

ART. I.—*Contributions to the Flora of Australia, No. 20.*<sup>1</sup>

BY

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(With Plates I.-II.)

[Read 13th March, 1913].

AMSINCKIA LYCOPSOIDES, Lehm. (Boraginaceae).

Near Benalla, Victoria, Hon. Mr. Little, M.L.C., 29/8/1912.

Not previously recorded as growing wild in Victoria. A native of California, but not yet sufficiently established to be considered naturalised.

ANTHOCERCIS MYOSOTIDEA, F. v. M. (Solanaceae).

Jeparit, Victoria, W. R. A. Baker, 14/10/1912.

BASSIA LANICUSPIS, F. v. M. (Chenopodiaceae).

Mildura, Victoria, H. B. Williamson, No. 1480, September, 1912.

This is a new record for Victoria, but previous specimens (Murray River, Wimmera, etc.) have been placed under *Bassia diacantha* var. *longispinea*. This variety was queried by Bentham, and can undoubtedly best be placed under *B. lanicuspis*, no special varietal designation then being necessary.

CARDAMINE HIRSUTA (C. parviflora), "Small-flowered Bitter Cress."  
(Cruciferae).

Mildura, Victoria, H. B. Williamson, 4/9/1912.

The form usual in Australia is glabrous, or rarely with a few whitish hairs at the base. This specimen is sparsely hairy on stem and leaves, with white, scattered, usually bifurcate, tri-radiate or even stellate hairs.

CELTIS PHILIPPINENSIS, Blanco. (*Zizyphus melastomoides*, Cunn.).  
(Urticaceae).

Tropical Australia, A. Cunningham, 1818-1821.

This plant was in the Herbarium under the name *Zizyphus melastomoides*, A. Cunn., but does not occur in Mueller's Census. In Benth. Fl. Aust. Vol. I, p. 412, and in the Index Kewensis, *Z. melastomoides*, A. Cunn., is given as a *Celtis* sp., but no definite, specific name is given.

The specimen agrees closely with the type specimen of *C. philippinensis*, and hence must be placed as a synonym to that species.

CYANOSTEGIA MICROPHYLLA, S. Le Moore. (Verbenaceae).

Spencer le Moore (Journal of Botany, vol. xli. 1903, page 100), states that this new species is identical with the Elder Exploring Expedition specimen marked by Mueller as *C. Turczaninowii*. Baron von Mueller under this name included 3 varieties. Variety *angustifolia* (*C. angustifolia*, Turcz.), var. *lanceolata* (*C. lanceolata*, Turcz.), and var. *dentata* (*C. microphylla*, S. le Moore). All three species appear to be distinct.

The full list of localities for *C. microphylla* will therefore be:—Coolgardie district, L. C. Webster, 1897 and 1902, Menzies, Diels, 1903; Gnarlbin, Helms, Elder Exploring Expedition, 1891; Southern Cross and Parker's Range, E. Merrill, 1890; Yilgarn, near Mt. Moore, King and Lefroy, 1899; between Victoria Springs, Ularling, and Mt. Jackson, Young, October, 1873.

All are Western Australian localities.

CYTISUS LINIFOLIUS, Lam. "Flax Broom." (Leguminosae).

Talbot, Victoria, G. Porter, 1885; Pakenham and Nar Nar Goon, Victoria, J. W. Audas, November, 1912.

A native of the Mediterranean region. This plant has now evidently established itself in various localities, and may be classed as a naturalised alien in this State. It is often grown in gardens.

DESMAZERIA ACUTIFLORA (Nees.), Dur. and Schinz. (BRIZOPYRUM ACUTIFLORUM, Nees; ERAGROSTIS ACUTIFLORA). (Gramineae).

Identified by Professor Hitchcock.

Castlemaine, Victoria, J. P. McLennan, May, 1911; Bendigo, Victoria, J. P. McLennan, November, 1911; Veterinary School Grounds, Melbourne, October, 1912, L. C. Bartels; Raglan, Victoria, H. B. Williamson, December, 1912.

This grass is a native of South Africa, and appears to have naturalised itself as an alien in Victoria. It appears to grow in dry situations, but is apparently too stiff and harsh to be of much value as a grazing plant. It has no injurious properties so far as is known.

DIURIS PUNCTATA, Sm., var. ALBA. (Orchidaceae).

Sydenham, Victoria, P. R. H. St. John, October, 1912.

This is given in Bentham's Flora as *D. alba*, the chief distinction being the white flowers with smaller parts. The flowers may vary from pure or nearly pure white to white with purple spots or lines, or diffusely purple nearly all over, and some of the most purple flowers were also the smallest. The plant is evidently a variety only of *D. punctata*.

DODONAEA TRIQUETRA, Wendl. "Large-leaved Hopbush."  
(Sapindaceae).

Heathcote, Victoria, W. J. Stephens, December, 1912.

Recorded in Mueller's "Key to the System of Victorian Plants." as from the East only.

EUCALYPTUS PERRINIANA, author ? (Myrtaceae).

The first published description of this plant is given by Rodway, in the Papers and Proceedings of the Royal Society of Tasmania, p. 181, 1893. Rodway gives the name as *E. Perriniana*, F.v.M., and refers to the plant as being described at the meeting of the Association for the Advancement of Science, Melbourne, 1890. No such name is printed in the Proceedings, and in Mr. Perrin's paper on Tasmanian Eucalypts, a reference merely occurs to a specimen No. 2, which he thought would prove to be a new species. The species appears to be not merely Tasmanian, but also to grow in Victoria and New South Wales—(Dargo High Plains, Victoria, Dr. Heber Green, January, 1913; Tingiringi Mountain and Snowy Mountains, New South Wales, W. Bauerlen). According to the Congress rules, the authority for the name would be Rodway, who first published the name and description, although he assigned the name to Baron von Mueller, apparently being under the impression that a name and description had been published in 1890.

EUCALYPTUS SMITHII, R. T. Baker. "Gully Gum." (Myrtaceae).

Gippsland, Victoria, Mr. Howitt, March, 1879.

Previously placed as a variety of *E. Stuartiana*, F.v.M., near to *E. rostrata*. The species will be an addition to the Flora of Victoria.

## GALIUM GAUDICHAUDI, D.C. (Rubiaceae).

Bentham (Flora Aust., vol. iii. p. 446) gives this species as valid, but suggests that it may not really be distinct from the New Zealand *G. umbrosum*. Baron von Mueller (Fragm. vol. ix. p. 188) accepted this suggestion. There seems, however, as good reason to uphold *G. Gaudichaudi* as in the case of any other species of Galium, provided that the variety *muriculatum* is transferred to *G. umbrosum*, with which it closely agrees, except as regards the surface of the fruit. *G. Gaudichaudi* then includes a series of forms with narrow leaves, with recurved margins, showing an increasing tendency to develop a rough hispid character. Both *G. Gaudichaudi* and *G. umbrosum* may therefore be regarded as valid Victorian species of very distinct habit and facies, but closely related as regards flower and fruit. Both species are natives of Tasmania, Victoria, South Australia and New South Wales, and *G. Gaudichaudi* appears to be the commoner of the two. *G. umbrosum* occurs in New Zealand, but not *G. Gaudichaudi*.

## GASTROLOBIUM LAYTONII, J. White. (Leguminosae).

In Proc. Roy. Soc. Vict., 23, 1910, p. 111, for "the under surfaces of the leaves covered with felt-like greyish hairs," read "leaves practically glabrous on both surfaces." The shape of the leaf varies from obtuse, or narrow oblong, to pointed cuneate on the same branch. Additional localities are Day Dawn, West Australia, J. A. McClellan, 20/9/1912. A scrap of the same species without definite locality or number also exists among J. Drummond's West Australian plants. It was included under *G. crassifolium*.

## GAUDINIA FRAGILIS, Beauv. (Gramineae).

Det. A. S. Hitchcock, Agrostologist to the Department of Agriculture, U.S. America.

Warrnambool, Victoria, H. Hauschildt, 1912.

A native of the Mediterranean region. An unrecorded introduced grass for Victoria, and may eventually become sufficiently established to be considered naturalised.

## GNAPHALOIDES ULIGINOSUM, A. Gray. (Compositae)

Mt. Alfred, near Walwa, Victoria, A. J. Ewart, November, 1912.

Only recorded in Baron von Mueller's Key from the North-West and South-West of Victoria.

## GOMPHRENA INVOLUCRATA, Ewart, n. sp. (Amarantaceae).

A stiff, erect, apparently annual herb, the rigid cylindrical stems softly hairy when young, more or less glabrous when older. Leaves opposite, flat linear lanceolate, acute, densely hairy beneath, more sparsely so on the upper surface, over an inch in length. Flowers in hemispherical heads about three-quarters inch diameter at the ends of the branches, surrounded by an involucre of 10 to 20 linear lanceolate leaves. Bracts and bracteoles, thin transparent scarious, keeled, ovate pointed, 7 mm. long. Perianth segments about 6 mm. long, linear obtuse, very woolly on the back below the middle. Anther tube longer than the ovary, the free portion flattened, the sterile lobes between the anthers slightly longer than them, and each divided into two short blunt lobes. Style filiform. Stigma bifid. One brown flattened slightly curved seed. Near Pine Creek, Northern Territory, J. H. Niemann, April, 1904. The specimen consists of the heads only with a small portion of the stem, but the plant is readily distinguished from *G. canescens*, R. Br., by the involucre, the broader bracts and bracteoles, the blunt perianth segments very woolly on the back, and the flat bilobed free segments of the staminal tube.

## HOVEA LONGIFOLIA, R. Br., var. ASPERA. (Leguminosae).

Victoria: Bogong Ranges and Mitta Mitta River, Dr. F. Mueller, January, 1854; Snowy River, Dr. F. Mueller, February, 1854; Munyang Mountains, Dr. F. Mueller, 1874; Grampians. Et. Eloy Dalton, Warburton, G. Weindorfer, 1904; Yarra Junction, P. R. H. St. John, 1910. New South Wales: Bunberry, near Molong, J. H. Maiden, August, 1897.

The roughness of the leaves is so pronounced as to justify the recognition of an additional variety of this species. Some specimens of it have been placed under the variety "*rosmarinifolia*." The variety "*aspera*," was first recognised by F. M. Reader in a manuscript name, apparently unpublished.

## INDIGOFERA AUSTRALIS, Willd. "Austral Indigo." (Leguminosae).

Healesville, Victoria, C. French, Junr., October, 1912.

A white flowered form.

## ISOETES DRUMMONDII, A. Braun. (Rhizospermae).

Pine Mountain, between Tintaldra and Dalwa, Upper Murray, Victoria, A. J. Ewart, November, 1912.

In pools on summit, in granite basins on bare rock.

LACTUCA SCARIOLA, L. "Prickly Lettuce." (Compositae).

Benalla, Victoria, W. B. Tiernan, January, 1913; Rutherglen, Victoria, G. H. Adcock, January, 1913.

A native of Europe and Central Asia, not previously recorded for Victoria as a naturalised alien. It is an annual or biennial weed of no economic value, and apt to be spread readily by its flat seed-like fruits, provided with a parachute mechanism of pappus hairs.

LIMOSELLA AQUATICA, L. (Scrophulariaceae).

This little cosmopolitan plant varies somewhat in different parts of the world. The Australian specimens usually have more or less linear leaves, as shown in Figure I. Occasionally, however, specimens occur with oblong or almost spatulate leaves (J. P. Eckert, Murtoa, Victoria, 1912), and this is the common form in Europe and Asia.

LINARIA PELISSERIANA, L. (Scrophulariaceae). "Pelisser's Toad Flax."

Guy's Forest and various localities along the Upper Murray, and Corryong and Cudgewa Valleys, Victoria. A. J. Ewart, 6/11/1912.

LINARIA VULGARIS, L. Common Toad Flax.

Nullawarre (Allansford), J. Carter, March, 1913. A garden plant previously recorded as a naturalised alien in the East of Victoria, and now also recorded from the West.

MICROCALA FILIFORMIS, H. and L. "Slender Microcala." (Gentianaceae).

Linton, Victoria, H. B. Williamson, No. 1484, November, 1912.

MICROCALA QUADRANGULARIS, Griseb. "Quadrangle Microcala."

Agricultural High School, Ballarat, E. J. Semmens, November, 1912; Wangaratta, Victoria, E. E. Pescott, September, 1901.

This interesting genus is small both in size and species. *M. filiformis* is native to the Mediterranean area extending from North Germany to Asia, while *M. quadrangularis* is native to South America, and also occurs in California, possibly as an introduction. Externally the plant suggests the native *Sebaea ovata*, and the Wangaratta specimen from Walter's collection was placed under that species as a small form of *S. ovata*. The former has, however, a cup-like quadrangular calyx, while the latter has the calyx divided to the base.

Probably both *M. filiformis* and *M. quadrangularis*, whose seeds are very minute, have been introduced with imported seeds, and have been growing in Victoria for some time, but overlooked on account of their small size, or confused with *Sebaea ovata*.

MICROMYRTUS MICROPHYLLA, Benth. (Myrtaceae).

Pine Mountain, between Tintaldra and Walwa, Victoria, A. J. Ewart, 5/11/1912.

MODOLIA MULTIFIDA, Moench. "Red-flowered Creeping Mallow."  
(Malvaceae)

Spreading along the Upper Murray above Tholgoalong, Victoria, A. J. Ewart, November, 1912.

MYAGRUM PERFOLIATUM, L. "Musk Weed." (Cruciferae).

Wimmera Shire, Victoria, J. R. Tovey, January, 1913.

A native of Europe and West Asia, naturalised in Victoria for some years, but hitherto overlooked. Probably first appeared between 1900 and 1904, and "is now spread north over an area of about ten miles from east to west, and five miles north to south, lying twenty miles north of Horsham, and west of Yarrambiack Creek." (Dr. S. Cameron).

An allied plant *Neslia* (*Myagrum*) *paniculatum* is a troublesome weed in Canada. The present species interferes with harvesting by blocking the reaper, and it has been proclaimed for the whole State.

OLEARIA SPECIOSA, Hutchinson. (Compositae).

In Curtis's Bot. Mag. Tab., 8118 (1907).

The locality given is Australia.

This plant was raised in the Royal Botanic Gardens, Kew, England, from seed received in 1888 from the Botanic Gardens, Melbourne. We have received dried specimens, collected in the Grampians, Victoria, by W. R. A. Baker, March, 1888, also from Hall's Gap, Grampians, H. B. Williamson, December, 1902 and 1904, which agree with the type specimen received from the Kew Herbarium, thus giving a precise locality for the species. The species may hence be added to the list of plants native to Victoria. The leaves of the type specimen have rounded tips, but the leaves appear to vary from round to pointed (Mr. Baker's specimen), and forms with entirely pointed leaves appear to approach towards *Olearia myrsinoides*, F.v.M. var. *erubescens*. The relationship of this variety to the above species needs further investigation.

*PERSOONIA JUNIPERINA*, Labill., var. *SERICEA*, Ewart and Rees,  
n. var. (Proteaceae).

Grampians, Victoria, A. G. Campbell, 10/10/1911, and 27/1/  
1912.

Differs from type specimen in being larger and more hairy. Leaves rather more than one inch in length, and 1—1.5 lines broad, and covered with short silky hairs, which are more conspicuous on the younger parts.

Flowers are also larger, being 6 lines long as compared with 4—5 lines in *P. juniperina*.

*POTENTILLA RECTA*, L. "Erect Potentil." (Rosaceae).

Mitta Mitta Valley, Noorongong District, Victoria, Mr. Paton, December, 1912.

A native of Europe and North Asia, previously recorded in Victoria from the Western District. It is now evidently establishing itself as a naturalised alien in Victoria.

*RANUNCULUS SARDOUS*, Crantz. (Ranunculaceae).

Port Franklin, December, 1912, H. B. Williamson, No. 1498, "The moisture-loving Crowfoot."

The plant is a native of Europe, North Africa, and Asia Minor, and is probably a garden escape. It has not previously been recorded as growing wild in Victoria. The present specimens from the sea coast have the flowers a brighter, deeper yellow than usual, and the fruits are smooth, as in the variety, *angulatus* (formerly recognised as a distinct species) instead of with a row of minute tubercles on each face of the fruit.

*RAPISTRUM RUGOSUM*, All. "Giant Mustard or Turnip-weed."  
(Cruciferae).

Bacchus Marsh, Victoria, J. R. Tovey, November, 1910.

Naturalised in the Bacchus March district in cultivated land and waste places, and evidently introduced with imported seeds.

The plant is a native of South and Central Europe, where it is common in corn crops. It has no known economic value, and is a freely seeding weed, troublesome on account of its seedlings fouling the seed bed for the young corn. It is already recorded as a naturalised alien in South Australia.



## REESIA, Ewart. nov. gen. (Amarantaceae).

Flowers hermaphrodite, perianth segments 5, free, overlapping but nearly equal; stamens 5, forming a short staminal tube; anthers two-celled, on long filaments alternating with flat lobes bifid at the end, the lobes and stamens of nearly equal length. Ovary one-celled, style long and slender, stigma capitate. Fruit a capsule, splitting by 3 apical boat-shaped valves of equal size and shape. Seeds kidney shaped, more than one.

## REESIA ERECTA, Ewart, n. sp.

A herb, with slender but stiff and erect slightly hairy stems, bearing terminal white scaly clusters of flowers in an irregularly dichotomous cyme. Leaves opposite, sessile, about 5 lines long, linear acuminate, each with a basal pair of small narrow pointed membranous scaly stipules with entire or fringed edges.

Flowers each with a pair of nearly equal scaly bracts. Perianth segments  $2\frac{1}{2}$  to 3 lines long, with a clearly defined midrib, and free from hairs on both sides. Seeds brown, slightly curved, flat on the sides, minutely tuberculate. Four seeds in each ripe fruit.

Near Pine Creek, Northern Territory, J. H. Niemann, August, 1904.

This plant, in general appearance and habit, as well as in the structure of the flower, appears to come between *Alternanthera* and *Gomphrena*. It differs from both genera mainly in the dehiscent capsular fruit, with several instead of a single seed, and also from *Gomphrena* in the capitate stigma. The long filaments and glabrous perianth segments are also diagnostic features.

To place a multiseminate genus among the uniseminate series of the Amarantaceae may seem an abnormality, but the plant appears to have no other affinity to the series (Celosiaee) with several seeds. A few species of *Celosia* have in fact only one seed, and the reverse is shown by *Reesia*. Possibly too much importance is attached to the number of the seeds in the classification of the Amarantaceae.

## SENECIO DALTONI, F. v. M. (Compositae).

This plant was recorded by the late Mr. C. Walter (Vict. Nat. xvi., 1899, p. 99) as new to Victoria (North-West). The specimen (Mallee, Victoria, C. French, Junr., October, 1898) proves to be *Senecio Jacobaea*, the common Ragwort, a naturalised alien proclaimed for certain shires.

STACHYS ARVENSIS, L. "Woundwort or Stagger-weed." (Labiatae).

Pine Mountain, between Tintaldra and Walwa, Victoria, A. J. Ewart, 5/11/1912. A naturalised alien.

TUNICA PROLIFERA, Scop. (Caryophyllaceae).

Mt. Alfred, near Walwa, A. J. Ewart, November, 12th, 1912.

URENA LOBATA, L. (Malvaceae).

Near Pine Creek, Northern Territory, J. H. Niemann, August, 1904.

VERBASCUM BLATTARIA, L. (Scrophulariaceae).

Common along Upper Murray, Victoria, A. J. Ewart, November, 1912. A long naturalised alien.

WESTRINGIA EREMICOLA, A. Cunn. (Labiatae).

Ellam, between Jeparit and Rainbow, Victoria, W. R. A. Baker, 12/10/12.

This species was considered by Baron von Mueller to be a variety of *Westringia longifolia*, F.v.M., and was omitted from his second Census of Australian Plants. The general habit, pubescent calyx and strongly revolute leaves readily distinguish it from the closely allied *W. longifolia*, which is a native of New South Wales only, and has flat leaves and a glabrous calyx. *W. eremicola* was only previously recorded in Victoria from the East.

WESTRINGIA RIGIDA, R. Br. (Labiatae).

Near Dimboola, Victoria, St. Eloy Dalton, 12/11/1899.

Ellam, between Jeparit and Rainbow, Victoria, W. R. A. Baker, 12/10/1912.

ZYGOPHYLLUM OVATUM, Ewart and White. (Journ. and Proc. Roy. Soc. New South Wales, 1908, p. 197). (Zygophyllaceae).

Mildura, Victoria, H. B. Williamson, September, 1912.

New to Victoria, and possibly often overlooked on account of its small flowers, since when not in fruit it resembles *Z. ammobulum*. In the original description for "petals about half the length of the sepals," read "petals from about half the length of the sepals to nearly the same length." In regard to it Mr. Williamson writes: "It seems remarkable that I gathered at Mildura all the Victorian *Zygophyllums*. The little annual 1468 seems to be one



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