FLORA AUSTRALIENSIS.

Order XC. MYOPORINEÆ.

Flowers irregular or rarely nearly regular. Calyx persistent, more or less deeply toothed or divided into 5, rarely 4, lobes or segments. Corolla with 4 or 5, rarely more, lobes more or less 2-lipped or nearly equal, imbricate in the bud, the upper lip or lobes outside (or rarely inside ?). Stamens usually 4, in pairs, inserted in the tube of the corolla and alternating with its lower lobes, rarely nearly equal and as many as corolla-lobes; anther-cells opening longitudinally, at first nearly parallel, confluent at the apex, and usually when open forming a single reniform cell. Ovary free, not lobed, normally 2-celled, with 2 collateral ovules, or 2 or 3 superposed pairs of collateral ovules in each cell, attached to the incurved margins of a placenta projecting from the dissepiment so as to divide each cell more or less perfectly into 2, with one of the ovules of each pair in each half-cell, or sometimes the ovary divided from the first into 2 to 4, or in extra-Australian species more, cells with one ovule in each cell. Ovules pendulous, anatropous, with a superior micropyle. Style simple, undivided, or obscurely notched at the apex. Fruit a dry or succulent drupe, the endocarp 2- to 4- or rarely more-celled or 1-celled by abortion, or separating into as many pyrenes. Seeds usually solitary in each cell or half-cell, very rarely 2 or 3 superposed, albuminous in the species where they have been seen ripe, but the albumen sometimes thin; embryo straight, with a superior radicle.—Shrubs or rarely trees. Leaves alternate, scattered, or rarely strictly opposite, undivided. Flowers axillary, solitary, or in clusters of 2, 3, or more. Bracts at the base of the pedicels very small or none, no bracteoles on the pedicels.

The Order is chiefly Australian, and two genera entirely so; a third extends sparingly over the Indian Archipelago, the Pacific Islands, and tropical Africa; and there is a fourth monotypic tropical American genus. The affinity of this Order with Verbenaceæ is so striking that some have proposed uniting the two, but the superior radicle has, on examination, proved so constant a distinction, that I have followed Brown and others in maintaining the two as separate Orders. The three genera, very distinct as to the majority of their species, run so much into one another, through intermediate species with the characters differently combined, that it is impossible to ascribe to them any absolute limits.

Corolla usually campanulate, nearly regular, rarely shortly cylindrical at the base. Ovary usually 2- to 4- or more celled, with 1 ovule in each cell, rarely 2-celled with 2 ovules in each cell . . . . . 1. MYOPORUM.
Corolla usually tubular at the base, with a more or less irregular limb. Ovary 2-celled, with 2 or rarely 1 ovule in each cell . . . . . 2. PHOLIDIA.
Corolla usually tubular at the base, with a more or less irregular limb. Ovary 2-celled, with 2 or 3 superposed pairs, or rarely 1 pair only of ovules in each cell . . . . . 3. EREMOPHILA.

1. MYOPORUM, Banks and Soland.

(Polycœlium *and* Disoon, *DC.*)

Calyx divided to the middle or nearly to the base into 5 lobes or segments not enlarged after flowering. Corolla-tube usually short and almost campanulate or shortly cylindrical at the base, lobes 5, nearly equal and regular, or the lowest rather larger. Stamens 4, alternating with the lower lobes, or rarely 5, all nearly equal, and scarcely protruding or shortly exserted. Ovary 2- to 4-celled, or in species not Australian 5- or 6-celled, with 1 ovule in each cell, or rarely 2-celled with 2 ovules in each cell. Drupe usually small, but more or less succulent.—Shrubs (or undershrubs?). Leaves alternate or rarely opposite, entire or toothed. Pedicels axillary, usually clustered. Flowers small, mostly white.

The genus is represented by a few species in the Indian Archipelago and the Pacific islands, and by one species in tropical Africa. Of the thirteen Australian species here enumerated, one may be the same as a New Caledonian one, the others appear to be all endemic.

SECT. I. **Eumyoporum.**—*Calyx small, narrow. Ovary 2- to 4-celled, with 1 ovule in each cell. Fruit globular or ovoid, not compressed.*

Erect or divaricate shrubs. Leaves from lanceolate to obovate. Corolla more or less bearded inside, or rarely quite glabrous. Perfect stamens 4.
Leaves acute or acuminate, entire or very rarely slightly serrate. Corolla-lobes usually shorter than the tube . . 1. *M. acuminatum.*
Leaves obtuse, acute, or acuminate, some usually serrate. Corolla-lobes usually as long as the tube. (Southern or Western seacoast or salt plant) . . . . . 2. *M. serratum.*
Erect shrubs. Leaves lanceolate or linear, entire. Corolla not bearded at the throat. Stamens, 5.
Corolla 2 to 3 lines long . . . . . 3. *M. deserti.*
Corolla 4 to 5 lines long . . . . . 4. *M. laxiflorum.*
Diffuse or procumbent shrubs. Leaves linear or cuneate, thick.
Corolla-lobes bearded at the base, as long as the tube, or nearly so. Fruit globular . . . . . 5. *M. parvifolium.*
Corolla-lobes glabrous, much shorter than the tube. Fruit ovoid . . . . . 6. *M. brevipes.*
Diffuse or weak shrub. Leaves opposite . . . . . 7. *M. oppositifolium.*

SECT. II. **Disoon.**—*Calyx small, narrow. Ovary 2-celled, with 1 ovule in each cell. Fruit compressed.*

Fruit very flat, acute (about 3 lines long).
Leaves linear-lanceolate, acute, entire or scarcely toothed, 1½ to 3 in. long . . . . . 8. *M. platycarpum.*

Leaves oblong or lanceolate, obtuse, serrate, ½ to ¾ in. long. Plant very glutinous . . . . . 9. *M. Beckeri.*
Fruit small and very obtuse, somewhat flattened (about 1 line long).
Leaves narrow, linear, 2 to 4 in. long . . . . . 10. *M. floribundum.*
Leaves minute, crowded, cordate . . . . . 11. *M. salsoloides.*

Sect. III. **Chamæpogonia.**—*Calyx-segments herbaceous. Ovary 2-celled, with 2 ovules in each cell. Fruit somewhat compressed.*

Calyx-segments 2 to 4 lines long . . . . . 12. *M. debile.*

Species insufficiently known.
Calyx and foliage of some forms of *M. serratum*, but ovary and fruit said to be 2-celled, with 2 ovules or seeds in each cell . . . . . 13. *M. mucronulatum.*

Sect. 1. Eumyoporum.—Calyx small, narrow. Ovary 2- 3- or 4-celled, with 1 ovule in each cell. Fruit globular or ovoid, not compressed.

The first six species of this Section, however different in extreme cases, run so much into each other that they might almost be reduced to varieties of a single one.

1. **M. acuminatum,** *R. Br. Prod.* 515. An erect glabrous shrub, exceedingly variable in stature, breadth of leaves, and size of flowers. Leaves alternate, in the common forms varying from elliptical-oblong to lanceolate or linear, more or less acuminate, much contracted towards the base, quite entire, and 1½ to 3 in. long, but sometimes the broader ones almost obovate and rather obtuse, or all smaller, or very rarely a few of the leaves marked here and there with a few distant teeth. Pedicels 2 to 4 lines long, in axillary clusters of 2 to 4 or rather more, or rarely solitary. Calyx-tube very short, segments narrow, acute, rather rigid, rarely above 1 line long. Corolla almost campanulate, about 3 to 4 lines long, the lobes nearly equal, spreading, rather shorter, or sometimes much shorter than the tube, more or less bearded inside as well as the tube, the hairs sometimes almost disappearing from the lobes, but on a close examination I have very rarely found them quite absent as in *M. deserti.* Stamens 4 without any rudiment of the fifth in the numerous flowers examined, although such a rudiment has been observed by others; anthers very shortly protruding. Ovary most frequently 4-celled, but occasionally with only 3 cells and ovules. Drupe nearly globular, 2 to 3 lines diameter, or rarely larger.

N. Australia. Dampier's Archipelago and Cygnet Bay, N.W. coast, *A. Cunningham;* Nichol Bay, N.W. coast, *Ridley's Expedition.*
Queensland. Common along the coast from Cape Upstart, *M'Gillivray,* to Moreton Bay, *A. Cunningham* and others.
N.S. Wales. Very common from Port Jackson to the northern frontier and in the desert interior to the Murray and the Barrier range.
Victoria. On the Murray and adjoining deserts, but apparently replaced on the south coast by *M. serratum.*
W. Australia. Murchison river, *Oldfield, Drummond,* 6th coll. n. 137.

This truly polymorphous species, usually distinguished from *M. serratum* by its acute or acuminate entire leaves, cannot, however, be separated from it by any positive characters; and on the other hand has been subdivided into several races, or supposed species, of which the following are the most marked:—

1. *ellipticum.* Leaves rather broad and scarcely acuminate. Flowers moderate-

sized.—*M. ellipticum*, R. Br. Prod. 515; A. DC. Prod. xi. 707.—About Port Jackson, *R. Brown*, *Sieber*, *n.* 223, and others.

2. *acuminatum*. Leaves rather broad, acuminate, mostly 3 to 4 in. long. Flowers larger than in *M. ellipticum*.—*M. acuminatum*, R. Br. Prod. 515; A. DC. Prod. xi. 707.—Barnard and Franklland islands, *M'Gillivray*; Brisbane river, Moreton Bay, *F. Mueller* and others: Port Jackson, *R. Brown*, *Sieber*, *n.* 222 and others: Hastings river, *Beckler*. *Pogonia glabra*, Andr. Bot. Rep. t. 283; *Andreusia glabra*, Vent. Jard. Malm. t. 108, although figured with 5 equal stamens, is probably this form.

3. *parviflorum*. Leaves of the typical form, or rather smaller and narrow. Flowers smaller, the beard of the corolla copious or rare, or sometimes none at all.—*M. tenuifolium*, R. Br. Prod. 515; A. DC. Prod. xi. 711, au Forst.?—Queensland coast, Keppel and Shoalwater Bays, etc. *R. Brown*; islands off the coast, *M'Gillivray*, *F. Mueller*, and others; Rockingham Bay and Rockhampton, *Dallachy* and others; Moreton Bay and other parts of the coast, *A. Cunningham*. Some of the N.W. specimens appear also to belong to this form.

4. *angustifolium*. Leaves narrow-lanceolate or almost linear, but on longer petioles and more acute than in *M. deserti*, the lobes of the corolla sometimes almost, or even quite, glabrous, but often much bearded, and the upper stamen wanting (or small and abortive?)—*M. montanum*, R. Br. Prod. 515; A. DC. Prod. xi. 708; *M. Cunninghamii*, Benth, in Hueg. Enum. 78; A. DC. l. c. 707; *M. cyanantherum* and *M. Dampieri*, A. Cunn. in A. DC. l. c. 708.—Port Jackson and Mount Hunter, *R. Brown*, but chiefly in the interior of Queensland and N. S. Wales, extending to the Murray, the Barrier Range, and to Cooper's Creek. To this form also belong most of the specimens from the N.W. coast as well as those from Murchison river.

The species is closely allied to, and perhaps should include, the New Caledonian *M. tenuifolium*, Forst., a name which in that case would claim the priority over Brown's. But on examining our New Caledonian specimens (Viellard n. 1091 and Deplanche n. 356), I find that, although they resemble some Queensland ones of the var. *parviflorum* yet the corolla is more perfectly glabrous inside, and the fifth stamen is present, although with a narrow barren anther. I have great doubts, however, whether this character will prove constant.

2. **M. serratum,** *R. Br. Prod.* 516. An erect or somewhat diffuse shrub, attaining several feet and usually glabrous, still more variable in foliage and flowers than *M. acuminatum*, and sometimes very difficult to distinguish from that species, whilst some of the forms enumerated below may be thought by many to be specifically distinct. Generally speaking the leaves are elliptical-oblong or lanceolate, obtuse or acute, and more or less serrate, but in a few maritime specimens they are all or nearly all entire, cuneate-oblong and obtuse. Flowers usually smaller than in *M. acuminatum*, and several in each axil, but sometimes quite as large as in that species. Calyx-lobes or segments varying fron lanceolate and under $\frac{3}{4}$ line long, to subulate and $1\frac{1}{2}$ lines. Corolla-lobes usually as long as the tube, abundantly or sparingly bearded inside, at least at the base. Stamens 4, not exceeding the corolla-lobes, and sometimes scarcely protruding from the tube. Ovary-cells 2 to 4, but more frequently 3 than 2 or 4, with 1 ovule in each cell. Fruit globular or ovoid, not compressed, from 1 to 2 lines diameter, or even larger, but all the large ones appear to be deformed by the puncture of some insect.—A. DC. Prod. xi. 709; Bartl. in Pl. Preiss. i. 350; *M. insulare*, R. Br. Prod. 516; A. DC. l. c. 708; Bartl. in Pl. Preiss. i. 349; *M. tasmanicum*, A. DC. Prod. x. 709; Hook. f. Fl. Tasm. i. 287.

N. S. Wales. Apparently rare and only towards the Victorian frontier.
Victoria. Along the whole coast from Gipps Land to the Glenelg, *F. Mueller* and many others; Wimmera, *Dallachy*.

Tasmania. Kent's group, *R. Brown;* common along the N. coast, *J. D. Hooker.*
S. Australia. Spencer's gulf and other parts of the coast, *R. Brown* and others.
W. Australia. From the Great Bight, *Maxwell*, and King George's Sound, *R. Brown* and many others, to Murchison River, *Oldfield, Drummond;* Dirk Hartog's Island, *A. Cunningham, Milne*, and the Abrolhos, *Bynoe.*

The principal forms are the following :—

1. *obovatum.* Leaves obovate, oblong, rather broad, obtuse. Ovary very frequently 2-celled only, as figured Bot. Reg. 1845, t. 15.—*M. adscendens*, R. Br. Prod. 516. A. DC. Prod. xi. 710.—Chiefly in Tasmania and the sea-coast of Victoria, S. Australia, and King George's Sound.

2. *apiculatum.* Leaves linear-cuneate, ½ to 1 in. long, obtuse or mucronate, thick and often entire.—*M. apiculatum*, A. DC. Prod. xi. 707.—Station uncertain, probably W. coast, *Baudin's Expedition.* The above quoted specimens from Dirk Hartog's Island and the Abrolhos, are very near it, but the leaves are broader. They are still thick and entire, but some of the Murchison river specimens have both the narrow and entire, and large and serrate leaves (all thick) on the same specimen.

3. *tuberculatum.* Leaves narrow, mostly serrate, rather thick and obtuse, sprinkled or covered with raised glandular dots.—*M. tuberculatum*, R. Br. Prod. 516; A. DC. Prod. xi. 710. Bartl. in Pl. Preiss. i. 349.—King George's Sound, *R. Brown* and others; Swan river, *Preiss. n.* 1351 (the latter approaching the var. *apiculatum*).

4. *subserratum.* Leaves mostly oblong or lanceolate, serrate, not very thick. Calyx-segments short, as in all the preceding forms.—*M. subserratum*, Nees in Pl. Preiss. i. 350.—S. coast of W. Australia, King George's Sound, *R. Brown* and others, extending to Swan river, *Drummond, Preiss. n* 1247, and eastward to the Great Bight, *Maxwell.* This may be considered as the typical *M. serratum*, the typical *M. insulare* only differing in the leaves being altogether larger.

5. *pubescens.* Like the preceding variety, but the branches, leaves and calyxes copiously pubescent, with short spreading hairs. Ovary 2-celled only in the flowers examined.—Gale's Brook, W. Australia, *Maxwell.*

6. *glandulosum.* Leaves small in some specimens, 1 to 2 in. long in others; almost ovate, very tuberculate-glandular (more so than in the var. *tuberculatum*). Flowers small.—*M. viscosum*, R. Br. Prod. 516; A. DC. Prod. xi. 710; *M. glandulosum*, A. DC. l. c. 709, and (according to A. DC.) *Bertolonia glandulosa*, Spin. Jard. S. Sebast. 25. f. 2.—Coast of S Australia, *R. Brown* and others.

7. *gracile.* Leaves usually narrow, always acute and mostly serrate, thinner than in most of the preceding forms. Pedicels slender. Calyx-lobes subulate, often 1 to 1½ lines long, but very variable. Ovary cells usually 3.—*M. caprarioides*, Benth. in Hueg. Enum. 77; A. DC. Prod. xi. 707, *M. gracile*, Bartl. in Pl. Preiss. i. 350, A. DC. l.c. 708. —Common in W. Australia, *Preiss. n.* 1350, *Drummond, Oldfield.* Some of Brown's specimens are very nearly, if not quite, identical with this form.

8. *parviflorum.* Leaves small and narrow, sessile or nearly so, often tuberculate. Flowers and fruits very small. Calyx-segments slender, as in the last variety. Ovary cells 2 or 3.—Murchison river, *Oldfield.*

All the above varieties appear to be connected by several intermediate forms.

3. **M. deserti,** *A. Cunn.*; *Benth. in Hueg. Enum.* 78. An erect, glabrous shrub, nearly resembling the narrow-leaved varieties of *M. acuminatum*, but the leaves still narrower, linear or linear-lanceolate, acute or almost obtuse, entire, rather thick, 1 to 2 in. long, and narrowed into a very short petiole. Pedicels often several together, rather thick, and almost always remarkably recurved. Calyx and corolla about the size of the smaller-flowered varieties of *M. acuminatum*, but the corolla very regular, without any or with scarcely any hairs in the throat. Stamens 5, all equal in every one of the numerous flowers examined, the anthers not exserted. Ovary 2-celled or very rarely 3-celled, with 1 ovule in each cell. Fruit ovoid, "yellowish," 2 to 3 lines long, not compressed, usually with 2 cells and seeds.—A. DC. Prod. xi.

707; *M. strictum* and *M. patens*, A. Cunn. in A. DC. Prod. xi. 708; *M. dulce*, Benth. in Mitch. Trop. Austr. 384; *M. rugulosum*, F. Muell. in Linnæa, xxv. 427.

Queensland. Burdekin river, *F. Mueller;* Belyando and Balonne rivers, *Mitchell;* Nerkool Creek, *Bowman;* Darling Downs, *Lau.*

N. S. Wales. Lachlan river, *A. Cunningham;* from the Murray and Darling to the Barrier Range, *Victorian and other Expeditions;* Mudgee, *Woolls;* New England, *C. Stuart.*

Victoria. Murray river and Bacchus Marsh, *F. Mueller.*

S. Australia. From the Murray to St. Vincent's Gulf, Flinders Range, &c., *F. Mueller;* in the interior, *M'Douall Stuart's Expedition.*

W. Australia. Æstuary of the Murchison, *Oldfield;* Shark's Bay, *Milne.*

4. **M. laxiflorum,** *Benth.* An erect shrub, closely allied to *M. deserti*, with the foliage and habit of the broader leaved forms of that species, differing chiefly in the larger flowers. Leaves narrow-lanceolate, acute, contracted into a short petiole. Pedicels solitary or 2 or 3 together, often ½ in. long. Calyx-lobes rather longer than in *M. deserti.* Corolla fully 5 lines long, the lobes bearded inside at the base or nearly glabrous. Stamens 5, all equal, included in the tube. Ovary 2-celled, with one ovule in each cell. Drupe succulent, with a hard putamen, not compressed.—*Eremophila myoporoides*, F. Muell. Fragm. v. 23.

Queensland. Cape river, *Bowman;* Rockhampton, *Thozet.*

I examined 4 ovaries and found them all 2-celled, with 1 ovule in each cell, and the drupe I cut across had also only 2 seeds; but in one drupe dissected by F. Mueller there were 4 cells and seeds. The ripe drupes were, however, all loose in the sheets with the specimens, and this one may have got mixed among them from some other species.

5. **M. parvifolium,** *R. Br. Prod.* 516. Stems procumbent, extending sometimes to 2 ft. or more, the whole plant glabrous. Leaves scattered, rather crowded, linear or linear-spathulate, obtuse, or rarely almost acute, entire, thick, and sometimes succulent, contracted at the base, and sometimes shortly petiolate, all under ½ in. in some specimens, above 1 in. in others. Flowers solitary or 2 or 3 together, on slender pedicels, sometimes very short, but often ½ in. long, or even more. Calyx-segments rather acute, about 1¼ to 1½ line long. Corolla campanulate, glabrous inside or nearly so, about 4 lines long, the lobes at least as long as the tube. Stamens 4, often exceeding the lobes. Ovary 3- or 4-celled, with 1 ovule in each cell. Drupe ovoid-globular, attaining about 2 lines, the putamen with 3 or 4 cells and seeds, or fewer by abortion.—A. DC. Prod. xi. 710, Bot. Mag. t. 1693.

Victoria. Murray river, *F. Mueller, Herrgott.*

Tasmania. Flinders Island, *Milligan.*

S. Australia. Memory Cove, Spencer's Gulf, *R. Brown;* W. of Mount Sturgeon, *Robertson;* lagoons near Rivoli Bay and Holdfast Bay, *F. Mueller;* Port Lincoln, *Wilhelmi;* Spencer's Gulf, *Warburton.*

W. Australia. Goose Island Bay, *R. Brown.*

M. humile, R. Br. Prod. 516; A. DC. Prod. xi. 710, is founded upon specimens of what appears to me to be a slight variety of *M. parvifolium*, with rather shorter and broader leaves.

6. **M. brevipes,** *Benth.* The specimens have the aspect of some of the short, thick-leaved ones of *M. parvifolium*, but the stems may be erect. Leaves linear, obtuse, very thick, all under ½ in. long. Flowers

of the size of those of *M. parvifolium*, but different in shape. Pedicels mostly solitary, not above 2 lines long. Calyx-segments acute, about 1 line long. Corolla glabrous inside, the tube about 2 lines long, not much dilated upwards, the lobes nearly equal, scarcely 1 line long. Stamens 4, rather shorter than the lobes. Ovary 2-celled, with 1 ovule in each cell. Fruit oblong, not compressed, about 2 lines long.

S. Australia. From M'Douall Stuart's journey into the interior; only known from very few specimens.

7. **M. oppositifolium,** *R. Br. Prod.* 516. A weak shrub, ascending to 3 or 4 feet, usually bearing numerous resinous tubercular glands. Leaves opposite, sessile, and usually stem-clasping, lanceolate or oblong-lanceolate, acute, serrate, $\frac{3}{4}$ to $1\frac{1}{2}$ in. long, the margins often recurved. Pedicels rather slender. Calyx-segments rather narrow, acute, rather long. Corolla very open, the lobes somewhat longer than the tube, very slightly bearded inside at the base. Stamens 4, the anthers short. Ovary 2- or 3-celled, with 1 ovule in each cell. Fruit small, globular, not compressed.—A. DC. Prod. xi. 710.

W. Australia. King George's Sound, *R. Brown*, *A. Cunningham*, and many others.

Sect. 2. Disoon. Calyx small, narrow. Ovary 2-celled, with 1 ovule in each cell. Fruit compressed.

8. **M. platycarpum,** *R. Br. Prod.* 516. A tall shrub, or small tree, quite glabrous. Leaves linear-lanceolate, acute, entire, or with a few small distant teeth in the upper part, $1\frac{1}{2}$ to 3 in. long, rather thick, contracted into a short petiole. Pedicels often 6 or more in the axils, 1 to 2 lines long. Calyx not $\frac{3}{4}$ line long, acutely lobed. Corolla more or less bearded inside at the throat, sometimes scarcely 2 lines long with the stamens included, in other specimens twice as large with exserted stamens. Ovary 2-celled, with 1 ovule in each cell. Fruit ovate or ovate-oblong, acute, much flattened, about 3 lines long.—A. DC. Prod. xi. 711.

N. S. Wales. Murray and Darling rivers, *Victorian and other Expeditions.*
Victoria. Wimmera, *Dallachy.*
S. Australia. Spencer's Gulf, *R. Brown;* Encounter Bay, *Whittaker;* Murray Scrub, *Behr.;* Elders and Flinders Range, Lakes Hindmarsh and Gairdner, *F. Mueller.*

9. **M. Beckeri,** *F. Muell.* An erect, much-branched shrub of several feet, strongly scented, and very viscous. Leaves alternate, oblong or lanceolate, rarely almost ovate, serrate, about $\frac{1}{2}$ to $\frac{3}{4}$ in. long, contracted into a petiole. Flowers shortly pedicellate, often 2 or 3 in the axil. Calyx 1 to $1\frac{1}{4}$ lines long, deeply divided. Corolla-tube cylindrical to about 2 lines, then expanded into a small campanulate throat, the lobes spreading to 5 or 6 lines diameter, slightly bearded inside towards the base, the middle lower one larger and broader than the others, and slightly notched. Anthers 4, shortly protruding from the tube. Ovary 2-celled, with 1 ovule in each cell. Fruit ovate, acute, much flattened, exceeding the calyx, but not seen quite ripe.—*Disoon Beckeri*, F. Muell. Fragm. iv. 48; vi. 150; *Eremophila Beckeri*, F. Muell. Fragm. i. 156.

W. Australia. *Drummond, n.* 338; Phillips river and sand hummocks, Eyre's Relief, *Maxwell.*

Notwithstanding some approach in the form of the corolla to that of *Pholidia*, this species agrees in other respects much more with *Myoporum*, approaching very near *M. platycarpum* in the ovary and fruit.

10. **M. floribundum,** *A. Cunn.* ; *Benth. in Hueg. Enum.* 78. A glabrous, strong-scented shrub of 5 or 6 ft. Leaves very narrow, linear, acute, entire, 2 to 4 in. long on the main branches, often much smaller on the lateral ones. Flowers small, often numerous, in axillary clusters of 3 to 6, on filiform pedicels of 1 to 2 lines. Calyx-segments rather thick, acute, $\frac{1}{2}$ to $\frac{3}{4}$ lines long. Corolla-tube about 1 line long, lobes rather longer, almost acute, not much imbricate in the bud, glabrous inside. Stamens 4, rather longer or shorter than the corolla-lobes. Ovary compressed with a nerve-like border, 2-celled, with 1 ovule in each cell. Style filiform, the stigma obtuse. Fruit compressed, or at length somewhat turgid, very obtuse, almost truncate, 1 to $1\frac{1}{4}$ lines long. — *Disoon floribundus*, A. DC. Prod. xi. 703; F. Muell. Fragm. i. 126.

N. S. Wales. Rocky banks of the Nepean river, *A. Cunningham.*
Victoria. Snowy river, *F. Mueller.*

11. **M. salsoloides,** *Turczan. in Bull. Soc. Imp. Nat. Mosc.* 1863, ii. 226. An erect, very much branched shrub of several feet, quite glabrous, but often glandular-tuberculate. Leaves very small (under 1 line long), but numerous, sessile, cordate, often broader than long, very thick, spreading. Flowers solitary in the axils, on short pedicels. Calyx not 1 line long, deeply divided into lanceolate lobes. Corolla $2\frac{1}{2}$ to 3 lines long, the lobes longer than the tube, spreading, nearly equal. Stamens 4, exserted. Ovary 2-celled, with 1 ovule in each cell. Fruit small, obtuse, somewhat compressed, like that of *M. floribundum.* — *Disoon cordifolius*, F. Muell. Fragm. i. 126; vi. 150.

W. Australia. *Drummond, 5th coll. n.* 339; Gordon, Phillips, and Salt rivers, *Maxwell.*

Sect. 3. Chamæpogonia. Calyx-segments herbaceous. Ovary 2-celled, with 2 ovules in each cell. Fruit somewhat compressed.

12. **M. debile,** *R. Br. Prod.* 516. A low glabrous shrub, with a thick stock and decumbent or ascending stems, attaining sometimes 2 ft. or more, the branches often glandular-tuberculate. Leaves alternate, very shortly petiolate, or nearly sessile, elliptical oblong or lanceolate, entire or with a few small distant acute teeth, and often one or two larger ones on each side near the base, $1\frac{1}{2}$ to 3 or even 4 in. long. Pedicels solitary in the axils or in pairs, rarely so long as the calyx, Calyx-segments linear but leaf-like, acute, 3 to 4 lines long. Corolla pink or purplish, the tube about as long as the calyx, the lobes not half so long, more or less bearded inside at the base. Stamens included in the tube. Ovary 2-celled, with 2 collateral ovules in each cell. Fruit ovoid, somewhat compressed, 3 to 4 lines long, often furrowed on each side, 2-celled. Seeds either 2 in each cell more or less separated by an

imperfect dissepiment, or more frequently solitary by the abortion of the other ovule.—Bot. Mag. t. 1830, A. DC. Prod. xi. 711; *Pogonia debilis*, Andr. Bot. Rep. t. 212; *Andreusia debilis*, Vent. Jard. Malm. under n. 108; *Myoporum diffusum*, R. Br. Prod. 516, A. DC. Prod. xi. 711; *Capraria calycina*, A. Gray, in Proc. Amer. Acad. vi. 49; Benth. Fl. Austral. above, iv. 503.

Queensland. Keppel and Shoalwater Bays and Broad Sound, *R. Brown*; Dawson river, Brisbane river, Moreton Bay, *F. Mueller*; Rockhampton, *Dallachy* and others; Nerkool Creek, Connor's river, *Bowman*; Darling Downs, *Lau.*

N. S. Wales. Port Jackson to the Blue Mountains, *R. Brown* and others; Hunter's river, *A. Cunningham* and others; Clarence river, *Beckler*; Richmond river, *Fawcett.*

Since the publication of the last volume, Dr. Torrey has kindly re-examined and sent me a flower from the specimen inadvertently described by A. Gray as a *Capraria*, of which it had so much the aspect, and to which species I had probably myself referred it on a first hasty sorting.

Doubtful Species.

13. **M. mucronulatum,** *A. DC. Prod.* xi. 706. A glabrous shrub with the aspect foliage and flowers nearly of the var. *apiculatum* of *M. serratum*, but said to have a very different ovary and fruit. Leaves oblong or oblanceolate, obtuse, mucronate, much contracted into a petiole, rather thick, quite entire, 1 to 2 in. long. Pedicels 2 to 4 together, 2 to 4 lines long. Calyx-lobes short. Corolla-lobes slightly bearded inside. Fruit ovoid-globular, 2-celled, with 2 seeds in each cell, not separated by any spurious dissepiment.

N. S. Wales. "East Coast" *Herb. Mus. Par.* I have seen the specimen described by De Candolle, but have not had the opportunity of examining the ovary or fruit. The stations given for Australian plants from the collections of Baudin and other early navigators are not to be depended upon, the "côte occidentale" or "côte orientale" being sometimes attached to plants from the Recherche Archipelago or from the north coast.

2. PHOLIDIA, R. Br.

(Pseudopholidia, *A. DC.*; Sentis, Duttonia and Pholidiopsis, *F. Muell.*)

Calyx divided to the base, with 5 or rarely 4 segments, often unequal, somewhat dilated and much imbricate at the base, acuminate, not enlarged after flowering. Corolla-tube shortly cylindrical at the base, expanded into an obliquely campanulate throat, the limb of five spreading lobes, not very unequal, the 2 upper ones usually rather more united. Stamens 4, didynamous, usually exserted from the corolla-tube, but shorter than the lobes. Ovary 2-celled, with 2 ovules, or very rarely only 1 in each cell; style usually longer than in *Myoporum*, and hooked at the end. Fruit a dry or rarely succulent drupe, 2-celled, or more or less perfectly 4-celled, with 1 seed in each cell. —Shrubs. Leaves alternate scattered or irregularly opposite, entire or toothed. Flowers axillary, solitary and sessile, or on very short pedicels (except in *P. santalina*).

The genus is limited to Australia. In the typical forms it differs from *Myoporum* in the more perfectly divided calyx, the shape of the corolla, the more didynamous stamens, as well as in the ovary and fruit and inflorescence, but *Myoporum Beckeri* has almost the corolla and *M. debile* the ovary of *Pholidia*, whilst *Pholidia brevifolia* and perhaps

P. Delisserii have only 1 ovule in each of the ovary-cells as in the majority of *Myopora*. From *Eremophila*, *Pholidia* differs in the more regular corolla, the calyx-segments never enlarged after flowering, the stamens not exserted, the ovules never superposed in each half cell, and the fruit not separating into 1 seeded nuts as in the section *Eremocosmos*, nor so succulent as in *Stenochilus*, but none of the latter characters are constant through all the species of *Eremophila*, and the fruits of some species are as yet unknown. The distinction between *Pholidia* and *Eremophila* is not, therefore, more definite than that between *Pholidia* and *Myoporum*.

Leaves mostly opposite, hoary or white, almost scaly, usually recurved at the end. Flowers sessile or nearly so.
- Leaves narrow-linear, ¾ to 1 in. long . . . . . 1. *P. Dalyana.*
- Leaves narrow-linear, rarely above ½ in. long . . . . . 2. *P. scoparia.*
- Leaves obovate or oblong, 3 to 4 lines long . . . . . 3. *P. Delisserii.*

Leaves alternate, obovate, or ovate, 3 to 5 lines long. Flowers sessile or nearly so.
- Leaves very thick, complicated and recurved, glaucous or hoary 4. *P. crassifolia.*
- Leaves rather thick, white on both sides, resinous . . . . . 5. *P. resinosa.*
- Leaves rather thin, green, often toothed.
  - Leaves obovate or cuneate, acute, mostly toothed. Ovules 2 in each cell . . . . . 6. *P. Behriana.*
  - Leaves ovate or elliptical-oblong, entire. Ovules 2 in each cell . . . . . 7. *P. Woollsiana.*
  - Leaves ovate, entire or toothed. Ovules 1 in each cell . . 8. *P. brevifolia.*

Leaves alternate, entire, crowded or imbricate, ½ to 1 in. long. Flowers sessile or nearly so.
- Leaves oval or oblong, white-tomentose. Ovary glabrous . . 9. *P. imbricata.*
- Leaves linear, acute, glabrous. Ovary woolly . . . . . 10. *P. densifolia.*

Leaves alternate, narrow or small, not crowded. Flowers sessile or nearly so.
- Leaves small, erect, with a few large tubercles. Fruit compressed, obtuse, not exceeding the calyx . . . . . 11. *P. gibbifolia.*
- Leaves linear, entire. Branches divaricate, often spinescent. Fruit beaked . . . . . 12. *P. divaricata.*
- Leaves linear, not gibbous, erect. Branches erect, hoary-pubescent or nearly glabrous. Leaves 2 to 4 lines long . . . . 13. *P. microtheca.*
- Very viscid-pubescent. Leaves 1 in. long. . . . . 14. *P. adenotricha.*

Leaves narrow-lanceolate, above 1 in. long. Pedicels about ½ in. long . . . . . 15. *P. santalina.*

1. **P. Dalyana,** *F. Muell.* Very closely allied to *P. scoparia*, and perhaps a variety only, differing in the leaves longer and more slender, usually ¾ to 1 in. long, the corolla-tube not so much contracted at the base, and the ovary densely villous instead of being scaly only.—*Eremophila Dalyana*, F. Muell. Fragm. v. 22.

S. Australia. Between Cooper's Creek and Stoke's Range, *Howitt's Expedition.* There is but a single specimen (*Herb. F. Muell.*), and I could only examine one ovary, which was 2-celled as in *P. scoparia*, but one ovule of each cell was very small and probably abortive.

2. **P. scoparia,** *R. Br. Prod.* 517. An erect shrub, hoary or almost silvery, with a close more or less scaly indumentum, the branches rigid, but not thick, with prominent angles decurrent from the leaves. Leaves mostly opposite or nearly so, narrow-linear with hooked points, rather thick, keeled underneath, channelled above, rarely exceeding ½ in. in length. Flowers of a pale violet blue, solitary on short axillary pedicels, without bracts. Calyx 1¼ to 1½ line long,