 11	0.31 2	0.55 10	3.58 4	2.50 10
	Uitenhage.....	2.38 8	0.20 3	1.21 7	3.42 6	1.56 6
June	Van Stadens....	0.35 3	1.88 6	0.05 1	1.40 6	4.67 4
	Port Elizabeth..	0.62 5	2.68 7	0.15 3	1.62 9	2.02 5
	Uitenhage.....	0.14 3	1.45 8	0.15 3	0.78 4	1.82 3
July	Van Stadens....	0.85 3	0.72 4	0.70 3	0.10 1	1.48 4
	Port Elizabeth..	0.54 4	2.28 6	1.43 5	0.82 2	2.12 4
	Uitenhage.....	0.18 2	0.62 6	0.23 3	0.15 5	0.95 4
Aug.	Van Stadens....	1.05 2	3.32 7	2.87 4	0.76 4	2.40 12
	Port Elizabeth..	0.74 5	2.36 9	3.16 7	3.54 5	3.55 12
	Uitenhage.....	0.16 3	0.87 7	1.59 7	0.59 4	1.28 8
Sept.	Van Stadens....	1.79 7	1.17 4	3.04 10	2.53 9	5.87 5
	Port Elizabeth..	0.65 7	0.80 4	2.17 12	1.30 7	7.59 7
	Uitenhage.....	0.44 5	1.16 4	1.44 8	0.61 6	5.83 6
Oct.	Van Stadens....	1.92 6	6.73 14	4.91 9	8.78 8	3.51 14
	Port Elizabeth..	2.79 10	3.58 13	2.84 12	4.28 8	1.72 10
	Uitenhage.....	0.53 7	4.37 13	1.26 8	2.46 6	1.85 10
Nov.	Van Stadens....	2.09 7	3.21 5	1.63 5	2.34 8	0.93 6
	Port Elizabeth..	1.22 11	4.49 8	1.70 6	0.96 8	0.25 6
	Uitenhage.....	1.04 10	3.58 4	0.78 5	1.47 8	0.62 6
Dec.	Van Stadens....	2.93 7	1.13 4	4.97 13	2.80 3	0.45 2
	Port Elizabeth..	2.96 9	0.76 8	2.57 12	0.50 8	0.64 5
	Uitenhage.....	2.48 8	0.70 7	2.99 10	1.52 5	0.24 2
Totals	Van Stadens....	24.69 70	31.65 65	27.41 77	33.67 72	36.18 86
	Port Elizabeth..	21.40 92	25.65 76	22.06 104	25.34 83	28.82 92
	Uitenhage.....	14.74 72	20.99 72	16.04 82	19.72 74	22.39 71

RECORDS OF RAINFALL for VAN STADENS (alt. 1000 ft.), PORT ELIZABETH (alt. 200 ft.), and UITENHAGE (alt. 300 ft.), together with the records of the number of days during which rain fell in each month.—(contd.)

FOR THE YEARS 1912 TO 1916.

		1912.	1913.	1914.	1915.	1916.
		in. d.	in. d.	in. d.	in. d.	in. d.
Jan.	Van Stadens....	4.74 7	0.90 6	2.80 6	2.19 9	1.86 8
	Port Elizabeth..	2.18 11	0.87 6	2.20 13	1.83 10	4.16 14
	Uitenhage.....	2.38 8	1.27 8	1.68 4	1.43 7	3.23 7
Feb.	Van Stadens....	1.58 10	1.90 7	1.47 9	0.65 4	0.00 0
	Port Elizabeth..	0.99 10	1.79 9	1.01 9	0.63 5	0.24 6
	Uitenhage.....	2.09 11	4.22 8	1.29 5	0.34 5	0.00 0
Mar.	Van Stadens....	1.62 8	2.80 9	1.05 5	1.01 7	3.95 9
	Port Elizabeth..	0.67 10	2.82 10	0.72 7	0.47 5	3.31 11
	Uitenhage.....	0.87 6	3.64 7	0.91 4	0.67 5	2.24 8
Apr.	Van Stadens....	5.53 4	1.96 7	3.77 5	3.81 7	1.92 7
	Port Elizabeth..	3.15 10	0.18 3	2.98 5	2.35 7	0.77 6
	Uitenhage.....	5.24 6	0.32 2	2.47 3	1.87 6	0.97 4
May	Van Stadens....	1.06 3	1.80 4	2.53 3	2.40 5	4.89 8
	Port Elizabeth..	1.52 5	2.05 6	1.63 5	1.54 8	7.70 9
	Uitenhage.....	0.53 4	1.22 3	2.38 1	1.17 6	2.99 7
June	Van Stadens....	3.23 7	0.12 1	1.88 5	1.41 6	0.62 2
	Port Elizabeth..	2.48 7	0.65 4	2.53 7	1.51 5	1.37 4
	Uitenhage.....	2.36 6	0.03 1	2.15 3	0.71 3	0.20 1
July	Van Stadens....	1.68 7	2.01 5	2.50 1	5.11 9	2.14 1
	Port Elizabeth..	1.85 6	1.43 6	1.39 3	4.69 12	1.57 4
	Uitenhage.....	0.58 4	0.88 3	1.69 3	2.17 7	1.10 2
Aug.	Van Stadens....	2.30 7	3.26 6	1.45 5	0.44 4	1.45 6
	Port Elizabeth..	2.62 6	3.98 8	1.78 10	0.82 7	1.66 6
	Uitenhage.....	1.00 4	1.73 2	1.09 8	0.58 6	0.60 5
Sept.	Van Stadens....	5.59 9	4.86 9	0.75 7	1.51 6	1.60 7
	Port Elizabeth..	3.45 12	5.19 10	1.71 9	2.46 10	1.63 7
	Uitenhage.....	1.91 5	3.46 7	0.00 0	0.43 4	1.66 9
Oct.	Van Stadens....	3.02 5	2.64 4	1.73 7	3.21 7	1.97 6
	Port Elizabeth..	1.08 7	1.95 6	2.29 9	2.58 9	1.19 9
	Uitenhage.....	1.90 4	1.50 1	1.92 8	2.12 7	0.08 2
Nov.	Van Stadens....	1.00 5	1.48 6	4.55 9	1.23 6	1.46 7
	Port Elizabeth..	0.84 6	1.35 9	2.07 7	1.51 8	1.31 8
	Uitenhage.....	0.37 2	0.65 4	2.42 6	0.74 3	1.10 6
Dec.	Van Stadens....	2.43 8	0.50 2	1.35 6	1.15 7	2.97 8
	Port Elizabeth..	1.47 6	0.83 6	0.32 5	2.57 10	1.63 7
	Uitenhage.....	1.21 5	0.00 0	0.55 2	1.54 10	1.32 5
Totals	Van Stadens....	33.78 80	24.23 66	25.83 68	24.12 77	24.83 69
	Port Elizabeth..	22.30 96	23.09 83	20.63 89	22.96 96	26.54 91
	Uitenhage.....	20.44 65	18.92 46	18.55 47	13.77 69	15.49 56

	Van Stadens.	Port Elizabeth.	Uitenhage.
Average yearly rainfall.....	30·55"	22·69"	18·25"
Average number of days on which rain fell during a year.....	82	86	68
Largest yearly rainfall.....	36·45" (1897)	28·82" (1910)	27·73" (1905)
Lowest " "	20·22" (1899)	10·41" (1899)	10·27" (1899)
Largest number of days on which rain fell in one year.....	101 (1901)	96 (1912, 1915)	74 (1910)
Smallest number of days on which rain fell in one year.....	66 (1913)	64 (1899, 1900)	44 (1900)

Thus Van Stadens has the largest amount of rainfall, as we should expect, since it is on a mountain range close to the sea. Rain falls more frequently in Port Elizabeth than in Uitenhage, but we find already the same difference at Redhouse where, as Mrs. T. V. Paterson informed me, it often does not rain when rain is falling at Port Elizabeth. The visitor to these places will find that the climate of Port Elizabeth is much more "clammy" than that of Uitenhage.

For comparison it may be mentioned that, according to Bews, in Natal the average rainfall in inches is 34·09, the number of wet days 117, the percentage fall in summer (October to March) 77, in winter (April to September) 23.

A few more data based on these records may be of interest :—

	Van Stadens.	Port Elizabeth.	Uitenhage.
Lowest number of rainy days in summer.....	34 (1913)	27 (1905)	21 (1899)
Lowest amount of summer rains..	9·44" (1915)	3·80" (1899)	4·06" (1899)
Months in which no rain fell during twenty years.....	1 (Feb., 1916)	0	3 (Dec., 1913; Sept., 1914; Feb., 1916)
Number of years in which the amount that fell in winter exceeded the amount which fell in summer.....	10	15	9

These last numbers are, however, somewhat misleading from our point of view. It is hardly justifiable to divide summer and winter by reckoning summer from October to March. At least September should be included. If we do this we find the numbers modified as follows :—

	1	6	2
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In fact the area under discussion is in a region in which summer and winter rains about balance one another, though in some years either one or the other may be of considerably greater amount. A little further east the balance is generally in favour of summer rains, as it is also in the north-eastern part of the Uitenhage division. However suggestive the data which I have abstracted from the records may be, it must not be forgotten the influence of rainfall on vegetation can only in the vaguest way be expressed by averages. It is customary to say that rainfall in South Africa to a large extent determines the nature of the vegetation in any given area, of course apart from soil and other well-known factors, amongst which, however, altitude does not play an important part. Marloth has shown that mists also are a very important factor. These mists, together with the greater certainty of rain on the mountains, show forth the unity of the so-called "Cape Flora." In places such as Uitenhage, where the rainfall is still not inconsiderable, droughts are the most important determining factor, as can be already seen from the fact that cultivation without irrigation is impossible or at best most precarious near Uitenhage, in the Sundays River valley, and the north-western part of the division. Unfortunately a drought cannot be rigidly defined. The following Uitenhage records will, however, show how severe the climate frequently is:—

1897	only 6 months with over 1" of rain (0 in Jan.-Mar., 2 in Oct.-Dec.).
1899	" 2 " " " (0 " " 0 " ").
1900	" 4 " " " (2 " " 2 " ").
1903	" 5 " " " (0 " " 2 " ").
1907	" 5 " " " (1 " " 2 " ").
1908	" 5 " " " (1 " " 2 " ").

Taking a similar standard, only the years 1899 and 1900 can be quoted as seasons of drought at Port Elizabeth and none for Van Stadens. Of course, farmers will tell us that severe droughts are much more frequent, but such seasons as I have quoted are in my (unfortunately very imperfect) judgment of most importance for the distribution of the native plants.

SYSTEMATIC ELEMENTS OF THE FLORA.

	Orders.	Genera.	Species.	Non-Native Species.
Gymnosperms.....	3	3	7	—
Monocotyledons.....	22	203	637	about 23
Dicotyledons.....	104	510	1668	" 81
TOTALS.....	129	716	2312	about 104

For further details see the "Recapitulation" on p. 110.

Compare the corresponding figures for the South-western Region and South-eastern Region published by the late Dr. Bolus in "Science in South Africa," 1905, pp. 215, 221.

Proportion of genera to species, 1 : 3.2.

Proportion of Monocotyledons to Dicotyledons, 1 : 2.6.

Orders represented by more than 35 species:—

Gramineae (124), Cyperaceae (80), Amaryllidaceae (43), Liliaceae (150), Iridaceae (67), Orchidaceae (70), Aizoaceae (79), Crassulaceae (63), Leguminosae (148), Geraniaceae (40), Euphorbiaceae (52), Umbelliferae (38), Ericaceae (39), Asclepiadaceae (65), Labiatae (40), Scrophulariaceae (62), Acanthaceae (33), Compositae (296).

Orders represented by not more than 5 species (the first number in parentheses gives the numbers of genera, the second that of the species):—

Cy adaceae (1, 4), Pinaceae (1, 2), Taxaceae (1, 2), Typhaceae (1, 2), Aponogetonaceae (1, 3), Scheuchzeriaceae (1, 3), Hydrocharitaceae (1, 1), Aroidaceae (1, 1), Lemnaceae (2, 3), Commelinaceae (2, 4), Xyridaceae (1, 1), Dioscoraceae (2, 3), Musaceae (1, 2), § Cannaceae (1, 1), Piperaceae (1, 1), Salicaceae (1, 1), Myricaceae (1, 5), Ulmaceae (2, 2), Moraceae (1, 2), Grubbiaceae (1, 1), Rafflesiaceae (1, 1), Phytolaccaceae (4, 5), Portulacaceae (3, 5), § Basellaceae (1, 1), Nymphaeaceae (1, 1), Ranunculaceae (3, 5), Menispermaceae (2, 2), Lauraceae (1, 1), § Papaveraceae (2, 2), Fumariaceae (2, 3), Droseraceae (1, 2), Saxifragaceae (1, 1), Pittosporaceae (1, 1), Cunoniaceae (2, 2), Hamamelidaceae (1, 2), Linaceae (1, 3), Meliaceae (3, 3), Callitrichaceae (1, 1), Aquifoliaceae (1, 1), Icacinaceae (1, 1), Sapindaceae (5, 5), Melianthaceae (1, 1), Balsaminaceae (1, 1), Tiliaceae (2, 3), Violaceae (1, 1), Guttiferae (1, 2), Ochnaceae (1, 2), Elatinaceae (1, 1), Frankeniaceae (1, 2), Achariaceae (2, 2), Penaeaceae (1, 5), Oliniaceae (1, 1), § Lythraceae (1, 1), Combretaceae (1, 1), Myrtaceae (1, 2), § Oenotheraceae (2, 5), Halorrhagidaceae (2, 2), Araliaceae (1, 2), § Cactaceae (3, ?), Cornaceae (1, 1), Myrsinaceae (1, 3), Primulaceae (3, 4), Plumbaginaceae (2, 3), Sapotaceae (1, 1), Salvadoraceae (1, 1), Apocynaceae (4, 5), Bignoniaceae (2, 2), Gesneriaceae (1, 1), Lentibulariaceae (1, 4), Plantaginaceae (1, 5), Valerianaceae (1, 1), Dipsacaceae (2, 2), Goodeniaceae (1, 1).

NOTE.—Orders marked § consist entirely of non-native species. For details of the remaining orders see the "Recapitulation" on page 110.

Genera represented by more than 15 species:—

Ficinia (23), Aloe (16), Mesembrianthemum (64), Crassula (49), Aspalathus (20), Indigofera (22), Pelargonium (35), Oxalis (19), Agathosma (16), Euphorbia (22), Rhus (21), Hermannia (22), Erica (30), Sutura (16), Helichrysum (40), Senecio (59).

Unrecorded genera distributed both in the south-west and south-east coast region:—

Schoenus, Lapeyrousia, Liparis, Platanthera, Faurea, Hydнора, Anemone, Cryptocarya, Raspalia, Geum, Dumasia, Acmadenia, Cassinopsis, Zizyphus, Sphaeralcea, Sanicula, Ptychotis, Teedia, Bellardia, Nenax, Dicrocephala, Chrysanthemum, Artemisia, Oedera, Landtia.

Here may also be mentioned the fact that *Roella* stops in the Uitenhage division, but reappears again at East London.

Number of genera extending in the coast districts from a westerly direction only as far as the Port Elizabeth and Uitenhage divisions, 63; from the opposite direction, 83; number of genera endemic in Uitenhage and Port Elizabeth divisions, 5.

Genera reaching close to the Uitenhage and Port Elizabeth divisions, but not recorded from them:—

From the east: Stangeria, Phoenix, Clivia, Gloriosa, Turraea, Buxus, Mimusops, Lippia, Clerodendron, Siphonoglossa, Pentanisia, Barresia (Spermacoce), Schistostephium.

From the west: Pauridia. (There are sure to be others, but on this point my information is not very precise.)

From the north: Salsola, Sarcocaulon, Augea, Heeria.

NOTES ON PLANT FORMATIONS, PLANT ASSOCIATIONS, ETC.

There is a wide field for local workers to study ecological problems of the flora here dealt with. My own remarks on such points must be rather superficial, as my visits to the two divisions have always been hurried and of brief duration. Even the data of distribution in the accompanying list are still very incomplete.

1. *Shore Vegetation.*—As far as I have seen this, it does not differ essentially from the vegetation in other similar localities along the south coast of South Africa. A narrow belt of shifting sand-dunes separates the sea from the more stable dunes where psammophilous herbaceous vegetation is replaced frequently by a fringe of bush. In the open parts we find *Cnidium suffruticosum*, *Hydrophylax carnosa*, *Scaevola Thunbergii*, *Cryptostemma niveum*, *Scleropoa rigida*, *Agropyrum distichum*, etc. *Mundia spinosa* and species of *Myrica* are not uncommon. The striking *Gasteria Croucheri* has its home here. *Ipomaea biloba*, so much in evidence further east, is only found in a few isolated spots. The shifting sands west of Port Elizabeth have been successfully fixed by extensive plantations of Australian acacias and other plants which have become naturalized. See "Reclamation of Drift Sands in Cape Colony," by C. H. Braine, in *Cape Agric. Journ.*, xxiii (1903), pp. 161-178.

2. *Halophilous Meadows.*—These are particularly well developed at and near the mouth of the Zwartkops River and extend on its right bank to beyond Redhouse. They are the home of many rare plants. Amongst their more common inhabitants are *Spartina stricta*, *Sporobolus pungens*, species of *Triglochin*, *Samolus*, *Statice*, *Frankenia hirsuta*, *Chenolea diffusa*, *Salicornia fruticosa*, *Suaeda fruticosa*.

3. *Vegetation of Van Stadens Mountains.*—Apart from patches of thorn scrub and forests this has many features of a south-western hill-vegetation. The prevalence of Proteaceae and Ericaceae points to this conclusion, but in addition we find here also five species of Penaeae, five Bruniaceae, numerous Rutaceae, several Cliffortias, the leguminous genera *Podalyria*, *Cyclopia*, and *Priestleya*, a species of *Caesia*, two of *Hermas*, and in the river beds *Prionium Palmita*. Acanthaceae, otherwise fairly strongly represented in the two divisions are unrecorded, so are Bignoniaceae and Apocynaceae (apart from *Gonioma*, which grows in the forest patches); there are a few Rubiaceae, there is no *Gasteria*, no *Haworthia* and even no *Aloe* recorded—thus central and eastern types are much scarcer than in other parts of our areas. *Mesembrianthemum* is represented only by few species.

The Elandsberg and Great Winterhoek Mountains are very little explored botanically. Much of their vegetation is thorn scrub with occasional patches of forest. The Coxcomb will probably yield a number of south-western types. A few years ago Mr. N. Chase discovered on it *Rochea jasmineea*. Other south-western types not recorded from our

area, but well known further east near Grahamstown, will be found on the southern slopes of the Zuurberg Range. It is a pity that the exact locality where *Grubbia stricta* was found by Ecklon is not known. He records it from "mountains near Uitenhage."

4. *Vegetation of the Coastal Plateau (south of Van Stadens Mountains and east to Port Elizabeth and the Bethelsdorp hills).*—Here thorn scrub is more frequent and eastern types more prevalent than on Van Stadens Mountains. Yet much of the vegetation is of the type of south-western sandy plains. Proteas still form a conspicuous feature of some portions of it. Ericaceae, Restiaceae, several Cliffortias, species of *Heliophila*, etc., are common. *Microtoma lineare* is a favourite of local residents. There are numerous ground orchids, some species being also found on the Cape Peninsula, e.g. *Satyrium Hallackii*, *Schizodium rigidum*, and *Herschelia venusta*. The following also serve to remind one of the south-west: *Lanaria plumosa*, *Cyanella capensis*, *Ianthe (Hypoxis) aquatica*, *Gethyllis spiralis*. This is also the eastern limit of *Crassula Sphaeritis* (in fact of the sub-genus *Sphaeritis*), of *Crassula saxifraga*, of the section *Hoarea* of the genus *Pelargonium*. There are numerous species of *Oxalis*, many *Anthericum*s (of which six species are also found on the Cape Peninsula), numerous *Ornithogalum*s, and other bulbous plants. On its south-eastern edge we find *Crassula glomerata* and *Cr. decumbens*, Thunb. (*Bulliarda trichotoma*).

It is interesting to note that, while in 3 and 4 the Gramineae are prevalently eastern types, the Cyperaceae are more largely represented by south-western types.

5. *Karroid Succulent Vegetation.*—This occupies a large tract of country and is most typically developed in the north-western parts, and merges frequently into the next, the Karroid thorn scrub formation. Travelling from Uitenhage on the Graaff-Reinet railway line, one sees for hours practically nothing but succulent *Euphorbias*, 2 to 3 feet high, and the *Spekboom*, *Portulacaria afra*, interspersed with other succulents and species of *Asparagus*. Though very dreary in aspect during the greater part of the year, it affords an unforgettable sight when, in November and December, the *Spekboom* is covered with its mass of delicately pink flowers.

6. *Karroid Thorn Scrub.*—This, as stated before, is not always sharply divided from 5. Not only are numerous succulents often mixed with it—on the Zwartkops hills near Redhouse they even preponderate—but patches of pure succulent vegetation frequently occur in it. Tree-*Euphorbias* are frequent in steep well-drained localities.

In its purest form it is found in the western and central part of the "Addo bush," where it forms a dense growth of an average height of about 10 to 14 feet, which shelters a herd of elephants (frequently in a locality plainly visible from Port Elizabeth). There are buffaloes still to be found. Both would have been exterminated long ago, although nominally they are under Government protection, if they were not firmly entrenched in the almost impenetrable thorn scrub, which in many parts it does not pay to remove as the soil on which it grows is frequently very poor and sandy. Reference to its occurrence in the south-western parts of our area has already been made. In a north-easterly direction it crosses the Zuurberg Range into the Fish River valley.

Here we find a number of Celastraceae, species of *Rhus* (including *Rh. longispina*), *Grewia*, *Doryalis*, *Scolopia*, *Schotia*, *Capparis*, *Euclea*, *Royena*, *Olea*, *Lycium*, *Brachylaena*, *Tarchonanthus*, *Osteospermum*, *Asparagus*, *Acacia horrida*, *Heteromorpha arborescens*, *Azima tetracantha*, *Carissa Arduina*, *Ehretia hottentotica*, *Randia rudis*, and other woody Rubiaceae (e.g. *Pavetta lanceolata*), *Rhigozum obovatum*. Some of these, especially the last named, make a fine show when in flower in summer. Shrubby species of *Cotyledon*, *Crassula perfoliata*, numerous species of *Pelargonium* and *Mesembrianthemum*, *Clematis brachiata*, several species of *Zygophyllum*, *Tecomaria capensis*, *Plumbago capensis*, several Jasmins, a number of Acanthaceae, several showy species of *Albuca* and other bulbous plants—all add to the attractiveness of the scene when seen in summer; while in winter some stately *Aloes*, especially *A. pluridens*, *ferox*, *africana*, and *speciosa*, brighten the landscape.

In parts *Portulacaria afra* is very common and forms a most important food plant of elephants and other large herbivorous animals. On the other hand, *Crassula portulacea*, which is also common in some localities and resembles the Spekboom is not touched by them. Scandent *Senecios* are not uncommon, also twining *Asclepiads*, especially *Sarcostemma viminialis*. In fact the majority of *Asclepiads* occurring in our area are found in the thorn scrub tract. *Testudinaria elephantipes* is not uncommon in rocky situations. *Sansevieria thyrsoflora* is very common. Several species of *Encephalartos* are met with.

It will be seen that the thorn scrub, like the succulent Karroid vegetation, consists very largely of extreme xerophytes. Such an extensive conglomerate of extreme xerophytes points to a very great age of these formations, as has been shown by Engler in his paper "Ueber Herkunft, Alter und Verbreitung extremer xerothermer Pflanzen in Sitzungsber d. k. Preuss. Ak. d. Wissenschaften XX, 1914," p. 564, and it is interesting to note that Engler, though dealing with the vegetation of the whole world, mentions many of the plants found in these formations in our area. Valuable information on a number of them will also be found in Marloth's "Das Kapland," Jena, 1908.

The question of the cause of thorn development is not clearly decided yet. A résumé of recent work on this point will be found in "The Growth-forms of Natal Plants," by J. W. Bews (*Trans. Roy. Soc. S. Afr.*, V p. 614). He also records a number of observations on Natal thorny plants which will be of value to students in our parts.

Between Coega and the Sundays River the thorn scrub is partly replaced by Karroid shrublets which include *Pentzia virgata*

7. *Acacia Formation*.—Marloth (in "Das Kapland," p. 57) says, in speaking of the vegetation of the parts here dealt with, "when these parts are better investigated it may become necessary to distinguish as a separate formation these *Euphorbia* and Thornbush thickets from the more eastern *Acacia* formation." This I have done. However, no mathematical line can be drawn between them. In the *Acacia* formation we find stretches of grass country dotted over with *Acacia horrida*. The latter frequently serves as a nucleus for plant associations of which other thorny plants always form some of the constituents. In our area pure *Acacia* formation is not extensive and occurs in the eastern and north-eastern portions. I also noticed it near the mouth of the Gamtoos River.

8. *Pure Grassland Formation* is found on a large part of the Zuurburg, on the "Grass Ridge" east of Uitenhage and east of the Sundays River near its mouth.

g. *Forest Patches*.—These occur almost entirely in deep kloofs on the southern side of the mountains and hills and close to the sea. They are of the "Knysna type," though no doubt they will be found to vary more or less. Thus *Virgilia capensis* finds its eastern limit in the kloof traversed by the Van Stadens Pass; *Ocotea bullata* occurs only, as far as my information goes, in a patch on the Elandsberg; on the farm Kamaehs, north of Uitenhage, a patch contains numerous specimens of the famous *Sterculia Alexandri*, which in isolated specimens is only known from a couple of other localities in our area. It is perhaps to be looked upon as a relict from the time when forests had a wider distribution in our southern coast-belt. Similar plant-relicts are known from other South African forest areas, and there are some interesting examples amongst animals associated with our forest patches. Detailed information on the plants found in the Knysna type of forest is contained in Marloth's "Das Kapland," p. 190, and in Sim's "The Forests and the Forest Flora of Cape Colony." Frequently forest patches merge into thorn scrub.

It may be of interest to record the water and swamp plants as well as the phanerogamic Epiphytes and Parasites:—

(a) Water and swamp plants—

Typha (2 species), *Potamogeton* (5), *Aponogeton* (3), *Lagarosiphon muscoides*, *Crassula natans*, *Myrsiphyllum spicatum*, *Utricularia* (3), numerous Cyperaceae, *Zantedeschia aethiopica*, *Juncus* (several species), *Prionium Palmita*, *Ianthe aquatica*, *Crinum* (3), *Ranunculus capensis*, *Crassula inanis*, *Callitriche* (*C. Bolusii* ?), *Laurembergia repens*, *Gunnera perpensa*, *Villarsia ovata*, *Limnanthemum thunbergianum*, *Mentha* (2), *Ilysanthes riparia*.

(b) Phanerogamic Epiphytes—

Polystachia pubescens, *Angraecum* (3 species), *Listrostachys arcuata*, *Mystacidium filicorne*.

(c) Phanerogamic Parasites—

Loranthus elegans, *Viscum* (5 species, including the remarkable *V. minimum*, and *V. Crassulae*), *Thesium* (26), *Cytinus dioicus*, *Cassytha ciliolata*, *Cuscuta* (2), and 14 species of Scrophulariaceae of which the following are holoparasites: *Striga orobanchoides*, *Hyobanche sanguinea*, and 3 species of *Harveya*. It is strange that *Hydnora africana* has not been recorded, as it occurs both east and west of our area.

PHYTOGEOGRAPHY.

It was early recognized that in the districts of Uitenhage and Port Elizabeth an important phytogeographical boundary is found. Thus already Ecklon in his "List of Plants Found in the District of Uitenhage, collected during the months of July, 1829, and February, 1830" (*S.A. Quart. Journ.*, 1830), stated on p. 358: "It seems that the Winterhoek Mountain forms the limit of what may be called the Cape Flora, and which distinguishes itself by its representatives, *Erica*, *Protea*, etc., while that by which it is supplanted may be called the Flora of Caffraria." The matter is, however, not so simple as it looks at first sight and as it has been taken by most writers. It is true a large number of genera find in this area their eastern or western limit, I find that 62 genera extend in our coast districts from a western direction only to our area, and 83 genera from an eastern direction. In addition 5 genera have not been found outside it. These numbers will undoubtedly be modified as our knowledge

increases, but even if they were considerably reduced they would command attention. However, without having resource to statistics, one has only to take a stroll on the "Cape Road," near Port Elizabeth or near Walmer, and cannot help being struck with the fact that here the flora is essentially south-western. On the Zwartkops hills an essentially karroid vegetation prevails. In the kloofs we find the same types and mostly the same species found at the Knysna and in the kloofs near Grahamstown, while in the eastern parts, and especially in the adjoining district of Alexandria, eastern types become more common. Especially differences in rainfall, no doubt largely account for these changes in vegetation, and the tongue of karroid vegetation reaching almost to the sea from Port Elizabeth to the mouth of the Sundays River, helps to prevent the intermingling of eastern and western types. We must, however, not forget that a large number of genera and even of species are found in our area both east and west of it. This has led the editor of the recent volumes of the "Flora Capensis" to lump the coast districts from the Oliphants River in the west to Natal under the name of the "Coast Region," but no South African botanist will agree that this was a wise proceeding. The south-west coast region and the south-east coast region are so well characterized by prominent types that it is most advisable to keep them up. This is not the place to deal with this matter in detail; moreover it has been frequently dealt with by Bolus, Marloth, and others. The question only is, where to draw the line? Quite a fair number of south-western types find their eastern limit near Grahamstown, but with them we find karroid and eastern types. However, karroid and eastern types also extend to the Cape Peninsula and beyond. Some south-western types extend far into the south-eastern region. The truth of the matter is, that in a continental area no absolutely sharp boundaries between large geographical regions can be drawn, they must be more or less conventional and preferably they should be purely geographical, bounded by mountain ranges or river systems. On these lines Bolus's and Engler's primary divisions of South Africa into phytogeographical regions have been made (see e.g. Bolus in "Science in South Africa," 1905, and Engler, "Die Pflanzenwelt Afrikas," Vol. I). Having fixed our geographical limits we can next proceed to work out the plant-formations and plant-associations as has been done by Marloth for a portion of Cape Colony, and Bews for Natal. Some formations and associations have often very sharp boundaries. I am led to make these remarks to show how little it matters whether we accept, e.g., Bolus's or Engler's primary divisions. The latter, following Rehmann, has a transition sub-region for Van Stadens to Mossel Bay, before he comes to the region of south-west Cape Colony, but Bolus has already pointed out that this simply introduces an additional artificial boundary. It is also inadmissible, because the Langkloof has an almost pure south-western flora. If geographical and topographical divisions of the country should be used in primary divisions for phytogeographical purposes, it follows further that they should have geographical names, but these should be clear, especially to people living in this country. For instance, the term "Karoo Region" should be dropped and the much better term used in the "Flora Capensis"—"Central Region"—be substituted. We can then use the excellent term "karroid" not only for the vegetation of the Karoo but for similar vegetation in other parts of South Africa and even other parts of the world, e.g. East Africa. For the same reason I would reject the term "Kalahari Region." If I promised to take a South African

to the Kalahari Region, and I landed him in the Orange Free State or at Barberton he would not know what to make of it. For similar reasons I would reject such terms as "Cape Province," as used by Marloth (e.g. in "Report of the 75th Meeting of the British Assoc. for the Adv. of Science," 1906, p. 598, and "Das Kapland," 1908).

After this digression it will be seen that, on the whole, I accept for our area the divisions adopted by Bolus, only I prefer to place the eastern boundary of the south-west coast region not at Van Stadens but in a line from Port Elizabeth through the Bethelsdorp hills.

LIST OF THE PHANEROGAMIC PLANTS FOUND IN THE DIVISIONS OF UITENHAGE AND PORT ELIZABETH.

EXPLANATION OF SIGNS AND ABBREVIATIONS.

* means that I have not seen the species from these divisions, and the reference is taken from the literature only.

† means the species so marked is found on the Cape Peninsula.

‡ means the species so marked is found in Natal.

§ means the species is not native in my opinion.

Uit. = Uitenhage.

P.E. = Port Elizabeth.

T.V.P. = T. V. Paterson.

J.L.D. = J. L. Drege.

W.K. = W. H. Kemsley.

GYMNOSPERMAE.

CYCADACEAE.

ENCEPHALARTOS Lehm.

1. *caffer* Miq.—Kamaehs; Van Stadens Mts.; Zuurberg.
2. *horridus* Lehm.—Redhouse, Perseverance, etc.
3. **cycadifolius* Lehm.—Near the Zwartkops R., 20 to 100 ft.
(*teste* Ecklon).
4. **longifolius* Lehm.—Hills near Uitenhage, 200 to 800 ft.
(*teste* Ecklon).

PINACEAE.

WIDDINGTONIA Endl.

- ††1. *cupressoides* Endl.—Zuurberg, Mar.; Kamaehs.

TAXACEAE.

PODOCARPUS L'Herit.

- †1. *elongata* L'Her.—Springfields, Mar.; Zuurberg, Mar.; Van Stadens Pass.
- †2. **latifolia* R. Br.—Though not specially recorded, this species is sure to occur in our districts.

ANGIOSPERMAE.

MONOCOTYLEDONES.

TYPHACEAE.

TYPHA L.

- †1. **australis* Schum.—Between Van Stadens Mts. and Bethelsdorp.
 ††2. *capensis* Rohrb.—Redhouse, Apr.

POTAMOGETONACEAE.

POTAMOGETON L.

- †1. **natans* L.—Near the Zwartkops R., Dec.
 †2. **americanus* Cham.—Uit. div.
 †3. **lucens* L.—Uit. div.
 †4. *Friesii* Ruprecht—Elands R., Dec.; Baakens R. valley, Jan.
 5. **pectinatum* L.—Zwartkops R.

ZOSTERA L.

1. *marina* L. var. *angustifolia* Hornem.—Zwartkops R. at Redhouse.

APONOGETONACEAE.

APONOGETON Thunb.

1. *Kraussianum* Hochst.—Despatch, Oct.; Kamkas, Nov.
 †2. *spathaceum*, E. Mey.—Bethelsdorp, Sept.; P.E., Nov.; Uit. E. and Z. (var. *junceum*).
 †3. **distachyon* L.—Uit. div.

SCHEUCHZERIAEAE.

TRIGLOCHIN L.

- †1. *bulbosum* L.—Walmer, Oct.; P.E., Nov.; Cape Recife, Feb.
 ††2. *laxiflorum* Guss.—Redhouse, Mar.
 ††3. *striatum* Ruiz et Pavon.—P.E., Nov.; Van Stadens R.; Redhouse, Oct.

HYDROCHARITACEAE.

LAGAROSIPHON Harv.

- †1. *muscoides* Harv.—P.E., Feb. and Oct.; Redhouse.

GRAMINACEAE.

ERIANTHUS Mich.

- †1. *capensis* Nees—Redhouse, Apr.
 2. *Sorghum* Nees—Zuurberg, Mar.

POLLINIA, Trin.

- †1. **villosa* Spreng.—Rocky slopes of Van Stadens Mts.

ROTTBOELLIA Linn. f.

- ††1. *compressa* L.—Zwartkops R.

TRACHYPOGON Nees

- †1. *polymorphus* Hack.—Between Kromme R. and Kraggakamma; P.E.

FLIONURUS Humb. et Bonpl.

- †1. **argenteus* Nees—Near the Zwartkops R.

ANDROPOGON L.

- ††1. *eucomus* Nees—Schoenmaakers Kop, Apr.; Walmer, May.
- †2. *appendiculatus* Nees—Bethelsdorp, Nov.
- †3. **filifolius* Steud.—P.E.
- †4. **confortus* Linn.—Near the Zwartkops R.
- ††5. *Nardus* Linn.—Bethelsdorp, Nov.; P.E., Oct.
- ††6. *hirtus* Linn.—Redhouse, June, Sept., and Nov.
- †7. **auctus* Stapf—Uit. div.

ANTHISTIRIA Linn. f.

- ††1. *imberbis* Retz.—Aloes, Sept. Var. *argentea* Stapf—Between Coega and Sundays R.
- 2. *ciliata* L.—Redhouse, Oct.

PASPALUM L.

- †1. *scrobiculatum* L.—Zwartkops R., Jan., Z. 445I.

DIGITARIA Rich.

- †1. *monodactyla* Stapf—Addo.
- †2. *eriantha* Steud.—Redhouse, Oct.; Earn Cliff, near P.E., Mar., Galpin 6384; Cradock Place, P.E., May, Galpin 6383; Uit., E. and Z. 84; Zwartkops R., May, E. and Z. 2I.
- †3. *ternata* Stapf—Redhouse, May.
- ††4. *sanguinalis* Scop.—Zwartkops R., Jan.

PANICUM L.

- †1. *serratum* Spreng.—Redhouse, Mar.
- †2. *arrectum* Hack.—Uit.
- †3. *pyramidale* Lam. var. *hebetatum*.—Uit., Jan.
- ††4. *§Crus-Galli* L.—Frames Drift, Mar.
- †5. *deustum* Thunb.—P.E., Oct.; Uit., May, E. and Z. 45I.
- †6. *maximum* Jacq.—Redhouse, Oct.; Uit.
- 7. *minus* Stapf—Uit., Oct. and Nov., E. and Z. 478.

OPLISMENUS L.

- †1. *africanus* Beauv.—Springfields, Mar.

SETARIA Beauv.

- †1. *perennis* Hack.—P.E.; near the Zwartkops R.; hills of Addo, E. and Z. 176.
- 2. **flabellata* Stapf—Zwartkops R.; P.E.
- †3. *aurea* A. Br.—Redhouse.
- †4. **imberbis* Roem.—Zwartkops R.
- †5. *verticillata* Beauv.—Uit., Apr.

PENNISETUM Pers.

- ††1. *macrourum* Trin.—Zwartkops R., Z. 4468.
- ††2. **Thunbergii* Kunth—Near Uit.

STENOTAPHRUM Trin.

- ††1. *glabrum* Trin.—Humewood, July; P.E., Nov.; on meadow-like spots near the Zwartkops R., E. and Z. 440; Uit., Nov.

TRICHOLOAENA Schrad.

- †1. *setifolia* Stapf—Redhouse, Oct.; P.E., June.

ARUNDINELLA Raddi

- †1. *Ecklonii* Nees—Zwartkops R., Mar.; Uit.

TRISTACHYA Nees

- †1. *leucothrix* Trin.—Walmer, Oct.; Zuurberg.

ACHNERIA Munro

- †I. *ampla* Dur. et Schinz—Redhouse, Feb.

AIRA L.

- †I. *scaryophyllea* L.—Redhouse, Oct.

KOELERIA Pers.

- ††I. **cristata* Pers.—Zwartkops R.; near Uit.; hills near Addo.

AVENASTRUM Juss.

- †I. *turgidulum* Stapf—Zwartkops R., Z. 463.
2. **antarcticum* Stapf—Zwartkops R.

PENTASCHISTIS Stapf

1. *viscidula* Stapf—Bethelsdorp, Nov.; P.E., Nov.
†2. *curvifolia* Stapf—Walmer.
3. **Zeyheri* Stapf—Near Zwartkops R.
†4. *angustifolia* Stapf—Gamtoos R.; P.E.
5. *heptamera* Stapf—On the sand-hills near the Zwartkops R.,
Dec. E. et Z. 659 et Z. 4533.

DANTHONIA DC.

1. *papposa* Nees—Van Stadens, Dec.; Uit., Nov.
2. **cincta* Nees—Zwartkops R.; between Van Stadens Mts.
Range and Bethelsdorp; between Leadmine R. and
Van Stadens R.
3. *disticha* Nees—Redhouse, Nov. and Oct.
†4. *curva* Nees—Redhouse, Nov.; Uit.
5. **inermis* Stapf—Near P.E.

ARUNDO L.

- I. *§Donax* L.—Walmer.

PHRAGMITES Trin.

- ††I. *communis* Trin.—P.E.; Redhouse, Apr.; Uit., Mar.

LAGURUS L.

- †I. *§ovatus* L.—P.E.

POLYPOGON Desf.

- †I. *monspeliensis* Desf.—Baakens R. valley, Nov.; Uit., Dec.
2. *tenuis* Brongn.—P.E., Dec.; Uit., Nov., E. and Z. 430.

AGROSTIS L.

- ††I. *lachnantha* Nees—Zwartkops R., Dec., Z. 173.

ARISTIDA L.

- †I. *Adscensionis* L. (= *Chaetaria curvata* Nees).—Near Uit.,
Apr.
†2. *congesta* R. et Sch.—Near Uit., Schlechter 2548 and E.
and Z.
††3. *barbicollis* Trin.—Between Coega and Sundays R., Nov.,
E. and Z.
††4. *vestita* Thunb.—Redhouse, Oct.; on the grass fields near
the Zwartkops R., Dec., E. and Z. 447; between
Sundays and the Coega R.
†5. *capensis* Thunb.—Schoenmakers Kop, Mar.; Humewood,
Mar.; on downs between Coega and Sundays R.,
Z. 502 and 4501.
6. *Zeyheri* Nees (= *A. capensis* Thunb. var. *Zeyheri* Trin.)—
P.E., May.

STIPA L.

- †1. *dregeana* Steud.—P.E., July; Van Stadens, May; Uit.; in the fields of Addo and by the Zwartkops R.; E. and Z. 770.

TRAGUS Haller

1. *koelerioides* Aschers.—Redhouse, Dec.; near Sundays R., May; E. and Z. 45; Uit., Apr.; Schlechter 2506.
 ‡2. *racemosus* All.—Sundays R., May; E. and Z. 46; Zwartkops R.; E. and Z.; Uit., Apr.; Schlechter 2555.

SPOROBOLUS R. Br.

1. *ioclados* Nees—Uit., Apr., E. and Z.
 2. *fimbriatus* Nees—Zuurberg, Mar.; Zwartkops R.
 †‡3. *indicus* R. Br.—P.E., Oct.; Zuurberg, Mar.
 †‡4. *pungens* Kunth—Redhouse, Oct.; Van Stadens R.; at the mouth of the Zwartkops R., Jan. and Sept.

DIPLACHNE Beauv.

- †‡1. *fusca* Beauv.—Redhouse, Aug.

ERAGROSTIS Beauv.

- †‡1. *curvula* Nees—Redhouse, Mar.; Van Stadens Mts., Oct.; Uit., Apr.; Schlechter 2509; Cradock Place, May; Galpin 6382.
 2. *porosa* Nees—Redhouse, Oct.; Uit., Apr.; Schlechter 2554; E. and Z.
 3. *micrantha* Hack.—Uit., Apr.; Schlechter 2509.
 †‡4. *plana* Nees—Redhouse, Feb.
 †‡5. *chalcantha* Trin.—Van Stadens Mts., Oct. and Nov.; Zeyher 1835, 7.
 †‡6. *brizoides* Nees—Redhouse, Oct.; P.E., Nov.; on fields near the Zwartkops R., Oct.; E. and Z. 238.
 7. *obtusata* Munro—Redhouse, Oct.; Uit., Apr.; Schlechter 2554; E. and Z.
 †‡8. *gummiflua* Nees—Redhouse, Mar.; Zwartkops R., Oct.; Uit., Jan.; Bethelsdorp, Oct.; E. and Z. 12.

SPARTINA Schreb.

- †1. *stricta* Roth—Zwartkops R., Jan.; along the strand of Algoa Bay, near P.E.; Cape Recife; E. and Z. 662.

CYNODON Pers.

- †‡1. *Dactylon* Pers.—Redhouse, June.
 2. *incompletus* Nees—Near Uit., Nov. and Apr.; E. and Z.

MICROCHLOA R. Br.

- †1. *caffra* Nees—Near the Zwartkops R.

HARPECHLOA Kunth

- †1. *capensis* Kunth—Walmer, Nov.

CHLORIS Swartz

- †1. *virgata* Sw.—Redhouse, Apr.; near Uit.; Schlechter 2504.
 ‡2. *petraea* Thunb.—Bethelsdorp, Nov.; Uit., Jan.; Zwartkops R.; Z. 1823.

ELEUSINE Gaertn.

- †‡1. *§indica* Gaertn.—P.E., Dec.

TRIRAPHIS R. Br.

- †1. *Rehmanni* Hack.—Near Uit., Apr., Schlechter 2515; Zwartkops R., Feb.; on sand-hills near the Zwartkops R., E. and Z. 85, 1829; Redhouse, Mar.

LEERSIA Sw.

- †1. *hexandra* Sw.—Moist spots in channel of Zwartkops R., E. and Z. 510.

EHRHARTA Thunb.

- †1. *erecta* Lam.—Redhouse, Aug.; Zwartkops R., Sept. and Nov., E. and Z.; Uit., Nov.
 ††2. *calycina* Sm.—Redhouse, Oct.; between Coega and Sundays R., Nov.; Addo, Sept.
 3. *ramosa* Thunb.—Van Stadens Mts., Oct., Z. 4510.
 †4. *aphylla* Schrad.—Van Stadens Mts., Oct. and Nov., E. and Z. 293.
 5. *gigantea* Thunb.—On sand-hills near the Zwartkops R., E. and Z. 253; Humewood, Oct.
 †6. *villosa* Schult. var. *maxima*.—On downs along the strand of Algoa Bay, Jan., E. and Z. 409; Zwartkops R., Sept., Z. 4509, 4508.

PHALARIS L.

- ††1. *§minor* Retz.—Redhouse, Sept. and Oct.
 †2. *arundinacea* L.—Van Stadens Mts.

MELICA L.

- ††1. *racemosa* Thunb.—Redhouse, June and Oct.; Walmer, Nov.; Uit., Apr., Schlechter 2577; sand-hills near the Zwartkops R., E. and Z. 253.

FINGERHUTHIA Nees

- †1. *sesleriaeformis* Nees.—Near P.E., Jan., Z. 4506.

SCHISMUS Beauv.

1. *fasciculatus* Beauv.—P.E., Oct. Var. *tenuis* Stapf, near Uit., Z.
 2. **koelerioides* Stapf—Near the mouth of the Zwartkops R.

LASIOCHLOA Kunth

- †1. *longifolia* Kunth—Redhouse, April and Oct.; Walmer, Oct.
 2. *obtusifolia* Nees—Near the Zwartkops R., E. and Z. 4592, 102.

BRIZOPYRUM Nees

- †1. *capense* Trin.—Near Van Stadens R.; between Coega and Zwartkops R., Z. 1039; Redhouse, Dec.

BRIZA L.

- †1. *§maxima* L.—Bethelsdorp, Nov.; P.E., Sept.
 ††2. *§minor* L.—Bethelsdorp, Nov.; Uit., Schlechter 2554.

POA Linn.

- †1. *binata* Nees—P.E., Aug.

ATROPIS Griseb.

1. **angusta* Stapf—Zwartkops R.

SCLEROPOA Griseb.

- †1. *§rigida* Griseb.—Humewood, Oct. and Nov.

FESTUCA L.

- †1. *scabra* Nees—Bethelsdorp, Nov.; Van Stadens Mts., Oct., Z. 4594; on the flats near the Van Stadens Mts., E. and Z. 290.

VULPIA Gmel.

- ††1. **Myuros* Gmel.—Zwartkops R.
 †2. *Bromoides* S. F. Gray—Baakens R. valley, Nov.; Zwartkops R.; near Uit., Oct.

BROMUS L.

- †1. *smolliformis* Lloyd—Humewood, Nov.
 †2. *spatulus* Mer.—Redhouse, Nov.
 ††3. *maximus* L.—Redhouse, Oct. and Dec.
 ††4. *unioloides* H. B. K.—Redhouse, Sept.

LOLIUM L.

- ††1. *stemulentum* Linn.—Coega; P.E., Dec.
 2. *perenne* L. var.—P.E., Oct.
 †3. *rigidum* Gaud.—Redhouse, T.V.P. (Has narrower leaves than *L. temulentum* Linn., but is more luxuriant than the type of *L. rigidum*.)
 †?4. *multiflorum* Lam.—Redhouse, T.V.P. 403a. (This may, however, be a cultivated form of *L. perenne* L.)

LEPTURUS R. Br.

- †1. **cylindricus* Trin.—Near Uit.

AGROPYRUM Gaertn.

- †1. *distichum* Beauv.—Cape Recife, Jan.; Governor's Kop, Sim 2725; P.E., near the mouth of the Zwartkops R., Jan.

HORDEUM L.

- †1. *murinum* L.—Redhouse, Dec.; P.E., Oct.

(BAMBUSA Schreb.

1. *vulgaris* Nees.—Uit., in *hortis*, Zeyher.)

CYPERACEAE. ||

KYLLINGA Rottb.

- †1. *alba* Nees, var. *alata* C. B. Cl.—Redhouse, Oct.
 †2. *erecta* Schum.—Redhouse, Nov.; Uit., Mar., E. and Z.

PYCREUS Beauv.

- ††1. *Mundtii* Nees—Uit., Apr., Schlechter 2553.
 ††2. *polystachyus* Beauv.—By the Zwartkops R.; Zuurberg.
 †3. *ferrugineus* C. B. Cl.—Schoenmaker's Kop, T.V.P. 546.
 ††4. *umbrosus* Nees—Zwartkops R., Z. 4357; Van Stadens R., Dec.; Uit., Apr., Schlechter 2550; Zuurberg, Mar.
 †5. *macranthus* C. B. Cl.—Zuurberg.
 6. *sp.*—Humewood, Dec., T.V.P. 2654a. This is near *P. angulatus* Nees, but the specimens seen are too poor for accurate determination.

|| There are several *Cyperaceae* in the Herbarium of the Albany Museum from the Uitenhage and Port Elizabeth divisions, which are not included in this list as it was not possible to determine them accurately. The most noteworthy of them is a plant collected in flower only at Walmer by Mrs. T. V. Paterson (No. 2028, Aug., 1914). It resembles *Tetraria Burmanni* C. B. Cl. I am inclined to make it the type of a new genus, but it is not advisable to deal with it until I can finish a revision of the genus *Tetraria* on which I am engaged.

JUNCCELLUS C. B. Clarke.

- ††1. *laevigatus* C. B. Cl.—P.E., Dec.

CYPERUS L.

- †1. *tenellus* L.—Van Stadens Mts.
 †2. *Teneriffae* Poir.—Uit. div., Schlechter 2485.
 †3. **compactus* Lam.—Uit. div.
 4 *semitrifidus* Schrad.—P.E., Mar.; Uit., Apr., Schlechter
 2513.
 †5. *difformis* L.—Van Stadens Mts.
 6. *pulcher* Thunb.—Kamaehs, Nov.
 ††7. *sphaerospermus* Schrad.—Bethelsdorp, Nov.; Uit., Dec.,
 Z. 4359, Apr., Schlechter 2553; Walmer, Nov.
 ††8. *denudatus* L. f.—Near the mouth of the Zwartkops R.
 †9. *textilis* Thunb.—Redhouse, Oct.; P.E., W.K.
 †10. *albostriatus* Schrad.—P.E. Valley, Apr.; Zuurberg, Apr.;
 Uit., Apr., Schlechter 2569.
 II. *usitatus* Burch.—Humewood, Apr.; Redhouse, Mar.;
 P.E., Mar.; Uit., Apr., Schlechter 2500.
 †12. *rotundus* L.—Redhouse, Mar.
 ††13. *fastigiatus* Rottb.—Uit., Apr.

NOTE.—E. and Z. 9, in Herb. S.A. Mus., named *C. haspan* L., appears to be *C. denudatus* L. f. It was found on the Van Stadens R. *C. marginatus* Thunb. is quoted from the P.E. div. in the "Flora Capensis," VII, p. 74. I have left this species out pending confirmation.

MARISCUS Gaertn.

- †1. *capensis* Schrad.—P.E., Mar.
 ††2. *congestus* C. B. Cl.—Walmer, Oct. and Jan.; Schoenmaakers
 Kop, Apr.; Zuurberg, Apr.
 †3. *riparius* Schrad.—Oct.; P.E. Valley, Sept.
 †4. *elatio*r C. B. Cl.—Frames Drift, Oct.; Walmer, Oct.
 5. *involutus* C. B. Cl.—Van Stadens R., Dec.
 †6. **Gueinzii* C. B. Cl.—Zwartkops R.
 †7. *tabularis* Schrad.—Uit., 50 to 500 ft., E. and Z.; Redhouse.
 8. *durus* C. B. Cl.—P.E. Valley, T.V.P. 2317.

ELEOCHARIS R. Br.

- †1. *limosa* Schultes—Baakens River Valley, Nov.; Red-
 house, Dec.; in marshy places along the Zwartkops R.,
 Z. 4423.

FIMBRISTYLIS Vahl

- †1. **complanata* Link—Van Stadens Hoogte.

BULBOSTYLIS Kunth

- ††1. **humilis* Kunth—P.E.; Zwartkops R.
 †2. *collina* Kth.—P.E., Redhouse, Aug.

SCIRPUS L.

- †1. *Ludwigii* Boeck.—Uit. div.; Van Stadens.
- †2. **tenuissimus* Boeck.—Waterpools near the Zwartkops R.
- †3. **verrucosulus* Steud.—P.E.
- 4. **setaceus* L.—Uit. div.
- 5. *costatus* Boeck.—Van Stadens.
- ††6. *cernuus* Vahl—Redhouse, Aug.; Van Stadens.
- †7. *incomptulus* Boeck.—Redhouse, Aug. and Sept.
- †8. *antarcticus* L.—Walmer, Nov.
- †9. *nodosus* Rottb.—Redhouse, May; near the mouth of the Van Stadens R.
- ††10. *paludicola* Kth.—Sandy places near the Zwartkops R.
- ††11. *prolifer* Rottb.—P.E., Nov.; Springfields, Nov., T.V.P. 3301; Van Stadens R.
- 12. *Holoschoenus* L.—Van Stadens Hoogte; P.E. div., along the coast.
- ††13. *littoralis* Schrad.—Chatty R.; Redhouse, Mar.
- †14. *maritimus* L.—Redhouse, May; Green Bushes, P.E., Dec.; Humewood.

FICINIA Schrad.

- †1. *aphylla* Nees—Humewood, Apr.; Cape Recife, Jan.
- 2. **repens* Kunth—Zwartkops R.
- 3. **sylvatica* Kunth—Van Stadens Mts.
- 4. *leiocarpa* Nees—Van Stadens Mts., July.
- †5. *filiformis* Schrad.—Redhouse, June; Humewood; V n Stadens, Oct.
- ††6. *? stolonifera* Boeck.—Walmer, July, T.V.P. 619b. Material insufficient.
- †7. *tristachya* Nees—Bethelsdorp, Nov.
- 8. *involuta* Nees—Near Van Stadens Mts., MacOwan 2176.
- †9. **albicans* Nees—Uit. div.
- †10. *laciniata* Nees—Near Zwartkops R., Oct, Zey. 4415; seashore, New Brighton, May, Galpin 6425.
- 11. *truncata* Schrad—P.E., Sept; Redhouse; mouth of Zwartkops R, Z. 4418
- 12. *praemorsa* Nees—Between Zwartkops and Sundays Rs., June.
- †13. *ecklonea* Nees—Walmer, July.
- †14. **laevis* Nees—Between Coega and Sundays Rs.
- †15. *gracilis* Schrad.—Zwartkops R., Z. 4413.
- 16. **latinus* C.B. Cl.—Uit.
- †17. *setiformis* Schrad.—Near Zwartkops R., Z. 4391, 4395. (Walmer, T.V.P. 1071, July, is close to *F. setiformis* Schrad, but apparently not identical with it.)
- †18. *n. sp. aff. lithospermae* Nees—Humewood, Aug.; P.E., Oct.; P.E. Valley, Sept.
- †19. *bracteata* Boeck.—Redhouse, June; Humewood, May; Walmer, May; Earn Cliff, near P.E., May.
- †20. *bulbosa* Nees—Redhouse, Sept., Oct.; P.E., Sept.
- †21. **secunda* Kunth—Uit. div.
- †22. *ramosissima* Kunth—Sandhills, at P.E.

FUIRENA Rottb.

- ††1. *pubescens* Kth.—Bethelsdorp, Nov.
 †2. *hirta* Vahl—Walmer, Nov.; Bethelsdorp, Jan.; Uit., Jan.

CARPHA R. Br.

- †1. *glomerata* Nees—Walmer, Oct.; Van Stadens, Nov.

TETRARIA Beauv.

- †1. *cuspidata* C. B. Cl.—Redhouse, June; Walmer, Oct.;
 Humewood, June; Earn Cliff, near P.E., May.
 2. *thermalis* C. B. Cl.—Frames Drift, Mar.

MACROCHAETIUM Steud.

- †1. *Dregei* Steud.—Van Stadens Mts.; P.E., Dec.

CLADIUM P. Browne

- ††1. *mariscus* R. Br.—P.E., Jan.; Van Stadens R.

SCHOENOXIPHIUM Nees

- ††1. **rufum* Nees—P.E.
 †2. *Ecklonii* Nees—P.E., July (*Carex bisexualis* C. B. Cl. in Fl.
 Cap.).

CAREX Linn.

- †1. **glomerata* Thunb.—Zwartkops R.
 ††2. *extensa* Gooden.—Walmer, Oct.; P.E., Nov.
 †3. **aethiopica* Schk.—In the forests on Van Stadens Mts.
 †4. *clavata* Thunb.—Walmer, Nov.

AROIDACEAE.

ZANTEDESCHIA Spreng.

- ††1. *aethiopica* Spreng. (= *Richardia africana* Kth.)—Bethelsdorp, Nov.

LEMNACEAE.

WOLFFIA Hook.

- ††1. *sp.* I have seen flowerless specimens from P.E.

LEMNA L.

- ††1. **minor* L.—Zwartkops R., in stagnant places.
 ††2. *gibba* L.—Near the mouth of the Zwartkops R.; P.E.

RESTIACEAE.

RESTIO L.

- †1. *cuspidatus* Thunb.—Earn Cliff, near P.E.; Redhouse;
 Bethelsdorp; P.E.
 2. *tetragonus* Thunb.—Walmer.
 3. *Rhodocoma* Mast.—Perseverance; Van Stadens; Spring-
 fields; Zuurberg.
 4. *callistachyus* Kth.—Van Stadens; Springfields; channel of
 Zwartkops R., E. and Z. 539.
 5. *sp.*, near *R. subverticillatus* Nees—Van Stadens, T.V.P. 2517,
 2419; Humewood, June, T.V.P. 1099, 1100; Walmer,
 Nov., T.V.P. 2366; Earn Cliff, near P.E., May, Galpin
 8392; P.E., June, Potts 301.

DOVEA Kunth

- †1. *tectorum* Mast.—P.E.; Bethelsdorp.
 2. *microcarpa* Kth. (= Schlechter 10502 and 10503, so named in Herb. Berol., but this is not identical with *D. ebracteata* Kth., under which Masters doubtfully placed it as a synonym).—Humewood, T.V.P. 3347, 618, 1104; P.E., T.V.P. 2546.
 †3. **racemosa* Mast.—Witteklip.

ELEGIA L.

- †1. *propinqua* Kth.—Witteklip.
 †2. *squamosa* Mast.—Van Stadens; Humewood; P.E.
 3. *sp.* (close to *E. obtusiflora* Mast.).—Walmer, T.V.P. 2360.

LAMPROCAULOS Mast.

1. *sp.*—Van Stadens, T.V.P. 900.

LEPTOCARPUS R. Br.

- †1. *incurvatus* Thunb.—Walmer.
 ††2. **paniculatus* Mast.—Zwartkops R.

THAMNOCHORTUS Berg

- †1. *fruticosus* Berg.—Bethelsdorp; Humewood.
 †2. *argenteus* Kth.—Thornhill; Van Stadens.
 3. *sp.*—Redhouse, T.V.P. 487; P.E. Valley, T.V.P. 2101 ♀; Earn Cliff, near P.E., Galpin 6391 (♂).

HYPOLAENA R. Br.

1. *sp.* (♂).—P.E., W.K. 310; Humewood, T.V.P. 1102.

HYPODISCUS Nees

1. *striatus* Kth.—Elands River.
 2. **synchroolepis* Mast.—Van Stadens.
 †3. **alboaristatus* Mast.—Van Stadens.

CANNOMOIS Beauv.

1. *cephalotes* Beauv.—Van Stadens.

Not identified.

- P.E., Dec., T.V.P. 1154; P.E., Sept., T.V.P. 2130; P.E., Oct., W.K. 1074.

XYRIDACEAE.

XYRIS L.

- †1. **capensis* Thunb.—Van Stadens (*teste* Ecklon).

COMMELINACEAE.

COMMELINA L.

- †1. *benghalensis* Linn.—Uit., Jan.; Redhouse, Oct.
 ††2. *africana* Linn.—P.E.; Redhouse, Sept.; Despatch, May; on hills of Addo, E. and Z. 441.
 †3. *eckloniana* Kth.—Uit., Dec.

CYANOTIS D. Don

- †1. *nodiflora* Kunth—P.E.; Redhouse, Dec.; Uit., Jan.; hills by the Sunday and Zwartkops Rs., Nov., E. and Z. 610.

JUNCACEAE.

JUNCUS L.

- ††1. *maritimus* Lam.—Van Stadens R.; ? Redhouse, Dec., T.V.P., 2363.
 †2. **acutus* L.—Near Zwartkops R.
 ††3. **punctorius* L.—Uit.
 ††4. *oxycarpus* E. Mey.—Bethelsdorp, Jan.
 †5. **rostratus* Buch.—Zwartkops R.
 6. *diaphanus* Buch.—Springfields, Nov.
 †7. *bufonius* L., var. *genuinus*, forma *fasciculatus* Buch.—Redhouse; Walmer, Oct.
 8. **singularis* Steud.—Van Stadens Mts.; Bethelsdorp.
 †9. *dregeanus* Kth.—Between Van Stadens Mts. and Bethelsdorp; Zwartkops R. Var. *conglomeratus* Buch.—Frames Drift, Feb.
 10. *sonderianus* Buch.—Walmer, Oct.; P.E., Aug.
 ††11. *capensis* Thunb.—Uit. Var. *Ecklonii* Buch.—Van Stadens, Dec.
 ††12. *lomatophyllus* Spreng.—Zuurberg, Mar.

PRIONIUM E. Mey.

- †1. *Palmita* E. Mey.—Van Stadens R., MacOwan 2089.

HAEMODORACEAE.

WACHENDORFIA L.

- †1. *thyrsiflora* L.—Elands R., Dec.; Van Stadens Mts., Dec.
 2. *paniculata* L.—Bethelsdorp, Nov.

LANARIA Ait. (Perhaps better placed under AMARYLLIDACEAE.)

1. *plumosa* Ait.—Bethelsdorp, Oct., Nov.; near Van Stadens Mts., Dec.; Leadmine R.

SANSEVIERIA Thunb. (Better placed amongst LILIACEAE near DRACAENA.)

- ✓ †1. *thyrsiflora* Thunb.—Redhouse, Dec.; between the Zwartkops and Bushmans Rs., Dec., E. and Z. 612, common in the Addo Bush.
 ✓ 2. **aethiopica* Thunb. (wrongly named *S. zeylanica* Willd. in "Flora Capensis," VI, 5).—Uit.

CYANELLA L. (Perhaps better placed under AMARYLLIDACEAE.)

- †1. *capensis* Linn.—Redhouse, Oct.
 2. *lutea*, L.—Near the Zwartkops R., Nov.

AMARYLLIDACEAE.

FORBESIA Ecklon = CURCULIGO (see monograph by Nel in *Engl. Bot. Jahrb.*, Vol. LI).

(The material at my disposal is hardly sufficient to determine the species distinguished by Nel.)

- ††1. *plicata* (Ait.) Nel = *C. plicata* Ait.—Humewood and Emerald Hill.

NOTE.—T.V.P. 2700 (Donkin Reserve, P.E.) comes closest to *Forbesia plicata* (Ait.) Nel in *Engl. Bot. Jahrb.*, LI, p. 290, but the corm is without bristles.

IANTHE Salisb.

- †1. *aquatica* (L. f.) Willd.—In swampy places left side of Cape Road, P.E., Nov.
- †2. *stellata* (L. f.) Willd.—Redhouse, Aug.
3. *trifurcillata* Nel—P.E. Valley, Apr.; Humewood, May; Redhouse, Apr.; Emerald Hill; Dispatch, June; Zuurberg, Mar.

HYPOXIS Linn.

- †1. *Kraussiana* Buch.—Between Van Stadens and Bethelsdorp; P.E., Jan.
- †2. *argentea* Harv.—Near Uit., 250 ft., Apr., Schlechter 2492.
3. *Ludwigii* Bak.—Emerald Hill, Mar.
4. *stellipilis* Ker—Redhouse, Aug.; P.E., Oct.; on Karroo-like hills near the Zwartkops R., Oct., E. and Z. 1063.
5. **obliqua* Jacq.—Van Stadens, Burchell 4745 (*ex* Nel *l.c.* 309).
6. *Zeyheri*, Bak.—P.E., Jan.; near Uit., Ecklon, Drege 4139 (*ex* Nel, *l.c.*, 308).
- †7. *villosa* Linn. f.—Bethelsdorp, Nov.
- †8. *rigidula* Bak.—Van Stadens, Oct.
- †9. *Rooperi*, Moore—Zuurberg, Oct.
10. *sp.*—P.E., Jan., W.K. 267.
11. *sp.*—P.E., Mar., T.V.P. 3395. This is nearest *H. angustifolia*, Lam., but has longer stamens than the type.

HESSEA Herb.

1. **gemmata* Benth.—Between Coega R. and Sundays R.
2. **crispa* Kunth—Addo (*teste* Ecklon).

GETHYLLIS L.

- †1. *spiralis* Linn. f.—P.E., May; Redhouse.

APODOLIRION Bak.

1. *MacOwani* Bak.—Algoa Bay and Coega R.

CRINUM L.

1. *lineare* Linn. f.—Redhouse; Bethelsdorp, Feb.; P.E., Oct.
2. ? *variabilis* Herb.—Perseverance. (Material insufficient.)
3. *sp.*—Van Stadens, Mar., T.V.P. 1982.

AMMOCHARIS Herb.

- ††1. **falcata* Herb.—Coega R.

BRUNSVIGIA Heist.

- †1. *Josephinae* Gawl.—Frames Drift; Schoenmaakers Kop; Emerald Hill, Mar.; Zuurberg, May.
2. *minor* Lindl.—Redhouse, Mar.; Uit. div., E. and Z.

NOTE.—Zuurberg, Mar., F.H.H. 211, compare *B. sphaerocarpa* Bak.; Humewood, Apr., T.V.P. 2054, near *B. minor*. Ecklon (*l.c.*, p. 365) also quotes *B. uitenhagensis* Eckl. Herb. and *B. angustifolia* Eckl. Herb. Both of these have evidently remained manuscript names, and without reference to his specimens it is impossible to say whether they are distinct. Both were found on the hills near Uitenhage.

NERINE Herb.

1. ? *flexuosa* Herb.—Zuurberg, Apr., W. Tyson.
2. *undulata* Herb.—Mimosa, Aug.; Addo (*teste* Ecklon).
3. *Huttoni* Schonl.—Redhouse, Apr.

STRUMARIA Jacq.

1. *undulata* Jacq.—Zwartkops Hill, Mar.; Zuurberg, Mar.; near Uit., Apr., Schlechter 2571.

CYRTANTHUS Ait.

1. *stadensis* Schonl.—P.E., Jan.; Van Stadens, Mar.
2. *Dregei* Schonl.—P.E.
- ‡3. *obliquus* DC.—Bethelsdorp, Dec.
4. **parviflorus* Bak.—P.E.
5. *spiralis* Burch.—Redhouse, Dec.; burnt places, P.E., hills near Uit. (*teste* Ecklon).
- †‡6. *angustifolius* Ait.—Redhouse, Feb.; P.E., July.
7. *uniflorus* Gawl.—Near Van Stadens R.
8. **vittatus* Desf.—Hills near Uit. (*teste* Ecklon).
- ‡9. *sanguineus* Hook.—Emerald Hill, Mar.
10. *n. sp.*—Redhouse, Feb., T.V.P. 452.

HAEMANTHUS L.

- ‡1. *puniceus* Bak.—Zwartkops R. mouth, Mar.
- ‡2. *magnificus* Herb.—Humewood, Jan.
- ‡3. *albiflos* Jacq.—Redhouse, Aug.
4. **incarnatus* Burch.—Kraggakamma.
5. *? tigrinus* Jacq.—P.E., May, J.L.D. 118, Feb., W.K. 282; Uit., Mar., E. and Z.
6. **hyalocarpus* Jacq.—Uit. dist. (*teste* Ecklon).
7. *sp.*—Redhouse, Feb.; Frames Drift; P.E. Valley, T.V.P. 489. Evidently allied to *H. tigrinus*, also to *H. sanguineus* Jacq.
Ecklon (*l.c.*, p. 365) also mentions *H. pubescens* Jacq. as having been found by him on the hills near Uitenhage.

BUPHANE Herb.

- ‡1. *disticha* Herb.—Redhouse, Dec.; P.E., Jan.

LILIACEAE.

ASPARAGUS L.

1. *exuvialis* Burch.—Redhouse, Feb.
2. **virgatus* Bak.—Van Stadens Hoogte, Dec.
3. *subulatus* Thunb.—Aloes, Dec.; near the Zwartkops R., Z. 250.
- †4. *capensis* L.—P.E., June.
5. *Burchellii* Bak.—Near Zwartkops R., June, Z. 10.
6. *stipulaceus* Lam.—Redhouse, July. Var. *spinescens*.—Uit., July.
- †7. *africanus* Lam.—On the banks of the Zwartkops R., Z. 178, 236.
8. *striatus* Thunb., var. *linearifolius*.—Uit., Jan.; Aloes, Dec.; Redhouse, Dec.
9. *racemosus* Willd.—Redhouse, Feb.; Van Stadens, Sept.; P.E. Valley, Nov.; Uit., Apr. (var. *tetragonus* Bak.).
10. *sarmentosus* L.—P.E., Feb.; near the Zwartkops R., Dec., E. and Z. 1061.
11. *Kraussii* Bak.—Baakens R. Valley, Nov.
- †12. *medeoloides* Thunb.—Redhouse, Aug.; Uit., July, Z. 972; Zuurberg, Mar.

BEHNIA Didrichs

1. *reticulata* Didrichs—Redhouse, Mar.

DRACAENA Vand.

1. **hookeriana* K. Koch—Van Stadens R.

KNIPHOFIA Moench

- †1. *aloides* Moench.—Zuurberg, Mar.
2. *Patersoniae* Schonl., n. sp. MS.—Bethelsdorp and Frames Drift, Apr., T.V.P. 669.

GASTERIA Duval

1. *Beckeri* Schonl.—Rocklands; Uit., Mar.; P.E., Jan.
2. *nigricans* Haw.—Redhouse, Aug. Var. *fasciata* Bak.—Redhouse, Sept.
3. *variolosa* Bak.—Cradock Place, P.E., Sept., Galpin 7101.
4. **colubrina* N. E. Br.—Uit. div.
5. *maculata* (Thunb.) Haw., var. *dregeana* Berg.—P.E., Jan., Drege 4182.
- †6. *Croucheri* (Hook. f.) Bak.—Humewood, Nov.; P.E., Nov.

ALOE L.

- †1. **Cooperi* Bak.—P.E. div., between Drostdy Farm and the Leadmine.
2. *micracantha* Haw.—Frames Drift, Feb.; Redhouse, Mar.
3. *humilis* Mill.—Redhouse, Aug.; P.E., Aug.
4. *striata* Haw.—Redhouse, Aug.; Uit., Z. 17.
5. *saponaria* Haw.—Springfields, Mar.; P.E., Jan.
6. *obscura* Mill.—Koega-Kamma's Kloof, May, Z. 4177; between Coega and Sundays R., Sept., Z. 15.
7. *laxiflora* N. E. Br.—Kamaehs, July.
8. *ciliaris* Haw., var. *Tidmarshii* Schonl.—Zuurberg, Mar.; Baakens R. Valley, Jan.
9. *tenuior* Haw.—Zuurberg, E. and Z. 1.
10. *striatula* Haw.—Redhouse, July; P.E., July.
11. *stans* Berg—Stony places near Bethelsdorp, Drege 4179.
12. *lineata* Haw.—Redhouse, Sept.
13. *microstigma* Salm-Dyck—Addo Bush.
14. *pluridens* Haw.—Redhouse, Aug.
15. *africana* Mill.—Redhouse, July.
16. *n. sp.*—Bethelsdorp, Jan., Zeyher in Herb., Alb. Mus.

HAWORTHIA Duval

1. *albanensis* Schonl.—Zuurberg, Mar.
2. *subfasciata* Bak.—Uit., Aug.; Despatch, Nov.
3. *fasciata* Haw.—Bethelsdorp, Jan.; near the Zwartkops R., Z. 4187, 1055, 29.
4. *attenuata* Haw.—P.E., Mar.
5. *cymbiformis* Haw., var.—Walmer, Aug.
6. *planifolia* Haw.—P.E., July.
7. *altilinea* Haw.—Redhouse, Dec., Jan.; Zwartkops R., Z. 4189, 25.
8. *vittata* Bak.—Redhouse, Nov., Jan.
9. **xiphiophylla* Bak.—Uit. div.

BULBINE L.

1. *caulescens* L.—Redhouse, Nov.; New Brighton, Apr.; P.E., Jan., Oct.; Zuurberg.
2. *rostrata* Haw.—Redhouse, Aug.
3. *filifolia* Bak.—Redhouse.
- †4. *asphodeloides* L.—Uit., Apr.; Zuurberg, Mar.
5. **flexicaulis* Bak.—Hills by the Zwartkops R.
6. *narcissifolia* Salm-Dyck.—Redhouse, May.
7. **mesembryanthemoides* Haw.—Near the Zwartkops R.
8. *latifolia* R. et S.—Redhouse, Oct.
9. *Patersoniae* Schonl. Ms.—Redhouse, Sept., T.V.P. 1165.

SCHIZOBASIS Bak.

1. *intricata* Bak.—Redhouse, Feb.; Zuurberg, Mar.
2. *sp.*—Uit., Z. 286.

ERIOSPERMUM Jacq.

1. *Dregii* Schonl.—Zwartkops R., Mar.; North End, P.E.
2. *Bellendeni* Sw.—Zwartkops, Feb.; P.E., Feb.; near Bethelsdorp, Mar., E. and Z. 739; Redhouse, May.
- †3. *pubescens* Jacq.—Redhouse, May and Mar.
4. **latifolium* Jacq.—Uit.

ANTHERICUM L.

1. **angulicaule* Bak.—Sandy hills by the Zwartkops R.
2. **triflorum* Ait., var. *minor*.—By the Zwartkops R.
3. *pubicum* Bak.—Redhouse, Nov., Oct.
- †4. *elongatum* Willd.—Zwartkops R., Sept.; on sand-hills near Uit.; Zuurberg.
5. *MacOwani* Bak.—P.E., Oct., Nov.
- †6. *revolutum* L.—P.E., Oct.
7. *falcatum* L.—P.E., Oct.
- †8. *longifolium* Jacq.—Redhouse, Sept.
- †9. *hirsutum* Thunb.—P.E., Oct.
- †10. *Gerrardi* Bak.—P.E., Oct.; Redhouse, Oct.
- †11. *ciliatum* L.—New Brighton, Sept.
12. *sp.*—Uit., Oct., E. and Z. in Herb., Alb. Mus.

CHLOROPHYTUM Ker

1. *crispum* Bak.—Redhouse, Dec., Feb.
2. *elatum* R. Br.—Frames Drift, Feb.; Springfields, Mar.; Uit., Jan.; Van Stadens, May.
- †3. *comosum* Bak.—Redhouse, Mar.

CAESIA R. Br.

1. *sp.*—Van Stadens, Nov., T.V.P. 869.

AGAPANTHUS L'Herit.

- †1. *umbellatus* L'Herit.—Bethelsdorp, Dec.; Uit., Oct., E. and Z. 1062.

TULBAGHIA L.

- †1. *acutiloba* Harv.—P.E., Dec., Nov.
2. *cepacea* L.—Near Zwartkops R., Oct., E. and Z. 645; Uit.
3. *violacea* Harv.—P.E., June; Redhouse, Feb.; Uit., May.

ALLIUM Linn.

1. *dregeanum* Kth.—Redhouse, Nov.
2. *striquetrum* L.—P.E., Oct., Nov.

MASSONIA Thunb.

1. *hirsuta* Link.—Redhouse, June, July; P.E., July.
2. **orientalis* Bak.—Sand-dunes at P.E.
3. **muricata* Ker.—Near the Zwartkops R., 20 to 200 ft. (teste Ecklon).

POLYXENA Kunth

1. *ensifolia* Schonl.—P.E.; Redhouse, May; Uit., Apr., Schlechter 2600.

NEOPATERSONIA Schonl.

1. *uitenhagensis* Schonl.—Redhouse.

LACHENALIA Jacq.

1. *algoensis* Schonl.—Redhouse, Aug.; P.E.
- †2. *orchioides* Ait.—P.E.; Redhouse, Aug.; Perseverance.
3. **pustulata* Jacq.—Near the Zwartkops R.

DRIMIA Jacq.

- †1. **media* Jacq.—Near Kragga Kamma.
2. **pusilla* Jacq.—Hills near Uit. (teste Ecklon).
3. *haworthioides* Bak.—Redhouse, Jan., Feb.
4. *Burchellii* Bak.—Frames Drift, Mar.
5. *? *macrantha* Bak.—Van Stadens R., below 200 ft.
6. *sp.*—Redhouse, Dec., T.V.P. 2664a. (Probably the plant which Baker called *D. ? Bolusii*.)

LITANTHUS Harv.

1. *pusillus* Harv.—Thornhill, July.

DIPCADIA Medic.

1. *megalanthum* Zahlbr.—P.E., Feb., Dec.
2. *ciliare* Bak.—Redhouse, Sept.
3. *viride* Moench—Redhouse, Dec.

ALBUCA L.

1. *nana* Schonl.—Redhouse, Nov.
2. *Dalyae* Bak.—Coerney, Oct.; P.E., Nov.
3. *Schonlandi* Bak.—Redhouse, Oct.
4. *longifolia* Bak.—Redhouse, Oct.
5. *Patersoniae* Schonl.—Zwartkops, Feb.; Redhouse, Feb., Aug.
6. *circinata* Bak.—Redhouse, Dec.
7. *exuvata* Bak.—Redhouse, Sept., Oct.
8. *minor* L., var. *juncifolia* Schonl.—Walmer, Oct.
9. *Cooperi* Bak.—Humewood, Oct.; P.E., Aug.
10. *trichophylla* Bak.—Redhouse, Nov.
11. **corymbosa* Bak.—P.E.
12. *fastigiata* Dryand.—Redhouse, Oct.; Walmer, Oct.
13. *caudata* Jacq.—Redhouse, Oct.; ? Emerald Hill, Aug., T.V.P. 2554; P.E., Aug.
14. *polyphylla* Bak., var. *major* Schonl.—Redhouse, Sept., Oct.
15. *tortuosa* Bak.—P.E., May; Walmer, Oct.
16. *aurea* Jacq.—Redhouse, Nov.
17. *setosa* Jacq.—P.E., Feb.
18. *tenuifolia* Bak.—Redhouse, Nov.
19. *sp.*—P.E., Aug., J.L.D.; P.E. Valley, Sept., T.V.P. 2579.

URGINEA Steinh.

1. *Patersoniae* Schonl. Ms.—P.E., Nov., J.L.D. 3122; Redhouse, Nov., Oct., T.V.P. 2175; Aloes, Apr., J.L.D. 3122.
2. *vittata* Schonl. Ms.—Redhouse, Nov., T.V.P. 2648.
3. *filifolia* Steinh.—Van Stadens, Nov.
4. *exuviata* Steinh.—Humewood, Oct.; P.E., Oct.
- †5. ? *altissima* Bak.—Zuurberg, Dec.
6. *sp.* (closely allied to *U. ciliata* Bak.)—Redhouse, Mar., T.V.P. 976.

Ecklon (*l.c.* p. 364) points out that already Thunberg probably confounded a new species which the former described as *Drimia uitenhagensis* (found by him near Addo, and near the Zwartkops and Sundays Rivers) with *D. altissima* Ker. This is evidently the plant enumerated above as *U. altissima* Bak. There appears to be, however, even another species different from *U. altissima* though close to it, which was collected on the P.E. golf-course by Mr. F. H. Holland. I have these plants under cultivation and hope to be able to report on them later when the descriptions of the other new species mentioned in this paper will be published.

VELTHEIMIA Gled.

1. *viridifolia* Jacq.—Bethelsdorp, Sept.

EUCOMIS L'Herit.

1. *undulata* Ait.—Bethelsdorp, Sept.

SCILLA Linn.

1. *lanceaeifolia* Bak.—Addo (*teste* Ecklon).
2. *Nelsoni* Bak.—Redhouse, Mar.
3. *Ludwigii* Bak.—Redhouse, Oct.; sandy places near the Zwartkops R.
4. *prasina* Bak.—Redhouse, Dec.
5. *concolor* Bak.—Kamaehs, Nov.
6. *tricolor* Bak.—? P.E., Dec., J.L.D. 138.
7. *floribunda* Bak. (= *Sc. princeps* Bak.)—P.E., Dec
8. *ebracteata* Schonl. Ms.—Redhouse, Oct.
9. *sp.*—Redhouse, Jan., T.V.P. 2678 (near *S. subsecunda* Bak.

NOTE.—Ecklon (*l.c.*, p. 364) describes a new species of *Drimia* as *D. nitida*, which would be now placed under *Scilla*, found in woods at Addo. Without reference to his specimens it is difficult to decide whether it is identical with any other described species. According to him it is distinguished from *D. lanceaeifolia* Ker, by green and not spotted leaves, by larger flowers and somewhat shorter flower stalks.

ORNITHOGALUM L.

1. *Patersoniae* Schonl. Ms.—Redhouse, Nov.; Coega, Nov., F.A.R. 2118; P.E., Dec., W.K. 266; Redhouse, Oct., F.A.R. 118.
- †2. *thyrsoides* Jacq.—Redhouse, Dec.; P.E., Nov.; Bethelsdorp, Nov.
3. **Zeyheri* Bak.—Near the Zwartkops R.
4. *tenellum* Jacq.—Redhouse, Feb.
5. *flavovirens* Bak.—Redhouse, Nov.

ORNITHOGALUM L.—*continued.*

6. *bolusianum* Bak.—Coerney, Oct.; Redhouse, Oct.
7. *niveum* Ait.—? Redhouse, Dec., T.V.P. 389.
8. *subulatum* Bak.—Redhouse, Feb.; P.E., Nov.
9. *comptum* Bak.—Redhouse, Nov.; P.E., Dec.
10. *humifusum* Bak.—Redhouse, Nov.
11. *Eckloni* Schlecht.—Redhouse, Dec.; Frames Drift, Feb.
12. *longebracteatum* Jacq.—P.E. Valley and Redhouse, Nov.,
Apr.
13. *caudatum* Bak.—Redhouse, Oct.
14. *sp.* (near *O. Zeyheri*, but apparently distinct).—Redhouse,
Oct., F.A.R. 118.

ANDROCYMBIUM Willd.

- †1. *leucanthum* Willd.—Addo (also ? T.V.P. 1148, Schoen-
makers Kop, Aug.).
2. *eucomoides* Willd.—Banks of Zwartkops and Sundays Rs.
3. *melanthioides* Willd.—Hills near Uit.; Redhouse, Aug.
4. *longipes* Bak.—Thornhill, July.
5. *albanense* Schonl.—Redhouse, June, Aug.

WURMBEA Thunb.

- †1. *capensis* Thunb.—Walmer, Oct., T.V.P. 818 (var. *marginata*),
P.E., Sept., J.L.D. 269 (var. *purpurea*).

DIPIDAX Salisb.

- †1. *triquetra* Bak.—P.E., Aug.

ORNITHOGLOSSUM Salisb.

- †1. *glaucum* Salisb.—Redhouse, Nov.

NEODREGEA C. H. Wright

1. *Glassii* C. H. Wright—P.E., Aug., May.

DIOSCOREACEAE.

DIOSCOREA L.

1. *sp.*—Kamaehs, Nov., T.V.P. 1032 (no flowers).

TESTUDINARIA Salisb.

- †1. *elephantipes* Burch.—P.E., Mar.; Sundays R., Mar.
- †2. *sylvatica* Kth.—Humewood, Apr.; P.E., Aug.; Red-
house, Aug.; Krakakamma under 500 ft.

IRIDACEAE.

MORAEA L.

- †1. *spathacea* Ker—Bethelsdorp, June; P.E., July.
- †2. *viscaria* Ker—Frames Drift, Nov.
3. *polyanthos* Thunb.—Lo rie R., Aug.; Uit., Aug.
4. *polystachya* Ker—P.E., Sept., Oct.; Bethelsdorp, Sept.,
Z. 16.
- †5. **ramosa* Ker—Plains under the Mts. of Winterhoek; Van
Stadens R.; by the hills near P.E. (*teste* Ecklon).
6. *setacea* Ker—Redhouse, Nov.; P.E., Aug., Nov.
- †7. **tripetala* Ker—Plains under the Mts. of Winterhoek; Van
Stadens R.; by the hills near P.E. (*teste* Ecklon).
- †8. *iridioides* L.—Elands R., Dec.; Springfields, Nov.
9. *bicolor* Spae—P.E., Aug.
10. *sp.*—P.E., Nov., J.L.D. 298; near Uit., Z. 13; Bethelsdorp,
Nov., T.V.P. 382; Uit., Sept., 1164.

HOMERIA Vent.

- †1. *collina* Vent.—Redhouse, Sept.; Walmer, Aug. Var. *ochroleuca* Salisb.—Banks of Zwartkops R. and Sundays R. (*teste* Ecklon).

FERRARIA L.

1. *santherosa* Ker—P.E., Aug., J.L.D. 153.

HEXAGLOTTIS Vent.

- †1. *longifolia* Vent.—Kamaehs, Nov.; P.E., Jan.; Van Stadens Hoogte.

SYRINGODEA Hoo^r. fil.

1. *Flanagani* Bak.—Redhouse, June.

ROMULEA Maratti

- †1. **bulbocodioides* Bak.—Uit. dist. (*teste* Ecklon).
 2. **filifolia* Eckl.—Uit.
 †3. *chloroleuca* Bak.—Walmer, Aug.
 †4. *rosea* Eckl., var. *parviflora* Bak.—P.E., Aug., Sept.; Hume-wood, July.
 5. *sp.*—P.E., Sept., T.V.P. 2138; Van Stadens, Sept., T.V.P. 755; Walmer; P.E., Miss Jordan 8.

BOBARTIA Ker

1. *Burchellii* Bak.—Baakens R. valley, Feb.
 †2. *spathacea* Ker—Bethelsdorp, Nov.

ARISTEA Soland.

- †1. *anceps* Eckl.—Redhouse, Dec.
 †2. *schizolaena* Harv.—P.E., Oct.
 †3. *paniculata* Bak.—Van Stadens, Dec.
 4. *pusilla* Ker—Bethelsdorp, Sept.; P.E., Aug.
 5. *spiralis* Ker—Bulkriver, P.E., Oct.; Elands R., Dec.; in the channel of the Zwartkops R., Sept., Z. 235.
 †6. *Eckloni* Bak.—Zwartkops R. and Van Stadensberg, Ecklon 235, 4054.

HESPERANTHA Ker

- †1. *falcata* Ker—P.E., Sept.
 †2. *radiata* Ker—Redhouse, Sept.
 3. *angusta* Ker—Redhouse, Aug.; P.E., Nov.; Loerie R., near P.E., Nov.; Van Stadens, Sept.

GEISSORHIZA Ker

1. *Patersoniae* L.Bol.—P.E., Sept., J.L.D. 257, ? 165; Redhouse, Oct., T.V.P. 47.
 2. **setacea* Ker—Near the Zwartkops R. (*teste* Ecklon).
 3. *secunda* Ker—Bethelsdorp, Sept.; Walmer, Oct.; P.E., Sept.; Van Stadens.
 4. **imbricata* Ker—Hills near Uit. (*teste* Ecklon).
 5. *bracteata* Klatt—P.E., Sept.
 6. **grandis* Hook.—P.E.
 7. *sp.*—Uit., Sept., E. and Z. in Herb., Alb. Mus.

IXIA L.

- †1. *polystachya* L.—Van Stadens, Oct.

DIERAMA K. Koch

- †1. *pendula* Bak.—Baakens R. valley, Jan.; Zuurberg.
 †2. **pulcherrima* Bak.—Uit.

MICRANTHUS Pers.

- †1. *plantagineus* Eckl.—Near Galgebosch; Van Stadens R.

FRESIA Klatt

1. *refracta* Klatt—Redhouse, Aug.; Bethelsdorp, Sept.;
 P.E., Oct. Var. *odorata* Klatt—Between Zwartkops R.
 and Sundays R., Oct., E. and Z. 286.

WATSONIA Miller

1. *angusta* Ker—P.E., Nov.; near the Van Stadens R.
 ††2. *Meriana* Miller—Van Stadens, Nov.; Baakens R. valley,
 Jan.; P.E., July; on stony hills by Bethelsdorp, Jan.,
 E. and Z. 182, 183.

BABIANA Ker

1. *coerulescens* Eckl.—(Placed by Baker wrongly under *B. plicata*).—Redhouse, Aug., T.V.P. 39; P.E., Aug., J.L.D. 76; Uit., Oct., Miss Jordan 66; P.E., Aug.; near the Zwartkops R., Sept., E. and Z. 159.
 Ecklon (*l.c.*, p. 366) also mentions *B. tubata* Willd. (found on the plains under the Winterhoek Mts.). I do not know whether this is *B. tubata* Sweet.

MELASPHAERULA Ker

- †1. *graminea* Ker—Hills near Uit.; Redhouse, Sept.; Van Stadens, Sept.

SPARAXIS Ker

1. **fragrans* Ker—Banks of Zwartkops R. and Sundays R. (*teste* Ecklon).

TRITONIA Ker

1. *dubia* Eckl.—Redhouse, Aug.; P.E., Aug.; Uit., Oct.; near the mouth of the Zwartkops R., Ecklon 141, Nov., E. and Z. 3971.
 †2. *lineata* Ker—Redhouse, Aug.; P.E., Oct.; near the Zwartkops R., Ecklon 141, Nov., E. and Z. 3971.
 3. **Wilsoni* Bak.—P.E.
 †4. *rosea* Klatt—P.E., Nov.
 †5. **laxifolia* Benth.—Between Zwartkops R. and Sundays R.
 6. *securigera* Ker—Sydenham, Sept.; Redhouse, Mar.; near Uit., Apr., Schlechter 2510; Zuurberg, Mar.
 Ecklon (*l.c.*, p. 366) mentions also *T. rosea* R. Br. (found near Addo) and *T. odorata* Eckl. Herb. (found on the hills near Uitenhage). I have no means of deciding whether these are identical with any of the species mentioned above.

ACIDANTHERA Hochst.

1. **platypetala* Bak.—Galgebosch.

GLADIOLUS L.

- †1. *grandis* Thunb.—Van Stadens and Bethelsdorp, Oct.
 †2. **tristis* Linn.—Foot of Van Stadensberg, below 1000 ft.
 †3. *maculatus* Sw. (= *recurvus* Linn).—Zuurberg, May;
 Walmer, Mar., Aug.; Bethelsdorp, June; Redhouse,
 Aug.
 †4. **gracilis* Jacq.—Van Stadensberg.
 †5. *tenellus* Jacq.—Walmer, Aug.
 6. *floribundus* Jacq.—P.E., Jan. (MacOwan 2062, from Van
 Stadens R., is mentioned in the "Flora Capensis" under
 this species, but Mr. F. Bolus names it *G. undulatus*.)
 7. *Milleri* Ker—Van Stadens R., Apr., Dec.; P.E., Oct.;
 near Coego.
 8. *undulatus* De la Roche—Redhouse, Sept., Oct., Nov.;
 Uit., Nov.; P.E., Nov.
 9. *MacOwani* Bak., var. *brevituba*.—Zuurberg, Mar.
 †10. *edulis* Burch.—P.E., Dec.; Redhouse, Oct.
 11. *permeabilis* Bak.—Bethelsdorp, Oct.; Redhouse, Aug.;
 P.E., Nov.; Frames Drift, Mar.
 12. *sp.*—P.E., Oct., W.K. 124.
 Ecklon (*l.c.*, p. 366) also mentions *G. pendulus* Mund., from
 plains under the Winterhoek, but the identity of this
 species appears to be unknown. The same applies to
 his *Hebea viperata* (which he says is identical with
Gladiolus viperatus Ker), found by him near the
 Zwartkops River.

ANTHOLYZA L.

- ‡1. *cafra* Ker—Van Stadens, Nov.
 2. *intermedia* Bak.—Bethelsdorp, Sept., T.V.P. 121 (no leaves,
 but has the perianth marked as in *A. intermedia* Bak.);
 Van Stadens Hoogte.
 †3. *aethiopica* L.—Redhouse, Apr.
 †4. *revoluta* Burm.—Bethelsdorp, June.
 †5. *Lucidor* L. f.—Van Stadensberg, Z. 604.
 †6. *nervosa* Thunb.—Bethelsdorp, Sept.; Redhouse, Feb.;
 Van Stadens Mts., Dec.

MUSACEAE.

STRELITZIA Ait.

1. *Reginae* Banks—Rocky slopes near Uit.
 2. *parvifolia* Dryand.—Uit. Mts., Sept.

CANNACEAE.

CANNA L.

1. *§indica* L.—Naturalized at Van Stadens Pass.

ORCHIDACEAE.

ACROLOPHIA Pfitz.

1. *micrantha* Schlechter—Redhouse, Oct., Nov.; near Zwart-
 kops R.
 †2. **cochlearis* Schlechter—Van Stadens Mts.; ? P.E., Oct.,
 J.L.D. 97, 98.
 †3. *tristis* Schlechter—P.E., Nov., Dec.; Redhouse, Nov.

EULOPHIA R. Br.

1. **nutans* Sond.—Van Stadens Mts.
- †2. **purpurascens* Rolfe—Van Stadens Mts.
3. **ovatipetala* Rolfe—Emerald Hill.
- †4. *hians* Spreng.—Van Stadens, Sept.; Frames Drift, Nov.
- †5. *barbata* Spreng.—P.E.; Redhouse, Nov.; between Van Stadensberg and Bethelsdorp; Uit.
- †6. *aculeata* Spreng.—Elands R., Dec.
7. *Huttonii* Rolfe—Zwartkops R.

LISSOCHILUS R. Br.

1. *platypetalus* Lindl.—Van Stadens, Sept.; Redhouse, Sept.
- †2. *aequalis* Lindl.—P.E., Feb., Oct.
- †3. **speciosus* R. Br.—Sandhills at Kraggakamma.
- †4. *arenarius* Lindl.—Redhouse, Oct., Nov.; P.E., Oct.

POLYSTACHYA Hook.

- †1. **pubescens* Reichb. f.—Van Stadens R. and around Kraggakamma.

ANGRAECUM Bory

- †1. *sacciferum* Lindl.—Kamaehs, Nov.
- †2. *pusillum* Lindl.—P.E., Aug.; Zuurberg, Aug.
- †3. **bicaudatum* Lindl.—Limestone hills near the mouth of the Zwartkops R.; ravines near Uit.

LISTROSTACHYS Reichb. f.

1. **arcuata* Reichb. f.—Limestone hills near the mouth of the Zwartkops R.; Uit.

MYSTACIDIUM Lindl.

- †1. *filicorne* Lindl.—Despatch, Dec.

BARTHOLINA R. Br.

- †1. *pectinata* R. Br.—Walmer, Aug.; P.E.
2. *lindleyana* Reichb. f.—Uit.; sandy places at P.E.

HOLOTHRIX L. C. Rich.

- †1. **exilis* Lindl.—Uit.
- †2. *villosa* Lindl.—P.E., Oct.; Van Stadens, Nov.
- †3. **squamulosa* Lindl.—P.E.
- †4. *lindleyana* Reichb. f.—Redhouse, Aug.; Bethelsdorp, Sept.
- †5. *orthoceras* Reichb. f.—P.E., Aug.
6. *Schlechteriana* Kränzl.—Redhouse, Nov.
7. **grandiflora* Reichb. f.—Uit.
8. *Burchellii* Reichb. f.—Redhouse, Sept., Oct.; P.E., Nov.
9. *Hallackii* Bol.—P.E., Dec.

HABENARIA Willd.

- †1. *arenaria* Lindl.—P.E., May; Kamaehs, June.
2. **anguiceps* Bol.—Van Stadens R.
- †3. *foliosa* Reichb. f.—P.E., Feb.; Emerald Hill.
4. *laevigata* Lindl.—Van Stadens, Sept.
5. *falciornis* Bolus—Van Stadens, Mar.

BONATEA Willd.

- †1. *Boltoni* Bol.—P.E., Oct.; Redhouse, Sept.
2. *speciosa* Willd.—P.E., Oct.; Walmer, Nov.

SATYRIUM Sw.

1. **retusum* Lindl.—Sandy places at Algoa Bay.
- †2. *parviflorum* Sw.—P.E., Oct., Nov.; Van Stadens, Sept.; Bethelsdorp, Sept.
- †3. ? *aphyllum* Schlechter.—P.E.
4. *coriifolium* Sw.—P.E., Aug.; Walmer, Sept.
- †5. **lupulinum* Lindl.—Algoa Bay.
- †6. *Hallackii* Bol.—Humewood, Jan.; P.E., Oct., Nov.
- †7. **cristatum* Sond.—P.E.
8. *maculatum* Burch.—Van Stadens, Nov.; Redhouse, Nov.; P.E., Nov.
9. *membranaceum* Sw.—Bethelsdorp, Sept.; Van Stadens, Sept.; P.E., Nov.
10. *princeps* Bolus—Humewood, Oct.; P.E., Oct.

MONADENIA Lindl.

1. *micrantha* Lindl.—P.E., Oct., Nov.; Walmer, Oct.; Van Stadens, Aug.
2. *brevicornis* Lindl.—Walmer, Nov.

HERSCHELIA Lindl.

- †1. *venusta* Kränzl.—P.E., Feb., Mar.; Van Stadens.

PENTHEA Lindl.

1. *filicornis* Lindl.—Zuurberg, Nov. (odd sepal unspotted).

DISA Berg

- †1. **tenella* Sw.—Uit.
- †2. *chrysostachya* Sw.—Walmer, Nov.; P.E., Oct., Nov.
3. **Hallackii* Rolfe—Wet places near P.E.
- †4. *cornuta* Sw.—Van Stadens, Sept.; P.E., Sept., Oct.; Kraggakamma.
- †5. **crassicornis* Lindl.—Uit.
- †6. *tripetaloides* N. E. Br.—Van Stadens, Dec.
- †7. *sagittalis* Swartz.—Bethelsdorp, Sept.
- †8. **racemosa* Linn.—Near P.E.
9. *porrecta* Sw.—Uit., Feb.; Zuurberg, Mar.

SCHIZODIUM Lindl.

- †1. *rigidum* Lindl.—Redhouse, July; P.E., Aug.

BROWNLEEIA Harv.

- †1. *coerulea* Harv.—Zuurberg, Mar.

CERATANDROPSIS Rolfe

1. *grandiflora* Rolfe—Cape Road, 10 miles out of P.E., Nov.

CERATANDRA Eckl.

1. *chloroleuca* Eckl.—Walmer, Nov.

PTERYGODIUM Sw.

1. *acutifolium* Lindl.—P.E., Oct.
- †2. *catholicum* Sw.—P.E., Sept.
3. **cruciferum* Sond.—Near Bethelsdorp.

CORYCIUM Sw.

1. *carnosum* Rolfe—Van Stadens, Nov.; Baakens R. valley, Oct.

DISPERIS Sw.

- †1. *capensis* Sw.—Bethelsdorp, Sept.; P.E., Aug.

DICOTYLEDONEAE.

ARCHICHLAMYDEAE (POLYPETALAE AND APETALAE).

PIPERACEAE.

PEPEROMIA Ruiz et Pav.

- †1. *reflexa* Dietr.—Springfields, Mar.

SALICINEAE.

SALIX L.

- †1. *capensis* Thunb.—Elands R., Dec.; on the banks of the Zwartkops R., Z. 147.

MYRICACEAE.

MYRICA L.

- ††1. *aethiopica* L.—Walmer, Mar.; in channel of the Zwartkops R., Dec., Z. 128; Springfields, Jan.
 †2. *quercifolia* L.—Humewood, July; Van Stadens Mts., July; on downs by P.E., Dec., Z. 749.
 †3. *cordifolia* L.—Humewood, Apr.; P.E., Jan., Oct.
 4. *serrata* Lam.—Van Stadens, Mar., June.
 5. *sp.*—Van Stadens, July, E. and Z. in Herb., Alb. Mus.

URTICACEAE.

URTICA L.

- †1. *§dioica* L., var.—P.E., May.
 2. *Meyeri* Wedd.—Despatch, Oct., T.V.P. 3240.
 3. **Burchellii* N. E. Br.—Uit. div., Zeyher.

FLEURYA Gaud.

1. **grossa* Wedd.—On old trees in the Uit. div.; Zuurberg Range.
 2. *mitis* Wedd.—Galgebosch; Kraggakamma.

AUSTRALINA Gaud.

- †1. ? *capensis* Wedd.—Redhouse, Nov., T.V.P. 3233; ? P.E. Valley, Aug., T.V.P. 1160.
 2. **acuminata* Wedd.—Near Enon.

ULMACEAE.

CELTIS L.

- †1. *rhannifolia* Presl—Van Stadens, Sept.; Kraggakamma.

CHAETACME Planch et Harv.

1. *aristata* Planch.—Forest near Van Stadens R.; Galgebosch; Enon.

MORACEAE.

FICUS L.

1. *capensis* Thunb.—Springfields; Enon.
 2. *Burtii-Davyi* Hutch.—Kraggakamma; P.E.; near Enon.

PROTEACEAE.

LEUCADENDRON R. Br.

- †1. *salignum* R. Br.—Van Stadens Drift, Nov. ; Zwartkops, Feb.
2. *strictum* R. Br.—Van Stadens Mts., Z. 3650.
3. *eucalyptifolium* Buek—Van Stadens, May.
- †4. *adscendens* R. Br.—Van Stadens, Nov. ; Bethelsdorp, Aug. ; Zuurberg.
5. *concolor* R. Br.—Van Stadens Mts., Oct.
Ecklon (*l.c.*, p. 367) mentions having found *L. venorum* R.Br., on Van Stadens Mts.

PROTEA L.

- †1. *Lepidocarpodendron* L.—Walmer ; Van Stadens Mts.
2. *neriifolia* R. Br.—Walmer, Aug. ; P.E., Dec. ; rocky places on the Van Stadens Mts., Oct.
3. *latifolia* R. Br.—Van Stadens Mts.
4. **compacta* R. Br.—Van Stadens Mts.
5. *longiflora* Lam.—Winterhoek and Van Stadens Mts.
- †6. *mellifera* Thunb.—Springfields, Mar.
7. *Mundii* Klotzsch—Van Stadens R., June ; on the stony hills of the Van Stadens Mts., Oct.
8. *tenax* R. Br.—Bethelsdorp, Sept. ; Van Stadens Mts.
- †9. *cynaroides* R. Br.—Van Stadens, Apr., Oct.
Ecklon (*l.c.*, p. 367) also mentions *P. mucronifolia* Salisb. (*P. odorata* Thunb.) and *P. revoluta* R. Br. as having been found by him on Van Stadens Mts.

LEUCOSPERMUM R. Br.

- i. *attenuatum* R. Br.—Van Stadens, Sept. ; Zuurberg.

✓ NIVENIA R. Br.

- i. *reflexa* Phill. et Hutch.—Van Stadens, May.

LORANTHACEAE.

LORANTHUS L.

- * †i. *elegans* Ch. et Schl. (= *L. oleaeifolius* E. et Z., non Cham. et Schlecht. ; see Kew Bull., 1914, 362).—Despatch and Redhouse, July ; along Sundays and Zwartkops Rs., Z. 2283 ; Uit., June.

VISCUM L.

- ††i. *obscurum* Thunb.—Redhouse, Mar. ; P.E., July.
2. *rotundifolium* Thunb.—Uit., Sept. ; Redhouse, Feb., Nov. ; P.E., Aug. ; near the Zwartkops and Sundays Rs., July, Z. 244 (on *Rhus* and *Celastrus*) ; in the channel of the Zwartkops R., June, Z. 624 (on *Salix*).
3. *Crassulae* E. et Z.—Near Uit. (on *Portulacaria* and *Euphorbia polygona*).
4. *minimum* Harv.—Near P.E. (on *Euphorbia polygona*).
- †5. *capense* Thunb.—Walmer, Aug. ; Redhouse, Nov. ; P.E., July (on *Rhus Krebsiana* Presl ?) ; Uit. dist., E. and Z. 2278.

SANTALACEAE.

THESIUM L.

1. **rigidum* Sond.—Uit. div.; Steinbok Flats, north of Winterhoeksberg; near Karreebosch.
2. *acutissimum* A. DC.—Redhouse; Van Stadens, May, Sept.
- †3. *squarrosum* L.—Van Stadens, Sept.
4. *foliosum* A. DC.—Van Stadens, Dec.
5. *fruticosum* A. W. Hill—Zuurberg, Oct.
- †6. *euphorbioides* L.—Uit. div.; Zwartkops R., Z. 3786.
- ††7. *triflorum* Thunb.—Redhouse, Dec.; near the Zwartkops R., Z. 50.
8. *scandens* E. Mey.—P.E., Jan.
- †9. *galioides* A. DC.—P.E., Sept.
- †10. *ericaefolium* A. DC.—Redhouse, Sept.
- †11. *nigromontanum* Sond.—Humewood, Sept.
- †12. *leptocaulum* Sond.—Walmer, Aug.; Humewood, Apr.
- †13. *commutatatum* Sond.—Van Stadens Mts., Oct., E. and Z. 272.
- †14. *virgatum* Lam.—Uit., Dec.; Schoenmakers Kop, Apr.
- †15. *strictum* Berg—Bethelsdorp, Jan.; Van Stadens, May.
16. *junceum* Bernh., var. *mammosum* A. W. Hill.—Walmer, Oct.
- †17. *flexuosum* A. DC.—Walmer, July; Redhouse, Oct.; Gamtoos R., 150 ft., Nov., Schlechter 6081.
- †18. *gnidiaceum* A. DC.—Addo, 1000 to 2000 ft.
19. **phyllostachyum* Sond.—Between P.E. and the Zwartkops R.
20. *? rufescens* A. W. Hill—Aloes, Sept., J.L.D. 3043.
21. *sonderianum* Sch.—Redhouse, Aug.
- †22. *? micropogon* A. DC.—Redhouse, Oct., F. A. Rogers 131.
- †23. **carinatum* A. DC.—Uit. div.; Winterhoek Mt., 2000 ft.
- †24. *spicatum* Thunb.—Despatch, Oct.; P.E., Sept.
- †25. **subnudum* Sond.—Van Stadens Berg.
26. *Patersonae* A. W. Hill—Redhouse, June.

OSYRIS L.

- ††1. *abyssinica* Hochst. [= *compressa* (Berg.) DC.].—Baakens R. valley, May; Van Stadens Mts., Mar., E. and Z. 311.

RHOIOCARPUS A. DC.

1. *capensis* A. DC.—Redhouse, Aug.; amongst shrubs on banks of the Zwartkops R., June, Z. 6; Uit., 50 to 500 ft., Apr., E. and Z.

THESIDIUM Sond.

- †1. **Thunbergii* Sond.—Strand near Cape Recife.

GRUBBIACEAE.

GRUBBIA Berg

1. **stricta* DC.—Mountains in the Uit. dist.

RAFFLESIIACEAE.

CYTINUS Linn.

- †1. *dioicus* Juss.—P.E., Sept.

POLYGONACEAE.

POLYGONUM L.

- †1. *atraphaxoides* Thunb.—Humewood, Oct.; Van Stadens Mts.; hills and forest of Kraggakamma.
- ††2. §*aviculare* L.—Redhouse, Sept.
- †3. §*Convolvulus* L.—Redhouse, Dec.
- ††4. *serrulatum* Lag.—Despatch, June; Zuurborg.
- ††5. *tomentosum* Willd.—Bethelsdorp, Nov.; P.E., Dec.; Uit., Jan.
- 6. *pedunculare* Wall.—Despatch, Oct.
- 7. *equisetiforme* DC.—Redhouse, June.

RUMEX L.

- †1. §? *pulcher* L.—Springfields, Nov.
 - †2. *sagittatus* Thunb.—P.E. Valley, Nov.; banks of Zwartkops and Sundays Rs.
 - ††3. §*Acetosella* L.—Redhouse, Oct.; Walmer, Oct.
 - 4. *lativalvis* var. *acetosoides* Meisn.—Redhouse, Aug.
 - †5. *cordatus* Desf.—P.E.; near the Zwartkops R.
 - †6. *ecklonianus* Meisn.—Redhouse, Aug.
- Ecklon (*l.c.*, p. 367) quotes *R. lanceolatus* Thunb., as found by him near Addo; and *R. spathulatus* Thunb., found by him on the banks of the Zwartkops River. Both these species are imperfectly known.

EMEX Neck.

- ††1. *australis* Steinh.—Redhouse, Aug.

CHENOPODIACEAE.

CHENOPODIUM L.

- ††1. §*sambrosioides* L.—Redhouse, Mar.
- ††2. §*murale* L.—Redhouse, Mar.
- 3. §*Vulvaria* L.—Redhouse, Apr.
- 4. **mucronatum* Thunb. (an imperfectly known species).—Foot of the Winterhoek Mts. (Krause); near the Zwartkops R., 20 to 100 ft. (*teste* Ecklon).

EXOMIS Fenzl

- †1. *axyrioides* Fenzl—P.E., Feb.; Redhouse, Jan.; on cultivated spots near the Zwartkops R., Jan., E. and Z. 71.

ATRIPLEX L.

- 1. *littoralis* L.—Uit., 50 to 500 ft.
- 2. *Halimus* L.—Near the Zwartkops R., Dec.; Uit., 50 to 500 ft., Jan., Z. 616.

CHENOLEA Thunb.

- ††1. *diffusa* Thunb.—Redhouse, Oct.; on sandy places along the strand of Algoa Bay, E. and Z. 501.

SALICORNIA L.

- †1. *fruticosa* L.—Redhouse, Mar.; Zwartkops R., Z. 3615; sea-shore of Algoa Bay.
- 2. **herbacea* L.—Sea-shore of Algoa Bay (*teste* Ecklon).

SUAEDA Forsk.

- †1. **caespitosa* Wolley-Dod.—New Brighton, 20 ft.
- 2. *fruticosa* Forsk.—Redhouse, Dec.; Uit., 50 to 500 ft., Mar., E. and Z.

AMARANTACEAE.

AMARANTUS L.

1. *Syetroflexus* L.—Zuurberg, Mar.
 †‡2. *Thunbergii* Moq.—Redhouse, Aug. ; Uit., 50 to 500 ft., Mar.,
 dd E. and Z. ; on cultivated spots near the Zwartkops R.,
 dd Dec., E. and Z. 576.
 3. *viridis* L.—Redhouse, Mar.

CYATHULA Lour.

- †‡1. *globulifera* Moq.—Uit., Schlechter 2564 ; Zuurberg, Mar.,
 May. (Uit., Schlechter 2566 is probably a poor specimen
 of this species.)

PUPALIA Juss.

- †‡1. *lappacea* Juss.—Enon.
 †‡2. *atropurpurea* Moq.—Van Stadens, May ; in the forests of
 Kraggakamma, Nov., Z. 554.

ACHYRANTHES L.

- †‡1. *aspera* L.—In the forests of Kraggakamma, Feb., E. and
 Z. 3555.

ACHYROPSIS Hook f.

1. *leptostachya* Hook. f.—Redhouse, Apr. ; Bethelsdorp, Nov. ;
 Uit., Apr., Schlechter 2523, Jan., E. and Z.

ALTERNANTHERA Forsk.

1. *Achyrantha* R. Br.—Redhouse, Mar.

GOMPHRENA L.

- †‡1. *globosa* L.—P.E., Feb.

PHYTOLACCACEAE.

PHYTOLACCA L.

- †‡1. *Sheptandra* Retz.—Schoenmaake s Kop, Apr. ; P.E., July,
 Oct.

LIMEUM L.

1. *aethiopicum* L.—P.E. ; Redhouse, Feb. ; Coega ; near Uit.,
 Schlechter 2497.

PSAMMOTROPHA E. et Z.

1. *parvifolia* E. et Z.—Sandy hills near Witteklip ; Zwart-
 kops R.

ADENOGRAMMA Reichb.

1. *sylvatica* Fenzl—Van Stadens Mts.
 †‡2. *galioides* Fenzl—Near the Zwartkops R.

AIZOACEAE.

ORYGIA Forsk.

1. *decumbens* Forsk.—Stony hills near Sundays R.

HYPERTELIS E. Mey.

- †‡1. *arenicola* Sond.—Redhouse, Jan.

PHARNACEUM L.

- †‡1. *dichotomum* L.—Redhouse, Aug. ; near Uit., Schlechter
 2483.
 †‡2. *distichum* Thunb.—Humewood, Oct.
 †‡3. *incanum* L.—Walmer, Oct. ; Redhouse, Nov.

MESEMBRIANTHEMUM L. [The majority of the specimens of the Herb. of the Alb. Mus. belonging to this genus are in Europe, having been lent to a specialist. This list is compiled from the "Flora Capensis," Vol. II, Berger, "Mesembrianthemum and Portulacaceae" (1908), and notes supplied by Mrs. L. Bolus.]

1. *felinum* Haw.—Zwartkops R.
2. *multiceps* Salm-Dyck—Near the Zwartkops R.; Coega.
3. *rhomboideum* Salm-Dyck—By the Zwartkops R., Coega, and Sundays R.
4. *cultratum* Salm-Dyck—Near the Zwartkops R.
5. *linguiforme* L., var. *cultratum*.—Near the Zwartkops R.
6. *diversifolium* Haw.—Sandy places near Bethelsdorp.
7. *laeve* Thunb.—Sandy places near Sundays R.
8. *crassifolium* L.—Redhouse, T.V.P. 99, F.A.R. 4656.
9. *acinaciforme* L.—Sandy flats near Zwartkops R.
10. *edule* L.—Walmer, T.V.P. 362.
11. *mutabile* Haw.—Dist. of Uit.; Ecklon.
12. *congestum* Salm-Dyck—Bethelsdorp, and near the Zwartkops R. and Cape Recife.
13. *virens* Haw.—Sandy places between Bethelsdorp and Cradockstadt.
14. *turbinatum* Jacq.—Redhouse, T.V.P., 110.
15. *uncinatum* Willd.—Witteklip, Pillans 944.
16. *uncinellum* Haw.—Karoo in Zoutpanshoogde, near Zwartkops R.
17. *tenellum* Haw.—P.E. Valley, T.V.P. 1063, Kensit 20.
18. *rigidum* Haw.—On hills near the Zwartkops R.
19. *luteum* Haw.—Aloes, J.L.D.
20. *verruculoides* Sond.—Near the Zwartkops R.
21. *stipulaceum* L.—Uit. dist.
22. *productum* Haw.—Karoo hills near Zwartkops R., Winterhoeksberg, and near Bethelsdorp.
23. *Zeyheri* Salm-Dyck—Near Zwartkops R.; Redhouse, T.V.P. 111.
24. *Lehmanni* E. et Z.—Karoo-like hills near the Zwartkops R.; Redhouse, T.V.P. 2179.
25. *flexuosum* Haw.—Redhouse, T.V.P. 98.
26. *bicorne* Sond.—Near Zwartkops R.
27. *granulicaule* Haw.—Karoo-like hills near Zwartkops R.
28. *simile* Sond.—Near Zwartkops R.; Redhouse, T.V.P. 2162.
29. *glomeratum* L.—Uit. dist.
30. *elegans* Jacq.—Uit.
31. *tuberosum* L.—Zwartkops R.
32. *megarhizum* Don—Redhouse, T.V.P. 2142.
33. *subincanum* Haw.—Karoo-like hills near the Zwartkops R.
34. *testaceum* Haw.—Karoo-like hills near the Zwartkops R.; Redhouse, T.V.P. 7.
35. *Ecklonis* Salm-Dyck—Woods near Addo; Zwartkops R. Var. *glabra*.—Redhouse, T.V.P. 477.
36. *parvifolium* Haw.—Redhouse, T.V.P. 108.
37. *brevifolium* Ait.—Karoo-like hills near Uit.
38. *obliquum* Haw.—Karoo-like hills near the Zwartkops R.
39. *flavum* Haw.—Karoo-like hills near the Zwartkops R.
40. *pruinatum* Thunb.—Near the Zwartkops R.

MESEMBRIANTHEMUM --continued.

41. *striatum* Haw.—Near the Zwartkops R.
42. *candens* Haw.—Seashore near Cape Recife.
43. *floribundum* Haw.—Zwartkops R.
44. *intonsum* Haw.—Near the Zwartkops R. and Sundays R.
45. *bulbosum* Haw.—Karoo-like hills near P.E.
46. *stellatum* Mill.—Karoo-like hills near the Zwartkops R. ;
Coega and Sundays R.
47. *densum* Haw.—Near Zwartkops R.
48. *echinatum* Ait.—Zwartkops R.
49. *nitidum* Haw.—Near the Zwartkops R.
50. *grossum* Haw.—Near the Zwartkops R.
51. *longispinulum* Haw.—Humewood, T.V.P. 2168.
52. *viridiflorum* Ait.—Redhouse, T.V.P. 104.
53. *canaliculatum* Haw.—Karoo-like hills near Zwartkops R.
54. *salmoneum* Haw.—Humewood, T.V.P. 2168.
55. *incomptum* Haw.—Hills near Addo ; Van Stadens, T.V.P.
748.
56. *crystallinum* L.—Sundays R. and near Uit.
57. *angulatum* Thunb.—Near the Zwartkops R. and Sundays R.
58. *cordifolium* L.—Zwartkops R. ; near Addo.
59. *crassicaule* Haw.—Redhouse, T.V.P. 67.
60. *pallens* Ait.—Near Zwartkops R.
61. *Patersoniae* L. Bolus—Schoenmakers Kop, T.V.P. 2288.
62. *hamatum* L. Bolus—Aloes, J.L.D. 3004.
63. *Haeckelianum* Berger—Redhouse, T.V.P. 414.
64. *mirabile* N. E. Br.—Redhouse, T.V.P. 212.

TETRAGONIA L.

- †1. **echinata* Ait.—Hills near the Zwartkops and Sundays R.
- †2. *decumbens* Mill.—Redhouse, July ; Humewood, Apr. (var.
obovata) ; P.E., 2126 ; Zwartkops R., Z. 138.
- †3. *spicata* L.—Perseverance, Sept.
- †4. *fruticosa* L.—P.E., Nov. ; Redhouse, Aug.

AIZOON L.

- †1. *glinoides* L.—Van Stadens R., Nov. ; Uit., Schlechter 2561 ;
near the Zwartkops R., E. and Z.
2. *rigidum* L.—P.E., May ; Redhouse, Aug. ; Despatch,
June.

GALENIA L.

- †1. *secunda* Sond.—Uit., Apr., Schlechter 2561 ; Paarde Poort,
Sept., Bolus 1866.
2. *pallens* Fenzl—Among shrubs near the Zwartkops R.,
Z. 2144, 2145, 1049.
3. *spathulata* Fenzl—Redhouse, Aug. ; P.E., Feb. ; near the
Zwartkops R., Z. 2188, 1049.
4. *fruticosa* Sond. (= *G. salsoloides* Fenzl)—Uit., Jan. ; 50 to
500 ft., E. and Z.

PORTULACACEAE.

ANACAMPSEROS Sims

1. *arachnoides* Sims—Redhouse ; sandy ground near Uit.,
Bolus 549.
2. *filamentosa* Sims—Redhouse.
3. *Telephiastrum* DC.—Redhouse.

PORTULACA L.

- ††1. *§oleracca* L.—Redhouse.

PORTULACARIA Jacq.

- †1. *ajra* Jacq.—Green Bushes, P.E.; common in scrub east of the Zwartkops R.; north of Uit. common.

BASELLACEAE.

BOUSSINGAULTIA H.P. et K.

1. *§baselloides* H.B. et K.—A weed, especially in hedges at Uit. and elsewhere.

CARYOPHYLLACEAE (including ILLECEBRACEAE).

DIANTHUS L.

- †1. *incurvus* Thunb.—Redhouse.
 †2. *scaber* Thunb.—Bethelsdorp; P.E.; Uit., E. and Z.
 3. **crenatus* Thunb.—Zwartkops R.
 4. *sp.*—Redhouse, T.V.P. 2646.
 5. *sp.* (near *D. holopetalus* Turcz)—Redhouse, Nov., T.V.P. 449a.

SILENE L.

1. *bellidioides* Sond.—Redhouse.
 ††2. **capensis* Ott.—Zwartkops R.; Uit.
 3. *clandestina* Jacq.—Redhouse.
 4. *crassifolia* L.—P.E.
 †5. *§gallica* L.—Redhouse.
 6. *primulaeflora* E. et Z.—Bethelsdorp; mouth of Zwartkops R.
 7. *§sp.*—P.E., Aug., T.V.P. 2543, 204.

STELLARIA L.

- ††1. *§media* Villars—Redhouse.

CERASTIUM L.

- †1. *capense* Sond.—Redhouse.

SPERGULA L.

- ††1. *§arvensis* L.—P.E.

SPERGULARIA Pers. (= LEPIGONUM Fries in "Flora Capensis," I, p. 134).

- ††1. *media* Presl—Redhouse.
 †2. **rubra* Fenzl—Zwartkops R.

POLYCARPON Loeffl.

- ††1. *§tetraphyllum* L.—Redhouse.

POLLICHIA Soland.

- †1. *campestris* Soland.—Redhouse, Mar.; P.E., Jan.

HERNIARIA L.

- †1. *hirsuta* L.—Humewood, Sept.; P.E., Oct.

CORRIGIOLA L.

- ††1. *§littoralis* L.—Redhouse, July; Baakens R. valley, May.

NYMPHAEACEAE.

NYMPHAEA L.

- ††1. *capensis* Thunb. (= *stellata* Willd.)—Redhouse, etc.

RANUNCULACEAE.

CLEMATIS L.

- ††1. *brachiata* Thunb. (including *Cl. Thunbergii* Steud., which cannot be satisfactorily distinguished from *Cl. brachiata*)—Schoenmaakers Kop; near Uit., Schlechter 2565.

KNOWLTONIA Salisb.

1. *capensis* (L.) Huth (= *rigida* Salisb.).—Uit.; P.E.
2. *rotundifolia* Huth—P.E.
††3. *vesicatoria* DC.—Van Stadens; Zuurberg.

RANUNCULUS Hall.

1. *pubescens* Thunb. (= *R. pinnatus* Poir.).—Walmer; Uit.; near Paarde Poort.

MENISPERMACEAE.

CISSAMPELOS L.

1. **torulosa* E. Mey.—Galgebosch; Van Stadens.

ANTIZOMA Miers

- †1. *capensis* (L. f.) Diels—Redhouse; Schoenmaakers Kop; woods near Zwartkops R., Z. 697.

LAURACEAE.

CASSYTHA L.

- ††1. *ciliolata* Nees—Baakens R. Valley, Apr.; Zuurberg, Mar.

OCOTEA Aubl.

- †1. *bullata* Benth.—In a forest patch on the Elandsberg (*teste* Dayer).

PAPAVERACEAE.

PAPAVER L.

- †1. *§aculeatum* Thunb.—P.E. Valley.

ARGEMONE L.

- †1. *§mexicana* L.—P.E.

CORYDALIS DC.

1. **§cracca* Schlecht.—Uit.
†2. **§pruinosa* E. Mey.—Enon.

FUMARIA L.

- †1. *§officinalis* Linn.—Baakens R. Valley.

CRUCIFERAE.

BRASSICA Koch

1. **leptopetala* Sond.—Zwartkops; Uit.; Addo.
†2. *§strigosa* DC.—Sundays R., near Addo Drift, MacOwan 993.

DIPILOTAXIS DC.

1. *§muralis* DC.—Humewood.

SINAPIS Koch

1. *§retrorsa* Burch.—P.E.

HELIOPHILA L.

- †1. **abrotanifolia* Herb. Banks—Uit.
2. *brachycarpa* Meisn.—P.E.
3. *florulenta* Sond.—Near Zwartkops R.; near Bethelsdorp.
4. *glauca* Burch.—Uit.
- †5. **linearifolia* Burch.—Zwartkops R.
- †6. *linearis* DC.—Humewood; Zwartkops R. mouth; Redhouse.
7. *macrosperma* Burch.—Redhouse.
8. *pendula* Willd.—Redhouse; P.E.
9. *suavissima* Burch.—Redhouse.
- †10. *subulata* Burch.—Redhouse; Humewood; Walmer; Van Stadens, Schlechter 6068.
11. *stylosa* Burch.—Baakens R. Valley; Zuurburg.
12. **succulenta* Herb. Banks—Uit.
- †13. **virgata* Burch.—Van Stadens Mts.; near P.E.

NOTE.—*H. suavissima*, *succulenta*, and *subulata* do not seem to be sufficiently distinct to be kept separate.

NASTURTIUM R. Br.

- †1. *§fluviatile* E. Mey. (= *Rosina nudiuscula* Thel. in Schinz, Beitr., XXIV, 259).—Zwartkops and B. shman's Rs.; near Blue Krantz, Bolus 1878.
- †2. *§officinale* R. Br.—Walmer; Uit.

SISYMBRIUM All.

1. *Burchellii* DC.—Redhouse.
- †2. **capense* Thunb.—Zwartkops.

LEPIDIUM L.

- †1. **africanum* DC.—Zwartkops R.
- †2. *capense* Thunb.—P.E.; Schoenmaakerskop.
3. **hirtellum* Sond.—Uit., July.

CAPSELLA Vent.

- †1. *§Bursa-pastoris* Moench.—P.E.

CAPPARIDACEAE.

CAPPARIS L.

- †1. *citrifolia* Lam.—Redhouse; Despatch; Klassen's, near Paarde Poort, Bolus 1654; Loerie R.
2. *oleoides* Burch. (= *albitrunca* Burch.)—Uit.
3. **Volkmeriae* DC.—Kraggakamma and Addo.
4. *Zeyheri* Turcz.—P.E.

CADABA Forsk.

- †1. *junceae* DC.—Redhouse; Uit.; Loerie R.

MAERUA Forsk.

1. *triphylla* Wendl.—P.E.; in the forests of Addo and by the Zwartkops R.; Redhouse; Klassen's, near Paarde Poort, Bolus 1653.

DROSERACEAE.

DROSERA L.

1. *cistiflora* Linn.—Van Stadens; P.E.
2. *cuneifolia* Thunb.—Redhouse.

CRASSULACEAE.

DINACRIA Harv.

1. *grammanthoides* Schonl.—Walmer, Oct.

CRASSULA L.

- †1. *natans* Thunb. (= *Helophytum natans* E. et Z.)—P.E.; Redhouse, July–Sept.
- ‡2. *inanis* Thunb. (= *Helophytum inane* E. et Z.)—Van Stadens; in water not far from the saltpan by the Zwartkops R., Z. 729.
- †3. *Vaillantii* (Willd.) Schonl.—Redhouse, Aug.–Oct.; Uit.
- †4. *decumbens* Thunb. (non E. et Z.) (*Bulliarda trichotoma* E. et Z.)—Humewood, Sept.–Nov.
- †5. *glomerata* L.—Humewood, Sept.
- ††6. *campestris* (E. et Z.) Harv.—Humewood, Sept.; Redhouse, Aug.
7. *parvula* Harv.—Uit., Apr., Schlechter 2583.
- †8. *lycopodioides* Lam.—Redhouse, May–Aug.; Koega-Kamma Kloof and Commando Kraal.
- ‡9. *expansa* Dryander—Bethelsdorp; Redhouse, Dec.
- †10. *ericoides* Haw.—Redhouse, May; Frames Drift, Mar.; Despatch; foot of Witteklip; Zuurberg.
11. *lineolata* Dryander—P.E., Oct., Nov.; Redhouse, Nov.; in shady places near Zwartkops R., Z. 981.
12. *pellucida* L. (*Cr. marginalis* Dry.)—Kamaehs, Sept.; Bethelsdorp, Nov.; Redhouse, Oct.
- †13. *brachypetala* E. Mey., var. *parvisepala* Schonl.—Zuurberg, Apr.
14. *Aitoni* Britt. et Bak. f. (= *Cr. cordata* Ait.)—Zwartkops R., E. and Z. 1898; Redhouse.
15. *spathulata* Thunb.—Redhouse, Mar.; Bethelsdorp, Nov.
16. **Cotyledon* Jacq.—Zwartkops R.
17. *portulacea* Lam.—Redhouse, July.
- †18. *lactea* Soland.—Van Stadens; Addo and on the banks of the Zwartkops R., Z. 311, 2540, E. and Z. 1877; Redhouse, June–Aug.
- †19. *multicava* Lem. (= *Cr. quadrifida* Bak.)—Redhouse, Aug.
20. *tetragona* L.—Cradock Place, May, E. E. Galpin 1902; Redhouse.
21. *biplanata* Haw.—Redhouse, Jan.; in the woods by the Zwartkops R., Z. 2532.
22. *fruticulosa* L., var.—Cockscomb, Mar.
23. *acutifolia* Lam.—Redhouse, Feb., Dec.
- †24. *crenulata* L.—Thornhill, Jan.; Van Stadens, Jan.; Redhouse.
25. *rubricaulis* Harv.—Van Stadens; Baakens R. Valley, Apr.
26. *vaginata* E. et Z.—Zuurberg.
27. *ramuliflora* Link. et Otto (= *Cr. stachyera* E. et Z.)—Zuurberg, Mar.
- †28. *corymbulosa* Link.—P.E., Mar.; Redhouse, Mar.
29. *rufo-punctata* Schonl.—Redhouse, Jan.
30. *turrita* Thunb.—P.E., Nov. Var. *paniculata* Schonl. Ms.—Redhouse, Oct.
- †31. *rosularis* Haw.—Redhouse, Aug.; in woods near the Zwartkops R., E. and Z. 1901; Bethelsdorp, Nov.

- ‡32. *orbicularis* L.—Bethelsdorp, Nov.
 ‡33. *perforata* L. f.—P.E., Nov.; Redhouse, Jan.; in scrub near the Zwartkops R., E. and Z. 1888; Zwartkops and Addo, Z. 310; Zuurberg, Mar.
 34. *Patersoniae* Schonl.—Bethelsdorp, June; Craddock Place, June.
 35. *perfoliata* L.—Green Bushes, near P.E., Feb., T.V.P. 441; Redhouse, Jan.
 ‡36. *falcata* Willd.—Green Bushes, near P.E., Feb.
 †37. *sphaeritis* Harv.—Uit., 50 to 500 ft., E. and Z. 994; Bethelsdorp, Sept.; P.E.
 †38. *ciliata* L.—P.E., Jan.; Witteklip, Nov., Dec.; MacOwan 1047; Redhouse, Dec.
 39. *micrantha* Schonl.—Redhouse, Aug.
 40. *trachysantha* E. et Z.—Redhouse; Zuurberg, Mar.
 41. *margaritifera* (E. et Z.) Harv.—Bethelsdorp; Walmer.
 42. *cultivata* L., var. *radicans* (Haw.) Schonl.—Redhouse; P.E., Jan.; Humewood; Aloes.
 43. *Rogersii* Schonl.—Springfields, Uit., Nov.
 44. *obvallata* L.—Bethelsdorp; Coega; Uit., Z. 1044.
 †45. *nudicaulis* L. (incl. *Cr. sulcata* Harv.).—Walmer, Oct.; Zwartkops R., E. and Z. 1928.
 46. *cephalophora* Thunb. (= *Cr. canescens* Roem. et Schult.).—On sand-hills near the Zwartkops R., Z. 345, 1993, 2553.
 47. *Tayloriae* Schonl.—P.E.
 48. *platyphylla* Harv.—P.E., J.L.D. 654.
 †49. *saxifraga* Harv.—P.E.
 50. *nemorosa* E. et Z.—Redhouse, Oct.; Bethelsdorp.

ROCHEA DC.

- †1. *jasminea* DC.—Cockscomb Mts., Mar.

COTYLEDON L.

1. *velutina* Hook. f., var. *Beckeri* Schonl.—Common in karroid scrub at Redhouse.
 †‡2. *orbiculata* L.—Redhouse; Bethelsdorp.
 3. *coruscans* Haw.—P.E.
 4. *ramosissima* Haw.—P.E.; Zwartkops.
 5. *decussata* Sims—Blue Cliffs.
 6. *teretifolia* Thunb.—Elands River.
 7. **tomentosa* Harv.—Uit.
 8. *rhombifolia* Haw.—P.E.; Avontuur Line to Green Bushes.
 9. *Cooperi* Bak.—Zuurberg.
 10. *cristata* Haw.—Redhouse, Mar.

KALANCHOE Adans.

- †1. *rotundifolia* Haw.—Redhouse, Mar., T.V.P. 523.
 ‡2. *hirta* Harv.—Uit., Z.

SAXIFRAGACEAE.

MONTINIA L.

1. *acris* L.—Bethelsdorp, Aug.; Van Stadens Mts.

PITTIOSPORACEAE.

PITTIOSPORUM Banks

- †1. *viridiflorum* Sims—P.E. Valley, Nov.; Van Stadens Mts., Z. 382; Bethelsdorp.

CUNONIACEAE.

CUNONIA L.

- ††1. *capensis* L.—Zuurberg, May.

PLATYLOPHUS Don.

1. **trifoliatus* Don—Van Stadens Mts., E. and Z.

BRUNIACEAE.

BERZELIA Brongn.

1. *commutata* Sond.—P.E.; Van Stadens, Dec.
 2. *intermedia* Schlecht.—Van Stadens, Nov.
 †3. *lanuginosa* Brongn.—Van Stadens R. Mts., Bolus 1574.

BRUNIA L.

- †1. **nodiflora* L.—Van Stadens (*teste* Dümmer).

PSEUDOBÆCKIA T. Anders.

1. **cordata* Niedenzu—Uit., Z. 593 (*teste* Dümmer).
 2. **racemosa* Niedenzu—Van Stadens, Z. 2225 (*teste* Dümmer).

HAMAMELIDACEAE.

TRICHOCLADUS Pers.

1. *ellipticus* E. et Z.—Springfields, Nov.
 †2. *crinitus* Pers.—Van Stadens, MacOwan 2065; Addo Bush,
 Z. 625.

ROSACEAE.

RUBUS L.

- †1. **pinnatus* Willd.—Addo; Uit.
 ††2. *rigidus* Sim—Walmer, Nov. Var.—Banks of Zwartkops R.
 and Addo, Z. 66.

ALCHEMILLA L.

- ††1. *capensis* Thunb.—Addo and Van Stadens, Z. 693; Zuurberg.

CLIFFORTIA L.

- †1. *ilicifolia* L.—Thornhill, July; Zwartkops R. and Van Stadensberg, Z. 19; ? Witteklip, Jan., Bolus 9119.
 2. *cordifolia* E. Mey.—Walmer, Mar.
 †3. *odorata* Linn. f.—Theescomb.
 †4. *ferruginea* Linn. f., var. *b.*—Kraggakamma, MacOwan 1082.
 †5. **linearifolia* E. et Z.—Zwartkops R.
 †6. *strobilifera* L.—Banks of the Zwartkops R., Z. 57; Van Stadens R. Mts., Jan., Bolus 1572; Zuurberg.
 7. *drepanoides* E. et Z.—Kamaehs, Nov.; Winterhoek, E. and Z. 1741.
 †8. *juniperina* L. f.—Van Stadens Mts., May; Zuurberg, Oct.

LEGUMINOSAE.

CYCLOPIA Vent.

1. *Vogelii* Harv.—Van Stadens, Nov.
 2. *pubescens* E. et Z.—Van Stadens Mts.

PODALYRIA Lam.

1. *Burchellii* DC.—Van Stadens, Sept., E. and Z. 1157, Z. 824.
 †2. *calypttrata* Willd.—P.E.
 †3. *cuneifolia* Vent.—Walmer, Aug.; Van Stadens, E. and Z. 1179; in the stony channel of the Zwartkops R., Z. 109.

PRIESTLEYA DC.

1. *hirsuta* DC.—Bethelsdorp, June; Van Stadens, E. and Z. 1220; Walmer Flats; P.E.

AMPHITHALEA E. et Z.

1. *phylicoides* E. and Z.—Van Stadens, Z. 2287.
2. **micrantha* Walp.—Van Stadens.

BORBONIA L.

- †1. *lanceolata* L.—Van Stadens, Sept., Z. 336, Bolus 1606; at the foot of the Witteklip Mts., Jan., MacOwan 1099, Bolus 13232.

RAFANIA Thunb.

1. **elliptica* Thunb.—Van Stadens; Addo.

LOTONONIS (DC.) Benth.

- †1. **cytisoides* Benth., var. *brevifolia* (Dümmer in *Trans. Roy. Soc. S. Afr.*, III, 289).—Uit., Z. 856.
2. *azurea* Benth.—Van Stadens, Schlechter 6072, Bolus 1066; P.E., Nov., Z. 1262, 922; Humewood.
3. **acuminata* E. et Z.—P.E., Burchell 4361; in fields by the Zwartkops R.
4. **argentea* E. et Z.—Near Uit.; Burchell 4463 may belong to this species.
5. **debilis* Benth.—P.E., Bolus 2666.
6. *trichopoda* Benth.—Redhouse, Dec.; P.E., Feb.; New Brighton.
7. **monophylla* Harv.—Van Stadens.
8. *porrecta* Benth.—Redhouse.
9. *Leobodea* Benth.—Redhouse, Aug.; Zwartkops R., E. and Z. 1264.
10. **pumila* E. et Z.—Uit. div.
11. *tenella* E. et Z.—Redhouse, Dec.
12. **versicolor* Benth.—On the fields near the Zwartkops R.
13. **neglecta* Dümmer.—Uit.
14. *sp.*—P.E., July, J.L.D. 514; Bethelsdorp, Z.; between Coega and Sundays Rs., Z. 401.

LEBECKIA Thunb.

1. *psiloloba* Walp.—Redhouse, Oct.; Uit., E. and Z. 1340, Z. 737.
- †2. *Plukenetiana* E. Mey.—Walmer, Oct.
- †3. *sepiaria* Thunb.—Uit.; Walmer.
- †4. *mucronata* Benth.—Van Stadens; Uit.; Van Stadens R. Mts., 1000 ft., Bolus 1605.

ASPALATHUS L.

- †1. **ciliaris* L.—Uit.
- †2. *spicata* Thunb.—Despatch, Oct.; Van Stadens, MacOwan 2057.
- †3. *thymifolia* L.—Bethelsdorp, Nov.; P.E.
4. *rubro-fusca* E. et Z.—On the hills near the Zwartkops R., E. and Z. 1467.
5. *teres* E. et Z.—Witteklip, Bolus 9118.
- †6. *rigescens* E. Mey.—P.E., May, Mar.; Van Stadens, Z. (typical); between Coega and Sundays Rs., E. and Z. 1461 (var. *echinata*).
7. **opaca* E. et Z.—Uit.

ASPALATHUS—continued.

- ††8. *laricifolia* Berg.—Baakens R. Valley, P.E.; Redhouse, Feb.; Walmer; Van Stadens, Bolus 1594.
- ††9. *canescens* L.—P.E., June; Van Stadens Mts., Bolus 1595.
10. *frankenioides* DC.—Van Stadens (var. *poliotes*); Van Stadens, E. and Z. 1437 (var. *intermedia*).
11. *setacea* E. et Z.—Van Stadens Mts., Bolus 1592.
12. *collina* E. et Z.—Redhouse, July; near P.E., Z. 2366.
13. *adelphea* E. et Z.—Redhouse, Apr.; P.E., Feb., Bolus 168; on the grass swamps of the Zwartkops R. and the Addo Hills, E. and Z. 1441, 1443; Aloes.
14. *argyrea* DC.—P.E.; Zwartkops R., Sept.; Uit.; Bethelsdorp, June.
- ††15. *spinosa* L.—Redhouse, Mar.; near the Zwartkops R., E. and Z. 1499, Z. 257, 2365 (var. *horrida*), Z. 415 (var. *longifolia*); near Uit., Jan., Bolus 1591.
16. *marginalis* E. et Z.—Near the Zwartkops R., Z. 2349; Redhouse; valley near Kleinschool, Bolus 2289.
17. *rubens* Thunb.—Van Stadens, Z. 2325; E. and Z. 377, Oct.
- †18. *astroites* L.—Van Stadens, Nov.; Redhouse, Oct.
19. *nivea* Thunb.—Hills near Uit.; on the banks of the Zwartkops R., MacOwan 1056.
- †20. *suffruticosa* DC.—Baakens R. Valley, P.E.; near Zwartkops R., E. and Z. 1405.

Mrs. Bolus has supplied the following note on a plant collected by Dr. G. Potts (No. 299) in Jan., 1907, at Humewood: "This seems near *A. verrucosa* L., but differs (1) in having the ovary 2-ovuled, (2) in the size of the fruit. It is also near *A. adelphea* E. et Z., but differs (1) in the calyx segments being longer and more acute, (2) longer leaves. It might be regarded as a n. sp. or a var. of either of the above two."

BUCHENROEDERA E. et Z.

1. **multiflora* E. et Z.—Van Stadens.

MELOLOBIUM E. et Z.

1. *candicans* E. et Z.—Redhouse, Mar.; near Uit.; Schlechter 2491.
2. *microphyllum* E. et Z.—Redhouse, Sept.

CROTALARIA L.

1. *obscura* DC.—Humewood, Oct.; Schoenmaakers Kop, Apr.; Uit. dist., E. and Z. 1250.
2. *purpurea* Vent.—Thornhill, July; Uit.
- ††3. *capensis* Jacq.—Near the Zwartkops R., E. and Z. 1258; between Gamtoos and Van Stadens R., Bolus 2285.

MEDICAGO L.

- ††1. *denticulata* W.—P.E.
- ††2. *laciniata* All.—In karroid places in Uit. dist., E. and Z. 1504.

MELILOTUS Tournef.

- †1. *§parviflora* Desf.—Redhouse, Dec.

ARGYROLOBIUM E. et Z.

- †1. *tuberosum* E. et Z.—Van Stadens, E. and Z., Bolus 1597.
2. *crassifolium* E. et Z.—Redhouse, Mar.; Baakens R. Valley, Apr.; Elands R., E. and Z. 1305.
3. *incanum* E. et Z.—Van Stadens, Sept.
4. *sericeum* E. et Z.—Van Stadens, MacOwan 1031, Z. 323, Bolus 1596.
5. *collinum* E. et Z.—Uit. dist., in many places; ? Redhouse, Dec., T.V.P. 424 in Herb. Bolus.
- †6. **uniflorum* Harv.—Van Stadens Mts.
7. **barbatum* Walp.—Uit.
8. *pumilum* E. et Z.—Show Ground, P.E.; Van Stadens, E. and Z. 1308; near the Zwartkops R., E. and Z. 1310.
9. *patens* E. et Z.—Grassy pastures near the Zwartkops R.; Zoutpanshoogde, Z. 2304.
- †10. *Andrewsianum* Steud.—Springfields, Mar.; Uit., Schlechter 2522, 500 ft., Apr., 1893 (var. B.).

TRIFOLIUM L.

- ††1. *Burchellianum* Ser.—Walmer, Oct.; Van Stadens, Z. 451; P.E., Sept., 1903; Addo and P.E., E. and Z. 1507.
- †2. *stipulaceum* Thunb.—Algoa Bay; near the Zwartkops R.

PSORALEA L.

- ††1. *pinnata* L.—Van Stadens, Sept.; near P.E., Sept., Bolus 220.
2. *oligophylla* E. et Z.—Uit., E. and Z.; Zuurberg.
3. *verrucosa* Willd.—Walmer, Oct.; P.E.; near the Zwartkops R., E. and Z. 1521.
4. *axillaris* L.—Van Stadens R., Jan., Bolus 1548.
5. *polyphylla* E. et Z.—Uit., E. and Z. (Pappe 13).
6. *repens* L.—Redhouse, Apr.; Humewood.
- †7. *decumbens* Ait.—Redhouse, Sept.; P.E., Oct.; near the Zwartkops R., E. and Z. 1033.
- †8. *polysticta* Benth.—Zuurberg.
9. **triantha* E. Mey.—Zwartkops R.
10. *candicans* E. et Z.—Redhouse, Oct.
- †11. *capitata* L.—Redhouse, Mar.; Witteklip, MacOwan 2068, Bolus 13233; Zwartkops R., Z. 84.
- †12. *bracteata* L.—Walmer, Oct.; Redhouse, Mar.; Van Stadens, Z. 271 (var. *algoensis*).
13. **tomentosa* Thunb.—Uit. dist.
14. *Patersoniae* Schonl.—Redhouse, Dec.

INDIGOFERA L.

- †1. *denudata* Thunb.—Van Stadens, MacOwan 1107. Var. *luxurians*—Van Stadens, Z. 276, E. and Z. 1566, Jan., Bolus 1590. Var. *simplicifolia*—Elands River, Z. 2420. Var. *inermis*—Zwartkops R.
2. *stenophylla* E. et Z.—Van Stadens, Sept.; Bethelsdorp, Nov.
3. *complicata* E. et Z.—Van Stadens, Sept.
4. *heterophylla* Thunb.—Redhouse, Nov.; Uit.; P.E.
5. **leptocarpa* E. et Z.—Uit.
6. *porrecta* E. et Z.—Redhouse, Aug.; Walmer; by the Zwartkops R. and Addo; New Brighton, Aug.
7. **tomentosa* E. et Z.—Mouth of the Zwartkops R.
- †8. *incana* Thunb., var. *angustistipulata* Bak. f.—P.E.

INDIGOFERA L.—continued.

9. *sulcata* DC.—Walmer, Aug.; Van Stadens, E. and Z. 1601, Bolus 1904; P.E., June.
10. **hispidata* E. et Z.—On the mountains above Uit.
11. *stricta* L.—Schoenmaakers Kop, Mar.; Uit.
- †12. **fastigiata* E. Mey., var. *angustata*.—Zwartkops R.
13. **poliotes* E. et Z.—Uit.
- †14. *Zeyheri* Spr.—Emerald Hill, Mar.; Uit.; Zwartkops; Addo, etc.
15. *leptophylla* E. Mey. (= *L. Zeyheri*, var. *leptophylla* Harv.).—Near Zwartkops R. and Addo, E. and Z. 1110, Z. 2433.
16. *glaucescens* E. et Z.—Zwartkops R., Z. (Pappe 69).
17. **pauciflora* E. et Z.—Uit.
18. *disticha* E. et Z.—Redhouse, Dec., Oct.; Uit. dist., July, 1500 ft., Bolus 33.
- †19. **alternans* DC.—Uit.
- †20. **argyrea* E. et Z.—Near Uit.
21. *? falcata* E. Mey.—Redhouse, Oct., T.V.P. 239.
22. *sessilifolia* DC.—Between Sundays and Zwartkops Rs., 1000 ft., Z. 1109 and E. and Z. 1559; Redhouse, Oct.

TEPHROSIA Pers.

1. **stricta* Pers.—Near Van Stadens R.
- ††2. *capensis* Pers.—Redhouse, Oct.; near Zwartkops R. and Addo, Z. 59; Zwartkops R. mouth; Emerald Hill, Oct.; P.E., Feb., Oct.; Van Stadens, Bolus 2299; near Uit., Jan., Bolus 13231.

NOTE.—The variety *hirsuta* Harv. is found on the Zuurberg (T.V.P. 33) and at Coldstream, near Grahamstown (S Schonland 1521) It may have to be considered a distinct species

- 3 *grandiflora* Pers.—Uit; Van Stadens; Uit., E and Z 1629
- †4 *aemula* E. Mey.—Emerald Hill, Dec., Bolus 10633

SUTHERLANDIA R. Br.

- ††1 *frutescens* R. Br.—Redhouse, Nov.; Uit. dist., E. and Z. 1658.

LESSERTIA DC.

- †1. **linearis* DC.—Zwartkops R.; Uit.
2. *physodes* E. et Z.—Van Stadens, Sept., T.V.P. 177; Uit.
3. **depressa* Harv.—Zwartkops R.
4. *carnosa* E. et Z.—Karroid places at the mouths of the Coega and Sundays Rs.; Zoutpanshoegde, Z.
5. *brachystachya* E. Mey.—Redhouse, Aug.; Zwartkops R., E. and Z. 1635.
6. *stenoloba* E. Mey.—Zwartkops R.; P.E. Var. *obtusata*—Near the Zwartkops R., E. and Z.
7. *annularis* Burch.—Despatch, Aug.
8. *Kensitii* L. Bol., n. sp.—Humewood, Sept.

HALLIA Thunb.

- †1. *virgata* Thunb.—Frames Drift, Mar.; near Zwartkops R., Z. 574, 4818; P.E., Dec.; Van Stadens.
- †2. *cordata* Thunb.—Van Stadens, Oct., Jan., Bolus 1589; near Zwartkops R., Z. 514.
- †3. *asarina* Thunb.—Van Stadens, Z. 704.

NOTE.—I fail to see any permanent distinctions between 2 and 3.

VICIA L.

- ††1. *§sativa* L.—Redhouse, Nov. ; Walmer, Oct.

ERYTHRINA L.

- †1. *caffra* Thunb.—Redhouse, Aug. ; Uit.

VIGNA Savi

- †1. *vevillata* Benth.—Redhouse, Mar. ; near Zwartkops R.,
E. and Z. 1682.
†2. **triloba* Walp.—Sand-dunes near Algoa Bay.
3. *luteola* Benth.—Bethelsdorp, Jan.

DOLICHOS L.

- ††1. *gibbosus* Thunb.—Bethelsdorp, Nov. ; Redhouse, Oct.
2. *hastaeformis* E. Mey.—P.E., Feb. ; Redhouse, Dec. ; Uit.,
Apr., Schlechter 2498.
†3. *angustifolius* E. et Z.—Near Uit., Schlechter 2560 ;
Sundays and Zwartkops Rs.
4. **linearis* E. Mey.—Zwartkops R.

RHYNCHOSIA Lour.

1. *leucoscias* Benth.—Van Stadens, Nov. ; Walmer.
2. *secunda* E. et Z.—Redhouse, Aug.
†3. *carribea* DC. (= *gibba* E. Mey.)—P.E., Sept. ; Redhouse,
Apr. ; near Uit., Schlechter 2572.
4. *puberula* Harv.—Redhouse, Mar. ; Addo, Z. 840, 1677.
5. *gibba* E. Mey.—Schoenmaakerskop.
†6. **Totta* DC.—Uit.
†7. *glandulosa* DC.—Walmer, Oct. ; Uit.
†8. **orthodanum* Benth., var. *Muhlenbeckii*.—Uit.

ERIOSEMA DC.

- †1. *squarrosus* Walp.—Redhouse, Apr. ; Van Stadens, Mar. ;
Addo.

VIRGILLA Lam.

- †1. *capensis* Lam.—Van Stadens, Nov., MacOwan 1057, Bolus
1546.

CALPURNIA E. Mey.

- †1. *sylvatica* E. Mey.—Elands R., Dec.

CASSIA L.

- ††1. *§tomentosa* Lam.—Gamtoos R., Schlechter 6049.
†2. *mimosoides* L.—Redhouse, Feb. ; P.E., Jan. ; Van
Stadens, MacOwan 2081 ; Uit., Z. 536.
†3. *§occidentalis* L.—P.E. Valley.

SCHOTIA Jacq.

1. *stipulata* Ait.—Bethelsdorp, June ; Baakens R., Jan. ; P.E.
2. *speciosa* Jacq.—Redhouse, Mar. ; Zwartkops R., etc., Z. 47 ;
P.E., June.
†3. *latifolia* Jacq.—Humewood, Jan. ; Van Stadens, Z. 1701,
MacOwan 2458 ; Baakens R., Jan. ; Uit., Jan. ; Paarde
Poort, Jan., Bolus 1547.

ACACIA Willd.

- ††1. *horrida* Willd.—Redhouse, Dec. ; near Zwartkops and Addo,
E. and Z. 605.
†2. *caffra* Willd.—Elands R., Nov. ; Zwartkops and Sundays R.,
Z. 560.

Various species of Australian acacias have become naturalized on the driftsands near P.E., on which especially *A. saligna* and *A. cyclopis* have been largely planted.

GERANIACEAE.

ERODIUM L'Her.

- †1. *moschatum* L'Her.—P.E., Sept.
2. *sp.* (may be *E. moschatum* also).—Redhouse, Mar.

• GERANIUM L.

- ‡1. *cafrum* E. et Z.—Zwartkops R.
†‡2. *incanum* L.—Van Stadens, Sept.; Walmer, Dec.
†‡3. *ornithopodium* E. et Z.—P.E.

PELARGONIUM L'Her.

1. *acetosum* (L.) Ait.—Between Coega and Sundays Rs.
†‡2. *alchemilloides* (L.) Ait.—Redhouse; P.E. Var. *dentatum*—Uit., Z. 230, 594.
3. *cafrum* (E. et Z.) Harv.—Van Stadens Mts.
4. *campestris* E. et Z.—Redhouse.
†‡5. *capitatum* (L.) Ait.—Zwartkops R., Z. 630.
6. *carnosum* (L.) Ait.—Redhouse; between Zwartkops R. and Sundays R.; Uit.; Kamaehs.
7. *cordatum* L'Her.—Van Stadens, MacOwan 1048, Bolus 1611.
8. *dichondraefolium* DC.—P.E.
†9. *grossularioides* (L.) Ait.—Walmer; Schoenmaakers Kop; Theescomb; P.E.
†10. *hirsutum* (Burm. f.) Ait.—P.E.; Van Stadens.
†11. *inquinans* (L.) Ait.—Despatch, Dec.
†12. *longifolium* (Burm. f.) Jacq.—P.E., Nov.
†13. *lobatum* (L.) Ait.—Uit.
14. *multicaule* Jacq.—Zwartkops R.
†15. *myrrhifolium* (L.) Ait.—Saltpan near Zwartkops R., Z. 1104.
16. *odoratissimum* (L.) Ait.—Redhouse, July, Oct.
17. *ovale* (Burm. f.) Harv.—P.E.; Walmer; at the mouth of the Van Stadens R.; Van Stadens, Schlechter 6075. Var. *ovatum* Harv.—Walmer, Bolus 1892.
18. *peltatum* (L.) Ait.—Redhouse, Oct.; P.E.
NOTE.—*P. lateripes* L'Her. does not seem to me specifically distinct from *P. peltatum*. T.V.P. 229 (Redhouse) may be referred to it, also F. A. Rogers 106 (Uit.), W.K. 53 (P.E.), and Z. 181 (Uit.).
19. *populifolium* E. et Z.—Elands R.
20. *procumbens* (Andr.) Pers.—P.E.
†21. *pulverulentum* Sw.—Redhouse.
22. *Radula* (Cav.) L'Herit.—Walmer; Bethelsdorp, Sept.; Kamaehs; Van Stadens; Uit., Z. 645.
23. *radulaefolium* (E. et Z.) Harv.—Zwartkops R.
24. *reniforme* Curt.—P.E., Bolus 8307; foot of Witteklip.
25. *ribifolium* Jacq.—Van Stadens.
26. *scandens* Ehrh.—Bushmans R. and Zuurbergen.
27. *schizopetalum* Sw.—Van Stadens; Witteklip.
28. *sidaefolium* (Thunb.) P. Knuth—Between Zwartkops R. and Addo, Z. 597.
29. *tetragonum* (L. f.) L'Her.—Avontuur Line to Green Bushes.
30. *tripartitum* Sw.—Blue Krantz, Bolus 443.
31. *urbanum* (E. et Z.) Harv., var. *pinnatifidum* Harv.—Van Stadens; Humewood; P.E.; near Uit. Var. *bipinnatifidum* Harv.—P.E.

PELARGONIUM L. Her.—continued

- ††32. *vitifolium* (L.) Ait.—P.E.; near Uit., Bolus 1895.
 ††33. *zonale* (L.) Ait.—Redhouse, Aug.; Uit., Schlechter 2489;
 Zuurberg.
 34. *sp.* (= *Cortusina velutina* E. et Z., non *P. velutinum*
 L. Herit.).—Redhouse, T.V.P. 85. This species is placed
 by Knuth under *P. reniforme* (Bot. Mag.), but is quite
 distinct.
 35. *sp.* (near *P. fulgidum*; perhaps a hybrid).—P.E., J.L.D. 105.

MONSONIA L.

- ††1. *ovata* Cav.—Redhouse, T.V.P. 63, Aug.; P.E., J.L.D. 8,
 June; Uit., Z. 439; Van Stadens, Bolus 1544.

OXALIDACEAE.

OXALIS L.

1. **algoensis* E. et Z.—Near P.E.
 †2. *bifurca* Lodd.—Addo, Z. 670; Zwartkops R., Z. 2134.
 †3. *caprina* L.—Zwartkops R.; Uit., Z. 2105, 91, 656;
 Uit., Schlechter 2546; between Sundays R. and Paarde
 Poort, Bolus 1956.
 †4. *cernua* Thunb.—Redhouse; sand-hills at P.E.; Zwartkops
 R., Z. 2108.
 ††5. *convexula* Jacq.—Humewood; Redhouse.
 ††6. *corniculata* L.—Schoenmaakers Kop.
 7. *imbricata* E. et Z.—Thornhill; Redhouse; P.E.; Zwart-
 kops R.; Quaggasvlakte, Z. 93, 94.
 †8. *incarnata* L.—Van Stadens.
 †9. *lanata* L. f.—Zwartkops R., 50 to 500 ft., Oct., Z. 229.
 †10. *obtusata* Jacq.—Near Zwartkops R., Uit., Z. 2120; P.E.
 †11. *polyphylla* Jacq., var. *filifolia*.—Van Stadens Mts.; Baakens
 R. valley, Bolus 2220.
 †12. *punctata* L.—Redhouse; Schoenmaakers Kop; near
 Sundays R. (Coega-Kammaskloof), Z. 2118.
 13. **purpurata* Jacq., var. *Bowiei*—Uit.
 14. *Smithii* Sond.—Redhouse; Uit., Schlechter 2545; Addo
 and Quaggasvlakte, Z. 739.
 15. *stellata* E. et Z.—Redhouse; Addo, Z. 2140; Zwartkops
 R., Z. 96, 661.
 16. *uitenhagensis* Sond., var.—Redhouse, T.V.P. 2272, 2273;
 Zwartkops R.; Uit., Z. 2119, 2121.
 †17. *variabilis* Lindl.—Walmer; Humewood. *Var. *nana*.—
 Zwartkops R.
 18. *sp.*—Redhouse, T.V.P., Sept.

LINACEAE.

LINUM L.

- †1. *africanum* L.—Emerald Hill. Var. β .—Walmer, Bolus
 1902; Van Stadens. Var. γ .—P.E. beach; at the foot
 of Witteklip, MacOwan 464.
 ††2. **Thunbergii* E. et Z.—Uit.; Van Stadens Mts.
 †3. **quadrijolium* L.—Van Stadens Mts.

ZYGOPHYLLACEAE.

ZYGOPHYLLUM L.

- †1. *debile* Ch. et Schl.—Sundays R.; between Roodewal and Blue Krantz, Bolus 1877.
2. *divaricatum* E. et Z.—Redhouse; P.E.; near Commando Kraal, between P.E. and Sundays R., Bolus 2665.
3. *foetidum* Schr. et Wendl.—Avontuur Line to Green Bushes; Zwartkops R.
- †4. *fulvum* L.—Humewood; Redhouse; near the coast near P.E., Bolus 2222.
- †5. *morgsana* L.—Redhouse; P.E.; between Roodewal and Blue Krantz, Bolus 1880.
6. *witenhagense* Sond.—Redhouse, Apr.; P.E.; Bethelsdorp.

TRIBULUS Tourn.

- ††1. *terrestris* L.—Redhouse.

RUTACEAE.

DIOSMA L.

- †1. *vulgaris* B. et W.—P.E., Jan.

COLEONEMA Bartl. et Wendl.

1. *pulchrum* Hook.—P.E.; Walmer Flats, Bolus 1901; Humewood, Oct.; near Bethelsdorp.

ACMADENIA Bartl. et Wendl.

1. *juniperina* B. et W.—Between Coega and Sundays Rs., 500 to 1000 ft., Jan.

BAROSMA Willd.

- †1. *pulchella* Bth.—Walmer, Sept.
2. *venusta* E. et Z.—Van Stadens Mts.
3. **ovata* B. et W.—Van Stadens Mts.
4. **oblonga* E. et Z.—Van Stadens Mts.
5. *scoparia* E. et Z.—Bethelsdorp, Sept.; Van Stadens, May.
Var. *ternata*—Van Stadens.
Van Stadens R., Aug., J.L.D. 700 is *B. scoparia* E. et Z., but (1) calyx segments are rather shorter than usual, (2) the specimen is more luxuriant, (3) horns of the fruit are longer than in typical *B. scoparia* (L. B.).
- †6. *lanceolata* Sond.—P.E., Sept. Var. *obtusifolia*—Uit.
7. **microcarpa* Sond.—Between Van Stadens Mts. and Bethelsdorp.

AGATHOSMA Wi d.

- †1. *hirta* B. et W.—Van Stadens, MacOwan 1035, 1067, Bolus 1603; flats under the Van Stadens Mts., Z. 687; near P.E., Z. 2164; Redhouse, T.V.P. 481; Walmer, T.V.P. 481a.
2. **hirtoides* Dümml.—Uit.
3. **leptospermoides* Sond.—P.E.; Van Stadens R.
4. *apiculata* Mey.—Humewood, Oct.; P.E., Bolus 2223; Redhouse.
[*A. apiculata* G. Mey., var. *algoensis* Dümml. (Fedde, Rep. XI, p. 332)—Algoa Bay, Dr. A. Prior (*ex* Dümmler). This variety is not worth separating.]
5. **acutissima* Dümml.—Between Galgebosch and Melkfontein.
6. **piliifera* Schl.—Uit.
7. *gnidioides* Schl.—Paarde Poort, Bolus 1876; Uit. Mts., Sept., T.V.P. 2333 (style glabrous); Kamaehs, Nov.

AGATHOSMA—*con'inued.*

8. **microphylla* Mey., var. *stadensis*.—Under the Van Stadens Mts.
9. **adenocaulis* E. et Z.—Uit.
10. *gonaquensis* E. et Z.—Baakens R. valley, P.E., J.L.D. 365; Schoenmaakers Kop, T.V.P. 572.
11. **barosmoides* Sond.—Sandfontein, near Uit.
12. *ericoides* Schl.—Redhouse, Apr.; Van Stadens Mts.
13. *decumbens* E. et Z.—Aloes, Sept.; near Coega R., Uit.; Redhouse, Aug.
14. *Owanii* Sond.—P.E., Nov.; Van Stadens, Oct.; Walmer; Zondagsvlakte.
15. *chortophila* E. et Z., var. *blaerioides* Dümml.—P.E., Oct.; Burchell's Valley, near P.E., E. M. Kensit (in Herb. Bolus 6377); Bethelsdorp; Van Stadens.
16. *filipetala* E. and Z.—P.E.; Humewood, Oct.

MACROSTYLIS B. et W.

1. ? *Patersoniae* Schönl. (in *Trans. Roy. Soc. S. Afr.*, Vol. I, p. 445).—Redhouse and Zwartkops R., Nov., T.V.P. 322. ("Evidently identical with Burchell 5532; named by Oliver *Acmadenia* ? *A. alternifolia*, Ch. et Schl." L. B.)
2. *sp.*—Walmer, T.V.P. 481a, Nov.

EMPLEURUM Soland.

1. *serrulatum* Ait.—Uit. Mts.; Van Stadens, May.

FAGARIA L. (XANTHOXYLUM L.)

- †1. *capensis* Harv.—Van Stadens and Walmer.

TODDALIA Juss.

- †1. *lanceolata* Lam.—Springfields; Uit.

CLAUSENA Burm.

- †1. *inaequalis* Bth.—Near the Zwartkops R., Z. 498; P.E.

CALODENDRON Thunb.

1. *capense* Thunb.—Van Stadens Pass.

MELIACEAE.

EKEBERGIA Sparm.

- †1. *capensis* Sparm.—P.E. Valley; Uit.; Van Stadens Pass.

PTAEROXYLON E. et Z. (frequently placed under SAPINDACEAE).

- †1. *utile* E. et Z.—In the woods by the Zwartkops R., Z. 160; Kamaehs.

NYMANIA Lindb. (= AITONIA Thunb.) (frequently placed under SAPINDACEAE).

1. *capensis* (Thunb.).—Uit.

POLYGALACEAE.

MURALTIA Neck.

- †1. *alopecuroides* DC.—Bethelsdorp (var. *filifolia*); P.E. (var. *typica*), Bolus 2219; ? Bethelsdorp, T.V.P. 365.
2. *ericaefolia* DC.—Humewood; P.E.; Redhouse; mountains of Uit.
3. *laricifolia* E. et Z.—Van Stadens; P.E.; Uit.
4. *squarrosa* DC.—P.E.; Humewood; Van Stadens R. Mts., Bolus 1599.
5. **macroceras* DC.—Uit.
6. *Beiliana* Harv.—Zwartkops R.; Uit.

MUNDIA Kunth

- †1. *spinosa* DC.—P.E.; Redhouse.

POLYGALA L.

1. *asbestina* Burch.—Uit.
 †2. *ericæfolia* DC.—Bethelsdorp; Humewood; P.E.; Uit.
 3. *hispidà* Burch.—Thornhill; Schoenmaakers Kop; Walmer, Dec.; Uit.
 4. *hottentotta* Presl—Redhouse; Uit.
 5. **illepida* E. Mey.—Uit.
 †6. *myrtifolia* Linn.—Kamaehs, Nov.; Van Stadens, Sept.
 7. *oppositifolia* Linn., var. *cordata*—Redhouse, Aug.; P.E.; Despatch.
 8. *refracta* DC., var. *cuspidata* Harv.—P.E., Bolus 1746; Van Stadens Mts., MacOwan 340.
 9. ? *serpentaria* E. et Z. (without flowers, partly mixed with *P. asbestina* ?)—Zwartkops Hills, T.V.P. 968.
 †10. *virgata* Thunb.—Walmer; New Brighton.

EUPHORBIAEAE (excerpted from the "Flora Capensis," Vol. V, pt. 2, and from notes supplied by the Director, Royal Botanic Gardens, Kew, to whom the collection in the Herbarium of the Albany Museum was submitted).

EUPHORBIA L.

- †1. *prostrata* Ait.—Redhouse.
 †2. *striata* Thunb.—Near Uit.; Coega.
 3. *ericoides* Lam.—Van Stadens; Baakens R. valley.
 †4. *Kraussiana* Bernh.—Near P.E. and various other localities (incl. Zuurberg Range).
 †5. *rhombifolia* Boiss.—P.E.; Redhouse; Uit.; Coegakam-maskloof.
 6. *hastisquama* N. E. Br.—By the Zwartkops R.
 †7. *mauritanica* L.—Near P.E. and various other localities.
 8. *globosa* Sims—Redhouse; Zwartkops.
 †9. *elliptica* Thunb.—Van Stadens; P.E.; Winterhoek Mts.
 10. *Gorgonis* Berg.—North End Hill, P.E.; hills between the Sundays and Zwartkops Rs.
 11. *inermis* Mill.—P.E.; Zwartkops R.; Redhouse; Coega.
 12. *tuberculata* Jacq.—Cannon Hill, near Uit.
 13. *Clava* Jacq.—Near P.E.; Cannon Hill, near Uit.; Aloes.
 14. *pubiglans* N. E. Br.—Near P.E.; near the Zwartkops R.
 15. *mammillaris* L.—P.E.; Redhouse; Uit.
 16. *polygona* Haw.—P.E.; Redhouse.
 17. *meleformis* Ait.—Zwartkops Hills; Redhouse.
 18. *stellata* Willd.—Near P.E.; Redhouse; hills between the Sundays and Zwartkops Rs.
 19. *Ledienii* Berg.—Near P.E.; Bethelsdorp; Zwartkops; Redhouse; between Sundays and Zwartkops Rs. Var. *Dregei* N. E. Br.—Near P.E.
 20. *triangularis* Desf.—Redhouse.
 21. *coerulescens* Haw.—Common in Karroid scrub.
 22. *tetragona* Haw.—Zuurberg, etc.

LACHNOSTYLIS Turcz

1. *capensis* Turcz.—Between Galgebosch and Melk R.; Van Stadens R.; Kraggakamma; near P.E.; Zwartkops R.; Elands R.

ANDRACHNE L.

1. *ovalis* Mull. Arg.—Springfields; Georgetown.

CROTON L.

1. *rivularis* E. Mey.—Addo, 1000 to 2000 ft.

JATROPHA L.

1. *capensis* Sond.—Addo, 1000 to 2000 ft.

PHYLLANTHUS L.

1. *verrucosus* Thunb.—Between Galgebosch and Melk R.; Elands R.; near Uit.; Zuurberg Range; Addo.
 2. *incurvus* Thunb.—Between Kraggakamma and Van Stadens Mts.; between Kraggakamma and upper part of Maitland R.; P.E.; Redhouse; Tzamas; near Enon.
 3. *heterophyllus* E. Mey.—P.E.; near the Zwartkops R.; near Uit.

CLUYTIA L.

- †1. *ericoides* Thunb., var. *pachyphylla* Prain—Uit. div.
 2. *brevifolia* Sond.—Van Stadens Mts.; Redhouse.
 ‡3. *laxa* Eckl.—Elands Kloof; Uit.
 †4. *alaternoides* L.—Van Stadens Mts. Var. *brevifolia* E. Mey.—Van Stadens Mts.
 †5. *rubricaulis* Eckl.—Near P.E. Var. *grandifolia* Prain—Algoa Bay.
 ††6. *pulchella* L.—Uit. div.
 †7. *affinis* Sond.—Van Stadens Mts.; P.E.; Zwartkops R.
 †8. *dregeana* Schlecht.—Van Stadens Mts.; Elands R.; near Uit.; Zuurberg.
 †9. *hirsuta* E. Mey.—Zuurberg Range, near Bontjes R., 2000 ft. Var. *robusta* Prain.—Addo.
 10. *heterophylla* Thunb.—Van Stadens Mts.; near Uit.; very common.
 ††11. *daphnoides* Lam.—P.E.; various localities in the Uit. div.

LEIDESIA Mull. Arg.

- †1. *obtusa* Mull. Arg.—Baakens R. valley; Zwartkops R.; near Uit.; Zuurberg Range.

SEIDELIA Baill.

1. *pumila* Baill.—By the Zwartkops R., near Amsterdam Flats.

ACALYPHA L.

- †1. *glabrata* Thunb.—Kraggakamma; Zwartkops R.; between the Kromme R. and Uit.; Addo, 1000 to 2000 ft.
 2. *decumbens* Thunb.—Maitland R., near the lead mine; Zwartkops R. Var. *villosa* Mull. Arg.—Van Stadens Mts.; Zwartkops R.; near Uit.
 †3. *Eckloni* Baill.—Van Stadens Mts.; Zwartkops R.; near Uit.
 4. *Zeyheri* Baill.—Van Stadens Mts.
 †5. *peduncularis* E. Mey.—Zwartkops R.; Bontjes R.; Enon.

RICINUS L.

- †1. *§communis* L.—Redhouse, etc.

ADENOCLINE Turcz.

1. *acuta* Thunb.—Baakens R. valley, Nov.
 ††2. *sessilifolia* Turcz., var. *Zeyheri* (= *pauciflora* var.).—Humewood, Apr.

DALECHAMPIA L.

- ‡1. *capensis* Spreng. f.—Kraggakamma; near P.E.; Tzamas; near Uit.; Enon.

GELONIUM Roxb.

- ‡1. *africanum* Mull. Arg.—Uit.

STENOMERIA Harv.

1. *cordata* Harv.—Galgebosch; near Uit.; by the Coega R. and in the Winterhoek Mts.

CALLITRICHACEAE.

CALLITRICHE L.

- ‡1. **Bolusii* Schonl. et Pax—Uit. dist. Ecklon (*l.c.*, p. 361) simply mentions the occurrence of the genus, which I cannot question as it is found near Grahamstown.

ANACARDIACEAE.

HARPEPHYLLUM Bernh.

- ‡1. **cafrum* Bernh.—Uit.

LOXOSTYLIS Spreng. f.

- ‡1. *alata* Spreng.—Van Stadens, 250 ft., Schlechter 6065.

LAUROPHYLLUS Thunb. (BOTRYCERAS Willd.).

1. *capensis* Thunb.—Van Stadens, MacOwan 1068, Z. 2241, 229, Bolus 1615; Witteklip.

RHUS L.

- †1. *rosmarinifolia* Vahl—P.E.; Uit.
 ‡2. *stenophylla* E. et Z.—Redhouse; Van Stadens, MacOwan 1030; P.E. Var. *brevifolia*.—Van Stadens Mts.
 3. *obovata* Sond.—Redhouse; Uit.
 †4. *tomentosa* L.—Van Stadens, E. and Z. 1109.
 †5. *undulata* Jacq.—Zwartkops R.
 6. **excisa* Thunb.—Zwartkops R.; Bethelsdorp; Sundays R. Var. *pellens*—Zwartkops R.
 †7. *lucida* L.—P.E., Aug.; Baakens R. valley; Uit., ? Z. 39; Humewood; Redhouse.
 †8. **glauca* Desf.—Zwartkops R.
 9. *scoparia* E. et Z.—Humewood; Walmer, Oct.; Uit.
 10. *longispina* E. et Z.—Zwartkops R. and near Addo, Z. 1048, E. et Z. 1115; Despatch.
 †11. *crenata* Thunb.—P.E. Valley, June; Humewood; Uit.
 †12. **dentata* Thunb.—Van Stadens Mts.
 †13. *incana* Mill. (= *Rh. villosa* L. f. and incl. *Rh. pyroides* Burch.)—Van Stadens, Sept.; P.E.; Uit., E. et Z. 1100, 1002.
 †14. *refracta* E. et Z.—Uit., Z. 87.
 †15. *puberula* E. et Z.—Addo, E. and Z. 1108; Van Stadens, Mar.
 †16. *mucronata* Thunb.—Redhouse; Schoenmakers Kop; P.E. Var. *Burmanni*—Van Stadens R.
 †17. *laevigata* L.—Near Uit., Z. 314; Springfields; Redhouse, Mar.
 18. **Eckloniana* Sond.—Zwartkops R.
 †19. *viminalis* Vahl—Van Stadens.
 20. **lancea* L.—Uit.
 21. **discolor* E. Mey.—Van Stadens.

AQUIFOLIACEAE.

ILEX L.

- ††1. **capensis* Sond. et Harv.—Near Uit.

CELASTRACEAE.

PUTTERLICKIA Endl.

- †1. *pyracantha* Endl.—P.E., Nov.; Redhouse.

PTEROCELASTRUS Meisn.

- †1. *variabilis* Sond.—Walmer, Oct.; P.E., Nov.; Redhouse, Mar.
2. **stenopterus* Walp.—Uit.

GYMNOSPORA Wight et Arn. (under CELASTRUS L. in "Flora Cap.").

- ††1. *acuminata* (L.)—Redhouse; Uit. forests, Z. 546.
2. **linearis* (L. f.)—Sundays R.
†3. *polyacantha* (Sond.)—Bethelsdorp; Redhouse; Walmer, Apr.; Zwartkops and Sundays Rs., Z. 956.
4. **Zeyheri* (Sond.)—Uit.
†5. *procumbens* (L.)—Humewood, Aug.; P.E.
†6. *undata* (Thunb.)—Zoutpanshoogde, E. and Z. 932, Z. 2190.
7. *capitata* (E. Mey.)—Redhouse, Aug.
8. **elliptica* (Thunb.)—Zwartkops R. and Van Stadens.
††9. *buxifolia* (L.)—P.E., Nov.; on the banks of the Zwartkops R., E. and Z. 944 (*Celastrus humilis* E. et Z.); *ibid.* E. and Z. 952 (*C. venenatus* E. et Z.); Humewood, Dec.
††10. **angularis* (Sond.)—Van Stadens.
II. *heterophylla* (E. et Z.)—Witteklip, Bolus 9137.
††12. *maritima* Loes.—Schoenmaakers Kop, Mar.; Humewood, Aug.; P.E., May; ? Redhouse, Aug., T.V.P. 2294.
††13. ? *laurinus* (Thunb.)—P.E., Oct., W.K. 99.

CASSINE L.

- ††1. *capensis* L.—Emerald Hill, Mar.; Humewood; Walmer, Apr.; sand-dunes, P.E., Z. 986; Redhouse, Aug.
2. *scandens* E. et Z.—Schoenmaakers Kop, July; Walmer, Apr.; P.E., Aug., Nov.; Zwartkops, Feb.; Addo. Var. *latifolia* Sond.—Van Stadens, Z. 2203.

ELAEODENDRON Jacq.

- †1. *capense* E. et Z.—Van Stadens; Baakens R. Valley, Bolus 2224; Springfields, Nov.; Uit. 2199.
†2. *croceum* DC.—Uit. dist., E. and Z. 983.

MYSTROXYLON E. and Z.

1. *confertiflorum* Tulasne—By the Zwartkops R., E. and Z. 973, 975.
2. *sphaerophyllum* E. et Z.—Van Stadens; Zwartkops R. mouth, Mar.; by the Zwartkops R., E. and Z. 632; Redhouse, May. Var. *littorale* Sond.—Bethelsdorp, Jan.; Humewood, Dec.
3. *pubescens* E. et Z.—By the Zwartkops R., E. and Z. 977.
†4. *euclaeiforme* Sond.—Van Stadens, E. and Z. 971.

PLEUROSTYLIA Wight et Arn. (CATHASTRUM Turcz).

- †1. **capensis* (Turcz)—Between P.E. and Van Stadens Mts.

LAURIDIA E. et Z.

- †1. *reticulata* E. et Z.—Elands R.; P.E.

ICACINACEAE.

APODYTES E. Mey.

- ‡I. *dimidiata* E. Mey.—Bethelsdorp, Jan.; Van Stadens, Z. 2024.

SAPINDACEAE.

ALLOPHYLUS L. (SCHMIDELIA L.)

- ‡I. *decipiens*.—Humewood, Dec.; on hills of Addo, Z. 515 (sub *Rhus undulata* Jacq.).

SMELOPHYLLUM Radlk.

- I. *capense* Radlk. (= *Sapindus capensis* E. et Z.).—Redhouse, Nov.; P.E., July; Van Stadens.

PAPPEA E. et Z.

- I. *capensis* E. et Z. (= *Sapindus Pappaea* Sond.).—In woods by the Zwartkops R., Z. 166; Redhouse.

HIPPOBROMUS E. et Z.

- ‡I. *alata* E. et Z.—Walmer, Oct.; P.E., Sept.; Uit., Z. 149.

DODONAEA L.

- I. **Thunbergiana* E. et Z., var. *linearis*—Near Uit.

MELIANTHACEAE.

MELIANTHUS L.

- I. **comosus* Vahl.—Banks of the Gamtoos R., Uit.

BALSAMINACEAE.

IMPATIENS L.

- I. **capensis* Thunb.—Uit.

RHAMNACEAE.

RHAMNUS L.

- ‡I. *prinooides* L'Herit.—Van Stadens R.; Emerald Hill, Mar.; Redhouse, Mar.; Addo Bush, Z. 545; Uit. dist., E. and Z. 992.

SCUTIA Brongn.

- ‡‡I. *Commersoni* Brongn.—P.E., Aug., Sept.; Uit., Z. 994, 16.

2. *indica* Brongn.—Aloes, Sept.

NOLTEA Reichb.

- ‡‡I. *africana* Rich.—On the banks of the Zwartkops R., Z. 995, 148.

HELINUS E. Mey.

- I. **ovata* E. Mey.—Zuurberg Range.

PHYLICA L.

- I. **rigidifolia* Sond.—Van Stadens Mts.

2. *axillaris* L.—P.E., June; Humewood; Van Stadens, Bolus 1612, MacOwan 1073.

3. *villosa* Thunb.—Baakens R. Valley; P.E., Apr.; Van Stadens.

- ‡4. **paniculata* Willd.—Van Stadens Mts.

5. **Willdenowiana* E. et Z.—Van Stadens Mts.

- †6. *ericoides* Thunb.—Redhouse, June; P.E.

7. *gnidioides* E. et Z.—Redhouse, Apr.; Bethelsdorp; P.E., Galpin 6359, Bolus 1049.

8. *lutescens* Sond.—Van Stadens; Zuurberg.

9. *sp.*—Cape Recife, Jan., T.V.P. 1939.

NOTE.—I cannot always distinguish *Ph. axillaris* and *Ph. villosa*.

AMPELIDACEAE (VITACEAE).

RHOICISSUS Planch.

1. **capensis* (Burm.) Planch.—Uit.
2. *cirrhiiflora* (L. f.) Gilg et Brandt—Redhouse ; Baakens R. ; P.E. ; amongst shrubs near Zwartkops R., E. and Z. 32.
3. *dimidiata* (Thunb.) Gilg et Brandt (= *Cissus sericea* E. et Z.)—Elands R. Mt. ; Van Stadens, Bolus 1543.
4. *digitata* (L. f.) Gilg et Brandt—Elands R. ; P.E.

CISSUS L.

- ††1. *lanigera* Harv.—Redhouse.
- ††2. *cirrhusa* Thunb.—Walmer, Oct. ; Uit.

TILIACEAE.

GREWIA L.

- ††1. *occidentalis* L.—Walmer ; P.E. ; Schoenmaakerskop.
- ††2. *flava* DC.—Redhouse ; woods near Uit.

SPARMANNIA L.

1. **africana* L.—Kraggakamma (*teste* Ecklon).

MALVACEAE.

MALVA L.

- ††1. *§parviflora* L.—Redhouse.

MALVASTRUM A. Gray

- ††1. *capense* Gray et Harv.—P.E.
2. **strictum* Gray et Harv.—Uit.

SIDA L.

1. *longipes* E. Mey.—Uit.
- ††2. *triloba* Cav., var. *pubescens*—P.E. ; Redhouse ; Uit. ; near Uit., 300 ft., Schlechter 2995 (or ? 2495).

ABUTILON Gaertn.

- ††1. *sonneratianum* Cav.—Redhouse, T.V.P. 90 (this equals Ethel West 336, New Brighton ; seems different from typical form in having pilose rather than velvety indument—L.B.) ; P.E. ; Schoenmaakerskop.

PAVONIA L.

1. *praemorsa* Willd.—Near Uit., 400 ft., Schlechter 2595.

HIBISCUS L.

- ††1. *aethiopicus* L.—Van Stadens ; P.E. ; Redhouse. Var. *diversifolius* Haw.—P.E.
- ††2. **diversifolius* Jacq.—Zwartkops R.
3. *Ludwigii* E. et Z.—Redhouse ; Kraggakamma.
- ††4. *pedunculatus* Cav.—Springfields ; P.E. ; Van Stadens.
- ††5. *pusillus* Thunb.—Redhouse ; P.E. ; Zuurberg ; foot of Witteklip.
- ††6. *trionum* L.—Baakens R. valley ; Zuurberg.

STERCULIACEAE.

STERCULIA L.

1. *Alexandri* Harv.—Glen Somers, Winterhoek Kloof ; plentiful on farm Kamaehs, north of Uit. ; Van Stadens, MacOwan 2066.

HERMANNIA L.

1. *candicans* Ait.—P.E., Bolus 3054; Redhouse; near Uit., Schlechter 2507; foot of Witteklip. Var. β *discolor* Harv.—Uit.
2. *cavanillesiana* E. et Z.—Redhouse.
3. **conglomerata* E. et Z.—Near Sundays and Zwartkops R.
4. **filifolia* Linn.—P.E.
- †5. *flammea* Jacq.—P.E.; Redhouse; Uit.
6. **holosericea* Jacq.—Uit.
7. *latifolia* E. et Z., var.—Redhouse.
8. *linifolia* L.—Sandy dunes, P.E., Bolus 2225.
- †9. **hyssopifolia* L.—Uit.
10. *mucronulata* Turcz.—Van Stadens.
11. **pallens* E. et Z.—Uit.
12. **pulverata* And.—Uit.; Sundays R.
- †13. *salvifolia* L.—P.E.; Bethelsdorp; Uit.
14. *stipulacea* Lehm.—Van Stadens, Bolus 2266.
15. *suavis* Presl—Redhouse; Cradocktown, near P.E., Bolus 1888; Aloes; Sundays R.
16. *sulcata* Harv.—Redhouse; near P.E.
- †17. *velutina* DC.—P.E., J.L.D.; Redhouse; Uit.; Kamaehs.
- †18. *saccifera* Turcz (= *Mahernia ovalis* Turcz)—P.E.; near Zwartkops R.; Green Bushes.
19. *filosula* (Harv.).—Redhouse; P.E.
20. *pulchella* (Cav.).—Redhouse; P.E.
- †21. *scalpa* (E. et Z.).—Zwartkops and Sundays Rs.; New Brighton; Cradocktown, near P.E., Bolus 13402.
- †22. *veronicaefolia* (E. et Z.).—Bethelsdorp, T.V.P. 114; Uit.

MELHANIA Forsk.

- †1. **didyma* E. et Z.—Zuurberg Range; Winterhoeksberg, near Van Royen on the Coega R.

DOMBEYA Cav.

- †1. **Dregeana* Sond.—Uit.

GUTTIFERAE (incl. HYPERICINEAE).

HYPERICUM L.

- †1. *Lalandii* Chois.—Van Stadens Mts., Bolus 1610.
2. **aethiopicum* Thunb.—Uit.

OCHNACEAE.

OCHNA Schreb.

- †1. *atropurpurea* DC.—Redhouse, Mar.; Van Stadens, Sept.; Bethelsdorp, June; P.E., June.
- †2. **arborea* Burch.—Uit.

ELATINACEAE.

BERGIA L.

1. **glomerata* Linn. f.—In wet places near the Zwartkops R.

FRANKENIACEAE.

FRANKENIA L.

1. *hirsuta* L. (*capitata* Wedd.), var. *Krebsii* Harv.—Redhouse; Uit., Z. 1060. Var. *laevis* Harv. (*F. laevis* L.)—Mouth of the Zwartkops R., Jan., Z. 663.
2. **pulverulenta* Linn.—Zwartkops R.

VIOLACEAE.

HYBANTHUS Jacq. (IONIDIUM Vent.)

- †1. *capense* (R. et Sch.)—P.E.; Uit.

FLACOURTIACEAE (BIXACEAE).

KIGGELARIA L.

- †1. *Dregeana* Turcz—Uit.

SCOLOPIA Schreb.

- ††1. *Mundtii* Arn.—Uit.; at the edge of Van Stadens forest,
Z. 3785.

‡2. **Ecklonii* Arn.—Van Stadens Mts.

‡3. **Zeyheri* Arn.—Uit.

DORYALIS Arn. et Mey. (= DOVYALIS)

1. *rhamnoides* Burch. et Harv.—Springfields.

2. *rotundifolia* Thunb.—Bethelsdorp; P.E.; Redhouse.

TRIMERIA Harv.

1. *trinervis* Harv.—Van Stadens Mts., MacOwan 903, Z. 724.

ACHARIACEAE (usually placed under PASSIFLORACEAE).

CERATIOSICYOS Nees

- †1. *Eckloni* Nees—Baakens R. valley, May; woods of Uit.

ACHARIA Thunb.

1. *tragioides* Thunb.—Van Stadens, Sept.; Uit.; kloof near
P.E.

§CACTACEAE (various species of *Opuntia* L. naturalized).

PENAEACEAE.

PENAEA L.

†1. **mucronata* L.—Van Stadens R.

†2. *ovata* E. et Z.—Van Stadens; Elands R., Mar.

†3. **myrtoides* L.—Elands R. Mts.

4. **myrtifolia* Endl.—Uit.

†5. **Cneorum* Meerb.—Uit. div.

OLINIACEAE.

OLINIA Thunb.

- ††1. *cymosa* Thunb., var.—Bethelsdorp and P.E., Oct.; Van
Stadens. Var. *acuminata*—P.E., Sept.; Uit.

THYMELAEACEAE (excerpted from the "Flora Capensis," as the Albany Museum specimens are at Kew).

PASSERINA L.

1. *falcifolia* C. H. Wr.—In the channel of the Zwartkops R.;
Van Stadens Mts.

††2. *filiformis* L.—Drift sands, P.E.

††3. *ericoides* L.—Sand-hills and rocky shores near P.E.

††4. *rigida* Wikstr.—Shore near P.E.; Kraggakamma; Zwart-
kops R.

LACHNAEA L.

1. *diosmoides* Meisn.—Van Stadens Mts., 800 ft.

STRUTHIOLA L.

- †1. *striata* Lam.—Uit. div.
2. *ovata* Thunb.—Van Stadens Mts. and to Kraggakamma.
3. *tuberculosa* Lam.—Uit. and Kraggakamma.
4. *parviflora* Bartl.—Uit.; Zuurberg.
- †5. *lucens* Lam.—Near P.E.
6. *argentea* Lehn.—Between Kraggakamma and Van Stadens.

GNIDIA L.

- †1. *oppositifolia* L.—Uit.
2. *styphelioides* Meisn.—Van Stadens to P.E.
3. *variegata* Gandog.—P.E.
4. *coriacea* Meisn.—Van Stadens Mts. and between Enon and Driefontein.
5. *thesioides* Meisn.—Near Uit.; Addo.
6. *obtusissima* Meisn.—Between Sunday and Coega Rs.
- †7. *polystachia* Berg.—P.E. to Uit.
- †8. *nodiflora* Meisn.—Uit.
- †9. *sericea* L.—Uit.

LASIOSIPHON Fresen.

- †1. *linifolia* Decne.—On plains near Uit.; Addo; Zuurberg Range.
- †2. *anthylloides* Meisn.—Van Stadens Mts. and thence to P.E.
- †3. *meisnerianus* Endl.—Uit. div.
4. *oblongifolius* Gandog. (imperfectly known).—P.E. div.

LYTHRACEAE.

LYTHRUM L.

- †1. *§hyssopifolium* L.—Baakens R. valley, Jan.; Uit.

COMBRETACEAE.

COMBRETUM L.

- †1. *salicifolium* E. Mey.—Van Stadens, MacOwan 1088; Uit.; Redhouse, July.

MYRTACEAE.

EUGENIA L.

- †1. *Zeyheri* Harv.—Springfields, Nov.; P.E.; woods on Van Stadens R.
- †2. *capensis* Harv.—Zwartkops R. mouth, Mar.

OENOTHERACEAE.

OENOTHERA L.

- †1. *§nocturna* Jacq.—Redhouse, Oct.
2. *§speciosa* Nutt.—P.E., Nov.
- †3. *§odorata* Jacq.—Walmer, July.

EPILOBIUM L.

- ††1. *§hirsutum* L.—On the banks of the Zwartkops R., June, Z. 545; Van Stadens, Dec.
- ††2. **§tetragonum* L.—Zwartkops R.

HALORRHAGIDACEAE.

LAUREMBERGIA Berg. (SERPICULA Linn.)

- ††1. *repens* L.—Frames Drift, Mar.; Zwartkops R., Jan., Bolus 1521.

GUNNERA L.

1. **perpensa* L.—Kraggakamma (*teste* Ecklon).

MYRIOPHYLLUM L.

- †1. **spicatum* L.—Zwartkops R.

ARALIACEAE.

CUSSONIA Thunb.

- †1. *spicata* Thunb.—Elands R., Dec.; P.E., Nov.
 †2. *thyrsiflora* Thunb.—Walmer, Oct.; P.E.; Zwartkops R. mouth; Uit.

UMBELLIFERAE.

HYDROCOTYLE Tourn.

- †1. *verticillata* Thunb.—Despatch, Apr.; Redhouse, May; banks of Zwartkops R., Z. 434.
 ††2. *asiatica* L.—Redhouse, May; Frames Drift, P.E., Mar.; Van Stadens R., Zuurburg.
 3. *hermanniaefolia* E. et Z.—Humewood, Apr.; P.E.; Walmer; Van Stadens R. Var. *littoralis*—Walmer, Nov.; Humewood, Mar.
 4. *debilis* E. et Z.—Van Stadens; Walmer, Aug.
 †5. *virgata* L.—P.E., June; Humewood, Apr.; Springfields; Van Stadens, Oct., MacOwan 1063, Schlechter 6071; Addo.
 †6. *eriantha* Rich.—Van Stadens, Jan., Bolus 1613.

ALEPIDEA La Roche.

- †1. *ciliaris* La Roche.—Van Stadens Mts., Nov.; Baakens R. Valley, Apr.; Uit., Z. 700, E. and Z. 2187.

APIUM L.

1. *decumbens* E. et Z.—Redhouse, Apr.; P.E.; Schoenmaakers Kop, Apr.
 ††2. *graveolens* L.—Redhouse, Mar.

TRACHYSPERMUM Link

- †1. *rigens* E. et Z.—Hills near the Zwartkops R., Z. 2197, 1047.

CARUM Linn.

- †1. *capense* Sond.—Redhouse, June.
 †2. *hispidum* Benth. et Hook. (= *Ptychotis hispida* Sond.)—Redhouse, Sept.; Baakens R. Valley, Nov.

PIMPINELLA L.

1. **stadensis* Harv.—Van Stadens Mts.; Zuurburg.

SIUM L.

- ††1. *Thunbergii* DC.—Schoenmaakers Kop, Apr.; in beds of Zwartkops R., Z. 518.

RHYTICARPUS Sond.

1. *rugosus* Sond.—By the Zwartkops R., Z. 535, 2371; Redhouse, Feb.

BUPLEURUM L.

- ‡1. *Mundtii* Ch. et Sch.—Humewood, Oct.; Zwartkops.
2. *difforme* L.—P.E. Valley, Jan.; Van Stadens, Z. 2202; Zuurberg.

HETEROMORPHA Cham. et Schlecht.

- ‡1. *arborescens* Ch. et Sch.—Frames Drift, Mar.; P.E., Dec.; Addo and Zwartkops R., Z. 2203, 2204, 581.

LICHTENSTEINIA Cham. et Schlecht.

1. **latifolia* E. et Z.—Van Stadens Mts.; Uit.
2. *interrupta* E. Mey.—Schoenmaakers Kop, Apr.; Redhouse, Mar.; Van Stadens, MacOwan 1078; Zwartkops R., Z. 580, 2212.

ANNESHORHIZA Cham. et Sch. (= STENOSEMIS E. Mey.)

- ‡1. *caffra* (Sond.).—Van Stadens, MacOwan 1041.
- ‡2. *macrocarpa* E. et Z.—Sand-hills on Zwartkops R., Z. 584; Redhouse, May.

FOENICULUM Adans.

- ‡1. *§*officinale* All.—Hills near Zwartkops R. and Van Stadens R.

PITURANTHOS Viv. (DEVERRA DC.)

1. *aphylla* (DC.)—Uit.

SESELI L.

1. **caffrum* Meisn.—Addo.

CNIDIUM Cuss. (SELINUM L.)

- ‡1. *suffruticosum* Ch. et Sch.—P.E. beach, Dec.; Walmer, Oct.; near mouth of Zwartkops R., Z. 2686.

PEUCEDANUM Koch

- ‡1. *capense* Sond., var. *latifolium*—Bethelsdorp, Nov.
2. *Ecklonianum* Sond.—Elands R., Z. 934.
3. **capillaceum* Thunb.—Van Stadens R.
- ‡4. **ferulaceum* Thunb., var. *stadense*—Van Stadens Mts.
5. *cynorhiza* Sond.—Zwartkops R., Z. 2693.
6. *Zeyheri* Sond.—Redhouse, Mar.

CAPNOPHYLLUM Gaertn.

- ‡1. *? africanum* Koch—Redhouse, Dec., T.V.P. 396 (specimen poor).

CAUCALIS L. (TORILIS Adans.)

- ‡1. *C africana* (Spr.) (= *Torilis africana* Spr.)—Near Zwartkops R., Oct., Z. 488.

ARCTOPUS L.

- ‡1. *echinatus* L.—P.E., June and July, Bolus 2247; Redhouse, July.

CONIUM L.

1. **chaerophylloides* E. et Z.—Uit.

HERMAS Linn.

1. *ciliata* Linn.—Van Stadens Mts., Jan., MacOwan 1023, Bolus 1587.

CORNACEAE.

CURTISIA Ait.

- ††1. *faginea* Ait.—Zuurberg.

METACHLAMYDEAE (SYMPETALAE).

ERICACEAE.

ERICA L.

- †1. *curviflora* L.—Van Stadens, Nov.; Redhouse, Mar.
 2. *glandulosa* Thunb.—Van Stadens; Walmer; in the stony channel of the Zwartkops R., May, Z. 126.
 3. *chloroloma* Lindl.—Redhouse, Apr.; Schoenmaake's Kop, Mar.; P.E., July.
 4. *strigilifolia* Salisb.—Redhouse, Mar.; P.E., Mar.
 5. *pectinifolia* Salisb.—Bethelsdorp, Sept.; P.E. Golf Links; Springfields; Van Stadens Mts.
 ††6. *cerinthoides* L.—Bethelsdorp, Nov.; P.E.; Zuurberg.
 7. *tetragona* L. f.—Van Stadens, Oct.
 ††8. *caffra* L.—Zuurberg, Oct.
 9. *cordata* Andr.—Uit.
 10. *petraea* Benth.—Cockscomb, Apr.
 11. *deliciosa* Wendl. f.—Thornhill, July; Van Stadens, Apr.
 12. *decipiens* Spreng.—Van Stadens, Mar.; Baakens R. Valley, Jan.; P.E. Golf Links, May; Bethelsdorp, June; Zuurberg, Mar.
 13. *demissa* Kl.—Van Stadens Mts.
 14. *harveiana* Guthrie et Bolus—Van Stadens Mts.
 15. *unilateralis* Kl.—Redhouse, June; Van Stadens Mts.
 16. *coarctata* Wendl., var. *longipes*—Elands Kloof.
 17. *arachnoides* Kl.—Van Stadens Mts.
 18. *copiosa* Wendl.—Van Stadens Mts.
 19. *glumaeflora* Kl.—Van Stadens Mts.; Humewood, June; Zuurberg, Oct.
 20. *nabea* G. et B.—Van Stadens Mts.
 21. *affinis* Benth.—In the stony channel of the Zwartkops R., Oct.
 †22. *articularis* L.—Uit., Apr., E. and Z. 105.
 †23. *calycina* L.—Van Stadens Mts., Jan., Oct.
 24. *seriphiiifolia* Salisb.—Van Stadens.
 †25. *cubica* L.—Van Stadens, Nov., Dec.
 26. *nemorosa* Kl.—Redhouse, July; Bethelsdorp; Van Stadens Mts.
 27. *floribunda* Lodd.—Elands R., Mar.; Zuurberg, Mar.
 28. *melanthera* L.—Thornhill, July; Walmer; Van Stadens; July, E. and Z.; Walmer, Oct.
 29. *Chamissonis* Kl.—Van Stadens, July; Zuurberg, Oct.
 30. *longipes*, Thunb.—Grass ridge, Uit. div.
 31. **Ethelae* L. Bolus (allied to *E. glandulosa*)—near P.E.

BLAERIA L.

1. *grandis* N. E. Br.—Van Stadens Mts.
 2. *fuscescens* Thunb.—Van Stadens Mts.

COILOSTIGMA Kl.

1. *tenuifolium* Thunb.—Walmer, July; Van Stadens, July, 1000 to 3000 ft., E. and Z.; rocky places on Van Stadens Mts., Jan., Z. 3321.
2. *Zeyherianum* Kl.—Among shrubs on Van Stadens Mts., Jan., Z. 3236; between Kraggakamma and Van Stadens Mts., 500 to 1000 ft., July, E. and Z.; P.E., Aug., T.V.P. 1156.

The above two species do not seem to be sufficiently distinct to be kept separate. The amount of hairiness on the corolla in *tenuifolium* varies considerably; other characters also vary slightly.

THORACOSPERMA Kl.

1. *nanum* N. E. Br.—Van Stadens Mts.

THAMNUS Kl.

1. *multiflorus* Kl.—Cockscomb, Apr.; Thornhill, July; Van Stadens.

SIMOCHEILUS Kl.

1. *barbiger* Kl.—Van Stadens Mts.; Witteklip, Jan.; Baakens R. Valley, Jan.; Redhouse, Apr.; Uit., Feb.
2. *pubescens* Kl.—Near the Elands R.

ANOMALANTHUS Kl.

1. *discolor* Kl.—Hills near P.E., under 500 ft.; Nov.

MYRSINACEAE.

MYRSINE L.

- ††1. *africana* L.—Redhouse, Aug.
2. *gilliana* Sond. [= *Rapanea gilliana* (Sond.) Mez in "Pflanzenreich" 3, IV, 236, p. 376]—Redhouse, July; Hume-wood; P.E.; sand-hills between the mouths of the Coega and Zwartkops Rs.
- ††3. *melanophloeos* R. Br. (= *Rapanea melanophloeos* L.)—Redhouse, Mar.

PRIMULACEAE.

LYSIMACHIA L.

1. **nutans* Nees—Between Hoffmann's Kloof and Driefontein, 1000 to 2000 ft.; Zuurberg Range, near Bontjes R.

ANAGALLIS L.

- ††1. *§arvensis* L.—Redhouse, Oct.; P.E., Aug.

SAMOLUS Linn.

- ††1. *Valerandi* L.—Redhouse, Apr.; P.E., Nov.
- ††2. *porosus* Thunb.—Redhouse, Oct.; P.E.

PLUMBAGINACEAE.

STATICE Willd.

- †1. *linifolia* L.—Redhouse, Oct. Var. *collina*.—Uit.; Zwartkops R., under 100 ft. Var. *β*.—On sand-hills near P.E., under 100 ft.
- †2. *scabra* Thunb.—New Brighton; Coega; on hills near P.E. and dunes near Cape Recife up to 500 ft.

PLUMBAGO Linn.

- †1. *capensis* Thunb.—Van Stadens, Sept.; Zuurberg.

SAPOTACEAE.

SIDEROXYLON L.

- ††1. *inerme* L.—P.E., Mar., Aug.; Redhouse; Aloes.

EBENACEAE.

ROYENA L.

- †1. *cordata* E. Mey.—Bethelsdorp, Sept.
 †2. *pallens* Thunb.—P.E., Sept.; Redhouse.
 3. *lycioides* A. DC.—Despatch, Apr.; Redhouse, Dec.; P.E., Aug.

EUCLEA Murr.

1. *polyandra* E. Mey.—Redhouse, Mar.; Van Stadens Mts.
 2. **acutifolia* E. Mey.—Between Kromme R. and Uit.
 †3. *lanceolata* E. Mey.—Van Stadens Mts.; between Zwartkops and Sundays Rs.
 †4. *multiflora* Hiern—Bethelsdorp, June; Zwartkops R.; Addo Hills.
 †5. *daphnoides* Hiern—Uit.; by the Baakens R.
 †6. *racemosa* L.—Redhouse, Mar.
 7. *undulata* Thunb.—Redhouse, July.

OLEACEAE.

JASMINUM L.

- †1. *angulare* Vahl—P.E., Jan.; Redhouse, Oct.; Uit.; between Enon and the Zuurberg Rang; Addo.
 †2. **multipartitum* Hochst.—Uit. div., Sandfontein.

OLEA Linn.

- †1. **foveolata* E. Mey.—Near Uit.; Addo.
 ††2. *verrucosa* Link—Humewood, Jan.; Redhouse, Oct.; Springfield, Nov.; Addo.
 3. *exasperata* Jacq.—P.E., Sept., Nov.; Redhouse, Oct.; Frames Drift, Mar.; Addo.
 ††4. *capensis* L.—P.E.
 †5. *laurifolia* L. m.—Van Stadens R.; P.E. div., sand-hills by the seashore.
 6. *sp.*—Uit., Jan., T.V.P. 2214.
O. humilis Eckl., published in his "List of Plants Found in the District of Uitenhage," *S.A. Quart. Journ.*, 1830, p. 370, is, judging from the description, the same as *O. exasperata* Jacq.

SALVADORACEAE.

AZIMA L.

1. *tetracantha* Lam.—Redhouse, Nov.

LOGANIACEAE.

GOMPHOSTIGMA Turcz.

1. **scoparioides* Turcz.—By the Sundays and Coega Rs.

NUXIA Lam.

- †1. *floribunda* Bth.—Van Stadens, Aug.; Kraggakamma, E. and Z.; Zwartkops R.

CHILIANTHUS Burch.

1. *arboreus* A. DC.—Between Galgebosch and Melk R.; Van Stadens R.; on banks of Zwartkops and Bushmans Rs.
 2. **dysophyllus* A. DC.—Uit. div.

BUDDLEIA L.

1. **salviifolia* Lam.—Between Galgebosch and Melk R. ; banks of the Zwartkops R.

STRYCHNOS L.

1. **Atherstonei* Harv.—Kraggakamma.

I do not know which plant Ecklon means by his *Logania capensis* (S.A. Quart. Journ., 1830, p. 371), found in the woods of the Zuurberg, near Bontjes River at an altitude of 1000 ft. It flowers in Nov. The diagnosis is not detailed enough to recognize the genus. It is a shrub with trichotomous four-angled branches and is briefly characterized as follows: "Foliis ovatis-oblongis perfoliatis utrinque laevibus corymbis terminalibus trichotomis."

GENTIANACEAE.

SEBAEA Soland.

- †1. *minutiflora* Schinz—Humewood, Oct. ; Walmer, Oct.
 2. *sedoides* Gilg—P.E., Sept.
 3. *Zeyheri* Schinz—P.E., Aug.
 4. *macrostigma* Gilg—Van Stadens, Oct.
 †5. *crassulaefolia* Cham.—Van Stadens.
 6. **fastigiata* A. W. Hill—Van Stadens Mts.
 7. *Dregei* Schinz—Van Stadens, Nov. ; Zuurberg, Mar.
 8. *pseudobelmontia* Schinz *n. sp.*—Humewood, Sept., T.V.P. 1050. Does not seem distinct from *S. intermedia* Schinz.

CHIRONIA L.

- ††1. *baccifera* L.—Bethelsdorp, Jan.
 †2. *peduncularis* Lindl.—P.E. Valley ; near Uit.
 3. *serpyllifolia* Lehm.—Near Zwartkops R., below 100 ft. Var. *laxa* Gris.—Redhouse, Dec.
 †4. *maritima* Eckl.—Redhouse, Apr.
 5. *tetragona* L.—Frames Drift and Bethelsdorp ; Van Stadens ; P.E. ; Humewood, Jan.
 6. **melampyrifolia* Lam.—Van Stadens Mts. ; near P.E.

VILLARSIA Vent.

- †1. **ovata* Vent.—Zuurberg Range, 2500 ft.

LIMNANTHEMUM S. M. Gmel.

1. *thunbergianum* Griseb.—Springfields.

APOCYNACEAE.

CARISSA L.

- †1. *Arduina* Lam.—P.E. Valley, Sept., Nov. ; Redhouse, Dec. ; Zuurberg Range at Bontjes R.

There are two distinct varieties of this species, which Ecklon distinguished as two species in the Uit. dist. (see "On the Flora of Uitenhage," by Ecklon in S.A. Quart. Journ., 1830, p. 372). One has blackish sour fruit, the other bears red edible fruit ; the former was called *Arduina haematocarpa* Eckl., the latter *A. erythrocarpa* Eckl.

ACOKANTHERA G. Don

- †1. *venenata* G. Don—Springfields ; Zuurberg ; fruit in Jan.

GONIOMA E. Mey.

1. *Kamassi* E. Mey.—Van Stadens, Sept., Dec. ; also in other forest patches.

PACHYPODIUM Lindl.

1. *bispinosum* DC.—Redhouse, Dec. ; P.E. ; Loerie R.
2. *succulentum* DC.—Redhouse, Dec. ; Uit. ; P.E., Feb. ; Loerie R.

ASCLEPIADACEAE.

RAPHIONACME Harv.

1. *Zeyheri* Harv.—P.E., Nov. ; Redhouse, Dec.

SECAMONE R. Br.

1. *Alpini* Schult.—P.E. Valley, Nov. ; on the sand-hills along the coast ; Van Stadens Mts. ; near Uit.
2. *frutescens* Decne.—Redhouse, July, T.V.P. 1132 ; Uit., Schlechter 2532 ; Zuurberg Range on the Bontjes R.

ASTEPPHANUS R. Br.

1. *marginatus* Decne.—Humewood, Apr.

MICROLOMA R. Br.

- †1. *lineare* R. Br. (*M. tenuifolium* K. Schum.)—Bethelsdorp, Nov. ; Baakens R.

WOODIA Schlechter

1. **mucronata* N. E. Br.—Uit. ; Addo.

XYSMALOBIMUM R. Br.

1. **Zeyheri* N. E. Br.—Van Stadens Mts.
2. *undulatum* R. Br.—Bethelsdorp, Sept.

SCHIZOGLOSSUM E. Mey.

1. *cordifolium* E. Mey.—P.E., Aug. ; Van Stadens, Sept.
2. *linifolium* Sch.—Redhouse, Aug.
3. *heterophyllum* Sch.—Walmer, Oct.
4. *biflorum* Sch.—P.E., Nov.
5. *Bowkeræ* N. E. Br.—Redhouse, Nov.
6. *addoense* N. E. Br.—Addo.

ASCLEPIAS L.

1. *expansa* Sch.—Zwartkops R. ; Van Stadens Mts., Dec.
2. **peltigera* Sch.—Van Stadens Mts
3. ? *fruticosa* Linn.—Humewood, Apr., T.V.P. 2053 (poor specimen).
4. **physocarpa* Sch.—Zwartkops R.
5. *rotundifolia* Mill.—Bethelsdorp, June ; Baakens R.
6. *dregeana* Sch.—Walmer, Sept.
7. *crispa* Berg—Van Stadens, Sept., Schlechter 6077 ; P.E., June ; Redhouse, T.V.P., Nov. ; sandy plains near Uit.
8. *albens* Sch.—Zuurberg, near Coerney.

PACHYCARPUS E. Mey.

1. *dealbatus* E. Mey.—Bethelsdorp, Jan.
2. *grandiflorus* E. Mey.—Van Stadens Mts. ; Frames Drift, Mar. ; near P.E. ; round Uit. ; near Addo.

GLOSSOSTEPHANUS E. Mey.

- I. **linearis* E. Mey.—Van Stadens R.

PENTARRHINUM E. Mey.

- I. **insipidum* E. Mey.—Near Enon; Klein Winterhoek.

CYNANCHUM L.

- I. **intermedium* N. E. Br.—Near P.E.

†2. *africanum* R. Br., var. *crassifolium* N. E. Br.—Humewood, July; P.E., Feb.; Redhouse, Apr.; Uit.

†3. *obtusifolium* L.—P.E., Oct.; near Uit.; P.E., Feb.; Redhouse, Apr.; Uit.

4. *capense* Thunb.—Van Stadens, Sept.; amongst shrubs near Uit.

5. *sarcostemmaoides* K. Schum.—Redhouse, Aug.; Despatch; hills between Zwartkops and Sundays Rs.; near Uit.

SARCOSTEMMA R. Br.

- I. *vininale* R. Br.—Redhouse, Oct.; Despatch; Uit.; Addo.

TYLOPHORA R. Br.

I. *umbellata* Sch.—Springfields, Jan.

2. **badia* Sch.—Uit div.

3. **syringaeifolia* E. Mey.—Galgebosch.

4. **lycioides* Decne.—Near Enon.

MARSDENIA R. Br.

- I. **floribunda* N. E. Br.—Zuurberg Range.

FOCKEA Endl.

- I. *glabra* Decne.—Redhouse, Mar., Nov.; Uit.; near the Zwartkops saltpan.

TENARIS E. Mey.

- I. **rubella* E. Mey.—Addo.

CEROPEGIA L.

I. *stapeliaeformis* Haw.—Redhouse, Oct.

2. *carcosa* E. Mey.—Redhouse, Apr.; Uit., 300 ft. Schlechter 2494.

3. *hastata* N. E. Br.—Redhouse, June; Bethelsdorp, June.

4. *Patersoniae* N. E. Br.—Redhouse, Sept., June.

5. *Schonlandii* N. E. Br.—Redhouse.

BRACHYSTEMMA R. Br.

I. *decipiens* N. E. Br.—Redhouse, Sept.

2. **Schonlandianum* Sch.—Dry stony places in a valley near Uit.

3. **comptum* N. E. Br.—Hills by the Zwartkops R.

4. **Zeyheri* N. E. Br.—Near Uit.; stony places near the Zwartkops R.

5. **undulatum* N. E. Br.—In fissures of rocks at Tzamas, near Uit., 400 ft.

ANISOTOMA Fenzl

- I. **cordifolia* Fenzl—Van Stadens Mts.

HUERNIA R. Br.

1. *barbata* Haw.—Sundays R., north of Uit., Apr.
2. *primulina* N. E. Br.—Redhouse, May.
3. *Thureti Cels.*—P.E., Mar.

STAPELIA L.

1. *desmetiana* N. E. Br.—Near Zwartkops Station, June ;
Zuurberg, Mar.
2. *ambigua* Mass.—Barkly Bridge Station.
3. *grandiflora* Mass.—Redhouse, May ; P.E., Jan.
4. *conformis* N. E. Br.—Cockscomb Mts.
5. *verrucosa* Mass.—P.E., Mar., Apr. ; Bethelsdorp, Nov.
6. *pulchella* Mass.—Near the banks of the Zwartkops R., in
the vicinity of Zwartkops Station ; sand-dunes along
the coast south of Port Elizabeth.
7. *sp.*—P.E., Jan., J.L.D. 565.

DÜVALIA Haw.

1. *Pillansii* N. E. Br.—Redhouse, June.
2. *Corderoyi* N. E. Br.—Redhouse, Mar., June.
3. *elegans* Haw.—P.E., Mar.
4. *reclinata* Haw.—Redhouse, Mar.
5. *hirtella* Sw., var.—Redhouse, Aug.

CONVOLVULACEAE.

IPOMAEA L.

- †1. *simplex* Thunb.—Redhouse, Mar. ; between Lo rie R. and
Galgebosch.
- †2. *biloba* Forsk.—Baakens R. valley, Jan.
- †3. *ficifolia* Lindl.—Redhouse ; Uit. ; Addo ; between Enon
and the Zuurberg Range ; Klein Winterhoek Mts.,
below 1000 ft.
- †4. *palmata* Forsk.—Emerald Hill, Mar.

CONVOLVULUS L.

- †1. *hastatus* Thunb.—P.E., Oct. ; Bethelsdorp, Sept. ; Red-
house, June, T.V.P. 1088 (has larger flowers than the
type).
2. **multifidus* Thunb.—Uit. div., near Loerie R. ; Grassridge,
near Uit.
3. *filiformis* Thunb.—Near the Zwartkops R. ; “ T.V.P. 146,
from the P.E. Valley, has the angular stem of *C. hastatus*
Thunb., but the villous sepals of *C. filiformis.*”—L. B.
- †4. *farinosus* L.—Uit., Apr.
- †5. *capensis* Burm., var. *plicatus*—P.E., May.

DICHONDRA Forst.

- ††1. *repens* Forst.—P.E., Oct.

FALKIA L.

- †1. *repens* L. f.—Redhouse, Aug. ; P.E., Oct., Nov.
2. **dichondroides* Bak.—Near Enon, below 1000 ft.

CUSCUTA Tourn.

- †1. **africana* Thunb.—At the foot of the Van Stadens Mts.
2. *schinensis* Lam. (*fide* Kew)—Redhouse, Apr.

BORAGINACEAE.

CORDIA L.

- †1. **caffra* Sond.—Van Stadens R.

EHRETIA L.

- †1. *hottentotica* Burch.—P.E., Oct.; Redhouse, Apr., Sept.; Uit., 50 to 500 ft.; in the forests of Addo; Enon; Zuurberg, Mar.

HELIOTROPIUM L.

1. *currassavicum* L.—Redhouse, Nov.; Uit., 50 to 500 ft., Oct.
 2. **ovalifolium* Forsk.—Enon.
 3. **supinum* L.—Valley of the Zwartkops R.

CYNGLOSSUM L.

- ††1. **Senerve* Turcz.—Near Uit.
 †2. **Smicranthum* Desf.—Van Stadens Mts., under 1000 ft.

ECHINOSPERMUM Swartz

1. *§Lappula* Lehm.—Redhouse, Aug.; on the hills by P.E. and by the Zwartkops R.

ANCHUSA L.

1. *capensis* Thunb.—P.E., Dec.

MYOSOTIS L.

1. *intermedia* Link.—Van Stadens, Oct.

LITHOSPERMUM L.

1. *papillosum* Thunb.—Zuurberg, Oct.
 2. **scabrum* Thunb.—Zuurberg.

LOBOSTEMON Lehm.

- †1. *argenteus* Buek—Uit., Oct.
 2. **trigonus* Buek—Between Coega and Sundays R.; Zuurberg Range.
 3. *obtusifolius* DC.—P.E., Sept. to Nov.; Redhouse, Sept.; Coega, Oct.
 4. **scaber* DC.—Van Stadens Mts.; Algoa Bay; near Uit.
 5. **sphaerocephalus* Buek—Van Stadens Mts.

ECHIUM L.

1. *§violaceum* L.—P.E., Oct.
 2. *§sp.*—Redhouse, Dec., T.V.P. 227.

VERBENACEAE.

STILBE Berg

1. **ericoides* L.—Algoa Bay.
 2. *sp.*—? *phylicoides* A. DC.—Cape Recife, Jan., T.V.P. 1939.

LANTANA L.

- †1. *salvifolia* Jacq.—Redhouse, Mar.; Aloes, Sept.; Uit., 50 to 500 ft.

BOUCHEA Chamisso

- †1. *cuneifolia* Schauer—Redhouse, Sept.

PRIVA Adans.

1. **leptostachya* Juss.—Grassy mountainous places near Enon.

VERBENA L.

- ††1. *§bonariensis* L.—Redhouse, Mar.

LABIATAE.

BECIUM Lindley.

1. *burchellianum* N. E. Br.—Near Uit.; Hougham Park, Coega, May.

PLECTRANTHUS L'Herit.

1. *spicatus* E. Mey.—Hill flats near Bethelsdorp; Kamahs, June.
2. **laxiflorus* Benth.—Uit.
3. *Thunbergii* Benth.—Near Uit., Schlechter 2501; woods of Addo and by the Zwartkops R.
4. *strigosus* Benth.—Redhouse, Aug.; Gamtoos R., July.
5. *hirtus* Benth.—P.E., Jan.; near Uit., Schlechter 2599.

MENTHA L.

1. **longifolia* Huds., sub-sp. *capensis* Briq.—Uit. div., by the Witte R. near Enon.
- †‡2. **aquatica* L.—Around Kraggakamma.

SALVIA L.

- †1. *aurea* L.—Humewood, Oct.; Schoenmaakers Kop, Oct.
2. **rugosa* Thunb.—Hills of Uit.
3. *clandestina* L.—P.E., Oct.; North End Hill, P.E., Sept.
4. *scabra* L.—Van Stadens R.; P.E.; New Brighton.
5. **triangularis* Thunb.—Enon.
- †‡6. **obtusata* Thunb.—Valley and hills of the Zwartkops R., 50 to 500 ft.
7. **lasiostachys* Benth.—Uit. div.
- †‡8. *stenophylla* Benth.—Redhouse, Mar.
9. *runcinata* L.—Redhouse, Oct.; P.E., Nov.
10. *repens* Benth.—Zuurberg Range.
11. **rudis* Benth.—Zuurberg Range.

STACHYS L.

- †1. **Thunbergii* Benth.—Van Stadens Mts.
2. *tubulosa* MacOwan—Zuurberg, Schlechter 6605.
- †3. *aethiopica* L.—Van Stadens Mts.; P.E., June; Redhouse, Apr., Aug.; near Uit., 300 ft., Apr., Schlechter 2502.
4. *scabrida* Skan—Van Stadens Mts.; Baakens R. valley; Zuurberg.
5. *subsessilis* Burch.—Redhouse, Oct.; Cradockplace, P.E.; 100 ft.; between Kraggakamma and Van Stadens, 500 to 1000 ft., Dec.
6. **Priori* Skan—Algoa Bay.
7. **hyssopioides* Burch.—Zwartkops R., 1500 to 3000 ft., Dec.
8. *obtusifolia* MacOwan—Schoenmaakerskop.
9. *leptoclada* Berg.—Zuurberg.

MARRUBIUM L.

1. *§vulgare* L.—Addo.

BALLOTA Linn.

1. **africana* Benth.—Olivenhout Kloof, near Enon.

LEUCAS Burm.

1. *martinicensis* R. Br.—Redhouse, Aug.

LASIOCORYS Benth.

1. *capensis* Benth.—P.E., Oct.; Redhouse, Dec.; Cradockplace, 100 ft., May; Uit., 50 to 500 ft., Jan., 300 ft., Apr., Schlechter 2486.

LEONOTIS R. Br.

- ††1. *Leonurus* R. Br.—Elands R. ; P.E., May, Zuurberg.
2. *Leontitis* R. Br.—P.E., Aug., J.L.D. ; Van Stadens Mts. ; between Van Stadens Mt. and Bethelsdorp ; Addo.
3. **mollis* Benth.—Addo ; Zuurberg Range ; banks of the Coega R.
- †4. *dysophylla* Benth.—Frames Drift, Mar.
- †5. *dubia* E. Mey.—Humewood, Aug. ; Enon.
6. **intermedia* Lindl.—Algoa Bay.
7. **Westae* Skan—P.E.

TEUCRIUM L.

- †1. *africanum* Thunb.—P.E., Mar., Sept. ; Redhouse, Dec.
- †2. *capense* Thunb.—Near Uit., 250 ft., Schlechter 2591.

AJUGA L.

1. **Ophrydis* Burch.—Zuurberg Range ; Van Stadens Mts.

SOLANACEAE.

SOLANUM L.

- ††1. *snigrum* L.—Redhouse, Mar. ; Zuurberg.
- †2. **aggregatum* Jacq.—Addo Bush and banks of Zwartkops R., 50 to 500 ft.
- †3. *quadrangulare* Thunb.—Redhouse, Apr., Aug. ; Schoenmaakers Kop, Apr. ; P.E., Apr.
- †4. *giganteum* Jacq.—Van Stadens Pass, at end near the lead mine ; Zuurberg.
- †5. *aculeastrum* Dun.—Zuurberg, Mar.
6. *rigescens* Jacq.—P.E., Nov. ; Zwartkops R., 50 to 500 ft. ; Enon.
- ††7. *sodomeum* L.—Walmer, Apr. ; Redhouse, Mar.
- †8. **aculeatissimum* Jacq.—Van Stadens Mts., under 1000 ft.
- ††9. *tomentosum* L.—Redhouse, Dec. ; P.E., Feb.
10. *sp.* [near *S. acanthoideum* E. Mey. (L. B.)]—Walmer, Apr., T.V.P. 1026.

PHYSALIS L.

1. **pubescens* L. (= *P. peruviana* Mill ?)—Addo.

WITHANIA Pauq.

- ††1. *somnifera* Dun.—Elands R., Nov. ; P.E., Nov. ; Zwartkops R., 50 to 500 ft.

LYCIUM L.

1. *campanulatum* E. Mey.—P.E. ; Redhouse, Apr.
- †2. *tetrandrum* Thunb.—Redhouse, Apr., Aug. ; P.E., W.K. 76.
3. **oxycladum* Miers—Uit. div.
4. *tenuis* Willd.—P.E., Oct. ; Walmer, May ; Redhouse, Aug.
5. **Kraussii* Dunal—Uit. div.
6. *cinereum* Thunb.—Redhouse, Mar.
- †7. ? *afrum*, var. *erectum*—Uit., Feb., E. and Z.
8. *sp.*—Redhouse, Apr., T.V.P. 674.

DATURA L.

- ††1. *stramonium* L.—Schoenmaakers Kop, Apr., etc.

NICOTIANA L.

- ††1. *glauca* Grah.—P.E., Jan. ; Zuurberg.

CESTRUM L.

1. *viride* Moric.—Grows spontaneously in gardens.

SELAGINACEAE (placed frequently under SCROPHULARIACEAE).

HEBENSTREITIA L.

- †1. *integrifolia* L.—Redhouse, Mar.; Bethelsdorp, Nov.; Humewood, Sept.
- †2. *cordata* L.—Bethelsdorp, Jan.; Zwartkops R. and Van Stadens R. mouth; P.E.

DISCHISMA Choisy

- †1. **erinoides* Sweet—P.E.
- †2. *ciliatum* Choisy—P.E.; Walmer, Oct.

WALAFRIDA E. Mey.

- I. *nitida* E. Mey.—Bethelsdorp, Sept.; Baakens R. valley, Aug.; P.E., Sept.; Thornhill, July; Van Stadens, Oct., E. and Z.; Earn Cliff, near P.E., 150 ft., May, Galpin 6354.
- 2. **zuurbergensis* Rolfe—Zuurberg Range, 2000 ft.
- 3. *Zeyheri* Rolfe—Redhouse, June.
- 4. *rotundifolia* Rolfe—Van Stadens, 500 to 1000 ft.; Frames Drift, Feb.; P.E., June, Dec.
- 5. *cinerea* Rolfe—P.E., Sept.
- 6. *MacOwani* Rolfe—Aloes, Sept.
- 7. *decipiens* Rolfe—Addo, 1000 to 2000 ft., July; on the hills above the Elands R.; Uit., etc.
- 8. *polycephala* Rolfe—Redhouse, Sept.
- 9. **witbergensis* Rolfe—Zwartkops R.
- 10. *micrantha* Rolfe—Uit., Nov.; Despatch, May; Aloes, Sept.; Cradockplace, P.E., 100 ft., May; Redhouse, Oct.
- 11. **squamrosa* Rolfe—Coega Kop.
- 12. *geniculata* Rolfe—Uit., 50 to 500 ft.; near Uit., Schlechter 2590; Redhouse, Oct.; foot of Witteklip.

SELAGO L.

- I. *Forbesii* Rolfe—P.E., June; Humewood, Aug.; Drift Sands, P.E., Nov.
- 2. **canescens* L.—Near P.E.
- 3. *Zeyheri* Rolfe—Redhouse, June.
- 4. **luxurians* Choisy—Van Stadens Mt.
- 5. *Dregei* Rolfe—Emerald Hill, June; Cradockplace, P.E., May.
- 6. *glomerata* Thunb.—Springfields, Jan.; Kamaehs, Nov.
- ††7. *corymbosa* L.—Redhouse, Mar.; Uit., 50 to 500 ft., Jan.; Van Stadens Mts. and Bethelsdorp; Zuurberg.
- 8. *racemosa* Bernh.—Zuurberg, 5500 ft., Schlechter 6582 (from Uit. div.?).
- 9. **herbacea* Choisy—Algoa Bay.
- 10. *decumbens* Thunb.—P.E., Nov.; Humewood, June.

SCROPHULARIACEAE.

APTOSIMUM Burch.

- I. **depressum* Burch.—Foot of the Winterhoek Mts.

PELIOSTOMUM Benth.

- I. **origanoides* E. Mey.—Winterhoek Mts.

ALONSOA Ruiz et Pavon

- I. **peduncularis* V. Wettst.—In wooded gorges near Uit.

DIASCIA Link et Otto

1. *cuneata* E. Mey.—Redhouse, May.
2. *capsularis* Benth.—Addo; Zuurberg.

HEMIMERIS Linn. f.

- †1. *montana* L.—P.E. Valley, Sept., Oct.; Humewood, Sept.

NEMESIA Vent.

- †1. *barbata* Benth.—Walmer, Nov.; P.E., Sept.
- ‡2. *floribunda* Lehm.—Walmer, Oct.; Redhouse, Sept.; Addo (Redhouse, Nov., T.V.P. 316—? a starved form of *N. floribunda* Bth.).
- ‡‡3. *foetens* Vent.—Baakens R. valley, Feb., Sept.; Uit., Schlechter 2540.
- ‡4. **melissaeifolia* Benth.—Near Uit.

DICLIS Benth.

- †1. *reptans* Benth.—Zuurberg, Oct., March.

HALLERIA L.

- ††1. *lucida* L.—Van Stadens, Aug.; P.E., July; Zuurberg, Mar.
- †2. *elliptica* Thunb.—Van Stadens, Sept.

FREYLINIA Spin.

1. *oppositifolia* Spin.—Springfields, Jan.
2. *undulata* Benth.—Zuurberg, Oct.

MANULEA L.

1. *bellidifolia* Benth.—Redhouse, Oct.
2. *obovata* Benth.—P.E., June, Oct.; Humewood, Nov.; Walmer, Oct.; on the hills of Kraggakamma, Jan.
- ‡3. *parviflora* Benth.—Walmer, Miss E. M. Kensit in Herb. Bolus 6486.

SUTERA Roth

1. **pauciflora* O. Kuntze—Kraggakamma.
2. *campanulata* O. Kuntze—Humewood, May; P.E., June; Despatch, June.
3. **intertexta* Hiern—Algoa Bay.
4. **halimifolia* O. Kuntze—Uit. div.
- ‡5. *polyantha* O. Kuntze—Near Uit., 250 ft., Apr., Schlechter 2538.
6. *marifolia* O. Kuntze—Van Stadens, Dec.; Springfields, Mar.
- ††7. *brachiata* Roth—Redhouse, Mar.
- †8. **linifolia* O. Kuntze—Uit.
9. **cordata* O. Kuntze—Kraggakamma.
- ‡†10. *pinnatifida* O. Kuntze—Redhouse, July; on hills of Addo; Bethelsdorp, Nov.; P.E. Valley, Nov.; near Uit., Schlechter 2589; amongst shrubs on the banks of the Zwartkops R., Jan. Var. *subcanescens*—Amongst the bushes near Zwartkops R.
11. *foliolosa* Hiern—Uit., 50 to 500 ft., Jan.; P.E., June.
12. **phlogiflora* Hiern—Zuurberg Range.
- ‡†13. *atropurpurea* Benth.—Uit., Nov.; on hills of Addo.
14. *aspalathoides* Benth.—Uit., Feb.; between Coega and Sundays Rs., 500 to 5000 ft.
15. *microphylla* Hiern—Drift Sands, P.E., Sept., Nov.; Redhouse, July; Uit.
16. *argentea* Hiern—Baakens R. valley, Nov.; Bethelsdorp, Nov.

PHYLLOPODIUM Benth.

1. *cuneifolium* Benth.—On hills by P.E., Oct. ; Nov., E. and Z. 743 ; P.E., Nov. ; Schoenmaakers Kop, Apr. ; Redhouse, July ; Uit.
- †2. **bracteatum* Benth.—Banks of Zwartkops R. ; near Uit.
3. *diffusum* Benth.—Uit., Schlechter 2511.
- †4. *capitatum* Benth.—P.E., Jan., July ; Humewood, Sept.

POLYCARENA Benth.

- †1. **capillaris* Benth.—Uit. div.

ZALUZIANSKYA F. W. Schmidt

- †1. *lychnidea* Walp.—Bethelsdorp, Sept.
- ††2. *capensis* Walp.—Humewood, Sept. ; Uit., Schlechter 2518 ; between Coega and Sundays Rs., 500 to 1000 ft.
3. **longiflora* Walp.—Van Stadens.
- †4. *divaricata* Benth.—Sundays R., Sept.
5. *peduncularis* Benth.—Redhouse, Sept.

LIMOSELLA L.

- †1. *capensis* Thunb.—P.E., Nov. ; Redhouse, Sept.
- †2. **grandiflora* Benth.—Zwartkops R.

ILYSANTHES Rafin.

- ††1. *riparia* Rafin.—Redhouse, Feb. ; in channel of Zwartkops R.

VERONICA Tournef.

1. *§Anagallis* L.—Uit. div., Z. 106 ; Zwartkops R.

MELASMA Berg

- ††1. *scabrum* Berg—Van Stadens, Jan., MacOwan 197 ; Kraggakamma ; P.E.
- †2. *capensis* Hiern—P.E., Nov. ; Redhouse, Aug., Sept. ; Uit.
- ††3. *sessiliflorum* Hiern—Frames Drift, Mar. ; P.E. ; Zuurberg, Mar.

STRIGA Lour.

- †1. *orobanchoides* Benth.—Near the Zwartkops R. ; P.E.
- †2. **Thunbergii* Benth.—Uit. ; Addo ; Van Stadens.

SOPUBIA Hamilt.

- †1. *simplex* Hochst.—Van Stadens, Dec.

BOPUSIA Presl

- †1. *scabra* Thunb.—Walmer and Frames Drift, T.V.P. 2178 ; Van Stadens, Nov.

BUCHNERA L.

- †1. *dura* Benth.—Walmer, Oct. ; Zuurberg.

CYCNIUM E. Mey.

- †1. *adonense* E. Mey.—Addo.

RHAMPHICARPA Benth.

- †1. *tubulosa* Benth.—Kraggakamma, Dec. ; marshy places in the channel of the Zwartkops R.

HARVEYA Hook.

- ††1. *purpurea* Hook.—Walmer, Oct. ; Redhouse, Oct., Dec. ; Uit., 50 to 500 ft., Nov.
2. **pauciflora* Hiern—Van Stadens Mts.
3. *hyobanchoides* Schlechter—Walmer, Oct. ; P.E., Aug. ; Bethelsdorp, Sept.

HYOBANCHE L.

- †1. *sanguinea* Benth.—P.E., Sept. ; Redhouse, Oct., Nov.

BIGNONIACEAE.

TECOMARIA Spach

- ‡1. *capensis* Spach—Thickets near Zwartkops R., Schlechter 2592; Enon.

RHIGOZUM Burch.

1. *obovatum* Burch.—Coegakamma Kloof; near the Winterhoek Mts.; between Coega R. and Sundays R., 500 to 1000 ft.; common in the Addo Bush.

Ecklon (*l.c.*, p. 368) mentions *Martynia longiflora* Linn. from the hills near Uit. This name is a synonym of *Rogeria longiflora*, J. Gay, a plant which is not likely to occur in the Uit. dist. I cannot make any suggestion as to what other plant Ecklon may have meant.

GESNERIACEAE.

STREPTOCARPUS Lindl.

- ‡1. *Rexii* Lindl.—P.E., Dec.

LENTIBULARIACEAE.

UTRICULARIA L.

- ‡1. *capensis* Spreng.—Van Stadens, Dec.
 2. **Ecklonii* Spreng.—Near the mouth of the Zwartkops R.
 ‡3. **stellaris* Linn.—By the Zwartkops R.
 4. *exoleta* R. Br.—Redhouse, Dec.

ACANTHACEAE.

THUNBERGIA L.

1. *capensis* Retz.—P.E., Nov.; between Van Stadens R. and Galgebosch; between Uit. and Drostdy Farm; between Kraggakamma and the upper part of the leadmine river.
 ‡2. *dregeana* Nees—Springfields, Nov.; Zwartkops R.; Sundays R.

RUELLIA R. Br.

- ‡1. **ovata* Thunb.—Enon.

CHAETACANTHUS Nees

- ‡1. *Persoonii* Nees—P.E., Aug.; Redhouse, May; Winterhoeksbergen, 1000 to 3000 ft., Jan.; near Uit., 300 ft., Schlechter 2545; between Van Stadens R. and Galgebosch; Loerie R.
 ‡2. *glandulosus* Nees—P.E.; Redhouse, Oct.

BLEPHARIS JUSS.

- ‡1. *molluginifolia* Pers.—Redhouse, Mar.
 2. **Ecklonii* C. B. Cl.—On karroo-like hills by the Sundays R.
 3. *hirtinervia* T. And.—P.E., July; Redhouse, Oct.
 ‡4. **pruinosa* Engl.—Uit.
 5. *procumbens* Pers.—P.E., Jan., July; Redhouse, Aug., Oct.; by the Sundays and Coega Rs.

CRABBEA Harv.

1. **nana* Nees
 2. **hirsuta* Harv.

Both these are recorded in the "Flora Capensis," V. 1, pp. 38, 39, from the Zuurberg Range just outside our area, the first also "between Galgebosch and Melk R., Burchell 4765 (?)," which would be in the Uit. div. and not in the Humansdorp div. as stated in the "Flora Capensis."

BARLERIA L.

1. *pungens* L. f.—Redhouse, Feb. ; Schoenmaakers Kop, Apr. ; Cradockplace, 100 ft., May ; New Brighton, Jan.
2. **irritans* Nees—By the Sundays R., 1000 ft. ; hills by the Zwartkops R.
- ‡3. *obtusa* Nees—P.E., June ; Schoenmaakers Kop, Apr. ; Springfields, Mar.
4. **jasminiflora* C. B. Cl.—Between Galgebosch and Melk R.

JUSTICIA L.

1. *capensis* Thunb.—Redhouse, Nov. ; Cannon Hill, Uit. ; near the mouths of the Coega and Zwartkops Rs. ; Addo, June.
2. *cuneata* Vahl—Redhouse, Aug.
- ‡3. *pulegioides* E. Mey.—Redhouse, Mar., Aug.
4. **mutica* C. B. Cl.—In wooded situations in Uit. div.
5. **orchioides* L.—Near P.E. ; near Enon ; Commando Kraal.

MONECHMA Hochst.

1. *incanum* C. B. Cl.—Redhouse and Schoenmaakers Kop, Apr.
2. **acutum* C. B. Cl.—Between Galgebosch and Melk R. ; near Uit.
3. *foliosum* C. B. Cl.—Near Roodeval.

ISOGLOSSA Oerst.

- ‡1. **ciliata* Lindau—Addo, Jan. ; amongst bushes by the Zwartkops R., E. and Z. 73.
- ‡2. *Eckloniana* Lindau—Springfields, Mar.
3. **origanoides* Lindau—Johannes Kloof, between Enon and the Zuurberg Range.

PERISTROPHE Nees

1. **caulopsila* Presl—In thickets by the Sundays R.
- ‡2. *Hensii* C. B. Cl.—Despatch and Redhouse, Aug. and Sept.
3. **cernua* Nees—Uit. ; near the Zwartkops R.

HYPOESTES R. Br.

- ‡1. *aristata* R. Br.—P.E., Feb. ; Redhouse, Apr., T.V.P. 593 ; near Uit., 400 ft., Schlechter 2526, Schoenmaakerskop.
- ‡2. *verticillaris* R. Br.—Redhouse, Aug. ; Springfields, Mar. ; Kraggakamma Forest, under 500 ft., Feb.

DICLIPTERA JUSS.

1. **capensis* Nees—Near Zwartkops R.

PLANTAGINACEAE.

PLANTAGO L.

- ‡‡1. *§major* L.—Walmer, Dec.
- ‡2. *? dregeana* Presl—Probably T.V.P. 2230, from Baakens R. Valley, Jan., belongs to this species
- ‡‡3 *§lanceolata* L.—Schoenmaakers Kop, Apr.
- ‡4 *carnosa* Lam.—Redhouse, Mar. ; P.E. ; Cape Recife, Z. 955 ; Green Bushes, near P.E. ; Witteklip.
5. *sp.*—New Brighton, P.E., Oct., T.V.P. 2370 ; P.E., W.K. 118. Not in "Flora Capensis."
N.B.—A specimen (F.H.H. 136, Zuurberg, Mar.) is close to, if not identical with *P. cornuta* Gouar, which, according to the "Index Kewensis," equals *P. major*.

RUBIACEAE.

BURCHELLIA R. Br.

- †1. *capensis* R. Br.—Van Stadens, Sept.; Uit., Z. 2285.

GARDENIA Ellis

- †1. *Neuberia* E. et Z.—Zuurberg, May.
 †2. **Thunbergia* L.—Kraggakamma.
 †3. **Rothmannia* L.—Uit.

RANDIA L.

1. **rudis* E. Mey.—Enon.

OLDENLANDIA L. (= HEDYOTIS)

- †1. **caffra* E. et Z.—Uit., stony places near the Zwartkops R.
 †2. **thymifolia* Presl—Zwartkops.
 †3. *amatymbica* Hochst.—Zuurberg, Oct.
 4. **capensis* Lam.—Near Enon.
 5. **setifera* Sond.—Stony places near the Zwartkops R.

VANGUERIA Comm.

- †1. *macrocalyx* Sond.—Zwartkops R. and Winterhoeksmts.

PLECTRONIA L.

- †1. *obovata* Klotzsch—Redhouse, Mar.; Van Stadens Mts.; Addo.
 ††2. *ventosa* L.—Redhouse, Mar.; Walmer, Oct.
 †3. **spinosa* Klotzsch—Addo; Van Stadens.

PAVETTA Linn.

- †1. *caffra* Thunb.—P.E., Jan.; Addo, Z.
 †2. *lanceolata* Eckl.—Uit.; Kraggakamma.

PSYCHOTRIA L.

- †1. *capensis* (Sond.) (= *Grumilea capensis* Sond.)—Zuurberg, Oct.

HYDROPHYLAX Linn. f.

- †1. *carnosa* Sond.—Bethelsdorp, Jan.; P.E., MacOwan 1927; Cape Recife, Jan.

GALOPINA Thunb.

- †1. *circaeoides* Thunb.—Emerald Hill, Mar.

ANTHOSPERMUM L.

- †1. *aethiopicum* L.—Perseverance, Aug.; Humewood, Oct.; Zuurberg.
 †2. *ciliare* L.—P.E., June.
 †3. *lanceolatum* Thunb.—Theescomb, near P.E., Feb.
 4. *paniculatum* Cruse—Winterhoekseberge; Kraggakamma; Van Stadens.

CARPACOCE Sond.

- †1. **scabra* Sond.—Van Stadens.

RUBIA Linn.

1. *petiolaris* DC.—Humewood, Apr.; Redhouse, Apr.

GALIAM Scop.

- †1. *asperum* Thunb.—Redhouse, Aug.; Uit., Oct.
 †2. *tomentosum* Thunb.—Redhouse.

VALERIANACEAE.

VALERIANA L.

- †I. **capensis* Thunb.—Kraggakamma ; Zuurborg.

DIPSACEAE

CEPHALARIA Schrad.

- †I. *attenuata* R. et Sch.—Van Stadens Mts., Jan., Bolus, 1586.

SCABIOSA L.

- ††I. *columbaria* L., var.—Bethelsdorp, Sept. ; Van Stadens Mts., Jan. ; Redhouse.

CUCURBITACEAE.

MELOTHRIA Cogn.

1. **cordata* Cogn. (= *Zehneria cordata* Sond.)—Uit.
 2. *hederacea* Cogn. (= *Zehneria hederacea* Sond.) *ex descr.*—Redhouse, Apr.
 ††3. *punctata* Cogn. (= *Z. scabra* Sond.)—Uit. ; Humewood, July ; P.E. Valley, Nov., Dec.

COCCINIA Wight et Arn.

1. *quinqueloba* Cogn. (= *Cephalandra quinqueloba* Schrad.)—Emerald Hill, Mar. ; Zuurborg, Mar. ; Uit.

CUCUMIS L.

- ††I. **africanus* Linn. f.—Uit.
 2. *Zeyheri* Sond.—Redhouse, May ; P.E., Jan.
 †3. **myriocarpus* Naudin—Dist. of Uit.

KEDROSTIS Cogn. (CONIANDRA).

1. *digitata* Cogn.—Redhouse, Oct. ; P.E.
 T.V.P. 526, Redhouse, has both the leaf-segments of *K. glauca* and also the narrow ones of *digitata*.
 2. *africana* Cogn.—Redhouse, Oct. ; Uit., Apr., Schlechter 2528 ; Zuurborg, Mar. ; (? Despatch, J.L.D. 271).
 3. *glauca* Cogn.—Coega.
 4. *punctulata* Cogn.—Uit., Apr., Schlechter 2528.
 5. **mollis* Cogn.—Near Uit.
 6. **Zeyheri* Cogn.—Near Zwartkops R. Var. *angustiloba*—Uit.
 †7. *nana* Cogn., var. *genuina* (= *Con. Thunbergii* Sond.)—Redhouse, Apr. Var. *latiloba*—P.E., Aug. ; Redhouse, Oct.

CAMPANULACEAE.

LOBELIA L.

- †I **flicaulis* (Presl) (= *Metzleria flicaulis* Presl)—Zwartkops R.
 2. **leptocarpha* Gr. (= *Parastranthus thermalis* Sond.)—Uit.
 3. *hirsuta* Linn.—Van Stadens, Nov.
 4. *tomentosa* L.—Bethelsdorp, Sept. ; Van Stadens ; Zuurborg ; foot of Witteklip.
 ††5. *erinus* L., var.—Van Stadens, Sept. ; Humewood, Sept. ; P.E., June, Oct., Zuurborg.
 ††6. *anceps* Thunb.—Redhouse, Apr. ; Uit., Schlechter 2585 ; P.E., Nov.
 †7. *erinoides* Thunb.—Zwartkops R. ; Zuurborg.

MONOPSIS Salisb.

1. *scabra* (Thunb.) (= *Lobelia scabra* Thunb. and *Drobrowskya scabra* A. DC.)—Schoenmaakers Kop; Redhouse; Uit., Schlechter 2559; Zuurberg. Var. *glabrata*—Zwartkops R.

MEZLERIA Presl

1. *depressa* Sond. (= *Laurentia radicans* Schonl.)—P.E., Nov.

LIGHTFOOTIA L'Herit.

- †1. *rubens* Buek—Van Stadens Mts.; Bethelsdorp; P.E. Valley, Feb., T.V.P. 2692.
2. *cinerea* Sond.—Van Stadens, MacOwan 2080.
3. *denticulata* Sond. (= *L. capillaris* Buek)—Near Uit., Schlechter 2505.
4. *albans* Spreng.—P.E., Mar., Nov.; Redhouse, Oct., T.V.P. 294; Zuurberg.
5. *ciliata* Sond.—Thornhill, July; Van Stadens Mts.; Redhouse, Oct.; P.E.; Zuurberg.
- 6. *Buekii* Sond.—Zwartkops R.
7. **tenella* A. DC., var. *microphylla*—P.E.; Zwartkops R. Var. *fasciculata*—Uit. Var. *rigida*—Uit.

WAHLENBERGIA Schrad.

- †1. *procumbens* A. DC.—Redhouse, Oct.
2. *oocarpa* Sond.—Sand-hills on the Zwartkops R.
- †3. *capillacea* A. DC.—Van Stadens Mts.; Zuurberg.
- †4. *undulata* DC.—Van Stadens, MacOwan 595; Bethelsdorp, Nov., T.V.P. 383; Schoenmaakers Kop, Apr.; Zuurberg.
- †5. *arenaria* A. DC.—Redhouse, Oct., Dec.; Humewood.
6. **robusta* Sond.—Uit.

PRISMATOCARPUS A. DC.

1. *strictus* A. DC.—Redhouse, Feb.; Van Stadens, MacOwan 1083.
2. **campanuloides* Sond.—Sandy places on the Zwartkops R., and on the Winterhoeksberg, near Elands R.

ROELLA L.

1. **Eckloniana* Buek—Uit.
2. **spicata* Linn.—Hills near the Zwartkops R., at Bethelsdorp.

CYPHIA Berg

- †1. *linarioides* Presl—P.E., May; near Uit., Schlechter 2517; Redhouse, Feb., foot of Witteklip.
2. *triphylla* Phillips—Redhouse, May, T.V.P. 466.
- †3. *sylvatica* Eckl.—P.E., May; Schoenmaakers Kop, Apr.; Zuurberg, Mar.
4. **undulata* Eckl.—Between Coega and Sundays Rs.; Elands R., May-June.

GOODENIACEAE.

SCAEVOILA L.

- †1. *Thunbergii* E. et Z. (= *Sc. Lobelia* Murr.)—Bethelsdorp, Jan.; Algoa Bay; mouth of the Zwartkops R.

COMPOSITAE.

VERNONIA Schreb.

- †1. *mespilifolia* DC.—Van Stadens, May, Sept.; forests of Uit.
- †2. *corymbosa* Less.—Van Stadens; P.E., Apr.; Uit., Jan.
- †3. *pinifolia* Less.—Bethelsdorp, Nov.

PLATYCARPHA Less.

- †1. *glomerata* Less.—Redhouse, Dec.; in the town of Uit., Jan., Bolus 2321.

CORYMBIUM L.

- 1. *latifolium* Harv.—Van Stadens Mts., Jan., Bolus 1539.
- †2. *nervosum* Thunb.—Bethelsdorp, Nov.; P.E., Jan., Dec.; Van Stadens Mts., Z. 302 (sub. *C. filiformi* L., but with quite smooth stems); Van Stadens, Jan., Bolus 1540.
- †3. *? *scabrum* L.—Uit.
- 4. *cymosum* E. Mey.—Van Stadens and Witteklip, Dec.

MIKANIA Willd.

- †1. **capensis* DC.—Van Stadens Mts.

AMELLUS Cass.

- 1. *strigosus* Less.—Redhouse, Dec.; Aloes, Sept.

MICROGLOSSA DC.

- 1. *mespiloides* Benth. et Hook.—Uit., Schlechter 2558; Zuurberg.

ANAGLYPHA DC.

- 1. **aspera* DC.—Between Coega and Zwartkops Rs., under 1000 ft.

ASTER L. (incl. DIPLOPAPPUS DC.).

- †1. *hispidus* Bak.—Van Stadens, Oct.
- †2. *muricatus* Less., var. *fascicularis* E. Mey.—Zuurberg, Mar.; woods near the Zwartkops R., Mar., Z. 86.
- 3. **Zeyheri* Less.—Van Stadens.
- †4. **erigeroides* Harv.—Uit.
- 5. *hyssopifolius* Berg—Redhouse. Var. *rigidulus* Harv.—Dist. of Uit.
- 6. *ficoideus* Harv.—Redhouse, Oct.; near the mouth of the Zwartkops R.
- 7. *echinatus* Less.—Redhouse, Apr.
- 8. **linifolius* Harv.—Uit.
- 9. **strigosus* Thunb.—Zwartkops R.
- †10. *capensis* Less.—Redhouse, Oct.; Van Stadens, Sept., Oct., and E. and Z. 318; near Uit., Apr., Schlechter 2574.
- †11. *aethiopicus* Burm.—Van Stadens Mts., E. and Z. 332; Redhill, Uit., Aug.
- †12. *filifolius* Vent.—Redhouse, Sept.; P.E., Sept.
- †13. *asper* (Thunb.).—P.E., June.
- 14. *laevigatus* Sond.—Van Stadens Mts., Jan.
- 15. *sp.* (agrees fairly well with MacOwan's specimen of *A. confusus* Harv., from Brintjeshoogte, except that his specimen is more hairy).—Redhouse, July, T.V.P. 2676.

FELICIA Cass.

- I. *rigidula* DC. (regarded as a var. of *Aster hyssopifolius* Berg in the "Flora Capensis"; *A. hyssopifolius* Berg = *Felicia angustifolia* Nees).—Redhouse, Oct., Nov., T.V.P. 330; near Uit., Apr., Schlechter 2499.
This species is mentioned in "Index Kewensis" under *Felicia angustifolia* Nees.

ERIGERON L.

- I. *slinifolius* Willd.—Redhouse, Feb. (introduced).
 - †‡2. *scanadense* L.—Frames Drift, P.E., Mar., T.V.P. 1957 (introduced).
- N.B.—The species found in South Africa require revision.

NIDORELLA Cass.

- I. **mespilifolia* DC.—Uit.
- ‡2. *resedaeifolia* DC.—Schoenmaakers Kop, Apr.; Redhouse, Mar.
- ‡3. *auriculata* DC.—Schoenmaakers Kop, Apr.; Redhouse, June.
4. **amplexicaulis* DC.—Van Stadens Mts.

CHRYSOCOMA Cass.

- †I. *ternifolia* Berg—P.E., June; Redhouse, July; foot of Witteklip. Var. *microcephala* DC.—Between Coega and Sundays Rs., E. and Z. III3.

PTERONIA L.

- I. *baccharoides* Less.—Van Stadens; Frames Drift, Mar.; Uit.
2. *incana* Less.—P.E., Oct.; Zwartkops R., Sept.; Despatch; Uit., six miles west of town, Jan.
3. *paniculata* Thunb.—Redhouse, Nov.; foot of Elandsberg.
4. *membranacea* L.—On the hills by P.E.; Redhouse; between Coega and Sundays Rs.
5. *elongata* Thunb.—P.E., Dec.; Redhouse, Sept.
6. *trigona* Phill.—Van Stadens, Jan.; between Kraggakamma and the upper part of the Leadmine R.
7. *stachelinoides* DC.—P.E.; Redhouse; Koegakammaskloof.

CONYZA Less.

- ††I. **pinnatilobata* DC.—Zwartkops R.
- ‡2. **obscura* DC.—Dist. of Uit.
- ‡3. *incisa* Ait.—Uit., E. and Z., Z. 500.
- ††4. *ivaeifolia* Less.—P.E., June; Redhouse, Feb.

BRACHYLAENA R. Br.

- †I. *dentata* Less.—Van Stadens, Nov., MacOwan 2076, Z. 309.
- ‡2. *racemosa* Less.—Redhouse, Mar. and Jan.; Zwartkops R., Z. 481.
- ‡3. *elliptica* Less.—Dist. of Uit., Dec., MacOwan.
- †4. **discolor* DC.—Uit., Burchell.

TARCHONANTHUS L.

- ††I. *camphoratus* L.—Walmer, Aug.; Emerald Hill, Mar.; Van Stadens.
- ‡2. *minor* Less.—Redhouse, Oct.

PULICARIA Cass.

- ††1. *capensis* DC.—Redhouse, Apr. ; near Zwartkops R., Z. 470, 2789, 2790, 359.

Both varieties described in the "Flora Capensis" are found in the Uit. dist.

IPHIONA Cass.

1. *baccharidifolia* B. et H.—Redhouse.

BIDENS L.

- ††1. *spilosa* L.—A common weed.

LOCASTE E. Mey.

1. *acicularis* DC.—Uit.

PRINTZIA Cass.

- †1. *Bergii* Cass.—Walmer, Aug. ; P.E. ; Redhouse.

MATRICARIA L.

- †1. *nigellaefolia* DC.—Redhouse ; banks of water-courses, Uit., Jan., Bolus 1503 ; Sundays R.

PENTZIA Thunb.

1. *sphaerocephala* DC.—Uit.
 ‡2. *incana* O. K. (= *virgata* Less.)—Between Coega and Sundays Rs., Z. 775 ; Uit. Schlechter 2487.
 3. *globifera* Hutch. (*Matricaria globifera* Fenzl)—Near Zwartkops R., Oct., E. and Z. 223 ; Redhouse, Oct. ; P.E., Nov.

ADENOSOLEN DC.

1. *tenuifolius* DC.—Near Uit.

COTULA L. (incl. CENIA Commers.).

- †1. *coronopifolia* L.—Schoenmaakers Kop, Apr.
 2. *sororia* DC.—Uit.
 3. *Zeyheri* Fenzl—Near Zwartkops R.
 4. *heterocarpa* DC.—Redhouse, Aug. ; Zuurberg.
 5. *ceniaefolia* DC., var.—P.E., June.
 †6. *turbinata* (Pers.)—P.E., June ; Schoenmaakers Kop, Apr. ; Redhouse ; between Uit. and P.E., Sept., Bolus 1884.
 7. *sericea* (DC.)—Schoenmaakers Kop ; P.E. ; Redhouse, Apr.

ERIOCEPHALUS L.

- †1. *umbellulatus* DC.—Van Stadens, May ; P.E., June, Bolus 2228 ; Redhouse, Sept.

ATHANASIA L.

- †1. *punctata* Harv.—Zuurberg.
 2. *dimorpha* DC.—At the mouth of the Van Stadens R., MacOwan 1062.
 3. *fasciculata* Harv.—Uit.
 †4. *dentata* DC.—Walmer, Nov. ; P.E. ; Uit., Z. 840, 315.
 5. *pinnata* E. Mey.—Elands R., Dec.

XANTHIUM L.

- ††1. *spinosum* L.—Redhouse, Apr.

LEONTONYX Cass.

- †1. *squarrosus* DC.—Van Stadens, Nov., Jan., H. Bolus 1623 ; Uit. ; Zuurberg.
 †2. *glomeratus* DC.—P.E. ; on the hills of Addo and Kraggakamma, Z. 365.
 †3. *spathulatus* Less.—Springfields, Jan.

HELICHRYSUM Vaill.

- †1. *odoratissimum* Less.—P.E., Oct.; Walmer, Nov.; Van Stadens, Jan., MacOwan 1033; Bethelsdorp, Nov.
- ‡2. *umbracligerum* Less.—Zuurberg.
- ‡3. *subglomeratum* Less.—Van Stadens, Jan., H. Bolus 1537.
4. *niveum* (L.) Less.—On the flats near the Winterhoek Mts., and on the hills of Addo, E. and Z. 338.
- †‡5. *dasycephalum* O. Hoff. (*H. parviflorum* DC.)—P.E., Nov.; Schoenmakers Kop, Apr., T.V.P. 562; between Coega and Sundays Rs., Z. 403; foot of Witteklip.
6. *anomalum* Less.—P.E., Aug.; Bethelsdorp, July, Sept. Var. *rufescens* DC.—Uit., Mar., E. and Z. 68; Zwartkops R., E. and Z. 53; Algoa Bay, Sept.; Zuurberg.
- †‡7. *cymosum* (L.) Less.—Humewood, Apr.
8. ? *Zeyheri* Less.—P.E., Nov., W.K. 208 (undeveloped).
9. **pedunculare* DC.—Uit.; Bethelsdorp, Z. 879.
- †10. *allioides* Less.—Uit.; Van Stadens Mts., Jan., H. Bolus 1517.
- †‡17. *nudifolium* (L.) Less., var. *peipodium* (DC.) Moes.—Uit.; Van Stadens Mts., Jan., H. Bolus 1529; Zuurberg.
12. *Krebsianum* Less.—Van Stadens, Oct.
- †13. *quinguenerve* Less.—Van Stadens Mts., Jan., H. Bolus 1528.
14. *undatum* Less.—Bethelsdorp, Nov.; Van Stadens, Jan., Bolus 1311; P.E., Aug.
- †15. *capitellatum* Less.—Witteklip, MacOwan 1069.
16. *rosom* (Berg) Less.—P.E.; Redhouse, July, Oct., Nov.; Uit., Nov., E. and Z., Apr., Schlechter 2876.
- †17. *rugulosum* Less.—Uit.
- †‡18. *teretifolium* Less.—Redhouse, Sept.; Humewood, Sept.; Witteklip, Dec., MacOwan 1162. Var. *congestum* DC.—Hills of Addo, and near the Van Stadens Mts., E. and Z. 317; near P.E., Oct., E. and Z. 394; Uit., Nov., Dec., E. and Z.; Van Stadens Mts. and Palmiet R., Jan., H. Bolus 1535.
- †‡19. *capillaceum* Less.—P.E., Feb.
- †20. *rutilans* Less.—Redhouse, Oct.
21. *Leontonyx* DC.—Springfields, Jan.
- †‡22. *ericaefolium* Less.—Redhouse, Dec.; Uit., Z. 400, 496, Jan., E. and Z.; Bethelsdorp, Jan.; P.E., Dr. Potts 305 (var. *albidulum* DC.); Van Stadens, MacOwan 2069; foot of Witteklip.
- ‡23. *caespitium* Sond.—P.E., Aug.
- ‡24. *leptolepis* DC.—Van Stadens, Oct.
- †‡25. *declinatum* Less.—Redhouse, Oct.; Uit., 50 to 500 ft. W.K. 1099, from P.E., has pappus to the outer florets and so should be *H. declinatum* Less., but otherwise it agrees with *Amphidoxa gnaphaloides* DC. var.
- †‡26. *serpyllifolium* Less.—Van Stadens, Oct., Nov.
27. *felinum* Less.—Van Stadens, Jan., Bolus 1533, E. and Z. 339; P.E., Oct., Aug.
- ‡28. *petiolatum* DC.—Springfields, Jan.; valleys near Van Stadens R., Jan., Bolus 1530.
- ‡29. *setosum* Haw.—Redhouse, Mar.
30. *striatum* Thunb.—Van Stadens, Sept.; Witteklip, MacOwan 1065; P.E., Oct., Sept.; Walmer, Oct. Var. *glabrum*

HELICHRYSUM Vaill.—*continued*.

- DC.—Uit., July. Var. *villosum* DC.—Channel of Zwartkops R., E. and Z. 158; Uit., Dec., E. and Z.; Van Stadens Mts., Jan., Bolus 1531.
31. *argenteum* Thunb.—Bethelsdorp, Sept.; P.E., Mar., Bolus 1672; Humewood, Sept.; dist. of Uit., Oct., E. and Z. 373; foot of Witteklip.
32. *recurvatum* Thunb.—Sundays R., Burchell 4216; Zwartkops, E. and Z. 416.
33. *sordescens* DC.—Humewood, Oct.; P.E., Jan., Bolus 9802.
- †34. *appendiculatum* Less.—Van Stadens, Jan., Sept., Oct., Bolus 1534; P.E., Nov., Dec.; Uit., Nov.
- †35. *retortum* Thunb.—Bethelsdorp, Nov.
36. *xeranthemoides* DC.—P.E., June.
- †37. *squamosum* Thunb.—Van Stadens Mts., E. and Z. 702, Bolus 1536; Zuurberg.
- ††38. *foetidum* Cass.—Elands R., Dec.
- †39. *fulgidum* Willd.—Walmer, Dec.; on the hills of Addo, and by the Zwartkops R., E. and Z. 751; Uit., Nov.; Van Stadens Mts., Jan., Bolus 236.
- †40. *vestitum* Less.—Uit., Jan.
- †41. *gymnocomum* DC.—Valley of the Van Stadens R., Jan., Bolus 1532.

IFLOGA Cass.

- †1. *polycnemoides* Fenzl—Zwartkops R., Oct., Z. 1023; Redhouse.

HELIPTERUM DC.

- †1. *canescens* DC.—Thornhill, July.
2. *phlomoides* DC.—Van Stadens, Nov.; P.E., Aug.

GNAPHALIUM L.

- ††1. **undulatum* L.—Uit.
- †2. *candidissimum* Lam.—Uit., 250 ft., Schlechter 2484.
3. *micranthum* Thunb.—Marshy places on Zwartkops R., Z. 1027; banks of Van Stadens R., Jan., Bolus 1538.
- †4. *repens* L.—Hills near P.E., Z. 740.
- ††5. *luteo-album* L.—Zwartkops R. and Addo, Z. 221; Redhouse; Uit., E. and Z. 1028.

AMPHIDOKA DC.

- †1. **gnaphaloides* DC.—Near Uit.; P.E., Z. 2890.

LASIOPOGON Cass.

1. *muscoides* DC.—Redhouse, May, Nov.

METALASIA R. Br.

1. *aurea* Don.—P.E.; between Zwartkops and Sundays Rs.
2. *pulcherrima* Less.—Uit., May, June.
- ††3. *muricata* Less.—Schoenmakers Kop, Apr.; P.E.; Redhouse, Mar.; foot of Witteklip; Zuurberg. Var. γ .—Van Stadens, Z. 278.
- †4. *fasciculata* Don—Walmer, Jan.; P.E.

ELYTROPAPPUS Cass.

- †1. *Rhinocerotis* Less.—Near Uit., Schlechter 2552 (introduced?).

AMPHIGLOSSA DC.

1. *callunoides* DC.—Springfields, Mar.; channel of Zwartkops R., Z. 45; Uit., Apr., Schlechter 2552.

DISPARAGO Gaertn.

1. *ericoides* Gaertn.—P.E., July ; Redhouse, Feb. and Aug. ;
Van Stadens Mts., Jan., Bolus 1626, Z. 712.

STOEBE L.

- †1. **tortilis* DC.—Uit.
†2. **alopecuroides* Less.—Zwartkops R.
††3. *cinerea* Thunb.—Walmer, Oct. ; P.E., July ; Redhouse,
Mar. ; Bethelsdorp, Aug. ; foot of Witteklip.

ATHRIXIA Ker

- †1. *heterophylla* Less.—Bethelsdorp, Sept. ; Van Stadens,
MacOwan 2927 ; Zuurberg.

LEYSSERA L.

- †1. *gnaphalioides* Walp.—Redhouse, Nov. ; banks of Zwartkops R., Z. 1031, 2928.

NESTLERA Spreng.

1. **humilis* Less.—Uit.

RELHANIA L'Her.

- †1. *genistaefolia* L'Her.—Redhouse, Aug. ; banks of Zwartkops R., Z. 1114 ; near Cradockstown, P.E., Sept., Bolus 1889.
2. *quinquenervis* Thunb.—Uit.
3. *trinervis* Thunb.—P.E. ; Walmer, Jan. ; Van Stadens Mts., Jan., Bolus 1631 ; Witteklip ; Redhouse ; Uit., Z. 3840.
†4. *pungens* L'Her.—Near P.E.
5. *speciosa* Harv.—Van Stadens, Oct.

HETEROLEPIS Cass.

1. *mitis* DC.—In rocky places near Uit., Jan., Bolus 1650 ;
Sundays R. ; Zuurberg.

CINERARIA L.

1. **erodioides* DC.—Uit.
†2. *lobata* L'Her.—P.E., Oct. ; Redhouse, Aug., Dec.
3. *saxifraga* DC.—P.E., Oct. ; Uit.

SENECIO L. (incl. KLEINIA L.).

1. *ficoides* Sch. Bip.—Bethelsdorp, July, T.V.P. 30 ; P.E. ;
Zwartkops, Sept. ; Redhouse, Feb.
†2. *radicans* Sch. Bip.—Redhouse, Apr., Aug.
†3. *crassulaefolius* Sch. Bip.—Stony places near the Zwartkops R. ; Schoenmaakers Kop, Apr. ; Redhouse, July, T.V.P. 575 ; Baakens R., June, Bolus 2247.
4. **Ecklonis* (Harv.).—Dry hills at Addo.
5. *articulatus* Sch. Bip.—Bethelsdorp, Sept. ; Zwartkops ;
Redhouse, July.
†6. *littoreus* Thunb.—Redhouse, Apr.
†7. *glutinosus* Thunb.—P.E., July, Aug. ; Humewood, M.D. 1092. Var. *inamoenus*—Zwartkops R. ; Van Stadens R., Nov., Bolus 1686 ; sandy banks between Uit. and P.E., Sept., Bolus 1686.
†8. *elegans* L.—Humewood, Oct. ; Emerald Hill, Oct. ; Walmer, Oct., T.V.P. 2342 ; P.E.
9. *multibracteatus* Harv.—Redhouse, Feb. ; Bethelsdorp.
†10. *concolor* DC., var. *hispidus*—Van Stadens, Oct.
††11. *erubescens* Ait.—Bethelsdorp, Nov. ; P.E. ; Zuurberg.
††12. *purpureus* L.—Van Stadens Mts. ; Zuurberg.
††13. *erosus* L.—Redhouse, Sept.

SENECIO L. (incl. KLEINIA L.)—*continued.*

- ††14. *hasitulatus* DC.—Redhouse, Sept.; Humewood, Oct.; P.E.
 15. *coronatus* Harv.—Humewood, Aug.
 †16. *albanensis* DC.—Zuurberg, Mar., F.H.H. 47a. Var. *doronici-*
florus—Redhouse, Mar.; Van Stadens Mts., Jan., Bolus
 1506.
 17. **monticolus* DC.—Uit.
 18. *gramineus* Harv.—Van Stadens Mts.
 †19. *crenulatus* DC.—Dist. of Uit. (frequent); P.E., Aug.; foot
 of Witteklip.
 †20. *othonnaeflorus* DC.—P.E., May, June; Redhouse, Mar.;
 mountains above Uit.
 †21. *oxyriaefolius* DC.—Redhouse, June; Zwartkops.
 †22. *rhomboides* Harv.—Redhouse, Mar., Aug.
 23. *tropaeolifolius* MacOwan—Zuurberg.
 24. *paucifolius* DC.—P.E., June; Redhouse, Apr., June;
 Despatch, F.H.H. 363; near Zwartkops R., Z. 957.
 25. *latifolius* DC.—Dist. of Uit.; Zuurberg.
 26. *isatideus* DC.—Zuurberg.
 27. *crenatus* Thunb.—Van Stadens Mts., Jan., Bolus 1525.
 MacOwan 1050; Zuurberg.
 28. *Zeyheri* Turcz—Redhouse, Apr.; Zuurberg, Mar.
 29. **pellucidus* DC.—Uit.
 †30. *lyratus* L.—Van Stadens Mts., Jan., Oct., Bolus 1526.
 ††31. *rigidus* L.—Baakens R. valley, Nov.; Addo and Zwart-
 kops R., Z. 486; Van Stadens.
 32. *ilicifolius* Thunb.—P.E., Oct.; Walmer; Redhouse, Nov.
 †33. *juniperinus* L.—P.E., Oct., Nov.; Redhouse, Oct.; Zwart-
 kops R., Z. 2945, 182; Zuurberg.
 34. *oederaefolius* DC.—Walmer, Oct., Nov.; Van Stadens Mts.,
 Jan., Bolus 1524, MacOwan 1037, Z. 709; Coega.
 35. **hirtifolius* DC.—Near the Zwartkops R.
 ††36. *lanceus* Ait.—Zwartkops R., MacOwan 1074, Z. 579; near
 Uit., Schlechter 2578; Despatch, June, F.H.H. 432;
 banks of Zwartkops R., Jan., Bolus 1501; Van Stadens,
 Z. 701.
 †37. *glastifolius* L.—Van Stadens Mts., Jan., Bolus 1523,
 MacOwan 1036.
 38. *oliganthus* DC.—Van Stadens, MacOwan 1038; Zuurberg,
 Apr.
 †39. *umbellatus* L., var. *latiusculus*—Redhouse; Humewood;
 Van Stadens Mts.; Bethelsdorp; Walmer, Oct.;
 Walmer Flats, Sept., Oct., Bolus 1886.
 40. *serrurioides* Turcz—On the flats near Van Stadens Mts.,
 Z. 274; Van Stadens Mts., Jan., Bolus 1513.
 ††41. *paniculatus* Berg, var. *reclinatus*—Zwartkops R., Z. 623,
 583; P.E., Nov.; Van Stadens Mts., Jan., Bolus 1527.
 42. *leptophyllus* DC.—Redhouse, July.
 43. *inaequidens* DC.—Walmer, Aug.; Zwartkops R.; Red-
 house, Oct.
 44. **debilis* Harv.—Uit.
 †45. *longifolius* Linn.—P.E.; Redhouse, Apr., July; Redhouse.
 †46. *rosmarinifolius* L.—Between Kraggakamma and Van
 Stadens, E. and Z.; near banks of Zwartkops R., Z. 432;
 Schoenmaakers Kop, Apr.

SENECIO I. (incl. KLEINIA L.)—*continued*.

- ††47. *Burchelli* DC.—Redhouse, Dec. ; Aloes, Sept.
- 48. **dracunculoides* DC.—Zwartkops R.
- 49. **hirtellus* DC.—Uit.
- †50. *pinifolius* Lam.—Van Stadens, Z. 814.
- †51. *mikanioides* Ott.—Redhouse, Apr.
- †52. *deltoides* Less.—P.E., Aug. ; Uit.
- †53. *quinguelobus* DC.—Van Stadens, May.
- †54. *macroglossus* DC.—Redhouse, Sept.
- †55. *angulatus* L. f.—P.E., June ; Van Stadens, Apr.
- 56. *crassiusculus* DC.—Zwartkops R. ; Zuurberg, Apr.
- 57. *pyramidatus* DC.—Zwartkops, Sept.
- 58. *scaposus* DC.—P.E., Dec. ; Redhouse, Feb. ; sandy hills near Uit, Jan, Dec., Bolus 1522.
- 59. *juitceus* Haw.—Redhouse, Apr., June ; Cradockplace, near P.E., E. E. Galpin 6398 ; near Uit., Schlechter 2556.
- 60. ? *n. sp.*—Van Stadens, MacOwan 1064.

EURYOPS Cass.

- 1. *algoensis* DC.—Schoenmaakers Kop, Apr. ; Cradockplace, near P.E., Galpin 6358 ; P.E., Apr. ; Uit.
- †2. *tenuissimus* Less.—Zwartkops R., Z. 65 ; Redhouse, Apr.
- 3. *spathaceus* DC.—Uit. ; New Brighton, Aug.

GAMOLEPSIS Less.

- 1. *chrysanthemoides* DC.—Uit.
- 2. *trifurcata* Less.—Uit., Schlechter 2534.
- 3. *euryopoides* DC.—Bethelsdorp, Sept. ; Van Stadens ; Uit., E. and Z. ; P.E.
- 4. *munita* Less.—Bethelsdorp, Nov. ; between Kraggakamma and Van Stadens ; Elandsberg, MacOwan 1052 ; Van Stadens Mts., Jan., Bolus 1619.
- 5. *ericoides* Less.—Coega, Oct. ; Uit. ; Redhouse, Aug. ; Cradocktown, near P.E., Sept., Bolus 1887.
- 6. *brachypoda* DC.—Uit., Jan.
- 7. *sp.* (close to *G. munita* Less.)—Van Stadens, May, T.V.P. 2440.

OTHONNOPSIS Jaub. et Spach

- 1. *Kraussii* Benth. et Hook. (= *Doris Kraussii* Sch. Bip.)—Near the mouth of the Zwartkops R., Redhouse, Sept. ; Uit.
- 2. **alata* Benth. et Hook. (= *Doria alata* Thunb.)—Uit.

OTHONNA L.

- †1. *parviflora* L.—Van Stadens, May, MacOwan 1066 ; on the top of the Van Stadens Mts., Z. 796 (var. *bupleuroides*), Bolus 1616.
- 2. *quinquedentata* Thunb.—Witteklip.
- 3. *membranifolia* DC.—Springfields, Nov. ; Van Stadens, May, June, Nov., Bolus 2361.
- †4. *amplexicaulis* Thunb.—Van Stadens, Oct., MacOwan 1100 Schoenmaakerskop.
- †5. *carnosa* Less.—Redhouse, Apr. ; hillsides near P.E., Nov.
- 6. **crassifolia* Harv.—Uit. ; Bethelsdorp.
- 7. *obtusiloba* Harv.—P.E., Feb.

OTHONNA L.—*continued*.

8. *rufibarbis* Harv.—Walmer, Apr.; Baakens R. valley, May; P.E., June, Bolus 2229.
9. **pinnatilobata* Sch. Bip. (= *Doria carnosus* DC.)—Grassy hills in Uit. dist.; Addo.
10. **eriocarpa* Sch. Bip. (= *Doria eriocarpa* DC.)—Zwartkops R.
11. *Gymnodiscus* Sch. Bip. (= *Doria Gymnodiscus* DC.)—P.E.; Redhouse.

OLIGOCARPUS Less.

- ‡1. *calendulaceus* Less.—Uit.; P.E.

TRIPTERIS Less.

1. **spathulata* DC.—Zwartkops R.

DIMORPHOTECA Vaill.

- †‡1. *fruticosa* DC.—P.E. Sept.; Uit.; Redhouse, Apr.
2. *Ecklonis* DC.—Van Stadens, Sept., Nov.; Zwartkops R.; P.E.
- ‡3. *cuneata* DC.—Redhouse, July to Sept., T.V.P. 21; Uit.; Coega.

OSTEOSPERMUM L.

- ‡1. **herbaceum* L.—Uit.
- †‡2. *moniliferum* L.—Redhouse, Apr.; Despatch, June; near the Zwartkops R., Z. 110, 74; Humewood, Apr.; Bethelsdorp, Nov.; P.E., Feb.; Van Stadens, Nov., Bolus 1621; Schoenmaakerskop.
3. *coriaceum* DC.—Van Stadens, Nov.; Van Stadens Mts., Jan., Bolus 1621.
- ‡4. *grandidentatum* DC.—Schoenmaakers Kop, Apr.; P.E., Oct.
5. *scabrum* Thunb.—Redhouse, Aug., Dec.; Zwartkops R., Z. 69.
6. *corymbosum* L.—Van Stadens, Nov. to Jan., Bolus 1622; flats near Van Stadens, Z. 307; Schoenmaakers Kop, Mar.; Emerald Hill, Jan., Bolus 9801; Walmer, Aug.; Redhouse, Apr.
- †7. *imbricatum* L.—P.E., June, H. Bolus 2241.
- ‡8. *nervatum* DC.—P.E., June, H. Bolus 753.

URSINIA Gaertn. (incl. SPHENOGYNE R. Br.)

1. *anthemoides* Gaertn.—Zwartkops R. Var. *microcephala* Harv.—Redhouse, July.
2. *foeniculacea* Poir.—Redhouse, Sept.; Sand-hills near Zwartkops R., Z. 1011.
3. *anethoides* (DC.)—Van Stadens, Jan., Aug., Nov.; Van Stadens Mts., Bolus 1632; Uit. Mts.
4. **discolor* (Less.)—Uit.
5. *heterodonta* (DC.)—Van Stadens R., MacOwan 2330; Kamaehs.
6. *scariosa* Poir.—Van Stadens, Oct.
- †7. *filicaulis* DC. = *U. chrysanthemoides* Harv.—Redhouse, Oct.; ? P.E., July; Kraggakamma, Dec.
8. *annua* Less.—Redhouse, July; P.E., July.

HAPLOCARPHA Less.

1. *lyrata* Harv.—Redhouse, Aug.; Zuurberg.
2. *scaposa* Harv.—Zuurberg.

CRYPTOSTEMMA R. Br. (incl. MICROSTEPHIUM Less.)

- ††1. *calendulaceum* R. Br.—P.E., June; Redhouse, Nov.
 ††2. *niveum* Nichols (= *Microstephium niveum* Less.)—Redhouse, July; along the seashore near P.E., MacOwan 1094; mouth of the Zwartkops R., Z. 421.

ARCTOTIS L.

- †1. **acaulis* L.—Uit.
 †2. *stoechadifolia* Berg—Redhouse, Aug.; Humewood, T.V.P. 1029 (with very narrow almost entire leaves). Var. *discolor*—Zwartkops R., Z. 2996; P.E., Aug., Nov., Bolus 10378, July, Miss West 217. Var. *grandis* Less.—Kraggakamma, Dec., MacOwan 1096.

NOTE.—There appear to be several distinct species mixed up under *A. stoechadifolia*.

VENIDIUM Less.

1. *decurrens* Less.—P.E., Feb.; Van Stadens Mts.
 2. **hispidulum* Less.—Zwartkops R.
 †3. *arctotoides* Less.—Uit., Schlechter 2586.
 4. *discolor* Less.—Witteklip, Jan., Bolus.
 5. *perfoliatum* Less.—Van Stadens, Apr.

GAZANIA Gaertn.

- †1. *uniflora* Sims—Redhouse, Apr.; Schoenmaakers Kop, Apr.; P.E.; on downs along the strand of Algoa Bay, Z. 615.
 †2. **subulata* R. Br.—Between Van Stadens and Bethelsdorp.
 †3. *longiscapa* DC.—Bethelsdorp, Nov.; Redhouse, Aug.; P.E.; Van Stdens, Schlechter 6073 Schoenmaakerskop.
 †4. *pinnata* Less., var.—P.E., June; Zwartkops R.

CULLUMIA R. Br.

1. *cirsioides* DC.—Witteklip, Jan.; Van Stadens Mts., Jan., Bolus 1507.
 2. *decurrens* Less.—Reed's Bog, near P.E., Sept., Bolus 1894.

CYPSELODONTIA DC.

1. **Eckloniana* DC.—Dist. of Uit.

BERKHEYA Ehrh. (incl. STOBÆA Thunb.)

1. **glabriuscula* (DC.)—Uit.
 2. **polyacantha* (DC.)—Uit.
 3. *scolymoides* DC.—Bethelsdorp, Jan.; P.E., Aug.
 4. *petiolata* (DC.)—Zwartkops R.; Van Stadens R.; Van Stadens Mts., Jan., H. Bolus 1618.
 †5. *echinopoda* DC.—Near the Zwartkops and Van Stadens Rs.; valley near P.E., June, H. Bolus 2230.
 6. **membranifolia* (DC.)—Uit.
 7. *heterophylla* (Thunb.)—Redhouse, Oct.; P.E., Mar.; hills by the Zwartkops R., Z. 517.
 8. *lanceolata* Willd.—P.E., Aug., J.L.D. 59, Oct., W.K. 106.

STEPHANOCOMA Less.

1. *carduoides* Less.—Zuurberg, Mar.

DIDELTA L'Her.

1. *cernuum* Less.—Despatch, June, Oct. Uit.; Coega, Nov.
 2. *annuum* Less.—Redhouse, Aug., Dec.

These two species cannot be satisfactorily separated from one another. Broadly speaking, *cernuum* is the eastern form of *annuum*.—(L. B.).

DICOMA Less.

1. **radiata* Less.—Uit.
2. **diacanthoides* Less.—Uit.

CARDUUS L.

1. §sp.—P.E., Oct., T.V.P. 2596.

CENTAUREA L.

- †1. §*calcitrapa* L.—Cultivated ground at Cuylerville.

OLDENBURGIA Less.

1. *arbuscula* DC.—Zuurberg, Mar.,

HYPOCHAERIS Vaill.

- ††1. *glabra* L.—Van Stadens, Sept.; Zwartkops R.
2. *sp.*—Redhouse, July, T.V.P. 3150.

GERBERA Gron.

1. *tomentosa* DC.—Bethelsdorp, Nov.; Van Stadens, Jan.,
H. Bolus 1625, MacOwan 1061.
2. *cordata* Less.—P.E., June; Uit.; Van Stadens.
- ††3. *piloselloides* Cass.—Van Stadens, Sept.; Uit.; Zuurberg.
- †4. *ambigua* Sch.—P.E.; Uit.; Van Stadens R., Nov., H.
Bolus 1191.

HIERACIUM L.

- ††1. **capense* L.—Zwartkops R.

LACTUCA Tourn.

- ††1. *capensis* Thunb.—P.E., Feb., May; Van Stadens, Sept.;
Redhouse, Oct.

SONCHUS L.

- †1. **dregeanus* DC.—Zwartkops R.
- ††2. §*oleraceus* L.—Redhouse, Mar., Apr.

LAUNEA Cass. (MICRORHYNCHUS Less.)

1. *dregeanus* DC.—Hougham Park, Coega, May.

UITENHAGE AND PORT ELIZABETH PHANEROGAMIC FLORA.

RECAPITULATION.

Genera with western distribution, not going beyond our area in the coast districts, are marked †.

Genera with eastern distribution, not going beyond our area in the coast districts, are marked ‡.

Genera restricted to our area are marked ||.

Introduced genera are marked §.

The numbers in brackets denote the numbers of species recorded.

	Total Species.	Non- Native Species.		Total Species.	Non- Native Species.
GYMNOSPERMAE (7).			<i>Graminaceae (contd.)</i>		
<i>Cycadaceae (4).</i>			§ <i>Koeleria</i>	1	1
<i>Encephalartos</i>	4	—	<i>Avenastrum</i>	2	—
<i>Pinaceae (1).</i>			<i>Pentaschistis</i>	5	—
<i>Widdringtonia</i>	1	—	<i>Danthonia</i>	5	—
<i>Tacaceae (2).</i>			§ <i>Arundo</i>	1	1
<i>Podocarpus</i>	2	—	<i>Phragmites</i>	1	—
ANGIOSPERMAE.			§ <i>Lagurus</i>	1	1
Monocotyledoneae (637).			<i>Polypogon</i>	2	—
<i>Typhaceae (2).</i>			<i>Agrostis</i>	1	—
<i>Typha</i>	2	—	<i>Aristida</i>	6	—
<i>Potamogetonaceae (6).</i>			<i>Stipa</i>	1	—
<i>Potamogeton</i>	5	—	<i>Tragus</i>	2	—
<i>Zostera</i>	1	—	<i>Sporobolus</i>	4	—
<i>Aponogetonaceae (3).</i>			<i>Diplachne</i>	1	—
<i>Aponogeton</i>	3	—	<i>Eragrostis</i>	8	—
<i>Scheuchzeriaceae (3).</i>			(? §) <i>Spartina</i>	1	—
<i>Triglochin</i>	3	—	<i>Cynodon</i>	2	—
<i>Hydrocharitaceae (1).</i>			<i>Microchloa</i>	1	—
† <i>Lagarosiphon</i>	1	—	<i>Harpechloa</i>	1	—
<i>Graminaceae (127).</i>			<i>Chloris</i>	2	—
<i>Erianthus</i>	2	—	§ <i>Eleusine</i>	1	1
<i>Pollinia</i>	1	—	<i>Triaraphis</i>	1	—
<i>Rottboellia</i>	1	—	<i>Leersia</i>	1	—
<i>Trachypogon</i>	1	—	<i>Ehrharta</i>	6	—
† <i>Elionurus</i>	1	—	<i>Phalaris</i>	2	1
<i>Andropogon</i>	7	—	<i>Melica</i>	1	—
<i>Anthistria</i>	2	—	<i>Fingerhuthia</i>	1	—
<i>Paspalum</i>	1	—	<i>Schismus</i>	2	—
<i>Digitaria</i>	4	—	<i>Lasiocchloa</i>	2	—
<i>Panicum</i>	7	—	† <i>Brizopyrum</i>	1	—
† <i>Oplismenus</i>	1	—	§ <i>Briza</i>	2	2
<i>Setaria</i>	5	—	§ <i>Poa</i>	1	1
<i>Pennisetum</i>	2	—	† <i>Atropis</i>	1	—
<i>Stenotaphrum</i>	1	—	†§ <i>Scleropoa</i>	1	1
<i>Tricholaena</i>	1	—	<i>Festuca</i>	1	—
<i>Arundinella</i>	1	—	§ <i>Vulpia</i>	2	2
<i>Tristachya</i>	1	—	§ <i>Bromus</i>	4	4
<i>Achneria</i>	1	—	§ <i>Lolium</i>	4	4
§ <i>Aira</i>	1	1	<i>Lepturus</i>	1	—
			<i>Agropyrum</i>	1	—
			§ <i>Hordeum</i>	1	1

	Total Species.	Non- Native Species.		Total Species.	Non- Native Species.
<i>Cyperaceae</i> (86).			<i>Amaryllidaceae</i> (con.)		
Kyllinga.....	2	—	†Gethyllis.....	1	—
Pycreus.....	6	—	Apodolirion.....	1	—
Juncellus.....	1	—	Crinum.....	3	—
Cyperus.....	13	—	Ammocharis.....	1	—
Mariscus.....	8	—	Brunsvigia.....	2	—
Eleocharis.....	1	—	Nerine.....	3	—
Fimbristylis.....	1	—	†Strumaria.....	1	—
Bulbostylis.....	2	—	Cyrtanthus.....	10	—
Scirpus.....	14	—	Haemanthus.....	7	—
Ficinia.....	22	—	Buphane.....	1	—
Fuirena.....	2	—			
Carpha.....	1	—	<i>Liliaceae</i> (161).		
Tetraria.....	2	—	Asparagus.....	12	—
†Macrochaetium.....	1	—	†Behnia.....	1	—
†Cladium.....	1	—	†Dracaena.....	1	—
Schoenoxiphium.....	2	—	Kniphofia.....	2	—
Carex.....	4	—	Gasteria.....	6	—
Not identified.....	3	—	Aloe.....	16	—
			Haworthia.....	9	—
<i>Aroidaceae</i> (1).			Bulbine.....	9	—
Zantedeschia.....	1	—	†Schizobasis.....	2	—
			Eriospermum.....	4	—
<i>Lemnaceae</i> (3).			Anthericum.....	12	—
Lemna.....	2	—	Chlorophytum.....	3	—
Wolffia.....	1	—	†Caesia.....	1	—
			†Agapanthus.....	1	—
<i>Restiaceae</i> (24).			Tulbaghia.....	3	—
Restio.....	5	—	Allium.....	2	1
†Dovea.....	3	—	Massonia.....	3	—
Elegia.....	3	—	Polyxena.....	1	—
†Lamprocaulos.....	1	—	Neopatersonia.....	1	—
Leptocarpus.....	2	—	Lachenalia.....	3	—
†Thamnochortus.....	3	—	Drimia.....	6	—
†Hypolaena.....	1	—	†Litanthus.....	1	—
†Hypodiscus.....	3	—	Dipcadi.....	3	—
†Cannamois.....	1	—	Albuca.....	19	—
Incertae sedis.....	2	—	Urginea.....	6	—
			Veltheimia.....	1	—
<i>Xyridaceae</i> (1).			†Eucomis.....	1	—
Xyris.....	1	—	†Scilla.....	9	—
			Ornithogalum.....	14	—
<i>Commelinaceae</i> (4).			†Androcymbium.....	5	—
Commelina.....	3	—	Wurmbea.....	1	—
Cyanotis.....	1	—	†Dipidax.....	1	—
			†Ornithoglossum.....	1	—
<i>Juncaceae</i> (13).			Neodregea.....	1	—
Juncus.....	12	—			
Pronium.....	1	—	<i>Dioscoreaceae</i> (3).		
			Dioscorea.....	1	—
<i>Haemodoraceae</i> (7).			Testudinaria.....	2	—
†Wachendorfia.....	2	—			
Lanaria.....	1	—	<i>Iridaceae</i> (72).		
†Sansevieria.....	2	—	Moraea.....	10	—
Cyanella.....	2	—	Homeria.....	1	—
			†Ferraria ?.....	1 ?	—
<i>Amaryllidaceae</i> (47)..			†Hexaglottis.....	1	—
Forbesia.....	1	—	Syringodea.....	1	—
Ianthe.....	3	—	Romulea.....	5	—
Hypoxis.....	11	—	Bobartia.....	2	—
Hessea.....	2	—	Aristea.....	6	—

	Total Species.	Non- Native Species,		Total Species.	Non- Native Species.
<i>Iridaceae</i> (con.)			<i>Urticaceae</i> (7).		
Hesperanthes.....	3	—	Urtica.....	3	1
Geissorhiza.....	7	—	Fleurya.....	2	—
Ixia.....	1	—	Australina.....	2	—
Dierama.....	2	—	<i>Ulmaceae</i> (2).		
†Micranthus.....	1	—	Celtis.....	1	—
Freesia.....	1	—	Chaetacme.....	1	—
Watsonia.....	2	—	<i>Moraceae</i> (2).		
†Babiana.....	1	—	Ficus.....	2	—
†Melasphaerula.....	1	—	<i>Proteaceae</i> (16).		
†Sparaxis.....	1	—	Leucadendron.....	5	—
Tritonia.....	6	—	Protea.....	9	—
Acidanthera.....	1	—	Leucospermum.....	1	—
Gladiolus.....	12	—	†Nivenia.....	1	—
Antholyza.....	6	—	<i>Loranthaceae</i> (6).		
<i>Musaceae</i> (2).			†Loranthus.....	1	—
Strelitzia.....	2	—	Viscum.....	5	—
<i>Cannaceae</i> (1).			<i>Santalaceae</i> (29).		
§Canna.....	1	1	Thesium.....	26	—
<i>Orchidaceae</i> (70).			Osyris.....	1	—
Acrolophia.....	3	—	Rhoiocarpus.....	1	—
Eulophia.....	7	—	Thesidium.....	1	—
Lissochilus.....	4	—	<i>Grubbiaceae</i> (1).		
Polystachya.....	1	—	†Grubbia.....	1	—
Angraecum.....	3	—	<i>Rafflesiaceae</i> (1).		
Listrostachys.....	1	—	†Cytinus.....	1	—
Mystacidium.....	1	—	<i>Polygonaceae</i> (14).		
Bartholina.....	2	—	Polygonum.....	7	3
Holothrix.....	9	—	Rumex.....	6	3?
Habenaria.....	5	—	Emex.....	1	—
Bonatea.....	2	—	<i>Chenopodiaceae</i> (12).		
Satyrium.....	10	—	§Chenopodium.....	4	4
Monadenia.....	2	—	Exomis.....	1	—
Herschelia.....	1	—	§Atriplex.....	2	2
Penthea.....	1	—	Chenolea.....	1	—
Disa.....	9	—	Salicornia.....	2	—
†Schizodium.....	1	—	Suaeda.....	2	—
†Brownlea.....	1	—	<i>Amarantaceae</i> (10).		
†Ceratandropsis.....	1	—	Amarantus.....	3	2
Ceratandra.....	1	—	†Cyathula.....	1	—
Pterygodium.....	3	—	†Pupalia.....	2	—
Corycium.....	1	—	Achyranthes.....	1	1
Disperis.....	1	—	†Achyropsis.....	1	—
Dicotyledoneae.			†Alternanthera.....	1	1
ARCHICHLAMYDEAE (894).			†Gomphrena.....	1	1
<i>Piperaceae</i> (1).			<i>Phytolaccaceae</i> (5).		
Peperomia.....	1	—	Phytolacca.....	1	—
<i>Salicaceae</i> (1).			Limeum.....	1	—
Salix.....	1	—	Psammotropha.....	1	—
<i>Myricaceae</i> (5).			†Adenogramma.....	2	—
Myrica.....	5	—			

	Total Species.	Non- Native Species.		Total Species	Non- Native Species.
<i>Aizoaceae</i> (79).			<i>Capparidaceae</i> (6).		
<i>Orygia</i>	1	—	<i>Capparis</i>	4	—
<i>Hypertelis</i>	1	—	<i>Cadaba</i>	1	—
<i>Pharnaceum</i>	3	—	<i>Maerua</i>	1	—
<i>Mesembrianthemum</i>	64	—	<i>Droseraceae</i> (2).		
<i>Tetragonia</i>	4	—	<i>Drosera</i>	2	—
<i>Aizoon</i>	2	—	<i>Crassulaceae</i> (64).		
<i>Galenia</i>	4	—	<i>Dinacria</i>	1	—
<i>Portulacaceae</i> (5).			<i>Crassula</i>	50	—
<i>Anacampseros</i>	3	—	<i>Rochea</i>	1	—
§ <i>Portulaca</i>	1	1	<i>Cctyledon</i>	10	—
<i>Portulacaria</i>	1	—	<i>Kalanchoe</i>	2	—
<i>Basellaceae</i> (1).			<i>Saxifragaceae</i> (1).		
§ <i>Boussingaultia</i>	1	1	<i>Montinia</i>	1	—
<i>Caryophyllaceae</i> (21).			<i>Pittosporaceae</i> (1).		
<i>Dianthus</i>	5	1	<i>Pittosporum</i>	1	—
<i>Silene</i>	7	1	<i>Cunoniaceae</i> (2).		
§ <i>Stellaria</i>	1	1	<i>Cunonia</i>	1	—
<i>Cerastium</i>	1	—	† <i>Platylophus</i>	1	—
§ <i>Spergula</i>	1	1	<i>Bruniaceae</i> (6).		
§ <i>Spergularia</i>	2	2	<i>Berzelia</i>	3	—
§ <i>Polycarpon</i>	1	1	† <i>Brunia</i>	1	—
<i>Pollichia</i>	1	—	† <i>Pseudobaeckia</i>	2	—
§ <i>Hemiaria</i>	1	1	<i>Hamamelidaceae</i> (2).		
§ <i>Corrigiola</i>	1	1	<i>Trichocladus</i>	2	—
<i>Nymphaeaceae</i> (1).			<i>Rosaceae</i> (11).		
<i>Nymphaea</i>	1	—	<i>Rubus</i>	2	—
<i>Ranunculaceae</i> (5).			<i>Alchemilla</i>	1	—
<i>Clematis</i>	1	—	<i>Cliffortia</i>	8	—
<i>Knowltonia</i>	3	—	<i>Leguminosae</i> (149).		
<i>Ranunculus</i>	1	—	† <i>Cyclopia</i>	2	—
<i>Menispermaceae</i> (2).			<i>Podalyria</i>	3	—
<i>Cissampelos</i>	1	—	† <i>Priestleya</i>	1	—
<i>Antizoma</i>	1	—	<i>Amphithalea</i>	2	—
<i>Lauraceae</i> (2).			† <i>Boi bonia</i>	1	—
<i>Cassytha</i>	1	—	<i>Rafnia</i>	1	—
<i>Ocotea</i>	1	—	<i>Lotononis</i>	14	—
<i>Papaveraceae</i> (5).			<i>Lebeckia</i>	4	—
§ <i>Papaver</i>	1	1	<i>Aspalathus</i>	20	—
§ <i>Argemone</i>	1	1	† <i>Buchenroedera</i>	1	—
<i>Corydalis</i>	2	1	<i>Melolobium</i>	2	—
§ <i>Fumaria</i>	1	1	<i>Crotalaria</i>	3	—
<i>Cruciferae</i> (25).			<i>Medicago</i>	2	—
§ <i>Brassica</i>	2	1	<i>Melilotus</i>	1	—
§ <i>Diplotaxis</i>	1	1	<i>Argyrolobium</i>	10	—
§ <i>Sinapis</i>	1	1	<i>Trifolium</i>	2	—
<i>Heliophila</i>	13	—	<i>Psoralea</i>	14	—
<i>Nasturtium</i>	2	1	<i>Indigofera</i>	22	—
<i>Sisymbrium</i>	2	1	<i>Tephrosia</i>	4	—
<i>Lepidium</i>	3	—	<i>Sutherlandia</i>	1	—
§ <i>Capsella</i>	1	—	<i>Lessertia</i>	8	—
			<i>Hallia</i>	3	—

	Total Species.	Non- Native Species.		Total Species.	Non- Native Species.
<i>Leguminosae</i> (con.)			<i>Euphorbiaceae</i> (con.)		
Vicia.....	1	—	(?) Seidelia.....	1	—
†Erythrina.....	1	—	Acalypha.....	5	—
Vigna.....	3	—	§Ricinus.....	1	1
Dolichos.....	4	—	Adenocline.....	2	—
Rhynchosia.....	8	—	Dalechampia.....	1	—
†Eriosema.....	1	—	†Gelonium.....	1	—
†Virgilia.....	1	—	†Ctenomeria.....	1	—
†Calpurnia.....	1	—			
†Cassia.....	3	2	<i>Callitrichaceae</i> (1).		
†Schotia.....	3	—	†Callitriche.....	1	—
Acacia.....	2	—			
<i>Geraniaceae</i> (40).			<i>Anacardiaceae</i> (24).		
§Erodium.....	1	1	Harpephyllum.....	1	—
Geranium.....	3	—	†Loxostylis.....	1	—
Pelargonium.....	35	—	†Laurophyllus.....	1	—
Monsonia.....	1	—	Rhus.....	21	—
<i>Oxalidaceae</i> (18).			<i>Aquifoliaceae</i> (1).		
Oxalis.....	18	—	Ilex.....	1	—
<i>Linaceae</i> (3).			<i>Celastraceae</i> (26).		
Linum.....	3	—	Putterlickia.....	1	—
<i>Zygophyllaceae</i> (7).			Pterocelastrus.....	2	—
Zygophyllum.....	6	—	Gymnosporia.....	13	—
Tribulus.....	1	—	Cassine.....	2	—
<i>Rutaceae</i> (33).			Elaeodendron.....	2	—
Diosma.....	1	—	Mystroxyton.....	4	—
†Coleonema.....	1	—	†Pleurostyli.....	1	—
Acmadenia.....	1	—	Lauridia.....	1	—
Barosma.....	7	—	<i>Icacinaceae</i> (1).		
Agathosma.....	16	—	Apodytes.....	1	—
†Macrostylis.....	2	—	<i>Sapindaceae</i> (5).		
†Empleurum.....	1	—	Allophylus.....	1	—
Fagara.....	1	—	†Smelophyllum.....	1	—
Toddalia.....	1	—	Pappea.....	1	—
†Clausena.....	1	—	†Hippobromus.....	1	—
Calodendron.....	1	—	†Dodonaea.....	1	—
<i>Meliaceae</i> (3).			<i>Melanthaceae</i> (1).		
Ekebergia.....	1	—	Melanthus.....	1	—
†Ptaeroxylon.....	1	—	<i>Balsaminaceae</i> (1).		
Nymania.....	1	—	Impatiens.....	1	—
<i>Polygalaceae</i> (17).			<i>Rhamnaceae</i> (14).		
Muraltia.....	6	—	Rhamnus.....	1	—
Mundia.....	1	—	Scutia.....	2	—
Polygala.....	10	—	Noltea.....	1	—
<i>Euphorbiaceae</i> (53).			†Helinus.....	1	—
Euphorbia.....	22	—	Phylica.....	9	—
†Lachnostylis.....	1	—	<i>Ampelidaceae</i> (6).		
Andrachne.....	1	—	Rhoicissus.....	4	—
†Croton.....	1	—	†Cissus.....	2	—
†Jatropha.....	1	—	<i>Tiliaceae</i> (3).		
†Phyllanthus.....	3	—	Grewia.....	2	—
Cluytia.....	11	—	†Sparmannia.....	1	—
Leidesia.....	1	—			

	Total Species.	Non- Native Species.		Total Species.	Non- Native Species.
<i>Malvaceae</i> (13).			<i>Myrtaceae</i> (2).		
§ <i>Malva</i>	1	1	† <i>Eugenia</i>	2	—
<i>Malvastrum</i>	2	—	§ <i>Oenotheraceae</i> (5).		
† <i>Sida</i>	2	—	§ <i>Oenothera</i>	3	3
† <i>Abutilon</i>	1	—	§ <i>Epilobium</i>	2	2
† <i>Pavonia</i>	1	—	<i>Halorrhagidaceae</i> (2).		
<i>Hibiscus</i>	6	—	<i>Laurembergia</i>	1	—
<i>Sterculiaceae</i> (25).			<i>Myriophyllum</i>	1	—
† <i>Sterculia</i>	1	—	<i>Araliaceae</i> (2).		
<i>Hermannia</i>	22	—	† <i>Cussonia</i>	2	—
† <i>Melhania</i>	1	—	<i>Umbelliferae</i> (37).		
† <i>Dombeya</i>	1	—	<i>Hydrocotyle</i>	6	—
<i>Guttiferae</i> (2).			<i>Alepidea</i>	1	—
<i>Hypericum</i>	2	—	<i>Apium</i>	2	—
<i>Ochnaceae</i> (2).			† <i>Trachyspermum</i> ...	1	—
<i>Ochna</i>	2	—	† <i>Carum</i>	2	—
<i>Elatinaceae</i> (1).			<i>Pimpinella</i>	1	—
<i>Bergia</i>	1	—	<i>Sium</i>	1	—
<i>Frankeniaceae</i> (2).			<i>Rhyticarpus</i>	1	—
† <i>Frankenia</i>	2	—	<i>Bupleurum</i>	2	—
<i>Violaceae</i> (1).			<i>Heteromorpha</i>	1	—
<i>Hybanthus</i>	1	—	<i>Lichtensteinia</i>	2	—
<i>Flacourtiaceae</i> (7).			<i>Anesorrhiza</i>	2	—
<i>Kiggelaria</i>	1	—	<i>Foeniculum</i>	1	—
<i>Scolopia</i>	3	—	<i>Pituranthos</i>	1	—
<i>Doryalis</i>	2	—	<i>Seseli</i>	1	—
<i>Trimeria</i>	1	—	<i>Cnidium</i>	1	—
<i>Achariaceae</i> (2).			<i>Peucedanum</i>	6	—
† <i>Ceratosicyos</i>	1	—	† <i>Capnophyllum</i>	1	—
† <i>Acharia</i>	1	—	<i>Caucalis</i>	1	—
§ <i>Cactaceae</i> (3 ?).			<i>Arctopus</i>	1	—
§ <i>Opuntia</i>	3 ?	3 ?	† <i>Hermas</i>	1	—
<i>Penaeaceae</i> (5).			<i>Conium</i>	1	—
† <i>Penaea</i>	5	—	<i>Cornaceae</i> (1).		
<i>Thymelaeaceae</i> (24).			<i>Curtisia</i>	1	—
<i>Passerina</i>	4	—	METACHLAMYPDEAE (794).		
<i>Lachnaea</i>	1	—	<i>Ericaceae</i> (40).		
<i>Struthiola</i>	6	—	<i>Erica</i>	31	—
<i>Gnidia</i>	9	—	† <i>Blaeria</i>	2	—
<i>Lasiosiphon</i>	4	—	<i>Coilostigma</i>	2	—
<i>Oliniaceae</i> (1).			† <i>Thoracospermum</i> ..	1	—
<i>Olinia</i>	1	—	<i>Thamnus</i>	1	—
§ <i>Lythraceae</i> (1).			† <i>Simocheilus</i>	2	—
§ <i>Lythrum</i>	1	1	† <i>Anomalanthus</i>	1	—
<i>Combretaceae</i> (1).			<i>Myrsinaceae</i> (3).		
† <i>Combretum</i>	1	—	<i>Myrsine</i>	3	—
			<i>Primulaceae</i> (4).		
			† <i>Lysimachia</i>	1	—
			§ <i>Anagallis</i>	1	1
			<i>Samolus</i>	2	—

	Total Species.	Non- Native Species.		Total Species.	Non- Native Species.
<i>Plumbaginaceae</i> (3).			<i>Convolvulaceae</i> (14).		
Statice.....	2	—	Ipomaea.....	4	—
†Plumbago.....	1	—	Convolvulus.....	5	—
<i>Sapotaceae</i> (1).			Dichondra.....	1	—
Sideroxylon.....	1	—	Falkia.....	2	—
<i>Ebenaceae</i> (10).			Cuscuta.....	2	1
Royena.....	3	—	<i>Boraginaceae</i> (19).		
Euclea.....	7	—	†Cordia.....	1	—
<i>Oleaceae</i> (8).			Ehretia.....	1	—
Jasminum.....	2	—	Heliotropium.....	3	—
Olea.....	6	—	Cynoglossum.....	2	—
<i>Salvadoraceae</i> (1).			Echinosperrnum.....	1	—
Azima.....	1	—	Anchusa.....	1	—
<i>Loganiaceae</i> (6).			Myosotis.....	1	—
†Gomphostigma.....	1	—	Lithospermum.....	2	—
Nuxia.....	1	—	Lobostemon.....	5	—
Chilianthus.....	2	—	Echium.....	2	2
Buddleia.....	1	—	<i>Verbenaceae</i> (6).		
†Strychnos.....	1	—	†Stilbe.....	2	—
<i>Gentianaceae</i> (16).			Lantana.....	1	—
Sebaea.....	8	—	Bouchea.....	1	—
Chironia.....	6	—	†Priva.....	1	—
†Villarsia.....	1	—	§Verbena.....	1	1
Limnanthemum.....	1	—	<i>Labiatae</i> (42).		
<i>Apocynaceae</i> (5).			†Becium.....	1	—
Carissa.....	1	—	Plectranthus.....	5	—
Acokanthera.....	1	—	Mentha.....	2	2?
Gonioma.....	1	—	Salvia.....	11	—
†Pachypodium.....	2	—	Stachys.....	9	—
<i>Asclepiadaceae</i> (65).			§Marrubium.....	1	1
†Raphionacme.....	1	—	Ballota.....	1	—
Secamone.....	2	—	†Leucas.....	1	—
Astephanus.....	1	—	†Lasiocorys.....	1	—
†Microloma.....	1	—	Leonotis.....	7	—
†Woodia.....	1	—	Teucrium.....	2	—
Xysmalobium.....	2	—	Ajuga.....	1	—
Schizoglossum.....	6	—	<i>Solanaceae</i> (23).		
Asclepias.....	8	—	Solanum.....	10	3?
Pachycarpus.....	2	—	§Physalis.....	1	1
†Glossostephanus.....	1	—	Withania.....	1	1
†Pentarrhinum.....	1	—	Lycium.....	8	—
Cynanchum.....	5	—	§Datura.....	1	1
Sarcostemma.....	1	—	§Nicotiana.....	1	1
†Tylophora.....	4	—	§Cestrum.....	1	1
†Marsdenia.....	1	—	<i>Selaginaceae</i> (26).		
Fockea.....	1	—	Hebenstreitia.....	2	—
†Tenaris.....	1	—	†Dischisma.....	2	—
†Ceropegia.....	5	—	Walafrida.....	12	—
Brachystelma.....	5	—	Selago.....	10	—
†Anisotoma.....	1	—	<i>Scrophulariaceae</i> (62).		
Huernia.....	3	—	Aptosimum.....	1	—
Stapelia.....	7	—	Pelostomum.....	1	—
Duvalia.....	5	—	Alonsoa.....	1	—
			Diascia.....	2	—
			Hemimeris.....	1	—

	Total Species.	Non- Native Species.		Total Species.	Non- Native Species.
<i>Scrophulariaceae</i> (con.)			<i>Rubiaceae</i> (con.)		
Nemesia.....	4	—	Oldenlandia.....	5	—
Diclis.....	1	—	‡Vangueria.....	1	—
Halleria.....	2	—	Plectronia.....	3	—
†Freylinia.....	2	—	‡Pavetta.....	2	—
Manulea.....	3	—	‡Psychotria.....	1	—
Sutera.....	16	—	Hydrophylax.....	1	—
Phyllopodium.....	4	—	Galopina.....	1	—
Polycarena.....	1	—	Anthospermum.....	4	—
Zaluzianskya.....	5	—	†Carpacoce.....	1	—
Limosella.....	2	—	†Rubia.....	1	—
Ilysanthes.....	1	—	Galium.....	2	—
§Veronica.....	1	—	<i>Cucurbitaceae</i> (14).		
Melasma.....	3	—	Melothria.....	3	—
‡Striga.....	2	—	Coccinia.....	1	—
Sopubia.....	1	—	Cucumis.....	3	—
Bopusia.....	1	—	Kedrostis.....	7	—
Buchnera.....	1	—	<i>Campanulaceae</i> (31).		
‡Cynenium.....	1	—	Lobelia.....	7	—
Ramphicarpa.....	1	—	Monopsis.....	1	—
Harveya.....	3	—	Metzleria.....	1	—
Hyobanche.....	1	—	Lightfootia.....	7	—
<i>Bignoniaceae</i> (2).			Wahlenbergia.....	6	—
‡Tecomaria.....	1	—	Prismatocarpus.....	2	—
Rhigozum.....	1	—	Roella.....	3	—
<i>Gesneriaceae</i> (1).			Cyphia.....	4	—
Streptocarpus.....	1	—	<i>Goodeniaceae</i> (1).		
<i>Lentibulariaceae</i> (4).			Scaevola.....	1	—
Utricularia.....	4	—	<i>Compositae</i> (299).		
<i>Acanthaceae</i> (33).			Vernonia.....	3	—
Thunbergia.....	2	—	‡Platycarpha.....	1	—
Ruellia.....	1	—	Corymbium.....	4	—
Chaetacanthus.....	2	—	‡Mikania.....	1	—
Blepharis.....	5	—	Amellus.....	1	—
‡Crabbea.....	2	—	Microglossa.....	1	—
Barleria.....	4	—	Anaglypha DC.....	1	—
Justicia.....	5	—	Aster.....	14	—
Monechma.....	3	—	Felicia.....	1	—
‡Isoglossa.....	3	—	§Erigeron.....	2	2
‡Peristrophe.....	3	—	Nidorella.....	4	—
Hypoestes.....	2	—	Chrysocoma.....	1	—
Dicliptera.....	1	—	Pteronia.....	6	—
<i>Plantaginaceae</i> (5).			Conyza.....	4	—
Plantago.....	5	1	Brachylaena.....	4	—
<i>Valerianaceae</i> (1).			Tarconanthus.....	2	—
Valeriana.....	1	—	Pulicaria.....	1	—
<i>Dipsaceae</i> (2).			Iphiona.....	1	—
Cephalaria.....	1	—	§Bidens.....	1	—
Scabiosa.....	1	—	†Iocasté.....	1	—
<i>Rubiaceae</i> (27).			Printzia.....	1	—
Burchellia.....	1	—	Matricaria.....	1	—
Gardenia.....	3	—	Pentzia.....	3	—
‡Randia.....	1	—	Adenosolen.....	1	—
			Cotula.....	7	—
			Eriocephalus.....	1	—
			Athanasia.....	5	—
			§Xanthium.....	1	1

	Total Species.	Non- Native Species.		Total Species.	Non- Native Species.
<i>Compositae</i> (con.)			<i>Compositae</i> (con.)		
Leontonyx.....	3	—	Tripteris.....	1	—
Helichrysum.....	41	—	Dimorphotheca....	3	—
Ifloga.....	1	—	Osteospermum.....	8	—
Helipterum.....	2	—	Ursinia.....	8	—
Gnaphalium.....	5	—	Haplocarpha.....	1	—
†Amphidoxa.....	1	—	Cryptostemma.....	2	—
Lasiopogon.....	1	—	Arctotis.....	2	—
Metalasia.....	4	—	Venidium.....	5	—
Elytropappus.....	1	—	Gazania.....	4	—
Amphiglossa.....	1	—	†Cullumia.....	2	—
Disparago.....	1	—	Cypselodontia....	1	—
Stoebe.....	3	—	Berkheya.....	8	—
Athrixia.....	1	—	Stephanocoma.....	1	—
Leyssera.....	1	—	†Didelta.....	2	—
Nestlera.....	1	—	Dicoma.....	2	—
Relhania.....	5	—	§Carduus.....	1	1
†Heterolepis.....	1	—	§Centaurea.....	1	1
Cineraria.....	3	—	Oldenburgia.....	1	—
Senecio.....	60	—	§Hypochaeris.....	2	2
Euryops.....	3	—	Gerbera.....	4	—
Gamolepis.....	7	—	Hieracium.....	1	—
Othonnopsis.....	2	—	Lactuca.....	1	—
Othonna.....	11	—	Sonchus.....	2	1
Oligocarpus.....	1	—	†Launea.....	1	—

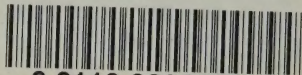


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