# CONTRIBUTIONS TO THE PHYTOGRAPHY OF TASMANIA.

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## III.

The material for this third unpretensive addition to the literature on Tasmanian plants has gradually been brought together from various sources. It was intended to offer this new contribution some considerable time ago, but the harassing anxieties which arose during the last few years in the writer's official life, and the impediment which thus occurred to his work in all directions, must plead excuse for the retarded appearance of this record of all those plants, placed so kindly at his disposal by several disinterested contributors. Some of the Algae now specially mentioned as not known from Tasmania at the time when Dr. Jos. Dalton Hooker's great work appeared, were already recorded in the magnificent volumes of the late Dr. Harvey's Phycologia, on the scientific elaboration and artistic embellishment of which work he spent also on Tasmanian shores many of his valuable days. These Algae, for completeness sake, have been admitted into the present supplementary list, along with more recently discovered species, on the examination of which the great authority of Professor Dr. J. Agardh, of Lund, was brought to bear. For quotations and arrangement, the writer of these lines is responsible. Circumstances over which he had no control, frustrated his plans to visit Mount Humboldt and the surrounding Alps for new observations; but he trusts to traverse these secluded highlands, which seem yet to promise much addition to our knowledge of the Tasmanian vegetation, during the approaching spring or summer. Much has also yet to be learnt respecting the geographic range of the rarer species of plants of the island; and this can only be accomplished by the local exertions of intelligent and observant inhabitants in their respective districts. By the formation of *general* collections in *various* localities, the rare species would gradually become better known as regards their natural distribution and their distinctive characteristics; moreover, the writer will always feel pleasure to examine collections so formed, and place such observations thereon, as may be of interest or novelty, before the Tasmanian Royal Society. Thus also additional material would be obtained for the universal work on Australian plants, for the elaboration of which he has spent almost all his spare hours and his worldly resources, in the great land of our southern homes for the last twenty-six years.

*Cardamine radicata*, J. Hook. in icon. plant. t. 882. Near Lake Petrarch; Hon. J. R. Scott.

*Drosera pygmæa*, Cand. prodr. i, 317. Ascends the Alpine elevations about Lake St. Clair; Th. and B. Gulliver.

*Drosera binata*, La Bill. Nov. Holl. plant. spec. i, 78 t. 105. Advances also to Alpine heights at Lake St. Clair. This and the preceding species with numerous other Alpine plants might be readily naturalized on the highland-moors of Britain.

*Colobanthus Billardierii*, Fenzl in Annal. des Wien. Mus. i, 49. King's Island; Ambr. Neate.

*Scleranthus biflorus*, J. Hook. fl. Nov. Zel. I. 74, King's Island; Neate.

*Claytonia australasica*, J. Hook. in icon. plant. 293; var. alpina. Depressed into cushions, with leaves only $\frac{1}{6}$ to $\frac{1}{2}$ inch long and one-flowered peduncles. Summit of Mount Wellington; F. v. M.

*Didymotheca thesioides*, J. Hook. in Lond. Journ. of Bot. vi., 279. Dry Hills at Kelvedon; Dr. Story.

*Ricinocarpus pinifolius*, Desf. in memoir. du musée Paris, iii., 459, t. 22. Swanport; Dr. Story. Mr. G. Bentham mentions in the 6th volume of the Flora Austral., p. 135, as Tasmanian; on the authority of La Billardière—Adriana quadripartita (Gaudich Bot. Freycinet Voyage, 489; Croton quadripartitum, La Bill, Nov. Holl. pl. sp., ii., 73, t. 223.) But in La Billardière's work several plants from the vicinity of Cape Leuwin have been erroneously recorded as Tasmanian, and as this Adriana is not found again in any locality in Tasmania, visited by D'Entrecasteaux's expedition, it was most likely obtained in West Australia. But the writer of these lines has fully 20 years ago observed and recorded this Adriana from Wilson's Promontory, and therefore a search after the plant on the Tasmanian smaller islands in Bass's Straits might not prove in vain. On the specific limits of the Adriana some remarks were offered in the transact. Edinb. Bot. Soc., vii., 481-482. Ricinocarpus major (Müll. Arg. in Linnaea xxxiv., 59) is another dubious euphorbiaceous plant, said to have been found by Verreaux in Tasmania.

**Sanguisorba minor*, Scop. Poterium Sanguisorba, L. sp. 1411. Near Lake St. Clair, 4000 feet high; Th. and B. Gulliver.

*Eucalyptus globulus*, La Bill, voy. i., 153, t. 13. The geographic limits of this highly important tree, almost restricted to Tasmania and Victoria, seem in the island yet imperfectly known. It is according to Mr. Stephens confined to the S. and S.E. districts, having its northern boundary about Falmouth on the East Coast, and Spring Hill, near Oatlands, on the eastern inland tracts, abounding between this and the

coast. In the Derwent country it extends about as far as Dunrobin. Mr. Gould records it from Flinders Island.

*Eucalyptus vernicosa*, J. Hook. in Lond. journ. of Bot., vi., p. 478. Mount Arrowsmith; Th. and B. Gulliver.

*Anodopetalum biglandulosum*, All. Cunn. in Endl. gen. pl. 818. A full description of the fruit was given for the first time last year by the contributor of these notes (in Caruel's Giornale Botan. Italian, p. 272) from specimens kindly supplied by Ronald Gunn, Esq., F.R.S., who found regular forests of Anodopetalum trees between the Surrey Hills and the River Leven.

*Bauera rubioides*, Andr. Bot. Rep. t. 198; var. pleniflora. Found at Port Esperance by Th. Gulliver.

*Spyridium obovatum*, Benth. Flor. Austral. I., 429. Eldon's Bluff, 4700 feet high; Hon. J. R. Scott, Th. Gulliver.

*Hydrocotyle pterocarpa*, F. v. Muell., in transact. Vict. inst., 1855, p. 126. St. George's Bay; W. Bissill. Circular Head; S. B. Emmett.

*Hydrocotyle asiatica*, L. sp. 234; var. monantha: Leaves quite entire, measuring only $\frac{1}{4}$ to $\frac{1}{2}$ inch; inflorescence reduced to a single flower; petals not less broad than long; bracts short and blunt. Lake St. Clair; Th. and B. Gulliver. The ordinary form occurs at Macquarie Harbour and Southport. La Billardière (Voyage in search of La Pérouse, Engl. edit. I., 152) affirms that Crithmum maritimum occurs at Storm Bay. Whether he mistook another plant for it, or whether the Crithmum remained as much overlooked on the Tasmanian shores as the Cakile on the Victorian coast, remains to be ascertained.

*Huanaca cordifolia*, Benth. gen. pl. I., 876; var. minuta: Hardly an inch high, nearly glabrous; umbel few flowered. Lake St. Clair; Th. and B. Gulliver.

*Actinotus bellidioides*, Benth. Fl. Austral. III., 869. With the preceding plant.

In reference to Umbelliferae it should still be observed that in all likelihood species of Leschenault's genus Catapha (Sieberia of Reichenbach and Bentham, not of Gay; Trachymene of Sprengel and De Candolle, not of Rudge) will yet be found within Tasmanian territory, as several plants of that genus occur as far south as Port Phillip and Wilson's Promontory.

*Abrotanella scapigera*, F. v. M. in Benth. flor. Austr. III. 554. Lake St. Clair; Benj. and Th. Gulliver.

*Cassinia spectabilis*, R. Br. in transac. Lin. Soc. xii., 128. King's Island; Ambr. Neate. Swanport; Dr. Story.

*Helichrysum pumilum*, J. Hook, Flor. Tasm. i. 213 tab. 60. On Mount Arrowsmith, 3—4000 feet high; Th. and B. Gulliver.

*Antennaria nubigena*, F. v. M. in transact. Phil. Soct. Vict. i., 45. Summit of Mount Olympus, Hon. J. R. Scott and Th. Gulliver. This with the following plant is left in the old genus Antennaria, as Raoulia rests on very frail characters, and as it will be impossible to assign for any genus the best limits until the whole of the species of the globe shall have been discovered. These additions to Antennaria may likely occur in the Alps of Central Africa and New Guinea.

**Antennaria Merediths*, F. v. M. in notices of the Royal Soc. of Tasm. 1870, p. 15. On Mount Olympus in society of A. nubigena, the two plants preserving fully their characteristics under precisely the same conditions. It is remarkable that A. Meredithæ should have been so long overlooked. In all likelihood it is to be found on many of the Tasmanian alpine heights. Its leaves are smaller, and of a thicker consistence than those of A. nubigena. This was the only absolutely new phaneorogamic plant discovered by the writer during his short visit to Tasmania in 1869.

In reality A. nubigena might be placed either in the section Leontopodium, or that of Chionolaena or even in that of Anaphalis, by the union of which a very natural genus (Antennaria) would be formed, with no greater habitual differences among the species, than are observable in the closely allied genera Helichrysum and Helipterum.

**Gnaphalium candidissimum*, Lam. encycl. methodiq. II., 754. In the vicinity of Hobart Town, on roadsides and in cultivated fields; S. Hannaford, Th. Gulliver. The transmitted specimens accord precisely with the South African plant. This is the first knowledge, which we possess, of this pretty species having strayed out of its native home. The base of the stem is woody; hence the plant is doubtless perennial.

*Senecio leptocarpus*, Cand. prodr., vi., 372; var. pectinata. Eldon's Bluff; Hon. J. R. Scott.

**Taraxacum officinale*, Weber, primit. flor. Holsat. p. 56. Rendered long since spontaneous on the South Esk, also according to Dr. Milligan's collection in Flinders' Island and Seal Island; occurring probably on many other places within Tasmanian territory now.

**Cryptostemma calendulaceum*, R. Br. in W. T. Ait. hort. Kew., second edit., v., 141. Seems to have first sprung up about Hobart Town in 1870, according to Mr. Samuel Hannaford. It is an unfortunate introduction, of which Tasmania kept free so long, while this weed had already immigrated into Australia at least forty years ago, according to Baron von Huegel's collection. It is the doubtful Gorteria, mentioned among the plants introduced in Australia at page cviii. of the introduction to the Flor. Tasman,

*Donatia Novæ Zelandiæ*, J. Hook, flor., Nov. Zeland, i. 81, t. 20. Lake St. Clair, Hon. J. R. Scott; Eldon's Bluff, Th. Gulliver; Mount Field East, B. Gulliver. The plant is placed here as Stylideous among the synpetalous orders, its true systematic position having finally been ascertained by the writer of these remarks only this year (Cont. fragm. phytogr. Austr. viii., 41). Although the genus was discovered already by both Forsters in Fuegia during Cook's second expedition about a century ago, the mature fruit is unknown up to the present day, it having not yet been found either in the Australian, New Zealand, or S. American Alps, it ripening probably in the beginning of winter, and could likely yet be found early in spring after thawing of the snow.

*Azorella dichopetala*, Benth. flor. Austr. iii., 365. Eldon's Range, Hon. J. R. Scott and Th. Gulliver.

*Coprosma repens*, J. Hook, flor. Antarct. i., 23, t. 16 a. (not b); flor. Nov. Zeland, i., 110; Handbook of N. Z. flora i., 119. Alpine country about Lake St. Clair, Th. and B. Gulliver. Sent only in a sterile state. The leaves thick and margined. Closely allied to the following species.

*Coprosma pumila*, J. Hook, flor. N. Zel., i., 111; handbook of the N. Zeal. flora, i., 119; C. repens, J. Hook. flora antarct, i., 23, t, 16, b. Lake Petrarch; Th. Gulliver. The leaves are thin, remarkably acute, distinctly pointed and narrowly petiolate. Specimens from Mount Laperouse, imperfect like the rest, seem rather to accord with C. repens than with C. pumila. Local observations must clear up the questions concerning the characteristics of these species.

*Goodenia humilis*, Br. prodr., 575; var. alpigena. The whole plant merely one or two inches high, with only 1 to 3 flowers. Alpine meadows about Lake St. Clair, Th. and B. Gulliver.

*Isotoma fluviatilis*, F. v. M. in Benth. flor. Austr. iv., 136. Accidentally omitted in the 4th volume of the Australian Flora as a Tasmanian plant, although an expressive figure is given already in Dr. Hooker's work. Lobelia pratioides, occurring on the S. Esk and probably elsewhere, has latterly proved a deadly herb to cattle in Victoria.

*Styphelia scoparia*, Sm. New Holl. 43. Lake Petrarch; Th. Gulliver. A broad-leaved form with pentamerous flowers from the above-mentioned Alpine locality. The genus Monotoca must now also be re-united with Styphelia, as latterly a species with very minute flowers, and a two-celled ovary was discovered by the writer in West Australia; moreover, Mr. Bentham having proved the existence of a species of the section Leucopogon with a one-celled ovary also in West Australia.

*Styphelia oxycedrus*, La Bill. Nov. Holl. pl. sp. i. 49, t. 69. King's Island; Ambr. Neate.

*Trochocarpa pumila*, F.v.M. fragm. phytog. Austr. vi. 57. Eldon's Bluff; Th. Gulliver.

*Trochocarpa disticha*, Spreng. syst. veg. i. 660. Mount Arrowsmith at an elevation of 3500 feet; Th. and B. Gulliver. Var. microphylla: leaves only $\frac{1}{4}$-inch long.

*Trochocarpa Gunnii*, Benth. Flor. Austr. iv. 167. Fatigue Hill; Th. & B. Gulliver. Lake St. Clair; Hon. J. R. Scott.

*Prionotes cerinthoides*, R. Br. prodr. 553. Mount Arrowsmith; Th. & B. Gulliver.

*Dracophyllum minimum*, F.v.M. fragm. i. 39. Eldon's Bluff; Hon. J. R. Scott.

*Mitrasacme montana*, J. Hook. Flor. Tasm. i. 274. t. 88 C, var. minuta. Smaller in all parts than the ordinary form. Creeping among alpine mosses on Mount Arrowsmith; Th. and R. Gulliver.

*Villarsia exaltata*, Don syst. of dichlamyd. plants, iv. 169. Lake St. Clair; Th. & B. Gulliver. This handsome swamp-plant, being also alpine, would prove hardy in Britain.

*Gratiola nana*, Benth. in Cand. prodr. x. 404. Lake St. Clair; Hon. J. R. Scott. It has the habit of Mimulus repens.

*Ourisia integrifolia*, R. Br. prodr. 439. Lake Augusta; Hon. J. R. Scott and Th. Gulliver.

*Veronica nivea*, Lindl. botan. reg., 1842; misc. 42. Lake St. Clair; Hon. J. R. Scott.

*Utricularia dichotoma*, Labill. Nov. Holl. plant. specim i. 11, t. 8; var. uniflora. Alpine regions about Lake St. Clair Hon. J. R. Scott.

*Cenarrhenes nitida*, Labill. Nov. Holl. plant. spec. i. 36, t. 50. Base of Mount Arrowsmith; Th. and B. Gulliver. Drupe purplish black.

*Hakea acicularis* R. Br. in transact, Lin. Soc. x, 181; var. lissosperna. Lake St. Clair; Hon. J. R. Scott.

*Orites revoluta*, Rob. Brown in transact. Linn. Soc. x. 190. Lake St. Clair; Hon. J. R. Scott.

*Persoonia Gunnii*, J. Hooker in Lond, journ. of bot. vi. 283. Lake St. Clair, Hon. J. R. Scott and Messrs. Gulliver. Drupe black, pruinous; the pericarp of rather a pleasant taste.

*Thesium australe*, R. Br. pr. 353. Derwent River; R. Brown.

*Pimelea cinerea*, R. Br. prodr. 361. (P. Gunnii, J. Hook, fl. Tasm. i. 332.) Lake St. Clair, Hon. J. R. Scott. Nearly allied to P. drupacea, which grows at the same locality. Mr. Bentham believes both to be distinct.

*Pimelea spathulata*, Labill. Nov. Holl. plant. specim. i. 9, t. 4. (P. cernua, R. Br. prodr. 359.) Mr. Bentham identified

Brown's plant with that of Labillardière by comparison of original specimens.

**Atriplex paludosum*, R. Br. prodr. 406. Port Dalrymple; R. Brown. Existing probably in many other localities of the muddy coasts.

**Polygonum lapathifolium*, L. sp. pl. 517. Port Dalrymple; R. Brown.

*Australina pusilla*, Gandich. in Freyc. voy. botanique, p. 505. Huon Road, beyond Mount Wellington; S. Hannaford.

*Fagus Gunnii*, J. Hook. icon. plant. t. 881. Eldon's Range; Hon. J. R. Scott and Th. Gulliver.

**Casuarina bicuspidata*, Benth. fl. Austr. vi. 202. Flinders' Island; R. Brown. This species has been added here as belonging to the Tasmanian flora on Mr. Bentham's authority. The plant is as yet very imperfectly known.

*Dacrydium tetragonum*, Parlatore in Cand. prodr. xvi. 496. (Microcachrys tetragona, J. Hook. fl. Tasm. i. 358, tab. 100 B; J. Hook in bot. magaz. tab. 5576.) Eldon's Range and Mount Olympus up to 4,400 feet; Th. Gulliver. The beautiful crimson colour of the fresh mature fruit-scales, as recorded in the pages of the R. S. of Tasmania (1870, p. 19), is a character by which the fruit is conspicuously distinguished from that of Pherosphæra. In dwarfness this coniferous plant has only rivals in the N. Z. Dacrydium laxifolium, and in the alpine state of Juniperus communis (J. nana. Willd. sp. pl. iv. p. 854), which latter bears fruits already at a height of four inches. There must, however, in this comparison with Juniperus not be overlooked, that, while Juniperus nana is creeping and dwarf like the Microcachrys, it passes gradually into the tall Juniperus communis, which is known to attain a height of 50 feet, just as the dwarf Exocarpus nana of Tasmania passes through E. humifusa into the tall Exocarpus cupressiformis. In the abstract sense, therefore, Tasmania possesses in Microcachrys probably the dwarfest coniferous plant of the globe.

*Pherosphaera Hookeriana*, Archer in J. Hook. fl. Tasm. i. 355, tab. IC. Parlatore in Cand. prodr. xvi. 497. Found along with Dacrydium tetragonum and Diselma Archeri by Messrs. Gulliver. The plant might well be placed sectionally into the genus Dacrydium, notwithstanding the position of the ovules and the want of the disc, the latter being neither developed in Dacrydium Kirkii of New Zealand.

*Athrotaxis selaginoides*, D. Don in transact. Linn. Soc. xviii, 172, t. 14. On Mount Olympus and Eldon's Range up to 4,500 feet; Hon. J. R. Scott and Th. Gulliver.

*Nagaia alpina*, F.v.M. Podocarpus alpina R. Br. in Mem. du Mus. Paris, xvii., 75. Summit of Mount Olympus; Gulliver.

*Phyllocladus rhomboidalis*, Ach. Rich. Conif, 130, t. 3, fig. 2. Cuvier's River, Th. & B. Gulliver. King's Island, Barnard.

*Zostera tasmanica*, Martens accord. to Ascherson in Linnaea, Neue Folge, i, 168, and

*Zostera Muelleri*, Irmisch, l.c., are the two Tasmanian species, recently proved to be distinct from Z. marina, L. and Z. nana, Roth, of the northern hemisphere.

*Typha Brownii*, Kunth enum, plant iii, 92, Brown's Tasmanian plant has been carefully distinguished by the late Dr. Rohrbach from the following :

* *Typha Muelleri*, Rohrbach in den Verhandl, des bot. Vereins von Brandenb. 1869, p. 95. This is the T. angustifolia of J. Hook, fl., Tasm., ii, 38, according to Dr. Rohrbach, who, alas, as a youthful and most promising worker in the field of phytographic knowledge was early called away from his earthly labours.

*Sisyrinchium pulchellum*, R. Br. prods. 305, Southport.

*Campynema lineare*. Labill, Nov. Holl. plant, spec, i., 93, t. 121. Lake Petrarch. Hon. J. R. Scott. A dwarf alpine form.

*Thelymitra aristata*, Lindl. orchid. plants, 521. Southport.

*Thelymitra cyanea*, Lindl. Bot. Reg. XXV., append. 50. Southport.

**Caleana minor*, R. Br. pr. 329. Near Hobart Town, Ron. Gunn, according to Benth. flor. Austr. VI. 366.

*Pterostylis barbata*. Lindl. gen. et. sp. Orchid. 388 (P. squamata, J. Hook, fl. Tasm. ii., 20; non R. Br.) Flinders' Island; Dr. Milligan.

*Diuris pardina*, Lindl., gen. et. spec., Orchid, 507. Near South Esk, from specimens there collected. The late Professor Lindley recorded it in the Linnaea already in 1853 pag. 239. It is identical with Diuris palustris of the Flora Tasmanica.

*Diuris longifolia*, R. Br. pr. 316. Port Dalrymyle, R. Brown accord. to Bentham, though the Tasmanian locality is not recorded in R. Brown's prodromus.

*Acianthus fornicatus*, R. Br. prodr. 321, Kelvedon; Dr. Story.

*Prasophyllum australe*, R. Br. pr. 318. Adventure Bay, D. Nelson, Southport.

* *Prasophyllum nigricans*, R. Br. pr. 319. Oyster Bay, Dr. Milligan; Southport.

*Prasophyllum intricatum*, C. St. in Benth. flor. Austr. VI. 346. Southport. The analytic details of Mr. W. Archer's figure of P. rufum (R. Br. pr. 319; P. nudum, J. Hook. flor. Tasm. t. 113) belong, according to Mr. Bentham's recent researches, to P. intricatum.

*Blandfordia marginata*, Herb. in Bot. Reg. 1842; Misc. 93. Eldon's Range; Hon. J. R. Scott.

*Drymophila cyanocarpa*, R. Br. prodr. 292. At Lake St. Clair, Hon. J. R. Scott; therefore also alpine.

*Bartlingia minor*, F.v.M. fragm. phytogr. Austr. vii. 88 (Laxmannia minor, R. Br. prodr. 286); Southport.

*Milligania densiflora*, J. Hook. in Kew Miscell. v. 298. Mount Olympus; Hon. J. R. Scott & Th. Gulliver. Mount Lapérouse; Oldfield.

*Triglochin procerum*, R. Br. prodr. 343; ascends the Alps in its small form.

*Lepyrodia stricta*, R. Br. prodr. 248. Swanport; Dr. Story.

**Calostrophus elongatus*, La Bill. Nov. Holl. plant. specim. ii. 78, tab. 228 (not of any other authors). At the base of Mount Lapérouse (C.S.), where it attains a height of 15 feet, being therefore as tall as the South African Cannamois cephalotes. This plant is perhaps not rare in other sub-alpine localities or deep mountain recesses of Tasmania, but may have been passed, being considered perhaps identical with the following extremely common species. As it is, the plant was not rediscovered since La Billardière's time, until the specimens from the above-mentioned locality were obtained.

*Calostrophus lateriflorus*, F.v.M., frag. phytogr. Austr. viii. 84; Calorophus elongatus, J. Hook. Fl. N. Zeal. i. 267; Fl. Tasm. ii. 75; Restio lateriflorus, R. Br. pr. 247. One of the most gregarious of all Tasmanian plants, from the lowland swamps to the alpine moors.

**Lepyrodia paniculata*, F. v. M. Second report 1854, p. 16; fragm. phyt. Austr. viii. 70. Southport.

*Restio gracilis*, R. Br. prodr. 245; Recherche Bay. Dr. Hooker had no Tasmanian specimens.

*Restio complanatus*, R. Br. prodr. 245. Swanport, Dr. Story; also at Southport.

*Caustis pentandra*, R. Br. prodr. 240; Swanport, Dr. Story.

*Chætospora capillacea*, J. Hook. Flor. Tasm. ii. 81, tab. cxli. At Bay of Fires, Bissill; also at Southport.

*Chætospora nitens*, R. Br. prodr. 233; King's Island, Ambr. Neate.

*Uncinia tenella*, R. Br. prodr. 241; Alpine country about Lake St. Clair, Hon. J. R. Scott.

*Danthonia penicillata*, F. v. M. fragm. phytogr. Austr. VIII, 134, var. pygmaea. The whole plant only rising to a height of 1—1½ inch. From the tufts of Abrotanella forsteroides. Spikelets only two in number. Bracts 1/6 to 1/8 inch long. Arista hardly 1/12 of an inch long. Mount Field East, F. v. M.

*Danthonia nervosa*, J. Hook. flor. Tasm. II., 121, tab. clxiii.; D. Archeri, J. Hook. l.c. South Esk and Southport.

*Hierochloe rariflora*, J. Hook., Flor. Antarct, i., 93 ; J. Hook. fl. Tasm. ii., 108, tab. vii., Bay of Fires, Bissell, St. Paul's River, C. St. Swanport ; Dr. Story.

*Hierochloe alpina*, Roem. et Schult. syst. veg. II., 515. Summit of Mount Lapérouse, Oldfield ; Mount Olympus, Gulliver ; Mount Field East, F. v. M.

**Aira caryophyllea*, Linné sp. pl. 97. On various places.

*Trisetum subspicatum*, Beauvois essai d'une nouvelle agrostographie, p. 88 ; ver. submutica. South Esq.

**Anthoxanthum odoratum*, L. Naturalized at Swanport ; Dr. Story.

**Imperata arundinacea*, Cyrillo icon. fasc. ii., t. 11. Swanport ; Dr. Story. This conspicuous and remarkable grass was already recorded as Tasmanian by R. Brown (*vide* prodrom, 203.) Dr. Hooker seems not to have had any Tasmanian specimens.

**Phalaris Canariensis*, L. sp. pl. 79. Together with the smaller variety (P. minor, Retzius obs. iii., 8) now spontaneous at Swanport, Dr. Story ; George Town and Launceston, S. Hannaford.

*Ehrharta distichophylla*, Labill, Nov. Holl. plant. specim. i, 90, t. 117. Southport.

*Ehrharta acuminata*, F. v. M. in transact, phil. Soc. Vict. i, p. 111, according to note. Swanport, Southport, Mersey River. A small-flowered variety occurs in Alpine regions, at elevations of about 4,000 feet.

*Ehrharta diarrhena*, F. v. M. fragm. vii, 89. Diplax Tasmanica, J. Hook. fl. Tasm, ii, 105, tab. 155. Southport. Var. sub-alpina ; smaller in all parts ; Mount Lapérouse ; occurs also at Lake St. Clair.

**Bromus mollis*, L. sp. pl. 112. Swanport, Dr. Story. This invading plant, not without some utility, yet inferior to many other fodder grasses, bids fair to become as frequent in Australia as it is in Europe. Bromus arenarius (Labill. Nov. Holl. plant specim. i, 23, t. 28), which is common in the South of Australia, may be looked for on the isles of Bass' Straits. It is the only indigenous species.

**Bromus unioloides*, Humb. Bonpl. & Kunth, gen. et spec. plant. orbis novi i, 151. King's Island ; A. Neate. Established as a spontaneous and highly useful grass.

**Bromus sterilis*, L. sp. pl. 113. Mr. Neate found this also truly naturalized in King's Island.

*Festuca distichophylla*, J. Hook., flor. Tasm. II., 127. D'Entrecasteaux's Channel, La Billardière ; Swanport, Dr. Story.

*Festuca Hookeriana*, F. v. M. in J. Hook. fl. Tasm. ii, 127, tab. clxv. Near Launceston in the lowlands ; S. Hannaford, Esq. Meander and South Esk.

**Briza minor*, L. sp. pl. 102. Naturalized in King's Island, at Swanport and in other localities. The perennial Briza media is mentioned as a Tasmanian introduced grass in Dr. Hooker's introductory essay pag. cix.

*Polypogon monspeliensis*, Desf. flor. Atlant, i 67. Swanport, Dr. Story. Lolium perenne, long since spontaneously disseminated almost everywhere in the Tasmanian lowlands, is given by Dr. Hooker as belonging to the naturalized plants of the island among the introduced plants in his introductory essay cix. Some accidental omissions may have occurred in Dr. Hooker's work among the Tasmanian gramineae, as the genera xv and xx are passed.

**Hordeum murinum*, L. sp. 126. Immigrated into many parts of Tasmania; for instance, common about Launceston (Hannaford), King's Island (A. Neate). Not mentioned by Dr. Hooker as Tasmanian, either in the prefatory essay, or in the general work.

**Hordeum secalinum*, Schrad. spicileg. flor. Lipsiens, p. p. 148. Southport.

**Holcus lanatus*, L, sp. pl. 1485. Rendered spontaneous in King's Island, Lieut. Stanley; Launceston, S. Hannaford; Swanport, Dr. Story.

**Alopecurus agrestis*, L. sp. pl. 89. Swanport, Dr. Story.

*Isoetes Gunnii*, Al. Br. in Monatsber. der. Kgl. Acad. der Wissens. Berlin, 1868. Marginal bottom of Lake St. Clair; Hon. J. R. Scott and Th. Gulliver.

*Lycopodium densum*, La Bill. Nov. Holl. plant. spec. ii., 104, t. 251. Alpine at Lake St. Clair; Hon. J. R. Scott.

*Lycopodium Selago*, L. sp. 1565; var. L. varium, R. Br. prodr. 165. Alpine at Lake St. Clair and Eldon's Range; Hon. J. R. Scott.

*Osmunda barbara*, Thunb. prodr. flor. Cap. 171. In the mountain glens near the South Esk. Todea and Leptopteris might well be considered subgenera of Osmunda, as transitory forms of O. regalis and other species to the Todeas exist, and as in Grammitis and a few other fern genera we have species with coriaceous and also transparent membraneous fronds.

*Schizaea bifida*, Sw. filic. 151; var. simplex; Southport.

*Schizaea fistulosa*, Labill. Nov. Holl. plant, specim. ii., 103, t. 250. South Esk and Southport.

**Cyathea affinis*, Sw. synops, fil. 140. Under Anodopetalum trees at Adamson's Peak; Hon. J. R. Scott. The species is closely allied to Cyathea medullaris, a tree fern very common in New Zealand. In Australia it is as yet only found in the Cape Otway ranges, and it is there accompanied by Aspidium hispidum, that being the only known locality of that remarkable fern out of New Zealand. In all probability it exists

also in Tasmania along with the Cyathea. The latter is very remarkable for its great height, combined with extreme slenderness of stem and paucity of fronds. Its occurrence in Tasmania was indicated some time since by the writer from a specimen kindly sent by Ronald Gunn, Esq., in Mr. Thomas' creditable little book printed for Tasmanian tourists. Mr. Scott found the Cyathea to have a stem 40 feet high. The species may have been passed in other parts of Tasmania and Australia in dense fern groves of the ranges. Its discovery in Tasmania came not altogether unexpected.

*Pteris comans*, G. Forst, florul. insul. Austral. 79. Near Circular Head; S. B. Emmett.

*Lomaria Patersoni*, Spr. syst. iv., 62. St. George's Bay; Bissill.

**Polypodium membranifolium*, R. Br. pr. 147. Honeywood; Mr. Blyth.

**Sargassum tasmanicum*, Sonder in Linnæa xxv., 673. The precise locality not mentioned.

**Cystophora retorta*, Ag. sp. Alg. 74. Near George Town; Miss Goodwin. At Swanport; Mrs. Meredith.

**Sporochnus Scoparius*, Harv. in transact. Royal Irish Acad. xxii., 535. Swanport; Mrs. Meredith.

**Sporochnus caudatus*, J. Ag. Swanport; Mrs. Meredith.

*Sporochnus radiciformis*, Ag. spec. Alg., i. 149, Swanport; *Sphacelaria paniculata*, Suhr in Regensb. bot. Zeit., 1840, 278. Swanport; Mrs. Meredith.

*Polyphacum smithiæ*, Harv. Ner. Austr. 17. t, 3. Entrance of the Tamar; Miss Goodwin.

*Mesogloia virescens*, Carmich. in Berkeley's Gleanings of British Algae, p. 44. Swanport; Mrs. Meredith.

**Chondria corynephora*, Harv. in transact. Roy. Irish Acad. xxii, 539. Recorded by the late Professor Harvey at page xxviii. of his synopsis, but without note of special locality.

*Polysiphonia tasmanica*, J. Ag. sp. Alg. ii., 1018. George Tn.

**Polysophonica ferulacea* Suhr in J. Ag. sp. Alg. ii, 980, Table Cape, Miss McKenzie. It may here incidentally be remarked, that the name Hutchinsia, bestowed by Bishop Agardh on this genus in 1817, should be restored, inasmuch as those species of Rob. Brown's cruciferous genus, which have accumbent cotyledons are referable to Thlaspi, while all those with incumbent cotyledons, belong to Capsella.

*Laurencia elata*, Harv. in Hook. Lond. Journ. vi. 401. Swanport; Mrs. C. Meredith.

*Champia tasmanica*, Harv. in Hook. Lond. Journ. iii. 407, tab. 19. Swanport; Mrs. Meredith.

*Champia obsoleta*, Harv. in J. Hook. fl. Tasman. ii, 307, Swanport; Mrs. C. Meredith.

*Wrangelia plumosa* Harv. in Lond. Journ. of Bot. iii, 450. Swanport; Mrs. C. Meredith.

**Corallina Cuvieri*, Lamour. Pol. flex. p. 286. The special locality not recorded by Dr. Harvey, who found it.

**Amphiroa tasmanica*, Sond. in Linnæa xxv, 686. Like Sargassum tasmanicum, this was given about 25 years ago to the writer of these lines from the northern shores of Tasmania, but the special locality remained unknown.

*Nitophyllum crispum*, Kuetz, sp. Alg. 868. Swanport; Mrs. C. Meredith.

*Nitophyllum Gunnianum*, Harv. in Lond. Journ. of Bot. vi. 403. Swanport; Mrs. C. Meredith.

**Phacelocarpus apodus*, J. Agardh. Discovered by Ronald Gunn, Esq., F.R.S.

***Curdiaea laciniata*, Harv. in Annals of Nat. Hist. ser. II., xv., 333. Swanport; Mrs. C. Meredith; also found by S. Hannaford, Esq.

*Gracilaria confervoides*, Grev. Alg. Brit. 123. Swanport. Mrs. C. Meredith.

*Acanthococcus Ewingi*, Harv. Phycol. Austr. 141. Mychodea hamata Harv. in J. Hook fl. Tasma. ii., 323. Discovered bythe Rev. Mr. Ewing, and collected also at George Town and Port Arthur by Dr. Harvey.

**Thamnoclonium claviferum*, J. Ag. Found by R. Gunn, Esq.

*Nemalium insigne*, Harv. Phycol. Austr., 284. Nemastoma densa, Harv. in J. Hook. Fl. Tasm. ii., 328. Tamar. Fruit as yet unknown, and the genus therefore doubtful.

*Plocamium procerum*, Harv. in Hook. Lond. Journ. of Bot. iv., 542. Swanport; Mrs. C. Meredith.

*Plocamium costatum*, Harv. Nereis Aust., p. 122. Swanport; Mrs. C. Meredith.

**Rhodophyllis ramentacea*, J. Ag. Swanport; Mrs. C. Meredith. Entrance of the Tamar; Miss Goodwin.

*Rhodophyllis hypnoides*, Harv. phyc. Austr. cx., cix. Hypnea planiculis, Harv. in J. Hook. Fl. Tasm. ii., 315. Swanport.

*Rhodymenia corallina*, Grev. in J. Hook. and Harv. Cryptog. antarct., p. 169. Swanport; Mrs C. Meredith.

**Rhabdonia flagelliformis*, J. Ag. Allied to R. robusta. Collected by Ronald Gunn, Esq.

*Erythroclonium Muelleri*, Sond. in Linnaea, xxv., 691. Swanport; Mrs. C. Meredith.

**Spyridia opposita*, Harv. in J. Hook. Flor. N. Zealand ii., 256. Southport.

*Mychodea carnosa*, J. Hook and Harv., in Lond. Journ. of Bot. vi., 408. East Coast; R. Gunn, Esq., F.R.S.

*Mychodia terminalis*, Harv. in J. Hook, fl. Tasm. ii., 323. Swanport; Mrs. C. Meredith.

**Callophyllis carnea*, J. Ag., in Act. Holm. 1849, p. 87. Swanport; Mrs. C. Meredith.

*Callophyllis Lamberti*, J. Hook and Harv. in Lond. Journ. of Bot. vi., 405. Swanport; Mrs. C. Meredith.

*Kallymenia cribrosa*, Harv. in transact, Roy, Irish Acad., xxii., 555. Swanport; Mrs. C. Meredith.

**Gigartina Binderi*, Harv. sym. 44. Near Hobart Town according to Senator Binder's collection.

*Gigartina pinnata*, J. Ag., spec. Alg., ii., 270. Swanport.

**Gigartina radula*, J. Ag., spec. Alg. ii. 278. Swanport; Mrs. C. Meredith.

***Gloioderma australe*, J. Ag. Swanport; Mrs. C. Meredith.

**Nemastoma palmata*, Harv. phyc. Austr. C.C.L. xxi. Collected by Miss Brown, but the locality remained unrecorded; neither is the fruit known.

***Dumontia prolifera*, J. Ag., Swanport; Mrs. C. Meredith. A new species to science and a new genus for Tasmania.

**Ceramium isogonum*, Harv. in transact. Roy. Irish Acad. xxii, 55. Collected in Tasmania by Sam. McGowan, Esq. Precise locality unknown.

*Ptilota rhodocallis*, Harv. phycol. Austr. t. 44. Swanport; Mrs. C. Meredith.

*Ptilota articulata*, J. Ag. Symbol. p. 36. Swanport; Mrs. Meredith.

**Caulerpa trifaria*, Harv. phycol. Austr. C.C.L. xi., Swanport; Mrs. C. Meredith. Port Arthur; Dr. Harvey.

**Caulerpa longifolia*, Ag. Swanport; Mrs. C. Meredith.

**Caulerpa furcifolia*, J. Hook. and Harv. in Lond. Journ. of Bot. vi., 416. Swanport; Mrs. C. Meredith.

***Bryopsis plumosa*, Lamour. Annal. du Mus. xx., 281. Common on the coasts of Tasmania according to Dr. Harvey.

***Valonia Gigas*, I. Ag. Swanport, Mrs. C. Meredith. The genus is new not only for Tasmania, but unrecorded for Australia at large; the species is new to science.

**Porphyra Woolhousiæ*, Harv. phycol. Austr. cclxv. On macrocystis. From Miss Woolhouse's collection. Special locality unknown.

**Ulva latuca*, L. sp. pl. 1632. Southport.

**Ulva rigida*, Ag. syst. 189, Swanport; Mrs. C. Meredith.

**Oedegonium gracile*, Kuetz, l.c. This and the three following freshwater Algae came from the South Esk out of the writer's collection, and were identified by Dr. W. Sonder in the Linnæa 1853.

**Oedogonium stagnale*, Kuetz. sp. Alg. 368.

**Oedogonium capillare*, Kuetz. phycol. gen. 255.

***Schizothrix fuscescens*, Kuetz. phycolog. general, 230.

*Thesium australe,* R. Br. prodr. 358. Derwent River; R. Brown.

In the foregoing article, for the locality of the specimens furnished by Mrs. Meredith, read "Orford" (Prossers Bay) instead of "Swanport."