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[PART. III]

DESCRIPTIVE NOTES ON PAPUAN PLANTS,

BY

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III.  
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THE collections for this third publication on Papuan Plants were mainly obtained by the Rev. S. Macfarlane of the London Mission-Society, and by Mr. Andrew Goldie (an emissary of the great Horticulturist S. B. Williams of London), who had the favor conceded of sharing in the last mission-voyage, which shed so much geographic glory also on the toilsome and perilous enterprises of the devoted divines in the South-East of the Papuan Island. Lastly the celebrated Signor D'Albertis through Dr. G. Bennett's kind mediation contributed also to the material for these pages. And more—it is delightful to add, that from all these investigators of the Papua-land further and grand additions to our knowledge of its plants also may early be expected; because in the now forthcoming explorations almost certainly the alpine heights will be attained; these with the middle and perhaps also lower regions of the mountain-tiers must produce large numbers of endemic species among plants also, when the animal creation, while sending many of its forms from the mountains to the coast-lines, exhibited already such a startling display of peculiar types.

Melbourne, 30th June 1876.



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GUTTIFERÆ.

CALOPHYLLUM INOPHYLLUM.

Linné, Species Plantarum, 513.

South-East part of New Guinea; D'Albertis. Fruit not seen.

STERCULIACÆ.

ABROMA AUGUSTA.

Linné fl. Supplement. Plant. 341.

Port Moresby; Rev. S. Macfarlane. Darnley's Island; Goldie.

MELOCHIA PYRAMIDATA.

Linné, Spec. Plant. 774.

Port Moresby; Rev. S. Macfarlane.

MALVACÆ.

THESPESIA POPULNEA.

Solander, according to Correa in Annal. Mus. Paris. ix. 290, t. 8, f. 2.

Darnley's Island; A. Goldie.

MALPIGHIACÆ.

RYSSOPTERYS TIMORENSIS.

Blume in Adr. de Juss. Monographie des Malpighiacées, 133.

Port Moresby; Macfarlane and Goldie.

Fruits from this locality not yet obtained. The only other coordinal plant on record from New Guinea is *Tristellateia Australasica*, A. Rich. Sert. Astrolab. 38, t. 15.

VINIFERÆ.

LEEA SAMBUCINA.

Willdenow, Spec. Plant. i. 1177.

Darnley's Island; A. Goldie.

VITIS CORDATA.

Wallich, Numerical List, 6008.

South-Eastern parts of New Guinea; D'Albertis.

Besides we know through Miquel's writings the following plants of this order from New Guinea:

Vitis Papuana, Miq. Annal. i. 74.

Vitis pubiflora, Miq. l. c. 74.

Vitis pisocarpa, Miq. l. c. 79.

Vitis diffusa, Miq. l. c. 83.

Vitis rostrata, Miq. l. c. 85.

Leea Zippeliana, Miq. l. c. 101.

Leea Sundaica, Miq. Fl. Ind. Bat. I. pars. ii. 610.

The moist jungles of the Papuan Mountains will likely prove to be teeming with plants of the viniferous order. Since many years I have rejected the term *Ampelideæ*, though nearly universal in recent phyto-graphic works, as quite the same word is in full use by Ornithologists, having been adopted in 1831 already by Prince Bonaparte for that group of the *Clamatores*, of which *Ampelis* (Linné Syst. Nat. anno 1748) is the type. Surely in any system of nature ought not to re-occur precisely the same names for genera or orders both in the animal and plant-divisions; and for this reasonable principle Reichenbach and a few others have contended, though only with very scanty success. Moreover Jaume de Saint Hilaire established his original group of *Viniferæ* with its also very expressive name in 1805 already (*Expos. Famil. ii. 48, t. 79*) according to Pfeiffer's great and really most accurate work; whereas the term *Ampelideæ* occurs first in Humb. Bonpl. et Kunth, *Nova Genera et Species Plantar. v. 222*, as late as 1821. The less significant name *Sarmentosæ*, adopted already in 1799 by Ventenat (*Tableau du Règne Vegetale, iii. 167*) in the limitation of *Viniferæ*, was restricted from Linné's *Philosophia Botanica 32* anno 1751, where however it included both Mono- and Dicotyledonous plants. Sprengel in 1817 (*Anleitung zur Kenntniss der Gewaechse, zweite Ausgabe, i. 219*) restricts the *Sarmentaceæ* to some liliaceous groups; hence the appellation has become utterly ambiguous.

ZYGOPHYLLÆ.

TRIBULUS TERRESTRIS.

Linné, *Spec. Plant. 387.*

Darnley's Island; Macfarlane and Goldie.

De l'Obel (*Plantarum seu Stirpium Icones ii. 84*) already in 1581 bestowed precisely the same generic and specific name on this well known plant without any further designation. There seems thus really no reason, as Sprengel and others long since have pointed out, why for this and numerous other plants the ancient authorities should not be

restored. Could the great Linné have foreseen, how much stress in later times with increasing material would be laid necessarily on the precise chronologic authority for all genera and species as well of plants as of animals, then with his strong sense of justice he would doubtless have maintained also the names for species, established by his predecessors, in all those cases certainly when one single specific word only was chosen for the designation. The question therefore arises, whether as the merest act of right the oldest species-names, limited to one apt word and applied correctly to a genus, should be restored. A number of meritorious and toiling men, whose literary labors have sunk gradually into undeserved oblivion, would then share anew in the honor of sponsorship for the specific surnames of plants and animals, originally given by them. At all events wherever Linné himself adopted the very specific appellations from writers before him, no difficulty ought to exist to return to the original authorities, as this would not involve any undesirable change whatever of names maintained by the usages of more than a century. I find that already in the first edition of Linné's *Species Plantarum* not less than 286 plants are adduced with only one specific name from previous literature, so far as they are correctly placed in their genus. Although to hardly any of these the least exception could rightly be taken at the present day, yet it might perhaps be too much to ask to restore them all, inasmuch as in the majority of cases a change of the specific word would become needful. But there remain still 114 species to be considered, the ancient names of which both generic and specific were left unchanged by the great Swedish naturalist. A list of these is given below from Linné's own quotations, although I am aware that not in every instance modern critical research coincides in the views held by Linné, to what particular species, as now defined, these oldest names should be drawn. Linné himself must have been led by De l'Obel, de l'Ecluse, Casp. Bauhin and others to recognize the necessity of confining the specific appellations throughout to one word, by which principle he at once gained such glorious clearness for all his specific designations, obtaining thus also brevity for the systematic record of all the organic beings, as well zoological as phytological, known at his time, and this in a manner to call forth the imitation and admiration of all ages, and to stamp Linné's name for ever on every square mile of the inhabitable portion of the globe through the organic creation.

Ranunculus aquatilis, Dodon. *Stirp.* Hist. Pempt. 387; *R. bulbosus*, Lobel. *Plant. seu Stirp.* Icon. 666; *Anemone trifolia*, Dod. Pempt. 436; *Caltha palustris*,

C. Bauhin Pinax, 276; *Thalictrum minus*, Dod. Pempt. 58; *Nymphæa alba*, J. Camer. de Plant. Epitom. Util. 634; *Lepidium latifolium*, C. Bauh. Pin. 97; *Thlaspi montanum*, Clus. Rar. Stirp. Hist. ii. 131; *Dentaria pentaphyllos*, C. Bauh. Pin. 322; *Chelidonium majus*, Fuchs de Hist. Stirp. Comment. 865; *Viola odorata*, Renealm Specim. Hist. Pl. 141, t. 140; *V. tricolor*, Ren. Specim. 144, t. 140; *Geranium nodosum*, C. Bauh. Pin. 318; *Malva crispa*, Dod. Pempt. 653; *Vitis vinifera*, C. Bauh. Pin. 229; *Rhus coriaria*, Dod. Pempt. 779; *Platanus occidentalis*, Catesb. Nat. Hist. of Carolina, i. 56, t. 56; *Populus alba*, Dod. Pempt. 835; *P. tremula*, C. Bauh. Pin. 429; *P. nigra*, C. Bauh. Pin. 429; *Cannabis sativa*, C. Bauh. Pin. 320; *Amarantus tricolor*, Lob. Icon. 252; *Atriplex hortensis*, Dod. Pempt. 615; *Chorispermum hyssopifolium*, Ant. de Jussieu in Act. Acad. Paris, 1712, p. 244; *Mesembrianthemum calamiforme*, Dillen. Hort. Elthamensis. 239, t. 186; *M. bellidiflorum*, Dill. Hort. Elth. 244, t. 189; *M. loreum*, Dill. Hort. Elth. 264, t. 200; *Reseda lutea*, J. Bauhin et Cherler. Histor. Plant. Univ. iii. 467; *Ebenus Cretica*, Alpin. de Plant. Exotic. 279, t. 278; *Astragalus Bæticus*, Clus. Hist. ii. 234; *A. Syriacus*, Lob. Icon. 79; *A. Monspessulanus*, J. Bauh. et Cherl. Hist. iii. 338; *Cicer arietinum*, Dod. Pempt. 525; *Melilotus Italica*, J. Camerar. Hort. Med. et Phil. 99, t. 29; *Trifolium repens*, Rivin. Ord. Plant. Fl. Tetrapet. 17; *T. pratense*, J. Camer. de Pl. Epit. 582; *T. stellatum*, C. Bauh. Pin. 329; *T. fragiferum*, Vaillant. Botanic. Paris, 195, t. 22; *T. agrarium*, Dod. Pempt. 576; *Medicago sativa*, Morison Pl. Hist. Univers. ii. 150, t. 16; *M. marina*, Clus. Hist. ii. 243; *M. scutellata*, J. Bauh. et Cherl. Hist. iii. 384; *M. Arabica*, J. Camer. Hort. Med. 97, t. 27; *Phaseolus vulgaris*, Lobel. Icon. 59; *Lathyrus silvestris*, Clus. Hist. ii. 129; *L. latifolius*, C. Bauh. Pin. 344; *Vicia sepium*, Rivin. Ord. Pl. Fl. Tetrap. 56; *V. Narbonnensis*, Riv. Ord. Pl. Fl. Tetrap. 56; *Anagyris fœtida*, C. Bauh. Pin. 391; *Rubus odoratus*, Cornut. Canad. Pl. Hist. 149, t. 150; *Rosa eglanteria*, Tabern. Eicon. Plant. 1087; *Alchemilla vulgaris*, C. Bauh. Pin. 319; *Rhamnus catharticus*, C. Bauh. Pin. 478; *Asarum Canadense*, Cornut. Canad. Pl. Hist. 24, t. 25; *Aristolochia rotunda*, Clus. Hist. ii. 70; *A. longa*, Clus. Hist. ii. 70; *Cucurbita verrucosa*, J. Bauh. et Cherl. Hist. ii. 222; *Sium latifolium*, C. Bauh. Pin. 154; *Angelica silvestris*, Dod. Pempt. 318; *Laserpitium Gallicum*, C. Bauh. Pin. 156; *Ammi majus*, C. Bauh. Pin. 159; *Eryngium maritimum*, Clus. Hist. ii. 169; *Galium rubrum*, C. Bauh. Pin. 355; *Santalum album*, C. Bauh. Pin. 392; *Scabiosa arvensis*, Tabernæmont. Kræuterbuch, 442; *Eupatorium cannabinum*, C. Bauh. Pin. 320; *Artemisia vulgaris*, J. Bauh. et Cherl. Hist. iii. 184; *Helichrysum orientale*, C. Bauh. Pin. 264; *Chrysanthemum segetum*, Clus. Hist. ii. 70; *Ambrosia maritima*, C. Bauh. Pin. 138; *Carduus nutans*, J. Bauh. et Cherl. Hist. iii. 56; *C. acanthoides*, J. Bauh. et Cherl. Hist. iii. 59; *Cichorium spinosum*, C. Bauh. Pin. 126; *Chondrilla juncea*, Tabernæm. Kræuterb. 487; *Lactuca sativa*, C. Bauh. Pin. 122; *Pyrola minor*, Rivin. Ord. Pl. Fl. Pentapet. 149; *Gentiana cruciata*, Bauh. Pin. 188; *Glaux maritima*, Bauh. Pin. 215; *Soldanella alpina*, J. Camer. de Pl. Epitom. 254; *Globularia spinosa*, Tournefort Instit. rei herbar. 476; *Plantago major*, J. Camer. de Pl. Epitom. 261; *Cuscuta major*, C. Bauh. Pin. 219; *Digitalis purpurea*, Dod. Pempt. 168; *Orobanche ramosa*, C. Bauh. Pin. 491; *Fraxinus excelsior*, C. Bauh. Pin. 416; *Phillyrea angustifolia*, C. Bauh. Pin. 476; *Echium Creticum*, Clus. Hist. ii. 143; *Cerinthe minor*, C. Bauh. Pin. 258; *Satureja*

montana, C. Bauh. Pin. 218 ; S. hortensis, C. Bauh. Pin. 218 ; Lavandula latifolia, C. Bauh. Pin. 216 ; L. angustifolia, C. Bauh. Pin. 216 ; Ocimum minimum, C. Bauh. Pin. 226 ; Marrubium vulgare, Clus. Hist. ii. 34 ; Prunella hyssopifolia, C. Bauh. Pin. 261 ; Pinus silvestris, C. Bauh. Pin. 491 ; Juniperus Bermudiana, Hermann Hort. Acad. Lugd. Bat. 345, t. 347 ; Sparganium ramosum, C. Bauh. Pin. 15 ; Colchicum montanum, Clus. Rar. Stirp. Hisp. Hist. 266 ; Crocus sativus, C. Bauh. Pin. 65 ; Narcissus serotinus, Clus. Hist. i. 162 ; Allium sativum, Bauh. Pin. 73 ; A. ursinum, Fuchs de Hist. Stirp. Comment. 739 ; Fritillaria Pyrenaica, Clus. Hist. ii. 256 ; Ornithogalum Pyrenaicum, Clus. Cur. Postr. 21 ; O. Arabicum, Clus. Hist. 189 ; Hyacinthus Orientalis, Bauh. Pin. 44 ; Hordeum distichum, C. Bauh. Pin. 22 ; Equisetum silvaticum, Tabernæm. Kræuterb. 562 ; Ophioglossum vulgatum, C. Bauh. Pin. 364 ; O. palmatum, Plumier Filicet. American. 139, t. 163 ; Polypodium vulgare, C. Bauh. Pin. 359.

Linné himself made already in 1737 exceptionally use of the merely dual appellation of plants in his *Flora Lapponica*.

EUPHORBIACEÆ.

SECURINEGA ABYSSINICA.

A. Richard, Teutam. Fl. Abyssin. ii. 256.

Darnley's Island ; A. Goldie.

EUPHORBIA ATOTO.

G. Forster, Florul. Insul. Austr. Prodr. 36.

Darnley's Island ; Macfarlane and Goldie.

URTICEÆ.

TREMA CANNABINA.

Loureiro, Flora Cochinchinensis, edit. Willd. 689.

Port Moresby ; A. Goldie.

FLEURYA INTERRUPTA.

Gaudichaud, Voyage de l'Uranie, Bot. 497.

Darnley's Island.

POUZOLZIA QUINQUENERVIS.

Bennett in Horsfield. Plant. Javan. Rarior. 66.

Yule's Island ; A. Goldie.

Blume and Miquel have recorded already from New Guinea the following Urticeæ :

Celtis paniculata, Planchon in *Annales des Scienc. Nat.* 1848, p. 305.

- Celtis Zippelii*, Planch. l. c.
Celtis latifolia, Planch. l. c.
Girroniera rhamnifolia, Bl. Mus. Bot. Lugd. ii. 74.
Fleurya ruderalis, Gaud. Voy. Uran. 497.
Villebrunia murina, Blume Mus. Bot. Lugd. 160.
Villebrunia rufescens, Bl. l. c.
Villebrunia rhodopleura, Bl. l. c. All three doubtful, so far as generic position is concerned, and transferred by Miquel to *Oreocnide*.
Cypholophus latifolius, Wedd. in Cand. Prodr. xvi. 235.
Cypholophus vestitus, Miq. Fl. Ind. Bat. i. pars. alt. 263.
Cypholophus prostratus, Wedd. l. c.
Cypholophus melanocarpus, Miq. l. c.
Streblus asper, Lour. Fl. Coch. ii. 615.
Ficus pilosa, Reinw. in Miq. Annal. iii. 260.
Ficus cuspidata, Reinw. in Bl. Bijdr. 464.
Ficus obscura, Bl. Bijdr. 474.
Ficus angulidens, Miq. Fl. Ind. Bat. i. pars. alt. p. 310.
Ficus parietalis, Bl. Bijdr. 462.
Miquel (Annal. iii. 274) mentions that 30 species of *Ficus* were already gathered in New Guinea by Zippelius, who however did not preserve specimens of them, but wrote their descriptions on the spots of discovery.
Weddell (in Cand. Prodr. xvi. p. i. 169) mentions further from New Guinea:
Pellionia elatostemoides, Gaudichaud, Botaniq. Voy. Freycen. t. 119.

AMARANTACEÆ.

DEERINGIA CELOSIODES.

R. Br. Prodr. Fl. Nov. Holl. 413.

- Port Moresby; A. Goldie.
Moquin-Tandon (in Candolle's Prodr. xiii. tom. ii. pag. 326) gives as Papuan:
Cyathula geniculata, Loureiro, Flora Cochinchinensis, i. 101.

LEGUMINOSÆ.

PSORALEA ARCHERI.

F. M. Fragm. Phytogr. Austr. iv. 21.

- Port Moresby; Rev. S. Macfarlane.

DESMODIUM UMBELLATUM.

Cand. Prodr. ii. 325.

Port Moresby; Macfarlane and Goldie. Sent also by Signor D'Albertis.

INDIGOFERA LINIFOLIA.

Retzius, Observation. Botan. iv. 29.

Port Moresby; Rev. S. Macfarlane. Yule's Island; A. Goldie.

INDIGOFERA TRIFOLIATA.

Linné, Amœn. Acad. iv. 327.

Yule's Island; Macfarlane and Goldie.

PYCNOSPORA HEDYSAROIDES.

R. Brown in Wight et Arnott Prodr. Flor. Penins. Ind. 197.

Yule's Island; A. Goldie.

CROTALARIA LINIFOLIA.

Linné fil. Supplem. Plantar. 328.

Yule's Island; A. Goldie.

CANAVALLIA OBTUSIFOLIA.

Candolle, Prodr. Syst. Nat. Regn. Veg. ii. 404.

Port Moresby; Rev. S. Macfarlane.

GALACTIA TENUIFLORA.

Wight et Arnott, Prodr. 206.

Yule's Island; A. Goldie.

URARIA CERCIFOLIA.

Desvaux, Journal de Botanique, iii. 122, t. 5, f. 19.

Yule's Island; A. Goldie.

SOPHORA TOMENTOSA.

Linné, Spec. Plant. 373.

Darnley's Island; A. Goldie.

CÆSALPINIA BONDUCELLA.

Fleming, Asiatic Researches, xi. 159.

Darnley's Island; Macfarlane and Goldie. Fruit not seen.

LYTHRACEÆ.

PEMPHIS ACIDULA.

R. et G. Forster, Characteres Generum, 67, t. 34.

Darnley's Island; A. Goldie.

RUBIACEÆ.

KNOXIA CORYMBOSA.

Willdenow, Spec. Plant. i. 582.

Yule's Island; Macfarlane and Goldie.

GUETTARDA SPECIOSA.

Linné, Spec. Plant. 991.

Darnley's Island; Macfarlane and Goldie.

COMPOSITÆ.

BIDENS PILOSUS.

Linné, Spec. Plantar. 832.

Port Moresby and Darnley's Island; Macfarlane and Goldie.

PTEROCAULON BILLARDIERI.

Monenteles spicatus, Labillard. Sert. Austr. Caled. 43, t. 43.

Port Moresby; A. Goldie.

Bentham (J. H. et B. Gen. Plant. ii. 294) has reduced Monenteles to Pterocaulon; in the latter Labillardière's species-appellation is already preoccupied by a Brazilian plant.

WEDELIA BIFLORA.

Candolle in Wight's Contributions, 18.

Darnley's Island; Macfarlane and Goldie.

ERIGERON LINIFOLIUS.

Willdenow, Spec. Plant. iii. 1955.

China-Straits; Rev. S. Macfarlane.

ASPERIFOLIÆ.

CORDIA SUBCORDATA.

Lamarck, Illustrat. des Genr. 1899.

Yule's Island; A. Goldie.

SOLANACEÆ.

SOLANUM VERBASCIFOLIUM.

Linné, Spec. Plantar. 184.

Port Moresby; A. Goldie. Found at Port Doreh already during the explorations of the French corvette *Astrolabe*.

Other Solanaceæ, known as Papuans:

Solanum Schefferi (*S. incanum*, Scheff. in Annal. du Jardin Botanique de Buitenz. 1876, p. 39, non Linné).

Near Andaj; Teysmann.

Solanum lasiocarpum (Dunal, Histoire des Solan. 222).

Near Port Doreh, according to Botanique de l'*Astrolabe*, 1832, p. xxi.

Solanum pulvinare (Scheff. l. c.).

Ajambori, Teysmann. The cushion-like appearance, which the specific name would imply, is quite exceptional among the many hundred species of *Solanum* hitherto described.

CONVOLVULACEÆ.

IPOMÆA QUINATA.

R. Brown, Prodr. Fl. Nov. Holl. 486.

Yule's Island; Macfarlane and Goldie.

LABIATÆ.

ANISOMELES SALVIFOLIA.

R. Brown, Prodr. Flor. Nov. Holl. 503.

Darnley's Island; Macfarlane and Goldie.

ORTHOSIPHON STAMINEUS.

Bentham in Wallich's Plant. Asiatic. Rarior. ii. 15.

Yule's Island; A. Goldie.

A variety with toothless leaves. Neither Miquel nor Scheffer (Annales du Jardin Botanique de Buitenzorg, 1876) have any plant of the Labiatae in their lists of New Guinean plants. The missionaries have sent a Plectranthus also, but not in flower for exact naming.

XEROTIDEÆ.

XEROTES BANKSII.

R. Brown, Prodr. Fl. Nov. Holl. 263.

On Baxter's River; Jam. Orkney.

The specimens are without flowers and fruits; but there seems no doubt, that they belong to the genuine Banksian plant, which the writer has also ascertained to extend to New Caledonia. Mr. Orkney gathered several other plants, all communicated to me by R. Br. Smyth, Esq.; but they are identical with the species previously recorded in these pages.

HYDROCHARIDEÆ.

ENHALUS ACOROIDES.

L. C. Richard in Memoir. de l'Institute, 1811, tom. ii. p. 64.

Frequent on some parts of the New Guinean coast; Dr. F. Naumann.

Observed during the voyage of the Imperial German corvette *Gazelle*, according to Dr. Ascherson, the able monographer of the oceanic Monocotyledoneæ. See Annalen der Hydrographie und Maritimen Meteorologie, March 1876.

COMMELYNEÆ.

COMMELYNA ENSIFOLIA.

R. Brown, Prodr. Fl. Nov. Holl. 269.

Port Moresby and Darnley's Island; Rev. S. Macfarlane and A. Goldie.

CYPERACEÆ.

CYPERUS MONOCEPHALUS.

F. M. Fragm. Phytogr. Austr. viii. 271.

Darnley's Island; Goldie.

ISOLEPIS BARBATA.

R. Brown, Prodr. Fl. Nov. Holl. 222.

Port Moresby; Macfarlane and Goldie.

GRAMINEÆ.

SACCHARUM SPONTANEUM.

Linné, Mantissa Plantarum, 183.

Yule's Island; Macfarlane and Goldie.

Recorded already by Ach. Richard from Port Doreh.

APLUDA MUTICA.

Linné, Spec. Plant. 82.

Port Moresby; Rev. S. Macfarlane.

ANDROPOGON ROTTBÆLLIOIDES.

Steudel, Glumac. i. 382.

Darnley's Island; A. Goldie.

Cœlorachis muricata (Brogner. in Duperrey's Voy. Bot. 65, t. 14), which undoubtedly represents the *Ischæmum rottbœllioides* (R. Br. Pr. 205) is by Steudel adduced to *Ischæmum pectinatum* (Trin. Act. Petropol. 296).

ANDROPOGON ANNULATUS.

Forskæl, Flor. Ægypt. Arabic. 173.

Port Moresby; Rev. S. Macfarlane.

The form with long-bearded bracts and elongated awns, described by R. Brown as *A. sericeus*.

ANDROPOGON CONTORTUS.

Linné, Spec. Plantar. 1045.

Port Moresby; Rev. S. Macfarlane. Yule's Island; A. Goldie.

The Eucalyptus-country inland also is densely covered with this grass, except low swampy localities, according to Mr. Goldie's note.

ANDROPOGON HALEPPENSIS.

Sibthorp et Smith, Flora Græca, t. 68.

Port Moresby; Rev. S. Macfarlane. Yule's Island; A. Goldie.

The variety with smaller spikelets, considered by some to have claims as a species, namely *A. tropicus* (Spreng. Syst. Veg. i. 287).

ANTHISTIRIA CILIATA.

Linné fil. Dissertat. de Nov. Gramin. Gener. 35.

Yule's Island; A. Goldie.

PANICUM VIRGATUM.

Linné, Spec. Plant. 59.

Port Moresby; Rev. S. Macfarlane.

PANICUM SANGUINALE.

Linné, Spec. Plant. 57.

Port Moresby; Macfarlane and Goldie.

The form with elongated spikes, superposed on an extended axis. See *Fragm. Phytogr. Austr.* viii. 154.

ELEUSINE CRUCIATA.

Lamarck, Encycl. Méthodiq. t. 48, f. 2.

Darnley's Island; A. Goldie.

PEROTIS RARA.

R. Brown, Prodr. Fl. Nov. Holl. 172.

Port Moresby; Rev. S. Macfarlane.

LEPTASPIS BANKSII.

R. Brown, Prodr. Fl. Nov. Holl. 211.

Port Moresby; Rev. S. Macfarlane. Yule's Island; A. Goldie.

Miquel records as Papuan grasses:

Aristida ramosa, R. Br. Pr. 173.

Centotheca lappacea, Desv. Journ. de Bot. 1813, p. 70.

Saccharum macilentum, Chauv. in Steud. Glum. 406.

FILICES.

CHEILANTHES TENUIFOLIA.

Swartz. Synops. Filic. 129.

Yule's Island; Goldie.

POLYPODIUM IRIOIDES.

Poiret in Lam. Encycl. Meth. v. 513.

Yule's Island; A. Goldie.

POLYPODIUM PHYMATODES.

Linné, Mantiss. Plant. 360.

Darnley's Island; A. Goldie.

Mettenius (in Miq. Annal. iii.) gives the following species from Papuan collections:

P. sinuosum, Wall. Catal. 2231.

P. linguiforme, Mett. Fil. Ind. 225.

P. quercifolium, Linné, Sp. Pl. 1087.

P. Linnæi, Bory in Annal des Sc. Nat. v. 464, t. 12.

P. rigidulum, Sw. Syn. Fil. 38.

P. ferrugineum, Bak. in H. et B. Syn. Fil. 318.

P. acrostichoides, G. Forst. Florul. Insul. Austr. Prodr. 81.

Baker (in Hooker's Synops. Fil. sec. edit. p. 350) notes as Papuan:

P. stigmatosum, Swartz. Synops. Fil. 29.

ASPIDIUM RAMOSUM.

Beauvois, Flore d'Oware, 91.

South-East Papua; D'Albortis.

Mettenius has shown, that the following congeners exist also in New Guinea:

A. immersum, Bl. Enum. Fil. Jav. 156.

A. truncatum, Gaudich. in Freyc. Voy. t. 10.

A. Pica, Desv. in Berl. Mag. v. 319.

A. acutum, Schkuhr Kryptog. Gewächsh. 32, t. 31.

A. exaltatum, Swartz Syn. Fil. 45.

If *Oleandra* becomes reduced to *Aspidium*, as well might be done, then *O. neriiformis* (Cavanill. Præl. 1801, n. 623) requires to be recorded on

this occasion as an additional Papuan Aspidium (*A. neriiforme*, Sw. Syn. Fil. 42), according to Hook. et Bak. Syn. Fil. second edit. 302.

O. musæfolia, Kunze in Metten. Filic. Ind. 240, stands also on record from New Guinea, according to Miq. Annal. i. 240.

ADIANTUM LUNULATUM.

Burmann, Flor. Indic. 235.

Darnley's Island; Rev. S. Macfarlane.

DAVALLIA ELEGANS.

Swartz Synops. Felic. 132.

China-Straits; Rev. S. Macfarlane.

ASPLENIUM SCOLOPENDROPSIS.

Entirely glabrous; stems creeping and rooting; fronds simple, thinly chartaceous or almost membranous, elongate narrow-lanceolar, more or less sinuate-denticulate, gradually narrowed into a long wingless stipes; veins simple or consisting of two branches, prominent, extending in almost parallel lines to the edge; sori broad, in pairs, traversing the whole width of the frond from the stout midrib to the margin; the indusia of each pair touching each other with their edge, but disunited from the commencement; sporangia of each indusium separated from those of the other in each pair by an ample empty interstice.

In the South-East part of New Guinea; D'Albertis.

Rootlets, so far as seen, distant and not much branched, either very short or extending to simple wiry fibres sometimes over a span long. Fronds $\frac{2}{3}$ – $1\frac{1}{2}$ foot long, to about 1 inch broad, very gradually acuminate; the margin often wavy and with rather distant and irregular denticulations; veins very spreading. The paired sori somewhat distant from each other; the very tender indusia of each pair covering a width of about one line or rather more.

This remarkable *Asplenium* invalidates still more the limits of *Scolopendrium* as a genus, the reunion of the latter with the former becoming almost unavoidable. The sori of the typical *Scolopendrium vulgare* (Smith in Memoir. Acad. Roy. des Scienc. Turin, v. 421, t. 9, f. 2) are however at the early state of growth covered by indusia, which overlap each other, the sporangia within forming a crowded uninterrupted mass. Specific distinctions to separate this new species from the ordinary *Scolopendrium* are further easily derived from the total absence of a scaly

covering of the stipes and midrib, the long creeping stems, the generally more tender consistence of the fronds, their narrowness, acute base, long acumen and often manifest denticulations, the very conspicuous not almost concealed veins, and the sori approaching as well to the edge as to the midrib. There is on record an evidently allied *Scolopendrium* from the Philippine-Islands, namely *S. longifolium* (Presl. Reliquiæ Hænkean. 48, t. 9, f. 1), which Sir Will. Hooker united with the later described *S. pinnatum* (J. Smith in Hook. Journ. of Bot. iii. 406). This I have here been unable to compare; but also Baker (in Hook. et Bak. Syn. Fil. 247) describes the fronds as subcoriaceous; nor is there any tendency in Signor D'Albertis's plant, of which we have several specimens, to any division pinnate or otherwise of the fronds. Mettenius however keeps the simple-fronded plant distinct as *Micropodium longifolium* (Falic. Ind. ii. 233).

Other species of this genus, known as New Guinean, according to Hooker, Mettenius and Baker:

A. scandens, J. Sm. in Hook. Journ. of Bot. iii. 408.

A. cyathæfolium, Bory in Rich. Voy. d'Astrol. Bot. 19.

A. vulcanicum, Bl. Enum. Fil. Jav. 176.

A. Nidus, Linné Sp. Pl. 1079.

A. decussatum, Sw. Syn. Fil. 76.

A. tenerum, G. Forst. Prodr. 80.

A. LATIFOLIUM.

D. Don., Prodrum. Fl. Nepalens. 8.

About 15 miles inland from Port Moresby; *A. Goldie*.

The sender found the stem three feet high, hence mentions this as a small treefern. It is still necessary, that from living plants the full characteristics of *A. latifolium*, *A. Schkuhrrii* and *A. silvaticum* should be more clearly set forth. *A. decussatum*, which also bears much resemblance, has simply pinnate fronds and anastomosing veins.

ACROSTICHUM SCANDENS.

J. Smith in Hooker's Journal, iv. 149.

China-Straits; Rev. S. Macfarlane.

Mettenius in Miq. Annal. iv. 294 notes his *Lomariopsis spectabilis*, which according to Baker (Hook. et Bak. Syn. Fil. sec. edit. 412) must be regarded as one of the many forms of *A. sorbifolium*, L. Sp. Pl. 1069.

