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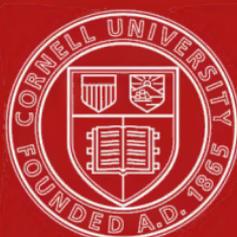
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THE BOTANY OF THE KIMBERLEYS, NORTH-WEST
AUSTRALIA.

BY WILLIAM VINCENT FITZGERALD.

(Communicated by J. H. Maiden, I.S.O., F.R.S., F.L.S.,
Honorary Member, 4th February. 1918.)

Issued November, 1918.

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THE BOTANY OF THE KIMBERLEYS, NORTH-WEST AUSTRALIA,

BY WILLIAM VINCENT FITZGERALD.

(Communicated by J. H. Maiden, I.S.O., F.R.S., Honorary Member.)

Note by Communicator.—Mr. Fitzgerald was attached to two expeditions, viz., that of C. Crossland in 1905, and one in the following year. A note on the botanical work will be found in my "Notes on Acacia, No. li., Tropical Western Australia," in *Proc. Roy. Soc., N.S.W.* li., 106, 1917. The few specimens collected by Dr. House, collected on the F. S. Brockman expedition of 1901 are referred to, *op. cit.* p. 104, and are included by Mr. Fitzgerald in the present paper.

From time to time I brought before the Royal Society of New South Wales (Vols. xlvii., 221 (1913); xlix., 317, 318, (1915); li., 445 (1917)) notes on or descriptions of Eucalypts collected by Mr. Fitzgerald, embodying his notes or descriptions where available.

Concerning Acacia, the same remarks apply as regards tropical species, to my papers in *Proc. Roy. Soc., N.S.W.* li., 71 (1917) and "The Flora of the Northern Territory" (Ewart and Davies), published by the Federal Government, 1917, Appendix iv., Acacias, p. 318. As regards Extra-tropical species, *Proc. Roy. Soc., N.S.W.* li., 238 (1917).

On 11th April, 1916, I received from Mr. Fitzgerald, the day after his departure on active service, his M.S. on Western Australian plants, together with some herbarium specimens. With the author away from Australia (he recently returned wounded), I acted in his interests as well as I could. Some few remaining Eucalyptus notes I will continue to publish in the Royal Society, New South Wales, series of papers, and others in my Critical Revision of the genus.

A Hydrocharidiaceae, which on receipt of the manuscripts I found Mr. Fitzgerald had described (but not published) had been forwarded by me to Dr. A. B. Rendle, F.R.S., of the British Museum, a specialist on this Family, as far back as July, 1915.

No opportunity presented itself of dealing with Mr. Fitzgerald's manuscripts in 1916. I divided them into three parts (a) The present portion, which deals with the tropical (chiefly Kimber-

ley) plants. This is by far the most valuable. I have re-arranged it but have not otherwise interfered with it. (b) Some notes on other Western Australian plants; valuable, but not so urgent. (c) Descriptions of Western Australian plants already published by Mr. Fitzgerald. It was evidently the intention of Mr. Fitzgerald to publish (a), (b), and (c) as a complete work, and this would have been very convenient. Of course no scientific journal would republish (c). It is regretted that the present paper was not published years ago, but financial difficulties apparently stood in the way.

During the last ten years I obtained a number of specimens of Mr. Fitzgerald's collecting by purchase from a former business partner of his. A few others I had received at odd times from Dr. Stoward, Botanist and Plant Pathologist of the Western Australian Department of Agriculture. In April, 1917, I received from Dr. Stoward specimens of 53 species now described in this paper. These are in the National Herbarium of Sydney, and the original set is with Dr. Stoward at Perth. Many of the species will have to be re-collected before material is available for other herbaria.

Mr. Fitzgerald's paper deals with one of the important *terrae incognitae* of Australia. This has been brought home to me frequently, as small collections from North-Western Australia are from time to time received. Accordingly, long before I became the trustee of Mr. Fitzgerald's manuscripts, I had prepared a botanical bibliography of the region, which is attached to my *Acacia* paper (*Journ. Roy. Soc. N.S.W.*, li., 71 (1917)), the chief value of the purely botanical portion of which is based on Mr. Fitzgerald's material received from Dr. Stoward.

The following are proposed as new genera:—

CYPERACEÆ.	MALVACEÆ.
<i>Crosslandia</i>	<i>Brockmania</i>

The following are proposed as new species:—

CYCADACEÆ.	HÆMADORACEÆ
<i>Cycas furfuracea</i>	<i>Hæmadorum longifolium</i>
	<i>Hæmadorum flaviflorum</i>

SCHÆUCHZERIAACEÆ.	PROTEACEÆ.
<i>Triglochin pterocarpa</i>	<i>Grevillea miniata</i>
	<i>Grevillea heteroneura</i>
	<i>Grevillea erythroclada</i>
	<i>Hakea Morrisoniana</i>

GRAMINEÆ.
<i>Eriachne pauciflora</i>

CYPERACEÆ	LORANTHACEÆ.
<i>Fimbristylis pilifera</i>	<i>Loranthus ferruginiflorus</i>
<i>Fimbristylis oligocephala</i>	<i>Loranthus biangulatus</i>
<i>Fimbristylis arthrostyloloides</i>	
<i>Crosslandia setifolia</i>	AMARANTACEÆ.
<i>Scirpus Isdellensis</i>	<i>Ptilotus longistachyus</i>
<i>Rhynchospora affinis</i>	<i>Ptilotus Johnstonianus</i>

PORTULACACEÆ.

Calandrinia Tepperiana

LAURACEÆ.

Cassytha strigosa

LEGUMINOSÆ.

Cassia neurophylla
Cassia cladophylla
Jacksonia petrophiloides
Jacksonia aculeata
Crotalaria membranacea
Psoralea cuneata
Psoralea virens
Tephrosia conspiciua
Tephrosia stipuligera
Atylosia lanceolata

ZYGOPHYLLEÆ.

Tribulus affinis
Tribulus curvicaarpus

RUTACEÆ.

Boronia pauciflora

EUPHORBIACEÆ.

Euphorbia distans
Euphorbia comans
Euphorbia cinerea
Euphorbia chrysochaeta
Bridelia phyllanthoides
Petalostigma humilis
Phyllanthus polycladus
Mallotus Derbyensis

ANACARDIACEÆ.

Buchanania oblongifolia

RHAMNACEÆ.

Cryptandra intratropica

TILIACEÆ.

Triumphetta reflexa

MALVACEÆ.

Sida Hackettiana
Abutilon Andrewianum
Abutilon propinquum
Brockmania membranacea

STERCULIACEÆ.

Sterculia viscidula
Sterculia tuberculata
Sterculia viridiflora
Helicteres rhynchocarpa

LYTHRACEÆ.

Nesaea repens

COMBRETACEÆ.

Terminalia Hadleyana
Terminalia chlorocarpa
Terminalia biangulata
Terminalia Rogersii

MYRTACEÆ.

Melaleuca Crosslandiana
Melaleuca argentea
Melaleuca Loguei
Fenzlia phebalioides

EBENACEÆ.

Diospyros nitens

LOGANIACEÆ.

Mitrasacme lepidocalyx
Mitrasacme hispida

ASCLEPIADACEÆ.

Marsdenia Brockmaniana

BORRAGINACEÆ.

Ehretia urceolata
Heliotropium flaviflorum

SOLANACEÆ.

Solanum dioicum

SCROPHULARIACEÆ.

Stemodia flaccida

PEDALIACEÆ.

Josephinia papillosa

LENTIBULARIACEÆ.

Utricularia Charnleyensis

MYOPORACEÆ.

Pityrodia obliqua

CANDOLLEACEÆ.

Stylidium cordifolium
Stylidium rubiscapum
Stylidium irriguum
Stylidium claytonioides

GOODENIACEÆ.

Goodenia linifolia
Goodenia propinqua
Calogyne Heppleana
Scaevola scabrida
Scaevola stenostachya
Scaevola decipiens
Dampiera conospermoides

COMPOSITÆ.

Olearia aspera
Blumea pungens
Blumea prostrata
Pterocaulon globuliflorus

VARIETIES.

GRAMINEÆ.

Xerochloa imberbis R. Br. var.
repens.

CYPERACEÆ.

Cyperus Holoschaenus R. Br. var.
viscida.

MALVACEÆ.

Hibiscus zonatus F. v. M. var.
spinulosa.

GOODENIACEÆ.

Goodenia lamprosperma F. v. M.
var. *foliosa*.

COMPOSITÆ.

Pluchea tetranthera F. v. M. var.
cinerea

His paper therefore contains descriptions of—

2 new genera
88 new species
5 new varieties

and from that circumstance also becomes a most important contribution to Australian botany. The new species of *Acacia* and *Eucalypts* are not included, having been dealt with elsewhere, as already stated. This would increase the number of species by at least six, making 94 in all.

It would be desirable to make a comprehensive statement in regard to the flora of North-West Australia, and my bibliography will be useful in this connection, but it is not desirable to increase the length of the present paper. In a few cases Mr. Fitzgerald has not given specific localities, and in cases in which a species occurs in extra-tropical areas, I have been careful to only present such of Mr. Fitzgerald's notes as refer, at least in part, to tropical specimens.

The Northern Territory and North-West Australia being contiguous country, it will be most instructive to compare Ewart and Davies' "Flora of the Northern Territory," published last month (December, 1917), with the present paper, but to do this would delay publication of Mr. Fitzgerald's paper, and would also raise the question of additional cost.

The following brief account of the physiography of the area dealt with was supplied by Mr. Fitzgerald. The author has also some fuller notes on the geology of the region which are less in place in a purely botanical paper.

The part specifically detailed extends due east of King Sound and is typical of the country bounded on the south by the Fitzroy River.

The principal mountain chains are the King Leopold Ranges which bear west of north to Walcott Inlet. Mount Broome is the highest point, but does not exceed 1,900 feet above the north-eastern base. Away to the west and parallel with the ranges is a low rugged-looking one known as the Napier Range, and beyond, for a distance

of roughly 100 miles, when King Sound is reached, are a series of sandy, scrubby undulations and grassy plains. To the east of the King Leopold Ranges, looking from Mount Broome, the country in configuration consists of ranges and tablelands, with undulations, and extensive plains intervening, besides isolated mountains which rise above the surrounding country like islands from an ocean. The whole are intersected by numerous watercourses which, during the wet season, carry huge volumes of water, and always contain large permanent pools, or are running in part throughout the whole year. The elevations are faced by frequently unscalable cliffs of 50 to above 500 feet in height, whilst the rivers do not uniformly follow the base of the ranges, but instead often cut clean through them, forming wildly picturesque and precipitous gorges. The following are some examples:—

River.	Ranges through which they gorge.
Lennard	King Leopold and Napier.
Isdell	Packhorse and Artesian.
Sprigg	Synnott.
Hann	Phillips.
Barker	Napier.

PTERIDOPHYTA.

FILICALES.

POLYPODIACEÆ.

1. *Adiantum lunulatum* Burm.
King Sound District (Froggatt), Wingrah Pass, Napier Range
(W.V.F.).
Among limestone rocks.
2. *Aspidium exaltatum* Swartz.
Sprigg, Charnley, and Hann Rivers, MacNamara Creek, base
of Artesian Range, Edkins Range, Sunday Island (W.V.F.).
In boggy spots.
Rhizome creeping and fronds 4ft. long or caudex slender.
6-8ins. high, fronds to 3ft. long.
3. *Polypodium phymatodes* L.
Sunday Island (W.V.F.).
In shaded spots.
4. *Acrostichum aureum* L.
Hamersley Range (McRae), King Sound District (Froggatt),
Sunday Island (W.V.F.). In boggy spots.
5. *A. scandens* Smith.
Sprigg and Charnley Rivers (W.V.F.). In wet spots.
Rhizome trailing or climbing many yards.

PARKERIACEÆ.

6. *Ceratopteris thalictroides* Brong.
Isdell, Adcock, Charnley Rivers, Woollybutt Creek (W.V.F.).
Fronds form a thickened rhizome which is beneath water.

GLEICHENIACEÆ.

7. *Platyzoma microphyllum* R. Br.
Cæspitose and forming patches of one or more feet across.
Always found in sandy soil.
8. *Gleichenia dichotoma* Hook.
Hunter's River, York Sound (A. Cunn), Charnley River,
Lat. 16° 17' (W.V.F.).
1-2ft. in height. In wet spots among quartzite rocks.

SCHIZEACEÆ.

9. *Lygodium scandens* Swartz.
Isdell, Sprigg, Hann, Charnley, and Calder Rivers, Sunday
Island, Dillen's Springs (W.V.F.). Stems climbing many
yards over scrub and small trees, and often attaining a
height of 15-20ft.
Among sandstone and quartzite boulders.

MARSILEACEÆ.

10. *Marsilea angustifolia*. R. Br.
Bases of Mts. House, Clifton, Hamilton, and Brennan (W.V.F.).
In wet spots chiefly around billabongs.

LYCOPODIALES.

LYCOPODIACEÆ.

11. *Lycopodium cernuum* L.
Charnley River, Edkins Range (W.V.F.).
Among wet rocks.

SELAGINELLACEÆ.

12. *Selaginella Belangeri* Springer.
Isdell River, Mt. Bartlett, affluent of the Isdell River, eight
miles N.W. of the Isdell Range (W.V.F.). In the clefts
of wet rocks.

PSILOTALES.

PSILOTACEÆ.

13. *Psilotum triquetrum* Swartz.
Sprigg and Charnley Rivers (W.V.F.).
Rhizome shortly creeping ; spore-cases yellow. In moist spots.

GYMNOSPERMÆ.

CYCADALES.

CYCADEÆ.

14. *Cycas furfuracea* (W.V.F.), n. sp.
A palm-like plant with a simple stout trunk, leaves petiolate,
the rhachises glabrous ; leaflets numerous, entire or
rarely bifid, broad, linear, rigid and straight, ending in
dark-coloured points, strongly keeled, margins somewhat
recurved, glabrous above, invested beneath with a con-
spicuous furfuraceous indumentum, not decurrent on the
rhachis, the lowest gradually smaller and passing into
more or less scaly hairy straight spines which extend
half-way down the petiole ; male cones shortly pedun-
culate, narrow-ovoid-deltoid, thickened at the apices,
and terminating in stout obtuse upwardly curved points,
the scales glabrous above, the acumen and antheriferous
surface invested with a short dense brown woolly
tomentum ; anther-cells covering the scale from the base
to the thickened summit, carpophylls petiolate, with one
to two pairs of ovules above the middle, densely ferrugin-
ous tomentose, blade ovate, prominently spinous-toothed,
and terminating in a slender obtuse glabrous apex ; seeds
globose, hard and glabrous.

Summits of Mts. Herbert, Broome, and Bold Bluff (W.V.F.). Trunk 4–6ft. high. Leaves 2–2½ft. long, petioles ¼–½in.; leaflets 6in. or less long by ¼in. broad. Male cones 1¼ft. long by 3in. diameter; scales 1in. or less in length, ½in. diameter; acumina ½in. long. Carpophylls 6–8in. long; stalk ¼in.; blade 1–1¼in. broad; apex 1–1½in. long. Seeds 1¼in. diameter, bluish purple and glaucous when young, yellow when mature. In sandy soil among sandstone and quartzite rocks.

Affinity to *C. media* R. Br.

15 *C. media* R. Br.

N.W. coast (A. Cunn.), Prince Regent's River. (J. Bradshaw and Allen.)

The description published in *Flora Australiensis* appears to be based on examples of more than one species.

CONIFERÆ

CUPRESSEÆ (ACTINOSTROBINÆ).

16. *Callitris verrucosa* R. Br.

A tree of 20–40ft.; trunk to 15ft.; diameter 1–1½ft.; bark grey, rough; timber brownish; branchlets and foliage often glaucous and then the cones are much more verrucose than in the ordinary form. "Cypress-pine."

In the western interior the species is most often found growing over calcareous rocks. Both the ordinary form and the glaucous one occur in tertiary limestone and sands, the latter in proximity to the sea.

var. *microcarpa* Benth.

York Sound, Prince Regent's River, Brunswick Bay (A. Cunn.). Summits of King Leopold, Packhorse, Isdell, Synnott, Artesian, Edkins, and Harding Ranges, and to the north; Mts. Harris, Barnett, and Bold Bluff; occasionally descending to their bases (W.V.F.).

Tree 30–80ft.; trunk to 40ft.; diameter 1½–2ft.; bark greyish, rugose; timber brown; cones small, slightly verrucose or quite smooth. In sandstone and quartzite country.

ANGIOSPERMÆ.

MONOCOTYLEDONEÆ.

PANDANALES.

TYPHACEÆ.

17. *Typha angustifolia* L.

Near Perth (Preiss), (W.V.F.); Rawlinson's Range (E. Giles); Bases of Mts. Brennan, Synnott, and Edkins Ranges (W.V.F.).

The tropical plant agrees with that of the Shaw River.
The scapes are 4-8ft. in height.

PANDANACEÆ.

18. *Pandanus odoratissimus* L.
Stems erect, usually several together, attaining a height of 30ft., bi-tri-furcated near the summit; fruits globular, 6-9in. long and in diameter, red when ripe. Reputedly an indication of fresh water. "Pandanus" or "Screw-pine."
19. *P. aquaticus* F. v. M.
Fitzroy, Isdell, Charnley, Denham, and King Rivers (W.V.F.).
Stem erect, 12-25ft.; slender, emitting adventitious roots as in *P. odoratissimus* L., and inflorescence similar to those of that species; drupes free, obovate to cuneate, dry and brown, mostly about lin. long; when old, splitting at the base into numerous fibres, the whole fruit forming a globose-ovate bead, 4-6in. long.

HELIOBIÆ (FLUVIALES).

POTAMOGETONACEÆ.

20. *Potamogeton javanicus* Hassk.
Isdell, Charnley, Calder, and Hann Rivers, MacNamara Creek (W.V.F.).
Leaves floating in still water.

NAJADACEÆ.

21. *Najas tenuifolia* R. Br.
Lennard, Isdell, Charnley, and Calder Rivers (W.V.F.).
In water and muddy localities.

APONOGETONACEÆ.

22. *Aponogeton elongatus* F. v. M.
Isdell and Charnley Rivers; bases of Artesian, Synnott, Isdell and Edkins Ranges, and of Mt. Rason (W.V.F.).
In still water. The submerged leaves are linear-lanceolate, those floating, ovate-lanceolate and purplish beneath; flowers yellow, in a thick ovate spathe.

SCHEUCHZERIACEÆ (JUNCAGINACEÆ).

23. *Triglochin pterocarpa* W.V.F. n. sp.
Roots tuberous; leaves numerous, form a thickened base; terete or semi-terete throughout, flaccid, the upper portion floating; scapes terete almost as long as the leaves and bearing a spike-like raceme; flowers numerous, on very short pedicels; perianth-segments, 4-6, ovate or almost

orbicular ; anthers 6, all perfect ; carpels 3, quite free from the base ; not tapering upwards, all or 1-2 only ripening, the stigmas broad and slightly recurved ; fruit sessile or shortly stipitate, compressed ; oblong-lanceolate to lanceolate, falcate, terminating in a broad, usually straight beak, the inner and outer edges expanding into narrow longitudinal wings.

Isdell and Charnley Rivers (W.V.F.).

Leaves and scapes 2-5 or more feet in length. Inflorescence 4-12in. long, perianth-segments 1-1½in. long ; yellowish. Fruits ¾in. long, yellow or purplish when ripe.

In still water.

Affinity to *T. procera*, R. Br.

ALISMATACEÆ.

24. *Alisma oligococcum* F. v. M.

King Sound District (Froggatt) ; Lennard and Barker Rivers (W.V.F.).

In still water, rooting in mud ; scapes 1-2ft. high ; flowers white.

HYDROCHARITACEÆ.

25. *Maidenia rubra* (W.V.F.) Rendle.

See ‘ “Maidenia” a new genus of Hydrocharitaceæ,’ by A. B. Rendle, D.Sc., F.R.S., with a plate (Journ. Bot., Vol. 54, p. 313, Nov., 1916).

VALLISNERIÆ.

26. *Vallisneria spiralis* L.

May, Meda, Lennard, Fitzroy and Isdell Rivers (W.V.F.) ; Margaret River (C. Andrews). The Margaret River here mentioned is in the South-West and not the tributary of the Fitzroy River known under that name.

GLUMIFLORÆ.

GRAMINEÆ.

ANDROPOGONEÆ.

27. *Andropogon affinis* R. Br.

Fraser Ranges (Dempster) ; Lennard, Fitzroy, Isdell, Hann, and Charnley Rivers (W.V.F.).

Cæspitose, reed-like, 6-8ft. in height.

In sandy loam and black soil.

28. *A. procera* R. Br.

Cæspitose. The lemon-thyme scented rhizomes are used by the aborigines of N.W. Australia in the preparation of an infusion which is drunk by them as a specific for colds, and reputedly has a beneficial effect.

In black soil and sandy loam.

29. *A. brevifolius* Swartz.
Goody-Goody, May, Meda, Lennard and Isdell Rivers (W.V.F.).
In sandy loam. This is the *A. fragilis* R. Br. of the Flora
Australiensis.
30. *A. axilis* Hochsh.
May, Meda, Lennard, and Isdell Rivers (W.V.F.).
In black soil.
31. *Sorghum halepense* Persoon
W. Australia (Drumm); Port Hedland, Lennard and Fitzroy
Rivers (W.V.F.).
In sandy loam.
32. *Dimeria ornithopoda* Trinius.
Eastern base of Bold Bluff (W.V.F.).
In moist black soil. This is the *D. tenera* Trin. of the Flora
Australiensis.
33. *Rottboellia ophiuroides* Benth.
Lennard, May, and Isdell Rivers (W.V.F.)
A reed-like grass, 6-8ft. in height. In sandy loam.
34. *Ischaemum laxum*, R. Br.
Lennard and Isdell Rivers (W.V.F.).
In black soil.
35. *Anthistiria imberbis* Retz.
May, Meda, Lennard, Barker, Fitzroy, Richenda, Yeeda,
Traine, Adcock, Throssell, Hann, Barnett, Isdell, Sprigg,
Charnley, Calder, Ord, Denham, and King Rivers; Valen-
tine, Bell, Synnott, Station, Messmate, Manning, Harris,
McNamara, and Dingo Creeks; Dillen's Springs, Cygnet
Bay (W.V.F.).
The "Bundle-Bundle," one of the best of fodder grasses.
A. australis R. Br., is now referred to this species. Ben-
tham, in the Flora Australiensis, placed both under the
annual *A. ciliata* L.
In black soil.
36. *A. membranacea* Lindley.
This is the "Flinders grass" of N.W. Australia, and is one
of the best of fodder plants.
37. *Imperata arundinacea* Cyrillo.
Murchison River (Oldfield); Walcott Inlet, mouth of Calder
River (W.V.F.).
Cæspitose, in black sandy soil.

ZOYSIEÆ.

38. *Perotis latifolia* Aiton.
Fitzroy River and Margaret Creek (Calvert's Exped.);
Broome; Derby; May, Lennard, and Fitzroy Rivers
(W.V.F.).
In sandy soil. Includes *P. rara* R. Br.

TRISTEGINEÆ.

39. *Arundinella brasiliensis* Raddi.
Prince Regent's River (J. Bradshaw and Allen); Lennard,
Isdell, Barnett, Charnley, and Calder Rivers (W.V.F.).

PANICEÆ.

40. *Paspalum longiflorum* Retz.
Isdell, Hann, and Barnett Rivers (W.V.F.).
In deep black soil or sandy loam.
41. *P. scrobiculatum* L.
Prince Regent's River (J. Bradshaw and Allen); Wingrah
Pass, Napier Range, Lennard, Fitzroy, and Isdell River
(W.V.F.).
In wet sandy spots.
42. *Panicum crus-galli* L.
Swan River (Helmich); Port Hedland; May River (W.V.F.).
In sandy spots.
43. *P. indicum* L.
Prince Regent's River (J. Bradshaw and Allen); Lennard
and Isdell Rivers (W.V.F.).
In sandy loams.
44. *P. majusculum* F. v. M.
Durack River (J. Bradshaw and Allen); Lennard, Isdell,
and King Rivers (W.V.F.).
In heavy black soil.
45. *P. rarum* R. Br.
Isdell and Barnett Rivers; north base of Bold Bluff (W.V.F.).
In moist black soil. A gibbosity at the base of the palea.
46. *P. colonum* L.
Lennard, Fitzroy, and Isdell Rivers (W.V.F.).
In sandy loam.
47. *P. myosuroides* R. Br.
North and east base of Bold Bluff (W.V.F.).
In moist black soil. A form reduced in all its parts.
48. *P. repens* L.
Isdell River, east base of Bold Bluff (W.V.F.).
In moist black soil.

49. *P. bicolor* R. Br.
Lennard, Isdell, and Charnley Rivers (W.V.F.).
In black and sandy loams.
50. *P. polyphyllum* R. Br.
May, Meda, Lennard, Fitzroy, Barker, and Isdell Rivers
(W.V.F.).
In moist sandy loam. Spikelets silky; no palea within the
3rd glume; panicle broad with filiform pedicels.
51. *Setaria macrostachya* H. B. et K.
Gascoyne River (Polak); Wingrah Pass, Napier Range,
Lennard and Isdell Rivers; Packhorse Range, Wyndham
(W.V.F.).
Among rocks and in their crevices.
52. *Pennisetum arnhemicum* F. v. M.
King Sound District (Froggatt); Wingrah Pass, Napier
Range, Lennard River (W.V.F.)
In moist sandy soil.
53. *P. compressum* R. Br.
Fitzroy River, above Upper Liverynga Station (W.V.F.).
In black soil.
54. *Chamaeraphis spinescens* Poirét.
Fortescue River (J. Forrest); Fitzroy River (W.V.F.).
In wet black soil.
Var. *parvispicula* Benth.
May, Meda, Lennard, Isdell, Barnett, and King Rivers (W.V.F.).
Stems running many yards in water. "Water-grass"—The
specimens are very close to *C. gracile* Hackel.
55. *Xerochloa imberbis* R. Br.
Cygnet Bay (A. Cunn.); King Sound District (Froggatt);
near Derby; Cygnet Bay (W.V.F.).
In dry sandy soil.
Var. *repens* W.V.F.
Goody-Goody, nine miles from Derby (W.V.F.).
Stems creeping and rooting at the nodes; rhachises muricate;
spikelets smaller than those of the typic plant.
56. *X. barbata* R. Br.
May, Meda, Lennard, and Fitzroy Rivers; Broome (W.V.F.).
In sandy loam.

ORYZEÆ.

57. *Oryza sativa* L.
May, Meda, Lennard, and Isdell Rivers (W.V.F.).
Cæspitose. 4-6ft. in height. "Wild Rice." In sandy spots.

AGROSTIDÆ.

58. *Aristidea hygrometrica* R. Br.
Lennard, Fitzroy, Barker, Hann, and Isdell Rivers (W.V.F.).
Cæspitose, in sandy soil. Regarded as a pest. The seeds
sometimes cause the death of stock by penetrating the
entrails from outside of the body.
59. *Sporobolus tremulus* Kunth.
May, Lennard, and Isdell Rivers (W.V.F.).
The specimens differ from the type in large, not rigid, flat leaves,
and more open panicle. In moist sandy soil.

AVENÆ.

60. *Eriachne ciliata* R. Br.
Between De Grey River and La Grange Bay (Alex. Forrest);
Lennard, Barker, and Isdell Rivers (W.V.F.).
In dry sandy spots.
61. *E. pauciflora* W.V.F. n. sp.
Rhizome perennial, shortly creeping and somewhat knotted,
woolly, tomentose; stems erect or ascending; filiform,
and along with the leaves, silky; hairy, the nodes bar-
bellate; leaves chiefly basal, narrow, often almost setaceous,
convolute, finely pointed, erect, shorter than the stems,
the outer ones reduced to broad mucronate-acute sheaths;
ligula barbellate; spikelets 1-3, pedicellate; outer
glumes acute, 7-9, curved, thin, purplish, keeled, glabrous
or rarely scantily hirsute along the keel, margins often
scabrous; flowering glume slightly shorter, narrow densely
silky-pubescent and terminating in a fine curved awn;
palea silky-hairy, with two prominent nerves on each
side and tapering into a rather long rigid fruit.
Edkins Range (W.V.F.).
Stems, including the inflorescence, not exceeding 4ins. in
height. Pedicels 2in. or less. Outer glumes $2\frac{1}{2}$ lin.
long. Awns $\frac{1}{2}$ - $\frac{3}{4}$ in.
In sandy soil. The species probably attains greater dimen-
sions than already detailed. All grains in the specimens
are diseased, they being filled with black granules which
have caused them to assume an oblong-cylindrical form,
black in colour with longitudinal whitish stripes or pure
black. They attain a length of two lines.
Affinity—*E. squarrosa* R. Br.
62. *E. festucacea* F. v. M.
Careening Bay (A. Cunn.); Isdell, Charnley, and Calder
Rivers (W.V.F.).
In sandy loam.

63. *E. pallida* F. v. M.
Dampier's Archipelago (Walcott); Lennard, Fitzroy Rivers
(W.V.F.).
In black or sandy loam.
64. *E. melicacea* F. v. M.
Lennard and Isdell Rivers (W.V.F.).
In sandy soil.

FESTUCEÆ.

65. *Phragmites communis* Trinius.
The tropical western plant varies from 8–10ft. in height.
66. *Elythrophorus articulatus* Beauvois.
Fortescue River (J. Forrest); Lennard, Fitzroy, and Isdell
Rivers (W.V.F.).
In black soil.
67. *Ectrosia Schultzii* Benth.
May, Lennard, Fitzroy, Barker, Isdell, Hann, and Barnett
Rivers (W.V.F.).
Spikelets from plate to purplish, flowers usually two. In
black or sandy loams.
68. *Eragrostis pilosa* Beauvois.
Gascoyne River (Polak); Lennard and Fitzroy Rivers (W.V.F.).
In sandy loam.
69. *Triraphis pungens* R. Br.
10 miles above Wingrah Pass, Lennard River, Isdell, and
King Rivers (W.V.F.). Leaf-sheaths often viscid.
In dry sandy spots.
70. *Triodia Mitchelli* Benth.
Upper Ashburton and between the Lyons and Fortescue
Rivers (H. S. King); Lennard, Isdell, Hann, Denham,
and King Rivers (W.V.F.).
Among sandstone or quartzite rocks.
71. *T. Cunninghamii* Benth.
Cambridge Gulf (A. Cunn.); Isdell, Charnley, Calder, Sprigg,
and Barnett Rivers; elevations between the Ord, Denham,
and King Rivers, Dillen's Springs (W.V.F.).
Among sandstone or quartzite rocks.
72. *T. microstachya* R. Br.
N.W. Coast (A. Cunn.); Broome; Cygnet Bay (W.V.F.).
In sandy soil.

CHLORIDEÆ.

73. *Cynodon tenellus* R. Br.
Fitzroy River and near Margaret River (Calvert's Exped.);
near Derby; May River (W.V.F.).
In sandy loam.

74. *C. convergens* R. Br.
North base of Bold Bluff (W.V.F.).
Spikes sometimes four. In moist grassy spots.

CYPERACEÆ.

75. *Cyperus pygmaeus* Rottb.
Meda, May, Lennard, Fitzroy, and Isdell Rivers (W.V.F.).
An *Isoetopsis*-like plant; in muddy spots.
76. *C. cuspidatus* H.B. et K.
Lennard, Isdell, and King Rivers, Hillgrove Station (W.V.F.).
In sandy soil.
77. *C. flavescens* L.
Denham and King Rivers (W.V.F.).
A slender tufted annual of 1ft. high; nuts more than $\frac{3}{4}$ the
length of the glumes.
In moist grassy spots.
78. *C. albo-marginatus* Nees.
Lennard, Isdell, and King Rivers (W.V.F.).
In damp grassy spots.
79. *C. fulvus* R. Br.
Gascoyne River (Polak); Lennard, May and Fitzroy Rivers
(W.V.F.).
In moist black soil.
80. *C. trinervis* R. Br.
Lennard, Fitzroy, Isdell, Barnett, Charnley Rivers, and base
of Inglis' Gap, King Leopold Ranges (W.V.F.).
In moist grassy spots.
81. *C. distans* L.
Lennard, Isdell, Ord Rivers (W.V.F.).
On grassy and sandy flats.
82. *C. holoschoenus* R. Br.
Near Derby, May, Meda, Lennard, Fitzroy, Isdell, Ord, Den-
ham and King Rivers; Knob Hill; base of Mt. Robb.
(W.V.F.).
In sandy soil.
Var. viscida, W.V.F.
Summit of Mt. Leake, Lady Forrest Range (W.V.F.).
In crevices of quartzite rocks. Differs from other forms in
the whole plant being very viscid.
83. *C. sporobolus* R. Br.
N.W. coast (A. Hughan), Isdell River (W.V.F.).
Remarks.—Rhizome bulbous; nuts black. On a sandy ridge

84. *C. squarrosus* L.
Dampier's Archipelago (Walcott); Fortescue River (J. Forrest); Fitzroy, Lennard, Denham and King Rivers, and Hillgrove Station; near the last named (W.V.F.).
In sandy and stony spots.
85. *C. haspan* L.
Brunswick Bay. (A. Cunn.); Isdell and King Rivers (W.V.F.).
In moist sandy soil.
86. *C. rotundus* L. var. *pallidus* Benth.
Near Broome and Derby, May and Meda Rivers (W.V.F.).
In dry sandy spots.
87. *C. polystachyus* Rottb.
Hamersley Range (McRae) Ord, and King Rivers (W.V.F.).
In sandy spots.
88. *Heleocharis variegata* Kunth.
Adcock, Isdell, Hann, Charnley and King Rivers (W.V.F.).
In sandy or muddy spots or in shallow pools.
89. *H. atropurpurea* Kunth.
Lennard, Isdell, Denham and King Rivers (W.V.F.).
In wet sand.
90. *Fimbristylis acicularis*, R. Br.
Lennard, Isdell, Charnley, Denham and King Rivers. (W.V.F.).
In damp grassy spots.
91. *F. pilifera* (W.V.F.) n. sp.
A tufted annual with the leaves, stems, and outer bract-like glumes invested with short white hairs; stems filiform, few to many from each stock, the whole surrounded by several narrow-lanceolate or broad linear leaves, which are usually longer than the stems; stem-leaves reduced to 2-3 loose sheathing scales, the upper terminating in setaceous points of $\frac{1}{4}$ - $\frac{1}{2}$ in. long; spikelet solitary, erect or slightly nodding, herbaceous, somewhat compressed; glumes few, imbricate on all sides, 2 outer ones $\frac{2}{3}$ as long as the spikelet, green in the centre and 5-nerved, obtuse, margins membranous, 3rd one similar, all flowerless, the flowering glumes 4-6, membranous, with green centres; stamens 3, style somewhat flattened, almost or quite glabrous, much longer than the nut, 2-branched, the branches considerably shorter than the entire part; nut obovate, biconvex, with 6-9 strong transverse ridges. Base of Bold Bluff; Isdell, Charnley and Calder Rivers (W.V.F.).
Stems 1-4in. high. Spikelets $3\frac{1}{2}$ lines long by $1\frac{1}{2}$ lines broad.
Nuts 1 line long, shining brown.
In moist grassy spots.
Affinity, *F. acuminata*, Vahl.

92. *F. cardiocarpa* F. v. M.
Near Derby, Meda, Lennard and Isdell Rivers ; Sunday Island
(W.V.F.).
Stamens and style-branches 3 each.
In dry sandy or black loamy soil.
93. *F. tetragona* R. Br.
Beagle Bay (Alex. Forrest) ; May, Lennard and Isdell Rivers
(W.V.F.) Style-branches 3.
In sandy soil.
94. *F. aestivalis*, Vahl.
Denham and King Rivers (W.V.F.).
In moist black soil.
95. *F. diphylla* Vahl.
Hillgrove Station, King River (W.V.F.).
A hirsute form attaining a height of over 3ft. ; leaves often
2 lines broad.
In wet sandy spots.
96. *F. denudata* R. Br.
Ord, Denham and King Rivers. (W.V.F.).
In damp sandy spots.
97. *F. caespitosa* R. Br.
Lennard, Isdell and Charnley Rivers (W.V.F.).
In rather dry sandy loam.
98. *F. capillaris* Asa Gray.
Western Australia (Drumm.) ; Blackwood River (W.V.F.).
On damp grassy flats.
99. *F. miliacea* Vahl.
Near Derby ; Goody Goody, May, Meda, Lennard, Fitzroy,
and Isdell Rivers. (W.V.F.). Leaves broader than those
of the type.
In sandy soil.
100. *F. ferruginea* Vahl.
Murchison River (Oldfield) ; Lennard, Ord, and Denham
Rivers ; Sunday Island (W.V.F.).
In sandy soil.
101. *F. pterygosperma* R. Br.
Lennard, Fitzroy, Isdell, Charnley and Ord Rivers. (W.V.F.).
In sandy spots.
102. *F. rara* R. Br.
Lennard, Isdell, Denham Rivers (W.V.F.).
In moist sandy or black soil.

103. *F. sphaerocephala* Benth.
Camden Harbour (J. Martin); Isdell River, Packhorse Range
(W.V.F.)

In moist sandy loam.

104. *F. capitata* R. Br.
Isdell River, Packhorse Range, east base of Bold Bluff (W.V.F.).
Besides typical specimens, there are some with 1-3 pro-
liferous branches.

In moist sandy loam.

105. *F. oligocephala* (W.V.F.) n. sp.

An annual with hardly any rhizome; stems tufted, somewhat compressed, striate, or obtusely angular, slender, glabrous or slightly scabrid upwards; radical leaves linear, flaccid, glabrous, with short open sheaths, those on the lower portion of the stems reduced to obtuse sheathing scales, more or less barbellate at the orifices; heads of spikelets depressed-globose, usually terminal, but the inflorescence often proliferous and emitting 1-2 short branches, each bearing heads similar to the primary one; spikelets 5-10, 5-7 flowered, ovate, the subtending bract solitary, shorter than or equalling the spikelets, bordered upwards by membranous wings which terminate in divaricate obtuse lobes, the apex of the bract ending in a rigid obtuse point equalling the lobes; glumes loosely imbricated, 1-2 of the lower ones flowerless, carinate, the keel green, and very prominent and terminating in a short rigid mucro, the sides of a rich brown, nerveless, and terminating in 2 obtuse lobes beyond the mucro, hispid on the keel and sides, the margins ciliate with short white spreading hairs; stamens 3, the anthers tipped with white globular appendages; style terete or slightly flattened, glabrous, 3-branched, the branches as long as the entire portion; nut small, broadly-obovate, obtusely triangular, tuberculate. Packhorse Range (W.V.F.).

Stems 6-9 in. high. Leaves 9 in. long or less. Head of spikelets $\frac{1}{3}$ in. diam. Proliferous branches $\frac{1}{2}$ -1 in. long. Spikelets 2 lines long, $1\frac{1}{2}$ line broad. Nuts greyish and shining.

In moist sandy loam along the banks of creeks.

Affinity to *F. capitata*, R. Br.

106. *F. quinquangularis* Kunth.
Lennard and Isdell Rivers. (W.V.F.).
In wet sandy spots.

107. *F. solidifolia* F. v. M.
Derby ; Goody Goody, May, Meda, Lennard, Fitzroy, Hann
Rivers (W.V.F.).
On dry sandy rises.
108. *F. microcarpa* F. v. M.
Goody Goody, May, Meda, Lennard, Fitzroy, and Ord Rivers
(W.V.F.).
On dry sandy rises.
109. *F. barbata* Benth.
Dampier's Archipelago (Walcott) N.W. coast (Alex. Forrest) ;
Sunday Island ; Broome (W.V.F.).
In sandy spots.

110. *F. arthrostyloides* (W.V.F.) n. sp.
Rhizome thick and short, the roots woolly-tomentose ; stems
leafless and densely tufted, erect, slender, 5-angled, very
scabrous, with scattered setulose bristles ; sheathing
scales bristly-hairy, the basilar ones membranous, broadly
lanceolate, terminating in short subulate points ; cauline
sheaths near the base, few, terminating in filiform points
of $\frac{1}{2}$ in. or less in length ; spikelets 1-flowered, 1 to several,
sessile in a terminal head, each spikelet ovate, glabrous
or slightly pubescent ; outer bracts several, 2 quite or
nearly as long as the spikelets, lanceolate-subulate, mar-
gined by long bristly hairs, those subtending each spikelet
gradually passing into the glumes ; glumes 3-4 only ; inner
flowering glume conspicuously keeled, obscurely 5-7
nerved, ovate-lanceolate, the 2nd the longest, the others
gradually smaller, lanceolate, acute, keeled, obscurely
7-nerved ; flowers hermaphrodite, stamens 3 ; filaments
short ; anthers linear terminating in almost acute white
tips ; style compressed, glabrous, much thickened at the
base, conspicuously articulate on the nut and deciduous
at the articulation after flowering ; style-branches 3,
recurved, simply stigmatic or slightly plumose, as long as
or slightly longer than the entire portion of the style ; nut
ovate, globose, obtusely triangular, on a short thick stipes,
tuberculate. Artesian Range (W.V.F.).

Stems $1\frac{1}{2}$ -2ft. high. Sheathing scales reddish-brown.

Spikelets 3-4 lines long, brown. Anthers nearly 2 lines long,
yellow. Nuts above 1 line long, white.

Among sandstone and quartzite rocks. The species is separ-
ated from Section *Abildgaardia* of *Fimbristylis* by the
1-flowered spikelets. It closely approaches *Arthrostylis*,
R. Br.

Crosslandia (W.V.F.) n. gen.

Flowers monoecious. Male spikelets capitate, on filiform stems. Glumes imbricate, all flowering. Female spikelets solitary or in twos or threes at the base of the leaves. Glumes few, slightly imbricate. No hypogynous bristles. Nut and style as in *Fimbristylis*. Stems leafy at the base. Differs from *Fimbristylis* in the spikelets being monoecious and in the position and structure of the female spikelets. This is named out of compliment of Mr. Charles Crossland, who was in charge of the Trigonometrical Survey Expedition to Kimberley in 1905, of which the author was a member.

111. *C. setifolia* (W.V.F.) n. sp.

A tufted annual with a short stock; stems several, filiform, almost terete, sulcate, scabrous upwards, bearing a depressed-globular head of male-spikelets, the head subtended by 8 or more narrow-lanceolate rigid bracts, the outer generally strongly tri-nerved, and 1-2 usually exceeding the spikelets; leaves numerous, radical, surrounding but not adherent to the stems, setaceous, rather rigid, almost half the length of the stems, scabrous, with short, broad, striate, open, hyaline, margined sheaths, those on the stems reduced to 1-2 open mucronate sheaths, the radical female spikelets very numerous and imparting to the stock a bulbous appearance; male spikelets 10-12, rather closely packed, glumes 8-10, all flowering, boat-shaped, with a prominent green keel which terminates in a short mucro, sides thin, pale-brown, minutely scabrous; stamens 3, or in the upper flowers, 2 only; ovary and style rudimentary; female spikelets 3 or fewer together, closely sessile outside or slightly intermixed with and always at the base of the leaves; spikelets 2-5 flowered, much narrower upwards; glumes, excepting the lowest short one, all containing flowers, narrow, membranous with prominent greenish middle, ending in long hair-like points, finely hirsute, style filiform, glabrous, or slightly silky, the branches 3, occasionally 4, as long as the entire portion; base of the style pyramidal-triangular, articulate on the ovary, nut narrow-obovate, not compressed, with 3-4 conspicuous longitudinal ribs hispid and densely minutely tuberculate.

Goody Goody, 9 miles from Derby (W.V.F.).

Stems 3-8 in. high. Leaves $1\frac{1}{2}$ -4 in. long. Male-spikelets 3 lines long, $1\frac{1}{2}$ in. broad. Female spikelets $\frac{1}{3}$ - $\frac{1}{2}$ in. long, and comparatively narrow. Style $\frac{1}{2}$ in. long. Nuts 1 line long, brown.

In dry sandy spots. The plant bears a close resemblance to some of the capitate *Schoeni*. The long membranaceous glumes of the female flowers, along with the protruding style branches, cause the leaves to appear as if surrounded by bracts with reddish filamentose apices.

112. *Scirpus isdellensis* (W.V.F.) n. sp.

Roots fibrous or shortly creeping; stems filiform, floating in water; leaves reduced to a solitary sheathing scale at the base of the stem; spikelets 2, each 2-3 flowered, but usually perfectly only 1 nut, subterminal (the stem terminating in a glume-like point much shorter than the spikelets); spikelets narrow-ovate; glumes obtuse, keels prominent and green, the sides not striate and varying from a pale brown to a dark reddish brown; hypogynous bristles 6, unequal, the longest about as long as the nut, retrorsely scabrid; nut nearly as long as the glume, obovate, minutely striate, prominently 3-angled, terminal callosity much thickened and prominent; style-branches 3, free almost to the base; stamens 2; anthers apiculate. Upper Isdell River (W.V.F.).

Stems 2, 6 ins. long. Spikelets mostly under 1 line long. Nuts brownish.

Always in running water.

Affinity. *S. riparius*. Sprengel.

113. *S. erectus* Poir.

Isdell, Charnley, Calder, Lennard Rivers. (W.V.F.) In damp spots. The *S. debilis* Pursh.

114. *S. supinus* L.

Fortescue River (J. Forrest); Fitzroy, Hann and Isdell Rivers. (W.V.F.).

In moist sandy spots.

Var. *uninodis*, Benth. (not so indicated in *Flora Australiensis*, J.H.M. Presumably after *Scirpus uninodis* Boiss. J.H.M.)

Lennard, Isdell, Charnley, and Calder Rivers (W.V.F.).

In wet sand.

115. *S. articulatus* L.

Isdell, Charnley and Calder Rivers. (W.V.F.)

In muddy spots.

116. *S. mucronatus* L.

Isdell and Charnley Rivers. (W.V.F.)

In wet sandy soil.

117. *Lipocarpa microcephala* R. Br.
Fortescue River (J. Forrest) ; Lennard, Isdell and King Rivers
(W.V.F.).
In sandy loam.
118. *Fuirena glomerata* Lamarck.
Isdell and Charnley Rivers (W.V.F.).
In wet spots.
119. *Rhynchospora affinis* (W.V.F.) n. sp.
An annual, stems 1-3 together, rather stout, trigonous and striate ; leaves nearly all basal, narrow, with loose open, glabrous or scarcely ciliate sheaths, the inner with a closed sheath, the laminae often longer than the stem ; spikelets numerous, capitate, involucrel bracts spreading, narrow, all with dilated ciliate bases ; spikelets very narrow and almost acute, 2-3 outer glumes much shorter and powerless ; hypogynous bristles six, three nearly equalling the glume and three somewhat shorter, all much longer than the nut, scabrid with upward pointing teeth ; nut narrow-oblong, biconvex, beak half the length of the nut, narrow-conical, the broad base not contracted nor decurrent along the margins of the nut.
Base of Inglis' Gap, King Leopold Ranges. (W.V.F.).
Stems 4-8 ins. high. Heads of spikelets $\frac{3}{4}$ in. diameter. Involucrel bracts 3 in. or less in length. Spikelets 5 lines long, pale-shining brown.
In moist grassy spots.
Affinity. *R. longisetis* R. Br.
120. *Schoenus falcatus* R. Br.
Isdell, Sprigg and Charnley Rivers (W.V.F.).
In sandy soil among sandstone and quartzite rocks.
121. *S. punctatus*, R. Br.
Isdell and Charnley Rivers. (W.V.F.).
In sandy soil.
122. *Scleria rugosa* R. Br.
Packhorse Range ; Isdell River (W.V.F.).
In dry sandy spots.
123. *S. Brownii* Kunth.
Artesian and Edkins Ranges ; Isdell, Charnley and Calder Rivers. (W.V.F.).
In sandy soil and in the clefts of sandstone and quartzite rocks.

PRINCIPES.

PALMÆ.

124. *Livistona* Alfredi F. v. M.

Millstream, Fortescue River (Alex. Forrest); Mts. Herbert, Broome, Leake and Barnett; Isdell, Harris and Phillips Ranges; hills near the junction of Hann and Barnett Rivers (W.V.F.). Trunk 40–60ft. in height; diameter, 1ft. The “Fan-palm” or “Cabbage-palm” of Kimberley. Among sandstone and quartzite rocks. F. S. Brockman and J. Bradshaw have reported the existence of another species between Wyndham and the West coast.

The trunk is never above 10ft. in height. It is probably identical with *L. Leichhardtii*, F. v. M.

SPATHIFLORÆ.

ARACEÆ.

125. *Typhonium* angustilobium, F. v. M.

King Sound District (Froggatt); Lennard River, near Inglis' Gap, King Leopold Ranges. (W.V.F.).

In good soil, in damp depressions.

LEMNACEÆ.

126. *Lemna* trisulca, L.

Ord and Denham Rivers and lagoons in their vicinity; Parry's Creek (W.V.F.).

FARINOSÆ.

127. *Flagellariá* indica L.

East of Oscar Range (Alex. Forrest); Prince Regent's River (J. Bradshaw and Allen); Sunday Island, Point Cunningham, Cygnet Bay, Swan Point (W.V.F.). Climbing to 30ft.; flowers pale yellow, fruits red. The aborigines use the stems for many purposes in lieu of bamboos.

CENTROLEPIDAEÆ.

128. *Centrolepis* Banksii Roem. et Schult.

Isdell and Charnley Rivers (W.V.F.). A small form growing in wet spots.

129. *C. exserta* Roem. et Schult.

Isdell, Charnley, Calder and Sprigg Rivers; north-base of Bold Bluff (W.V.F.). Bracts hispid with long white spreading hairs; scales longer than the bracts; edges of the bracts, the filaments, and styles scarlet.

In wet soil.

XYRIDACEÆ.

130. *Xyris complanata*, R. Br.
N. W. coast (Alex. Forrest) ; north base of Bold Bluff ; Isdell
and King Rivers ; Dillen's Springs (W.V.F.).
Cæspitose, in wet spots. Flowers yellow.
131. *X. pauciflora* Willd.
Upper Isdell River, Charnley River (W.V.F.).
Leaves broad. In wet soil.

ERIOCAULACEÆ.

132. *Eriocaulon quinquangulare* L.
Isdell and Adcock Rivers (W.V.F.).
In wet spots. Originally recorded as indigenous in Australia
on a solitary specimen found at Keckwich Springs, in the
Northern Territory.
133. *E. nigricans* R. Br.
Isdell River, Bell Creek, Inglis' Gap (W.V.F.).
In damp spots.
134. *E. cinereum* R. Br.
Lennard and Isdell Rivers (W.V.F.).
In moist sandy soil.
135. *E. setaceum* L.
Woodhouse River (J. Bradshaw and Allen) ; Woollybutt Creek,
base of Mt. Rason, Artesian and Edkins Ranges, Isdell,
Charnley, and Calder Rivers (W.V.F.).
In running water.

COMMELINACEÆ.

136. *Cartonema spicatum* R. Br.
Woodhouse and Carson Rivers (J. Bradshaw and Allen) ;
Isdell River, Woollybutt Creek (W.V.F.).
On grassy plains.

PONTEDERIACEÆ.

137. *Monochoria cyanea* F. v. M.
King Sound District (Froggatt) ; in lagoons (billabongs),
alongside of Lennard, Fitzroy, Barker, Isdell, and Adcock
Rivers ; bases of Mts. House and Clifton (W.V.F.).
Rooting in mud ; stems floating for many feet ; flowers bright
blue.

PHILYDRACEÆ.

138. *Philydrum lanuginosum* Banks.
Isdell, Charnley, and Calder Rivers (W.V.F.).
In and alongside still water.

LILIIFLORÆ.

JUNCACEÆ.

139. *Xerotes elongata* Benth.
Isdell River, base of Table-top Mountain, base of Mts. Rason
and Daglish, Calder River (W.V.F.).
Cæspitose ; flowers yellow. In sandy soil.

LILIACEÆ.

140. *Rhipogonum album* R. Br.
Charnley River, Artesian and Edkins Ranges (W.V.F.).
Among sandstone and quartzite rocks.
141. *Dianella cœrulea* Sims.
Upper Isdell River (W.V.F.).
Cæspitose in sandy soil.
142. *Iphigenia indica* Kunth.
Summit of Mt. Rason (W.V.F.).
Bulbous. Among quartzite rocks.
143. *Thysanotus chrysantherus* F. v. M.
Durack River (J. Bradshaw and Allen) ; north base of Bold
Bluff, Isdell, Charnley, Calder and Barnett Rivers (W.V.F.).
Roots thickened, scarcely or not tuberous ; flowers bluish-red ;
seeds black ; shining and pitted. In moist grassy spots.
144. *Asparagus racemosus* Willd.
Of rambling habit or climbing many feet.

HÆMODORACEÆ.

145. *Haemodorum longifolium* W.V.F. n. sp.
Rootstock bulb-like, with thick woolly-tomentose roots ; stems
stout, usually tall, branched from about the middle ;
leaves long-linear, rigid, somewhat glaucous, with long
open sheaths, the laminae flat, obtuse, with numerous
striations, the stem-leaves gradually shorter ; panicle
large, with spreading branches, the ultimate ones bearing
loose few-flowered racemes ; bracts and bracteoles sub-
acute ; outer segments of the perianth broad to narrow-
lanceolate, obtuse, rather thick, the inner ones oblong-
lanceolate and one-eighth or less longer than the outer ;
stamens equalling the outer perianth-segments, the
anthers as long as the filaments ; ovary inferior, capsule
half-superior, conspicuously didynous.
Upper Isdell River, near Synnott Range, Dillen's Springs
(W.V.F.).

Plant 2-4ft. in height. Leaves from $2\frac{1}{2}$ to above $3\frac{1}{2}$ ft. long. Bracts and bracteoles $1\frac{1}{2}$ -2 lines long. Pedicels 2- $2\frac{1}{2}$ lines long. Perianth 2- $2\frac{1}{2}$ lines long, dark-red. Capsule above $\frac{1}{2}$ in. in diameter.

In moist sandy loam.

Affinity, *H. coccineum* R. Br.

146. *H. flaviflorum* W.V.F. n. sp.

Stems form a thickened base, branched from about the middle or above; basal leaves linear-terete, striate, frequently longer than the stem, upper ones very few and short; inflorescence a loose few-branched panicle, the ultimate slender branches terminating in loosely flowered racemes; bracts and bracteoles obtuse or subacute; perianths yellow, occasionally greenish-yellow, all on short pedicels, the outer segments oblong-lanceolate, the inner narrower, all obtuse and of equal length; stamens as long as the perianth, the anthers equalling the filaments; ovary half-superior.

Edkins Range (W.V.F.).

Total height of plant 2ft. or less. Leaves $2\frac{1}{2}$ ft. long or shorter.

Racemes 1-2in. long. Bracts and bracteoles mostly about 2 lines long. Perianths 2 lines long. Capsule not seen.

In sandy loam.

Affinity, *H. parviflorum* Benth.

147. *H. parviflorum* Benth.

Brunswick Bay (A. Cunn.); near Derby, Goody Goody, Sunday Island (W.V.F.).

Lower leaves longer than the scapes; flowers scarcely $1\frac{1}{2}$ lines long, dark-purple; stamens as long as the perianth-segments. In damp sandy spots.

AMARYLLIDACEÆ.

148. *Crinum asiaticum* L.

King River (W.V.F.).

In wet soil.

MICROSPERMÆ.

ORCHIDACEÆ.

149. *Cymbidium canaliculatum* R. Br.

Epiphytal on various species of Eucalyptus, especially *E. clavigera*, A. Cunn. Sepals greenish-yellow without, yellow on the margins, very dark-red within; petals greenish-yellow, saturated with very dark-red; column pale-coloured, profusely streaked and blotched with reddish purple; base of the labellum and two lateral lobes magenta, terminal lobe pale-yellow spotted with purple. Flowers sweetly scented.

150. *Eulophia venosa* Reichb.

Bell Creek, and between it and King Leopold Ranges (W.V.F.).
 Bulb sessile, large and white ; scapes erect, $1\frac{1}{2}$ -3ft. (including the raceme), leafless but bearing several bract-like scales ; pedicels short, spreading, reflexed after flowering ; sepals brownish-yellow, purple striated ; petals similar in colour but broader and shorter ; labellum greenish at the base with diverging purple streaks, gibbous, the margins raised and appearing as short lobes, the upper broad portion flat, with crenulated wavy margins and a recurved tip of a pale-purple, the median line of the lower half trifurcated from the base, and forming two lateral purple ridges, the median line in the upper half whitish and papillose. Among long grass in black boggy soil.

DICOTYLEDONEÆ.**URTICALES.****ULMACEÆ.**151. *Trema aspera* Blume.

Mt. Anderson, Grant Range, Fitzroy, Ord, Denham, and King Rivers (W.V.F.).

From a shrub of 2-3ft. to a tree of 20ft., trunk to 8ft. ; diameter 6in. ; bark grey, smooth ; timber pale and rather soft ; leaves from ovate and obtuse and under 2in. long to ovate-lanceolate, acuminate and above $2\frac{1}{2}$ in. long ; fruits black. In sandy soil.

152. *Celtis philippinensis* Blanco.

Shrub of 3ft. or a tree of 20ft. ; trunk to 8ft. ; diameter 6in. ; bark grey, smooth ; timber pale, close-grained and fairly hard. In rocky localities.

MORACEÆ.153. *Ficus nesophila* Miquel.

A spreading tree of 40ft. and giving off adventitious roots ; trunk to 10ft. or more ; diameter above 1ft. ; bark grey, smooth ; timber pale and not hard ; fruits white.

154. *F. puberula* A. Cunn.

Isdell, Sprigg, Charnley, Calder, Ord, Denham, and King Rivers ; Dillen's Springs (W.V.F.).

A tree of irregular straggling growth, giving off adventitious roots, from 25-40ft. high ; trunk 5-6ft. ; diameter 1ft. or more ; bark grey or brownish, smooth ; timber pale, rather soft, but tough ; fruits yellow. Grows usually in the crevices of quartzite and sandstone rocks.

155. *F. hispida* L.
Brunswick Bay (A. Cunn.); Sprigg River, Synnott Range (W.V.F.).
A spreading tree of 20ft. ; trunk to 5-6ft. ; diameter 9in. ; bark grey and slightly rough ; timber pale and soft ; fruits yellowish, hispid. In wet sandy spots, always among quartzite and sandstone rocks.
156. *F. coronulata* F. v. M.
East of Oscar Ranges (Alex. Forrest) ; Lennard, Fitzroy, Barber, Isdell, Charnley, and Ord Rivers (W.V.F.). A bushy tree of 40-50ft. ; trunk to 25ft. ; diameter 1-1½ft. ; bark grey, smooth ; timber pale and rather close grained. On the banks of streams.
157. *F. leucotricha* Miquel.
Isdell, Charnley, Calder, Denham, and King Rivers ; Packhorse, Isdell, Synnott, Artesian, Edkins, and Harding Ranges, Dillen's Springs (W.V.F.).
A tree of 30ft., giving off adventitious roots ; bark grey, smooth ; timber pale and rather soft ; fruits yellowish, hairy. Among sandstone and quartzite rocks.
158. *F. aspera* Forster.
Goose Hill, near Ord River (W.V.F.).
A tree to 40ft. ; trunk 10ft. ; diameter 1ft. or more ; bark greyish or whitish, smooth ; timber pale and rather firm ; fruits yellowish. In sandy loam.
159. *F. glomerata* Roxb.
Lennard, Fitzroy, Adcock, Barker, Isdell, Charnley, Calder, Ord, and Denham Rivers ; Eudialla Springs (W.V.F.).
A tree of 60ft. ; trunk 30ft. ; diameter 1½-2ft. ; bark greyish, smooth or rough ; timber pale and not very hard ; fruits orange-red, in pedunculate clusters on the trunk and usually infested with green ants. Along the muddy banks of streams and springs.

URTICACEÆ.

160. *Pouzolsia indica* Gaudich.
King Sound District (Froggatt) ; May, Meda, Lennard, Fitzroy, Barker and Isdell Rivers (W.V.F.).
In sandy and muddy spots.

PROTEALES.

PROTEACEÆ.

161. *Stenocarpus saligna* R. Br.
Near Bell Creek ; between Bell Creek and King Leopold Ranges (W.V.F.).

A tree of 30ft. ; trunk to 10ft. ; diameter 9in. ; bark greyish and rather rugose ; timber reddish and not very hard. Also the variety *concolor*.

162. *S. Cunninghamii* R. Br.

From a long bushy shrub to a tree of 30ft. ; trunk 10ft. ; diameter 9in. ; bark greyish, smooth or slightly rough ; timber reddish and rather tough ; flowers yellow or greenish-yellow, full of nectar and of a sickly sweet odour. Among sandstone quartzite rocks, frequently in their crevices. In juvenile plants the leaves are bipinnate, occasionally pinnate, with numerous linear mucronate segments.

163. *Grevillea mimosoides* R. Br.

A tall shrub to a tree of 30ft. ; trunk to 12ft. ; diameter under 1ft. ; bark dark-coloured, rough and irregularly fissured ; timber reddish, free-grained and rather hard ; leaves ash-coloured, flowers yellowish-white. In the *Flora Australiensis* the following occurs in the description of this species:—"Pedicels $\frac{1}{2}$ -1 inch." This should read "Pedicels $\frac{1}{2}$ -1 line."

164. *G. miniata* (W.V.F.). n. sp.

An erect, graceful looking shrub, the branches and branchlets terete and along with the leaves invested with a short close white-woolly or velvety tomentum, the young shoots ferruginous ; leaves on stout petioles, ovate to almost orbicular, obtuse or nearly truncate, the base cuneate, much undulate and margined by conspicuous prickly teeth, the midrib prominent, much reticulate between ; flowers in dense secund reflexed axillary racemes, solitary or occasionally several together, and then forming short panicles ; peduncles, pedicels and rachises densely silky villous ; perianth orange red, with a pink spotted throat ; pubescent without, slightly bearded at the throat within, the tube broad and oblique, much inflated and revolute under the globular limb ; torus very oblique ; gland conspicuous, horse-shoe shaped ; ovary glabrous, on a very short glabrous stipes on the upper margin ; style hispid, broad and compressed, longer than the perianth, the stigmatic disc orbicular ; fruit ovate-globose, smooth, rounded at the summit, the persistent base of the style lateral ; seeds oblong-ovate, edged with broad membranous margins.

Slopes of Mt. Leake, Lady Forrest Range (W.V.F.). Height 8-12ft. Leaves $2\frac{1}{2}$ - $3\frac{1}{2}$ ins. long on petioles of $\frac{1}{2}$ in. Racemes 2in. or less in length. Peduncles $\frac{1}{2}$ - $\frac{3}{4}$ in. Pedicels two lines long and slender. Perianths above three lines long. Style $3\frac{1}{2}$ lines long, the stigmatic disc $1\frac{1}{2}$ lines in diameter.

Fruits 5 lines long.

Among quartzite rocks.

Affinity, *G. angulata*, R. Br.

165. *G. heliosperma*, R. Br.

Prince Regent's River (J. Bradshaw and Allen) ; Inglis' Gap, King Leopold Ranges, Mounts House and Clifton ; Adcock, Isdell, Charnley, Calder Rivers, Synnott Range (W.V.F.).

A shrub to a tree of 20ft. ; trunk 5ft. or more ; diameter 6in. ; bark grey and rather rough ; timber pinkish and fairly tough ; flowers flesh-coloured. In sandy soil.

166. *G. heteroneura* (W.V.F.) n. sp.

Arborescent, the branchlets terete, finely silky-tomentose ; leaves pinnately divided into 3-5 segments, finely tomentose above, closely silky pubescent beneath, the entire cuneate bases very narrow and tapering into long petioles ; segments of soft texture, long, linear with obtuse dark-coloured tips, margins slightly refracted, midrib evident on both pages, with three longitudinal nerves visible on each side of the midrib above, and only a single one on each side beneath ; flowers in dense somewhat secund racemes ; several together and forming axillary or terminal simple or compound panicles, the primary and secondary rachises not very stout and almost glabrous ; pedicels slender, glabrous ; perianth white tinged with yellow, glabrous without and nearly or quite so within ; the tube broad, much revolute under the globular limb ; torus very oblique, gland prominent, semi-cupular, slightly crenulated ; ovary glabrous, stipitate ; style slender, much longer than the perianth ; stigmatic disc obliquely lateral, slightly conical in the centre ; fruit broadly oblique, compressed. Summit of Table-top mountain (W.V.F.). Height 30ft. ; trunk 15ft. ; diameter scarcely 9in. ; bark dark grey, rough, and longitudinally fissured ; timber pale-coloured, and moderately hard. Leaves to nearly 1ft. long ; segments 7-10in. long, the entire base and petiole 3in. long. Inflorescence :—Racemes 2-4in. long ; panicles 6in. to above 1ft. long. ; pedicels $1\frac{1}{2}$ -2 lines ; perianth scarcely four lines long ; ovary stipes nearly $1\frac{1}{2}$ lines long ; style $\frac{3}{4}$ in. ; fruit above $\frac{1}{2}$ in. long. In sandy soil.

Affinity, *G. polystachya*, R. Br.

167. *G. erythroclada* (W.V.F.) n. sp.

✓ Shrubby to arborescent, branchlets rather thick, reddish, the whole plant glabrous or the young buds ferruginous-tomentose ; leaves pinnate ; segments 9-17, not rigid, often almost filiform ; terete or scarcely flattened, obtuse

or subacute, simple, excepting the lowest two, which are again divided into 2-4 segments, the veins concealed; flowers small, numerous in erect racemes; pedunculate and several together in a broad panicle usually exceeding the leaves; the primary and secondary rachises stout; perianth white or greenish-yellow, the tube rather slender and slightly contracted beneath the reflexed globular limb, torus oblique, gland semi-annular, conspicuous; ovary glabrous, stipitate; style terete, with a rather broad terminal stigmatic cone; fruit obliquely ovate, somewhat compressed, smooth and viscid; seed-wing broad and continuous all round.

Upper Isdell and Hann Rivers (W.V.F.).

Height to 30ft.; trunk to 10ft.; diameter 8in.; bark dark-coloured to somewhat reddish, rough, and longitudinally fissured; timber pinkish, and tough leaf; segments $\frac{1}{2}$ -1ft. long; racemes 3-6in. long, the panicles frequently above 1 $\frac{1}{2}$ ft. long; pedicels 1 line; perianth 1 $\frac{1}{2}$ line long; ovary stipes 1-1 $\frac{1}{4}$ line; style scarcely above two lines long; fruits $\frac{3}{4}$ in. long. In moist sandy loam.

Affinity, *G. leucadendron* A. Cunn.

168. *G. leucadendron* A. Cunn.

Shrub to a tree of 30ft.; trunk 10ft.; diameter 10in.; bark dark-coloured, rough and longitudinally fissured; timber whitish to reddish, and rather tough; flowers white, in terminal panicles of a foot or more in length; fruits covered with an almost liquid viscid substance.

169. *G. pyramidalis* A. Cunn.

Prince Regent's River (A. Cunn.); Lennard, Barker and Isdell Rivers, etc. (W.V.F.).

In sandy loam.

As surmised by Bentham in the *Flora Australiensis*, this proves to be only a short-leaved form of *G. leucadendron* A. Cunn. In the field they cannot be separated.

170. *G. chrysodendron* R. Br.

A beautiful symmetrical tree to 50ft. in height; trunk to 20ft.; diameter 2ft.; bark greyish, rough, and longitudinally fissured; timber reddish, straight grained and not very hard, prettily grained; flowers showy; perianth brownish-yellow or greenish; style orange-red with a yellow stigma. The flowers secrete abundance of nectar, which falls on the ground at night; it affords food for numerous birds and insects.

171. *G. dimidiata* F. v. M.

Careening Bay (A. Cunn.) ; Ord River (W.V.F.).

A tree of 20ft. ; trunk to 10ft. ; diameter 9in. ; bark greyish-brown, and moderately tough ; timber reddish, straight-grained, and not very hard ; flowers yellow ; fruits similar in shape, size, and viscosity to those of *G. mimosoides* R. Br., from which this species can only be readily separated when in flower. Allan Cunningham's specimens are in leaf only and are therefore doubtful.

172. *Hakea Cunninghamii* R. Br.

A tree 15–20ft. ; trunk 10ft. ; diameter 1ft. ; bark dark-grey, rough, somewhat corky and longitudinally fissured, timber brownish and fairly close-grained ; flowers yellow.

173. *H. lorea* R. Br.

A tree of 20ft. ; trunk 8ft. ; diameter 9–12in. ; bark dark-grey, $\frac{1}{2}$ – $\frac{3}{4}$ in. thick, rough, corky, deeply longitudinally fissured ; timber brownish, and not very hard, flowers yellow. The "Cork-tree" of the West Australian Goldfields, where it is regarded as an indication of the existence of fresh water at shallow depths.

174. *H. suberea* S. Moore is the western form of *H. lorea*, R. Br.175. *H. macrocarpa* A. Cunn.

A tree of 20ft. ; trunk 9ft. ; diameter 9in. ; bark dark-grey, very rugged, often corky, longitudinally fissured ; timber brownish and fairly hard ; flowers usually on the old wood, white to greenish-white.

176. *H. arborescens* R. Br.

A tree 20–30ft., trunk to 12ft., diameter 1ft., bark dark-grey or blackish, rough, thick, deeply longitudinally fissured ; timber brown and rather hard and tough ; flowers white or pink.

177. *H. Morrisoniana* (W.V.F.) n. sp.

Aborescent ; young leaves sericeous ; leaves entire, long-linear, obtuse, much compressed but rather thick and rigid, of a greyish hue, veinless, with scarcely evident broad mid-ribs and somewhat thickened margins ; flowers numerous in shortly pedunculate racemes, either lateral on the old wood or axillary on the younger growth, solitary or several together, and often forming short panicles which are occasionally terminal through leaf-suppression ; pedicels, rachises and perianths densely silky pubescent, the tomentum closely oppressed and short ; perianth-tube slightly dilated at the base, revolute beneath the limb, torus oblique ; gland prominent, horseshoe-shaped ; ovary

glabrous, stipitate; style glabrous, slightly compressed, the stigmatic disk oblique, with a prominent conical centre; fruit smooth, obliquely ovate, terminating in a stout recurved beak. Banks of Hann River, between Mt. Caroline and the junction with Macnamara Creek (W.V.F.).

Height 30–40ft., trunk to 20ft., diameter 1ft. or more; bark dark-coloured, very thick, deeply longitudinally fissured and corky. Timber dark brown, not very hard, straight-grained. Leaves half to above 1ft. long, $1\frac{1}{2}$ lines broad. Racemes $\frac{1}{2}$ to $\frac{3}{4}$ ft. long. Pedicels slender, 2– $2\frac{1}{2}$ lines. Perianth $\frac{1}{3}$ in. long, white. Ovary-stipes $1\frac{1}{2}$ line. Style above $\frac{3}{4}$ in. Fruit above 1in. long by a little more than $\frac{3}{4}$ in. broad; beak at least $\frac{1}{4}$ in. long.

In moist sandy soil.

Named in honour of the late Dr. A. Morrison, formerly Government Botanist of Western Australia.

Affinity, *H. lorea*, R. Br.

SANTALALES.

SANTALACEÆ.

178. *Authobolus foveolatus* F. v. M.

Perianth lobes in both male and female flowers, three only. Fruits smooth and greenish when ripe.

179. *Exocarpus latifolia* R. Br.

A shrub to a tree of 25ft.; trunk 8–10ft., diameter 9in., bark dark grey to almost black, rough, timber reddish, close-grained, with a faint sandalwood odour, flowers greenish-yellow, fruits red.

OLACACEÆ.

180. *Opilia amentacea* Roxb.

York Sound (A. Cunn); Isdell, Charnley, Calder and Barker Rivers; Edkins Range, Dillen's Springs (W.V.F.). An erect shrub of 8ft., branches pendulous, and somewhat flexuose; flowers greenish-white, scented.

LORANTHACEÆ.

181. *Viscum articulatum* Burm.

Messmate Creek, Packhorse Range (W.V.F.).

Plant greenish-yellow, flowers greenish, fruits yellow.

Parasitic on *Buchanania oblongifolia* (W.V.F.). According to Hooker fil., the specimens referred by Bentham to this species, in the Flora Australiensis belong to *V. japonicum* Thunberg.

182. *Loranthus ferruginiflorus* (W.V.F.) n. sp.

Branches long and pendulous ; the branchlets terete, glabrous or closely ferruginous-tomentose ; leaves glabrous, opposite, lanceolate, obtuse, tapering into the petioles, rather firm and obscurely 3-5 nerved ; flowers on axillary peduncles, each peduncle once-forked, each branch bearing two sessile or almost sessile flowers, the inflorescence and perianths closely ferruginous-tomentose ; bracts orbicular, almost entirely enveloping the calyces ; calyx-limb truncate or slightly repand ; buds clavate at the tips and dilated at the base to a greater diameter than the calyx ; corolla divided to the base, or almost so, into 5-segments ; anthers oblong-linear, adnate ; style angular, slender, the stigma not large ; fruit globose, 3-4 lines diameter, rusty-red.

Mt. Rason, Broome, Sunday Island, Grant Range (W.V.F.)
Leaves 4-8in. long, the petioles lin. or less. Peduncles $\frac{1}{2}$ in., the branches somewhat shorter. Corolla red, the segments about lin. long. Fruit 3-4 lines diameter.

Parasitic on *Eucalyptus* sp. and *E. clavigera* (A. Cunn.)

Affinity, *L. pendulus* Sieber and *L. bifurcatus* Benth.

183. *L. signatus* F. v. M.

Lennard, Isdell, Charnley, and Calder Rivers ; Dillen's Springs, Sunday Island (W.V.F.).

Flowers greenish-red.

184. *L. biangulatus* (W.V.F.) n. sp.

Pendulous, quite glabrous and somewhat glaucous, the internodes acutely two-angled or narrowly winged, widened upwards. Leaves opposite or subopposite, narrow to broad-lanceolate, obtuse, tapering to the bases, mostly vertical, the veins numerous, very oblique and reticulate between ; inflorescence an axillary rarely terminal distinctly pedunculate raceme of usually five branches, each branch with three terminal closely sessile flowers ; buds slender, bract as large as the adnate portion of the calyx ; limb of the calyx rather broad, membranous, obscurely toothed, and half as long as the tubes ; corolla segments usually six, very narrow ; anthers linear, adnate, much longer than the perianth segments ; style slender, the stigma not broad ; fruit ovoid, brownish.

Base of Mt. Broome ; Sprigg, Isdell, and Calder Rivers (W.V.F.).

Leaves 4in. long or less. Corolla-segments $\frac{3}{4}$ in. long, pale yellow to red in the lower half, green in the upper portion. Anthers green or greenish-yellow. Fruit above four lines long.

Parasitic on *Tristania suaveolens* Smith, and *Eugenia eucalyptoides* F. v. M.

Affinity, *L. signatus*, F. v. M.

185. *L. longiflorus* Desr.

Goose Hill near Ord River (W.V.F.).

Flowers yellow, stamens pink.

186. *L. acacioides* (A. Cunn.).

Leaves often whitish, flowers orange, or orange-red, fruits scarlet. Parasitic on *Acacia flavescens*, (A. Cunn.) and

Cochlospermum heteronenum, F. v. M.

POLYGONALES.

POLYGONACEÆ.

187. *Polygonum minus* Hudson.

A form along the Isdell and Barnett Rivers has the stems and branches prostrate to 2-3ft., the shoots ascending.

188. *P. attenuatum* R. Br.

Hann River (W.V.F.).

Stems erect, 1-2ft. ; flowers white. In muddy spots.

189. *P. lapathifolium* L.

Fortescue River (H. S. Carey) ; Lennard, Isdell, Barnett, and Fitzroy Rivers, Wingrah Pass, Napier Range (W.V.F.).

Stems creeping in mud and water for many feet ; branches erect or ascending to 2ft. ; perianths white.

CENTROSPERMÆ.

CHENOPODIACEÆ.

190. *Chenopodium auricomum* Lindley.

Fitzroy River (W.V.F.).

Erect, 3-6ft. high. "Blue Bush." In black boggy soil.

191. *Atriplex Muelleri* Benth.

Fortescue River (Alex. Forrest) ; Port Hedland (W.V.F.).

In saline sandy soil.

192. *A. elachophyllum* F. v. M.

Broome (W.V.F.).

In saline flats.

193. *Chenolea Muelleri* Benth.

Broome (W.V.F.).

In damp saline soil.

194. *Salicornia cinerea* F. v. M.

Wyndham (W.V.F.).

In muddy spots along the shores of Cambridge Gulf.

AMARANTACEÆ.

195. *Ptilotus longistachyus* W.V.F. n. sp.

An erect annual, much branched from the base; branches greenish striate and, as well as the foliage, scantily woolly-tomentose; leaves lanceolate, obtuse, tapering into rather short petioles, very much crisped; flowers small, closely packed in long cylindrical spikes, which are shortly pedunculate, and form a large corymbose somewhat leafy panicle; bracts scarcely a quarter the length of the perianths; ovate, acute, scarious, with rather prominent darker slightly woolly midribs; bracteoles broadly ovate, mucronate, shining scarious, shorter than the bracts and along with them persistent on the woolly rhachis; perianth-tube very short and densely invested with short articulate straight hairs; segments trinerved, invested without with long articulate straight hairs, glabrous within, the outer with obtuse bifid or trifid apices, the inner narrower and acute, all narrow-lanceolate; staminal cup short, free, not surrounded by hairs, the truncate summit ciliate with slightly woolly articulate hairs; filaments very slender, unequal, all antheriferous; ovary shortly stipitate, with a slender central style, the summit of the ovary and lower half of the style invested with long straight hairs, otherwise glabrous.

Upper Isdell River; Mt. Anderson. (W.V.F.).

Height 3-5ft. Leaves 1-2in. long. Spikes 3-9 in. long, about $\frac{3}{4}$ in. diameter. Perianth $\frac{1}{2}$ in. long, the segments greenish with conspicuous glabrous pink tips.

Among sandstone and quartzite rocks.

Affinity, *P. alopecuriodes*, F. v. M.

196. *P. astrolasius* F. v. M.

N.W. coast (A. Hughan); South of Fitzroy River (Mayo Logue).

Among sand hills.

197. *P. Johnstonianus* (W.V.F.). n. sp.

Stems numerous, prominent or ascending, forming a thick perennial stock, quite glabrous; leaves linear to linear lanceolate, acute, gradually tapering into moderately long petioles; spikes pedunculate, somewhat obovoid, numerous and umbellate at the ends of short branchlets; the whole inflorescence forming a dense panicle, bracts and bracteoles ovate-lanceolate, acute or shortly aristate, half as long as the perianth; perianth surrounded at the base by a ring of short straight hairs; segments free almost from the base, the outer ones ovate-lanceolate, obtuse, glabrous, the three inner ones narrower, nerved

and invested half way up with intricate wool; staminal cup very short, the filiform filaments hardly dilated at the base and not very unequal; ovary glabrous; seeds shining.

Six miles N.E. of Mt. Eliza, Lennard River (W.V.F.).

Stems 1-2ft. long. Leaves mostly $1\frac{1}{2}$ -2in. long. Peduncles 1-2 lines; spikes about three lines in diameter; panicles 2-3 in. in diameter. Perianths $2\frac{1}{2}$ lines long, the segments crimson edged with white, the wool and ovary crimson. Seeds dark brown.

Named in memory of the late Mr. Harry F. Johnston, Surveyor General of Western Australia.

In sandy loam.

Affinity, *P. spicatus*, F. v. M.

198. *P. lanatus* (A. Cunn).

Cygnat Bay (W.V.F.) Segments trinerved, pale pink.
In sandy soil.

199. *P. Macleayi* F. v. M.

Diffuse, much-branched, 2ft. high; perianths white.

200. *P. brachyanthus* F. v. M.

Derby; Goody Goody (W.V.F.).

Apparently an annual with scantily hairy stems and linear leaves.

In sandy spots.

201. *P. humilis* F. v. M.

A Port Hedland form is somewhat woolly with prostrate or ascending stems of 1ft.; inflorescence through leaf suppression becoming paniculate; perianths white, scarcely two lines long.

202. *Alternanthera nana* R. Br.

Fortescue River (J. Forrest); Meda, May, Lennard, Barker, Fitzroy and Isdell Rivers (W.V.F.).

Erect and much-branched from the base and, along with the leaves, often reddish-coloured and almost glabrous; leaves ovate-lanceolate; perianths frequently slightly woolly.

In sandy loams.

203. *A. augustifolia* R. Br.

May, Meda, Lennard, Fitzroy and Isdell Rivers (W.V.F.).

In sandy soil.

204. *A. nodiflora* R. Br.

Prostrate or procumbent to 1ft.; perianths white.

205. *A. decipiens* Benth.
King Sound District (Froggatt); Meda, Lennard, and Fitzroy Rivers. (W.V.F.).
In sandy spots.
206. *Achyranthes aspera* L.
Erect, 2-4ft. high. A pest.
207. *Gomphrena canescens* R. Br.
A most variable species; 1-2ft. in height; flowers pink or white. A good fodder plant.
208. *G. parviflora* Benth.
Prince Regent's River (A. Cunn.); Upper Isdell River, Cygnet Bay (W.V.F.).
The Isdell River plant has a thick fleshy fusiform tap-root, which is apparently perennial; stems prostrate and much branched, 1-3ft. long. The Cygnet Bay examples are bushy, erect, canescent, 1ft. in height; leaves lanceolate; spikes mostly axillary.
209. *G. brachystylis* F. v. M.
Near Derby; Meda, May, Lennard and Isdell Rivers (W.V.F.).
In sandy soil.

PHYTOLACCACEÆ.

210. *Cyrostemon ramulosus* Desfont.
Diffuse or ascending and often under 1ft. in height to a tall shrub or tree of 25ft. in height; trunk 6ft., diameter 6in., bark grey, rough and corky; timber pale, soft and light.

AIZOACEÆ (FICOIDEÆ.)

211. *Sesuvium portulacastrum* L.
Sunday Island (W.V.F.).
Stems procumbent to 2ft. long; flowers pinkish within.
In saline spots.
212. *Trianthema turgidifolia* F. v. M.
Stems prostrate to ascending, 2-6in. long; leaves succulent, thickly clavate; ovary purple at the base.
213. *T. oxycalyptra* F. v. M.
King Sound District (Froggatt); Broome, Derby, Goody Goody; May, Lennard, Fitzroy and Isdell Rivers (W.V.F.).
Stems prostrate or ascending, 6in. to 2ft. long; flowers white or pink.
214. *Mollugo spargula* L.
W. Australia (Drum.); Meda, Fitzroy, Isdell and Lennard Rivers (W.V.F.).
In sandy soil.

PORTULACACEÆ.

215. *Portulaca tuberosa* Roxb.
A fibrous-rooted annual or a tap-rooted biennial or perennial ; stems loosely branched. $\frac{1}{2}$ –1 $\frac{1}{2}$ ft. high ; leaves 1–1 $\frac{1}{2}$ in. long ; petals $\frac{1}{2}$ in. long, bright yellow, styles 5-cleft.
When growing in saline spots a tap-root is developed, and the plant ceases to be annual ; as inland districts are approached this form gradually disappears and is replaced by a fibrous-rooted annual which constitutes the *P. filifolia*, F. v. M. The distinctions mentioned in the "Flora Australiensis" are not constant.
216. *P. digyna* F. v. M.
Prince Regent's River (J. Bradshaw and Allen), Lennard and Isdell Rivers. (W.V.F.).
Stems prostrate, covering 6–12ins., and along with the branches and leaves red coloured ; leaves orbicular, thick and succulent ; flowers pink ; stamens often reduced to five.
217. *P. bicolor* F. v. M.
Prostrate, forming patches 3–6in. across ; flowers yellow.
218. *P. australis* Endl.
Prince Regent's River (J. Bradshaw and Allen) : Broome, Isdell River (W.V.F.). Flowers yellow.
219. *Calandrinia strophilata*, F. v. M.
Radical leaves terete, succulent, to 3in. long, those on the scapes above lin., pedicels $\frac{3}{4}$ to above lin. long ; flowers $\frac{1}{2}$ – $\frac{3}{4}$ in. across, reddish-purple ; petals 10–12, narrow-spathulate, mucronate ; stamens numerous, irregular ; anthers pale yellow or purplish ; styles five.
In sandy soil.
220. *C. quadrivalvis* F. v. M.
Yule and Sherlock Rivers (J. Forrest) ; Isdell River, near Grace's Knob (W.V.F.).
Usually of straggling habit but sometimes erect or ascending, flowers red.
221. *C. Tepperiana* (W.V.F.) n. sp.
A glabrous annual with a succulent, cylindrical tap-root, the stock surmounted by a dense tuft of terete fleshy leaves ; scapes erect and ascending, 1–6 or more arising from the leaves, leafless excepting 1–2 very small scarious scales ; flowers few, each on a slender pedicel and forming short racemes, rarely panicles, on the upper portion of the scape ; bracts ovate-lanceolate, acute, scarious, sepals broadly ovate, mucronate-acute, very thin ; petals 6–8, lanceolate ; filaments numerous, short ; anthers oblong ;

- style divided to the base into four linear stigmatic lobes ; capsule ovoid, longer than the calyx, four-valved ; seeds numerous, smooth. May and Lennard Rivers (W.V.F.). Leaves $1\frac{1}{2}$ to above 2in. long. Scapes $\frac{1}{4}$ -1ft. high. Pedicels $1\frac{1}{4}$ in. or less. Bracts 1 line long. Sepals two lines long. Petals $3\frac{1}{4}$ -4 lines long, red. Anthers yellow. Seeds black and shining.
- In grassy sandy spots.
- The species is named in honour of Mr. J. G. O. Tepper, of South Australia.
- Affinity, *C. uniflora*, F. v. M.

CARYOPHYLLACEÆ.

222. *Polycarpaea longiflora* F. v. M.
Erect 1-1 $\frac{1}{2}$ ft. ; flowers crimson and very showy.
223. *P. Holtzei* Maiden and Betche in Ewart and Davies' "Flora of the Northern Territory," 1917, p. 109.
- This species was recognised by Mr. Fitzgerald as new, and he gave it a name, but the MS. of Maiden and Betche's species was in Prof. Ewart's hands long before Mr. Maiden saw Mr. Fitzgerald's description. The North-Western Australia localities given (*loc. cit.*) are, between the Gascoyne and Fortescue Rivers, (H. S. King), King Sound (W. W. Froggatt) ; Mr. Fitzgerald's localities are base of Mt. Eliza, near Lennard River, Isdell and King Rivers ; Mts. Barnett and Harris, Sunday Island (W.V.F.).
224. *P. involucrata* F. v. M.
Lennard and Isdell Rivers (W.V.F.).
On sandy and stony rises.

RANALES.

NYMPHECACEÆ.

225. *Nymphaea gigantea* Hook.
Rootstock bulbous, the roots thick, white, eaten by aborigines ; flowers blue, the petals frequently less than lin. long.
Found in Northern Australia generally.

MENISPERMACEÆ.

226. *Tinospora smilacina* Benth.
Twines over the tops of shrubs and small trees. Flowers greenish-yellow ; fruits scarlet.
Includes *T. Walcottii*, F. v. M. Known along the Fitzroy and Lennard Rivers as "Native Ivy."

LAURACEÆ.

227. *Cassytha strigosa* W.V.F., n. sp.

Quite glabrous excepting the inflorescence ; stems filiform : flowers distant, in simple slender spikes, the rhachis invested with rigid shining brown strigose hairs ; bracts ovate, as long as the outer perianth-segments ; scantily strigose ; outer segments of the perianth not half as long as the inner, scantily ciliate, the inner very broad and glabrous ; three outer stamens opposite the outer perianth-segments broad and petal-like ; ovary glabrous ; fruit scantily strigose, many ribbed, ovoid, reddish-brown, the persistent perianth-lobes of a bright pink color.

Eastern base of Mt. Broome (W.V.F.).

Spikes 1-1½ in. long. Perianths under ¾ line long, white.

Fruits 2-2½ lines long.

Parasitic in shaded spots on low shrubs.

Affinity, *C. filiformis* L.

228. *C. filiformis* L.

Broome, near Derby ; Meda, May, Lennard, Fitzroy, Isdell, Barker, Charnley, and Calder Rivers ; Walcott Inlet (W.V.F.).

A hirsute form. Flowers and fruits white.

RHOEADALES.

CAPPARIDACEÆ.

229. *Cleome oxalidea* F. v. M.

Sturt's Creek (W.V.F.) ; May and Lennard Rivers (W.V.F.). Scapes many from the one rhizome, filiform ; sepals 1½ lines long, red ; capsule to above 1½ in. long. In ironstone gravel.

230. *Gynandropsis Muelleri* Benth.

About 2ft. high, of straggling habit ; flowers yellow.

231. *Capparis lasiantha* R. Br.

Branches climbing many yards ; flowers white.

232. *C. nummularia* DC.

Petals white ; filaments pale to purple.

233. *C. umbellata* R. Br.

Careening Bay (A. Cunn.) ; near Wyndham, Ord and Denham Rivers, Swan Point (W.V.F.).

A tall shrub or small tree supported by others ; 10-15ft. high ; trunk 4-5ft. ; diameter 3-4in. ; bark grey, smooth ; timber pale, rather soft but close-grained ; branches straggling, sometimes shortly climbing ; flowers white. Among sandstone and quartzite.

234. *C. lucida* R. Br.
N.W. coast (A. Cunn.) ; H. 72, near Lennard River, Packhorse, Isdell, Synnott, Artesian, and Edkins Ranges (W.V.F.). A tree of 20–30ft. ; trunk 10ft. ; diameter 1ft. ; bark grey, thin, but rough and longitudinally fissured ; timber pale, moderately hard and close-grained. On sandstone and quartzite elevations and in gorges.
235. *C. umbonata* Lindley.
Arborescent, 20–30ft. high ; trunk to 12ft. ; diameter 6–9in. ; bark grey, rough and irregularly fissured ; timber pale and rather soft ; branches pendulous, often glabrous, pedicels to above 2in. long ; petals and filaments white or pink ; fruits globular, occasionally above 2in. diameter, scented. On gravelly or grassy plains. The fruits are eaten by aborigines and are known throughout Kimberley as “Native Oranges.”

CRUCIFERÆ.

236. *Cardamine eustylis* F. v. M.
Fitzroy and Lennard Rivers (W.V.F.).
Valves of the pod 1-nerved. On grassy flats.

SARRACENIALES.

DROSERACEÆ.

237. *Drosera indica* L.
Flowers white, pink or red with a darker centre. A North-Western form has the stems and leaves scarlet ; flowers dark-red or deep scarlet ; styles usually 4, bifid almost to the base.
238. *D. Burmanni* Vahl.
Prince Regent's River (A. Cunn.) ; Isdell, Sprigg, and Charnley Rivers ; Packhorse and Isdell Ranges (W.V.F.). Leaves rosulate, scarlet ; scapes to 1ft. high ; sepals papillose ; flowers purplish. Wet spots.
239. *D. Banksii* R. Br.
Dingle Creek, base of Packhorse Range (W.V.F.)
Flowers white. In wet soil.
240. *D. petiolaris* R. Br.
Flowers white or reddish. This species is also in Papua.
241. *Aldrovanda vesiculosa* L.
Upper Isdell River (W.V.F.).
Floating in tangled masses in water.

242. *Byblis liniflora* Salisb.

Flowers purple, petals toothed. The species occasionally has a subtropical distribution.

ROSALES.

PITTOSPOREÆ.

243. *Pittosporum phillyroides* DC.

A shrub of 10–12ft. or a tree of 30ft. ; trunk 10ft.; diameter 6–12in.; bark greyish, smooth ; timber whitish, branches usually pendulous, flowers yellow. “Native Willow.”

244. *Citriobatus pauciflorus* (A. Cunn.)

Careening Bay (A. Cunn.), near Synnott Range, and on a tributary of the Sprigg River, 10 miles N. of Mt. Bartlett (W.V.F.).

A Coprosma-like shrub of 10ft. or a tree of 25ft. ; trunk 10ft.; diameter 6in.; bark greyish, thin and rather smooth; timber pale, dense and moderately hard, fruits greenish-yellow or yellow. On the banks of and in the beds of watercourses.

LEGUMINOSÆ.

MIMOSOIDEÆ.

Acacia (see introductory note).

245. *A. kimberleyensis* W.V.F. in Maiden, *Proc. Roy. Soc., N.S.W.* LI. 112 (1917).246. *A. curvicarpa* W.V.F.. *Loc. cit.*, p. 114.247. *A. pachyphloia* W.V.F. *Loc. cit.* p. 116.

(For a complete list of North-West Australian Acacias see Maiden, *Proc. Roy. Soc., N.S.W.* LI, 71, 1917.)

248. *Eyrthrophloeum Laboucheri* F. v. M.

A tree 30–40ft., the branches spreading ; trunk 10–15ft. ; diameter 1–1½ft. ; bark dark-grey, rough ; timber a very dark brown, almost black, close-grained, moderately heavy, and one of, if not the hardest wood in Australia ; flowers greenish-yellow. The “Black Bean” of N.W. Australia.

249. *Dicrostachys Muelleri* Benth.

George’s River and Jones’ Creek (J. Forrest) ; May and Leonard Rivers, near Inglis’ Gap, King Leopold Ranges (W.V.F.).

An erect thorny shrub, 12–16ft. ; fertile, flowers yellow ; staminodia of the neuter ones purple ; pod glabrous, much curved, tardily dehiscent, 1–2in. long, 4–5 lines broad ; valves hard, convex ; seeds subrotund, a shining brown.

250. *Neptunia gracilis* Benth.
Sturt's Creek (F. v. M.) ; Fitzroy, May, Lennard, Barker, Isdell, Adcock, Hann, Barnett, Charnley, King and Ord Rivers (W.V.F.)
Stems form a few inches long and prostrate or procumbent to erect and 4-6ft. high.
251. *N. monosperma* F. v. M.
Stems almost prostrate and several feet long to erect and 2-3ft. high.
In the majority of North-West Australian examples, the leaflets are fewer than those of the type.
252. *Albizia procera* Benth.
From the Adcock to the Isdell Rivers (W.V.F.).
An evergreen tree of 40ft. ; trunk to 15ft. ; diameter 6-9in. ; bark grey, moderately rough ; timber brown, hard and tough. In stony soil.
253. *A. lebbek* Benth.
Sprigg and Barker Rivers and tributaries (W.V.F.).
A deciduous tree of 25-30ft. ; trunk to 8ft. ; bark dark-grey, rough and longitudinally fissured. ; timber very dark-brown, glistening, soft and light ; leaves of a vivid green ; corolla greenish-yellow ; stamens $\frac{3}{4}$ -1in. long, yellow in the lower half and including the anthers, green in the upper half ; pod often 10in. long and 2in. broad ; seeds brown, orbicular, compressed about $3\frac{1}{2}$ lines, broad.
254. *A. monilifera* F. v. M.
Goose Hill, Ord River (W.V.F.).
A tree of 30-40ft. ; trunk to 12ft. ; diameter 1ft. ; bark greyish, rather rough ; timber dark-brown and rather hard ; stipular spines sometimes entirely suppressed, others above 1in. long ; flowers white. In sandy loam.

CÆSALPINIOIDEÆ.

255. *Bauhinia Cunninghamii*, Benth.
A tree of between 30-40ft., the branches spreading ; trunk 10ft. ; diameter 1-2ft. ; bark dark grey, rough ; timber purplish, soft, but very tough, flowers scarlet. "Bauhinia."
256. *Cassia notabilis* F. v. M.
A spreading shrub of 3ft. in height ; pod compressed, thin, 1-1 $\frac{1}{2}$ in. long, above $\frac{1}{2}$ in. broad ; seeds dark-greyish, obovate retuse, thick and reticulate.
257. *C. venusta* F. v. M.
Erect, 2-4ft. ; seeds black, obovate, thick, reticulate.

258. *C. neurophylla* (W.V.F.).

A diffuse shrub, green and glabrous, the branchlets angular; leaves shortly stalked; stipules small, subulate; leaflets in 2-3 rather distant pairs ovate to ovate-lanceolate, mucronate, flat, thinly coriaceous, the venation prominent; glands large, acutely conical, between each pair of leaflets; peduncles axillary, shorter than or scarcely exceeding the leaves, bearing an umbel of three flowers on pedicels longer than the calyces; bracts setaceous; sepals broadly ovate; petals roundish; stamens 10, occasionally eight; anthers all on short filaments of which the lower are slightly the longest; ovary glabrous; pod oblong falcate, very flat; valves thinly coriaceous; seeds parallel to the valves.

Edkins Range, hills near Barker River (W.V.F.).

Height 1-3ft; leaflets $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long, bright yellow; anthers dark yellow. Pod 1 $\frac{1}{2}$ -1 $\frac{3}{4}$ in. long by $\frac{1}{3}$ in. broad.

In crevices of quartzite rocks.

Affinity to *C. Chatelainiana* Gaudich.

259. *C. sophera* L.

Lennard River (W.V.F.).

Diffuse, 3-4ft. high or more. In stony river bed.

260. *C. retusa* Sol.

Denham and King Rivers (W.V.F.).

A shrub 3-4ft. high; leaflets 2-3 pairs, often mucronate; peduncles slender, frequently longer than the leaves, 3-5 flowered; pedicels slender. Among quartzite gravel.

261. *C. australis* Sims.

Near Native Well, between Derby and Meda Station (W.V.F.).

Erect, from 2-3 to 10ft. high, often diffuse, leaflets fewer than in the type, 1-1 $\frac{1}{2}$ in. long. In sandy soil.

262. *C. mimosoides* L.

Stems ascending to 1ft.; flowers yellow.

263. *C. glutinosa* DC.

Erect, 3-4ft. high, viscid.

264. *C. cladophylla* W.V.F. n. sp.

A small diffuse shrub, the branches and leaves closely invested with short spreading white or yellowish hairs; leaf-rachis about half an inch long, terminating in an acute point or sharp thorn, the whole leaf resembling a short leafy branch; leaflets in two pairs, obliquely-obovate, terminating in a bent mucro, not very thick and rather soft, the upper pair much the largest, the gland between

each pair small and conspicuously stipitate; stipules semi-cordate-reniform, leafy; peduncles axillary, solitary, filiform and with the short filiform pedicels longer than the leaves and bearing an umbel of a few flowers; sepals small, broadly ovate; petals roundish; pod shortly stipitate, linear-oblong; slightly falcate, terminating in a short straight point, very thin and flat, pubescent; seeds mostly five.

Hills near the junction of Hann and Barnett Rivers; Edkins Range; Dillen's Springs (W.V.F.).

Height 1-2ft; leaflets $\frac{1}{2}$ - $\frac{3}{4}$ in. long; stipules 2-3 lines diameter; petals yellow; pod 1-1 $\frac{1}{2}$ in. long by $\frac{1}{4}$ in. across; seeds dark-brown. Among sandstone and quartzite rocks.

PAPILIONATÆ.

265. *Mirbelia oxyclada* F. v. M.

A spreading spinescent shrub, 2-3ft. high; flowers yellow, 2-3 together, shortly pedicellate on lateral or axillary peduncles; calyx 2-2 $\frac{1}{2}$ lines long, sericeous; lobes almost setaceous, much longer than the tube; standard slightly exceeding the calyx; wings and keel shorter; ovary and fruit glabrous. In sandstone and quartzite country.

266. *Jacksonia petrophiliodes* W.V.F. n. sp.

A much-branched rigid shrub, glabrous excepting the inflorescence; barren branches rather long and slender, angular and sulcate, not spinescent; scales linear; flowers mostly on the lower portion of the plant, pedicellate, few to many together, forming lateral or axillary white pubescent clusters on head-like racemes; bracts and bracteoles persistent, ovate, acuminate, shorter than the flowers; calyx hirsute, the tube broad, the lobes persistent, erect, linear-lanceolate, acute, much longer than the tube, the upper ones shorter than the others and connate to near their summits; petals shorter than the calyx; standard shortly acuminate, wings longer than it; keel acuminate, as broad as or broader than the wings and about as long; ovary shortly stipitate, 2-ovulate; pod ovate, turgid, densely silky-villous, about as long as the calyx and terminating in an acuminate exerted point; seeds two.

South of the Fitzroy River (Mayo Logue).

Height 1-2ft. Scales 1-2 $\frac{1}{2}$ lines long. Pedicels 1 line or less.

Calyx 4 lines long, the tube less than 1 line long. Petals yellow. Sandy, scrubby country, "Pindan."

Affinity to *J. odontoclada* F. v. M.

267. *J. aculeata* W.V.F. n. sp.

An erect rigid much-branched shrub, glabrous or more or less sericeous, branchlets short, rigid, striate, divaricate; leaves reduced to numerous small subulate pungent, spreading or recurved scales; flowers axillary, solitary, very shortly pedicellate; bracts small, caducous; bracteoles two, adherent to the base of the calyx-tube, small subulate, pungent-pointed; calyx sericeous, the lobes broad-linear to narrow lanceolar, terminating in slender acute points, the upper ones connate to below the middle, about as long as the tube, reflexed, persistent; corolla long, persistent; standard comparatively broad and slightly exceeding the calyx-lobes, wings slightly shorter; keel almost straight, obtuse, broader and shorter than the wings; ovary closely sessile, densely white tomentose, 2-ovulate; style short, slightly curved, glabrous; pod obliquely obovate, turgid, the rigid base of the style persistent, white tomentose and reticulate, scarcely as long as the calyx, and perfecting one seed.

South of the Fitzroy River (Mayo Logue).

Height 3ft. or more. Calyx scarcely 2 lines long, the lobes nearly 1 line long. Carolla reddish-yellow. Throughout "Pindan" and desert country.

Affinity to the series Pungentes.

268. *J. thesioides* A. Cunn.

Isdell, Charnley, Calder, and Hann Rivers, Packhorse Range (W.V.F.).

A graceful shrub 6–20ft. high; branches often pendulous; calyx frequently 3 lines long, sericeous; flowers yellow. In sandstone and quartzite country. The foliage is eaten by stock.

269. *J. pteroclada* F. v. M.

Stems numerous from the one stock, ascending, 6–9in.; flowers yellow.

270. *Gastrolobium grandiflorum* F. v. M.

An erect much-branched shrub, 4–8ft.; leaves opposite or 4-whorled; flowers scarlet; pod $\frac{1}{2}$ in. long, almost glabrous, reticulate. The "Wall-flower Poison."

271. *Bossiaea phylloclada* F. v. M.

Forrest, Carson, Roe, and Drysdale Rivers (J. Bradshaw and Allen); King and Isdell Rivers, near Grace's Knob (W.V.F.).

Erect, rigid, 3–5ft.; branches often pendulous; upper stamen free or almost so.

272. *Templetonia Hookeri* Benth.
N.W. Coast (Bynoe); Isdell, Charnley, Calder, Denham,
and King Rivers; Packhorse, Synnott, Artesian, Edkins
and Harding Ranges, Sunday Island, Dillen's Springs
(W.V.F.).
An erect graceful shrub, 6-10ft.; flowers yellow. Usually
among sandstone and quartzite rocks.
273. *Crotalaria punicea* L.
May, Lennard, Fitzroy, Isdell, Charnley, Barnett, and Hann
Rivers (W.V.F.).
In sandy loam.
274. *C. alata* Hamil.
Paradise Creek (J. Bradshaw and Allen); Isdell River, near
Grace's Knob, Synnott Creek (W.V.F.).
Of straggling habit; stems to 2ft. long; flowers bright yellow.
In damp grassy spots.
275. *C. medicaginea* Lam.
Stems erect, 2-3ft.; flowers yellow.
276. *C. verrucosa* L.
Erect, 2-4ft.; flowers purple.
277. *C. linifolia* L.
Often an erect slightly branched annual of 2-4ft. in height.
278. *C. crassipes* Hook.
Stems erect 4-6ft.; leaflets 3-5in. long, rarely 2in.; flowers
bright yellow; pods much inflated.
279. *C. membranacea* W.V.F. n. sp.
An erect much-branched annual. the stems and branches
terete, and, along with the foliage and inflorescence,
closely invested with long spreading pale or yellowish
hairs; leaves membranous, simple, almost or quite sessile,
ovate to lanceolate, rounded at the apex; stipules lance-
olate, narrowed upwards; flowers in loose terminal or
axillary racemes of usually 2-4 flowers only; peduncles
and pedicels rather short; bracts linear, shorter than the
calyx; calyx densely invested with long spreading hairs,
lobed nearly to the base, the two upper lobes much broader
than the others, the lateral ones and the lower one shortly
united, all scarcely acute; petals about as long as the
calyx, the standard ovate, silky tomentose, without
tomentum on the upper portion; wings and keel equal,
the latter terminating in a straight or slightly twisted
beak, ciliolate on the margins; ovary sessile, glabrous;
ovules numerous (30-40); pod much inflated, sessile or
shortly stipitate.

Base of Inglis' Gap, King Leopold Ranges (W.V.F.).

Height 1-2ft. ; leaves 1-2in. long. ; stipules 2-3 lines long ; flowers pale-yellow, copiously dark-spotted ; calyx 8 lines long ; standard 4 lines across ; pod lin. or more in height. In wet grassy spots.

Affinity to *C. linifolia* L.

280. *Psoralea Archeri* F. v. M.

Erect, 3-4ft. ; flowers pink. This tropical species is also in Papua.

281. *P. cuneata* (W.V.F.). n. sp.

A spreading, rigid, and somewhat intricately branched shrub, very hispid, with spreading white hairs, the glandular dots small and almost concealed ; leaves unifoliolate, sessile or almost so ; leaflets cuneate, with short pungent points and usually several acute or pungent teeth on the margins of the upper half, otherwise entire, very hispid on both pages ; stipules slender, recurved, persistent, spinescent ; flowers on extremely short pedicels, usually solitary and axillary, rarely in clusters of 2-3 ; calyx very hispid with white spreading hairs, the upper and lateral lobes as long as the tube, the lower lobe narrowly boat-shaped and much longer than the others ; corolla as long as the lower calyx-lobe ; standard glabrous ; keel obtuse ; pod included in the somewhat inflated calyx, ovate, obtuse, glandular and very hispid, especially near the apex.

Bases of Mts. House and Clifton ; King River (W.V.F.).

Height 2ft. ; leaflets $\frac{1}{2}$ in. or less in length. ; stipules two lines long ; calyx $3\frac{1}{2}$ -4 lines long ; corolla purple.

On shady rises associated with species of *Triodia* (Spinifex).

Affinity to *P. Archeri*, F. v. M.

282. *P. balsamica* F. v. M.

Erect, 3-5ft. ; strongly scented ; flowers purplish ; ovary glabrous.

283. *P. virens* (W.V.F.). n. sp.

Stems erect, slender, green and glabrous, with small brown glandular dots, few-branched ; leaves on slender petioles, rarely unifoliolate : leaflets lanceolate to ovate-lanceolate, mucronate-acute, entire, almost membranous, green and quite glabrous on the midrib, beneath scanty hispid, gland-dots minute and copious ; stipules very small, setaceous ; flowers on slender pedicels which are shorter than the calyces, in globular or ovoid shortly pedunculate racemes, axillary or, through leaf suppression, forming long terminal racemes ; the peduncles, pedicels, bracts and calyces sericeous, bracts shortly and broadly ovate, hardly acute and, along with the calyx copiously black glandular.

dotted; calyx—upper lobe shorter than the tube, the lower much broader, almost twice as long as the tube; corolla slightly longer than the lower calyx-lobe; wings and keel equal, shorter than the standard; fruiting calyx open, the pod much shorter than it; pod ovate glabrous, glandular and rugose.

Summit of Mts. Broome, Harris and Daglish; Packhorse and Harding Ranges. (W.V.F.).

Height 6–15ft.; very strongly scented; petioles $1\frac{1}{2}$ in. or less in length.; leaflets 3in. long or less; calyx 4 lines long; corolla purple; standard 4 lines diameter; keel very obtuse. In sandy loams overlying quartzite and sandstone.

Affinity to *P. balsamica* F. v. M.

284. *P. badocana* Benth.

Carson's Valley (J. Bradshaw and Allen); near Wyndham; King River (W.V.F.).

Erect, 2–3ft.; flowers purple.

285. *P. pustulata* F. v. M.

Stems erect, simple or slightly branched, 4–6ft.; flowers purple.

286. *P. leucantha* F. v. M.

Erect, 2–4ft.; standard white, the wings and keel white, blotched with purple.

287. *Indigofera trita* L.

Negri River (Alex. Forrest); Ord and Isdell Rivers (W.V.F.). Ascending to 6in. in height; flowers reddish.

288. *I. trifoliata* L.

Prince Regent's River (J. Bradshaw and Allen); Isdell, Charnley, and Calder Rivers (W.V.F.)

Stems procumbent or ascending, 6–8in. high, occasionally above 1ft.; flowers red.

289. *Tephrosia conspicua* W.V.F. n. sp.

An erect shrub, the branchlets, leaves, and inflorescence closely invested with a yellowish velvety tomentum; leaves petiolate; stipules narrow, deciduous; leaflets 3–5, ovate-lanceolate, mucronate, thinly coriaceous, nearly all equal, petiolulate, the primary parallel veins conspicuous, anastomosing near the margins and much reticulate between; racemes large, in the upper axils; flowers large, solitary or in clusters of 2–3; bracts sericeous, broadly ovate, terminating in long acuminate points; calyx softly villous, the tube broad; lobes ovate, acutely acuminate, the lower longer than the tube, the lateral

ones about as long, the two upper connate to above the middle; standard silky-villous, conspicuously calloused at the base above the claw; wings shorter; keel shorter than the wings, incurved, obtuse; upper stamen and adjoining portion of the staminal tube hirsute; style flattened, glabrous; ovary white-tomentose; pod linear, obliquely pointed, slightly recurved, compressed, pubescent; seeds lenticular, with a small circular strophiole.

Dillen's Springs (W.V.F.) (J. P. Rogers).

Height 5-7ft.; leaf-petioles lin. or more in length; leaflets 3-4in. long; petiolules 2-3 lines; racemes 1ft. long or less; flowers orange-red; pedicels 2-4 lines long; calyx 5 lines long; standard 8 lines diameter; wings 6 lines long; pod 3in. long.

This pretty species grows in sandy loam.

Affinity to *T. elongata*, R. Br.

290. *T. purpurea* Pers.

Shrub, erect, 2-4ft.; flowers pink.

291. *T. rosea* F. v. M.

Erect, 2-8ft.; flowers pink.

The taller forms have a silver-white tomentum.

The variability of this species and the existence of numerous intermediates between it and *T. purpurea* Persoon, tend to show that it cannot be even retained as a variety.

292. *T. flammea* F. v. M. var. *monophylla* (W.V.F.) n. var.

Isdell and Lennard Rivers (W.V.F.).

An erect shrub, 8-10ft. high; leaflets solitary, elliptical-oblong to obovate, obtuse, 1-2in. long; pod 2-2½in. long, slightly falcate. In sandy loams.

293. *T. coriacea* Benth.

Lennard and Isdell Rivers (W.V.F.).

Erect to 3ft.; flowers orange-red. In sandy loam.

294. *T. leptoclada* Benth.

Lennard and Isdell Rivers (W.V.F.).

Pod 1-1½in. long. In sandy soil.

295. *T. uniovulata* F. v. M.

10 miles above Wingrah Pass, on the Lennard River (W.V.F.).

Stems erect, almost simple, several together from a thick woody stock, 2-3ft.; leaves all trifoliolate; flowers yellowish. In sandy loam.

Port Hedland (W.V.F.).

Stems ascending or erect, under 1ft.; leaves uni-trifoliolate ferruginous tomentose; flowers small, clustered, purplish. Sandy soil. The species was previously collected along the Ashburton, Nichol and Cave Cane Rivers, also between Mueller's Range and Ord River (Alex. Forrest).

296. *T. stipuligera* (W.V.F.) n. sp.

A diffuse rigidly-branched shrub, the branchlets and foliage hirsute and the young shoots white-tomentose; leaves petiolate; stipules persistent, erect, rather rigid; leaflets 5-7, linear-cuneate to narrow-oblongate, with a small recurved point, very shortly petiolulate, the veins very oblique and occasionally anastomosing; flowers small, pedicellate or in leaf-opposed clusters of 2-3; bracts small, setaceous; calyx pubescent, the lobes linear, obtuse or subacute, the lower about as long as the tube, the upper connate to the middle; standard tomentose without; wings shorter; keel incurved, very obtuse, shorter than the wings; ovary densely tomentose; style glabrous, much compressed; pod linear, obliquely acute, straight or slightly falcate, the valves flattened, pubescent; seeds orbicular.

King River (W.V.F.).

Height 2ft.; leaf-petioles 1-2 line; leaflets $\frac{1}{2}$ - $\frac{3}{4}$ in. long; flowers red; pedicels 1 line long or less; Calyx $1\frac{1}{2}$ lines long; standard $2\frac{1}{2}$ lines diameter pod $\frac{3}{4}$ in. long. On basaltic hills.

The foliage is readily eaten by stock.

Affinity to *T. remotiflora* F. v. M.

297. *T. filipes* Benth.

Of straggling habit; stems 1-3ft. long; leaflets 3-5; racemes 3 to above 6in. long, with numerous pairs of pink or purplish flowers.

298. *T. remotiflora* F. v. M.

Leaflets narrow, to above $1\frac{1}{2}$ in. long; flowers pale pink.

299. *T. macrocarpa* Benth.

N.W. coast (Bynoe); Lennard, Fitzroy, Isdell, Adcock, Ord, Denham and King Rivers; Mt. Leake, Dillen's Springs (W.V.F.).

Diffuse, 3-5ft. high and across, the whole plant sometimes sericeous; disagreeably scented; leaflets occasionally solitary; flowers often in axillary clusters, the standard and wings orange-red to red, the keel always yellowish. In sandy soil.

300. *T. phæosperma* F. v. M.

Dillen's Springs. (W.V.F.)

An erect shrub, 4-6ft.; racemes often bead-like; flowers reddish-purple.

In moist sandy loam.

301. *Sesbania grandiflora* Pers.
A tree of 30–40ft. ; trunk 15–20ft. ; diameter 1–1½ft. ; bark dark-grey, longitudinally fissured, rough and corky ; timber pale, soft and light ; flowers white or yellowish-white. A “Cork-tree.”
In deep black soil adjacent to fresh water.
302. *S. aculeata* Pers., var. *sericea* Benth.
Erect, slender, 3–5ft. ; flowers yellow, the standard blotched with dark-purple.
In moist sandy soil.
Var. *erubescens* Benth.
Sturts' Creek (W.V.F.), near the junction of the Lennard and Barker Rivers (W.V.F.).
A graceful plant of 6–8ft. in height ; flowers numerous, in lax pendulous racemes ; pale-purple, about ¾in. long. In wet black soil. Apparently a distinct species.
303. *Swainsona oligophylla* F. v. M.
East of Oscar Range (Alex. Forrest) ; Lawlers, Mt. Magnet (W.V.F.).
Stems spreading, under 9in. high ; flowers purple ; calyx-lobes short.
304. *S. Kingii* F. v. M.
Between Gascoyne and Fortescue Rivers (H. S. King) ; Black Flag (W.V.F.).
Of lax ascending habit, the stems 1–1½ft. long ; flowers whitish.
305. *S. oroboides* F. v. M.
May and Lennard Rivers (W.V.F.)
On grassy flats.
306. *S. unifoliolata* F. v. M.
Annual, 2½in. high ; stipules somewhat foliaceous but small ; flowers solitary ; standard purple with darker striæ.
307. *S. colutoides* F. v. M.
Erect, 1–3ft. ; flowers purple ; pods red, much inflated.
308. *Æschynomene indica* L.
Rootstock and stems corky ; erect, 2–3ft. ; flowers yellow.
309. *Desmodium trichostachyum* Benth.
Upper Isdell River (W.V.F.)
Stems prostrate, often covering 1ft. ; flowers white. In wet soil.
310. *D. neurocarpum* Benth., var. *gracile* Benth.
Lennard River, between Napier and King Leopold Range (W.V.F.)
A small tufted plant growing in sandy soil.

311. *Erythrina vespertilio* Benth.

A deciduous tree to 40ft. ; trunk reaching 20ft. ; diameter 1-1½ft. ; bark brown, rough and corky ; timber white, soft, tough ; petals scarlet ; the standard with a dark blotch at the base. A "Cork-tree." In sandy soil.

312. *Canavalia ensiformis* DC.

Base of Mt. Brennan, Adcock and Throssell Rivers (W.V.F.)
Near Pittard's Bluff (W. H. Brown).
Twines over the tops of small trees.

313. *Atylosia marmorata* Benth.

South base of Artesian Range, Isdell River (W.V.F.)
Stems trailing for many yards, or shortly twining ; flowers yellow. In sandy soil.

314. *A. cinerea* F. v. M.

Shrubby, erect, 3-5ft. ; few-branched ; through leaf-suppression the racemes often form terminal panicles ; standard pink or greenish with darker striæ. Specimens from near the junction of the Fitzroy and Hann Rivers (W.V.F.) differ from those of the type in long slender branchlets ; woolly white indumentum, that on the inflorescence often glandular ; racemes sometimes above 4in. long, bearing numerous flowers, on pedicels which are often twice as long as the calyces.

315. *A. lanceolata* W.V.F. n. sp.

An erect shrub with long slender branches, closely invested with an appressed white or yellowish silky tomentum ; leaves petiolate ; leaflets uni-trifoliate, lanceolate to linear-lanceolate, obtuse, the terminal one shortly petiolulate, the lateral ones shorter or often suppressed, much reticulate beneath, rugose above ; stipules small, linear ; flowers in irregular clusters on short pedunculate axillary, solitary racemes, the uppermost occasionally (through leaf-suppression) forming short terminal panicles ; pedicels much shorter than the calyces ; calyx closely invested with yellowish silky hairs, the lobes lanceolate, longer than the tube ; wings and keel shorter than the standard ; ovules 4-6 ; pod oblong, closely tomentose ; valves coriaceous, with transverse depressions between the seeds ; seeds mottled brown and black.

Mt. Broome (W.V.F.).

Height 4-6ft ; petioles ½-¾in. long ; terminal leaflets 2½-3in. lateral ones 1in. or less in length ; calyx 4-5 lines long ; standard 6-7 lines long, yellow, longitudinally streaked with purple ; wings and keel 4-4½ lines long, yellow ; pod 1¼in. long by ½in. broad. Among sandstone and quartzite rocks.

Affinity to *A. grandifolia* F. v. M.

316. *A. grandifolia* F. v. M.
Isdell and Lennard Rivers, Synnot Creek, Dillen's Springs
(W.V.F.).
Erect, 3-4ft. high; standard yellow streaked with green or
purple; wings and keel yellow. In sandy loam.
317. *Rhynchosia acutifolia* Benth.
Erect, much-branched, 3-4ft.; standard yellow, longitudinally
purple striated; wings and keel yellow. In sandy soil.
318. *R. australis* Benth.
Artesian Range (W.V.F.).
Stems twining for several feet; standard and wings yellow;
keel greenish. Among sandstone rocks.
319. *R. rhomboidea* F. v. M.
Artesian Range (W.V.F.).
Stems twining or trailing for several yards, often viscid;
standard and wings yellow; keel greenish. Among
sandstone rocks.
320. *Flemingia lineata* Roxb.
Durack River (J. Bradshaw and Allen); Isdell and Charnley
Rivers, Synnot Creek (W.V.F.).
Erect, few-branched, 3-4ft.; standard and keel scarlet and
green; wings scarlet.
321. *F. pauciflora* Benth.
Carson's River (J. Bradshaw and Allen); Charnley and Calder
Rivers (W.V.F.).
Stems erect, almost simple, 1-1½ft.; several from the same
stock; flowers reddish-purple.

GERANIALES.

ZYGOPHYLLÆ.

322. *Tribulus hirsutus* Benth.
Nichol Bay (F. Gregory); Carnarvon. (W.V.F.).
In sandy loams.
323. *T. affinis* (W.V.F.). n. sp.
Stems slender, prostrate and along with the leaves and pedicels
more or less hirsute; leaves alternate, with 2-5 pairs of
almost equal linear or linear-lanceolate leaflets; stipules
linear-lanceolate; flowers small, on slender pedicels which
are thickened upwards; sepals hirsute; petals ovate,
shorter than the sepals; stamens five, alternating with
five shorter filiform staminodia; anthers large, ovate;
ovary-cells 1-ovulate; fruits narrow-pyramidal, the style
persistent and forming a straight beak, the cocci hirsute
on the back and prominently reticulate on the back and
sides.

Near Derby ; Lennard, Barker and King Rivers (W.V.F.).
 Stems 1-2ft. long. Leaflets, two uppermost lin. long,
 the lower slightly shorter. Stipules $1\frac{1}{2}$ -2 lines long.
 Pedicels $\frac{3}{4}$ in. or less. Sepals $1\frac{1}{2}$ lines long. Petals yellow.
 Fruits 4-5 lines long, including the beaks.

In damp sandy spots.

Affinity to *T. pentandrus* Benth.

324. *T. pentandrus* Benth.

King River, Dillen's Springs (W.V.F.).

Prostrate to 6in. ; flowers yellow.

In damp sandy spots.

325. *T. curvicaupus* (W.V.F.) n. sp.

Stock apparently perennial, the stems prostrate or ascending,
 and, along with the leaves and inflorescence, closely in-
 vested with white spreading almost bristly hairs ; leaves
 alternate ; leaflets 4-5 pairs ; oblong to oblong-lanceolate ;
 stipules small ; flowers rather large, on slender pedicels ;
 sepals lanceolate, hirsute without, glabrous within : petals
 obovate, glabrous, exceeding the sepals ; stamens 10,
 alternating filaments short ; anthers on the longer fila-
 ments oblong, on the shorter ones ovate : ovules solitary
 in each cell ; fruits obliquely pyramidal, more or less
 curved, the style persistent and forming a straight beak,
 each carpel hirsute on the back and reticulate or almost
 rugose on the back and margins ; each bearing a short
 conical spine about the middle on each side and a longer
 slightly reflexed one on each side at the base.

Goody Goody, near Derby. (W.V.F.).

Stems 1-3ft. long. Leaflets 3-5 lines long. Pedicels $\frac{1}{2}$ - $\frac{3}{4}$ in.

Sepals 3 lines long. Petals 4 lines long, pale yellow, fruits,
 including the beaks, 5 lines long.

In dry sandy localities.

Affinity to *T. bicolor* F. v. M.

RUTACEÆ.

326. *Boronia pauciflora* (W.V.F.) n. sp.

An erect much-branched shrub, slightly viscid and glabrous
 excepting the young shoots and flowers ; leaves simple,
 ovate-lanceolate, acute, tapering into a short petiole,
 firm, the margins entire, flat or slightly refracted, mid-rib
 evident above ; flowers few, solitary, on slender axillary
 pedicels ; sepals ovate-lanceolate or almost deltoid ; ter-
 minating in slender acute tips ; valvate, glabrous ; petals
 ovate-lanceolate, subacute, valvate, firm, tomentose, slightly
 shorter than the sepals ; filaments compressed, tomentose,
 glandular and slightly dilated upwards ; anthers hirsute,
 apiculate ; ovary viscid and glabrous ; style short, thick
 hirsute ; cocci slightly reticulate ; seeds wrinkled.

1,000ft.-1,900ft. above the base of Mt. Broome, King Leopold Ranges (W.V.F.).

Height 2ft. Leaves $\frac{3}{4}$ -1 $\frac{1}{4}$ in. long. Pedicels 3 lines or less. Sepals 1 $\frac{1}{2}$ -2 lines long. Petals white. Cocci 2 lines long. Seeds black.

Growing in crevices of quartzite.

Affinity to *B. grandisepala* F. v. M.

MELIACEÆ.

327. *Melia dubia* Cavan.

King Sound District (Froggatt); Wingrah or Devil's Pass, Napier Range, Grant Range, Ord and Denham Rivers (W.V.F.) An evergreen tree of 40-50ft., trunk to 20ft.; diameter 1-1 $\frac{1}{2}$ ft.; bark brownish, thin and scarcely rugose; timber pale yellow or brownish and straight-grained; flowers white, sweetly scented; fruits pale yellow. In sandy loams. The Australian plant is referred to *M. composita* Willd., in the Flora Australiensis. This is now regarded as a synonym for *M. dubia*. Muller places it under *M. Azedarach* L.

328. *Owenia reticulata* F. v. M.

Near Nichol Bay (Walcott); Ord River (W.V.F.).

A tree of 40ft. in height; trunk to 15ft.; diameter 1 $\frac{1}{2}$ ft.; bark dark brown, rough and moderately thick, usually longitudinally fissured and somewhat corky; timber brown, hard and tough; flowers greenish; fruits purple, globular, often 2in. diameter.

In sandy loam.

The pulp of the fruit is very scanty and of a disagreeable flavour.

329. *O. verrucosa* F. v. M.

A tree to 30ft.; trunk 15ft.; diameter to 1ft.; bark reddish, not very thick, rough and flaky; timber dark brown, very hard and tough; flowers greenish-white; fruits purple, the pulp extremely bitter to the taste.

Among sandstone and quartzite rocks, or on sandy undulations.

POLYGALACEÆ.

330. *Polygala leptalea* DC.

Carson River (J. Bradshaw and Allen); Upper Lennard and Isdell Rivers, north base of Bold Bluff (W.V.F.).

Sometimes almost leafless; flowers pink.

331. *P. Tepperi* F. v. M.

Roebuck Bay (J. W. O. Tepper); near Derby (W.V.F.).

Erect, 1-2ft.; flowers pink; closely allied to the Indian *P. rosmarinifolia* Wight and Arnott.

332. *P. stenoclada* Benth.

Near Derby and at Native Well (W.V.F.).

Erect to 1ft. A form with the foliage of var. *stenosepala* Benth., and the flowers of the type, excepting the stigma. This is not bearded, but there is a small membranous appendage on the underside of the style. The flowers are blue.

333. *Comesperma sylvestre* Lindley.

Isdell, Hann, Barnett, and Charnley Rivers (W.V.F.).

Erect, 1-2ft. On low hills among sandstone and quartzite boulders.

EUPHORBIACEÆ.

334. *Euphorbia alsiniflora* Baill.

Very doubtfully distinct from *E. myrtoides* Boiss.

335. *E. myrtoides* Boiss.

Involucres often on pedicels of $\frac{1}{3}$ in. long, and, when so, the gland appendages large and entire.

336. *E. Wheeleri* Baill.

Doubtfully distinct from *E. myrtoides* Boiss.

337. *E. australis* Boiss.

Nichol Bay (M. Brown) ; Port Hedland, etc. (W.V.F.).

In sandy localities.

338. *E. Mitchelliana* Boiss.

Near Derby (W.V.F.).

In shaded sandy spots.

Var. *stenophylla* Benth.

Near Derby, May, Meda. and Lennard Rivers (W.V.F.).

Leaves and capsules often slightly hirsute. In sandy loam.

339. *E. distans* W.V.F. n. sp.

A glabrous perennial, with straggling or ascending almost wiry dichotomous stems and branches, which along with the leaves are often red-coloured ; leaves opposite in distant pairs, oblong or ovate-lanceolate, shortly petiolate and obliquely cordate at the base, obtuse, entire, very thin, on the flowering branches very distant ; stipules lobed or slightly fringed ; flower heads terminal, 1-2 together on short stout pedicels, the last leaves much exceeding the involucres ; involucre slightly hairy, within the margin ciliate with rather long hairs, otherwise glabrous ; glands rather broad with much narrower entire appendages ; capsule glabrous ; seeds marked by very deep transverse furrows ; styles shortly bifid.

Base of Mt. Broome (W.V.F.).

Plant 1–2ft. long. Leaves $\frac{1}{2}$ – $\frac{3}{4}$ in. long. Involucres 1 line long, often red. Appendages of the glands white or reddish. Capsules 1 line long. Heads greyish. In sandy loam and black soil.

Affinity to *E. Armstrongii* Boiss.

340. *E. Schultzii* Benth.

Near Derby, May and Lennard Rivers (W.V.F.).

In sandy loam.

341. *E. comans* W.V.F. n. sp.

An annual or perennial of short duration, with several stems, erect or ascending from the base, much-branched and invested with spreading white hairs: leaves opposite, on extremely short petioles, ovate to ovate-oblong, obtuse, very obliquely cordate at the base, those on the flowering branches gradually smaller, stipules lobed or entire and setaceous; involucres terminal or, in the upper axils, solitary or two together, usually on short branchlets, glabrous, shortly pedicellate the leafy bracts longer than the involucre; glands rather broad, with slightly larger minutely denticulate appendages; capsule prominently angled, glabrous; styles shortly bifid; seeds marked with rather shallow transverse furrows.

Near Derby, Denham and King Rivers (W.V.F.).

Height under 9in. Leaves 3–4 lines long. Involucres about $\frac{1}{2}$ line long. Appendages to the glands white. Capsules under 1 line long. Seeds brownish. In sandy soil.

Affinity to *E. Schultzii* Benth.

342. *E. Muelleri* Boiss.

May, Lennard, Isdell Rivers, near Derby (W.V.F.). In sandy loam.

343. *E. cinerea* W.V.F. n. sp.

A prostrate glabrous and glaucous greyish many-branched plant, the rhizome woody and knotted; leaves opposite, very shortly petiolate, obovate to spatulate, shortly mucronate, oblique and very narrow at the base, entire or finely serrulate in the upper portion, almost imbricate on the flowering branches; stipules conspicuous and deeply lobed; involucres terminal or, in the upper axils, 1–2 together, very shortly pedicellate, glabrous, glands small, with a comparatively broad entire margin; capsule shortly stipitate, glabrous; styles simple; seeds rugulose.

Wingrah Pass, Napier Range (W.V.F.).

Plant covering the ground a foot in diameter. Leaves 2–2 $\frac{1}{2}$ –2–2 $\frac{1}{2}$ lines long. Involucres under 1 line long. Border of the glands pink, rarely white. Capsules scarcely $\frac{3}{4}$ line long. Seeds reddish-brown.

In moist sandy soil.

Affinity, *E. Drummondii* Boiss, and *E. alsiniflora* Bail.

344. *E. schizolepis* F. v. M.

Prince Regent's River (J. Bradshaw & Allen), near Derby ;
May, and Lennard Rivers (W.V.F.).

Capsules scabrous, two lines long, obtusely angled ; seeds
large, greyish, covered with numerous irregular white
tubercles. In sandy loam.

345. *E. atoto* Forster.

Often a spreading shrub of 1–2ft. high, sometimes slightly
tomentose ; leaves frequently scantily serrulated ; gland-
appendages white, ovate, larger than the gland. The
stipules are mostly setaceous and entire and not fimbriate
as in Indian specimens.

346. *E. chrysochæta* W. V. F. n. sp.

An erect scarcely branched annual ; the branches and upper
portion of the stem closely invested with rigid spreading
shining yellow pointed hairs, intermixed with a scant
white crisped pubescence ; leaves opposite, shortly but
distinctly petiolate, ovate to ovate-lanceolate, obtuse,
very oblique and obtuse at the base, sparingly pubescent
on both pages with short white appressed hairs, pale or
glaucous beneath, the veins prominent ; stipules small
and narrow, lacerate or irregularly fringed ; inserted
on a conspicuous transverse stipular line ; floral bracts
minute, narrow, lacerate or fringed ; involucre numerous,
crowded in bead-like cymes on an evident peduncle in one
axil of each pair of leaves, or sessile and terminal, the whole
inflorescence invested with short white or yellowish hairs ;
involucre small, the glands small and globose with con-
spicuous but small orbicular entire petal-like appendages ;
capsule hirsute ; seeds ovoid, acutely angled and trans-
versely shallow-rugulose.

May, and Lennard Rivers (W.V.F.)

Height 6–18in. Leaves $\frac{3}{4}$ –1 $\frac{1}{4}$ in. long. Involucres 1–3 lines
long. Appendages of the glands pale or pink. Capsules
 $\frac{1}{2}$ line diameter. Seeds pale-brown.

In wet sandy or muddy spots.

Affinity to *E. pilulifera* L.

347. *E. pilulifera* L.

Goose Hill, near Ord River (W.V.F.)

In sandy loam.

348. *E. eremophila* A. Cunn.

The Kimberley form is usually about 2ft. in height.

349. *Antidesma* Ghæsembilla Gaertner.

Careening Bay (A. Cunn.), Isdell and Charley Rivers :
Edkins Range : base of Artesian Range. (W.V.F.)

A tree of 25-40ft. ; trunk 5-15ft. ; diameter 1ft. or more :
bark dark-coloured, rugose : timber pale to brownish,
fairly hard and rather tough. fruits red. In moist black
or sandy soil.

350. *Briedelia* tomentosa Blume.

Prince Regent's River (J. Bradshaw & Allen). Swan Point
(W.V.F.)

An erect shrub of 6-12ft. In sandy soil.

351. *B. phyllanthoides* W.V.F. n. sp.

An erect much-branched shrub, ferruginous-tomentose in every
part excepting the flowers : leaves petiolate, ovate, very
obtuse, rounded at the base, of firm consistence, the
margins somewhat repand, the diverging veins 9-12
pairs, with the fine transverse veinlets very evident :
flowers glabrous, monœcious, both sexes together, forming
globose axillary clusters which consist of few to many
males with 2-3 females : bracts very numerous and
rather broad ; male flowers sessile or shortly pedicellate :
calyx-segments scarcely spreading, deltoid ; petals less
than half as long as the calyx-segments, several-toothed ;
disk margin broad and slightly repand : staminal column
slender, the free portion of the filaments much shorter,
the anthers closely surrounding the abortive tri-lobed
pistil ; female flowers on short stout pedicels, the calyx-
segments narrowly deltoid, obtuse : petals stipitate,
obovate, dentate, half as long as the calyx-segments :
disk bi-margined, the outer margin flat and slightly re-
pand, the inner surrounding the ovary and consisting of
five erect, broad, almost free, slightly denticulate scales :
ovary 2-celled ; styles 2, recurved, each deeply bifid ;
young fruits ovate, each cell 1-seeded.

Base of Mt. Broome (W.V.F.).

Height 6 ft. Leaves 1-1½ in. long ; the petioles 1-1½ lines.
Flowers greenish, segments of the males ½ line long, of
the females above ½ line long. In sandy loam under
trees.

Affinity to *B. tomentosa* Blume.

352. *Petalostigma* humilis W.V.F. n. sp.

Stems numerous and much-branched, erect from a thickened
stock, the plant appearing as a low diffuse shrub, closely
silky-pubescent ; leaves petiolate, orbicular to broadly
ovate, the apices rounded or retuse, rounded at the base,
not becoming glabrous with age, flat, the margins entire

or distantly toothed. stipules minute, setaceous. flowers dioecious; males several together, occasionally in axillary clusters but more often in short racemes; perianth-segments 3-4, broadly obovate, villous; staminal column invested with long hairs; the free portion of the filaments and the anthers glabrous; female flowers solitary, axillary, sessile or shortly pedicellate, the segments 4-6, narrower than in the males; ovary glabrous, 3, occasionally 4-celled; styles 3, sometimes 4, glabrous or scantily sericeous, the stigmatic branches broadly ovate, much undulate and erenate; fruit globular, 3-celled, rarely 4-celled; seeds smooth.

King River (W.V.F.).

Height 1-2ft. Leaves 1-1½in. long; petioles 1½-2 lines. Pedicels 1½-2 lines. Perianth-segments 1½ line long. Stigmatic-branches bright-yellow. Fruits 4-5 lines diameter, yellow, extremely bitter to the taste.

In rocky spots.

Affinity to *P. quadriloculare* F. v. M.

353. *Phyllanthus reticulatus* Poir.

Lennard and Isdell Rivers (W.V.F.).

A bushy shrub, 5-7ft. in height. In sandy localities.

354. *P. baccatus* F. v. M.

Vansittart Bay, Prince Regent's River (A. Cunn.). Lennard, Fitzroy, Isdell, Barker, Hann, Charnley, and Calder Rivers, Swan Point, base of Edkins Range (W.V.F.).

Diffuse shrub, 4-6ft. in height. Produces abundance of dark-purple or black fruits.

355. *P. Ferdinandii* J. Mull.

Edkins Range (W.V.F.).

A spreading shrub to 20ft. high; bark grey, smooth; fruits white. In sandy soil.

356. *P. Adami* J. Mull.

Edkins Range, Sunday Island (W.V.F.).

In crevices of quartzite.

357. *P. maderaspatensis* L.

This is described in the *Flora Australiensis* as *P. maderaspatanus* L.

358. *P. polycladus* W.V.F. n. sp.

A spreading twiggy shrub, glabrous and somewhat glaucous, the branchlets slender and terete. leaves almost distichous, shortly petiolate, oblong to lanceolate, acute, rounded at the base, more or less concave, the midrib alone evident; stipules minute, setaceous. flowers monoecious, axillary, on slender pedicels, the segments 6, the outer ones ovate,

acute, the inner anther and not longer; male flowers; anthers erect on a small column formed by the connate filaments, the cells parallel; glands minute; female flowers—disk repand; ovary glabrous and smooth; styles three, entire, erect; capsule depressed globular, smooth; seeds marked on the backs with about six longitudinal striae.

Edkins Range (W.V.F.).

Height 2ft. Leaves 3–4 lines long. Stipules dark-brown. Flowers pale-coloured; pedicels 2 lines or less. Perianth-segments $\frac{1}{2}$ line long. Capsules 2 lines diameter. Seeds dark-brown. In the crevices of sandstone and quartzite rocks.

Associated with *P. maderaspatensis* L., and with affinity to that species.

359. *P. minutifolius* F. v. M.

York Sound (A. Cunn.); near Mt. House, Adcock and Isdell Rivers, north base of Mt. Brennan (W.V.F.).

Some specimens have seeds varying from smooth to muriccate. In wet spots.

360. *Flueggia microcarpa* Willd.

An erect twiggy shrub, 4–10ft.; flowers and fruits white.

361. *Mallotus nesophilus* F. v. M.

Roebuck Bay (J. W. O. Tepper); Fitzroy, Isdell, Old, Denham, and King Rivers; Dillen's Springs, Swan Point (W.V.F.).

A tall shrub to a spreading tree of 30ft.; trunk to 10ft.; diameter 9in.; bark grey, smooth and thin; timber pale to brownish and not very hard, straight-grained; fruits orange-red. In sandy soil.

362. *M. derbyensis* W.V.F. n. sp.

An erect shrub with long lax branches, glabrous excepting the petioles or the branches and leaves scantily invested with a short stellate tomentum; leaves alternate, ovate-lanceolate, rather abruptly acuminate, rounded at the bases of the petiolate leaves, the petioles much thickened upwards, finely and regularly denticulate, the glands numerous and white on the under surfaces, prominently tri-nerved, rarely 5-nerved at the bases, with usually 5–7 pairs of nerves above the basal ones, the parallel veins numerous and conspicuous; racemes short, scantily stellate tomentose; capsule tomentose and muriccate with short tomentose, closely approximated processes; seeds subglobose.

Derby (W.V.F.)

Height 10–15ft. Leaves mostly 4in. long by $1\frac{1}{2}$ – $1\frac{3}{4}$ in. broad. Flowers not seen. Capsules about 3 lines diameter. Seeds brown. In sandy soil.

363. *Excaecaria agallocha* L.

Wyndham (W.V.F.).

An erect deciduous shrub, 6–10ft. high. In tidal muds.

364. *E. parviflora* J. Müll.

Nine-Mile Ridge, nine miles from Wyndham (W.V.F.).

A tree (often deciduous) of 40ft. ; trunk to 20ft. ; diameter 1–1½ft. ; bark greyish, smooth or somewhat rugose ; timber pale-coloured and not very hard. Yields quantities of an acrid milky juice. On saline flats. “Gutta Percha-tree.”

SAPINDALES.

ANACARDIACEÆ.

365. *Buchanania oblongifolia* W.V.F. n. sp.

A small tree with stout spreading branches, the young shoots and inflorescence villous or rusty-tomentose, otherwise glabrous ; leaves oblong or ovate-oblong, obtuse or almost rounded, gradually tapering into a petiole, coriaceous and rather rigid, pale-green and hardly shining, veins rather fine but prominent on both sides, much diverging and conspicuously reticulate between ; panicles lax, much shorter than the leaves, few to many together, terminal, sub-terminal or occasionally axillary, many-flowered, the peduncles and pedicels rather slender ; bracts ovate ; bracteoles lanceolate, and, like the bracts small ; pedicels short ; sepals five, almost orbicular, ciliate, longer than the tube and nearly half as long as the petals ; petals five, elliptical, obtuse ; filaments subulate ; fruits broadly ovate ; slightly compressed, tomentose.

Mt. Rason, between Precipice and Isdell Ranges, Hann, Barnett, Isdell, King, and Ord Rivers, Bell Creek, near Wyndham (W.V.F.).

Height to 30ft. ; trunk to 10ft. ; diameter 1ft. Bark not very thick or rough, dark-coloured, becoming somewhat corky on old trees, the inner with a purple sap. Timber pale, not hard, and rather tough. Leaves 4–6in. long by 1–2in. broad ; petioles ½–¾in. long. Flowers pale-yellow, sweetly-scented. Sepals under 1 line long. Petals 2 lines long. Fruits purplish, 3–4 lines diameter. In stony and sandy localities.

Affinity to *B. lucida* Blume.

366. *B. latifolia* Roxb.

Between Bell Creek and the King Leopold Ranges (W.V.F.). Tree of 30ft. ; trunk to 10ft. ; diameter 1ft. ; dark greyish to reddish, scarcely rugose ; timber pale, soft and tough ; branches stout and spreading ; flowers pale yellow odorous.

Among sandstone and quartzite rocks.

The species has not hitherto been recorded as Australian.

CELASTRINEÆ.

367. *Celastrus Muelleri* Benth.

Edkins Range (W.V.F.).

A deciduous tree to 25ft. ; trunk 8-10ft. ; diameter about 1ft. ; bark greyish, rugose, rather thick and often corky ; timber pink, close-grained, but rather soft ; leaves ovate to broad-lanceolate, obtuse, or often retuse with a small point in the sinus, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long ; flowers yellow.

On quartzite hills.

368. *Denhamiobscura* Meissn.

York Sound (A. Cunn) ; Cambridge Gulf, Mts. Herbert, Leake, Rason ; Packhorse, Isdell, Synnott, Artesian, Edkins, and Harding Ranges (W.V.F.)

A tree 20-30ft. ; branches pendulous ; trunk to 15ft. ; diameter 6-9in. ; bark dark grey and roughish or grey and smooth ; timber pale yellow, closely grained but fairly soft ; flowers yellow ; fruits lemon-yellow.

In sandy soil.

369. *Stackhousia muricata* Lindley.

The Kimberley plant is often quite leafless and bears yellow flowers and small quadangular fruits.

SAPINDACEÆ.

370. *Atalaya variifolia* F. v. M.

A tree of 30-40ft. ; trunk to 15ft. ; diameter 6-9in. ; bark grey, rugose ; timber pale yellow and not very hard ; flowers and fruits pale yellow or almost white.

In sandy loams.

The foliage is readily eaten by stock.

371. *A. hemiglauca* F. v. M.

A bushy shrub to a tree of 20ft. ; trunk to 5ft. ; diameter 6in. ; bark dark grey, thin, smooth or scarcely rough ; timber white and rather soft ; flowers and fruits white.

In sandy loam.

372. *Dodonaea lanceolata* F. v. M.

Erect, 2-4ft. ; seeds black and shining.

373. *D. physocarpa* F. v. M.

Lennard and Isdell Rivers ; Mt. Behn (W.V.F.).

Diffuse, 3-4ft. high.

In stony spots.

374. *D. platyptera* F. v. M.
Shrub to a tree of 30ft. ; trunk to 10ft. ; diameter 6in. ; bark grey, thin, rather rough and fibrous ; timber dark brown and hard.
In sandy loams.
375. *D. polyzyga* F. v. M.
An erect shrub of 5-15ft. in height ; sepals ovate-lanceolate, obtuse, 2 lines long ; anthers 10-12, linear, sparingly hirsute, shorter than the sepals ; style often elongated.
In sandy loam.
376. *Distichostemon phyllopterus* F. v. M.
Shrubby, 4-6ft. high, with the habit and appearance of a species of *Thomasia* ; anthers hirsute ; style red, to lin. long ; fruits purplish when ripe.
In sandy soils.
377. *Cardiospermum halicacabum* L.
Fitzroy and Hann Rivers. (W.V.F.).
Stems twining to 3ft. ; flowers white ; fruits inflated, angled or winged.

RHAMNALES.

RHAMNEÆ.

378. *Ventilago viminalis* Hook.
Roebuck Bay (J. W. O. Tepper) ; Isdell River ; between Erskine Range and Mt. Marmion (W.V.F.).
An evergreen tree of 30ft. ; trunk to 15ft. ; diameter 1ft. ; bark dark grey, not very thick, but roughish and longitudinally fissured ; timber brown, tough and very hard ; flowers and fruits yellow. "Steel-wood."
In sandy scrubby country ("Pindan").
379. *Alphitonia excelsa* Reissek.
Isdell and Charnley Rivers. (W.V.F.).
An erect bushy shrub of 8-20ft. : flowers white, fruits black, globular, 4 lines in diameter.
In sandy loam.
380. *Cryptandra intratropica* (W.V.F.) n. sp.
An erect twiggy, thornless shrub, rusty or villous-tomentose ; leaves usually clustered, cuneate, oblong to obovate, obtuse ; tapering into short slender petioles, the margins sharply refracted, stellate-tomentose above, very villous beneath, the midrib prominent ; stipules setaceous, brown, persistent ; flowers from few to many ; in axillary clusters or headlike racemes, sometimes forming a short narrow terminal panicle through one leaf-suppression, each flower

on a slender pedicel much shorter than the calyx, with five or more imbricate brown pubescent bracts surrounding the base of each pedicel, and about as long as it; calyx tomentose, small, enlarging in fruit, the adnate base as long as the free portion, almost turbinate in outline; lobes pale-coloured, slightly longer than the tube, usually connivent; ovary densely pubescent, 2-celled, the summit rounded and conspicuously raised above the adnate portion of the calyx; style minutely lobed; fruit crustaceous, obovoid, or almost turbinate, dividing into two cocci, each one dehiscing into two valves.

1,000ft. or more above the base of Mt. Broome (W.V.F.). Height 2-3ft.; leaves 3-5 lines long; calyx scarcely one line in flower, 2 lines or more when in fruit. Differs from *Cryptandra* proper in the constantly 2-celled ovary and in the fruits. In these characters it accords with *Trymalium Wichuræ* Nees., with the foliage and habit of *Spyridium* and the inflorescence and flowers of *Cryptandra*.

It is the only species recorded from the tropics and does not appear to have any near ally.

Occurs in crevices of quartzite along with *Boronia pauciflora* W.V.F.

VITACEÆ (AMPELIDEÆ).

381. *Vitis adnata* Wall.

Vicinity of Isdell, Hann, and Charnley Rivers; Bold Bluff; Artesian Range (W.V.F.) Sheba Hills, near Fitzroy River (W. H. Brown).

Climbing among sandstone and quartzite rocks to a height of 3-5ft.

382. *V. trifolia* L.

Durack River (J. Bradshaw and Allen); Ord River (W.V.F.).

Climbing to 20 or more feet.

In sandy loam.

MALVALES.

TILIACEÆ.

383. *Grewia breviflora* Benth.

An erect, twiggy shrub, 6-10ft.; flowers white.

384. *G. anthopetala* F. v. M.

Charnley River (W.V.F.). An erect shrub, 4-6ft.; flowers pale yellow.

385. *G. polygama* Roxb.

Carson River (J. Bradshaw and Allen); Lennard, Fitzroy, Isdell, Charnley and King Rivers; Synnot Creek; Dillen's Springs (W.V.F.).

Erect, 3-4ft.; flowers white; fruits red and distinctly 4-lobed.

386. *Corchorus Walcottii* F. v. M.
Capsules 4-celled, or by abortion 2-celled.
387. *C. vermicularis* F. v. M.
Lennard, Isdell, and Hann Rivers (W.V.F.)
A form differing from the Victorian River specimens in the tomentose ovary. Erect, 1-1½ft.
388. *C. elachocarpus* F. v. M.
Port Hedland (W.V.F.)
Erect, about 1ft. high.
389. *Triumfetta plumigera* F. v. M.
Erect, varying from 6in. to 4ft. in height; leaves crenate-serrate; ovary sometimes 3-celled.
390. *T. appendiculata* F. v. M.
Nichol Bay (F. Gregory); Lennard and Barker Rivers (W.V.F.).
Diffuse, 3-5ft. high; flowers yellow.
391. *T. reflexa* (W.V.F.). n. sp.
A diffuse shrub, the branches densely invested with dark-coloured or yellowish stellate hairs; leaves petiolate, oblong to lanceolate, obtuse, rounded or shortly tapering, dark-green, invested with rigid stellate hairs; scantily above, densely below; flowers few, pedicellate, forming shortly pedunculate cymose-racemes; buds almost globose and umbrella-shaped owing to the prominent reflexed calyx-appendages; calyx densely tomentose; sepals linear, the tips inflected and acute, appendages affixed immediately below the tips, reflexed, with many prominent teeth or lobes; petals obovate, as long as the sepals; stamens indefinite; fruits ovate-globose, apparently indehiscent, densely villous, coarsely tuberculate and terminating in a 6-lobed point, 6-celled, each cell 1-seeded.
Isdell River, near Grace's Knob (W.V.F.)
Height 4-8ft. Leaves ¾-1½in; petioles 3-4 lines long. Pedicels 1-2 lines. Calyx 5 lines long; appendages 1½ lines by 1 line broad. Petals yellow. Fruits 4 lines long. Seeds brown.
In sandy spots.
Affinity to *F. appendiculata* F. v. M.
392. *T. glaucescens* R. Br.
Fitzroy River, Dillen's Springs (W.V.F.).
A spreading shrub, 2-3ft. high; fruits on recurved pedicels, ovoid-globose, 3-4 lines diameter, tomentose, muricate with fine prickles which are longer than the tomentum, endocarp hard, 3-celled, each cell 1-seeded; seeds brown. In sandy loam.

MALVACEÆ.

393. *Malvastrum spicatum* A. Gray.
Ord River (Alex. Forrest); Lennard River (W.V.F.).
Among limestone rocks.
394. *Sida virgata* Hook.
Erect, 3-4ft.; tomentum often intermixed with long spreading hairs; carpels 10.
395. *S. subspicata* F. v. M.
Roebuck Bay (J. W. O. Tepper); Broome, Derby, Lennard, Adcock, and Calder Rivers, Inglis' Gap, King Leopold Ranges (W.V.F.).
Erect or spreading, 2-4ft. high; flowers bright yellow. In poor sandy soil.
396. *S. echinocarpa* F. v. M.
Nichol Bay (Alex. Forrest); Port Hedland (W.V.F.).
Erect, 3ft.; pedicels sometimes nearly lin. long.
397. *S. Hackettiana* W.V.F. n. sp.
A spreading stellate-pubescent shrub; leaves from cordate-ovate to ovate lanceolar, obtuse, of soft texture, crenate-serrate, on slender petioles which are shorter than the laminae; stipules subulate; flowers small, sessile, solitary but closely approximated, forming axillary and terminal simple or branched spikes, the whole inflorescence forming terminal panicles, leafy at the base with each flower subtended by a persistent bract, which is divided to below the middle into 3 linear lobes; calyx slightly angular when in bud, densely stellate tomentose without; invested within with long silky hairs; divided to below the middle into lanceolar acute lobes; petals slightly longer than the calyx, the claws woolly-ciliate; staminal column slender, glabrous; filaments thin, eight; anthers almost exerted; style-branches exerted, filiform; stigmas capitate; fruit small, included in the calyx, conical, silky-hairy; carpels 5, obscurely reticulate on the back and sides; seeds glabrous.
Wingrah Pass, Napier Range (W.V.F.).
Height 3-5ft. Leaves 1-3in. long. Stipules 4-5 lines long. Bracts 2-3 lines. Calyx 3 lines long. Petals yellow. Seeds brown. On limestone. Named in memory of the late Sir Winthrop Hackett, of Perth, Western Australia. Affinity to *S. subspicata* F. v. M.

398. *Abutilon Andrewsianum* W.V.F. n. sp.

An erect biennial or perennial, closely invested with a short velvety tomentum with which is occasionally mixed a few long spreading hairs; leaves ovate-cordate, obtuse, the margins irregularly crenulate, the petioles exceeding the laminae; stipules minute, subulate-linear, fugacious; peduncles axillary sometimes terminally clustered or forming terminal racemes through leaf-suppression, 1-flowered, articulate about the middle, always longer than the leaves; calyx campanulate, divided to the middle, the lobes broad, obtuse, obscurely 1- rarely 3-nerved; corolla glabrous, the tube shorter than the calyx; staminal column short, glabrous, the filaments free and numerous; capsule stellate-tomentose, almost truncate; carpels 8-10, the outer edges terminating in short divaricate points, not readily separable at maturity; seeds two in each carpel, minutely stellate-tomentose.

Derby; Lennard, Barker, Fitzroy, Adcock, Hann, and Isdell Rivers (W.V.F.).

Height 5-6ft. Leaves $1\frac{1}{2}$ -4 lines long. Calyx 3-3 $\frac{1}{2}$ lines long. Corolla $\frac{1}{2}$ - $\frac{3}{4}$ inch long, yellow. Capsule 4-5 lines long. Seeds brown. In sandy loam. Named after Mr. Cecil Andrews, Inspector General of Schools, Western Australia.

Affinity to *A. indicum* G. Don.

399. *A. propinquum* W.V.F. n. sp.

A spreading shrub, closely invested with a short viscid velvety pubescence intermixed with long spreading white hairs; leaves cordate-ovate, obtuse or minutely apiculate, margins serrulate, thin, of soft texture, velvety-pubescent on both pages, the petioles slender and shorter than the laminae; stipules setaceous; peduncles axillary, solitary or through leaf-suppression forming small terminal racemes, articulate above the middle, longer than the leaves and all 1-flowered; calyx divided to two-thirds of its length into ovate-lanceolar, acute, prominently 1-nerved lobes; corolla glabrous without, the tube short, hirsute at the base within; staminal column shorter than the corolla, more or less hirsute; filament short, numerous; capsule hirsute, nearly truncate; carpels 10, not readily seceding from the axis, the outer edges terminating in short divaricate points; seeds glabrous.

Wingrah Pass, Napier Range (W.V.F.).

Height 3-5ft.; leaves 2 $\frac{1}{2}$ in. long, much reduced upwards. Stipules 3 lines. Calyx about 3 lines long. Corolla 4 lines long, yellow. Capsule 4-4 $\frac{1}{2}$ lines long. Seeds brown. Among limestone.

Affinity to *A. Andrewsianum* W.V.F.

400. *Fugosia populifolia* Benth.
Stems prostrate for several yards ; leaves ovate-cordate, obtuse or shortly acuminate ; corolla fully 2in. long.
401. *Hibiscus microchlaenus* F. v. M.
Erect, 2-3ft. ; branches spreading ; flowers bluish-purple with a darker centre.
402. *H. pinonianus* Gaudich.
Erect, 2-4ft. ; leaves mostly entire ; bracteoles often equalling or exceeding the calyx ; flowers pink to purple with a darker centre.
403. *H. trionum* L.
Erect, few-branched, 2-4ft. high ; leafless or with few tri-lobed leaves ; flowers white with reddish-purple centre. On grassy plains.
404. *H. ficulneus* L.
Lennard, Barker, Fitzroy, and Isdell Rivers (W.V.F.).
Erect, 2-4ft. high.
405. *H. zonatus* F. v. M.
Erect, 4-8ft. high ; flowers sometimes 2½in. across, pink to rose-red with a purple centre ; seeds black, tuberculate.
Var. *spinulosa* W.V.F. n. var.
Mt. Broome, King Leopold Ranges (W.V.F.).
Stems simple or slightly branched, 2-3ft. high, more or less invested with short sharp spines, arising from tubercles, and associated with a short stellate pubescence. Among quartzite.
406. *H. Sturtii* Hook.
Erect, 2-3ft. high ; flowers violet, with a darker centre.
407. *H. cannabinus* L.
Lennard and Isdell Rivers ; Bell Creek (W.V.F.).
Stems erect, almost simple, 4-6ft. high ; gland on the underside of the leaf, midrib large ; flowers white to pale pink with a purple centre. This species is described in the Flora Australiensis under *H. radiatus* Cav. The Kimberley specimens differ from the type in the stems being quite devoid of prickles and in having a gland on the back of each calyx-lobe.
In good soil.
408. *H. Gibsoni* Stocks.
Lennard River, between Napier and King Leopold Ranges ; Charnley and Sprigg Rivers (W.V.F.).
Of straggling habit, the herbaceous stems 3-6ft. long ; setaceous bracteoles much longer than the calyx ; sepals almost acute ; corolla yellow with a purple centre ; often dying to a metallic green ; seeds black, sparingly hispid. Sandy loam. Includes *H. pentaphylla* F. v. M.

409. *H. geranioides* (A. Cunn.).
 Vansittart Bay (A. Cunn.); Native Well, between Derby and Meda Station (W.V.F.).
 Erect, sparsely branched, 2-3ft. high; calyx lobes 1-nerved, corolla white with a dark centre, sometimes scarcely exceeding the calyx; capsule sparingly hispid at the summit; seeds slightly silky.
 In dry sandy soil.

410. *H. vitifolius* L.
 Wingrah or Devil's Pass, Napier Range (W.V.F.).
 Erect, 3-5ft. high; tomentum intermixed with scattered tubercles from which arise simple or trifid setulose bristles; bracteoles 8; flowers yellow with a darker centre.

Brockmania (W.V.F.) n. gen.

Bracteoles free. Calyx 5-lobed. Staminal column with 5 anthers surrounding the summit. Ovary 5-celled, each cell 2-ovulate, the ovules ascending. Style-branches 5, slender, stigmatic along the inner side. Capsule membranous, 5-valved, loculicidally dehiscent and seceding from the short axis, each valve with 1 perfect seed.

The genus is named in memory of the late Mr. F. S. Brockman, Surveyor General of Western Australia.

411. *B. membranacea* (W.V.F.) n. sp.
 An erect or ascending annual; stems green, scantily invested with spreading or slightly recurved setulose bristles; leaves membranous, broadly cordate-ovate to orbicular, obtuse, entire or broadly 5-lobed, coarsely and irregularly toothed, glabrous or scantily setulose on both pages, the petioles slender, shorter than the laminae; stipules linear, setular pointed, deciduous; pedicels solitary in the upper axils, reflexed, shorter than the leaves, articulate about the middle, bracteoles 8-10, linear, longer than the calyx, rigid, setular-margined; calyx broadly campanulate, enlarged in fruit, lobed to the middle, the tube 10-ribbed, the ribs setulose, membranous and glabrous between the lobes, ovate, acuminate, with a prominent midrib and thickened margins both setulose; petals broadly obovate, glabrous, slightly exceeding the calyx; staminal column glabrous, short, the filaments short or none; style divided to below the middle into three lobes, two of which are again deeply divided; capsule enclosed in the enlarged calyx, globular, obtuse; seeds reniform, glabrous or scantily tomentose, tuberculate.
 Banks of Lennard River about 10 miles above Wingrah Pass (W.V.F.).

Height 1ft. or less. Leaves $1\frac{1}{2}$ –2in. long. Calyx scarcely 3 lines in flower, above 6 lines in fruit. Petals white or pink. Capsule glabrous. Seeds about 2 lines long, dark brown.

In wet soil.

412. *Thespesia lampas* dalz et Giles.

Lennard, May, Isdell, Barker, Adcock and Calder Rivers (W.V.F.).

Erect, 5–10ft. ; corolla to $2\frac{1}{2}$ in. long, yellow with a darker centre. Sandy loam. The above are the only known Australian localities. The second species, which is common in Queensland and the Northern Territory, is also in North-West Australia.

413. *Bombax malabaricum* DC.

Careening Bay (A. Cunn.) ; Artesian and Edkins Ranges (W.V.F.).

A deciduous tree, 50–60ft. high ; trunk to 30ft. ; diameter 2ft. ; bark greyish, not thick, almost or quite smooth, both on the trunk and limbs covered with stout prickles ; timber pale, soft and light ; flowers crimson, to $3\frac{1}{4}$ in. long. “Kapok tree.”

On sandstone and quartzite elevations.

414. *Adansonia Gregorii* F. v. M.

From 30–50ft. high ; trunk 15–20ft. ; diameter to 20ft. ; much contracted upwards ; branches stout, few ; bark grey or brownish, smooth ; timber white and spongy ; flowers white, above 4in. long, sweetly scented ; fruits 6–9in. long by 5–7in. across, brownish to black ; seeds dark brown. “Baobab.”

Trees often leafless when in fruit. Stock readily eat the young foliage, and the acid floury contents of the fruits along with the seeds are eaten by the aborigines, both being made into a kind of bread. Occasionally the larger trees have deep hollows at the base of the main branches in which is stored quantities of drinkable water which is utilised by the aborigines during dry periods. The species being a tardy reproducer, young plants are very seldom seen.

The trees evidently attain a great age, because there is no authentic record of one being found dead. An inhabitant of sandy loams overlying quartzite or sandstone.

STERCULIACEÆ.

415. *Sterculia quadrifida* R. Br.

Artesian and Edkins Ranges (W.V.F.).

A deciduous tree, 30–40ft. in height; trunk to 15ft.; bark greyish, smooth, rather thick; timber whitish, soft; follicles orange-red; seeds black and shining.

On sandstone and quartzite elevations.

416. *S. incana* Benth.

Cambridge Gulf (A. Cunn.), Near Wyndham; Dillen's Springs (W.V.F.).

A deciduous tree, 20–30ft. high; trunk 5–10ft.; diameter 1ft.; bark dark-grey, roughish; timber pale, soft and fibrous; leaves glabrous above when full grown; flowers in lateral clusters; calyx broadly campanulate, 1–1½in. long, scarlet, hairy within and without; lobes induplicate, much shorter than the tube, rounded and spreading, the inner base of the tube bearing a ring of many inflected hairy scales; staminal column rather short and very hirsute, stigmas linear, and much recurved; follicles shortly stipitate, ovate-oblong, about 3½in. long, terminating in a short straight beak; seeds greyish-yellow, smooth. In sandstone and quartzite country.

417. *S. viscidula* W.V.F. n. sp.

A deciduous tree, the branchlets and leaves densely stellate-pubescent; leaves petiolate, broadly ovate, cordate, shortly acuminate, entire, or obscurely trilobed, soft; flowers large, scarlet, numerous, pedicellate and forming dense short viscid-tomentose cluster-like panicles on the old wood; calyx broadly campanulate, viscid, stellate pubescent without, simple stellate hairy within, the lobes spreading, broad, obtuse, much shorter than the tube. trinerved, with broad induplicate margins, inner base of the tube thickened into a plate which terminates in a prominent ring of scales, the whole densely hirsute; staminal column rather long, hirsute, thickened at the base, attenuated upwards; ovary pubescent, follicles shortly stipulate, obliquely oblong, slightly falcate, terminating in a straight or curved beak, hard and almost woody, densely invested with a yellowish very viscid stellate pubescence, villous within; seeds numerous, yellowish, smooth.

Near Trig Station, H. 72, Lennard River, and from thence east to the Hann River and north to Calder River (W.V.F.)

Height 15–50ft.; trunk, 5–10ft.; diameter to 1ft. Bark dark-coloured and rather rough. Timber pinkish, soft, and fibrous. Leaves 5–7in. long; petioles lin. Pedicels 2–3 lines. Calyx 1½in. long. Follicles 2½–3in. long, beak ½in. long.

In barren localities among granite, quartzite and sandstone country. Occurs in the Northern Territory (M. Holtze).

Affinity to *S. ramiflora* Benth.

418. *S. tuberculata* W.V.F., n. sp.

A small deciduous tree; branchlets rather stout, and along with the leaves, inflorescence, flowers and fruits closely beset with a greyish stellate pubescence; leaves petiolate reniform-cordate, entire or obscurely trilobed, chartaceous, flowers dull pink, sessile or almost so, forming dense clusters on the previous year's wood; calyx broadly campanulate, chartaceous, the inner base of the tube bearing a ring of 5 conspicuous incurved broad trifold white woolly scales; lobes induplicate, much shorter than the tube, spreading, rounded, trinerved; staminal column fusiform densely hirsute; ovary pubescent, the styles linear and somewhat recurved; follicles sessile or very shortly stipitate, ovoid to obliquely oblong, terminating in a short straight stout beak, and thickly covered with prominent conical protuberances, villous within; seeds numerous, greyish-yellow, smooth.

Valentine Creek, near Ord River (W.V.F.).

Height 15–20ft.; trunk to 8 ft.; diameter 6–9in. Bark dark-grey, and somewhat rough. Timber pale pink, soft and fibrous. Leaves 4–5in. long by 5–7in. across; petioles $1\frac{1}{2}$ – $2\frac{1}{2}$ in. long. Calyx 1in. long. Follicles $2\frac{1}{2}$ – $3\frac{1}{2}$ in. long. Among quartzite rocks.

Affinities to *S. ramiflora* Benth., and *S. viscidula* W.V.F.

419. *S. ramiflora* Benth.

From a shrub to a tree of 35ft. in height; trunk to 10ft.; diameter 1ft.; bark thick, rough, greyish, inner fibre tough; timber pale, soft and fibrous; leaves often glabrous above, frequently absent when the plant is in flower; flowers scarlet; staminal column sometimes pubescent to the apex; follicles to 5in. long, on a stipes of $\frac{3}{4}$ –1in. long.

420. *S. viridiflora* W.V.F., n. sp.

A deciduous shrub or oftener a tree; leaves on slender petioles, broadly cordate-ovate or orbicular, very obtuse or rounded at the apex, entire or obscurely trilobed, thin, closely invested on both pages with a short greyish stellate pubescence; flowers green, with occasionally pinkish margins to the lobes; few almost or quite sessile on the previous year's wood; calyx broadly campanulate, stellate tomentose without and within lobed to almost the middle, the lobes broad obtuse, with narrow induplicate margins, trinerved; within the base of the tube is a thickened plate which terminates in a ring of densely

hairy scales ; staminal column densely stellate tomentose, much thickened downwards ; ovary closely hirsute ; follicles very shortly stipitate, ovate-oblong, terminating in a short obtuse beak, closely invested with yellowish stellate hairs ; seeds numerous, pale yellow, smooth.

Gorges near the Isdell River ; summits of Isdell and Edkins Ranges ; Mt. Rason (W.V.F.).

Height 10–30ft. ; trunk to 10ft. ; diameter to 1ft. ; bark greyish, smooth. Timber pale pink, fibrous, soft. Leaves 2–3in. long ; petioles $1\frac{1}{2}$ in. or less. Calyx $\frac{3}{4}$ –1in. long. Scales $1\frac{1}{2}$ –2 lines long. Follicles 3– $3\frac{1}{2}$ lines in length. Among sandstone and quartzite boulders.

Affinity to *S. discolor* F. v. M.

421. *S. Gregorii* F. v. M.

Attains a height of over 50ft. ; flowers yellowish-white, pinkish striate. “Kurrajong.”

422. *S. decipiens* W.V.F. n. sp.

A deciduous tree, quite glabrous, excepting the flowers ; leaves on long slender petioles ; ovate-cordate from short to long—acuminate, entire or prominently trilobed, the lobes ending in slender acuminate points, veins very divergent ; flowers in short axillary racemes ; calyx broadly campanulate, lobed to the middle, green streaked with purple, densely tomentose without, glabrous within ; staminal column in the male flowers very slender, glabrous except at the base, where it is surrounded by a tuft of straight white hairs, in the female very short, but with a similar basal tuft of hairs ; ovary densely tomentose ; style glabrous, the stigmas almost peltate ; follicles somewhat oblong, glabrous, with a straight or curved beak ; seeds numerous, bright-yellow, smooth and shining, the outer coating densely hairy.

Near Derby and Mt. Harris and in numerous intervening localities.

Height 30–35ft. ; trunk 10–15ft. ; diameter rarely to 1ft.

Bark grey, thin, smooth. Timber pale, soft, fibrous. Leaves 3–4in. long. Calyx 5 lines diameter. Style $\frac{3}{4}$ in. long. Follicles $2\frac{1}{4}$ – $3\frac{1}{4}$ in. long by $1\frac{1}{4}$ – $1\frac{1}{2}$ in. across ; beak $\frac{1}{4}$ in. long, reddish-brown. “Kurrajong.” In sandy loam.

Affinity to *S. caudata* Heward.

423. *S. caudata* Heward.

An evergreen tree of 30–60ft. in height ; trunk to 25ft. ; diameter scarcely 1ft. ; bark greyish, smooth, or slightly rugose ; timber pale, soft, fibrous ; leaves sometimes 6in. long ; follicles dull-red, 2– $2\frac{1}{2}$ in. long, inclusive of a broad beak of $1\frac{1}{2}$ lines ; outer coating of the seeds densely hairy, inner smooth and bright-yellow. “Kurrajong.” In sandy soils.

424. *Helicteres rhynchocarpa* W.V.F. n. sp.

Stems erect, numerous, almost simple, from a thick woody stock, densely stellate, tomentose; leaves petiolate, acuminate, often apiculate, margins flat, entire, green above, pale beneath, shortly and densely tomentose on both pages; flowers in racemose-paniculate axillary cymes, the peduncles and pedicels very short; calyx obliquely lobed to about one-third of its length, densely stellate-tomentose, the lobes subacute, petals narrow-linear with long slender claws, two slightly broader than the others, glabrous without, pubescent within, with a thickened woolly protuberance extending shortly upwards from the base of the claw, with usually two short lateral teeth lower down; stamens 10, the filaments not long; anthers very small; fruits stipitate, ovate-oblong, densely rusty-stellate; carpels straight, each with a slightly diverging beak, usually 6-seeded; seeds tuberculate.

Synnott Range (W.V.F.).

Height 3ft. Leaves 3-4in. long; petioles 3-4 lines. Calyx 3 lines long. Petals 4 lines long, red. Fruits: stipes 2 lines, carpels 5 lines long, the beaks above $1\frac{1}{2}$ lines in length. Seeds dark-brown. Among sandstone and quartzite boulders (W.V.F.).

Affinity to *H. incana* Benth.

425. *Melochia pyramidalis* L.

King Sound District (Froggatt); May, Lennard, Fitzroy, Barker, Isdell, and Charnley Rivers (W.V.F.).

An erect bushy shrub of 2-4ft.; flowers pink or red.

426. *Dicarpidium monoicum* F. v. M.

Mounts Behn, Herbert, Broome, Leake; Bold Bluff; Synnott, Artesian, Edkins, and Harding Ranges (W.V.F.).

Of straggling habit, the stems and branches wiry; flowers white or pink. Among sandstone and quartzite rocks.

PARIETALES.

ELATINACEÆ.

427. *Bergia perennis* F. v. M.

Sturt's Creek (F. v. M.); Lennard and Isdell Rivers (W.V.F.). In sandy localities.

FRANKENIACEÆ.

428. *Frankenia pauciflora* DC.

Decumbent and 6-9in. to erect and 2-3ft.; flowers white to pink.

429. *Cochlospermum heteronemum* F. v. M.

Varies from a shrub of 3ft. to a deciduous tree of 30ft. ; trunk to 10ft. ; diameter about 1ft. ; bark greyish-brown, smooth, or slightly rugose, with a very tough inner fibre ; timber pale, soft and light ; branches spreading ; stipules setaceous, $\frac{3}{4}$ in. long, caducous ; flowers sweetly scented ; sepals finely ciliate, pale yellow, streaked with reddish-purple ; petals glabrous, spreading, broadly obovate, deeply emarginate, $\frac{3}{4}$ -1in. long, $\frac{1}{2}$ - $\frac{3}{4}$ in. broad, yellow, streaked with reddish-purple ; stamens very numerous, the filaments 4-6 lines long, 10-15 of the lowest sharply refracted, the balance (60-70) normal ; style bent downwards lacinate ; capsules ovate to ovate-globose, obtuse or slightly depressed, nearly or quite glabrous, brown and reticulate where ripe ; to above 2in. long ; seeds numerous, reniform, brown and rugose, 2 lines diameter.

Distributed throughout Kimberley in sandy and rocky localities and known as "Cotton-tree," or "Kapok-tree." Possibly through misreading a label it is described in the "Flora Australiensis" as *C. heteroneurum* F. v. M.

VIOLACEÆ.

430. *Ionidium aurantiacum* F. v. M.

Ascending or erect to 1ft., branched ; flowers orange-red. Growing in stony beds of water courses.

PASSIFLORÆ.

431. *Modecca australis* R. Br.

Stems climbing many yards ; flowers white to pale yellow.

MYRTIFLORÆ.

THYMELACEÆ.

432. *Pimelca punicea* R. Br.

Erect, 6-12in. high ; flowers crimson.

433. *P. ammocharis* F. v. M.

Specimens were collected near the summit of Mt. Leake, Lady Forrest Range (W.V.F.) which are doubtfully referred to this species. The plant is erect, 2ft. high ; leaves $\frac{1}{2}$ in. long ; flowers white, hermaphrodite ; perianths persistent. In the crevices of quartzite. Possibly a different species, it is the only one known to be peculiar to that region.

The Section Epallage, as defined in the Flora Australiensis is unsatisfactory.

LYTHRARIÆ.

434. *Nesaea repens* (W.V.F.). n. sp.

Stems numerous from a perennial rhizome, prostrate or oftener creeping and rooting at the nodes and forming dense patches, hispid with short spreading white hairs, rarely, if ever, glabrous; leaves opposite, ovate to ovate-lanceolate, obtuse, shortly but distinctly petiolate, entire; flowers solitary, axillary in the upper axils, on slender pedicels shorter than the leaves; bracteoles linear, obtuse, shorter than the calyx and not far removed from its base; calyx ovate-campanulate, 12-ribbed, membranous between, the primary teeth six, very short, triangular, with membranous or white obtuse tips, the sinuses produced into minute almost horizontal accessory teeth; petals 5-6, rather longer than the calyx, fugacious; stamens six, the filaments longer than the calyx-tube; ovary 3-celled; style slender with a capitale stigma; capsule globular, nearly as long as the calyx, dehiscent irregularly.

Fitzroy River, near the junction of the Lennard and Barker Rivers (W.V.F.).

Patches from a few inches to nearly 1ft. across. Leaves $1\frac{1}{2}$ lines long. Petals reddish-purple.

In black or sandy loams.

SONNERATIACEÆ.

435. *Sonneratia alba* Smith.

North-West Coast (A. Cunn.); Sunday Island (W.V.F.).

A tree of 10-30ft.; trunk to 8ft.; diameter 9in. or more; bark greyish, smooth; timber pale, very soft; inner portion of the calyx purple; petals none; stamens $1\frac{1}{2}$ -2in. long, white; angles on fruits very obscure. The Australian plant has been referred to *S. acida*, L. by Bentham and Mueller.

RHIZOPHORACEÆ.

436. *Rhizophora mucronata* Lamarck.

Port Hedland; Derby; Sunday Island; Wyndham (W.V.F.).

An erect bush or tree of 15ft.; trunk to 4ft.; diameter 9in.; bark grey, smooth; timber brownish and very tough; flowers white or pale-yellow. A "Mangrove." The bark contains 28 to 40 per cent. of tannic acid.

437. *Ceriops Candolleana* Arnott.

Careening Bay (A. Cunn.); Sunday Island (W.V.F.).

Similar in habit to *Rhizophora*. Timber reddish, tough and hard. A "Mangrove." The bark contains 25 to 32 per cent. of tannic acid.

438. *Bruquiera gymnorhiza* Lamarck.

Timber pale to brownish, hard and tough; flowers pale purplish. A "Mangrove." The bark contains 25 to 36 per cent. of tannic acid.

COMBRETACEÆ.

439. *Terminalia platyptera* F. v. M.

Goose Hill, Ord, Denham, and King Rivers, near Wyndham (W.V.F.).

An almost deciduous tree of 30ft.; trunk to 10ft.; diameter 6-9in.; bark grey, tessellated; timber brown, tough; fruits sometimes 1½in. long and including the wings 4in. across. In sandy soil.

440. *T. volueris* R. Br.

Cambridge Gulf (A. Cunn.); near Mt. Marmion; Wyndham; Ord, Denham, and King Rivers (W.V.F.).

A deciduous tree to 30ft.; trunk to 8ft.; diameter 9in.; bark grey, somewhat rough, but often smooth; timber brownish, tough; flowers pale-yellow. In sandy and rocky soil.

441. *T. circumalata* F. v. M.

A bushy tree of 25-40ft.; trunk to 10ft. or more; diameter to 1ft.; bark brownish, rough; timber dark-brown, hard, and tough. "Iron-wood." In poor sandy soil.

442. *T. bursarina* F. v. M.

Lennard, Barker, Isdell, and Hann, Charney and Calder, Ord, Denham, King, and Durack Rivers (W.V.F.).

A tree to 30 or 40ft.; trunk to 12ft.; diameter 9-12in.; bark brownish to reddish, somewhat rugose and cancellated; timber reddish-brown to dark-brown, very tough, hard; flowers pale-yellow. In the stony beds of watercourses. The trees are oftener leaning than erect from the impact of flood waters and debris.

443. *T. discolor* F. v. M.

Hearson Island, Nichol Bay (F. Gregory's Exped.); between Lennard River and Inglis' Gap (W.V.F.).

A bushy tree of 25ft.; trunk to 8ft.; diameter to 8in.; bark grey and somewhat rough; timber dark-brown, tough and hard, fruits ½-¾in. long, reddish-yellow or almost purple, of a pleasant acidulous flavour. On granite rises.

444. *T. Hadleyana* W.V.F. n. sp.

A small much-branched evergreen tree, the branchlets not very stout and, along with the leaves, more or less invested with short greyish hairs; leaves alternate, rather crowded at the ends of the branchlets, ovate-orbicular, the apex rounded or retuse, the base obtuse, semi-cordate, or the laminae shortly decurrent, distinctly petiolate, thinly coriaceous, the veins diverging, conspicuous, reticulate between; spikes solitary, axillary, simple, longer than the leaves, on tomentose peduncles, the rachis scantily hirsute or glabrous, the flowers loosely arranged; calyx glabrous without, densely white-woolly within; ovary and style glabrous; fruit ovate, glabrous; bluish-purple, more or less conspicuously 2-angled and terminating in a straight or curved beak.

Sunday Island (W.V.F.).

Height 15–20ft.; trunk to 6ft.; diameter 6–9in; bark grey or brownish, somewhat rough; timber reddish-brown, very tough and hard; leaves 3–3½in. long, 2¼–3½in. broad; petioles slender, ¾–1in. long; peduncles 1in.; calyx white, the tube 1¾ lines long, the limb 2½ lines in diameter; stamens 2 lines; fruit not above ¾in. long, with a beak of 2–3 lines long. Among quartzite rocks. The fruits have an agreeable subacid flavour and are eaten by aborigines. The species is named in honor of Mr. S. Hadley of the Sunday Island Mission.

Affinity to *T. porphylocarpa* F. v. M.

445. *T. chlorocarpa* W.V.F. n. sp.

Arborescent and evergreen; branchlets stout and, along with the leaves, quite glabrous; leaves alternate, broadly obovate, obtuse or retuse, the laminae slightly decurrent along the petioles, very thin but coriaceous, the veins prominent and diverging and much reticulate between; spikes usually solitary, axillary, simple, loosely flowered, the rachis densely tomentose; calyx when in bud closely silky-tomentose, fruit ovate, greenish, densely tomentose, often somewhat rugulose, occasionally obscurely 4-angled but usually without angles or wings, terminating in a short obtuse beak.

Near Goose Hill, Ord River, Dillen's Springs (W.V.F.).

Height 30–40ft.; trunk to 15ft.; diameter 1ft.; bark greyish, thin and rather smooth; timber brown, hard and tough; leaves 4–6in. long, 3–5in. broad; petioles 1in. long; fruits about 1in. long. In moist sandy loams. The fruits, which have an agreeable subacid flavour, are eaten by aborigines.

Affinity to *T. biangulata* W.V.F.

446. *T. biangulata* W.V.F. n. sp.

An evergreen tree with a bushy crown; branchlets stout and, along with the leaves, glabrous or scantily villous; the young shoots almost villous; leaves alternate, orbicular or very broadly ovate, obtuse, on stout mealy-pubescent petioles, the laminae shortly decurrent, coriaceous, greyish, the veins prominent, spreading and much reticulate between; spikes solitary, axillary, simple, silky-tomentose, scarcely or not exceeding the leaves; fruit oblong-ovate, densely tomentose, pink, prominently biangular, terminating in a broad obtuse slightly compressed beak which has one or more raised lines on each face.

Hills near Grace's Knob, Isdell River, Packhorse Range, between Isdell, Charnley, and Calder Rivers, near Wyndham, Goose Hill, near Ord River (W.V.F.).

Height 30-40ft.; trunk to 12ft.; diameter to above 1ft.; bark greyish, thin, somewhat rugose; timber brown, very tough, hard, and heavy; leaves 4-7in. long; petioles $1\frac{1}{2}$ in. long; fruits from $\frac{3}{4}$ to nearly 1in. long, the beak 4 lines long. On sandstone and quartzite elevations. The fruits are subacid to the taste and are eaten by birds.

Affinities to *T. chlorocarpa* W.V.F., and *T. platyphylla* F. v. M.

447. *T. platyphylla* F. v. M.

Fitzroy, Lennard, Isdell, Hann, Adcock, Throssell, Barnett, Charnley, Calder, Barker, Ord, King and Denham Rivers; Walcott Inlet; Bell, Synnott, MacNamara, and Harris Creeks (W.V.F.).

A tree of 40-50ft.; trunk to 20ft.; diameter 1-1 $\frac{1}{2}$ ft.; bark dark-grey, rough, longitudinally fissured; timber rather pale-coloured and not very hard; flowers white to pale-yellow; fruits pink when ripe, exangular, $\frac{3}{4}$ in. long, narrow-ovoid, terminating in a thick straight beak of above 2 lines long. "Pear-tree." Along banks of streams in deep black soil.

448. *T. petiolaris* A. Cunn.

A shady tree of 30-35ft.; trunk to 10ft.; diameter 1ft. or more; bark dark-grey, rather rough; timber pale-coloured and moderately hard; leaves to 4in. long, crowded at the ends of the branchlets; spikes solitary, axillary, simple, shorter than or equalling the leaves on peduncles of 1in. long, which, along with the rachises, are closely silky-tomentose; flowers white, not crowded; calyx glabrous without, the adnate tube about 1 $\frac{1}{2}$ lines

long; the limb 2 lines diameter, white-woolly within; stamens 2 lines long; style and ovary glabrous; fruits narrow-ovate, glabrous, reddish-purple, about $\frac{3}{4}$ in. long, exangular, shortly and obtusely pointed. In sandy soil.

449. *T. Rogersii* W.V.F., n. sp.

Arborescent and evergreen, the young shoots pubescent, otherwise glabrous; leaves alternate, oblong-lanceolate to oblanceolate, obtuse, tapering into the petioles, thinly coriaceous, very obliquely veined, much reticulate between, the midrib prominent beneath; spikes as long as the leaves; solitary, axillary, simple, glabrous, conspicuously pedunculate, flowers numerous but not crowded; calyx glabrous without, white-woolly within; the lobes obtuse; style and ovary glabrous; fruit globular, dark-purple, glabrous and smooth, exangular, almost or quite beakless.

Denham River (J. P. Rogers) (W.V.F.).

Height 30–40ft.; trunk to 12ft.; diameter 9in.; bark rough grey, tessellated; timber brown and tough; leaves 3–4in.; flowers pale-yellow; calyx tube under $1\frac{1}{2}$ lines long; limb 2 lines diameter; stamens $1\frac{1}{2}$ lines long; fruits $\frac{3}{4}$ in. diameter. On stony rises.

Affinities to *T. erythrocarpa* F. v M. and *T. grandiflora* Benth.

450. *T. grandiflora* Benth.

Isdell, Charnley, and Calder Rivers; Synnott Creek (W.V.F.). A tree of 30–50ft.; trunk to 25ft.; diameter 1ft. or more; bark dark-grey, very thick, rough, and deeply longitudinally fissured; timber hard, free in the grain, dark brown in the inner half of the trunk, yellow without; leaves clustered at the ends of the branchlets; rachises and calyces closely invested with yellowish hairs; flowers yellow; fruits globular, purple, exangular. The plant is frequently almost entirely deciduous. The appearance and structure of the bark closely resembles that of *Eucalyptus melanophloia* F. v M. In sandy loams.

451. *Lumnitzera racemosa* Willd.

Cygnnet Bay (W.V.F.)

A spreading shrub of 15ft. in height; flowers white to pale-yellow.

452. *Gyrocarpus* Jacquini Roxb.

A deciduous tree of 40ft.; trunk to 15ft.; diameter $1\frac{1}{2}$ ft.; bark grey, smoothish; timber yellow, soft, and free. "Yellow-wood." In sandy loams.

MYRTACEÆ.

453. *Verticordia* *Cunninghamii* Schauer.
This tropical species varies from a tall shrub to a tree of 25ft. in height; trunk to 8ft.; diameter 7in.; bark greyish, thin, fibrous, rough; timber dark-brown to almost black and extremely hard; flowers white to pale-yellow.
454. *V. grandis* Drum.
A shrub, 2ft. in height and spreading to a width of 3ft.; flowers scarlet.
455. *Calythrix* *microphylla* A. Cunn.
A bushy shrub, 10–15ft. high; flowers reddish-purple.
456. *C. achæta* F. v. M.
Glenelg River (J. Martin); between Napier and King Leopold Ranges; Lennard, Isdell, Barker, Adeock, Hann, Barnett, Charnley, Calder, Ord, Denham and King Rivers; Dillen's Springs (W.V.F.).
A Selaginella-like shrub of 10ft. high or less; flowers white. Among sandstone and quartzite rocks.
457. *C. brachychæta* F. v. M.
Between Lennard River and Inglis' Gap, King Leopold Ranges; Isdell, Charnley, Denham and King Rivers (W.V.F.)
Diffuse, to 15ft. high; glabrous excepting the flowers, which are white. In sandy soil.
458. *Melaleuca* *alsophila* A. Cunn.
Erect bushy shrub of 15ft. to a tree of 25ft.; trunk to 6 or 8ft.; diameter 9in.; bark whitish to greyish, papery, and peeling off in sheets; timber reddish, fairly hard and tough; filaments pale yellow.
459. *M. Crosslandiana* W.V.F. n. sp.
Shrubby to arborescent, the young shoots, rachises, calyces silky pubescent, otherwise glabrous; leaves alternate lanceolate, acute, firm, alternated into short petioles, 3–5 nerved, anastomosing between; flowers in loose terminal spikes, often several together, the axis growing out into a leafy branchlet before or on completion of the flowering; calyx-tube ovoid, the lobes very short, broad and obtuse; petals pink, almost orbicular, on short broad claws, glabrous; staminal claws much shorter than the petals, each with 4–5 rather thick crimson filaments; anthers sulphur-yellow, ovate; ovary white-tomentose; ovules exceeding numerous, somewhat ascending on a thickened placenta; style exceeding the stamens, the stigma dilated, capitate, fruiting calyx ovate-truncate; seeds wingless.
Base of Mt. House, near Derby. (W.V.F.).
A shrub of 8–12ft. to a tree of 30ft.; trunk to 12ft.; diameter 1ft.; bark grey, rough, fibrous and persistent, timber

reddish-brown, hard and rather tough; leaves $2\frac{1}{2}$ – $3\frac{1}{2}$ in. long; spikes $2\frac{1}{2}$ –4in.; calyx nearly 2 lines long; petals under $1\frac{1}{2}$ lines long; filaments $\frac{3}{4}$ in.; fruiting calyx almost 2 lines long. In sandy flats.

Named in honor of Mr. Charles Crossland, who was in command of the 1905 Kimberley Exploring Expedition.

Affinity to *M. leucadendron* L.

460. *M. leucadendron* L.

A tree to 80ft.; trunk to 40ft.; diameter to $2\frac{1}{2}$ ft.; bark whitish to greyish, rather tough and decorticating in sheets; timber red, tough, hard and durable; stamens from white, greenish-yellowish to pink. The bark is used for roofing purposes, also by the aborigines in the manufacture of buckets, etc. The timber is utilised for building purposes. "Cajeput."

A form known as "Hill Cajeput" along the Lennard River, grown on sandy scrubby rises. It attains a height of 30ft., with very tortuous branches; leaves very rigid and often more than 7-nerved, filaments greenish-yellow.

461. *M. argentea* W.V.F. n. sp.

Shrubby to arborescent, with a bushy crown, the branches often pendulous and, along with the leaves, rachises and calyces closely invested with a white silvery silky appressed tomentum; leaves alternate, often vertical, lanceolate, acute, alternated at the base into a short petiole, of soft texture, usually 5-nerved, with anastomosing veins; flowers closely packed in terminal interrupted spikes, of which several are sometimes together, the axis growing out into a leaf branchlet before the completion of the flowering; calyx-tube broadly ovoid, the lobes much shorter, very broad and obtuse; petals white, obovate glabrous; staminal claws shorter than the petals, all somewhat connate in a ring at the base, each claw with seven white or pink filaments; anthers ovate-oblong; ovary pubescent; ovules numerous, ascending on a thickened placenta; style rather long; fruiting-calyx hemispherical truncate; seeds ellipsoid.

Isdell, Charnley, Fitzroy, Ord, Denham Rivers, etc. (W.V.F.). Height to 45ft.; trunk to 10ft.; diameter 1ft.; bark whitish, papery, and decorticating in sheets; timber reddish-brown, hard and rough; leaves 3–4in. long; flowers emitting a sickly-sweet odour; spikes $2\frac{1}{2}$ –6in. long; calyx $1\frac{1}{2}$ lines long; petals 2 lines long; filaments scarcely $\frac{1}{2}$ in.; fruiting calyx $1\frac{1}{2}$ lines long.

Always in stony or sandy spots along or in the beds of water-courses.

Affinity to *M. leucadendron* L.

462. *M. Loguei* W.V.F. n. sp.

A much-branched erect shrub, the branchlets and young foliage sericeous, ultimately glabrous with age; leaves alternate, frequently vertical, linear-lanceolate, acute, alternated at the bases, rigid but not thick, obscurely tri-nerved; flowers not seen but apparently small, in a loose terminal spike, the axis growing out into a leafy branchlet, the rachis and calyces scantily pubescent; fruiting-calyx hemispherical, truncate; seeds numerous, not winged, cuneate.

South of the Fitzroy River (Mayo Logue).

Height about 8ft.; leaves $\frac{1}{2}$ to nearly 1in. long; spikes about 1in.; fruiting-calyx above 1 line diameter. In desert country, forming patches near aboriginal wells.

Affinity to *M. lasiandra* F. v. M.

463. *M. genistifolia* Smith.

Between Isdell and Precipice Ranges; north base of Mt. Brennan; Upper Barker River (W.V.F.).

Shrub, 10–15ft. high, and as much across; filaments pale-yellow. In sandy loam.

464. *M. minutifolia* F. v. M.

Between Inglis' Gap and Lennard River; Dillen's Springs, Ord, Denham, King Rivers, near Wyndham (W.V.F.).

A tree to 30ft. high; trunk to 10ft.; diameter 6–9in.; bark persistent, dark-grey, thin, fibrous, rough; timber reddish-brown, and hard; filaments white. In sandy and stony soils.

465. *M. dissitiflora* F. v. M.

MacNamara Creek, Hann River (W.V.F.).

A tree of 25–30ft.; trunk to 10ft.; diameter 9in.; bark rough, greyish, flaky; timber reddish and fairly tough and hard; filaments white. In sandy loam.

466. *Beaufortia elegans* Schauer.

Diffuse, 3–4ft. high; filaments scarlet or purple.

467. *Tristania suaveolens* Smith.

Barker, Isdell, Hann, Charnley, Calder, Throssell, Fitzroy, and Ord Rivers; MacNamara and Harris Creeks; eastern base of Mt. Broome, near Wyndham (W.V.F.).

A tree of 50ft.; with spreading branches; trunk to 20ft.; diameter 2ft.; bark greyish, thin, scarcely rough; timber reddish, very tough and moderately hard; flowers pale. The "Fresh-water Mangrove" of North-West Australia. The species occurs in Papua.

Eucalyptus (see Introductory Note).

468. *E. mooreana* (W. V. Fitzgerald) Maiden, Proc. Roy. Soc. N.S.W. XLVII., 221 (1913).

469. *E. confluens* (W. V. Fitzgerald) Maiden, op. cit. XLIX, 317 (1915).

470. *E. Houseana* (W. V. Fitzgerald) Maiden, loc. cit. p. 318.
(A complete list of species of Eucalypts from North-West Australia will be compiled later.)

471. *Xanthostemon paradoxus* F. v. M.

A bushy-topped tree of 30–40ft. ; trunk to 15ft. ; diameter 1–1½ft. ; bark dark-grey, rugged but rather thin ; timber brownish, tough, and hard ; leaves to 5in. long ; stamens 1in. long, yellow ; fruits ovoid-globose, 4–5 lines diameter ; 3-celled.

472. *Fenzlia phebalioides* W.V.F. n. sp.

An erect shrub with numerous hardwood branches and, excepting the older branches and upper surface of the adult leaves, more or less invested with a close white tomentum ; leaves petiolate, oblong to narrow-oblongate, rounded at the apex, shortly tapering to the base, the margins flat or slightly revolute, thinly coriaceous, the venation congested, upper portion dull-green, and scarcely shining, glandular dots numerous and conspicuous, especially on the whitish under page ; flowers on slender pedicels, with two opposite subulate bracteoles a short distance between the calyx ; calyx-tube very shortly and broadly produced above the ovary, lobes subulate, acute, almost as long as the tube ; petals orbicular, woolly-tomentose, 5-nerved ; filaments as long as the petals ; anthers small ; ovary 1-celled, two ovulate ; style comparatively stout, the lower half tomentose, as long as the filaments ; fruit globular, hard, glabrous, one occasionally two-celled and surrounded by the closely reflexed calyx-lobes.

Slopes of Table-top Mountain, near Synnot Range (W.V.F.).

Height 4–6ft. ; leaves mostly ½–1in. long, rarely more ; petioles ⅓–1 line long. Pedicels ½–1in. or less. Calyx 1½ lines long. Petals 1½ lines diameter, red. Filaments red ; anthers yellow. Style red. Fruit under 2 lines diameter, dark-purple. In sandy loam.

Affinity to *F. obtusa* Endl.

473. *Eugenia grandis* Wight.

Edkins Range, Sunday Island (W.V.F.).

A shady tree, 30–40ft. ; trunk 15ft. ; diameter 1ft. or more ; bark light-greyish or whitish, smooth to somewhat rugose ; timber reddish or brownish ; flowers white or pinkish ; ripe fruits white, globular to ovate, often above 2in. diameter ; of an agreeable acid flavour, eaten by aborigines and termed by those on Sunday Island “Illarrie.” In sandy loams.

474. *E. myrtifolia* Sims.
Charnley River (W.V.F.).
Shrub to a tree of 25ft. ; trunk about 8ft. ; diameter 7in. ;
bark grey, smooth ; timber reddish and moderately hard.
In sandstone and quartzite gorges.
475. *E. eucalyptoides* F. v. M.
Isdell, Charnley, Calder, Ord, Denham, and King Rivers,
Walcott Inlet (W.V.F.).
A bushy shrub to a tree of 25ft. ; trunk to 10ft. ; diameter
9in. ; bark grey, smooth ; timber brownish, hard and
rather tough ; flowers pale-yellow ; fruits pink, globose,
4-5 lines diameter ; of a pleasant acid flavour. In sand-
stone and quartzite country along the banks of streams.
476. *E. Armstrongii* Benth.
Calder River, base of Packhorse Range, near Isdell River
(W.V.F.).
A shrub of 20ft. in height. In sandy loam.
477. *Barringtonia acutangulare* Gaertner.
The North-Western plant is a diffuse or bushy shrub of 4-10ft.
in height, with scarlet filaments and purplish quadrangular
fruits. The bark is used by the aborigines for poisoning
fish.
478. *Careya australis* F. v. M.
A tree of 25-30ft. ; trunk to 15ft. ; diameter about 1ft. ; bark
dark-grey, rather rough and sometimes slightly furrowed ;
timber reddish, very soft, and fibrous ; sepals greenish-
white ; stamens white. The bark contains much tannin.
479. *Osbeckia australiana* Naudin.
Prince Regent's River (J. Bradshaw and Allen) ; West Kim-
berley (Dr. House) ; Isdell and Charnley Rivers, Dillen's
Springs (W.V.F.).
Erect, 6-10ft. ; petals reddish-purple ; stamens yellow ; style
pink, with a greenish stigma.
480. *Melastoma malabathricum* L.
Charnley River (W.V.F.).
Erect, 8-12ft. ; flowers reddish-purple.
In sandstone and quartzite gorges.

ÆNOTHERACEÆ (ONAGRACEÆ).

481. *Jussiaeua suffruticosa* L.
Ord River (Alex. Forrest) ; Lennard, May, Fitzroy, Hann,
Isdell, Charnley, Calder, Ord, Denham and King Rivers
(W.V.F.).
In sandy loams.

482. *Ludwigia parviflora* Roxb.
Pentecost River (J. Bradshaw and Allen) ; Isdell and Charnley
Rivers (W.V.F.).
In black and sandy loams.

HALORRHAGACEÆ.

483. *Halorrhaghis acanthocarpa* Brongn.
Sources of Sturt Creek (F. v. M.) ; Mts. Brown and Herbert ;
Bold Bluff ; north-east base of Precipice Range ; Isdell
River ; Packhorse Range (W.V.F.).
Varying from weak and almost glabrous to robust and very
hirsute. The specimens from the King Leopold Ranges
are from diffuse plants, 1-2ft. high ; those from near
Precipice Range, Bold Bluff and Isdell Rivers are of
straggling habit, often intricate, and 1-2ft. high. The
Packhorse Range plant has glabrous almost filiform stems
and deeply serrated leaves which are under $\frac{1}{2}$ in. long.
Growing in dry or moist sandy soils.

UMBELLIFLORÆ.

UMBELLIFERÆ.

484. *Trachymene hemicarpa* Benth.
King Leopold Ranges, Isdell, Charnley and Calder Rivers
(W.V.F.).
Erect, 4-6in. ; flowers white.
Var. major Benth.
Erect, 2-4ft. ; flowers white to yellowish.

SYMPETALEÆ.

PRIMULALES.

MYRSINACEÆ.

485. *Ægiceras majus* Gaertner.
Cygnet Bay (W.V.F.).
A spreading shrub of 15ft. in height ; flowers white.
In saline boggy creeks.

PLUMBAGINALES.

PLUMBAGINEÆ.

486. *Statice salicorniacea* F. v. M.
Peron's Peninsula ; Freycinet Harbour ; Shark's Bay (F. v. M.)
Nannine ; Port Hedland (W.V.F.)
Stems creeping and rooting . At Port Hedland the branches
are erect, 6-9in. high ; at Nannine they are straggling or
procumbent and 2-3ft long. Flowers white.
In sandy saline spots.

487. *Plumbago zeylanica* L.
Wingrah Pass, Napier Range ; Barker and Isdell Rivers
(W.V.F.)
A spreading shrub, 2-3ft. high ; flowers white.
In rocky spots.

EBENALES.

SAPOTACEÆ.

488. *Lucuma sericeus* Benth.
A spreading shrub of 15ft. in height
489. *Sideroxylon arnhemicum* Benth. et Hook.
Between Roe and Drysdale Rivers (J. Bradshaw and Allen) ;
Isdell and Barker Rivers ; King Leopold, Lady Forrest,
Packhorse, Isdell, Synnott, Artesian, Edkins, and
Harding Ranges (W.V.F.).
A tree to 30ft. ; trunk 10-15ft. ; diameter 8-9in. ; bark grey,
somewhat rugose ; timber pale and not very hard ; fruits
globular or ovoid, succulent, yellowish, scantily tomentose,
lin. diameter, seeds 4, obovate-ellipsoid, $\frac{1}{2}$ in.
long, the testa brown and shining.
Among sandstone and quartzite rocks.
490. *Mimusops parvifolia* R. Br.
Careening Bay (A. Cunn.) ; Swan Point and Cape Leveque
(W.V.F.).
A tree of 40ft. ; trunk 20ft. ; diameter 1ft. ; bark greyish,
smooth ; timber pale, not hard ; fruits globular, reddish,
 $\frac{1}{2}$ in. diameter ; seeds eaten by aborigines.
In sandy loam.

EBENACEÆ.

491. *Diospyros montana* Roxb.
Goose Hill, Ord and Denham Rivers ; Swan Point (W.V.F.).
A twiggy shrub of 6-8ft. in height and not spinescent ; flowers
white to pale yellow ; fruits brown, sometimes above lin.
diameter. The *D. cordifolia* Roxb. of the Flora Aus-
traliensis.
492. *D. nitens* (W.V.F.).
A strong-growing bushy shrub, the branches and leaves glab-
rous, the young shoots silky-hairy ; leaves distinctly
petiolate, ovate-oblong to broad-lanceolate, shortly acumi-
nate or rounded at the apices, tapering at the base, thin
but coriaceous, olive-green and shining above, dull-green
beneath, the veins fine, ascending and reticulate between ;
flowers not seen ; fruiting calyx solitary, sessile and sur-
rounded at the base by a few small broad bracts, pube-

cent within and without, and forming an acutely edged sub-hemispherical cup at the base of the fruit, the lobes 4, rarely 5, broadly triangular, less than half the length of the tube, ascending; fruit 8-celled, each cell 1-seeded, globular, before maturity closely invested with appressed greyish or yellow hairs, which ultimately disappear except at the apex; seeds rugose, somewhat shining, the albumen horny.

Wingrah Pass, Napier Range, Sprigg and Charnley Rivers. (W.V.F.).

Height 8-10ft. Leaves to above 8in. long, 2-3in. broad; petioles $\frac{1}{4}$ in. long. Fruiting-calyx attaining a diameter of above $\frac{1}{2}$ in. Fruit $\frac{3}{4}$ in. diameter, of a reddish colour, and very bitter to the taste. Seeds $\frac{1}{3}$ in. long, 2 lines broad, brown.

In sandy or stony spots overlying sandstone, quartzite or limestone.

493. *Maba humilis* R. Br.

Hills near the junction of Hann and Barnett Rivers; Artesian and Edkins Ranges. (W.V.F.).

A tree of 20-25ft. with spreading branches; trunk to 10ft. diameter 1ft.; bark grey, smooth; timber pale, dense and hard.

Among sandstone and quartzite rocks.

CONTORTÆ.

OLEACEÆ.

494. *Jasminum simplicifolium* G. Forster.

Prince Regent's River (J. Bradshaw & Allen); Isdell, Charnley, Calder, Ord, Denham and King Rivers; Dillen's Springs (W.V.F.).

Stems erect, 3-5ft.; branches long and flexuose; fruits globular, 5 lines diameter, black. In sandy soil.

Var. molle Benth.

Near the entrance to King River (W.V.F.).

Erect, 1-3ft. In sandy loam.

LOGANIACEÆ.

495. *Strychnos lucida* R. Br.

An erect rigidly branched shrub, 8-12ft.; fruits orange-yellow; seeds extremely bitter. The pulp of the fruits is eaten by birds.

496. *Mitrasacme lepidocalyx* (W.V.F.), n. sp.

An erect, slender-stemmed annual, glabrous in every part, dichotomously branched from about the middle; leaves all radical and rosulate, oblanceolate, 1-nerved; bracts subtending the branches, branchlets and inflorescence in solitary pairs, connate or free, ovate, obtuse, flowers pedicellate, small, 4 or more together in simple umbels, the whole inflorescence forming a rather large dichotomous panicle, with 1-2 flowers in the forks; pedicels filiform; calyx-tube with 5 prominent dark-coloured ribs which terminate in extremely short broad obtuse lobes, the spaces between the ribs closely invested with small white scales; corolla slender, the lobes lanceolate, obtuse, scarcely as long as the tube; filaments inserted above the middle of the tube; anthers narrow-oblong, conspicuously exerted; style much exerted, with 2 rather short oblong linear stigmatic lobes; capsule shortly exceeding the calyx, ovoid-oblong, acute.

Messmate Creek, Packhorse Range (W.V.F.).

Height 6-12in. Leaves $\frac{1}{2}$ -lin. long. Bracts $\frac{1}{4}$ - $\frac{3}{8}$ line long.

Calyx $\frac{1}{2}$ - $\frac{3}{4}$ line long. Corolla $1\frac{1}{2}$ - $1\frac{3}{4}$ line long, white.

In wet sandy soil.

Affinity to *M. exserta* F. v M.

497. *M. hispida* (W.V.F.), n. sp.

An erect weak branching annual, the stems, branches and inflorescence hispid with short spreading white hairs; leaves on the lower portion of the stem, the radical ones withering before the flowering commences, the uppermost 2 pairs approximated so as to form a false whorl at the base of the branches, of thin texture, lanceolate-ovate, obtuse or slightly mucronate, trinerved, glabrous above, beneath the nerves alone hispid; bracts small, linear; flowers in simple or compound few-flowered umbels, often nodding on filiform pedicels; calyx-lobes deltoid, acute trinerved, as long as the tube; corolla campanulate, glabrous or scantily bearded within, the lobes very short; filaments inserted near the base of the tube; anthers ovate, usually semi-exserted; style soon separating at the base, shortly exerted, stigmatic lobes short, rather thick and slightly divaricate; capsule globular, scarcely exceeding the calyx, the persistent styles connivent in the upper portion.

Lennard and Isdell Rivers; Bell Creek; eastern base of Mt. Rason (W.V.F.).

Height 6-12in. Leaves usually under lin. long. Calyx $\frac{3}{4}$ -line or less in length. Corolla seldom above 3 lines long, yellow.

In moist grassy spots.

Affinity to *M. lutea* F. v M.

498. *M. nudicaulis* Reinwardt.
Near Mt. Bartlett, Isdell River; eastern base of Mt. Rason
(W.V.F.).
Leaves rosulate; corolla white. In moist grassy localities.

GENTIANACEÆ.

499. *Canscora diffusa* R. Br.
Bases of Bold Bluff and Precipice Range; Isdell River; Bell
Creek (W.V.F.).
Flowers pink. In moist sandy soil.
500. *Limnanthemum minimum* F. v. M.
York Sound (A. Cunn); Isdell River (W.V.F.).
Stems sometimes matted, 6-12in. long; flowers white. Floating
in water.
501. *L. indicum* Thwaites.
Lennard and Isdell Rivers (W.V.F.).
Flowers white, the petals fimbriated. Rooting in mud, the leaves
floating in still water.
502. *L. crenatum* F. v. M.
Meda, May, Lennard, Isdell and Charnley Rivers; Bell Creek
(W.V.F.).
Stems running many yards or rooting at each node in mud;
leaves floating in still water; flowers yellow; petals fim-
briated.

APOCYNACEÆ.

503. *Carissa lanceolata* R. Br.
A spreading intricately branched shrub of 4-8ft. in height;
flowers white; fruits purple, ovate, about 2 lines long, some-
what succulent, and yielding a viscid white juice. An
excellent hedge plant. Growing in sandy soils. The "Water
Currant" of Kimberley.
504. *Alstonia verticillosa* F. v. M.
Montague Sound (A. Cunn.); Edkins Range; Charnley and
Barker Rivers; vicinity of Napier Range (W.V.F.).
A bushy tree to 50ft. in height; trunk 20-25ft., diameter 2-2½ft.;
bark dark-brown, almost black, thick, rough and corky;
timber pale and not very hard; sap copious, milky. In
sandy loam.
505. *Wrightia saligna* F. v. M.
A willow-like tree of 20-25ft.; trunk to 10ft.; diameter 6in.;
bark grey, rough and longitudinally fissured; timber pale,
and rather soft. This plant, which is more often a shrub,

grows in sandy scrubby country ("Pindan"). Stock will often stray for many miles for the purpose of feeding on the leaves. In Kimberley it is known as "Milk-bush," where it is regarded as the best top-feed plant.

506. *Parsonia velutina* R. Br.

Ord, Denham and King Rivers; Cygnet Bay; Wingrah Pass, Napier Range (W.V.F.).

In sandy soils.

ASCLEPIADACEÆ.

507. *Vincetoxicum carnosum* Benth.

Cygnet Bay (A. Cunn.), (W.V.F.).

Twining 2-4ft.; flowers yellow. In moist black saline soil.

508. *Cynanchum floribundum* R. Br.

Erect and 2-3ft.; or stems twining for many yards; leaves linear to linear-lanceolate, tapering towards or quite obtuse at the base.

509. *C. pedunculatum* R. Br.

Montague Sound (A. Cunn.); Pentecost River (J. Bradshaw & Allen), Isdell, Sprigg and Charnley Rivers (W.V.F.).

Stems prostrate for many yards or shortly twining; follicles purplish, 2½-3in. long, ¾-lin. broad, with two lateral wings; seeds ¼in. long. The follicles in outline resemble a dagger.

510. *Gymnema sylvestre* R. Br.

Wingrah Pass, Napier Range, Goose Hill, near Ord River; Denham River (W.V.F.).

Stems twining for many yards; flowers yellow. In sandy soil.

511. *G. stenophyllum* Asa Gray.

Roebuck Bay (J. W. O. Tepper); vicinity of Derby; Native Well; May, Barnett, Ord and King Rivers; Goose Hill (W.V.F.).

Stems erect, 2-3ft., numerous from a thickened stock; follicles 2-2½in. long, glabrous, not very thick, acuminate, with straight or curved apices.

512. *Tylophora flexuosa* R. Br.

Ashburton and Cane Rivers (Alex. Forrest); Meda, Lennard, Fitzroy, Barker, Isdell, Hann, Barnett, Adecock, Charnley, Calder, Ord, Denham and King Rivers (W.V.F.).

Twining to a considerable height, inflorescence usually paniculated and along with the calyces silky-hairy; corolla purple; follicles not very thick, glabrous, acuminate, 2-3½in. long.

513. *Marsdenia cinerascens* R. Br.
Stems twining for several yards; flowers white.
514. *M. velutina* R. Br.
Roebuck Bay (J. W. O. Tepper); Lennard, Isdell and Hann Rivers (W.V.F.).
Follicles glabrous or nearly so, from a broad base, acuminate, 2½ in. long. In sandy soil.
515. *M. viridiflora* R. Br.
Grant Range (W.V.F.).
Stems twining many yards. Among sandstone boulders.
516. *M. Brockmaniana* (W.V.F.), n. sp.
A glabrous twiner, with slender stems and branches; leaves narrow-lanceolate to linear, obtuse or hardly acute, tapering into moderate petioles, sometimes scantily hirsute, veins very oblique, few but evident; flowers large, 2-3 together, pediculate on interpetiolar peduncles; calyx-segments narrow-ovate, obtuse; corolla rotate, lobed to about the middle, the lobes broad, obtuse, with ciliate margins, the lower portion of the tube with a densely tomentose, annular ridge within; corona-segments somewhat fleshy, with adnate saccate bases, the free erect portions linear with incurved tips and much exceeding the anthers; pollen-masses moderately large, oblong, erect; stigma compressed rather broad, shorter than the anthers; follicles obtuse, dagger-shaped when dry, rather large and glabrous when fresh; seeds obovate, scantily hirsute or glabrous, much compressed with narrow margins, conspicuously toothed at the apices.
Wingrah Pass, Napier Range; Upper Liverynga Station, Fitzroy River (W.V.F.).
Twining for many yards. Leaves 2-3 in. long; petioles ¼ in. Flowers the largest of the genus. Peduncles 1-2 in. Pedicels mostly about 1 in. long. Calyx-segments 1½ line long. Corolla above ¾ in. diameter; white, saturated with purple. Follicles 1½-2 in. long, green, saturated with purple. Seeds above 1 line long, black.
In sandy soil. Readily distinguished by the comparatively small calyx and large corolla. The species is named in memory of the late Mr. F. S. Brockman, Surveyor General, Western Australia.
517. *Gymnanthera nitida* R. Br.
Beagle Bay (Alex. Forrest); Meda, May, Fitzroy, Lennard, Barker, Richenda, Isdell, Charnley, Calder, Sprigg, Ord, Denham and King Rivers; Bell and MacNamara Creeks; Walcott Inlet, Goose Hill (W.V.F.).
Twining to a great height. In moist sandy loam along the banks of water courses.

TUBIFLORÆ.

CONVOLVULACEÆ.

518. *Ipomæa costata* F. v. M.
 Sherlock and Fortescue Rivers (J. Forrest); Lennard and Isdell Rivers; between Mt. Eliza and Inglis' Gap (W.V.F.).
 Stems twining or rambling for many feet or the plant erect; bushy and 3-10ft. in height. In sandy loam.
519. *I. reptans* Poiret.
 Gascoyne River (J. Forrest); May and Meda Rivers; in a billabong near Meda Station (W.V.F.).
 Stems hollow, prostrate for several feet; flowers small, white. In black muddy spots. Includes *I. aquatica* Forskael.
520. *I. diversifolia* R. Br.
 Roebuck Bay (J. W. O. Tepper); Meda, Lennard, and Fitzroy Rivers; near Derby (W.V.F.).
 In sandy loam.
521. *I. eriocarpa* R. Br.
 Roebuck Bay (J. W. O. Tepper); Meda, May, Lennard, Fitzroy, Isdell and Adcock Rivers (W.V.F.).
 Seeds punctate. In sandy soil.
522. *I. flava* F. v. M.
 De Grey River (Ridley's Expedition); Calder River, near Walcott Inlet; King River near Cambridge Gulf (W.V.F.).
 Stems trailing or twining for many yards; flowers sulphur-yellow. The specimens referred to in the Flora Australiensis as having been collected by Ridley's Expedition in all probability do not belong to this species.
523. *I. turpethum* R. Br.
 Port Hedland (W.V.F.).
 Stems twining for several feet; flowers white. In sandy soil.
524. *I. plebeia* R. Br.
 Adcock, Isdell, Hann and Barnett Rivers (W.V.F.).
 Flowers white. In stony and sandy spots.
525. *Polymeria ambigua* R. Br.
 Meda, Lennard, Isdell and Fitzroy Rivers; near Derby (W.V.F.).
 In sandy loam.
526. *P. angustata* F. v. M.
 Roebuck Bay (J. W. O. Tepper); May, Meda, Lennard and Fitzroy Rivers (W.V.F.).
 In sandy spots.

527. *P. distigma* Benth.
 Glenelg River (J. Martin); Isdell River; Bell Creek (W.V.F.).
 Stems simple or slightly branched, 1-2ft. high; several erect
 together from the one stock; flowers purple or pale-blue.
 On grassy flats.
528. *Breweria media* R. Br.
 King Sound District (Froggatt); near Derby; Goody Goody;
 Native Well; Meda, Lennard, Isdell, Fitzroy and Barker
 Rivers (W.V.F.).
 Stems ascending from a thickened stock and along with the
 leaves silky-hirsute; flowers bright blue. In light sandy
 soil.
529. *B. pannosa* R. Br.
 Mt. Marmion, Lennard River; Ord, Denham and King Rivers
 (W.V.F.).
 Stems prostrate, often several yards long; leaves ovate sericeous;
 flowers blue. In ferruginous gravels.
530. *B. rosea* R. Br.
 Erect, 1-2ft.; flowers nodding, pink to almost white.

HYDROPHYLLACEÆ.

531. *Hydrolea zeylanica* Vahl.
 King Sound District (Froggatt); Lennard, Fitzroy, Barker
 and Isdell Rivers (W.V.F.). Not very common.

BORRAGINEÆ.

532. *Ehretia saligna* R. Br.
 A willow-like tree to 30ft. in height; trunk 8-10ft.; diameter
 6in.; bark greyish, smooth; timber pale and fairly hard;
 flowers white or pale-yellow; fruits scarlet.
533. *Ehretia urceolata* (W.V.F.), n. sp.
 Deciduous; shrubby to arborescent, glabrous, the branchlets
 rather stout; leaves broad to narrow-linear, fine pointed
 but scarcely acute, tapering into conspicuous petioles,
 entire, very obliquely veined; flowers in sub-axillary, re-
 peatedly dichotomous pedunculate cymes, which are in-
 curved when in fruit and always shorter than the leaves;
 calyx lobed to the middle, the lobes ovate, obtuse, glabrous or
 scantily ciliolate; corolla-tube urceolate and very thin, the
 lobes reflexed, obtuse, as long as the tube; filaments rather
 broad; anthers included, or the tips exerted, as long as
 the filaments; ovary two-celled with two ovules in each cell;
 style bifurcated halfway down, the entire part included.

the lobes exerted and divaricate, stigmas truncate; fruit ovoid, obtuse, indistinctly four-ribbed, usually consisting of four one-seeded not very hard pyrenes.

Mt. Marmion (W.V.F.).

Height to 40ft.; trunk 10ft., diameter 9-12in. Bark greyish, smooth. Timber pale-yellow and moderately hard. Leaves 3-5in. long, thin, bright-green. Calyx $\frac{1}{2}$ line long. Corolla 2 lines long, yellow, Fruit $1\frac{1}{2}$ line diameter, scarlet. In iron-stone gravel.

Affinity to *E. saligna* R. Br.

534. *Tournefortia mollis* F. v M.

Montague Sound (A. Cunn.); Goose Hill. near Ord River (W.V.F.).

An erect shrub, 8ft. high; flowers and fruits white.

535. *Coldenia procumbens* L.

Ord and King Rivers (W.V.F.).

In moist sandy spots.

536. *Heliotropium ovalifolium* Forskael.

A perennial with a thick woody stock; stems diffuse or spreading and attaining a height or length of 1ft.; the whole often as much across; flowers white. The species is always bracteate in North West Australia and not ebracteate as described in the Flora Australiensis.

537. *H. flaviflorum* (W.V.F.), n. sp.

A slender erect much-branched shrubby plant, glabrous excepting the flowers; leaves shortly petiolate, linear, subacute or acute, the margins entire and closely refracted; flowers distant in one-sided simple or once-forked racemes terminating the branchlets; bracts setaceous and deciduous, occasionally none; calyx moderate, the outer segments ovate, the inner much narrower, all acute and ciliolate; corolla yellow, scantily invested without with closely appressed scabrid hairs, the tube ventricose about the middle and densely barbellate within, nearly twice as long as the calyx, lobes narrow-ovate, obtuse, a little more than half as long as the tube; anthers acuminate, cohering by their tips; style comparatively stout, at least four times as long as the obscurely four-lobed stigma; central cone small and obtuse; fruit almost mitriform, crowned by the persistent base of the style, the nuts, four, glabrous and shining.

Packhorse Range; Mt. Rason; near Mt. Marmion (W.V.F.). Height 2-3ft. Leaves 1in. or less in length. Calyx 1 line long.

Corolla under 2 lines long. Fruit $\frac{3}{4}$ line diameter. Seeds almost black. In dry sandy soil.

Affinity to *H. paniculatum* R. Br.

538. *H. strigosum* Willd.
 Cygnet Bay (A. Cunn.); Denham and King Rivers; Sunday
 Island (W.V.F.).
 Stems erect, 6-9in.; flowers white. Among sandstone and quartz-
 ite rocks.
539. *H. conocarpum* F. v M.
 Isdell and Acock Rivers (W.V.F.).
 Diffuse, 1-1½ft. high; flowers white; fruit ripening 2-4 nuts.
 In sandy loam.
540. *H. diversifolium* F. v. M.
 Cygnet Bay (A. Cunn.); Derby, Goody Goody, Cygnet Bay
 (W.V.F.).
 In sandy spots.
541. *H. ventricosum* R. Br.
 May, Meda, Lennard and Isdell Rivers (W.V.F.).
 A form with slender wiry straggling almost woolly stems and
 branches, which attain a total length of 1ft.; spikes slender,
 interrupted; calyx-segments 1 line long, the outer ovate,
 the inner narrower, all acute; corolla white, 4 lines long.
 In grassy spots.
542. *Trichodesma zeylanicum* R. Br.
 Semi-herbaceous, 3-5ft. high; calyx green; corolla white or blue.
 In sandy soil.
543. *T. indicum* R. Br.
 Acock River, near Mt. House (W.V.F.).
 Stems erect, 2-4ft.; flowers blue. In stony localities.

VERBENACEÆ.

544. *Cyanostegia Bunyana* F. v M.
 Roebuck Bay (J. Martin); Frant Range (W.V.F.), south of
 the Fitzroy River (Mayo Logue).
 A spreading shrub of 3-4ft. in height and at least as much
 across; flowers bright blue. In sandy soil.
545. *Clerodendron tomentosum* R. Br.
 Roebuck Bay (J. W. O. Tepper); Broome; Paekhorse Range;
 Lennard River; Dillen's Springs (W.V.F.).
 A tree, 25-30ft.; trunk 8-10ft.; diameter 1ft.; bark greyish and
 slightly rugose; timber pale and rather soft; flowers white.
 In sandy soil.

546. *Callicarpa cana* L.
King Sound District (Froggatt); Meda, May, Lennard and Isdell Rivers (W.V.F.).
A diffuse weak-growing shrub, 4-8ft. in height; flowers white; fruits black. In sandy soil alongside of water-courses.
547. *Premna acuminata* R. Br.
A bushy tree of 25ft.; trunk to 10ft.; diameter 10in.; bark greyish and slightly rough; timber pale and rather soft; flowers whitish; fruits black.
548. *P. integrifolia* L.
Roebuck Bay (J. W. O. Tepper); Broome; near Derby; May and Isdell Rivers (W.V.F.).
A tree 15-20ft.; trunk to 6ft.; diameter 6in.; bark light-grey, smooth or scarcely rough; timber yellowish and fairly soft.
549. *Vitex glabrata* R. Br.
A tree of 25-30ft. with a bushy crown; trunk 12ft.; diameter to 1ft.; bark grey, smooth; timber pale, dense, and fairly hard; flowers white.
550. *Aricennia officinalis* L.
A tree of 25-30ft.; trunk to 10ft.; diameter 1ft.; bark whitish to yellowish and fairly smooth.

LABIATÆ.

551. *Moschosma polystachya* Benth.
Lennard, Barker, Fitzroy, Charnley, Isdell, Calder, Ord and Denham Rivers (W.V.F.).
A strongly scented plant, erect, 2-4ft.; flowers white. In moist black or sandy loam.
552. *Coleus scutellarioides* Benth.
Isdell, Charnley, Sprigg and Calder Rivers; Dillen's Springs (W.V.F.).
A strongly scented erect shrub of 3-4ft.; flowers blue. In wet black soil.
553. *Plectranthus congestus* Benth.
Near the source of the Isdell River (W.V.F.).
An erect strong smelling herb of 3-4ft. In rock crevices.
554. *Dysophylla verticillata* Benth.
Isdell, Charnley and Calder Rivers and adjacent springs; base of Mt. Rason (M.V.F.).
Stems erect to 1ft.; leaves often toothed; flowers pink. In still water or wet soil.

SOLANACEÆ.

555. *Solanum pubescens* Willd.

Goody Goody, nine miles from Derby (W.V.F.).

A spreading shrub, 3ft. in height. In moist sandy soil.

Although there is a possibility of this Asiatic species having been introduced, the specimens differ from type ones by having a much larger calyx and constantly white flowers.

556. *S. ellipticum* R. Br. var. *pannifolium* A. Cunn.

N.W. Coast; Cambridge Gulf (A. Cunn.); Wyndham; Goose Hill, near Ord River (W.V.F.).

Among sandstone and quartzite rocks.

557. *S. quadriloculatum* F. v M.

Roebuck Bay (J. W. O. Tepper); Lennard, Isdell, Barnett, Hann, Charnley and Calder Rivers; Mt. Herbert; Station Creek (W.V.F.).

Erect or diffuse, 2-3ft. high; flowers bluish-purple; fruits yellow. Some specimens appear to differ, although all have a four-celled ovary; the flowers are differently disposed, the males in lateral racemes, the females solitary; axillary and on a different branch of the same plant; the fruiting calyces appear to assume three forms. In sandy soil.

558. *S. cataphractum* A. Cunn.

An erect, much-branched shrub, 3-4ft. high; calyces 4-4½ lines long when in flower, much enlarged in fruit, lobed to below the middle, the lobes narrow-ovate and ending in acuminate leafy tips; corollas purple, 2/3in. across, lobed to one-third of its width, the lobes broad, obtuse; anthers narrow-oblong, 2½ lines long, obtuse, on short filiform filaments; fruits 6-7 lines diameter; yellow when ripe. The diagnosis published in the *Flora Australiensis* was based on fruiting specimens only. When in flower the branches are stellate-tomentose, the tomentum disappearing as the fruiting advances.

559. *S. echinatum* R. Br.

Diffuse, 2ft. high; flowers to ¾in. in diameter; fruiting-calyx densely prickly; fruits completely four-celled.

560. *S. Cunninghamii* Benth.

Diffuse, to 3ft. high.

561. *S. ^{Loicum} ~~Cunninghamii~~* (W.V.F.), n. sp.

An erect or spreading shrub, the branches, foliage, and inflorescence closely invested with a yellowish or reddish stellate tomentum; prickles slender on the stems and branches, few or absent from the leaves and male calyces, numerous on

those of the female flowers; leaves petiolate, broad-linear to narrow-lanceolate, obtuse or subacute, obliquely tapering at the base, the margins entire, soft and greenish on both sides; flowers dioecious; males in lateral pedunculate racemes, the pedicels as long as the calyx; calyx cupular, the teeth broad and short; corolla hirsute without, broadly and shallowly lobed; anthers on very short filaments, ovate-oblong; ovary rudimentary; female flowers solitary or thick, lateral pedicels, which are erect at first but become reflexed as the fruiting advances; calyx tube campanulate, the lobes linear and shorter than the tube, ultimately becoming membranous, very prickly and enveloping the fruit; corolla as in the male flowers but much larger; anthers abortive; ovary two-celled; stigma large and oblong; ripe fruits not seen.

Dillen's Springs (W.V.F.).

Height 1-2ft. Leaves mostly 2-2½ in. long, the petioles about ½ in. Flowers bluish. Males: peduncles 1 in. or more. Pedicels 2 lines. Calyx 2 lines long. Corolla scarcely ½ in. diameter. Anthers 1 line long. Females: Pedicels ½-1 in. Calyx ½ in. long, and subsequently enlarging. Corolla almost 1 in. diameter.

Among quartzite rocks and often in their crevices.

Affinity to *S. echinatum* R. Br.

562. *S. phlomoides* A. Cunn.

Diffuse, to 2ft. high. A pest along the Fitzroy River.

SCROPHULARIACEÆ.

563. *Stemodia flaccida* W.F.V., n. sp.

A strongly scented scarcely branched flaccid perennial, more or less invested with a short white glandular pubescence; leaves opposite, membranous, the lower ones ovate, obtuse, on long petioles, with stem-clasping auricles, coarsely toothed, the upper bracteate ones gradually smaller, ovate-lanceolate, serrate, amplexicaul and distant; flowers on slender axillary pedicels which frequently exceed the upper bracts, bi-bracteolate; calyx, the upper lip broad, entire or almost so, the lower with three broadly ovate, retuse or emarginate lobes, scantily hirsute without, the throat within densely hairy, anthers bilocular; capsule acuminate, rather narrow, two-thirds as long as the calyx.

Wingrah Pass, Napier Range (W.V.F.).

Height 1-2ft. Leaf laminae, 2-3 in. long or less. Pedicels ½-1 in.

Calyx at least 3 lines long. Corolla ½ in. long. Violet.

In the crevices of limestone rocks.

Affinity to *S. debilis* Benth.

564. *Morgania floribunda* Benth.
 Gascoyne River (J. Forrest and Polak); Carnarvon (W.V.F.).
 In sandy spots.
565. *M. pubescens* R. Br.
 Isdell River (W.V.F.).
 Stems simple or few-branched, procumbent or ascending from a perennial stock, 1-2ft. long, the whole plant invested with a white woolly pubescence; leaves opposite or in whorls of three, obovate or cuneate, obtuse, narrowed below the middle, coarsely toothed above, broadly sessile; flowers wholly pedicellate in the upper axils; calyx 3 lines long, divided to the base into linear acute equal segments; corolla purple, at least one-third longer than the calyx, scantily tomentose without and within, the tube broad; lips broad, the upper one entire and as long as the tube, the lower lip as long with three obovate, obtuse lobes; filaments compressed; capsule glabrous, acuminate, much shorter than the calyx. In grassy spots. At first sight the plant reminds one of a species of *Chloanthes*. A description was not published by Bentham in the *Flora Australiensis*.
566. *M. parviflora* Benth.
 Meda, Lennard, Isdell, Barnett, Charnley, Calder and King Rivers; Dillen's Springs (W.V.F.).
 Ascending or straggling in habit; leaves entire or toothed, sometimes 1-1½ in. long; flowers purple. In sandy loam.
567. *Lindernia subulata* R. Br.
 Base of Bold Bluff (W.V.F.).
 Flowers bluish. In moist grassy spots.
568. *Limnophila serrata* Gaudich.
 Isdell, Charnley and King Rivers; base of Mt. Rason (W.V.F.).
 Flowers reddish-purple. In shallow pools and wet black soil.
569. *L. gratioloides* R. Br.
 Isdell, Charnley and Calder Rivers; one mile from north base of Bold Bluff; east base of Mt. Rason (W.V.F.).
 Of Gratiola-like habit; flowers purple. In wet spots.
570. *Herpestis floribunda* R. Br.
 Fitzroy River and Margaret Creek (Calvert's Expedition);
 Lennard River; Wingrah Pass; Napier Range (W.V.F.).
 In wet sandy places.
571. *Ilysanthes lobelioides* Benth.
 Base of Bold Bluff; Isdell River (W.V.F.).
 Almost flaccid, much branched, usually 9-15 in. high; lower leaves ½-¾ in. long; flowers bluish-purple. In wet grassy spots.

572. *Microcarpaea* muscosa R. Br.
Wingrah Pass, Napier Range; Lennard, Isdell, Sprigg and Charnley Rivers; Synnott Creek (W.V.F.).
Stems prostrate and forming large patches on mud; flowers pink.
573. *Peplidium* Muelleri Benth.
Gascoyne and Sherlock Rivers (J. Forrest); Nannine (W.V.F.).
In gravelly or sandy spots.
574. *Glossostigma* spathulata Arnott.
Lennard, Isdell and King Rivers (W.V.F.).
Flowers pale-blue. In mud.
575. *Hemiarrhena* plantaginea Benth.
N.t. King, Glenelg River (J. Martin); Isdell and Charnley Rivers (W.V.F.).
Stems erect, several from a thick stock; flowers blue. In moist grassy spots.
576. *Striga* curvifolia Benth.
North-West coast (Bynoe), Broome (W.V.F.).
In sandy localities.
577. *S. multiflora* Benth.
Camden Harbour (J. Martin); Lennard River; Carpenter's Gap, Napier Range (W.V.F.).
In pebbly and sandy spots.
578. *Buchnera* multiflora Benth.
Napier Range; Lennard, Isdell, Charnley and Calder Rivers (W.V.F.).
In sandy soil.
579. *B. ramosissima* R. Br.
York Sound (A. Cunn.); Lennard, Isdell and Calder Rivers; Carpenter's Gap, Napier Range (W.V.F.).
In stony soil.

BIGNONIACEÆ.

580. *Dolichandrone* heterophylla R. Br.
A tree, 20-30ft.; trunk to 10ft.; diameter to 1ft.; bark grey, lamellated, often almost corky; timber pale and soft. The foliage is readily eaten by stock.
581. *D. filiformis* Fenzl.
King River (W.V.F.).
From a shrub to a tree of 25ft.; trunk to 8ft.; diameter 6in.; bark grey, tessellated; timber pale and somewhat soft; leaves simple, slightly viscid; flowers white to pale-yellow, odorous. The leaves are greedily eaten by stock. On sandy flats.

PEDALINEÆ.

582. *Josephinia papillosa* W.V.F., n. sp.

A spreading much-branched shrub, the branches scantily invested with very short crisped white hairs intermixed with white papillae; lower leaves petiolate, trilobed, scantily hirsute above, beneath silvery from the presence of densely crowded papillae intermixed with a few short hairs; lobes lanceolate to oblong, obtuse, coarsely toothed, often almost lobed, the central one much larger than the others, the upper floral leaves coarsely toothed or entire; pedicels from as long to twice as long as the calyx; calyx-segments lanceolate, obtuse or sub-acute, along with the pedicels papillose and pubescent without, glabrous within; corolla papillose and pubescent on both sides, the tube very broad, the lobes much shorter, the upper four broad and short, the lowest twice as long; ovary four-celled, style long, with two thickened stigmatic lobes; fruit globose, very prickly, papillose and white hirsute, the apex truncate.

Lennard River, 10 miles above its junction with the Barker River (W.V.F.).

Height, $1\frac{1}{2}$ -3ft. Leaves $1\frac{1}{2}$ in. long or less, the petioles $\frac{1}{2}$ in. or more. Pedicels $1\frac{1}{2}$ -3 lines. Calyx about $1\frac{1}{2}$ lines long. Corolla $4\frac{1}{2}$ -5 lines long, pale-pink with a purple-spotted throat. Fruit, including the prickles, above 4 lines in diameter. Seeds pale brown. In sandy or strong soil.

Affinity to *J. Eugeniae* F. v M.

LENTIBULARINEÆ.

583. *Utricularia charnleyensis* W.V.F., n. sp.

Scapes bracteolate, glabrous, slender but rigid, erect, simple leaves radical, few (or sometimes none at the flowering period) spatulate, very small, on long petioles; bracts alternate, so much produced at the point of insertion as to appear peltate, rather narrow and acute at both ends; bracteoles 1-2, similar to the bracts; flowers small, subcapitate or in an interrupted spicate raceme, on bracteolate pedicels much shorter than the calyx; calyx-lobes almost orbicular, minutely denticulate, slightly enlarged in fruit; upper lip of the corolla narrow-ovate, entire and rounded at the apex, the margins incurved, slightly exceeding the calyx; lower lip ovate, entire, scarcely longer than the upper one, the margins rolled inwards; spur horizontal, obtuse, comparatively stout and projecting 1 line beyond the end of the lower lip; capsule globular.

Charnley River, lat. $16^{\circ} 17'$ (W.V.F.).

Height 4-9in., the whole plant drying black. Bracts at least 1 line long. Inflorescence 2in. long or less. Calyx-lobes 1 line long. Corolla blue. Capsule $1\frac{1}{4}$ line long. In wet sandy spots.

Affinity to *U. Baueri* R. Br.

584. *U. cyanea* R. Br.

Charnley River, lat. $16^{\circ} 17'$ (W.V.F.).

Flowers pale-blue or purplish.

Associated with *U. charnleyensis* (W.V.F.).

ACANTHACEÆ.

585. *Ebermaiera glauca* Nees.

May, Meda, Lennard, Barker, Fitzroy, Isdell, Hann, Charnley, Calder and Denham Rivers (W.V.F.).

Leaves often ovate; flowers purplish streaked with yellow. In damp sandy soil.

586. *Hygrophila salicifolia* Nees.

North-West Coast (A. Cunn.); Meda, May, Lennard, Fitzroy, Isdell, Charnley and Calder Rivers (W.V.F.).

In muddy spots.

587. *Justicia diffusa* Willd.

Wingrah Pass, Napier Range; Bold Bluff (W.V.F.).

Corolla pale, spotted with purple. In crevices of rocks.

The specimens belong to the variety *Vahlia Clarke* (J. Vahlia Roth.).

588. *Hypoestes floribunda* R. Br., var. *paniculata* Benth.

Cape Upstart (Bynoe); Lennard River and Wingrah Pass, Napier Range (W.V.F.).

Among limestone rocks.

589. *Nelsonia campestris* R. Br.

Beagle Bay (Alex. Forrest); Native Well; May, Meda, Lennard, Barker, Fitzroy and Isdell Rivers (W.V.F.).

Prostrate or stems slightly ascending, often covering 2ft. of ground; flowers white. In dry sandy spots.

590. *Dicliptera glabra* Dene.

A small herb with an inflated calyx and white corolla.

MYOPORACEÆ.

591. *Pityrodiu obliqua* W.V.F., n. sp.

An erect shrub, the branches white with a dense wool which often becomes yellowish upwards; leaves opposite, conspicuously petiolate, ovate-lanceolate to oblong-rounded at

the apices, more or less oblique and cordate, or rounded at the base, flat, thin, crenulated, tomentose green and rugose above, hoary-tomentose beneath, the venation evident; inflorescence cymose in the upper axils, woolly-tomentose, rarely exceeding the leaves, and forming a narrow leafy panicle; bracts linear; calyx divided almost or quite to the base into linear obtuse one-nerved lobes; corolla-tube broad, about as long as the calyx, the lowest lobe broader and slightly longer than the others, the whole tomentose; anthers slightly exerted, with small appendages to both cells; ovary densely tomentose for two-thirds of its length, then glabrous to the base; ovules attached near the top with short funicles; style slender, tomentose to shortly above the base, then glabrous; nut ovoid-globular, 2-3 of the carpels usually abortive.

Dillen's Springs (W.V.F.).

Height 2-4ft. Leaves 2-2½ in. long, the petioles ½-¾ in. Primary peduncles ½ in. or less, the secondary and pedicels less. Bracts 2 lines or less. Calyx 3½ lines long. Corolla 4½ lines long, the lobes 1 line long and broad, pink with purple streaks in the throat. Nut 1 line long, black. In the clefts of quartzite and sandstone.

Affinity to *P. paniculata* F. v M.

592. *Eremophila bignoniaeflora* F. v M.

Yeeda and Fitzroy Rivers (W.V.F.).

Shrubby or arborescent, from 10-20ft. high; trunk to 5ft.; diameter 6in.; bark grey and often slightly rough; timber pale-yellow, not very hard and with a sandalwood odour; flowers white spotted with purple. Among ironstone gravel and sands. A "Sandalwood."

593. *E. Willsii* F. v M.

A bushy shrub of 1-3ft. high; flowers violet.

RUBIALES.

RUBIACEÆ.

594. *Sarcocephalus cordatus* Miquel.

Glenelg River (J. Martin); May, Meda, Lennard, Barker, Yeeda, Fitzroy, Richenda, Traine, Hann, Adcock, Isdell, Charnley, Calder, Ord, Denham and King Rivers; Bell, MacNamara, Harris and Synnott Creeks; Dillen's Springs (W.V.F.).

A shady tree of 40-50ft.; trunk 25ft.; diameter 1-1½ft.; bark dark-grey, smooth to rather rough; timber pale-yellow or brownish, straight-grained and bitter tasting. "Leichhardt Pine." In sandy loams on the banks of streams and springs.

595. *Dentella repens* Forster.
Yale and Sherlock Rivers (J. Forrest); May, Lennard, Fitzroy, Ord, Denham and King Rivers (W.V.F.).
Prostrate, and forming patches of several inches across in wet black soil or spreading over rocks to 1-2ft. in diameter; flowers white to pink, the petals most frequently not toothed; style lobes rather short.
596. *Oldenlandia (Heydyotis) tillaeacea*.
Isdell River (W.V.F.).
In damp spots.
597. *O. trachymenoides* F. v M.
Roebuck Bay (J. W. O. Tepper); near Derby (W.V.F.).
In sandy localities.
598. *O. scleranthoides* F. v M.
Meda, Lennard and Isdell Rivers (W.V.F.).
Flowers white. In damp soil.
599. *Gardenia edulis* F. v M.
Ord, Denham and King Rivers; Dillen's Springs (W.V.F.).
A tree of 25ft.; trunk to 10ft.; diameter 8in.; bark greyish, smooth or slightly rugose; timber pale-yellow and not very hard; leaves 1-1 $\frac{3}{4}$ in. long; pedicels to 3 lines long; flowers white, sweetly scented, the tube about $\frac{1}{2}$ in. long; fruits almost 2in. diameter. In sandy loam.
600. *G. pyriformis* A. Cunn.
York Sound (A. Cunn.); Dillen's Springs; Goose Hill; Ord, Denham and King Rivers (W.V.F.).
A tree of 30-40ft.; trunk to 20ft.; diameter 9in.; bark greyish or brownish, rough or nearly smooth; timber pale-coloured; moderately hard and rather close-grained; flowers white, sweetly scented; fruits sometimes above 2in. long. In sandy loam.
601. *G. megasperma* F. v M.
Cambridge Gulf; Vansittart Bay (A. Cunn.); near Wyndham (W.V.F.).
Tree, 15-30ft.; trunk to 10ft.; diameter 1ft.; branchlets stout, the shoots and buds copiously viscid; bark grey, slightly rugose; timber pale, very brittle; leaves often tapering into the petioles, shining on both pages, to 8in. long by 5in. broad; fruits prominently 5-6 angled. Among quartzite rocks.
602. *G. resinosa* F. v M.
Dillen's Springs (W.V.F.).
A tree to 25ft.; trunk to 5ft.; diameter 6in.; bark grey and rather smooth; timber pale, not very hard. In sandy loam.

603. *G. Keartlandi* Tate.
Fitzroy River (Calvert's Expedition); Isdell, Hann Rivers;
Sunday Island (W.V.F.).
Tree of 15-20ft.; trunk to 10ft.; diameter 8in.; bark grey,
roughish; timber pale-coloured, rather hard. In sandy soil.
604. *G. Pantoni* F. v M.
Roebuck Bay (J. W. O. Tepper); Broome (W.V.F.).
A tree 20-30ft.; trunk to 12ft.; diameter 9in.; bark greyish to
brownish, rough to almost smooth; timber pale, and moder-
ately hard. In sandy loam.
605. *Randia densiflora* Benth.
Near junction of Hann and Barnett Rivers, Edkin's Range
(W.V.F.).
A diffuse shrub 10-15ft. in height; fruits scarlet, globular, 3-4
lines diameter. In sandy soil.
606. *Timonius Rumphii* DC.
Careening Bay (A. Cunn.); Fitzroy, Isdell, Charnley and
Calder Rivers; Endilla Springs; Grant Range; Sunday
Island (W.V.F.).
A tree of 50ft.; trunk 25ft.; diameter 1-1½ft.; bark white or
greyish, smooth or somewhat rough; timber pale-coloured
and not very hard; flowers white, dioecious. In moist sandy
soil.
607. *Ixora tomentosa* Roxb.
A shrub of 6ft. to a tree of 25ft.; apparently deciduous; trunk
not exceeding 6ft.; diameter 6-7in.; bark grey, somewhat
rugose; timber pale-coloured and rather soft.
608. *Canthium attenuatum* R. Br.
Brunswick Bay (A. Cunn.); Isdell, Charnley, Calder, Denham
and King Rivers; Dillen's Springs (W.V.F.).
A shrub to a tree of 30ft.; trunk about 10ft.; diameter 9in.;
branches pendulous; bark dark-coloured, rough; timber
yellowish and close-grained; flowers numerous, white,
sweetly scented; fruits greenish-black, wrinkled, didymous.
In stony soil, most frequently on low rises.
609. *Morinda citrifolia* L.
Sunday Island (W.V.F.).
A tree to 25ft.; trunk 6-10ft.; diameter 9in.; bark grey, smooth;
timber pale-coloured and not very hard; flowers and fruits
white. In wet black or sandy loam.
610. *Spermacoce pogostoma* Benth.
Roebuck Bay (J. W. O. Tepper); near Derby (W.V.F.).
Flowers bluish. In sandy soil.

611. *S. laevigata* Benth.
Near Derby (W.V.F.).
Flowers bluish-purple. In sandy loam.
Var. hispida Benth.
Goody Goody, nine miles from Derby (W.V.F.).
Flowers bluish-purple. In sandy soil.
612. *S. auriculata* F. v. M.
Isdell, Charnley and Calder Rivers; Swan Point (W.V.F.).
Flowers purple to white. In sandy loams.
613. *S. brachystoma* R. Br.
Lennard, Isdell, Charnley and Calder Rivers (W.V.F.).
Flowers white. In sandy soils.

CUCURBITALES.

CUCURBITACEÆ.

614. *Luffa graveolens* Roxb.
Stems twining many yards; flowers yellow; fruits striped white and green, ultimately reddish.
615. *Cucumis trigonus* Roxb.
Stems twining many feet; flowers yellow; fruits white when ripe.
616. *Mukia scabrella* Arnott.
Twining for many feet; leaves usually hastate.
617. *Bryonia laciniosa* L.
Wingrah Pass, Napier Range (W.V.F.).
Fruits purple when ripe and of a nauseous taste.
618. *Melothria Muelleri* Benth.
King and Denham Rivers (W.V.F.).
In sandy loams.

CAMPANULATÆ.

GOODENIACEÆ.

631. *Velleia panduriformis* R. Cunn.
Stems several together, erect or ascending from a thickened woolly stock, 3-5ft. high; radical leaves 4-6in. long, broadly obovate, deeply toothed, stem-leaves or bracts broadly ovate or suborbicular, toothed, to 3in. diameter; calyx about $\frac{1}{2}$ in. long; sepals free almost to the base, the upper one broadly ovate, much longer than the others and prominently toothed, the others with ciliate entire margins all acute, green and glabrous without, shortly hirsute within; corolla dark-

yellow, nearly lin. long, lower lobes narrowly winged, the upper ones shortly on the outer edge, the inner edge auriculated and almost completely enclosing the indusium there and in the throat slightly hirsute, otherwise glabrous, the saccate protuberance at the base short and thick; style stout, glabrous in the lower half, the upper half invested with fine hairs; indusium finely hirsute on both back and front, the margins ciliate.

632. *Goodenia* linifolia W.V.F., n. sp.

Stock woody, with numerous erect paniculately-branched stems which are always glandular and vary from glabrous to greyish-tomentose; leaves linear, entire, with involute margins so as to appear almost terete, without different basal leaves; peduncles in the upper axils, 1-flowered; ebracteate, orbiculate beneath the flowers; calyx very glandular-hirsute, the lobes lanceolate, longer than the tube; corolla glandular-hirsute without, the lobes conspicuously winged, the two upper ones deeply separated and prominently auriculate; style and indusium hirsute, the latter ciliate; capsule slightly viscid, ovoid, perfecting few seeds (4-6), the dissepiment short, often almost obsolete; seeds large, compressed brown, granulate, with broad yellowish membranous margins.

Near Derby; Inglis' Gap, King Leopold Ranges; Lennard, Isdell, Barnett Rivers (W.V.F.).

Height 9-18in. Leaves 1-2½in. long. Peduncles mostly ½-¾in. Corolla not exceeding ½in. long, yellow. Capsule under 3 lines long. In moist sandy soil.

Independently of other characters the foliage distinguishes this plant from other ebracteate species.

633. *G. propinqua* W.V.F., n. sp.

An erect annual, more or less invested with white usually spreading slightly glandular hairs, radical leaves rosulate, broadly obovate, entire or slightly toothed, with white-woolly axils; stem-leaves few, linear, entire, longer than the radical ones, the floral leaves reduced to bracts; flowers small, in a loose raceme on much-branched panicle; pedicels filiform, bracteolate about half way up; calyx narrow, the lobes lanceolate, much shorter than the tube; corolla pubescent without, the upper lobes deeply divided, broadly winged on one side, slightly so on the other, lower lobes equally winged; ovary bilocular; ovules numerous, the dissepiment reaching almost to the summit; style and indusium scantily hirsute, the latter ciliate; capsule thin, narrow; seeds very small, orbicular, compressed, quite smooth, with minute membranous margins, often almost obsolete.

Inglis' Gap, King Leopold Ranges; base of Bold Bluff, Upper Isdell River (W.V.F.).

Height 1ft. or less. Leaves, radical, $\frac{1}{2}$ in. or less long; stem $\frac{1}{2}$ -lin. Pedicels $\frac{1}{2}$ - $\frac{3}{4}$ in. Calyx almost $1\frac{1}{2}$ line long. Corolla $4\frac{1}{2}$ -5 lines long, upper lobes yellow to reddish-purple, lower yellow. Style and indusium reddish-purple. Capsules 2 lines long. Seeds shining-brown. In wet grassy spots.

Affinity to *G. bicolor* F. v M.

634. *G. scaevolina* F. v M.

Isdell and Lennard Rivers (W.V.F.).

Stems many, ascending, 2-3ft. high; flowers pale-blue. Sandy soil.

635. *G. lamprosperma* F. v M.

May, Meda, Lennard Rivers (W.V.F.).

Erect, often above 2ft. high, with numerous tufts of linear-lanceolate woolly-axilled leaves on the stems, branches and inflorescence. In damp sandy soil.

636. *G. sepalosa* F. v M.

Leaves often entire or scantily toothed.

Forms of this species occasionally merge towards *G. auriculata* Benth.

637. *G. coronopifolia* R. Br.

Cambridge Gulf (A. Cunn.) May, Meda, Lennard, Fitzroy, Isdell, Ord, and Denham Rivers (W.V.F.), Dillen's Springs (J. P. Rogers).

In moist grassy spots.

638. *G. paniculata* Smith.

Base of Bold Bluff (W.V.F.).

In wet grassy localities.

639. *Calogyne Heppleana* W.V.F., n. sp.

A procumbent or shortly ascending hispid or glandular pubescent annual; leaves shortly but distinctly petiolate, broadly obovate, entire or more often irregularly lobed or toothed, the floral ones similar but much reduced, the glandular pubescent pedicels much exceeding them; calyx-lobes narrow-lanceolate, obtuse, hardly as long as the tube; corolla glandular-hispid, the tube constricted above the ovary: upper lobes very deeply divided, unequally winged, each with a prominent reflexed auricle, the lower lobes equally winged; anthers conspicuously mucronate; ovary with few ovules in each cell, the dissepiment reaching to $\frac{1}{3}$ of its length; style hirsute, divided to above the middle into three

branches, the lateral ones slightly longer, much more slender than the central one; capsule narrow-ovate, usually ripening not more than 1-2 seeds in each cell; seeds narrow-ovate, flat, with thick edges, membrane-margined and densely muricate.

Isdell River, near Grace's Knob (W.V.F.).

Stems not exceeding 1ft. in length; leaves to above $1\frac{1}{2}$ in. long but usually less; calyx barely three lines long; corolla slightly above $\frac{1}{2}$ in. long, yellow streaked with reddish-purple; capsule nearly three lines long. Seeds brown.

In grassy spots. Named in honour of Mr. W. Hepple Brown, who was an officer of the Kimberley Survey Expedition, 1905.

Affinity to *C. pilosa* R. Br.

640. *Scaevola revoluta* R. Br.

Near Trainee River; junction of Hann and Fitzroy Rivers (W.V.F.).

A spreading shrub, 3ft. high; leaves often above lin. long, corolla over $\frac{1}{2}$ in. long, blue. In sandy loam.

641. *S. scabrida* W.V.F., n. sp.

Shrubby, with numerous erect much-branched stems from a thick stock, which along with the leaves are almost spinulose scabrous and densely glandular; leaves broadly sessile, oblanceolate to linear, obtuse, entire, with recurved margins; flowers in short dense terminal spikes; the lanceolate obtuse bracts almost as long as the flower; bracteoles similar, almost half as long as the flower, both bracts and bracteoles with dense tufts of white hairs in their axils; calyx-lobes exceedingly short and broad; corolla glandular without, lower half glabrous, upper portion spinulose scabrid, with the throat and tube densely invested with slightly reflexed white bristly hairs; anthers inappendiculate; ovary one-celled, two-ovulate; style and indusium scantily hairy, the latter slightly ciliate; fruit oblong, glabrous, tuberculate, one-seeded.

Summits of Mounts Herbert, Broome, and Rason; Packhouse and Isdell Ranges; Sunday Island (W.V.F.).

Height to 3ft.; leaves mostly $\frac{1}{2}$ - $1\frac{1}{2}$ in. long. Corolla 4-5 lines long. White. Fruit about $1\frac{3}{4}$ lines long.

Among and in the crevices of sandstone and quartzite rocks.

Affinity to *S. macrostachya* Benth.

642. *S. stenostachya* W.V.F., n. sp.

A densely-branched depressed shrub, more or less hirsute; leaves broadly sessile, oblong to oblanceolate, obtuse, with recurved entire margins; flowers sessile, in long terminal

slender spikes; bracts ovate, acuminate, conspicuously ciliate, at least half as long as the flowers; bracteoles narrower but in other respects similar; calyx-lobes sinuate or almost obsolete; corolla densely pubescent without, the throat and tube within closely white bristly hairy; ovary one-celled, two-ovulate; style and indusium glabrous, the latter scantily ciliate; fruit oblong-ovate, tuberculate, one-seeded.

Near Isdell River, between Isdell Range and Grace's Knob (W.V.F.).

Plant 1ft. high, and at least once and a half as much across.

Leaves 4-6 lines long. Corolla three lines long, white. Fruit about $1\frac{1}{2}$ lines long.

Grows on grassy black soil plains.

Affinity to *S. scabrida* (W.V.F.).

643. *S. decipiens* W.V.F., n. sp.

A much-branched diffuse hispid perennial; leaves obovate to cuneate, conspicuously toothed, sessile or very shortly petiolate, the floral ones similar but smaller; flowers sessile, in short leafy spikes; bracteoles linear-lanceolate, at least one-third as long as the corolla; calyx-lobes small, broadly ovate; corolla pubescent without, within up to near the base of the lobes densely bristly hairy; anthers inappendiculate; ovary two-celled; style hairy; indusium with a dense tuft of long purplish hairs, on the base at the back longer than the indusium itself, the margins densely white ciliate; fruit ovoid-oblong, shortly hirsute and tuberculate.

Port Hedland (W.V.F.).

Height 4-6in. Leaves $\frac{1}{4}$ - $\frac{1}{2}$ in. rarely $\frac{3}{4}$ in. long. Corolla about five lines long, whitish streaked with purple. Fruit two lines long. In sandy soil.

Affinity to *S. humilis* R. Br.

644. *Dampiera conospermoides* W.V.F., n. sp.

A spreading shrub, with stems, branches, underside of leaves and inflorescence densely white-stellate-tomentose; branches terete; leaves oblong to broad-lanceolate, obtuse tapering into the petioles, firm, entire, or the margins bordered by a few distant teeth, flat, at first stellate-tomentose above, becoming glabrous with age; flowers almost or quite sessile, 2-3 together, occasionally solitary, subtended by small ovate, obtuse bracts, on the long slender branches of a somewhat pyramidal panicle; bracteoles minute; calyx densely invested with white branched hairs, the lobes small and linear; corolla densely white tomentose without, the lower lobes linear-lanceolate, obtuse, pale-coloured, the upper ones ovate and shorter, the auricles comparatively large and of

a dark purple; ovary one-celled, with one erect oblong ovule laterally attached adjacent to the base; fruit ovate, smooth. Dillen's Springs (W.V.F.).

Height 1-2ft. Leaves $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long. Calyx one line or less long. Corolla one line or less in length. Anthers yellow. Style and stigma purple. Fruit 1 $\frac{1}{4}$ -1 $\frac{1}{2}$ line long. Among quartzite rocks.

Affinity to *D. Linschotenii* F. v M.

645. *Lobelia dioica* R. Br.

Isdell River, opposite Isdell Range; base of Artesian Range (W.V.F.).

Stems simple, erect or ascending; flowers blue. In moist black soil.

CANDOLLEACEÆ (STYLIDIA (ELE)).

619. *Styloidium Floodii* F. v M.

Fortesue River (J. Forrest); Lennard and Isdell Rivers (W.V.F.).

In moist soil.

620. *S. alsinoides* R. Br.

Fortesue River (J. Forrest); Lennard, Barker, Richenda, Isdell, Ord, Denham, King Rivers; Mt. Eliza, near Lennard River. (W.V.F.).

Flowers pink. In damp soil.

621. *S. cordifolium* W.V.F., n. sp.

A flaccid ascending or straggling much-branched annual, glabrous or the inflorescence slightly glandular; the branches angled or winged; leaves cauline, alternate, broadly ovate or almost orbicular, sessile, cordate, or almost amplexicaul, mucronate, entire, becoming upwards small lanceolate acute bracts; flowers solitary, axillary and terminal on the branches, each branch forming a long slender spike; calyx-lobes linear-lanceolate, obtuse, the two lower ones connate to above the middle; corolla not much exceeding the calyx-lobes, the segments connate in pairs to above the middle; no appendages to the throat or labellum; capsule linear-fusiform, not beaked.

Isdell and King Rivers; Messmate Creek; between Isdell Range and Mt. Bartlett (W.V.F.).

Plant 1ft. or more in length. Leaves 3-4 lines long. Calyx 4-5 lines. Lobes 1-1 $\frac{1}{2}$ line long. Corolla red and pink with a darker blotch at the base of the segments. Capsule at least $\frac{1}{2}$ in. long.

In damp soil, occasionally associated with *S. alsinoides* R. Br. The foliage and corolla readily distinguishes this species from other members of the series *Tenellae*, section *Nitrangium*. Baron von Mueller received specimens from Mr. M. Holtze, of Port Darwin, during 1885 and 1890, and referred them to *S. alsinoides* R. Br. var. *cordifolium*.

Affinity to *S. alsinoides* R. Br.

622. *S. rubriscapum* W.V.F., n. sp.

An annual, glabrous excepting the flowers; stems sometimes shortly proliferous; leaves along with lower portion of the stem scattered, the upper ones collected in a dense whorl-like tuft, linear, ending in rather long acute points; scapes sub-terminal, filiform, red, with 1-2 awl-shaped bracts above the middle, one-flowered; calyx divided to the middle into five ovate-lanceolate, obtuse lobes, almost or quite glabrous; corolla glandular hairy, the tube rather short; lobes broad, entire; appendages small or none to the throat and absent from the small labellum; upper portion of the column invested with yellow glandular hairs; capsule glabrous, obovate, many-seeded.

Calder River; Nessmate Creek in the Packhorse Range (W.V.F.).

Stems 1-2in. long. Leaves $\frac{1}{4}$ - $\frac{1}{2}$ in. long. Scapes 2-3in. high. Calyx 2 lines long. Corolla about 3 lines long, yellow without, red within. Capsule about 2 lines long. In moist sandy soil.

Affinity to *S. Floodii* F. v. M.

623. *S. leptorrhiza* F. v. M.

Prince Regent's River (A. Cunn.); Walcott Inlet; Calder, Charnley and Isdell Rivers (W.V.F.).

Flowers red. In damp spots.

624. *S. muscicola* F. v. M.

Sprigg River (W.V.F.).

Flowers pink. On wet cliffs.

625. *S. pachyrrhizum* F. v. M.

Isdell, Charnley, Calder and Sprigg Rivers (W.V.F.).

Total height of plant to $1\frac{1}{2}$ ft.; leaves spathulate, 2-3in. long, tapering into the petioles; corolla-lobes unequal, yellow without, red within. In moist soil.

626. *S. lobuliflorum* F. v. M.

Isdell, Hann, Adcock and Charnley Rivers (W.V.F.).

Flowers pink. In wet sandy spots.

627. *S. rotundifolium* R. Br.

Isdell River, near Mt. Bartlett (W.V.F.).

Leaves sometimes spathulate, to $\frac{3}{4}$ in. long, including the petioles; flowers pink with red blotches at the base of the segments; capsule 1-1 $\frac{1}{2}$ in. long. In rocky spots.

628. *S. irriguum* W.V.F., n. sp.

A slender erect annual, bearing a slight glandular pubescence on the flowers, otherwise glabrous; leaves radical, closely approximated but not rosulate, spathulate, tapering into a long petiole; scapes filiform, solitary or 2-3 from the one stock, the flower at first solitary and shortly pediculate above a bract; ultimately a branch or bracteolate pedicel grows out from the axil of the bract and leaves usually a second flower; occasionally the scape bears 3-5 sessile flowers; calyx-lobes connate into two almost orbicular entire lips; corolla exceeding the calyx, the two larger lobes somewhat connate, without appendages; capsule very slender.

Messmate Creek, in the Packhorse Range; Isdell and Charnley Rivers (W.V.F.).

Total height of plant 2-3 in. Leaves, laminae, 2-3 lines; petioles $\frac{1}{2}$ - $\frac{3}{4}$ in. long. Calyx-lobes $\frac{3}{4}$ line long. Corolla pale-yellow or white, scarcely 2 lines long. Capsule to nearly $\frac{3}{4}$ -in. long. In moist sandy soil.

Affinity to *S. rotundifolium* R. Br.

629. *S. fissilobum* F. v M.

Hann, Adcock, Barnett and Isdell Rivers (W.V.F.).

Flowers red. In wet soil.

630. *S. claytonioides* W.V.F., n. sp.

An annual, glabrous excepting the calyx-lobes, the whole plant of a reddish hue; stems with alternate subulate almost bract-like leaves, and surmounted by a tuft of terete obtuse, succulent leaves; scapes erect, filiform, from few to many together, bracteate, each bearing a solitary sessile flower; calyx-tube long and slender, when in flower appearing as a prolongation of the scape and scarcely distinguishable from it, the lobes connate into broadly spathulate or almost orbicular entire glandular-ciliate lips; corolla-lobes equal, entire, about as long as the tube; no appendages to the throat or to the small concave obtuse labellum; column broad and flat; anthers comparatively large; capsule narrow-linear, slightly beaked, the valves on dehiscing surmounted by the persistent calyx-lobes.

Between Isdell Range and Mt. Bartlett (W.V.F.).

Stems $\frac{1}{2}$ -1 $\frac{1}{2}$ in. high. Leaves under 1 in. long, sometimes green. Scapes 3-5 in. high. Calyx-lobes scarcely 1 line long. Corolla 3 lines long, bright-red. Column to $\frac{1}{2}$ in. long. Capsule 1-1 $\frac{1}{2}$ in. long.

In moist grassy spots. This species differs from all other simple flowered ones of the Series Corymbulosae, in foliage, calyx and capsule.

COMPOSITÆ.

646. *Pleurocarpaea denticulata* Benth.

Kimberley districts (Dr. House).

Specimens unsatisfactory.

647. *Vernonia cinerea* Lessing.

Roebuck Bay (J. W. O. Tepper), Lennard, Fitzroy, Hann, and Isdell Rivers (W.V.F.).

Erect, few-branched, 1-2ft.; florets pale or purple. Sandy loam.

648. *Olearia aspera* W.V.F., n. sp.

Stems several, few to many branched, erect or ascending from a thick woody stock and along with the foliage rough from numerous short septate asperities; leaves hardly spreading, frequently appressed, linear or a few of the lower ones oblanceolate, usually mucronate, sessile, rigid, margins entire, revolute, the midrib conspicuous, gradually reduced upwards until they become small and bract-like at the base of the involucre; flower-buds terminating the branches and not distinctly pedunculate; involucre hemispherical, the bracts narrowly lanceolate, acute, ciliate, the inner ones gradually shorter; ray-florets about 15; disk florets numerous and but slightly exceeding the involucre; style-appendages short, stout and obtuse; achenes silky-pubescent, those of the ray broad, much compressed, with thickened margins and usually a prominent rib on the inner face, those of the disk narrow terete, shortly stalked and apparently abortive; pappus-bristles of the ray-florets very numerous with a few shorter outer ones, of the disk florets similar but fewer, all scabrous.

Packhorse and Edkins Ranges; between Isdell and Precipice Ranges; Mounts Brennan and Rason, Isdell River; Dillen's Springs (W.V.F.).

Stems to 2ft. in height but oftener much less. Leaves $\frac{1}{2}$ - $\frac{3}{4}$ in. long. Involucres at least $\frac{1}{2}$ in. diam. Ray florets blue or purplish.

In sandy soil. The species very closely approaches *Vittadinia*. Affinity to *O. ciliata* F. v M.

649. *Vittadinia brachycomoides* F. v M.

Summit of Mount Broome (W.V.F.).

In sandy soil.

650. *V. scabra* DC.

Summit of Mount Rason, Artesian and Edkins Ranges (W.V.F.).

A narrow-leaved form. In sandy soil.

651. *Blumea pungens* W.V.F., n. sp.

An erect rigidly-branched plant, the branches and foliage hirsute and very viscid; leaves rigid, lanceolate, pungent-pointed, broadly sessile, prominently veined beneath, the margins with distant pungent teeth; flower heads hemispherical, terminating bracteate peduncles and forming a large pyramidal panicle; involucre bracts numerous, linear, obtuse or subacute, glandular and often ciliate, the outer ones gradually shorter, numerous in several rows and frequently squarrose; outer filiform florets very numerous and longer than the style, the inner mostly few, five rarely four-lobed, with a 2-3 branched style; achenes terete, striate. silky-hairy.

Vicinity of the Barker River (W.V.F.).

Height 2-3ft. Leaves 1-2in. long. Flower-heads four lines long. Florets yellow. On granite hills.

Affinity, readily distinguished from other species by the foliage.

652. *B. Wightiana* DC.

Isdell River (W.V.F.).

An erect strongly scented plant of 2-3ft.; florets purple. In black and sandy loam.

Specimens of this plant were referred by Bentham in the Flora Australiensis to *B. lacera* DC., a species at present not found in Australia.

653. *B. integrifolia* DC.

Isdell, Ord, Denham. and King Rivers (W.V.F.).

Florets four-merous, yellow. Sandy loam.

654. *B. Cunninghamii* DC.

Carneing and Vansittart Bays (A. Cunn.) Ord and Isdell Rivers; Dillen's Springs (W.V.F.)

Florets purple. In sandy and stony spots.

655. *B. laciniata* DC.

Isdell, Lennard, Hann, and Denham Rivers (W.V.F.).

Erect, 2ft.; florets yellow. In sandy loam.

656. *B. prostrata* W.V.F., n. sp.

A perennial with a thick woody stock, the stems numerous, prostrate and often rooting at the nodes, along with the foliage and peduncles more or less pubescent and sometimes woolly in the leaf-axils; leaves ovate, obtuse, broadly sessile or semi-amplexicaul, margined with distant callous teeth;

flower-heads few, almost hemispherical on slender terminal peduncles; involucre bracts linear, acute, the outer series not numerous, ciliate; filiform florets longer than the styles, about equal in number to the disk florets; disk florets five-toothed. the style branches rather short; achenes scantily silky-hairy. compressed.

Isdell River (W.V.F.)

Stems to 3ft. long. Leaves under lin. long. Flower-heads 3-3½ lines long. Florets yellow. In moist sandy loam.

657. *Pluchea tetranthera* F. v M.

Diffuse and much branched. 2-3ft. high. glandular and glabrous or slightly tomentose; florets white or reddish purple. This species has the appearance of *Eremophila latifolia* F. v M.

Var. cinerea (W.V.F.), n. var.

Isdell River (W.V.F.).

A hoary-tomentose bushy shrub of 3ft. in height; involucre ovoid. viscid-tomentose; outer short bracts broadly ovate. the inner narrower and longer; florets purple. with few or no filiform ones. In sandy soil.

Var. tomentosa F. v M.

Cane, Fortescue, and Ashburton Rivers (J. & A. Forrest), Lennard and Isdell Rivers (W.V.F.).

Bushy, 2ft. high; florets reddish.

658. *P. odoratus* Benth.

Ord River (Alex. Forrest); near Derby, Goody Goody, Meda, and Lennard Rivers, Sunday Island (W.V.F.).

Of shrubby habit and much branched, reaching a height of 3ft.; florets reddish-purple.

659. *P. macrocephalus* Benth.

Roebuck Bay (J. W. O. Tepper) Nine Mile Range, from Wyndham; Ord River (W.V.F.).

A perennial of 2-3ft. in height; ray-florets pale-coloured. In sandy soil.

660. *P. adscendens* Benth.

Cygnets Bay (W.V.F.).

Florets white. On damp saline flats.

661. *Epaltes australis* Lessing.

Isdell, Barnett, and Charnley Rivers (W.V.F.).

A *Myriogyne*-like plant with greenish-yellow flowers.

662. *Sphaeranthus indicus* L.

King Sound district (Froggatt), Fitzroy, Lennard, Barker, Isdell, Adcock, Barnett, Hann, Charnley, and Calder Rivers; bases of Mounts House, Clifton, and Hamilton (W.V.F.).

Erect, strongly scented, 9-12in. high; florets purple. In damp spots. This includes the *G. hirtus* Willd. of the Flora Australiensis.

663. *S. africanus* L.

North-West Coast (A. Cunn.) Calder River and Walcott Inlet (W.V.F.).

In damp soil. Includes the *G. microcephalus* of the Flora Australiensis.

664. *Spilanthus grandiflorum* Turcz.

Isdell River (W.V.F.).

On grassy black soil plains.

665. *Pterocaulon sphacelatus* Benth. et Hook.

Erect, or scantily branched, 1-3ft. high; florets white to purple.

666. *P. verbascifolius* Benth. et Hook.

Glenelg River (J. Martin) Lennard River; near Inglis' Gap, King Leopold Ranges (W.V.F.).

Erect, 2ft.; florets purple. In sandy soil overlying granite rocks.

667. *P. glandulosus* Benth. et Hook.

Yule River (J. Forrest) Adcock River; bases of Mounts Herbert, House, and Clifton (W.V.F.).

Stems erect, about 2ft.; branching, several from the same stock; clusters of flower-heads sometimes 2in. long, always viscid; florets white. In sandy soil.

668. *P. globuliforus* W.V.F., n. sp.

A much spreading shrub, with the branches closely white-tomentose; leaves ovate, obtuse, of thin texture, margined with distant small teeth, green and finely tomentose above, densely white-tomentose beneath, each contracted into a short petiole and long decurrent in narrow entire wings; clusters of flower-heads globose, distant, leaf-opposed or axillary and closely sessile; bracts of the common receptacle short, linear to linear-spathulate, densely woolly-tomentose, those of the partial involucre linear to linear-lanceolate, acute, scarious, about twice as long as those of the receptacle; ray-florets 12-15; disk-florets solitary; style-lobes subulate; pappus bristles scabrous; achenes slightly compressed, finely silky-hairy.

Wingrah Pass, Napier Range (W.V.F.).

Height 2ft. Leaves mostly 1-1½in. long. Clusters of flower-heads 4-5 lines diameter. Florets white. Among limestone rocks.

Affinity to *P. sphacelatus* Benth. et Hook.

669. *Gnaphalium indicum* L.
King Sound (Froggatt), near Derby (W.V.F.).
In saline spots.
670. *Helichrysum apiculatum* DC.
A narrow-leaved form along the Isdell River, near Grace's Knob, and also near the Charnley River, North-West Australia.
671. *Eriochlamys knappii* F. v M.
Fortescue, Lyons, and Upper Ashburton Rivers (H. S. King);
Mount Magnet and Cue (W.V.F.); Cue (C. Andrews).
In ferruginous sandy loams.
672. *Siegesbeckia orientalis* L.
Lennard and Isdell Rivers (W.V.F.).
In sandy loams.
673. *Wedelia asperrima* Benth.
King Sound district (Froggatt), Lennard and Isdell Rivers
(W.V.F.).
Erect, 1-2ft.; florets yellow. In sandy loams.
674. *Bidens pilosus* L.
Meda, May, Lennard, Barker, Richenda, Fitzroy, Adcock, Hann,
Barnett, Isdell, Charnley, and Calder Rivers; Bell, Station,
Manning, and Synnot Creek (W.V.F.).
Often 4ft. high; ray-florets none. A pest in North-West Australia. Grows in good soil.
675. *B. bipinnatus* L.
Isdell River (W.V.F.).
Florets yellow. In sandy loam.
676. *Glossogyne filifolia* F. v M.
Near Inglis' Gap, King Leopold Ranges; Lennard River
(W.V.F.).
Erect, much-branched, 2-3ft. high; florets white. Among schistose rocks.

