

A Systematic Account of the Plants collected in New Caledonia and the Isle of Pines by Prof. R. H. Compton, M.A., in 1914.—PART I. Flowering Plants (Angiosperms). By A. B. RENDLE, D.Sc., F.R.S., F.L.S., E. G. BAKER, F.L.S., and SPENCER LE M. MOORE, B.Sc., F.L.S.

(PLATES 13-24.)

[Read 2nd February, 1920.]

INTRODUCTION.

THE collection of which the following is a systematic account was made by Prof. R. H. Compton in New Caledonia and the Isle of Pines during 1914, with the aid of grants from the Royal Society, the Percy Sladen Trust Fund, and the Worts Travelling Fund of Cambridge University. Collecting materials were also provided by the Cambridge Botany School and the British Museum, Natural History.

The specimens collected have been presented to the British Museum, where the greater part have been determined.

Prof. Compton hopes later to publish a paper or papers dealing with the New Caledonian vegetation from the standpoints of Ecology and Geographical Distribution. A considerable quantity of material was preserved in a condition suitable for morphological and anatomical research, and several papers are foreshadowed on these aspects of some of the interesting forms in which the Flora of New Caledonia is so extraordinarily rich. A general account, including a description of the geology, topography, and climate of the Islands has been communicated by Prof. Compton to the Royal Geographical Society*.

The various groups have been elaborated as follows:—Flowering Plants: Angiosperms by Dr. A. B. Rendle (Monocotyledons), Mr. E. G. Baker (Polypetalous Dicotyledons), and Mr. Spencer Moore (Sympetalous and Apetalous Dicotyledons); Gymnosperms and Ferns by Prof. R. H. Compton; Mosses by M. Theriot; Hepatics by Prof. J. B. Farmer; Characeæ by Mr. J. Groves; Marine Algæ by Mr. A. Gepp; Fresh-water Algæ by Dr. Nellie Carter; Fungi by Miss E. M. Wakefield; Lichens by Miss A. Lorrain Smith, and Mycetozoa by Miss G. Lister.

At Prof. Compton's request I undertook the task of arranging the material for publication.

The present paper contains a systematic account of the angiospermous Flowering Plants, and enumerates 830 species, 230 of which are new; and

* "New Caledonia and the Isle of Pines." By R. H. Compton, M.A. *Geographical Journal*, xliv. No. 2, Feb. 1917.

there are ten new genera. The flora of New Caledonia is of exceptional interest, especially in regard to the large number of peculiar endemic forms, and Prof. Compton has added materially to our knowledge of the vegetation and its distribution. In addition to the large proportion of new genera and species, a number are now recorded for the first time from the Island. The latter include the anomalous genus of Amaryllidaceæ, *Campynema*, hitherto known only in one (or perhaps two) species from Tasmania, the Australian genus of Euphorbiaceæ, *Ricinocarpus*, the Malayan genus *Lucinea* (Rubiaceæ), and the Indo-Malayan and Australian genera *Gmelina* (Verbenaceæ) and *Litsæa* (Lauraceæ).

The new genera are *Comptonella* (Rutaceæ), *Salaciopsis* (Celastrineæ), *Montagueia* (Anacardiaceæ) (commemorating the late Mr. P. D. Montague, zoologist to the expedition), *Paraeryphia* (Eucryphiaceæ), *Enochoria* (Araliaceæ), *Merismostigma* (Rubiaceæ), *Tropalanthus* (Sapotaceæ), *Depanthus* (Gesneraceæ), *Adenodaphne* (Lauraceæ), and *Dendrophyllanthus* (Euphorbiaceæ).

The four families represented by the greatest number of species in the collection are Orchidaceæ, Euphorbiaceæ, Rubiaceæ, and Myrtaceæ, and these families also head the list in M. Guillaumin's "Catalogue des plantes phanerogames de la Nouvelle-Calédonie" (Ann. Musée Colonial de Marseille, 1911), and provide a large proportion of the novelties described in the present paper. The families Saxifragaceæ, Apocynaceæ, and Leguminosæ are also well represented.

In order to save space and reduce the cost of printing the systematic account has been condensed as much as possible. Distribution is indicated only in species which are not endemic. It has been convenient to follow the arrangement of the families, under Monocotyledons and Dicotyledons, adopted in Bentham and Hooker's 'Genera Plantarum.'

A. B. RENDLE.

MONOCOTYLEDONS.

By A. B. RENDLE.

ORCHIDACEÆ.

MICROSTYLIS POLYPHYLLA Ridl. Comboui Mts.; forest humus; serpentine; 3000 ft. 2185. Flowers dull red on yellowish ground, lip with deep crimson blotch.

LIPARIS LAXA Schlechter. Comboui Mts.; bare rocks in *Spermolepis* forest, near stream; serpentine; 1500 ft. 2176. Flowers red-brown.

DENDROBIUM FINETIANUM Schlechter. Ignambi; epiphyte; forest; 3500 ft. 1539. Mt. Koghi; on tree-trunks in forest; 3000 ft. 727.

River Ngoyé; *Spermolepis* forest; 500 ft. 1003. Flowers greenish yellow, lightly streaked with brown, lip creamy white with brown-purple streaks.

DENDROBIUM FRACTIFLEXUM Finet. Kuakué; terrestrial, in woods on steep hill-sides; 500 ft. 897. Lip oscillating, dark green inside at base, full magenta in middle, pale at apex; other perianth-segments turned upwards and outwards, pale dull magenta, finely spotted and veined.

D. VERRUCIFERUM Rehb. f. Presqu'île Bogota; terrestrial; serpentine scrub; 1500 ft. 1321. Lip hinged, green, other perianth-segments brownish.

D. PECTINATUM Finet. Mt. Panié; epiphyte; forest; 4000 ft. 1816. Tonine; on trunks in scrubby summit woods; 3500 ft. 1947. Flowers pale yellow with reddish longitudinal streaks except on lip.

D. AUSTRO-CALEDONICUM Schlechter. River Ngoyé; on trunks, forest margin; 400 ft. 2050. Flowers apricot-coloured; fruit with dull yellowish ridges and green furrows.

D. ELEUTHEROGLOSSUM Schlechter. Poume; on trees in scrubby woods; 1200 ft. 2372. Flowers pale yellowish green with purple pattern on lip.

D. COMPTONII Rendle, sp. nov. (Pl. 13. fig. 13.) Planta epiphytica; *caulibus* cylindricis circa 1 cm. crassis, siccis valde sulcatis; *foliis* 4-5, apicem versus congestis late lanceolatis apice bilobulatis coriaceis 12-13 cm. long., 2.8-3.8 cm. lat.; *racemis* folia paullo excedentibus multifloris 12-14 cm. long.; *floribus* carnosulis luteis externe sanguineo-punctatis, pedicellis tenuibus 1-1.5 cm. long.; *bracteis* minutis, lineari-angustatis; *sepalis* et *petalis* 8-9 mm. long.; sep. dorsale oblongo obtuso, sep. lateralia e basi latiore late oblongo-falcata paullo excedente; *petalis* subfalcate oblongis obtusis ad sepalorum margines cohærentibus; *labello* 5 mm. long., 3-lobo, lobo medio oblato 3.5 mm. long., 3 mm. lat., superne breviter acuminato disco lineis 2 elevatis instructo, lobis lateralibus vix 1 mm. longit. excedentibus suberectis obtusis; *columna* breve lata 2 mm. long.

Mt. Canala; forest; 1000 ft. 1151. In flower June. Stems yellow, almost covered with the whitish thinly membranous remains of the leaf-sheaths. A member of the *Speciosa* group, recalling the Australian *D. gracilicaule* F. Muell., but a much larger plant.

BULBOPHYLLUM NEOCALEDONICUM Schlechter. Ignambi; moist forests; attached to trunks by long slender roots; 3000 ft. 1702. Flowers transparent greenish.

B. NGOYENSE Schlechter. No note of locality. 2044.

B. LINGULATUM Rendle, sp. nov. Planta parva epiphytica repens, *rhizomate* elongato ramoso tereti vaginato laxè pseudobulbis obsesso polyrhizo;

radicibus filiformibus flexuosis glabris; *pseudobulbis* ovoideis 4–7 mm. long. 3·5–4 mm. crass. glabris unifoliatis; *folio* patente vel erecto-patente oblongo-elliptico obtuso glabro coriaceo 12–15 cm. long. 3·5–5 mm. lat.; *scapis* filiformibus glabris interdum folia excedentibus interdum brevioribus basi et sub medio vaginulis obsessis unifloris; *bractea* ovato-acuminata circ. 1 mm. long.; *sepalis* subæquilongis, 6 mm., 3-nervatis, sep. dorsale ovato subacuto, sep. lateralibus late ovatis breviter acutis basi ad columnæ pedem coherentibus et mentum efformantibus; *petalis* lanceolatis, subacutis, 4 mm. long.; *labello* crasso apice columnæ pedis curvato oscillante, sub medio valde reflexo, parte inferiore 75 mm. long. trapezoideo lateribus superne incurvatis, parte superiore linguiforme sub medio sulcato 1·2 mm. long.; *columna* breve vix 75 mm. long. pede producto demum sursum curvato; *ovario* graciliter pedicellato clavato anguste alato.

No note of locality. 1818.

Resembles in size and habit the endemic *B. ngoyense* Schlechter, but differs in floral details.

BULBOPHYLLUM COMPTONII Rendle, sp. nov. Planta epiphytica, *pseudobulbo* oblique ovoideo 1·4 cm. l., 1·1 cm. crass. e rhizomate repente oriundo, unifoliato; *folio* petiolato, oblongo-elliptico, glabro, coriaceo, 9 cm. l. (petiolo 1·9 cm. incluso) 2·4 cm. lat.; *scapo* erecto folium excedente tenui terete glabro vaginis paucis superne acuminatis dissitis obsesso, apice paucifloro 13 cm. l., 1 mm. crass.; *bracteis* distichis arcte compressis late ovatis acuminatis glabris ovario breviter pedicellato paullo brevioribus 5 mm. l.; *flore* (unus adest) inter mediocres erecto; *sepalo dorsale* lanceolato acuminato apice carinato-incrassato 1·2 cm. l., *sep. lateralibus* e basi latiore, 5·5 mm., oblique ovatis apice falcate acuminatis carinulatis 1·2 mm. l.; *petalis* columnæ subæquilongis ligulato-oblongis apice tridenticulatis carinulatis 5 mm. l.; *labello* crasso basi concavo callis 2 instructo et lateribus elevatis tum ovato-acuminato et margine crenulato in facie superiore sulcato 11 mm. l.; *columna* erecta in pedem subæquilongum transeunte; *ovario* clavato sulcato.

No note of locality. 1790.

Recalls another endemic species, *B. pachyanthum* Schlechter, in habit and general structure, but is a smaller plant with flowers about half the size.

CIRRHOPETALUM THOUARSII Lindl. Mt. Mou; on vertical trunk; damp gully; cretaceous forest; 600 ft. 529. Lip flexible, spotted with dull dark red, petals pale. Pacific Islands.

ERIA KARIKOUYENSIS Schlechter. River Ngoyé; on wet earth in stream course; serpentine; 500 ft. 1021. Lip rose-coloured; rest of flower apricot.

PHREATIA NEOCALEDONICA Schlechter. Mt. Humboldt; epiphytic on fallen trunk by stream; forest; 1000 ft. 1032. Tonine; trees in creek-side forest; 1000 ft. 1930. Flowers white.

PHREATEA OUBATCHENSIS Schlechter. Ignambi; 1620. Tonine; 1929. Epiphyte; forest by stream; 1000 ft. Flowers ivory white. Native name, Mangaounin.

P. COMPTONII Rendle, sp. nov. (Pl. 13. figs. 10-12.) Planta epiphytica parva, 6 cm. alta, *rhizomate* abbreviato, pseudobulbis dense obsessa; *radicibus* flexuosis glabris; *pseudobulbis* c. .5 cm. long. ut apparet 2-foliatis; *foliis* erectis ligulatis obtusis apice inæqualiter bilobulatis basin versus paullo angustatis utrinque glabris, 5.5 cm. l., c. .5 cm. lat.; *scapo* radicali erecto tenui glabro supra basin vaginula tum bracteis lineari-acuminatis membranaceis (7-4.5 mm. long.) instructo; *racemo* c. 20-floro 3 cm. l.; *floribus* minutis pedicellatis bracteis ovato-acuminatis excedentibus; *sep. dorsale* concavo late ovato subacuto (+1 mm. long.), *sep. lateralibus* oblique late ovatis subacutis 1.5 mm. l. anteriore conjunctis; *petalis* ovatis breviter acutis vix 1 mm. longis; *labello* sub medio late oblongo, supra medium dilatato, apice late rotundato 1 mm. l.; *columna* brevis c. .5 mm. l.

Mt. Mou; epiphyte on fallen log in moist forest; 3000 ft. 580. Flowers white. March.

Apparently near the endemic species *P. pachyphylla* Schlechter, but differs in floral details.

SPATHOGLOTTIS VIEILLARDII Rehb. f. Cap Bocage; creekside, scrub area, serpentine; 900 ft. 1395. Sepals and petals pink; lip purple and yellow. Dutch New Guinea.

S. UNGUICULATA Benth. & Hook. f. (*Limodorum unguiculatum* Labill., *S. breviscapa* Schlechter). Ignambi; gneiss; 1000 ft. 1663. Isle of Pines; *Pteridium* association, serpentine plateau; 300 ft. 2278. Flowers rosy purple; middle of lip yellow.

The specimens agree with one in Herb. Mus. Brit. labelled in Robert Brown's hand "*Limodorum unguiculatum* Labill. Sert. Austr.-Caled. p. 19, t. 25. Nova Caledonia, Labillardière." Labillardière figures and describes a small spur at the base of the lip, which spur is absent from the specimen, but otherwise the plants agree; the lip in Labillardière's figure conforms very well and shows the characteristic hairy calli at the base of the mid-lobe. *Spathoglottis Deplanchei* Rehb. f. (in *Linnaea*, xli. 86) is, judging from the description, also conspecific.

PHAJUS GRANDIFOLIUS Lour. Mt. Panié; Ignambi; moist spots in Niaouli region; gneiss; 1000 ft. 1800, 1800 bis. China, Australia.

P. NEOCALEDONICUS Rendle, sp. nov. (Pl. 13. figs. 5-7.) Planta terrestris, *caule* erecto bipedale; *foliis* vaginantibus nervis valde prominentibus, singulo anguste lanceolato plurinervio, basi in partem petiolarem elongatam angustata, superne quoque angustato acuminato, lamina 17 cm. long. 6 cm. lat.; *scapo* bracteis vaginantibus tubulosis dissitis 4 cm. longis instructo superne

florifero; *bracteis* florentibus caducis; *floribus* pedicellatis subpatentibus albis, labello flavo, apice roseo-tincto; *sepalis* obtusis 7-nerviis æquilongis 2·8–3·3 cm. long. 1·1–1·2 cm. lat.; sep. dorsale late oblanceolato; sep. lateralibus suboblique elliptico-oblongis; *petalis* oblanceolato-ligulatis apice pæne truncatis 5-nerviis 2·6–2·8 cm. l., ·7 cm. lat.; *labello* convoluto antice trilobo, lobis lateralibus obtuse triangularibus, intermedio breviter orbiculare retuso, carinis 2 parallelis medianis e basi in apicem vix apiculatam decurrentibus, 2·6–2·8 cm. longo, calcare nullo; *columna* 2 cm. longa facie concava superne ampliata et alata.

Mt. Arago; frequent in some parts of moist forest; schists. 1408. Leaves dark green, nerves prominent making sheaths and stem ridged. Flowers, ovary and pedicel white; lip creamy yellow with faint rosy patches outside mouth.

Apparently allied to the endemic *Phajus Robertsii* F. Muell., which I have not seen, but differing in colour of flower and details of size and shape of floral leaves. Is also near the Malayan *P. amboinensis* Bl., collected by Banks and Solander in Otaheite, but has larger flowers.

PHAJUS FLAVUS Lindl. Mt. Mou; Conifer forest, on fallen log; 3500 ft. 498. Flowers yellow; lip with brown folded edges. A small form of this Malayan species.

EARINA DEPLANCHEI Rehb. f. Mts. north of Ngoyé; abundant in dry scrub; serpentine; 1000–3000 ft. 2072. Flowers shiny green, transparent, lip rather lighter.

E. VALIDA Rehb. f. Mt. Mou; epiphyte; serpentine forest; 2500 ft. 568. Ignambi; on branches in forest; 2000–4000 ft. 1691. Taom; terrestrial; frequent in upland serpentine scrub; among rocks; 3000 ft. 2326. Flowers white, slightly fleshy, scentless.

CALANTHE ANGRÆCIFLORA Rehb. f. Ermitage stream; serpentine; 300 ft. 205. Mt. Canala; forest; schists; 1000 ft. 1152.

C. LANGEI F. Muell. Mt. Arago; 1500 ft. 1435. Ignambi; gneiss; 1000–2500 ft. 1682. On logs in moist forest. Flowers orange-yellow with pale transparent spurs.

C. OREADUM Rendle, sp. nov. (Pl. 13. fig. 9.) Planta terrestris glaber; *foliis* magnis lanceolatis, basi in vaginam angustatis superne acuminatis plicato-venosis, venis primariis conspicue prominentibus 5, lamina specimine 6 dm. long. 7·5 cm. lat.; *scapo* erecto tereti valido, folio brevior, 1½–2-pedale, bracteis vaginantibus tubulosis dissitis 3·5–3 cm. longis prædito, superne sublaxe florifero; bracteis florentibus obsoletis; *floribus* sine aroma erecto-patentibus semiapertis, pedicellis gracilibus c. 1 cm. long.; perianthii segmentis albidis apice viridescens; *sep. dorsale* concavo obovato apice

subacuto apiculato 3-nervio 9 mm. long. c. .5 mm. lat.; *sep. lateralibus* oblique elliptico-obovatis apice subacutis 3-nerviis 1 cm. long. .5 cm. lat.; *petalis* obovatis obtusis obsolete apiculatis 5-nerviis vix 1 cm. long. .6 cm. lat.; *labelli* parte inferiore columnæ adnato, parte superiore libero vix 5 mm. long. 3-lobo, lobis lateralibus parvis suberectis breviter ovatis 2-2.5 mm. long., lobo intermedio subquadrato 3.5 mm. lat. apice bilobulato, lobulis rotundatis medio apiculato; *calcare* pro flore magno sacciformi compresso obtuso 8 mm. long. pæne 5 mm. lat., ore callo crasso sub labelli basi ornato; *columna* 5.5 mm. long.

Mt. Canala; moist forests; schists; 2000 ft. 1239. Mt. Arago; logs in damp forest; 1500 ft. 1436. Mt. Panié; moist forest; gneiss; 1500 ft. 1761.

Near the endemic species *C. Balansa* Finet, but differs in floral details, especially in the form of the lip.

CALANTHE NEOCALEDONICA Rendle, sp. nov. (Pl. 13. fig. 8.) Planta terrestris, caule tumido, radicibus pluribus velutino-pilosis instructo; *foliis* glabris pluribus radicalibus magnis anguste lanceolatis basi in vaginam angustatis apice acutis plicato-venosis, venis primariis conspicuis 5, lamina specimine ad 5.5 dm. long. 7 cm. lat.; *scapo* 3-pedale laterali subvalido tereti glabro, *bracteis* 3-4 vaginantibus nigrescentibus æqualiter dissitis 3-4.5 cm. l. prædito; *racemo* multifloro specimine 25 cm. long., bracteis florentibus obsolete; *floribus* albis patentibus inter mediocres graciliter pedicellatis; *sep. dorsale* obovato-elliptico apice breviter acuminato 5-nervio 12 mm. long. 8 mm. lat.; *sep. lateralibus* elliptico-oblongis apice breviter et falcate acuminatis 5-nerviis 12.5 mm. long. 6.5 mm. lat.; *petalis* concavis late elliptico-obovatis, apice vix vel breviter acutis, 7-nerviis 12 mm. long. 8 mm. lat.; *labelli* parte inferiore columnæ adnato, parte superiore libero 7.5 mm. longo 3-lobo, lobis lateralibus brevibus suborbiculari-ovatis obtusis 2.5 mm. longis, lobo intermedio lato margine crispulo apice retuso 5 mm. longo 5.5 mm. lato; *calcare* pro flore magno crasso curvato 7 mm. longo obtuso; *columna* brevi (6.5 mm. long.) crassa margine superiore denticulata; *ovario* cum pedicello 2 cm. longo.

Mt. Arago; moist forests; schists; 1000 ft. 1409. Ignambi; forest; gneiss; 1000-3000 ft. 1609. Flowers white tinged with yellow when old, with a waxy appearance.

Near the last species, but differs in floral details and especially in the longer curving lip.

GEODORUM PICTUM Lindl. Mt. Mou; lowland forest; 700 ft. 439. Flowers dingy pink.

DIPODIUM SQUAMATUM R. Br. Tonghoué Mts.; 1000 ft. 163. Mt. Mou; cretaceous; 800 ft. 530. Ignambi; gneiss; 100 ft. 1661. Oubatche;

gneiss; 200 ft. 1837. Niaouli association. Flowers white tinged with rose on inside of segments and lip; scentless.

LUISIA TERETIFOLIA Gaud. Anse de la Mission, Nouméa; on tree-trunks near sea and in mangrove swamps. 420. Lip deep purple-brown, velvety; other perianth-segments greenish, tinged with brown.

SARCOCHILUS NEOCALEDONICUS Rendle, sp. nov. Planta epiphytica, caule repente 2 mm. crass. radicibus elongatis flexuosis cinereis glabris prædito et vaginis foliorum persistentibus obtecto; foliis ligulatis apice obtusis et oblique emarginatis crassiusculis glabris 4-5 cm. long. 7-8 mm. lat.; racemis pendentibus foliis subæquilongis, ut apparet c. 15-floris; bracteis parvulis, ovato-deltaideis, 1 mm. long.; floribus parvis, glabris; sep. laterali-bus ligulato-oblongis obtusis 1-nerviis concavis 5 mm. long.; sep. dorsale latiore et magis concavo; petalis lineari-ligulatis superne vix latioribus obtusis 1-nerviis sepala vix æquantibus; labello valde unguiculato ungue complanato crasso 1.5 mm. long., superne subito reflexo et 3-lobato c. 2 mm. long., lobis lateralibus oblique triangularibus quoque in apicem tenuem curvatum excurrente, lobo intermedio parvo sacciforme, disco callis binis parallelis medianis instructo; columna breve crassa 1 mm. long., ejus pede c. 1.5 long.

Ignambi; forest; 1000 ft. 1621. Flowers orange-yellow; lip with two fine upwardly directed points. Ang.

Apparently near the other endemic species, *S. rarum* Schlechter and *S. koghiensis* Schlechter, but distinguished by floral details, especially of the lip.

MICROTATORCHIS FASCIOLA Schlechter. Ignambi; forest; 3000 ft. 1569, 1653. Touine; forest; 3300 ft. 1985. On tree-trunks among mosses, clinging by flat green ribbon-like roots; flowers transparent green fading to yellow.

PODOCHILUS VIEILLARDII Schlechter. Poume; on bare rocks with very little humus, in scrubby wood; serpentine; 1300 ft. 237. Flowers white, delicate.

ERIAxis RIGIDA Rehb. f. River Comboui; terrestrial; very abundant in serpentine scrub (and also on gneiss and in light woods). 2210. Flowers one or two open at a time, lasting one day; lip white in centre with lateral blotches of purple and yellow hairs within, other perianth-segments white; slight scent; usually eaten by beetles.

SPIRANTHES AUSTRALIS Lindl. Ignambi; Niaouli-Pteridium-Gleichenia association; 1000 and 2000 ft.; gneiss. 1493, 1849. Mt. Panié; forest-clearing; gneiss; 1500 ft. 1830. Australia, New Zealand, temperate and tropical Asia.

ANÆCTOCHILUS IMITANS Schlechter (e. descript.). Ignambi; terrestrial; moist forest; 2000 ft. 1844. Leaves dark bronze-green, velvety with light veining; bracts tinged red; calyx greenish, red tinge; lip white.

A. MONTANUS Schlechter (e. descript.). Mt. Canala; abundant in dense shade of forest; schist clay; 2000 ft. 1109. Flowers pure white. Also specimen from Pancher, "Sous les forêts; alt. 600 mètres." The plants vary in size, becoming much larger than described; the stem in the largest specimen is nearly 25 cm. long, and the leaves 5.5 cm. in length by 2.5 cm. in breadth. New Hebrides.

ZEUXINE VIEILLARDII Benth. & Hook. f. (*Monochilus Vieillardii* Rehb. f.). Paompai; humus of creekside woods; shales; 50 ft. 1900. Rhizome creeping, erect stem fleshy, green, leaves about 4, soft dark green, horizontal; lip white with orange blotch in throat, petals tinged with pink.

RHAMPHIDIA VIEILLARDII Rehb. f. R. Ngoyé; serpentine; 400 ft. 2114. Comboui Mts.; serpentine; 1000 ft. 2205. Humus in *Spermolepis* forest. Rhizome elongated, creeping among humus and leaves; leaves green, variegated above with dark or light green pattern; spike erect, 1-2 ft., very brittle; corolla white with slight blotches of yellow, tip of column dark. Oct.

R. RUBICUNDA Rehb. f. Isle of Pines (Ouro); frequent in coral forest; 50 ft. 2260. Corolla dull whitish-brown; spike erect. Fiji Is., Loyalty Is.

R. SCRIPTA Rehb. f. Ignambi; humus in forest; gneiss; 1500 ft. 1675. Mt. Panié; forest; gneiss; 1200 ft. 1834. Long underground stem with elongated tubers at intervals; flowers yellowish brown.

THELYMITRA LONGIFOLIA Forst. Ignambi; abundant on ground in forest-clearings; gneiss; 2000 ft. 1857. Tonine; open spaces in forest and among *Pteridium* and *Gleichenia*; 2000-3000 ft. 1946. Perianth pink, becoming purplish. Australia.

MICROTIS PARVIFLORA R. Br. Ignambi; occasional in Niaouli-Gleichenia association; gneiss; 2000 ft. 1492. Australia, Indian Archipelago, S. China.

PTEROSTYLIS ACUMINATA R. Br. Mt. Canala; Niaouli-grass association; schists; 1500 ft. 1275. New South Wales.

P. CURTA R. Br. Mt. Panié; on earth among rocks in forest; gneiss; 4000 ft. 1817. Australia.

P. NEOCALEDONICA Schlechter. Ignambi; moist forest; gneiss; 3000 ft. 1511. Flowers greenish-veined.

PTEROSTYLIS OPHIOGLOSSA R. Br. Mt. Canala ; Niaouli-grass association ; schists ; 1500 ft. 1275 bis. Eastern Australia.

CORYSANTHES NEOCALEDONICA Schlechter. Mt. Mou ; bare hills ; serpentine ; 2000 ft. 1291. Flower purplish.

ACIANTHUS ELEGANS Rehb. f. Nekando ; *Spermolepis-Agathis* forest ; serpentine ; 1000 ft. 980. Stem reddish ; single leaf green above, dark purplish below ; flowers green ; column with red tip.

A. NANUS Rendle, sp. nov. (Pl. 13. fig. 3.) Planta terrestris glabra 7 cm. alta ; *caule* e tubere parvo rotundo erecto, medio unifoliato, bifloro ; *folio* circuitu orbiculare diam. 2.2 cm. basi cordato, 5-lobo lobis rotundatis apiculatis ; *bracteis* ovatis acutis pedicellos excedentibus 6-8 mm. long. ; *sepalis* anguste lineari-acuminatis apice obtusiusculis, dorsale 1.7 cm., lateralibus 1.4 cm. long. ; *petalis* oblique oblongo-ellipticis superne falcato-acuminatis apice caudatis 3 nerviis, 1.1 cm. long. ; *labello* 1.4 cm. long., parte inferiore ligulato supra medium dilatato, apice 3 mm. lato 3-lobo, lobis lateralibus obscuris rotundatis, lobo medio angusto acuto 3.5 mm. long., basi 2-auriculato ; *columna* supra medium curvata, in margine anteriore alata, ala apice et medio ampliata.

Ignambi ; rather rare in moist forest ; gneiss ; 2500-3500 ft. 1700. Flowers greenish white tinged with purple. Aug. Near *A. cymbalariaefolius* F. Muell. & Kränzl., but differs in the shape of the lip and other floral details.

A. CULICIFERUS Rendle, sp. nov. (Pl. 13. fig. 4.) Planta terrestris glabra circa 2.5 dm. alt. ; *caule* e tubere ut apparet pisiforme erecto pergracile flexuoso medio unifoliato laxiter 4-5-floro ; *folio* 5-1 cm. longo 4-partito, segmentis ellipticis apiculatis ; *bracteis* ovatis acutis 2.3-3 mm. long. pedicellos breves paullo excedentibus ; *sepalis* anguste linearibus sub apice angustatis, dorsale 9-11 mm. long., lateralibus paullo brevioribus ; *petalis* oblique elliptico-oblongis subito acuminatis, 1-nerviis, 4-5 mm. long. ; *labello* e basi cordato 1.5 mm. lat. angustato acuminato 7 mm. long. ; *columna* tenue sub apice curvata 4 mm. long.

River Ngoyé ; among dead leaves, twigs, and humus in *Casuarina* forest near river ; serpentine ; 300 ft. 1023. May.

Allied to *A. tenuilabris* Schlechter, which I have not seen, but differing in the longer sepals and shape of lip.

A. BRACTEATUS Rendle, sp. nov. (Pl. 13. fig. 1.) Planta terrestris glabra 10-15 cm. alt. ; *caule* e tubere pisiforme erecto tereti veluti foliis rubro tincto supra medium unifoliato 3-4-floro ; *folio* 5-partito, segmentis oblongo-ellipticis vel obovatis apiculatis usque ad 1.2 cm. long. ; *bracteis* inter congeneres magnis foliaceis elliptico-obovatis apiculatis 1-1.7 cm. long. pedicellum et ovarium superantibus ; *floribus* atrorubris ; *sepalis* anguste

lineari-oblongatis superne caudatis 1-nerviis 1 cm. long.; *labello* glabro 1.2 cm. long. e basi late lineari 3 mm. long. subito extenso superne dilatato et 4 mm. lato demum 3-lobato, lobis triangulari-acuminatis, lateralibus 2 mm. long., lobo medio 4.5 mm. long.; *columna* gracile .5 cm. long. medio geniculata et in facie anteriore appendice cordato-acuminata depressa instructa, supra medium incurvata; *ovario* cum pedicello brevi usque ad 1 cm. long.

Mt. Mou; cloud forest; serpentine; 3500 ft. 631. Flowers dull, dark red.

This and the next species are characterized by an appendage about the middle of the anterior face of the column; a character which has not, to my knowledge, been hitherto noted in the genus.

ACIANTHUS CORNICULATUS Rendle, sp. nov. (Pl. 13. fig. 2.) Planta terrestri glabra 6-16 cm. alt.; *caule* erecto tereti medio vel supra unifoliato 2-floro; *folio* ut in *A. bracteato*; *bracteis* parvis late ovato-acutis pedicellum vix excedentibus 2-2.5 mm. long.; *sepalis* linearibus sub apice acuto angustatis, dorsale 8.5 mm. long., lateralibus vix 7 mm.; *petalis* oblique ellipticis obtusis 4.5 mm. long.; *labello* glabro 5.5 mm. long. e basi angusta biauriculata dilatato superne 3 mm. lat. et 3-lobato, lobis lateralibus brevibus rotundatis, lobo medio ovato-triangulari subacuto; *columna* gracile 4 mm. long. medio geniculata et in facie anteriore appendice erecta bicorniculata instructa, supra medium incurvata; *ovario* cylindrico 6.5 mm. long.

Ignambi; moist forest; gneiss; 3000 ft. 1712. Plant with much anthocyan throughout. Aug. Flowers smaller than in the last species, and the subtending bract inconspicuous.

LYPERANTHUS GIGAS Schlechter. Plaine des Lacs; edge of pools on flood plain; serpentine; 800 ft. 345. R. Comboui; serpentine scrub; 50 ft. 2011. Flowers ivory white, upper face of lip purple. Feb., Oct.

L. GLANDULOSUS Schlechter. R. Comboui; forest humus; serpentine; 600 ft. 2204. Taom; upland serpentine scrub; 3000 ft.; rare. 2325. Flowers leaf-green, scentless. Oct., Dec.

L. LATILABRIS Schlechter. Mt. Koghi; open dry serpentine scrub; 2000 ft. 733. Nekando; serpentine scrub; 3000 ft. 2123. Flowers green except for tinge of pink at tip of labellum; sweet-scented. Apr., Oct.

CALADENIA ALBA R. Br. Mt. Arago; Niaouli-Gleichenia-Pteridium association; schists; 1500 ft. 1449. Ignambi; Niaouli association; gneiss; 1500 ft. 1662. Flowers white, lip streaked with purple and tipped with yellow; scentless. Australia.

AMARYLLIDACEÆ.

CRINUM ASIATICUM L. Île Porc Épic; just above high tide-mark. 913. Trop. Asia, Australia.

CAMPYNEMANTHE VIRIDIFLORA Baill. Mt. Mou, Mt. Koghi; serpentine forest; 2500 & 3000 ft. 573, 729.

CAMPYNEMA NEOCALEDONICUM Rendle, sp. nov. (Pl. 14.) *Herba perennis* 12–30 cm. alt., *rhizomate* brevi radicibus filiformibus et fibris diu persistentibus cum vaginis membranaceis foliorum marcescentium dense obsito; *foliis* plurimis equitantibus erectis e basi latiore vaginante linearibus, versus apicem tridenticulatum angustatis, carnosulis, 1–3 dm. long. 3–7 mm. lat.; *scapo* laterale erecto compresso rigido marginibus leviter alato, foliis brevioribus, *bracteis* 3, e basi latiore et vaginante attenuatis membranaceis longitudine instructo; *floribus* 2-plurimis (ad 16) longe pedicellatis proandriscis in scapi apice, flore terminali et cymis 1–3 unilateralibus; *pedicellis* compressis leviter alatis rigidis 2.5–4 cm. long.; *bracteis* lineari-lanceolatis acuminatis pedicellis 2–4-plo brevioribus; *perianthii segmentis* crassiusculis viridibus, in facie superiore brunneo-purpureis, ellipticis subacutis, 8 mm. long., 3 interioribus paullo angustioribus, 3 exterioribus in ovarium decurrentibus; *staminibus* perianthio brevioribus, antheris dorsifixis introrsis 1.3 mm. long., connectivo leviter umbonato, filamentis persistentibus 1.3 mm. long.; *stilo* brevi columnari medio in ramis 3 in facie superiore stigmatosis demum recurvatis diviso, 2.5 mm. long.; *fructu* turbinato 5–6 mm. long., pericarpio inter alas 3 rigidas tenuiter membranaceo seminum formam patefaciente; *seminibus* numerosis aggregatis pyriformi-angulatis in funiculo pendulis; testa tenui rubro-brunnea sparsius maculata.

Ignambi; forest; 3500 ft. 1575. Mt. Panié; moist clayey soil in forest; gneiss; 1500 ft., 1782; and 4000 ft., 1811. Flowers scentless; perianth green outside, deep brown-purple inside.

An interesting addition to the genus which has hitherto been known only from Tasmania, where it is represented by one (or two) species. The New Caledonian species is more leafy and floriferous than the Tasmanian, in which, moreover, the anthers are described as extrorse and the styles free to the base.

DIOSCOREACEÆ.

DIOSCOREA BULBIFERA L. Mt. Mou; frequent in old cultivation areas; serpentine; 800 ft. 507. Introduced.

LILIACEÆ.

SMILAX PURPURATA Forst. Mt. Mou; moist forest; cretaceous; 800 ft. 505. Mt. Humboldt; streamside forest; serpentine; 1000 ft. 1038. River Tchiam; sea-level. 1996.

Var. CONCOLOR A. DC. Dumbéa; serpentine scrub; 100 ft. 412. Kuakué; flood plain of river; serpentine; 50 ft. 903, 903 a. Ignambi; intermediate forest; 3500 ft. 1707.

S. VITIENSIS A. DC. Tonine; forest margin; 1500 ft. 1951, 1957. Fiji Is.

SMILAX ORBICULATA Labill., var. *BALANSÆ* A. DC. Taom; serpentine scrub; 2500 ft. 2334. Mt. Koghi; forest margin; serpentine; 1500 ft. 790.

GETTONOPLESIMUM CYMOSUM Cunn. Nouméa. 63. Paompai; forest margin; shales; 0-2000 ft. 1870. Taom; creekside forest; serpentine; 300 ft. 2339. Isle of Pines; coral forest; abundant. 2255. Australia.

LOMANDRA INSULARIS Schlechter. Mont Dore; 2000 ft.; 687; Cap Bocage; 800 ft.; 1393; Poume; 1200 ft.; 2378; all on serpentine scrub.

CORDYLINA TERMINALIS Kunth. Baie Kuakué; stream-valley woods near shore; serpentine. 891. Trop. Asia, Australia, Polynesia.

C. NEOCALEDONICA Linden (*Cohnia neocaledonica* Baker). River Comboui; alluvium scrub; serpentine; 400 ft. 2218. Plaine des Lacs; 800 ft. 380.

ASTELIA NEOCALEDONICA Schlechter. Mt. Mou; epiphyte; cloud forest; 3800 ft. 489. Mt. Humboldt; on ground and sloping trunks and branches in wet forest; 2000 ft. 1022.

XERONEMA MOOREI Brongn. & Gris. Mt. Koghi; on rocks; scrub association; serpentine; 2500 ft. 732.

ARTHROPODIUM NEOCALEDONICUM Baker. Mt. Mou; rocks by stream in forest; cretaceous; 500 ft. 531.

DIANELLA REVOLUTA R. Br. Ignambi; Niaouli association; gneiss; 1000 ft. 1601. Australia.

D. ENSIFOLIA Red. Comboui Mts; scrubby woods; serpentine; 2500 ft. 2186. Trop. Asia, Mascarene and Pacific Is., Australia.

D. AUSTROCALEDONICA Seem. Mt. Mou; cretaceous; 800 ft. 503. Baie Bâ; alluvium; sea-level. 1389. Moist part of Niaouli region.

PONTEDERIACEÆ.

EICHORNIA CRASSIPES Solms. Oubatche; floating in streams and ditches. 1602. South America. Introduced.

XYRIDACEÆ.

XYRIS NEOCALEDONICA Rendle. Nekando; open serpentine scrub; 1000 ft. 2117.

X. PANCHERI Rendle. Plaine des Lacs; abundant in flood plain and edges of permanent pools; serpentine; 800 ft. 342.

COMMELINACEÆ.

ANEILEMA NEOCALEDONICUM Schlechter. Mt. Mou; cretaceous; 1000 ft. 467. Tonine; 500 ft. 1955. Streamsides in forest.

FLAGELLARIACEÆ.

FLAGELLARIA NEOCALEDONICA Schlechter. R. Comboui; alluvial serpentine scrub; 0-500 ft. 2173.

JOINVILLEA ELEGANS Gaud. Mt. Canala; forest margin; schists; 1500 ft. 1127. Mt. Mou; damp gully forests; cretaceous; 600 ft. 557.

JUNCACEÆ.

JUNCUS PAUCIFLORUS R. Br. Tonghoué Mts. 166. Australasia, East Asia.

PALMACEÆ.

MICROKENTIA ERIOSTACHYS Benth. & Hook. f. Mt. Mou; conifer forest; 3500 ft. 491.

PANDANACEÆ.

PANDANUS ODORATISSIMUS Linn. f. Baie Ouémo, Nouméa; along littoral. 239. South Asia, Australia, islands of Indian and Pacific Oceans.

FREYCINETIA (Sect. Pleiostigma) COMPTONII Rendle, sp. nov. *Frutex* radicibus scandens; ramulis florentibus specimine singulo 8 mm. crass., internodiis brevibus; foliis in apice ramuli confertis basi brevissime vaginantibus siccis pergamentaceis elongato-obovato-oblongis abrupte cuspidato-acuminatis, submedio attenuatis, circiter 40-nerviis, marginibus præsertim in apice et secus costam in pagina inferiore aculeis minutis instructis, ad 35 cm. long. 7 cm. lat.; inflorescentia terminale fœminea, bracteis brunneis ovato-acutis 5 cm. longis sub medio circumdata; pedicellis validis subcompressis glabris circ. 4 cm. long. 4 mm. lat.; syncarpis 4, anguste oblongo cylindricis atrato-viridibus, 4.5-5.5 cm. long. 7-9 mm. crass.; carpidiis dense aggregatis, prismaticis 2.5 mm. long. 3-4 mm. lat., basi staminodiis brevibus circumdatis, parte superiore 1 mm. long. truncato-pyramidata libera; stigmatibus 4-7 distinctis, siccis pallide brunneis.

Paompai; creekside woods; shales; 50 ft. 1909.

Recalls *F. marantifolia* Hemsl. from the Solomon Is. in appearance, but the leaves and spikes are longer and proportionately narrower.

F. GRAMINIFOLIA Solms. Mt. Mou; moist valleys; cretaceous; 800 ft. 513. Mt. Arago; on trees and rocks in wet forest; schists; 1000 ft. 1406. Mt. Panié; forest; gneiss; 1200 ft. 1793. Paompai; forest; 0-1000 ft.; creeksides; shales. 1888.

F. MICRODONTA Martelli. Ermitage Stream; forest at 300 ft.; serpentine. 159. Mt. Mou; serpentine forest; 1500 ft. 453. Mt. Canala; moist forest; schists; 3000 ft. 1240. Ignambi; forest; gneiss; 3500 ft. 1543.

FREYCINETIA MONTICOLA Rendle, sp. nov. *Frutex* radicibus scandens; ramis elongatis pendulis, specimine subtrigonis rubicundis, internodiis brevibus usque ad 6-7 mm. long.; *foliis* e basi angusta contorta lineari-lanceolatis acutis, 16-18-nerviis, marginibus et secus costam in paginā inferiore frequentius aculeis minutis instructis, 8.5-14.5 cm. long. 1.7-2.2 cm. lat.; *inflorescentia* in ramulo brevi bracteis angustis recurvatis dense induto 1 cm. long.; *pedicellis* subvalidis 2.5-3 cm. long. vix 2 mm. crass.; *syncarpis* 3 elliptico-oblongis 2-3.5 cm. long. usque ad 1.5 cm. lat.; *carpidiis* aggregatis subellipsoideis supra medium liberis apice subcylindricis, 4 mm. long., basi staminodiis brevibus paucis circumdati; *stigmatibus* 3-4, subconicis, siccis læte brunneis.

Mt. Panié; forest; gneiss; 1500 ft. 1760.

Recalls the Fijian species *F. caudata* Hemsl., which, however, has leaves with a longer, narrow sheathing base and longer, narrower spikes.

F. SCHLECHTERI Warb. Tonine; forest; hornblende; 2000 ft. 1948. Bracts fleshy purple or white.

TYPHACEÆ.

TYPHA ANGUSTIFOLIA L. Anse Vata, Nouméa; freshwater swamp. 78. Widely distributed.

ARACEÆ.

EPIPREMNUM PINNATUM Engl. Mt. Arago; moist forests and along streams; schists; 1000 ft. 1421. Malaya to Australia and Polynesia.

AMORPHOPHALLUS cf. *CAMPANULATUS* Bl. Baie Kuakué; stream valley forest near shore; serpentine. 892. A single leaf.

POTAMOGETONACEÆ.

POTAMOGETON OWAIHIENSIS Cham. & Schlecht. R. Tchiem; 500 ft. 1987. (Det. A. Bennett.) Sandwich Is.

ERIOCAULACEÆ.

ERIOCAULON COMPTONII Rendle, sp. nov. *Herba* parva submersa in limo radicans glabra acaulis; *foliis* rosulatis e basi paullo dilatata lineari-ensiformibus acuminatis 7-11-fenestrato-nerviis membranaceis planis 5-13 cm. long. 1.5-3 mm. lat.; *pedunculo* solitario stricto 6-costato, 14.5-16 cm. long., basi vagina apice fissa c. 2.5 cm. long. circumdato; *capitulo* subglobozo albido-villoso, c. 5 mm. diam.; *bracteis involucrantibus* suborbicularibus glabris membranaceis capitulo plus duplo brevioribus; *bracteis florentibus* obovato-cuneatis vel obovato-trapezoideis concavis apice truncatis et erosis, versus

apicem dorso albedo-pilosis, 2.75 mm. long.; *flore masculo*: sepalis 3 spathulatis obtusis dorso sub apice breviter niveo-piloso 2 mm. long.; *petalis* in tubum, apice in lobos 3 ciliolatos glandula fusca parva instructos divisum, connatis; *antheris* 6 nigris; *flore femineo*: sepalis 3 ovatis acutis valde carinatis, dorso pilosis 2 mm. long.; *petalis* 3 oblanceolatis, apice pilosis et glandula fusca ornatis; sepalis paullo longioribus; *stigmatibus* filiformibus.

Plaine des Lacs; submerged in streams and marshes; serpentine; 800 ft. 368. Feb.

Near *E. neocaledonica* Schlechter, but apparently a larger plant with smaller heads, and differing in the form of the floral bracts and sepals. The leaves and peduncle are covered with diatoms and the threads of a *Cladophora*, giving the appearance of hairiness.

CYPERACEÆ.

PYCREUS POLYSTACHYUS Beauv. Nouméa; roadside ditches. 31. R. Dumbéa; moist places, ditches, and wet pastures; serpentine; 50 ft. 403. Widely distributed.

Var. LAXIFLORA Benth. Monac; edge of freshwater pool; 50 ft. 2354. Widely distributed.

MARISCUS CYPERINUS Vahl, var. VENUSTUS C. B. Clarke (*Cyperus venustus* Forst.). Dumbéa; abundant in moist pastures and ditches; serpentine; 50 ft. 406. Polynesia.

CYPERUS ROTUNDUS L. Nouméa; roadside ditches. 220. Widely distributed.

KYLLINGA BREVIFOLIA Rottb. Nouméa; roadside ditches. 34. Widely distributed.

K. MONOCEPHALA Rottb. Ignambi; forest-path; gneiss; 2000–3500 ft. 1570. Widely distributed.

ELEOCHARIS PLANTAGINEA R. Br. Anse Vata, Nouméa; freshwater swamps, sea-level. 79. Old World tropics.

FIMBRISTYLIS ÆSTIVALIS Vahl. Monac; edge of freshwater pool; 50 ft. 2355. Widely distributed.

F. COMPLANATA Link. Taom; stream banks; serpentine; 2000 ft. 2289. All warm regions.

F. DIPHYLLA Vahl. Nouméa; roadside ditches. 95. Dumbéa; abundant in moist places. 405. All warm regions.

F. FERRUGINEA Vahl. Port Ngea, Nouméa; margin of salt-marsh. 4. Nouméa; wet ditches in town. 38. All warm regions.

ABILDGAARDIA MONOSTACHYA Vahl. Mt. Dore; common in grassland in old guava cultivation; serpentine. 100 ft. 663.

SCIRPUS MUCRONATUS L. Tonghoué Mts.; streamside in open pasture; cretaceous; 1000 ft. 167. Mt. Mou; swamp, margin of cultivation; serpentine; 1000 ft. 474. Widely distributed in Old World.

CHORIZANDRA CYMBARIA R. Br. R. Comboui; marshy places by river; serpentine alluvium; 300 ft. 2214. Australia.

RHYNCHOSPORA GLAUCA Vahl. Tonghoué Mts.; moist muddy stream-banks. 168. Warm regions.

SCHÆNUS BREVIFOLIUS R. Br. Plainé des Lacs; abundant on level plain and up dry slopes, serpentine scrub and light woods. 398. Australia and New Zealand.

S. NEOCALEDONICA C. B. Clarke. R. Comboui; moister parts of serpentine alluvium; 500 ft. 2223.

S. TENDO Hook. f. Cap Bocage; frequent in dense serpentine scrub; 500 ft. 1379. New Zealand.

LOPHOSCHÆNUS ARUNDINACEUS Stapf (*Schænus arundinaceus* Forst.). Presqu'île Bogota; very abundant in dry serpentine scrub up to 3500 ft. 1343.

L. COMOSUS Stapf (*Schænus comosus* C. B. Clarke). Baie Ngo; abundant along streams in serpentine scrub; 300 ft. 255.

COSTULARIA NEOCALEDONICA Rendle, sp. nov. *Herba* glabra cæspitosa erecta 4-pedalis, rhizomate brevi crassa vaginis marcescentibus induta et radices filiformes emittente, apice folia pauca basi vaginis scariosis 5 inclusa et culmum gerente; *vaginis* latis 1.5–14 cm. long., apice lamina brevi usque ad 1.5 cm. long. instructis; *foliis* 3–4 elongatis suberectis rigidulis e vagina scariosa linearibus obtusis in facie superiore venis prominentibus lineatis margine subito et anguste reflexa, plicæ margine scabrido, ad 6 dm. long. et 3.5–4.5 mm. lat.; *culmo* 13 dm. long. rigidulo complanato striato sub medio 2-nodo et folia 3.4 dm. et 1.2 dm. long. gerente, supra medium graciliore et paniculam laxam 4.5 dm. long. eleganter nutantem efformante; *bracteis* foliaceis duabus inferioribus 6.5 et 4.5 cm. longis; *inflorescentiæ* ramis distantibus elongatis filiformibus, sparsifloris; *spiculis* pedicellatis anguste lanceolatis colore rubro-brunneo tinctis c. 8 mm. longis; *glumis* distichis dorso rotundatis, apice obscure 3-denticulatis, 6–8 inferioribus vacuis, 2 supremis florentibus majoribus 5.5–6.5 mm. long., flore inferiore masculo ovario rudimentario, fl. superiore bisexuali; *rhachilla* flexuosa nec inter neque supra flores elongata sed gluma binervi palæacea florem bisexualem tegente

terminata; *setis hypogynis* 6, *elongatis anguste linearibus, ciliatis*, 5 mm. long.; *antheris cum connectivo apiculato* 3 mm. long.; *stylo* sub-medio 3-ramo; nuce. . . .

Mts. north of Ngoyé; *Casuarina* forest; serpentine; 2500 ft. 2066. Nekando; conifer forest; serpentine; 3500 ft. 2066a.

A remarkable plant which is perhaps congeneric with the next species. It is very different in appearance from any of the species grouped in *Costularia* by Clarke, and may perhaps represent a new genus. Unfortunately the material contains no fruit.

COSTULARIA PALUDOSA C. B. Clarke (*Tricostularia paludosa* Benth.). Plaine des Lacs; covering small areas on serpentine alluvium, moist parts; 800 ft. 369. Eastern Australia.

CLADIUM DEPLANCHEI C. B. Clarke. Baie Ngo; moist places in flood plain; serpentine; 200 ft. 246. Plaine des Lacs; common on serpentine hillside; 1000 ft. 363.

C. GLOMERATUM R. Br. Ignambi; wet spots in Niaouli association; gneiss; 1000–2000 ft. 1670.

SCLERIA DEPAUPERATA Boeckl. Nouméa; Port Déspointes woods. 238.

S. MARGARITIFERA Willd. Ermitage Stream; streamside among pebbles; serpentine; 300 ft. 208. Polynesia, Australia.

S. NEOCALEDONICA Rendle, sp. nov. *Herba* 6.5 dm. alta, rhizomate horizontale brevi lignoso perennis; *culmo* erecto rigido multifoliato acute trigono glabrescente rufescente medio 2.5 mm. crasso, super basin 8-nodo; *foliis* 4 in parte culmi inferiore confertis, in parte florifera gradatim deminutis (sed culmum excedentibus) et in bracteis transgredientibus, erecto-patentibus, rigidulis lineari-acuminatis planiusculis, margine scabridulo et nervo mediano in facie inferiore prominente breviter pilosis usque ad 6.5 dm. long. et 8.5 mm. lat., vaginis pubescentibus rufescentibus, ea folii mediani 5 cm. long.; *paniculis* axillariis (cum singula terminali) densis spiciformibus brevibus usque ad 3 cm. long.; bracteis foliaceis; *spiculis* c. 7 mm. long. in ramulis brevibus paniculæ sessilibus binatis vel solitariis monœcis subfusco-rufescentibus; *bracteis* subtendentibus e basi lata anguste lineari-acuminata spiculam excedentibus vel subæquantibus; *squamis* ovatis mucronatis; *flore* inferiore fœmineo, superioribus paucis masculis; *staminibus* 3; *nuce* oblonga obsolete trigona breviter rostrata albida, pilis minutis læte-brunneis aggregatis hirtella, 3 mm. long.; *disco* breviter cupuliformi margine integro.

R. Ngoyé; among rocks by river; serpentine; 400 ft. 2047. A very distinct species characterized by the short dense axillary panicles,

CAREX DIETRICHIAE Boeckl. Ermitage Stream; streamside among stones; serpentine; 300 ft. 197.

C. MACULATA Boott, var. *NEUROCHLAMYS* Kukenth. Mt. Mou; freshwater swamp, margin of cultivation; serpentine; 1000 ft. 472. Ignambi; moist shady forest; gneiss; 2000 and 3000 ft. 1510, 1856.

GRAMINEÆ.

LEPTASPIS UMBROSA Bal. Ermitage stream; forest; serpentine; 300 ft. 206.

GRESLANIA CIRCINATA Bal. Nekando; abundant in conifer forest and upland serpentine scrub; 3000-4000 ft. 1080.

Besides the above two endemic grasses, the collection contains the following species, which are more or less generally distributed in warm countries:—

PASPALUM SCROBICULATUM L. Ermitage Stream. 207. Ignambi; 3500 ft. 1558.

DIGITARIA SANGUINALIS Scop. Ermitage Stream. 147.

PANICUM COLONUM L. Nouméa. 85.

OPLISMENUS COMPOSITUS Beauv. Ignambi; 2000-3000 ft. 1559.

O. SETARIUS Roem. & Schult. Mt. Mou; 800 ft. 601.

SETARIA GLAUCA Beauv. Ermitage Stream. 146.

CENCHRUS CALYCVLATUS Cav. Nouméa. 64.

COIX LACRYMA-JOBI L. Mt. Canala; 1000 ft. 1178.

MISCANTHUS JAPONICUS Anders. Mt. Mou; 1000 ft. 473.

ISCHÆMUM MUTICUM L. Paompai. 1885.

ANDROPOGON MICRANTHUS Kunth. Île Ouéré. 654.

A. REFRACTUS R. Br. Mt. Mou; 1000 ft. 525.

A. SQUARROSUS L. R. Dumbéa. 835.

HETEROPOGON CONTORTUS Roem. & Schult. Île Ouéré. 655.

CYNODON DACTYLON Pers. Nouméa. 32, 82.

ELEUSINE INDICA L. Nouméa. 41.

CENTOTHECA LAPPACEA Beauv. Paompai. 1889.

DICOTYLEDONS.

POLYPETALÆ.

By EDMUND G. BAKER.

RANUNCULACEÆ.

CLEMATIS GLYCINOIDES DC. Mt. Canala; intermediate woods infrequent; 1500 ft. 1254. Low liane. Lord Howe Island, Australia.

DILLENiaceÆ.

TETRACERA EURYANDRA Vahl. Littoral zone, Ouen Toro, near Nouméa. 54. Mt. Mou; cretaceous edge of forest; 600 ft. 561. Near Taom; serpentine plain; 2000 ft. 2285. Corolla white, very sweet scent. Malaya.

HIBBERTIA. The New Caledonian species collected by Mr. Compton fall into 4 sections:—

Sect. I. *Trimorphandra* Brongn. & Gris (genus). Stamina numerosa, exteriora sterilia, altera fertilia, quorum interiora multo majora. Petala 5. Carpella 2 libera circ. 6-ovulata. Flores in spicas 2-4-floras apicem versus ramorum nascentes.

H. PULCHELLA Schlechter. (*Trimorphandra pulchella* Brongn. & Gris.) Plaine des Lacs, abundant on dry hillsides. 364. Shrub 3 ft.

Sect. II. *Polystiche*. Stamina numerosissima, subæqualia vel exteriora subabortiva ovaria circumdantia. Petala 5. Carpella 2-4 multiovulata, ovulis in seriebus paucis dispositis. Flores inter maximos generis in spicas paucifloras vel plurifloras dispositi.

Series 1. Carpella 3-4, ovulis circ. 15. Spicæ sæpius 8-10-floræ.

H. BADOUINI Brongn. & Gris. Nekando Forest; 3-4000 ft. 2125. Small tree 20 ft. Petals bright yellow.

I am doubtful if *H. magnifica* Schlechter from Mt. Mou is specifically distinct.

Series 2. Carpella 2, 20-25 ovulata. Spicæ 2-4-floræ.

H. COMPTONII Bak. fil., sp. nov. *Frutæ* bimetralis vel arbor ramulis inferne cicatricibus foliorum delapsorum notatis; *foliis* pro genere majusculis coriaceis sessilibus vel petiolo brevi instructis oblanceolatis, 10-17 cm. longis, 2.5-4 cm. latis, glabris nervis lateralibus tenuibus juxta marginem inter se conjungentibus costa superne impressa subtus conspicua; *floribus* inter maximos generis in spicas unilaterales et 2-4-floras dispositis; *bracteis* majusculis ovatis vel ovato-lanceolatis; *sepalis* sæpius 5 glabrescentibus;

petalis majusculis flavis calyce longioribus 40–45 mm. longis obovatis apice emarginatis; *staminibus* numerosis filamentis filiformibus antheris oblongis; *carpellis* 2 oblique ovoideis stylis subfiliformibus antheras excedentibus ovulis numerosis 20–25 in seriebus paucis dispositis; *fructu* ignoto.

Tonine; mountain-top scrub; 3500 ft. 1934. Flower orange-yellow, slightly scented. Mt. Panié Forest; 2000–3500 ft. 1813. Tree 30 ft., much branched. Calyx segments 5, or in terminal flowers generally 6.

Sect. III. **Trisema** Gilg. Stamina numerosa, ovaria circumdantia. Petala 3–4 vel 1. Carpellum 1, pluriovulatum. Inflorescentiæ rhachis simplex vel furcata.

Series 1. Folia elliptica vel ovato-oblonga, petiolata.

HIBBERTIA CORIACEUM Gilg. River Ngoyé; 2053. Shrub or small tree. Scrubby *Spermolepis* forest; 4000 ft. Presqu'île Bogota; 1323. Shrub 5 ft. Flowers with 3 petals, buttercup yellow. Serpentine scrub; 1000–1500 ft.

The following is closely allied, but there seems to be only 1 petal in the flowers I have dissected. River Comboui. 2008. Shrub 6 ft. Leaves leathery.

H. CORIACEUM Gilg, var. PANCHERI Brongn. & Gris (under *Trisema*). Taom; 2336. Serpentine scrub; 2500 ft. Flowers in irregular cyme. Leaves rigid, lamina 4–6 cm. long, 2–3 cm. broad, petioles 15–20 mm. long. Calyx \pm 10 mm. long. Petals 8–10 mm. long, yellow.

H. oubatchensis Schlechter belongs to this series.

Series 2. Folia ligulata vel lanceolato-ligulata, sessilia.

H. DEPLANCHEANA Bur. Taom; abundant along river and creekside and lowland scrub; 1500 ft. 2316. Shrub or small tree 30 ft. Petals 3, pale yellow.

Allied to *H. salicifolia* Turcz., *H. ngoyensis* Schlechter, and *H. podocarpifolia* Schlechter in habit. Branchlets densely leafy at the apices, lower down marked with very numerous cicatrices of the fallen leaves. Leaves 7–8 cm. long, 12–15 mm. broad. Flowers in pedunculate one-sided spikes, shorter or sometimes as long as the leaves. Calyx externally sericeous, 9–10 mm. long. Petals 8–10 mm. long. Carpels solitary. This plant is intermediate between the Sections *Trisema* and *Spicata*. It has the habit of *H. salicifolia* Turcz. and its allies, but the 3 petals and solitary carpels of the Section *Trisema*.

Sect. IV. **Spicata**. Stamina numerosa, æqualia vel subæqualia ovaria circumdantia. Petala sæpissime 5. Carpella 2–3, pluriovulata. Flores mediocres vel parviusculi in spicas secundas vel subsecundas dispositi.

Series 1. Folia sessilia, ligulata vel lanceolato-ligulata.

HIBBERTIA SALICIFOLIA Turcz. Baie Ngo; common shrub on dry hillsides; 200 ft. 264. Shrub 4 ft. Port Bouquet; 2247. Abundant in lowland scrub by riverside; 100 ft. Shrub or small tree reaching 20 ft. Corolla buttercup-yellow. Isle of Pines; serpentine plateau; 300 ft. 2263. Shrub 2 ft. Corolla yellow. Faintly scented. *H. Brongniartii* Gilg is a very close ally.

H. ngoyensis Schlechter, *H. podocarpifolia* Schlechter, and *H. Brongniartii* Gilg also belong to this series.

Series 2. Folia majora, lineari-oblonga vel oblongo-ligulata, inæquilateralia, sessilia.

H. TRACHYPHYLLA Schlechter. (*H. scabra* Brongn. & Gris non R. Br.) River Comboui; serpentine scrub or low hills; 50 ft.; and on alluvial plain. 2007. Shrub 6 ft. Flowers with bright yellow corolla. Kuakué; edge of scrub forest; 100 ft. 951.

Series 3. Folia lineari-oblanœolata, brevissime petiolata. Spicæ laxæ 5-8-floræ.

H. DISSITIFLORA Bak. fil., sp. nov. *Frutex* circ. 6-pedalis ramis teretibus superne bene foliatis inferne cicatricibus foliorum delapsorum notatis cortice cinereo obtectis; *foliis* lineari-oblanœolatis 4-6 cm. longis 10-12 mm. latis apice rotundatis vel leviter emarginatis basi in petiolum 1-3 mm. longum attenuatis superne nitidis subtus opacis et costa prominente; *floribus* parviusculis in spicas laxas subsecundas dispositis, spicis sæpissime 5-8-floris foliis vix æquilongis; *inflorescentiæ* rhachi rufo vel ferrugineo-pubescente; *sepalis* extus pubescentibus oblongo-ellipticis \pm 7 mm. longis; *petalis* obovatis vel oblongo-obovatis unguiculatis 6-7 mm. longis; *stylis* \pm 3 mm. longis; *carpellis* 2 pauciovulatis.

Baie Ngo; scrub on serpentine; 70 mm. 260. Anthers 1.5 mm. long. A shrub with linear-oblanœolate glabrous leaves and rather small flowers in secund racemes. The bracts are either absent or caducous at an early period.

Series 4. Folia oblongo-oblanœolata vel oblanœolato-spathulata, petiolata. Spicæ 3-5-floræ.

H. ALTIGENA Schlechter. Taom; frequent; 1000-2000 ft. on serpentine scrub. 2300. Shrub 2 ft. Corolla yellow. Petals notched, sweet-scented. River Comboui; among rocks, serpentine; 500 ft. 2220. Scarce. This species is allied to *H. Balañseana* Bur.

Series 5. Folia oblonga vel oblongo-oblaneeolata, petiolata. Flores quam in Series 4 numerosiores.

HIBBERTIA INSULANA Bak. fil., sp. nov. *Frutex* circ. 4-pedalis ramulis deorsum cicatricibus foliorum delapsorum notatis sursum foliatis; *foliis* oblongis vel oblongo-oblaneeolatis 5-7.5 cm. longis 1.3-2.0 cm. latis subcoriaceis apice rotundatis vel emarginatis basi cuneatis superne glabris costa impressa subtus costa conspicua, petiolo brevi præditis; *floribus* inter mediocres generis in spicas unilaterales irregulares dispositis rhachi canescenti-tomentosa; *spicis* foliis sæpius paulo longioribus; *bracteis* linearibus vel lineari-lanceolatis floribus brevioribus; *calycis segmentis* 5 extus canescenti-sericeis; *petalis* 5 flavis caducis; *staminibus* numerosis filamentis gracilibus antheris oblongis filamentis multoties brevioribus; *carpellis* 2, circ. 8-10-ovulatis.

Isle of Pines; serpentine scrub; 300 ft. 2270. The noticeable features of this shrub are the oblong or oblaneeolate leaves not so close as in *H. Deplancheana* Bur. and narrowed to a short petiole, and the flowers in one-sided irregular spikes. The calyx is canescent tomentose externally.

MAGNOLIACEÆ.

DRIMYS PANCHERI Baill. (*Belliolum Pancheri* Van Tieghem.) Plaine des Lacs. Valley Forest; 1800 ft. 361. Tree 15 ft. Flowers crimson, stamens yellow. Mont Dore. Abundant in scrub of stony hillsides; 2000 ft. 690. Shrub 12 ft. Deep velvety-red corolla. Unpleasant smell.

D. AMPLEXICAULIS Vieill. (*Bubbia auriculata* Van Tieghem.) Ignambi; forest; 3000 ft.; gneiss. 1551. Small tree 10 ft. Whole fructification and peduncles red.

D. HETERONEURA Van Tieghem (sub *Bubbia*). Mont Canala; moist forest; 3000 ft.; schist clay. 1130. Small tree 20 ft. Panicles red, fruits red. This identification is doubtful as Prof. Van Tieghem's description is inadequate.

D. COMPTONII Bak. fil., sp. nov. *Arbor* mediocris 30-pedalis ramulis teretibus hinc inde cicatricibus foliorum delapsorum notatis; *foliis* oblongo-obovatis 8-11 cm. longis 4-5 cm. latis coriaceis, costa crassiuscula, basi in petiolum 10-15 mm. longum attenuatis superne lucidis; *floribus* in summis ramulis spurie umbellatis, radiis glabris cymiferis, cymis pluri- vel multifloris; *calyce* gamosepalo brevissimo; *petalis* oblongis vel lineari-oblongis 4 mm. longis purpureis sec. cl. detectorem; *staminibus* sæpissime 3 antheris flavis; *carpellis* sæpius solitariis \pm 1 mm. longis stigmatibus cristiformi lineari obliquo; *fructu* ignoto.

Mont Panié; frequent in forest; 2500–4000 ft.; gneiss. 1815. Inflorescence, primary rays 20–30 mm. long, ultimate pedicels 2–3 mm. long. Closely allied to *D. odorata*, but the leaves are broader, the stamens and carpels fewer, and Mr. Compton states the flowers are scentless.

DRIMYS ODORATA Bak. fil., sp. nov. *Arbor* parva inæqualiter ramosa; *foliis* coriaceis oblanceolatis vel oblongo-obovatis 11–13.5 cm. longis 3.5–5 cm. latis glabris, costa crassiuscula, basi in petiolum 10–12 mm. longum crassum attenuatis nervis lateralibus tenuibus parum prominulis; *floribus* in summis ramulis spurie umbellatis, radiis glabris cymiferis, cymis plurifloris; *bracteis* paucis; *calyce* brevissimo gamosepalo crassiusculo; *petalis* 4 albis 4 mm. longis basin versus maculo purpureo notatis calyce longioribus oblongis vel lineari-oblongis; *staminibus* 5 loculis rimosis; *carpellis* sæpius 2 obovatis \pm 1 mm. longis compressis stigmatate cristiformi lineari obliquo; *fructu* ignoto.

Tonine. Abundant in forest >2500 ft. 1982. Leaves with the broadest point about $\frac{1}{4}$ of the total length from the apex, lateral nerves slender, costa thick, prominent on both sides. Inflorescence with radii branching twice. Primary peduncles 30–40 mm. long, ultimate pedicels generally 5–7 mm. long. The noticeable features of this species are the oblanceolate glabrous leaves with a thick midrib, the flowers with a strong sweet scent, the petals being white with a purple patch towards the base, the generally 5 stamens and 2 carpels.

D. PAUCIFLORA Bak. fil., sp. nov. *Arbuscula* circ. 15-pedalis fide cl. detectorem ramulis tenuibus cortice nigrescente obtectis; *foliis* parvisculis tenuibus oblanceolatis vel oblongo-oblanceolatis vel elliptico-oblanceolatis 4.5–7 \times 2–5 cm. glabris basi in petiolum gracilem 7–10 mm. longum attenuatis apice obtusis, costa subtus conspicua, nervis lateralibus tenuissimis inconspicuis; *alabastris* globosis; *floribus* paucis in summis ramulorum sæpissime spurie verticillatis; *pedicellis* gracilibus 2.5–4.0 cm. longis haud furcatis apicem versus applanatis petiolis longioribus; *calyce* brevi gamosepalo; *petalis* 4 rubro-brunneis ovato-oblongis 5–6 mm. longis intus velutinis per anthesin reflexis; *staminibus* numerosis; *carpellis* sæpius 3 \pm 2 mm. longis stigmatate lineari sessili; *fructu* ignoto.

Mont Panié; moist forest; 1500 ft.; gneiss. 1761. Pedicels flattened at top. Anthers yellow. Flowers generally 2. Easily distinguished by the slender leaves much attenuate below, with very slender indistinct lateral nerves, the few flowers on long pedicels, and generally 3 carpels.

ZYGOGYNUM BALANSÆ Van Tieghem. Mont Panié; forest; 1500 ft. Gneiss. 1776. Good sized tree, soft wood, spreading irregular branches. Perianth outer whorl of 4 segments, green outside, yellow inside, inner spiral of about 9 segments, incurved, yellow.

ANONACEÆ.

POLYALTHIA NITIDISSIMA Benth. (*Unona fulgens* Labill.) Mt. Dore; stream valley woods; 100 ft. 666. Tree 25 ft., flowers bright yellow. Queensland.

PAPAVERACEÆ.

ARGEMONE MEXICANA L. Sandy seashore and in cultivated fields near Nouméa, Anse Vata. 77. Widely distributed.

CAPPARIDEÆ.

GYNANDROPSIS PENTAPHYLLA DC. Hienghène; 1861. Weed of cultivation. Perennial plant with unpleasant smell. Petals white, filaments brownish. Leaves soft greyish green. Widely distributed in the Tropics.

CAPPARIS NEOCALEDONICA Vieill. Isle of Pines (Troisième); forest on coral rock, locally frequent. 2275. Sprawling shrub or small tree. Calyx green, corolla white, downy. Filaments long, white.

VIOLACEÆ.

IONIDIUM ILICIFOLIUM Vieill., var. ANGUSTIFOLIUM Deplanche. *Folia* quam in typo perspicue angustiora. Port Déspointes, Nouméa. 238. Small shrub.

I. AUSTROCALEDONICUM Vieill. Mt. Mou; serpentine forest; 1500 ft. 457. Shrub.

I. SERRATUM Bak. fil., sp. nov. (*I. ilicifolium* auct. pro parte.) *Frutex* circ. 3-pedalis ad *I. ilicifolium* Vieill. accedens; *foliis* pallide viridibus oblongo-oblancoelatis 9-11 × 2-3 cm. subcoriaceis margine valde serratis quam iis *I. ilicifolii* longioribus et crassioribus, petiolo 2-3 mm. longo suffultis; *floribus* pedunculatis; *sepalis* ovatis apice rotundatis petalis brevioribus; *petalis* superioribus ± 5 mm. longis ovatis apice obtusis petalo inferiori 8-9 mm. longo ceteris longiori apice emarginato; *antheris* subsessilibus apice in membranam producto; *stylo* erecto validiusculo; *capsulis* elastice 3-valvibus externe glabris 8-9 mm. longis.

Plaine des Lacs; slight slopes. 304. Low shrub 3 ft. The distinguishing features are the coriaceous strongly serrate leaves with the inflorescence shorter than the leaves and the calyx about 3.5 mm. long. It differs from the type of *I. ilicifolium* Vieill. (Vieillard no. 1849) in the more coriaceous longer leaves and larger flowers.

AGATION RUFO-TOMENTOSUM Bak. fil., sp. nov. *Frutex* sarmentosus; *foliis* papyraceis ovatis 7-8 × 4-4.5 cm. abrupte subacuminatis basi subcordatis

margine integris petiolo 10–12 mm. longo pubescente suffultis; *floribus* albolacteis in racemos laterales dispositis inflorescentiæ rhachi rufo-tomentosa; *sepalis* ± 2 mm. longis margine ciliatis; *petalis* 2 dorsalibus brevibus 4 mm. longis lateralibus ± 6 mm. longis longioribus labello 9–10 mm. long., petalis lateralibus longioribus superne plurimum lanatis; *ovario* glabro; *fructu* ignoto.

Ignambi; forest; 2500 ft. 1544. Shrub. Flowers cream-coloured, marked and flushed with purple. Calyx ± 2 mm. long., lateral. Style ± 3 mm. long., slender. The noticeable features of this plant are the ovate glabrous leaves with entire margins and almost subcordate base, the rachis of the inflorescence is rufous-tomentose, the ovary is glabrous. It is closely allied to *A. Vieillardii* Brongn. & Gris, but differs by the rufous-tomentose rachis and subcordate base of the leaves.

AGATION LONGIPEDICELLATUM Bak. fil., sp. nov. *Frutex* sarmentosus humilis ad *A. Vieillardii* Brongn. & Gris valde accedens; *foliis* ellipticis vel oblongo-ellipticis 4.5–6.0 \times 2.5–3 cm. apicem versus attenuatis apice ipso obtusis pallide viridibus basi rotundatis vel late cuneatis, petiolo 8–10 mm. longo suffultis; *floribus* in paniculas laterales dispositis paniculis foliis longioribus; *inflorescentiæ* rhachi glabra vel subglabra; *pedicellis* pro genere longiusculis 5–10 mm. longis bracteolatis; *sepalis* 2.5 mm. longis margine ciliatis; *petalis* 2 dorsalibus ± 5 mm. longis lateralibus fere acquilongis lateralibus oblongo-lanceolatis ± 6.5 mm. longis labello lateralibus distincte longiori ± 10 mm. longo; *ovario* glabro stylo obclavato; *fructu* ignoto.

River Comboui; alluvial shrub; 200 ft. 2152. Low liane with light green leaves and greenish-white flowers. The noticeable features of this plant are the elliptical or oblong elliptical glabrous leaves remotely serrate at the margins, the long slender pedicels, the glabrous or almost glabrous rachis, and the glabrous ovary with obclavate style.

The following are closely allied, and are probably forms of this species:—

Taom; serpentine scrub; 1000 ft. 2308. Low shrub with straggling branches. Lip petal white, others streaked with dark purple.

The following is only in fruit:—

Ignambi; abundant in forest; 2000 ft.; gneiss. 1491. Spreading shrub 3–6 ft.

A. COMPTONII Bak. fil., sp. nov. *Frutex* elatus sarmentosus, caulibus lignosis; *foliis* ovato-oblongis 8–10 \times 4–5 cm. papyraceis glabris apice acuminatis glabris margine obsolete dentatis nervis lateralibus tenuibus marginem versus arcuatis et inter se conjungentibus, petiolo 12–14 mm. longo suffultis; *floribus* in paniculas terminales et axillares dispositis, paniculis foliis vix longioribus nec ut in *A. Pancheri* Brongn. & Gris duplo

longioribus; *calycis* lobis 5 petalis brevioribus; *petalis* 2 dorsalibus 5-6 mm. longis reflexis rubro-limeatis, lateralibus ± 7 mm. longis viridibus prorsus divergentibus, labello pendente superne lanato ± 10 mm. longo; *staminibus* 5; *ovario* glabro vel subglabro 2 mm. longo stylo glabro 3 mm. longo apice subelavato.

Mt. Panié; forest; 1200 ft. 1797. Tall liane with thick ropy, woody stem mounting tall trees. Lateral petals directed forwards, greenish lip hanging downwards, woolly on upper side, transverse crimson band in front of wool, beyond that greenish. Calyx 3 mm. long.

CLAVIS SPECIERUM.

A. Ovarium cinereo-pubescens vel cinereo-tomentosum.

A. Pancheri Brongn.

B. Ovarium glabrum vel subglabrum.

a. Inflorescentiæ rhachis rufo-tomentosa. Folia ovata basi fere subcordata, margine integro. *A. rufotomentosum* Bak. fil.

b. Inflorescentiæ rhachis pilis vestita. Folia ovato-oblonga margine subintegro vel obsolete serrata. *A. Comptonii* Bak. fil.

c. Inflorescentiæ rhachis glabra vel subglabra.

Pedicelli breviusculi. Petioli 3-5 mm. longi.

A. Vieillardii Brongn.

Pedicelli longiusculi. Petioli 8-10 mm. longi.

A. longipedicellatum Bak. fil.

PITTOSPOREÆ.

PITTIOSPORUM XANTHANTHUM Schlechter. Comboui Mts.; scrubby coniferous forest; 3500 ft. 2179. Serpentine shrub or small tree. Leaves in pseudo-whorls, downy beneath when young, glabrous later. Calyx red-brown. Petals yellow with stripes of red-brown on outside of each midrib, reflexed. Faintly scented.

Var. nov. PARVIFOLIUM Bak. fil. *Frutex* circ. 6-pedalis; foliis 3-4.5 cm. longis 8-15 mm. latis quam in typo minoribus oblanceolatis basi in petiolum brevem sensim angustatis; *floribus* luteis calyce 4 mm. longo; *petalis* recurvatis linearis-oblanceolatis ± 12 mm. longis; *ovario* deorsum hirto.

Tonine; mountain-top scrub; 3500 ft. 1936. Shrub 6 ft. Flowers daffodil-yellow. Petals recurved. Calyx brown. Fruit oval, black. Seeds numerous.

P. PANICULATUM Brongn. & Gris. Ignambi; forest; 2000 ft. Gneiss. 1695. Small woody plant 6 ft. Flowers creamy yellow. Corolla reflexed. Peduncles and pedicels reddish, glandular. Scentless.

PITTIOSPORUM PANICULATUM Brongn. & Gris, var. nov. *COMPTONII* Bak. fil. *Frutex* erectus circ. 4-pedalis; *foliis* lineari-oblancoelatis 10-12 cm. longis 17-20 mm. latis quam iis typi multo minoribus; *floribus* subumbellatis; calyce 8 mm. longo; *petalis* albis \pm 20 mm. longis oblanceolatis calyce subtriplo longioribus; *ovario* pilis patentibus vestito.

Mt. Panié; forest; 1500 ft. Gneiss. 1778. Small, erect, woody. Simple stem. Leaves in successive zones. Petals pure white, claws erect, limbs spreading. Sweet-scented. Petioles 15-20 mm.

P. PANICULATUM Brongn. & Gris, var. nov. *ODORATISSIMUM* Bak. fil. *Frutex* erectus lignosus circ. 6-pedalis; *foliis* oblanceolatis 17-21 cm. longis, 35-42 mm. latis, petiolo 20-25 mm. longo suffultis; *floribus* racemosis majusculis odoratissimis; *petalis* \pm 32 mm. longis flavescenti-albis calyce sub 4-plo longioribus.

Presqu'île Bogota; shrub forest with *Spermolepis*; 1500 ft. Serpentine. 1337. Leaves in groups, separated by internodes of several inches. Flowers yellowish white. Petals rolled back. Filaments white. Very sweet-scented. Calyx 10 mm. long.

P. FRAGRANS Schlechter. R. Tchiem; rocks in river course; 100 ft. 2000. Scarce. Tree 25 ft., copiously branched, giving dense shade. Calyx green. Corolla white. Petals rolled back. Sweet strong scent: Perhaps identical with *P. suberosum* Pancher.

P. PENDULIFLORUM Bak. fil., sp. nov. *Frutex* ramulis teretibus; *foliis* alternis membranaceis 7-13 cm. longis 25-40 mm. latis oblanceolatis hinc inde interdum margine dentatis interdum integris apice ipso obtusis, basi in petiolum 5-8 mm. longum attenuatis, superne costa impressa subtus prominente, nervis lateralibus tenuibus marginem versus furcatis et inter se conjungentibus; *floribus* albis axillaribus dependentibus solitariis vel binis, pedicellis gracilibus; *calycis segmentis* brevibus; *petalis* 4 coalitis albis apice reflexis \pm 7 mm. longis; *staminibus* 4 petalis brevioribus; *ovario* glabro, stylo columnari.

Mt. Mou; serpentine forest; 1500 ft. 460. Shrub, white hanging flowers. Corolla white, with coherent petals. Noticeable on account of the membranous alternate oblanceolate leaves and pendulous white solitary or subsolitary flowers.

P. ECHINATUM Brongn. & Gris. Ignambi; frequent in forest; 2000-3000 ft. 1499. Shrub or small tree 20 ft. Leaves thin, undulate at margins. Flowers in dense clusters. Calyx russet. Corolla white, its segments reflexed. Sweet scent.

PORTULACÆ.

PORTULACA OLERACEA L. Mt. Mou; rock crevice, old plantation area; 1000 ft. 520. Widely distributed.

HYPERICINÆ.

HYPERICUM GRAMINEUM Forst. fil. Mt. Canala; frequent in dry Niaouli association; 0-2000 ft. 1263. Herb 3-12 in. Annual. Leaves and stem often going red, usually pale green. Flowers yellow. Australia.

GUTTIFERÆ.

GARCINIA CORYMBOSA Sebert & Pancher (sub *Discostigma*). Paompai; creekside; 200 ft. 1882. Small tree 20 ft. Flowers rather fleshy. Green calyx disc. Petals pinkish white. White latex. The plant named *G. collina* Vieillard, collected by *Schlechter*, 15003, should be referred here. *Garcinia pedicellata* Seem. (*Clusia pedicellata* Forst.) is either identical or a close ally.

G. COLLINA Vieill. River Comboui; *Callitris* forest; 200 ft. 2162. Tree 25 ft. Flowers small, fleshy, sweet-scented. Calyx greenish. Corolla white. Tonine Forest; 1000 ft. 1927. Small tree 20 ft. Leaves scanty on flowering branches. Corolla yellowish white. Native name "Itahimbaombi." Port Bouquet; small creek in lowland serpentine scrub; 100 ft. 2249. Small tree. Calyx creamy yellow. Corolla white, rather fleshy. Strong sweet scent.

G. COMPTONII Bak. fil., sp. nov. *Arbuscula* circ. 15-pedalis ramulis validis subteretibus rigidis; *foliis* crassiusculis ovatis 3.5-5.0 × 2.5-3.5 cm. rigidis apice obtusis vel emarginatis basi acutis petiolo 3-5 mm. longo rubescente brevi suffultis costa crassiuscula nervis lateralibus tenuibus approximatis erecto patentibus; *floribus* ♂ parvis 1-2-4 ad pulvinos axillares insertis pedicellis brevissimis 1-2 mm. longis basi bracteatis; *sepalis* concavis subæqualibus decussatis; *petalis* crassiusculis; *staminibus* numerosis; *floribus* ♀ ignotis.

Poume; 2365. Allied to *G. sessilis* Seem. and *G. collina* Vieill. Differs by the rigid dark dull ovate leaves, obtuse at the apex, and creamy-yellow flowers from the old wood. It may be distinguished from its nearest allies as follows:—

a. Folia longiuscule acuminata, petiolo circ. 12 mm. longo suffulta.

G. sessilis Seem.

b. Folia apice obtusa vel subobtusa.

Folia 5-10 cm. longa, petiolo 5-10 mm. longo suffulta.

G. collina Vieill.

Folia crassiora, 3.5-5.0 cm. longa, petiolo 3.5 mm. longo suffulta.

G. Comptonii Bak. fil.

CALOPHYLLUM CALEDONICUM Vieill. Plaine des Lacs; streamside in scrub region. 391. Tree 25 ft.

MONTROUZIERA CAULIFLORA Planch. & Triana. River Comboui; scrubby and *Spermolepis* woods, especially on serpentine alluvium; 0-500 ft. 2200. Small formal pyramidal tree 15 ft. Yellow latex. Petals thick, yellowish, with scarlet and rose flushes. Mont Taom; serpentine scrub; 500-2500 ft., abundant. 2341. Shrub 4 ft., spreading habit. Latex yellow, sticky. Corolla fleshy, rose and yellow. Stamens greenish. Scentless.

M. VERTICILLATA Planch. & Triana. Mont Koghi; open serpentine scrub > 2000 ft. 730. Shrub 3 ft. Flowers proterandrous. Corolla spherical, pink, fleshy.

TERNSTRÆMIACEÆ.

MICROSEMMA SALICIFOLIA Labill. Hièghene roadside. 2006. Small tree 20 ft. Leaves medium green. Fls. male only, perianth green, anthers yellow.

M. COMPTONII Bak. fil., sp. nov. (Pl. 16. figs. 1-7.) As this species differs markedly from the species on which the genus was founded, I have ventured to propose the following sections:—

Sect. **Eumicrosemma**. Sepala 5-6 imbricata. Squamæ petaloideæ breves, 5-6, bifidæ. Ovarium mutiloculare. Stylus brevis, stigmatè 5-6-fido. Capsula glabrosa, 10-12 locularis. Frutex erectus, ramosus. Folia oblonga.

M. salicifolia Labill. *M. oblongum* Schlechter.

Sect. **Sapotophyllum**. Sepala 4-5-6 imbricata. Squamæ petaloideæ nullæ. Squamarum minutarum annulus, setaceus, inter ovarium et andrœcium interpositus. Ovarium ± 8 loculare. Capsula ignota. Arbuscula circ. 25-pedalis. Folia ovata vel elliptica.

M. (§ Sapotophyllum) COMPTONII Bak. fil., sp. nov. *Arbor* circ. 25-pedalis ramis novellis cinereo-hirtis; *foliis* ovatis vel ellipticis 6-10 \times 4.5-6 cm. margine integris subtus cinereis nervis lateralibus tenuissimis numerosis, costa subtus conspicua, apice rotundatis vel leviter emarginatis basi rotundatis vel late cuneatis petiolis 13-24 mm. longis crassiusculis præditis; *floribus* ex axillis foliorum fasciculatis fasciculis sæpissime 2-3-floris, pedunculis 5-8 mm. longis 1-floris petiolis brevioribus; *perianthio* crasso 6-7 mm. longo coriaceo persistente laciniis 5 rarius 4 vel 6 extus cinereis; *squamis* setaceis minutis filamentis numerosis a fundo calycis ortis; *ovario* hirsuto circ. 8-loculari, ovulis solitariis, stylo erecto, stigmatè terminali; *fructu* ignoto.

Ignambi; forest; 3500 ft., uncommon. Gneiss. 1579. Small tree 25 ft. Perianth green, thick. Dalla Torre and Harms in their 'Genera Siphono-

gamarum' place *Microsemma* in Flacourtiaceæ; Schlechter places it next *Wikstrœmia* in Thymelæaceæ.

MALVACEÆ.

MALVASTRUM TRICUSPIDATUM A. Gray. Nouméa. 222. Common roadside weed with yellow flowers. Decumbent, 6-12 inches. Widely spread.

HIBISCUS TILIACEUS L. Île Porc Épic; littoral zone, rare. 917. Tree 25 ft. Flowers large, sulphur-yellow with deep crimson blotch at base of petals. Widely distributed.

THESPESIA POPULNEA Soland. Ouen Toro near Nouméa. 61. Tree 20 ft. Littoral zone. Widely distributed.

STERCULIACEÆ.

STERCULIA (§ Acropogon) COMPTONII Bak. fil., sp. nov. *Arbor erecta; foliis maximis ad apices approximatis petiolatis, lamina subcordata usque ad 35 cm. longa ultra medium 5-lobata papyracea glabra reticulato-nervosa lobis apicem versus lobulatis petiolo \pm 31 cm. longo glabro; inflorescentia caulina paniculata 8-9 cm. longa multiflora pyramidalis ramis ramulisque brunneo tomentosus pedicellis brevibus teretibus brunneo-tomentosis; corolla in floribus masculis 8-9 mm. longa campanulata extus brunneo-tomentosa 5-6-lobata lobis oblongis; androgynophoro \pm 1.5 mm. longo in floribus masculis antheris subæquilongis, antheris uniseriatis, thecis parallelis, columnæ apice dense fulvo-barbata; floribus fœmineis ignotis.*

Paompai; forest; 100 ft. 1865. Tree with crowns of thin leaves. Perianth with 5-6 segments, dull yellowish, two crimson streaks on inside of each petal. Scentless. A tree with large papyraceous 5-lobed leaves and pyramidal panicle of rather small dull yellow flowers allied to *Sterculia* (*Acropogon*) *fatsioides* Schlechter, but differing in the larger thinner leaves.

S. BULLATA Pancher & Sebert. Nouméa, Port Ngéa; littoral zone. 47. Tree of 40 ft. Agrees with Pancher no. 108. A tree of 40 ft., with glaucous suborbicular leaves and male flowers with a uniseriate ring of anthers.

MELOCHIA ODORATA Linn. fil. Mont Canala; 1500 ft. 1264. Small tree 25 ft. Ignambi; creek at forest edge; 1500 ft. Gneiss. 1605. Small tree. Pedicels and calyces reddish. Corolla creamy, flecked with white. Slight scent. Widely distributed.

COMMERSONIA ECHINATA Forst. Mt. Mou; cretaceous forest; 800 ft. 512. Mont Panié; edge of Niaouli forest; 1000 ft. Gneiss. 1825. Small tree 20 ft. Flowers creamy white, scentless. Widely distributed.

TILIACEÆ.

TRIUMFETTA RHOMBOIDEA Jacq. Ermitage. 784. Weed of cultivation. Cretaceous. Perennial 4 ft. Widely distributed.

ELÆOCARPUS RIVULARIS Vieill. Isle of Pines; serpentine plateau, creek-side in scrub area. 2267. Shrub or small tree. Leaves thin, reddish when old. Flowers pendent, white; petal margins fringed. Slight scent.

E. MYRTILLUS Schlechter. Nekando; serpentine scrub among boulders. 2029. Small shrub 2 ft., spreading over ground. Flowers pendent. Calyx and corolla white. Petals fringed. Scented. I am doubtful if this species is distinct from *E. vaccinioides* Brongn. & Gris.

E. VIEILLARDII Brongn. & Gris. Ignambi; forest; 2000 ft. Gneiss. 1480. Large tree 40 ft., spreading crown. Flowers pendent. Sepals white. Petals white, fringed, sometimes flecked with red. Faint scent.

E. NODOSUS Bak. fil., sp. nov. *Frutex* circ. 4-pedalis ramulis teretibus cortice nigrescente obtectis inferne cicatricibus foliorum delapsorum notatis; *foliis* tenuiter coriaceis ovatis vel obovatis 6-10 cm. longis 33-53 mm. latis apice sæpius rotundatis basi cuneatis, costa subtus conspicua, nervis lateralibus utrinque 8-9 marginem versus furcatis, petiolis 12-20 mm. longis suffultis; *floribus* pendulis parvisculis in racemos dispositis racemis erectis vel suberectis foliis brevioribus; *sepalis* lanceolatis 5-6 mm. longis glabrescentibus vel parce pubescentibus, petalis subæquilongis; *petalis* cuneatis albis apice inæqualiter incisiss, *staminibus* circ. 30 apiculatis; *ovario* biloculari, stylo gracili; *fructu* ellipsoideo cinereo glabro \pm 15 mm. longo, 8-10 mm. lato.

Poume; 2379. Serpentine scrub; 800-1300 ft., abundant. Petal margins serrate. Sweet-scented. Noticeable on account of the obovate or ovate somewhat coriaceous leaves, and racemes of rather small pendent white flowers in half-erect racemes.

E. OVIGERUS Brongn. & Gris. Taom; creekside forest; 400 ft. Serpentine. 2315. Tree 30 ft., bark rough grey. Flowers pendulous. Calyx white, fleshy. Corolla creamy-white, petal margins serrate. Slightly scented.

E. GEMINIFLORUS Brongn. & Gris. Mt. Canala; forest; 2000 ft. 1111. Tree 30 ft. Leaves dark green, brown nerves projecting on under side, the upper surface corrugated. Flowers large. Calyx pale yellowish. Corolla white, petals fimbriated. Anthers numerous, with points. The calyx is 5-5.5 cm. long, the petals 5 cm. long. Noticeable on account of the very large flowers and corrugated surface of the leaves.

E. ALATERNOIDES Brongn. & Gris, var. nov. *GRANDIFOLIUS* Bak. fil. *Frutex* 6-pedalis sec. cl. detectorem; *foliis* subcoriaceis 6-7 cm. longis

15–23 mm. latis quam iis typi majoribus oblanceolatis apice rotundatis vel emarginatis longius petiolatis (petiolis 10–17 mm. longis); *floribus* parviusculis pendulis in racemos laxos dispositis; *sepalis* \pm 5 mm. longis lineari-lanceolatis; *petalis* 5–6 mm. longis lacteis; *ovario* biloculari.

Cap Bocage. Occasional in serpentine scrub; 500 ft. 1370. Flowers pendulous on erect reddish peduncles. Corolla cream-coloured. Differs from the type by the longer oblanceolate leaves with longer petioles. The lax raceme of pendulous cream-coloured flowers is sweet-scented. The sepals are linear-lanceolate, 5 mm. long.

ELÆOCARPUS TONINENSIS Bak. fil., sp. nov. *Arbuscula* 25-pedalis ad *E. rivularem* Vieill. accedens, ramis cortice cinereo obtectis; *foliis* chartaceis margine undulatis ovatis vel ovalibus 5–6.5 cm. longis 2–3 cm. latis basi attenuatis apice acuminatis apice ipso obtusis, subtus costa conspicua, nervis lateralibus tenuibus, petiolis 8–12 mm. longis suffultis; *floribus* parviusculis albis in racemos paucifloros dispositis; *sepalis* ovatis 3–5 mm. longis puberulis petalis brevioribus; *petalis* oblongis 4–5 mm. longis apice dentatis; *staminibus* circiter 25, filamentis antheris brevioribus; *ovarii* loculis 2 pauciovulatis; *fructu* ignoto.

Tonine Forest; 2000 ft. 1961. Small tree 25 ft. Leaves simple, thin, stiff, undulate margin, medium green, shining. Flowers white, petals curved inwards. Slight scent. Allied to *E. rivularis* Vieillard. Differs in the fewer flowered racemes and the ovate not lanceolate sepals. It is a small tree with few flowered racemes, and chartaceous leaves with markedly undulate margins.

E. DOLICHOPODUS Bak. fil., sp. nov. *Frutex* 3-pedalis, ramis teretibus cicatricibus foliorum delapsorum notatis; *foliis* oblanceolatis vel oblongo-oblanceolatis 4–4.5 cm. \times 1–1.5 cm. basi in petiolum brevem 1–2 mm. longum attenuatis apice obtusis costa subtus conspicua, nervis lateralibus tenuibus; *floribus* paucis lateralibus pedicellis longiusculis gracillimis teretibus; *sepalis* lanceolatis \pm 8 mm. longis margine albo-hirsutis; *petalis* albis \pm 10 mm. longis apice dentatis calyce paullo longioribus; *staminibus* circiter 10, filamentis hirtis, antheris brevioribus; *ovario* pubescente triloculari; *capsulis* trilocularibus apice acuminatis pendentibus in toto \pm 2.5 cm. longis 1.3–1.5 cm. latis.

Cap Bocage; frequent in serpentine scrub; 900 ft. 1392. Shrub 3 ft. Leaves light green. Flowers below leaves, white, pendulous. Fruit pendent, capsular, trilocular. A shrub with pendent flowers below leaves, and an acuminate trilocular capsule.

E. COMPTONII Bak. fil., sp. nov. *Arbor* ad *E. ovigerum* Brongn. & Gris accedens, ramis ramulisque teretibus vel subteretibus cortice cinerascente

obtectis cicatricibus foliorum delapsorum notatis; *foliis* coriaceis obovatis vel oblongo-obovatis 8.5–11.5 cm. × 5.5–6.5 cm. costa subtus conspicua, nervis lateralibus 8–9 marginem versus furcatis et inter se conjungentibus apice obtusis basi cuneatis, petiolis 20–25 mm. longis præditis; *floribus* pendulis speciosis in racemos paucifloros dispositis; *sepalis* crassiusculis 22–26 mm. longis lineari-lanceolatis; *petalis* oblongo-cuneatis 23–27 mm. longis glabris apice inæqualiter et breviter lobulatis; *staminibus* erectis antheris linearibus 6 mm. longis apiculatis; *ovario* cano-tomentoso biloculari, stylo gracili; *fructu* ignoto.

Couliné (Neketé); 1279. Large tree. Calyx fleshy, white. Corolla thin, carmine. Petal tips fringed. Flowers pendulous. Pedicels 16–20 mm. long. Noticeable on account of the large showy flowers in few-flowered racemes.

MALPIGHIACEÆ.

ACRIDOCARPUS AUSTROCALEDONICUS Baill. Baie Ngo; streamside; 70 m. 259. Tree 20 ft. Poume; abundant in scrub 500–1300 ft. 2381. Shrub 3 ft. Spreading leaves, medium green, grey downy below. Yellow corolla, brown calyx. Scentless. R. Dumbéa; flood plain. 418. Fruit a three-winged samara.

RYSSOPTERIS TIMORENSIS Blume. Ouen Toro; in *Acacia spirorbis* woods. 779. Slender woody climber forming large masses of trees. Fruit three-winged. Malaya, Australia.

Var. NEO-CALEDONICA Bak. fil., var. nov. *Folia* elliptica vel suborbicularia, subtus tomento brevi cinereo induta, *floribus* flavis.

Port Déspointes Wood, Nouméa. 134. Leaves 3–5.5 cm. long, 2.5–3 cm. broad. Wood climber. Flowers buttercup-yellow.

R. TAOMENSIS Bak. fil., sp. nov. *Frutex* scandens ad *R. timorensis* Bl. valde accedens; *foliis* oppositis ovatis vel ovato-oblongis acutis vel rarius obtusis 40–55 mm. × 21–25 mm. supra pallide viridibus subtus plus minus griseo-viridibus, petiolis 8–11 mm. longis suffultis; *inflorescentia* terminali vel axillari, pedunculis pedicellisque cano-tomentosis; *calycis lobis* apice obtusis extus cano-tomentosis glandulosis; *petalis* flavis breviter unguiculatis 1 cm. longis; *staminibus* 10 filamentis filiformibus glabris basi in urceolum connatis; *ovario* trilobo triloculari stylis 3 gracilibus stigmatibus capitellatis; *samaris* apice in alam expansis 20–23 mm. longis junioribus pilis plus minus obtectis latere tuberculatis.

Mont Taom; serpentine; 2000 ft. 2286. Liane, ultimate branches drooping. Leaves thin, soft, light green above, greyish below. Flowers sweet-scented. Corolla bright yellow. Calyx ± 3 mm. long. The leaves are smaller than in *R. timorensis* Blume and rounded at the base and much more deeply crowded. The corolla is bright yellow.

GONOSTYLACEÆ.

SOLMSIA CHRYSOPHYLLA Baill. Mont Dore; serpentine scrub; 1000 ft., occasional. 842. Shrub 6 ft. Mont Mou; dry serpentine scrub; 2000 ft. 429. Flowers green, scented. Presqu'île Bogota; serpentine scrub; 1500 ft. 1322. Small shrub 3 ft. Leaves medium green, shining above, grey green below.

LINACEÆ.

HUGONIA PENICILLANTHEMUM Baill. River Comboui; *Callitris* forest; 100 ft.; serpentine. 2151. Small shrub 2 ft. Leaves thin, dark green. Calyx green. Corolla bright yellow. Sweet-scented.

H. RACEMOSA Schlechter. Mont Mou; streamside in damp gully; 800 ft.; cretaceous. 549. Sprawling shrub. Flowers widely open, petals yellow.

ERYTHROXYLON NOVOCALÉDONICUM O. E. Schulz. River Ngoyé; *Casuarina* forest by river; 500 ft. 1015. Shrub or small tree 12 ft. Flowers sparse, solitary, dull red.

ZYGOPHYLLACEÆ.

TRIBULUS MOLUCCANUS Decne. Anse Vata. Creeping on sand. 83. Pinnate leaves, yellow petals. Fruit spiny. Moluccas, Timor.

OXALIDACEÆ.

OXALIS CORNICULATA L. Anse Vata; sand pit. 73. Widely distributed.

O. FRUTICOSA Vieill. in Herb. Taom; upland serpentine scrub; 3000 ft. 2328. Small weak subshrub 1 ft. Leaves dark green, tinged purple. Flowers yellow, delicate.

RUTACEÆ.

ZIERIDIUM GRACILE Baill. River Ngoyé (Mts. to N.W. of); serpentine scrub; 2000 ft., fairly frequent. 1000. Low shrub 2 ft. Flowers white. Leaves dark green above, light and dotted beneath.

BORONELLA FRANCI Schlechter. Plaine des Lacs; occasional in serpentine flood plain; 800 ft. 343. Small undershrub 1-1½ ft. Flowers white. This specimen agrees with Franc 247 in Herb. Kew.

B. PARVIFOLIA Bak. fil., sp. nov. *Frutex* 1-3-pedalis ad *B. Francii* Schlechter valde accedens, ramis glabris cortice cinereo obtectis; *foliis* parvisculis oppositis summitatem versus ramulorum confertis simplicibus subsessilibus coriaceis obovatis 10-13 mm. longis apice emarginato superne nitidis glanduloso-punctatis, petiolis 1-1.5 mm. longis suffultis; *floribus* albis

ad summitatem ramulorum cymosis vel ad axillas foliorum supremorum subumbellatis; *sepalis* 4 lanceolatis petalis brevioribus; *petalis* 4 ovato-oblongis 3-4 mm. longis filamentis crassiusculis glanduloso-verrucosis; *antheris* intus sub apice filamentis insertis; *carpellis* 4.

Taom; frequent in serpentine scrub; 500-2000 ft. 2296. Shrub 1-3 ft. Leaves aromatic. Corolla white tinged with pink. Scentless. The leaves of this plant are cuneate-obovate and shorter than in *B. Pancheri* Baill., *B. verticillata* Baill., or *B. Francii* Schlechter.

MYRTOPSIS MACROCARPA Schlechter. River Dumbéa; 200 ft. 827. Shrub 8 ft. Leaves dark green, rich red-brown beneath. Cap Bocage; serpentine scrub. 1371. Shrub usually ± 3 ft. Leaves finely pubescent when young on upper surface, glabrous later. Cap Bocage; scrubby woods on serpentine. 1372. Shrub 5 ft.

ERIOSTEMON PALLIDUS Schlechter. Kuakué; flood plain of river, frequent. 910. Shrub 5 ft. Flowers among leaves, almost sessile, white. Mont Dore; shrub; 1000 ft. 686. Shrub 6 ft. Flowers white, green outside. Ngoyé in *Spermolepis* woods just above rice; 200 ft. 960. Small tree 12 ft.; dark green leaves. Flowers white.

E. CORYMBOSUS Labill. Plaine des Lacs; open dry slope. 396. Shrub. A form with leaves smaller than those figured by Labillardière.

MELICOPE PLATYSTEMON Bak. fil., sp. nov. *Arbuscula*; *foliis* alternis petiolatis trifoliolatis foliolis intermediis majoribus oblongis vel ellipticis 15-26 cm. \times 6-8.5 cm. lateralibus 11-15 cm. \times 4-6 cm. inæquilateralibus superne glabris subtus costa pubescente nervis lateralibus marginem versus furcatis et inter se conjungentibus petiolis 7-10 cm. longis suffultis; *floribus* viridi-albis aggregatis in axillis foliorum delapsorum dispositis glomerulis subsessilibus; *calycis lobis* 4 ovatis brevibus; *petalis* 4 punctatis 8-9 mm. longis oblongis vel oblongo-lanceolatis; *staminibus* 8, 6-7 mm. longis filamentis applanatis; *disco ovarium* circumdante; *ovario* 4-lobo loculis 4 biovulatis, stylo erecto, stigmati terminali crasso.

Ignambi; forest; 2500 ft. Gneiss; uncommon. 1717. Inflorescence almost sessile, clusters on main stem in axils of fallen leaves. Calyx brown. Petals greenish white, the tips spreading. Slightly scented. Calyx 1.5-2 mm. long. A curious species with alternate, digitately trifoliolate leaves and subsessile clusters of flowers, with 8 stamens with flattened filaments. The ovary is 4-lobed and the loculi biovulate. It is a very anomalous species of *Melicope* and may be worthy of generic rank.

M. MONTANA Bak. fil., sp. nov. *Frutex* circ. 6-pedalis ramulis cortice nigrescente obtectis inferne cicatricibus foliorum delapsorum notatis; *foliis* digitatim trifoliolatis foliolis terminalibus oblongo-oblancoelatis vel anguste

obovatis 20-33 mm. × 11-14 mm. basi cuneatis apice acutis vel obtusis subtus costa prominente pubescente lateralibus inæquilateralibus paullo minoribus, petiolis medioeribus 5-13 mm. longis instructis; *floribus* in cymas axillares paucifloras in axillis foliorum supremorum dispositis; *calyce* 4-4.5 mm. longo brunneo extus pubescente; *petalis* 4 albis oblongis vel oblongo-oblanccolatis ± 5 mm. longis extus pubescentibus; *staminibus* 8 filamentis hirtis; *ovario* extus albo hirsuto; *fructu* ignoto.

Tonine; mountain-top scrub; 3500 ft. 1937. Shrub 6 ft. Leaves thickened, soft. Calyx brown. Corolla white, scentless. A shrub with trifoliolate leaves and white, scentless, tetramerous flowers in the axils of the leaves. There are 8 stamens with hairy filaments.

COMPTONELLA Bak. fil., gen. nov.

Flores hermaphroditi, parvi. *Calycis* lobi 4 petalis breviores. *Petala* 4, valvata, subrecta. *Discus* brevis, sinuatus. *Stamina* 4 basi disci inserta, antheris oblongis. *Ovarium* 4-lobum, pubescens, 4-loculare, loculis petalis oppositis. *Stylus* erectus, centralis, sursum attenuatus, stigmatate capitato globoso vix lobato. *Cocci* 1-3, ovoidei vel obovoidei, indehiscentes, nigrescentes, sessiles, sæpissime 1-spermi. *Semina* ovata, nigrescentia, testa opaca. *Arbuscula* 25-pedalis, ramis erectis rigidis. *Folia* opposita, 1-foliolata iis *Bauerellæ australianæ* Borzi subsimilia, foliolis integerrimis petiolatis, nervis lateralibus tenuibus marginem versus furcatis et inter se conjungentibus, costa subtus prominente. *Cymæ* axillares, floriferæ petiolis subæquilongæ, fructiferæ petiolis longiores, foliis breviores. *Flores* inter minores ordinis, albi. (Pl. 15. figs. 1-6.)

This genus is allied to *Evodia*, but is distinguished at once by the marked difference in the fruit, which does not separate into two valves. It differs from *Melicope*, *Pelea*, and *Baurella* in the stamens being isomerous with the sepals, and also in the fruit. Several of the simple-leaved species of *Evodia* have now been transferred to other genera. *Evodia* (§ *Peleopsis*) *crotonifolia* Baill. is *Myrtopsis Novæ-caledoniæ* Engler.

C. ALBIFLORA, sp. nov. *Arbuscula* 25-pedalis sec. cl. detectorem ramis erectis rigidis; *foliis* unifoliolatis ellipticis vel ovalibus 40-60 mm. × 20-33 mm. apice subobtusis basi late cuneatis nervis lateralibus tenuibus utrinque 6-8 marginem versus arcuatis, costa subtus prominente, sub lente punctatis, petiolo mediocri 15-18 mm. longo suffultis; *floribus* albis minutis in cymas laterales dispositis; *cymis* floriferis petiolis subæquilongis; *calyce* 1-1.5 mm. longo lobis 4 petalis brevioribus; *petalis* 4 albis ± 1.5 mm. longis margine incurvis; *staminibus* 4 basi disci insertis; *ovario* 4-loculari; *cocci* nigrescentibus 1-spermis ± 4.5 mm. longis indehiscentibus extus sub lente rugulosis ovoideis seminibus exalbuminosis.

Ignambi; forest; 3500 ft., gneiss. 1542. Flowers scentless. Calyx 1-1.5 mm. long.

The following clavis indicates its position with its nearest allies :—

A. Stamina 8–10.

α. Cocci dehiscentes. *Melicope* and *Pelea*.

β. *Sarcocarpus crassus*, *carneus*. *Sarcomelicope*.

B. Stamina 4–5.

α. Cocci dehiscentes.

• Folia sæpissime trifoliolata et opposita. *Evodia*.

** Folia alterna, simplicia. *Geijera*.

β. Cocci indehiscentes. Folia opposita, unifoliolata. *Comptonella*.

EVODIA CANALENSIS Bak. fil., sp. nov. *Arbuscula* 20-pedalis, ramulis cortice cinereo obtectis glabris vel fere glabris; *foliis* trifoliolatis foliolis terminalibus oblongo-oblancoelatis 6–9.5 cm. longis 16–23 mm. latis apice acuminatis apice ipso obtusis foliolis lateralibus parum inæquilateralibus nervis lateralibus tenuibus marginem versus arcuatis, petiolo communi 15–20 mm. longo suffultis; *floribus* minutis albis suaveolentibus in cymas pedunculatas dispositis; *cymis* petiolis brevioribus; *calyce* ±1 mm. longo lobis 4 triangularibus minutis; *petalis* 4 triangularibus ±1.5 mm. longis apice acutis antheris exsertis flavis; *stylo* erecto stigmatate terminali capitato; *coccis* parviusculis ±3 mm. longis.

Mont Canala; intermediate forest; 1500 ft. 1196. Also abundant by streamside in Niaouli region; 1000 ft. Leaflets 6–7.5 cm. long, 16–23 mm. broad, common. This species belongs to the Sect. *Trifoliolata* Engler and is allied to *E. Lamarckiana* Benth., but the leaflets and carpels are smaller. The flowers are small, white, sweet-scented, 4-merous, in short pedunculate axillary cymes.

E. LACTEA Bak. fil., sp. nov. *Frutex* 6-pedalis, ramulis cortice nigrescente obtectis deorsum cicatricibus foliorum delapsorum notatis; *foliis* digitatim trifoliolatis subcoriaceis foliolis oblongo-oblancoelatis vel oblancoelatis 30–42 mm. x 10–15 mm., costa superne impressa, subtus conspicua, nervis lateralibus tenuibus inconspicuis, petiolo communi 8–10 mm. longo suffultis; *floribus* 4-meris in cymas parvulas et densas laterales et breviter pedunculatas dispositis; *cymis* 10–15 mm. longis; *calyce* brevi; *petalis* lacteis ±1.5 mm. longis breviusculis; *staminibus* 4; *carpellis* 4.

Nekando; *Callitris* forest; 4000 ft.; serpentine; shrub 6 ft. 2122. Calyx green, other parts of flower creamy white. Leaves digitately trifoliolate. Calyx green, ±1 mm. long. This plant belongs to the Sect. *Trifoliolata* Engler and is noticeable on account of the oblancoelate or oblong-oblancoelate leaflets, and the small flowers in short rather small and dense lateral cymes.

Vieillard 2156 is closely allied.

E. LAMARCKIANA Benth. (*Lepta triphylla* Lour.) Mt. Canala; frequent by streamside, Niaouli region; 1000 ft. 1247. Small tree 25 ft. Leaves

trifoliolate, dark green, dull surface, almost same colour both sides. Flowers small, white, in axillary panicles. Fruit small. China, India, Ceylon, etc.

ZANTHOXYLON BLACKBURNIA Benth. Poume; frequent; 1000 ft.; scrub. 2386. Small tree or shrub. Leaves pinnate, the pinnæ very asymmetrical, yellowish pale green. Fruit spherical, each with one black seed. Australia.

Z. NEOCALEDONICUM Bak. fil., sp. nov. *Arbor*; *foliis* paripinnatis oppositis circ. 6-jugis ± 32 cm. longis foliolis tenuiter coriaceis elliptico-vel oblongo-lanceolatis 13-13.5 cm. longis 40-45 mm. latis inæquilateralibus apicè acuminatis basi cuneatis nervis lateralibus tenuibus, costa subtus conspicua, petiolulis brevibus, petiolo communi longo præditis; *floribus* albis carnosulis cymosis; *cymis* axillaribus ± 14 cm. longis folio 2-plo brevioribus; *floribus masculis* sepalis ovatis brevibus petalis multo brevioribus ± 2 mm. longis; *petalis* oblongis 8-9 mm. longis carnosulis staminibus longioribus; *staminibus* 4 antheris majusculis; *ovario* rudimentario stigmatè coronato.

Mt. Mou; forest; 3000 ft. 575. Tree. Flowers white, fleshy.

A tree with paripinnate leaves and about 6 pairs of opposite leaflets. The flowers are white and fleshy and borne in axillary cymes much shorter than the leaves. The filaments are thick and also fleshy. The pedicels are covered with lepidote scales. 1071 from River Ngoyé, which is only in fruit, is allied.

Z. ALBIFLORUM Bak. fil., sp. nov. *Arbuscula*; *foliis* pinnatis circ. 7-jugis ± 40 cm. longis foliolis ovatis vel ellipticis glabris petiolulatis superne subnitidis basi inæquali apicè acutis nervis lateralibus tenuibus utrinque 5-6 marginem versus inter se conjungentibus proximalibus ± 8 cm. longis 4-4.5 cm. latis distalibus 8-9 cm. longis 2.5-3 cm. latis; *floribus* tetrameris in corymbum pedunculatum 9-10 cm. longum dispositis, corymbis cum foliis hornotinis; *floribus masculis* calycis tubo brevi glabro dentibus brevibus acutis calyce in toto ± 2 mm. longo; *petalis* oblongis concavis albis glabris ± 6 mm. longis apicem versus glandula munitis; *staminibus* 4 antheris 3 mm. longis majusculis; *ovario* rudimentario; *floribus femineis* ignotis.

Mt. Mou; 2000 ft. 493. Small tree 12 ft. White flowers in terminal and axillary corymbs. Leaves pinnate in crown at top of simple stem. A small tree with pinnate leaves and about 7 pairs of elliptical or oblong glabrous leaflets. The flowers are paniculate, the inflorescence being about $\frac{1}{4}$ the length of the leaves.

DUTAILLYEA COMPTONII Bak. fil., sp. nov. *Arbor* 25-pedalis, foliis oppositis amplis pinnatim trifoliolatis oblongo-obovatis 30-33 cm. longis

13-15 cm. latis margine revolutis, costa subtus valde prominente, utrinque nervis lateralibus 15-18 basi attenuatis, apice acutis, petiolo communi longo valido subtus convexo supra canaliculato instructis, petiolulis apice sensim in foliolorum costam abeuntibus, petiolo communi ± 30 cm. longo suffultis; *floribus* in paniculas axillares dispositis pedicellis rugosulis paniculis 14-15 cm. longis et latis; *calycis dentibus* acutis; *petalis* 10-12 mm. longis calycem 2-3-plo longioribus; *ovario* conoideo 4-loculari; *fructu* ignoto.

Mont Panié; 1818. 3000 ft. Gneiss. Tree 25 ft. Leaves opposite. Panicles axillary. Flowers scentless. Petals creamy, tips streaked with rose. Calyx ± 4 mm. long. Differs from *Dutailleya trifoliolata* Baill. by the leaves being pinnately trifoliolate and 30-33 cm. long instead of digitately trifoliolate and 10-15 cm. long.

DUTAILLEYA TRIFOLIOLATA Baill. ex descript. Ignambi; forest; 2000 ft. Gneiss. 1475. Small tree. Leaves opposite. Axillary panicles. Petals rather thick and stiff, tinged with rose-pink. Scentless. Wood smells of sulphur. Requires comparison with type.

ACRONYCHIA LÆVIS Forst. Mt. Mou; cretaceous forest scrub. 517. Shrub. Mt. Dore; stream valley; 100 ft. Serpentine. 661. Tree 25 ft. Flowers dull white. Australia.

A. LÆVIS Forst., var. PAUCIFLORA Vieill. Poume. Lowland serpentine scrub 50 ft. near water. 2369. Low shrub 2 ft. Flowers scented. Petals white, green-tipped. Filaments white. This is the same as Vieillard 285 bis.

PHELLINE BILLARDIERI Panch. Paompai; forest; 1000 ft. 1894. Small tree 15 ft. Leaves dark green above. Terminal panicle of grey-green tricarpeal fruit. Fruits contain much latex, absent from stem and leaves.

P. COMOSA Labill. Plaine des Lacs; Kaori; forest. 394. Tree.

P. COMOSA Labill., var. CANALENSIS Bak. fil., var. nov. *Arbor* 30-pedalis vel ultra; *foliis* maximis ± 55 cm. \times 14 cm. quam iis typi multo majoribus; *paniculis* ± 28 cm. foliis brevioribus; *fructibus* pallide viridibus exsiccate nigrescentibus.

Mont Canala; moist forest; 1500 ft. Schists. 1197. Crown of dark green shining leaves. A whorl of leaves alternates with a whorl of smaller green bracts and subtends a series of axillary panicles. Inflorescences have reddish axes and pale green fruits. Specimens from Labillardière are in the Museum Collection.

P. LUCIDA Vieill. Comboni Mts.; serpentine forest; 3000 ft. 2184. Small tree 20 ft. Corolla white, the petals tipped with pink. Scentless.

Phelline erubescens Baill. Tonine; forest; 1500 ft. 1949. Small tree. Leaves medium green, shiny. Flowers white, sweet-scented. Petals recurved. Probably also 916 from Île Porc Épic. Tree 25 ft. The description of the genus *Phelline* in Bentham and Hooker's 'Genera Plantarum,' now that more species are known, requires certain additions. The flowers are 4-5-merous and the ovary sometimes 5-locular. The genus includes not only shrubs, but also trees 20 ft. high. Ten species have been described.

MURRAYA FLAVA Bak. fil., sp. nov. *Arbor* 25-pedalis, ramis teretibus vel subteretibus; *foliis* pinnatis 1-4-jugis foliolis membranaceis 6-7 cm. longis 30-38 mm. latis parum inæquilateralibus ovatis vel ellipticis opacis, costa subtus conspicua, basi cuneatis subsessilibus nervis lateralibus tenuibus; *floribus* flavis suaveolentibus sæpius in racemos laterales dispositis fide cl. detectorem; *calyce* brevi ± 1 mm. longo dentibus brevissimis; *petalis* 7-8 mm. longis carnosulis lineari-oblongis; *disco* prominente ovarium circumdante cupuliformi margine crenato; *stylo* elongato stigmate capitato; *fructu* ignoto.

Mont Mou; forest margin, cretaceous; 600-1000 ft. 456. Tree 25 ft. Flowers yellow, strong suffocating smell. Noticeable on account of the yellow flowers with a strong suffocating smell and prominent disc.

MICROMELUM CORIACEUM Seem. Île Ouéré. 652. Shrub 8 ft. Common in *Acacia spirorbis* association. Isle of Pines; forest on coral soil; 50 ft. 2282. Small tree 20 ft. Flowers white, sweet-scented. Fiji.

M. PUBESCENS Blume. Mt. Mou; cretaceous forest; 1000 ft. 518. Shrub or small tree. Widely distributed in Tropical Asia and Pacific Islands.

SIMARUBACEÆ.

SOULAMEA PANCHERI Brongn. & Gris. Kuakué. Fairly often in lowland scrub. Flood plain of river. 907. Shrub 4 ft. Stem little branched, with velvety clothing on young plants. Abundant leaves towards apex, thick but soft and pliable. Fruits two-winged on axillary racemes. Kuakué scrub; 800 ft. 940. Shrub. River Comboui; *Callitris* forest by river 200 ft.; serpentine. 2154. Small tree. Leaves dark green above, veins prominent not stiff. Perianth green, reflexed, anthers brown. Scentless.

S. MUELLERI Brongn. & Gris. Taom; abundant in serpentine scrub; 500-2000 ft. 2313. Small shrub, stem erect, simple and slightly branched. Flowers greenish yellow. Slight scent. Fruit 2-winged.

SURIANA MARITIMA L. Anse Vata; sea sand; 76. Isle of Pines; very abundant on coral sand; 2261. Shrub 8 ft. Leaves fleshy. Corolla delicate white, caducous. Widely distributed.

OCHNACEÆ.

STRASBURGERIA CALLIANTHA Baill. Nekando ; conifer forest ; 3500 ft. ; serpentine. 2021. Small tree 25 ft. Branches brittle. Perianth spiral, about 8 segments sepaloid, about 5 petaloid, transparent, veined, and mottled with dark crimson. Scentless. Rimlike disc surrounding ovary.

MELIACEÆ.

DYSOXYLUM COMPTONII Bak. fil., sp. nov. *Arbor* circ. 40-pedalis ; *foliis* pinnatis 20–25 cm. longis 4–5-jugis foliolis 9–10.5 cm. \times 3.5–4 cm. oblongis vel subobovato-oblongis supra glabris opacis subtus pallidioribus petiolulatis basi inæquali apice acutis nervis lateralibus tenuibus 8–10 ; *floribus* albis carnosulis spicatis tetrameris ; *spicis* e ramis vetustioribus vel e trunco oriundis ; *calycis lobis* 4 rotundatis tubo brevissimo calyce in toto 1.5 mm. longo ; *petalis* 5–6 mm. longis extus puberulis vel fere glabris ; *tubo stamineo* glabro petalis inferne connato antheris 1.25 mm. longis ; *disco* cupuliformi.

Mont Canala ; by stream in Niaouli region ; 1000 ft. 1244. Leaves pinnate, alternate, medium green. Flowers in spikes sometimes clustered on old wood and main stem, white, fleshy. A tree with pinnate glabrous leaves, and spikes of white tetramerous flowers from the old wood and main stem. Allied to *D. Vieillardii* C. DC.

D. GAMOSEPALUM Bak. fil., sp. nov. *Arbuscula* circ. 25-pedalis ; *foliis* abrupte pinnatis circ. 10-jugis \pm 36 cm. longis foliolis ovatis vel ellipticis vel subobovato-ellipticis 6–8 cm. \times 3.5–4.5 cm. utrinque glabris petiolulatis basi leviter inæquali nervis lateralibus tenuibus 6–8 arcuatis ; *floribus* 4–5 meris aggregatis e trunco oriundis ; *calyce* recurvato \pm 1 mm. longo gamosepalo ; *petalis* 4 vel 5 inferne coalitis ; *tubo stamineo* glabro antheris 8–10 summo tubo stamineo inclusis ; *disco* campanulato ; *stylo* erecto stricto stigmate capitato ; *fructu* rotundato sec. cl. detectorem sominibus 3–4, in quoque loculo solitariis.

Ignambi ; fairly frequent in moist forest ; 2000–3500 ft. Gneiss. 1711. Flowers on main trunk in small dense clusters. Perianth fleshy. Calyx pink, recurved. Corolla tubular, white, tip of stigma crimson. Fruit round, with 4 ridges and 3–4 brown seeds, one in each loculus, fruit-wall brown, corky. Calyx \pm 1 mm. long. Petals 11 mm. long. A tree 25 ft. with short gamosepalous calyx and flowers arising from the trunk.

D. NITIDUM A. DC. in DC. Monog. Phanerog. i. 522. Presqu'île Bogota. Occasional in serpentine scrub. 1000 ft. 1327. Shrub 6 ft. Flowers white. Petals yellowish on outside, caducous. R. Ngoyé. In *Spermolepis* forest near stream. 500 ft. Small tree. Leaves pinnate, medium green. Inflorescence axillary. Flowers white.

DYSOXYLUM CANALENSE A. DC. in DC. Monog. Phanerog. i. 505. River Comboui. Scrubby *Spermolepis* woods; 500 ft.; serpentine. 2206. Small tree 20 ft. Panicles drooping. Flowers white. Calyx segments reflexed. Scentless.

OLACINEÆ.

XIMENIA ELLIPTICA Forst. fil. Littoral zone, Ouen Toro near Nouméa. 51. R. Tchiem; littoral scrub river course near sea. 1999. Straggling shrub, long spreading main shoots. Leaves thin, soft, medium green. Flowers greenish yellow, with copious white hairs on inner surface of corolla. Pacific Islands.

ILICINEÆ.

SPHENOSTEMON COMPTONII Bak. fil., sp. nov. (Pl. 16. figs. 1-7.) *Arbor* circ. 30-pedalis, ramis glabris; *foliis* oblongis vel oblongo-oblancoelatis 8-10 cm. longis 35-40 mm. latis subcoriaceis superne nitidis costa crassiuscula nervis lateralibus 8-9 marginem versus arcuatis et inter se anastomosantibus, petiolo 15-20 mm. longo prælitis; *floribus* inter mediocres albis in racemos 7-9 cm. longos laxos 7-15-floros dispositis; *sepalis* 4 ellipticis vel oblongo-ellipticis 6-7 mm. longis dorso pubescentibus; *petalis* 4 imbricatis ovatis 7-8 mm. longis sepalis subæquilongis; *staminibus* 6 trigonis sessilibus ± 5 mm. longis antheris linearibus longitudinaliter deliscentibus; *ovario* 2-loculari hirta, loculis 1-ovulatis ovulis pendulis, stigmatibus capitato coronato.

Ignambi; forest; 3500 ft., scarce. 1693. Tree 30 ft. Leaves stiff, dark green above, light beneath. Flower white, rather fleshy. Petal and anther fused. Pedicels 6-8 mm. long. Differs from *S. Balanæ* in having hermaphrodite flowers and 6 stamens.

CELASTRINEÆ.

GYMNOSPORA PANCHERIANA Loes. Canala; lowland serpentine scrub; 100 ft. 1310. Shrub 4 ft.

MENEPETALUM SALICIFOLIUM Loes. Ignambi; fairly frequent in forest; 2000 ft. 1476. Shrub 8 ft. Flowers yellowish green.

SALACIOPSIS Bak. fil., gen. nov.

Flores unisexuales, actinomorphi, pro ordine majusculi. *Flores masculi.* *Sepala* 5 inter se libera, rotundata, 2 exteriora paullo minora. *Petala* 5 ovata vel oblongo-ovata, calyce 2-3-plo longiora. *Stamina* 5 extra discum carnosum inserta, petalis paullo breviora et iis alterna. *Ovarii* rudimentum cum disco lobulato confluent. *Flores feminei.* *Sepala* valde imbricata. *Petala* 5-7, præfloratione valde imbricata. *Stamina* 0. *Staminodia* 0. *Ovarium* triloculare, disco crasso valde prominente semiimmerso, ovulis in loculis plerumque 2 juxta basin affixis erectis. *Stylus* brevis, validus. *Stigma* trilobum.

Arbuscula circ. 20-pedalis, ramis teretibus. *Folia* majuscula, simplicia, alterna vel pseudoverticillata, petiolo brevissimo instructa. *Flores* fasciculati e nodis ramorum orti. *Pedicelli* graciles floribus 2-3-plo longiores circ. medium bracteolis minutis instructi. *Fructus* immaturus 3-locularis, verisimiliter capsularis, calyce petalisque stipatus. (Pl. 17. figs. 1-6.)

Allied to the genus *Menepetalum*, but differs in having large flowers with a calyx in which the sepals are free to the base, the two exterior smaller, and in the female flower 5-7 petals. The leaves are also different; they are in successive zones, either alternate or pseudo-verticillate, not as in *Menepetalum* opposite. The flowers are fasciculate, the pedicels being one-flowered. The disc is thicker and lobulate.

SALACIOPSIS NEOCALEDONICA, sp. nov. *Arbuscula* ramis teretibus; *foliis* alternis vel pseudoverticillatis oblongis vel ellipticis 8-14 cm. x 3.5-7.5 cm. glabris apice acutis vel subobtusis superne nitidis, subtus costa prominente, nervis lateralibus tenuibus utrinque 9-11, petiolis brevissimis 1-3 mm. longis crassiusculis instructis; *floribus* ♂ axillaribus fasciculatis e nodis ortis; *calyce* membranaceo sepalis rotundatis 1.5-2.5 mm. longis; *petalis* ovatis 6-7 mm. longis calyce 2-3-plo longioribus; *pedicellis* gracilibus 6-10 mm. longis floribus longioribus bibracteolatis; *bracteolis* minutis; *staminibus* 5 extra discum carnosum insertis; *ovario* triloculari, stylo brevissimo, stigmate trilobo.

Ignambi; small tree, male. Five stamens with dark yellow anthers. Central disc resembles a 5-locular ovary, but contains no ovules. 1600. Female, 1692.

Ignambi; occasional in forest; 2000 ft. Gneiss. 1479. Small tree 20 ft. Leaves in successive zones. Sepals cream-coloured. Petals white. Ovary light yellow, scentless.

The noticeable features of this species are the pseudoverticillate, ashen-grey, glabrous, nearly sessile leaves, and the flowers in fascicles from lateral nodes. The ovary is trilocular.

PERIPTERYGIA MARGINATA Loes. River Comboui; alluvial riverside scrub; 0-300 ft., abundant. Serpentine. 2165. Small shrub fastigiate habit. Corolla white. Fruit 3-winged capsule. Seeds winged. River Dumbéa; flood plain; 410. Shrub 6 ft. Baie Ngo; dry hillsides, common shrub; 254. Kuakué; abundant in sandy and stony flood plain of river; 902. Shrub 5 ft. Hard, stiff, almost erect leaves. Flowers small, white, in axillary dichasia, honeyed, sweet-scented. Fruits 3-winged, splitting into three valves at the apex, the valves remaining attached.

SALACIA PANCHERI Baill. River Comboui; forest by creek, serpentine alluvium. 2230. Small tree 20 ft. Branches dorsiventral. Leaves dark green above. Flowers dull yellow, petals recurved.

SALACIA (§ Dicarpeum) NEOCALEDONICA Loes. Ignambi; forest; 2500 ft. Gneiss. 1578. Shrub or small tree of irregular growth. Flowers green. Fruits oval. Ignambi; creekside woods; 1500 ft. Frequent. Gneiss. 1667. Shrub or small tree. Leaves often distichous. Flowers greenish yellow.

RHAMNACEÆ.

VENTILAGO MADERASPATANA Gaertn. River Ngoyé; *Spermolepis* forest; 400 ft., serpentine. 2097. Tall liane. Leaves shiny. Peduncles green. Perianth green. Stamens yellow. Broad central disc. Sweet strong scent. India, Java.

V. NEOCALEDONICA Schlechter. Taom, *Casuarina* association; 200 ft., serpentine. 2347. Small tree 15 ft.

COLUBRINA ASIATICA Brongn. Île Ouéré; abundant in littoral zone; 645. Shrub 6 ft. Green flowers with large honey disc. Thin light green, shining leaves. Widely distributed in Tropical Asia, also in S.W. Africa.

ALPHITONIA ZIZYPHOIDES A. Gray. Mt. Dore; common in stream valley; 100 ft., serpentine; 664. Leaves dark green above, almost white beneath. Peduncles and calyces brown. Flowers small, greenish yellow. River Dumbéa; 200 ft., serpentine; 830. Shrub 10 ft. Branches and leaves horizontal. Leaves red-brown below when young. Pacific Islands.

A. XEROCARPA Baill. Presqu'île Bogota; scrub, shrubby woods; 1000 ft., serpentine; 1330. Shrub or small tree up to 20 ft. in creeks. Midrib reddish. Flowers white, sweet-scented. Nekando; forest, especially near margin; 3000 ft., serpentine; 2024. Small tree 25 ft. Corolla white, sweet-scented.

SAPINDACEÆ.

LOXODISCUS CORIACEUS Hook. fil. Taom; serpentine scrub; 2500 ft., frequent. 2333. Shrub 6 ft. Leaves soft. Sepals glandular, very proterandrous. Fruit red-brown, covered with dark stalked glands. Isle of Pines.

ARYTERA CHARTACEA Radlk. Ouen Toro; *Acacia spirorbis* wood. 777. Tree 20 ft.

GUIOA COLLINA Schlechter. Paompai; creekside and wood margin; 1866. Tonine; forest margin and creekside; 1000 ft. 1954. Small tree 20 ft. Flowers white, sweet-scented. 1076 from Mt. Nekando may also belong here, but the flowers are only in bud.

G. MICROSEPALA Radlk. Mont Canala; forest; 2500 ft., schists. 1135. Tree 25 ft. Also Mont Panié; forest; 1500 ft. 1771; and Ignambi; forest; 2000 ft. 1849,

GUIOA GLAUCA Radlk. Île Porc Épic; edge of forest. 914. Tree 30 ft. Leaves light green, hard, paripinnate. Fruit three-winged with a waxy bloom.

G. PECTINATA Radlk. Mont Mou; damp gully near edge; 800 ft. Niaouli region. 548. Shrub 10 ft. White flowers, scented.

STORTHOCALYX PANCHERI Radlk. Plaine des Lacs; *Dacrydium* association on moderate serpentine slopes; uncommon. 315. Shrub 3-4 ft. Flowers white, scentless.

HARPULLIA AUSTRORCALEDONICA Baill. Ignambi; forest intermediate; 2500 ft. 1631. Small tree; pinnate leaves, medium green, dull, paripinnate. Flowers on lateral panicles, peduncle bronze green, calyx yellowish, petals greenish white; scentless. Large saucer-like disc outside staminal whorl. Perhaps also 915 from Île Porc Épic belongs here.

DODONÆA VISCOSA Jacq. Canala; lowland serpentine scrub on hill; 1308. Shrub 4 ft. Presqu'île Bogota; dry serpentine scrub; 1353. Widely distributed.

CUPANIOPSIS PETIOLULATA Radlk. Mont Canala; streamside, Niaouli region. 1194. Small tree.

C. AZANTHA Radlk. Ignambi; forest; 2000 ft. 1486. Gneiss. Corolla white, shorter than the sepals. Stamens 10. Requires comparison with type.

C. GLOMERIFLORA Radlk. Port Déspointes Woods, Nouméa; *Acacia spirorbis* woods, uncommon. 139. Shrub 4 ft. Flowers white, sweet-scented.

ANACARDIACEÆ.

EUROSCHINUS VERRUCOSUS Engler. The following is a form of this species with fewer pairs of leaflets. Isle of Pines; coral forest. 2283. Tree 20 ft. Leaves pinnate, light green. Flowers small, green. Anthers yellow. Sweet-scented.

E. RUBROMARGINATUS Bak. fil., sp. nov. *Arbuscula* 15-pedalis, ramulis cinerascens lenticellis plus minus obtectis; *foliis* ± 5 -jugis 20-30 cm. longis foliolis oppositis vel suboppositis 9-11.5 cm. \times 2.5-3.0 cm. oblongis acuminatis breviter petiolulatis (petiolulis ± 3.5 mm. longis) infimis brevioribus basi parum obliquis; *paniculis* ± 30 cm. longis foliis subæquilongis puberulis ramulis infimis longioribus; *floribus* breviter pedicellatis; *calyce* cupuliformi 1.5 mm. longo dentibus brevibus; *petalis* 5 ellipticis ± 2.5 mm. longis flavo-viridibus calyce 2-3-plo longioribus; *staminibus* extra discum insertis; *disco* breviter cupuliformi; *stilo* erecto, stigmatibus trilobis; *fructu* ignoto.

River Comboui; *Callitris* forest by river; 200 ft. 2155. Serpentine,

Small tree 5 ft. Leaves edged with red. Panicle terminal. Flowers widely open, yellowish green.

A tree with about 5 pairs of oblong acuminate leaflets, shortly petiolulate, and a panicle of small yellowish-green flowers about as long as the leaves. Allied to *E. elegans* Engler, but there are more pairs of leaflets and the inflorescence is not so lax, and it is puberulous.

EUROSCHINUS SYLVICOLA Bak. fil., sp. nov. *Arbuscula* ad *E. verrucosum* Engl. accedens, ramulis cinerascentibus lenticellis plus minus dense obtectis; *foliis* imparipinnatis circ. 5-jugis 5-6 dm. longis foliolis oblongo-ovatis vel oblongo-ellipticis 9-13 cm. \times 4-5 cm. apice acuminatis basi late cuneatis costa subtus prominula nervis lateralibus tenuibus utrinque 12-15 marginem versus arcuatis supra glabris petiolulo longiusculo instructis; *paniculis* multifloris 3-4 dm. longis quam folia paullo brevioribus sparse pubescentibus; *floribus* pallide flavis breviter pedicellatis glomeratis; *calycis lobis* semiorbicularibus calycis in toto 1-1.5 mm. longo; *petalis* \pm 2 mm. longis oblongis; *staminibus* extra discum insertis filamentis brevibus antheris flavis 1.25 mm. longis; *ovario* rudimentario; *drupis* ignotis.

Mont Humboldt; forest; 500 ft.; serpentine. 2087. Leaves imparipinnate, rachis grey mottled with brown, pinnæ medium green, thin. Terminal panicle. Flowers pale yellow, scentless; anthers yellow.

Noticeable on account of the glabrous, oblong-ovate or oblong-elliptical acuminate leaflets, and panicle 3-4 dm. long.

MONTAGUEIA Bak. fil., gen. nov.

Calyx brevis, glaber, tubo turbinato, limbo truncato vel subtruncato. *Petala* 4-5, valvata, oblonga, demum reflexa. *Stamina* 4-5 petala numero æquantia et iis alternantia, antheræ dithecæ rimis longitudinaliter dehiscentes. *Discus* vix lobatus ovarium circumdans. *Ovarium* superum 1-loculare, ovulum a funiculo infra apicem suspensum. *Stylus* erectus, gracilis, stigmatate capitato. *Arbuscula* 20-pedalis. *Folia* imparipinnata \pm 4-juga cum impari, foliolis herbaceis ovato-lanceolatis petiolulatis margine crenato-serratis vel undulatis, costa subtus prominente, nervis lateralibus tenuibus. *Panicule* terminales circ. dimidium foliorum æquantes, ramis approximatis patentibus. *Flores* pallide flavi, parviusculi, in ramulos ultimos glomerulati, glomerulis 6-12-floris. *Bracteolæ* minutæ. *Fructus* ignotus. (Plate 15. figs. 7-9.)

Allied to *Euroschinus*, from which it differs in its haplostemonous flowers and truncate calyx. The style is erect and shorter than the stamens. The stamens are alternate with the petals, the anthers being relatively rather large and longer than the filaments. The petals are valvate and not imbricate as in *Euroschinus*.

MONTAGUEIA HAPLOSTEMON, sp. nov. *Arbuscula* 20-pedalis; *foliis* imparipinnatis \pm 4-jugis cum impari \pm 30 cm. longis foliolis inæquilateraliter

ovato-lanceolatis 9–11 cm. longis 40–45 mm. latis apice acuminatis apice ipso obtusis basi late cuneatis margine remote crenato-serratis vel subundulatis, costa subtus prominula, nervis lateralibus tenuibus petiolulis 4–5 mm. longis; *floribus* pallide flavis paniculatis; *paniculis* terminalibus quam folia brevioribus pedicellis gracilibus; *calycis limbo* subtruncato tubo turbinato calyce in toto 0.5–0.75 mm. longo; *petalis* 4–5 oblongis demum reflexis ± 2.5 mm. longis; *staminibus* 4–5 petala numero æquantibus; *ovario* ovoideo, ovulo infra apicem loculi suspenso.

Paompai; forest margin; 1500 ft. Shales. 1897. Leaves light green. Inflorescence terminal. Flowers pale yellow, sweet-scented. Petals reflexed, anthers brown.

A small tree with imparipinnate leaves and about 4 pairs of ovate-lanceolate leaflets, and a terminal panicle of flowers. The ultimate clusters or glomerules are arranged in a subumbellate manner, and contain 6–12 flowers.

RHUS SIMARUBÆFOLIA A. Gray, var. nov. NEOCALEDONICA Bak. fil. *Frutex* ramulij pilosis teretibus vel subteretibus; *foliis* imparipinnatis 10–13 cm. longis foliolis 3–4-jugis cum impari lateralibus leviter inæquilateralibus oblongis 3–4 cm. longis margine integris vel rarissime hinc inde serratis superne glabris apice acutis basi cuneatis terminalibus 5–5.5 cm. longis 15–22 mm. latis, petiolo communi semiterete instructis; *floribus* albis parvisculis paniculatis; *calycis segmentis* brevibus extus glabris calyce in toto ± 1 mm. longo; *petalis* calyce longioribus imbricatis albis oblongis obtusis ± 2 mm. longis; *ovario* glabro sessili stylis brevibus; *drupis* globosis lævibus ± 4 mm. diam.

Port Déspointes Woods, Nouméa. 136. Shrub. Flowers white.

The type comes from Fiji. This variety differs from type in its oblong petals, etc.

SEMECARPUS NGOYENSIS Bak. fil., sp. nov. *Arbuscula* 20-pedalis sec. cl. detectorem; *foliis* coriaceis glabris 12–17.5 cm. \times 6–7.5 cm. supra opacis ellipticis vel oblongo-ellipticis apice obtusis vel emarginatis basi acutis nervis lateralibus utrinque 13–15 subtus conspicuis, petiolo 4–5 cm. longo supra canaliculato suffultis; *floribus* in paniculis 5–13 cm. longis digestis ramis 2–3 cm. longis atro-tomentosis erecto-patentibus; *calyce* cupuliformi laciniis imbricatis; *petalis* crassiusculis ± 6 mm. longis quam iis *S. Balansæ* Engler longioribus; *ovario* in floribus hermaphroditis globoso atro-fusco, stylis divergentibus.

River Ngoyé; shrubby. *Casuarina* association by riverside; 400 ft. Serpentine. 2112 and 2103. Petals pinkish white. Ovary very dark brown, velvety. Dark viscous exudation from cut stems. Leaves with dull upper surface.

Differs from *S. Balansæ* Engler, with which it has been compared in the Paris Herbarium, by the dull upper surface of the leaves and longer petals,

SEMECARPUS ATRA Vieill. Paompai; creekside woods; 50 ft. 1905. Stout tree 30 ft. Sturdy trunk, wide-spreading branches. Leaves dark green above, glaucous below, basal half of petiole corky-like stem, veins yellowish conspicuous. Corolla white central yellow, honey disc. Sweet scent. White latex.

Isle of Pines; roadside; 50 ft. 2280. Tree 30 ft., dense foliage dark green above, glaucous below. Corolla dingy yellowish white. Ovary black. Sweet scent.

LEGUMINOSÆ.

LOTUS AUSTRALIS Andr., var. nov. *ANFRACTUOSUS* Bak. fil. *Caulis* anfractu-
tuosus foliolis oblongo-obovatis glauco-viridibus; *calycis dentibus* acutis;
floribus rubro-purpureis; *carina* subalbida; *leguminibus* rectis calyce 5-6-plo
longioribus.

Isle of Pines, Ouro. Coral and shell-sand, littoral zone edge nearest sea.
2252. Perennial prostrate. Leaves pale glaucous green, fleshy. Corolla
red-purple, carina whitish. Scentless.

Agrees with a specimen collected by Macgillivray at the Isle of Pines.

ARTHROCLIANTHUS GRANDIFOLIUS Bak. fil., sp. nov. *Arbor* circ. 20-pedalis
ramulis fere glabris; *foliis* trifoliolatis foliolis terminalibus majusculis
10-12 cm. \times 4.5-5 cm., papyraceis glabris ellipticis vel elliptico-obovatis
basi attenuatis foliolis lateralibus minoribus 9-10 cm. \times 3-4 cm., parum
inæquilateralibus; *inflorescentiæ axi* folio breviori 3-4 cm. longo; *floribus*
albis graciliter pedicellatis pedicellis puberulis floribus sæpius 6-10 in
inflorescentia; *calyce* gamophyllo anguste campanulato 7-8 mm. longo,
extus minute puberulo lobis triangularibus tubo brevioribus; *corollæ partibus*
subæquilongis; *vexillo* 30-33 mm. longo, sec. cl. detectorem erecto; *alis* basi
longe unguiculatis carinæ adhærentibus; *carina* \pm 35 mm. longa, alis
paululum longiori; *ovario* stipitato pubescente lineari; *legumine* ignoto.

Mt. Canala; by creek forest region; 1000 ft. 1204. Small tree 20 ft.
Leaves medium green, shining above. Flowers creamy white, scentless.
Alæ stuck firmly to the carina. Vexillum erect, its margin unrolled.
Stamens 10, the dorsal free.

A. COMPTONII Bak. fil., sp. nov. *Arbuscula* circ. 20-pedalis ad *Desmodium*
Andersonii Seem. valde accedens, ramulis teretibus cortice griseo cinereo
obtectis; *foliis* trifoliolatis foliolis oblongo-ellipticis utrinque glabris basi
cuneatis nervis lateralibus tenuibus; *floribus* albis in racemos axillares dispo-
sitis pedicellis gracilibus 17-18 mm. longis; *calyce* campanulato \pm 7 mm.
longo, pilis sparse tecto lobis brevioribus; *corollæ partibus* inæquilongis;
vexillo \pm 2 cm. longo, carina distincte breviori, *carina* 26-30 mm. longa,

subfalcata; *fructu* 10–16 cm. longo, lomentaceo distincte stipitato 3–8-segmenta gerente, segmentis ellipticis facie reticulatis, 14–18 mm. longis, stipite \pm 3 cm. longo.

Tonine; creekside forest; 1000 ft. 1928. Small tree 20 ft. Native name "Ehu" Poyes tribe. Calyx and corolla white. Sweet-scented.

This plant is very closely allied to *Desmodium Andersonii* Seem., of which only fruiting specimens are known, but differs in the narrow terminal leaflets and more numerous segments of the fruit.

Rhachis of inflorescence 2–3 cm. long. Wings 2 cm. long. The last revision of this genus is by Dr. Hochreutiner in Ann. Jard. Bot. Genève. (1909) 30–46. Dr. Schindler subsequently described the genus *Nephrodesmus*, transferring *Arthroclianthus sericeus* and *A. macrobotrys* to that genus, also *Desmodium* (?) *Francii* Harms, and describing one new species, *N. albus*.

CROTALARIA STRIATA DC. Mt. Mou; cretaceous. 462. Widely distributed.

INDIGOFERA SUFFRUTICOSA Miller (*I. Anil* Linn.). Port Déspointes; woods; shrub 6 ft. 223. Widely distributed in tropical regions.

TEPHROSIA PURPUREA Pers. Paompai; creekside rocks; 2000 ft. 1912. Small undershrub, branches erect. Corolla purple, standard erect.

Île Ouéré; littoral sand. 648. Low prostrate shrub. Widely distributed.

PHASEOLUS ADENANTHUS G. F. W. Mey. (*P. truxillensis* H. B. K.). Paompai; creekside weed; 2000 ft. 1876. Twiner. Corolla purple, keel yellowish, coiled in 2–3 turns of spiral. Widely distributed.

P. NEOCALEDONICUS Bak. fil., sp. nov. *Rhizoma* crassum; *caule* volubili ferrugineo-hirto; *stipulis* sagittatis infra insertionem productis; *foliis* pinnatim trifoliolatis, foliolis lateralibus 5–7 cm. longis 2.5–3 cm. latis, inæquilateralibus apice subacuminatis foliolis terminalibus 6–8 cm. longis, æquilateralibus lobatis, lobo medio majore apice acuminatis basi late cuneatis; *floribus* flavis ad apicem pedunculorum paucis pedunculis ferrugineo-hirtis; *calyce* brevi 3–3.5 mm. longo, dentibus brevibus; *vexillo* \pm 11 mm. longo, calyce 2–3-plo longiori; *carina* apice incurva; *leguminibus* linearibus elongatis polyspermis juvenilibus \pm 7 cm. longis.

Paompai; Niaouli association; 0–2000 ft. Perennial, stout rootstock eaten by natives named "Maniania." Corolla yellow, widely open, apex of keel twisted over to one side.

Allied to some forms of *Phaseolus Mungo* L.

PUERARIA THUNBERGIANA Benth. Mont Mou; cretaceous edge of stream forest. Niaouli region; 800 ft. 605. Woody climber. Purple flowers, blotch of yellow in middle of base of standard. Widely distributed.

DESMODIUM UMBELLATUM DC. Cap N'dona littoral; uncommon; 867. Ignambi; 1846. Occasional in Niaoul association; 300 ft.; gneiss. Small undershrub 1 ft. Corolla white. Paompai; 1877. Creekside; 200 ft. Shrub 12 ft. Corolla ivory-white. Widely distributed.

GLYCINE TABACINA Benth. Ignambi; with 1849. Australia.

DOLICHOS LABLAB L. Paompai; creekside woods; 300 ft. 1878. Twiner. Widely distributed.

PONGAMIA GLABRA Vent. Hienghène; 1901. Estuarial mangrove swamps. Liane. Racemes erect. Standard erect. Petals white, tinged with rose. Scentless. Widely distributed.

MUCUNA (§ *Amphiptera*) *NEOCALEDONICA* Bak. fil., sp. nov. *Frutex* ramulis tenacissimis sec. cl. detectorem cortice griseo obtectis; *foliis* trifoliolatis foliolis ovatis basi cuneatis lateralibus inæquilateralibus superne pilis sparsissime vestitis apice acutis terminalibus 10–11 cm. longis, 7–8 cm. latis; *floribus* majusculis dependentibus in racemos laxos et paucifloros dispositis pedicellis calycem subæquantibus vel paullo longioribus; *calycis tubo* campanulato calyce in toto 13–16 mm. longo, extus tomento brevi rufescente oblecto dentibus brevibus obtusis vel subobtusis; *vexillo* 40–46 mm. longo, alis breviori; *alis* 60–65 mm. longis, carina brevioribus; *carina* longa recta 70–76 mm. longa, apice sursum curvata; *legumine* apice basi que attenuato, plicis obliquis lamellato, 10–11 cm. longo, 4.5–5 cm. lato.

Ignambi; creekside forest; 1500 ft.; gneiss. Stem very tough. 1665 (Flowers). Tonin; forest; 500 ft. 1959 (Fruit). Flowers pendent. Petals yellowish white tinged with pink. Keel two-pointed, often outside the wings. Petiolules 5–6 mm. long. Allied to *M. imbricata* DC.

The distinguishing features of this plant are the ovate or broadly ovate leaflets with a cuneate base, the obtuse or subobtuse teeth of the calyx; the standard is distinctly shorter than the long narrow wings, and the keel is 6–8 mm. longer than the wings, the pod is obliquely lamellated and attenuate at both ends. Differs from *M. gigantea* DC. by the pod, etc.

M. PLATYPHYLLA A. Gray, var. nov. *NEOCALEDONICA* Bak. fil. *Frutex* scandens; *foliis* trifoliolatis foliolis terminalibus 12–12.5 cm. × 14–14.5 cm., quam in typo latioribus late orbicularibus paullo latioribus quam longis foliolis lateralibus 9.5–11 cm. latis, inæquilateralibus; *floribus* in paniculas laterales dispositis; *vexillo* ± 40 mm. longo, alis breviori; *carina* ± 50 mm. longa.

Baie Ba; cultivated area by creek sea-level. Mica schist. 1385. Liane.

Petals ivory-white, scentless. Calyx when young externally incano-tomentose 18-20 mm. long, lowest lobe longer and narrower. Wings 50-55 mm. long, 13-15 mm. broad. Differs from type, which comes from Fiji, by the broader leaflets.

DERRIS ULIGINOSA Benth. Port Ngéa, Nouméa; littoral zone. 7. Woody climber and sprawling plant.

SOPHORA TOMENTOSA L. Cap N'dona; littoral uncommon. 873. Small tree 15 ft. Grey-green leaves. Widely distributed.

CÆSALPINIA SEPIARIA Roxb. Ignambi; 1586. Weed especially by creeks and in wet places in lowland Niaouli districts; 1000 ft. Shrub 8 ft. Corolla sulphur-yellow. Anthers orange. Widely distributed.

C. NUGA Ait. Oubatche. 1839. Littoral edge of mangrove swamp. Spreading bush. Flowers light yellow, scented. Widely distributed.

C. SCHLECHTERI Harms. Mont Canala. 1200. Small tree 20 ft. Leaves bright shining green, bipinnate. Flowers in terminal panicle. Calyx yellow, corolla yellow with orange blotch on standard. By streams in Niaouli regions, 1000 ft., and in intermediate forest. 1924 from Tonine is closely allied.

C. BONDUCELLA Fleming. Île Ouéré; sandy littoral zone. 646. Flowers dingy yellow. Widely distributed.

STORKIELLA (§ *Doga*) *COMPTONII* Bak. fil., sp. nov. *Frutex* circ. 8-pedalis sec. cl. detectorem; *foliis* imparipinnatis sæpius 3-4-jugis cum impari foliolis ellipticis vel oblongo-ellipticis 38-43 x 20-25 mm., basi subcordatis vel rotundatis subcoriaceis, costa subtus conspicua, nervis lateralibus tenuissimis petiolulis brevibus 3-5 mm. longis; *floribus* luteis in paniculas densas et multifloras dispositis; *sepalis* 4 in alabastris imbricatis 10-11 mm. longis, per anthesin initio subrectis demum reflexis; *petalis* 12-15 mm. longis, linearibus; *staminibus* 4 liberis filamentis filiformibus antheris linearibus basifixis loculis apice poro dehiscentibus 6-7 mm. longis; *ovario* sessili in fundo calycis libero pluriovulato; *legumine* plano-compresso lignoso 1-spermo.

Poume; occasional in scrub; 400 ft. 2362. Flowers in dense clusters, bright orange-yellow, scentless; corolla, calyx and stamens all yellow. Fruit a flat woody pod with one black seed.

The distinguishing features of this shrub are the ovate-elliptical or elliptical leaflets broader than in *Storkiella Pancheri* Baillon and the dense panicles of orange-yellow flowers.

CLAVIS SPECIERUM.

Sect. I. *Eustorkiella* Baillon, Hist. Pl. ii. (1870) 189.

Stamina 10. *S. vitiensis* Seem. Fiji.

Sect. II. *Doga* Baillon in Adansonia, ix. (1869) 205.

Stamina 4.

• Foliola oblonga vel oblongo-lanceolata, 12–16 rarius 18 mm. lata. *S. Pancheri* Baillon. New Caledonia.

** Foliola elliptica vel ovato-elliptica, 20–25 mm. lata. *S. Comptonii* Bak. fil. New Caledonia.

CASSIA NEOCALEDONICA Vieill. Noumea. 29. Shrub occasional along roadside, probably garden escape.

DESMANTHUS VIRGATUS Willd. Near Nouméa. 12. Abundant in hedge-rows and waste places. Widely distributed.

LEUCÆNA GLAUCA Benth. Nouméa. 11 and 94. Roadsides and waste places. Widely distributed.

ACACIA LAURIFOLIA Willd. Anse Vata near Nouméa; littoral zone. 74. Tree 30 ft. Fiji.

A. SPIRORBIS Labill. Nouméa. Port Ngéa; woods, common. 20. Pods spirally coiled separately.

A. FARNESIANA Willd. Nouméa. 3. Very abundant on hillsides forming impassable thickets. Widely distributed.

PITHECOLOBIUM FOURNIERI Vieill. Tonine creekside; in forest, abundant; 1000 ft. 1926. Large spreading tree. Filaments crimson, anthers yellow. Perianth pale. Native name Poyes tribe "Ouayeno."

ALBIZZIA OBOVATA Benth. Mont Arago; frequent along forest margin; 800 ft.; mica schists. 1404. Small tree 20 ft. Filaments in some trees rosy, in others white. Strong not pleasant scent.

A. GRANULOSA Benth. Paoinpai; abundant in forest and by creeks; 50–1000 ft. 1906, Tree 40 ft., copiously branched, perianth yellowish green. Filaments white. Slight scent. River Tchiem; creekside, frequent; 200 ft. 1979. Large tree. Filaments white. Scented.

A. PAIVANA Fournier. River Tchiem; forest by streamside; 500 ft. 1989. Tree 30 ft. Leaves bipinnate of 8 segments. Corolla and filaments bright cerise. Scentless. Mont Canala; occasional in streamside woods; 1000 ft.; mica schists. 1422. Tree 30 ft. Corolla and filaments carmine, anthers yellow.

ALBIZZIA (§ Lophantha) COMPTONII Bak. fil., sp. nov. *Arbor* 20-pedalis ramulis adultioribus glabris cicatricibus foliorum delapsorum notatis novellis rufotomentellis; *foliis* mox glabrescentibus pinnis 3-4-jugis foliolis, 10-16-jugis oblongis 12-14 mm. x 3-4 mm., obtusis demum glabris basi parum inæquilateralibus; *floribus* in spicis 2.5-4.0 cm. longis densis cylindraceis dispositis; *pedunculis* rufo-tomentellis 2-3.5 cm. longis spicis subæquilongis floribus sessilibus; *calycis* dentibus acutis tubo 2-3-plo brevioribus calyce in toto 4 mm. longo; *staminibus* petalis longioribus 12-15 mm. longis basi coalitis; *ovario* glabro, stylo elongato tenuissimo.

Baie Ngo; streamside. 258. Tree 20 ft. Petals 8-9 mm. long.

This species is a tree allied to *A. lentiscifolia* Benth., but the calyx is distinctly longer, and the pairs of leaflets are more numerous.

SERIANTHES CALYCINA Benth. Baie Uie; above littoral zone on serpentine. 854. Tree 30 ft. Dark green leaves. Flowers large, perianth greenish. Filaments whitish pink, below crimson in distal half.

ROSACEÆ.

PARINARIUM NEOCALEDONICUM Bak. fil., sp. nov. *Frutex* vel *arbuscula* ramulis cortice cinereo vel atro-cinereo obtectis; *foliis* breviter petiolatis ellipticis vel ovato-ellipticis 4.5-5.0 mm. x 2-3 cm., apice obtusis vel leviter emarginatis coriaceis basi sæpissime late cuneatis; *inflorescentiis* dense paniculatis foliis brevioribus; *calycis lobis* erectis apice acutis; *petalis* vix 1.5 mm. longis albis calyce brevioribus; *staminibus* uno latere receptaculi confertis irregulariter dispositis; *ovario* ovoideo stylo subulato brevi tenui; *receptaculi* tubo fauce dense pilis retrorsis barbato; *fructu* ovoideo glabro 1 cm. longo.

Taom; frequent by creekside and in riverside woods; 300 ft. 2320. Shrub or small tree, hard wood. Corolla white. Sweet-scented. Petioles 2-4 mm. long. Calyx 3.5-4.0 mm. long.

Differs from *P. myrsinoides* Schlechter by its smaller leaves obtuse or emarginate at the apex, and shorter petioles.

P. MINUTIFLORUM Bak. fil., sp. nov. *Frutex* vel *arbuscula* ramis cortice cinereo obtectis; *foliis* coriaceis 3-5.5 cm. longis 18-25 mm. latis, ellipticis vel elliptico-ovatis, apice obtusis vel leviter emarginatis basi leviter subcordatis vel rotundatis, costa subtus prominula, nervis lateralibus tenuibus utrinque 10-12, petiolo 3-5 mm. longo instructis; *floribus* inter minores generis paniculatis paniculis 4-7 cm. longis, foliis longioribus pedicellis brevibus; *calyce* 1-1.5 mm. longo, extus pubescente lobis brevibus erectis tubo campanulato; *petalis* brevibus 1.5 mm. longis, apice obtusis; *staminibus* 5 brevibus uno latere receptaculi dispositis; *ovario* ovoideo, stylo brevi, receptaculi fauce pilis barbato.

Port Bouquet; on riverside serpentine scrub; 50 ft. 2245. Shrub or small tree. Flowers greenish, scentless.

Closely allied to *P. myrsinoides* Schlechter, from which it differs by its smaller obtuse or submarginate leaves, with shorter petioles, by the pubescent inflorescence, the shorter calyx, and the greenish flowers.

CLAVIS SPECIERUM.

A. Folia 8-10 cm. longa. Petioli 10-15 mm. longi.

P. myrsinoides Schlechter.

B. Folia minora, 3-5 cm. longa. Petioli breviores, 3-5 mm. longi.

a. Folia basi subcordata.

P. minutiflorum Bak. fil.

b. Folia basi late cuneata.

P. neocaledonicum Bak. fil.

RUBUS MOLUCCANUS L., var. NEOCALEDONICUS Schlechter. Mont Mou; weedy area derelict cultivation; 8000 ft. 560. Petals white. Drupels bright red.

SAXIFRAGACEÆ.

ARGOPHYLLUM SCHLECHTERIANUM Bonati & Petitmangin. Baie Ngo; abundant in serpentine scrub; 100 ft. 250. Shrub 6 ft. Inflorescence grey. Corolla yellow.

Var. nov. VESTITUM Bak. fil. *Frutex* circ. 6-pedalis ramis tomento brevi griseo vel cinereo indutis; *foliis* ellipticis vel oblongo-ellipticis superne nitidis subtus tomento brevi rufescente vel cinerascete vestitis margine sæpius ultra medium grosse serratis; *floribus* numerosis in cymas pedunculatas digestis.

Taom; frequent in serpentine scrub; 1000-2000 ft. 2298. Corolla bright yellow. Rest of inflorescence white downy. Scentless. Calyx albotomentose \pm 3 mm. long. Petals yellow, 4 mm. long.

A. NITIDUM Forst. Mt. Mou; damp gulley; 800 ft. 344. Mont Panié; gneiss. 1827. Shrub 8 ft., much branched. Corolla white. Flowers whitish on white-stemmed panicle. Scentless. Australia.

A. ELLIPTICUM Labill., var. nov. COMPTONII Bak. fil. *Frutex* 6-pedalis ramis rigidis cicatricibus foliorum delapsorum notatis; *foliis* obovatis vel ovatis 5.5-8.0 cm. \times 4-5 cm., superne glabris subtus tomento brevi rufescente vel cinerascete instructis apice obtusis vel subacutis petiolis 10-15 mm. longis suffultis; *floribus* in cymas axillares dispositis; *calycis lobis* brevibus; *petalis* 5 intus luteis \pm 5 mm. longis, triangulari-ovatis; *ovario* semisupero stylo simplici.

Tonine; mountain top scrub; 3500 ft. 1938. Shrub 6 ft. Stems stiff, rough with leaf-bases. Inflorescence brown in all parts. Inside of petals bright yellow. Scentless. Flowers in pedunculate many-flowered panicles. Peduncle 3.5-6.5 cm. long.

Differs from type in the shape of the leaves, and differs from var. *obovatum* Guillaumin in the short tomentum on the under surface.

ARGOPHYLLUM LAXUM Schlechter, var. nov. SUBINTEGRIFOLIUM Bak. fil. *Frutex* circ. 8-pedalis; *foliis* ovatis vel elliptico-ovatis margine integris vel subintegris superne lucidis subtus pallide tomentosus 8-11 cm. x 4-6 cm.; *floribus* in paniculas laxissimas dispositis; *sepalis* albo-tomentosis oblongo-ovatis calyce in toto 3 mm. longo; *petalis* luteis \pm 4 mm. longis ovato-triangularibus; *stilo* simplici stigmatate capitato.

River Ngoyé; lowland serpentine scrub by river; 400 ft. 2905. Inflorescence white. Corolla bright yellow.

Differs from type by the entire or subentire margins of the leaves.

GEISSOIS RACEMOSA Labill. Mt. Mou; cretaceous forest; 800 ft. 484. Tree 40 ft. Mont Dore; frequent in margins of stream valley woods; serpentine. 677. Tree 30 ft. Flowers on old wood and trunk. Honey disc, yellow. Perianth and filaments bright red.

G. MONTANA Vieill. Mont Humboldt; streamside in forest; 1500 ft.; serpentine. 1029. Small tree 30 ft. Inflorescence on old wood. Perianth green tinged with red. Filaments long, bright red. Style bright red. Ignambi; fairly frequent in forest; 2000-2500 ft.; gneiss. 1523. Shrub or small tree. Leaves sparse. Perianth dark red, filaments scarlet. Ovary disc yellow. Honeyed, scentless. Tonine Forest; 2500 ft. 1942. Tree 25 ft. Flowers on old wood. Perianth cream-coloured, filaments and style crimson. Scentless. Ignambi Forest; 2000-3500 ft.; gneiss. 1704. Shrub or small tree. Ovary golden yellow.

G. MAGNIFICA Bak. fil., sp. nov. *Frutex* vel *arbuscula* circ. 25-pedalis; *foliis* oppositis ternatis foliolis pallide viridibus utrinque glaucis majusculis 20-21 cm. x 10-13 cm. obovatis, costa subtus prominula, nervis lateralibus utrinque 8-9 coriaceis petiolatis; *stipulis* magnis basi subcordatis; *floribus* speciosis rubris in racemos simplices laterales dispositis; *pedicellis* calyce longioribus 10-13 mm. longis glabris infra medium articulatis; *calycis* lobis 4 intus hirsutis extus glabris 6-7 cm. longis valvatis apice acutis; *petalis* 0; *staminibus* numerosis basi discis tenui hypogyni et crenulato insertis; *ovario* oblongo conico 2-mero stylis 2 elongatis basi connatis stigmatibus simplicibus; *capsulis* ignotis.

Cap Bocage; scrub and scrubby forest; serpentine. 1378. Leaves opposite, light green, glaucous on both sides. Inflorescence on old wood.

Calyx and filaments bright red. Scentless. Petiolules 2-4 cm. long. Pedicels 10-13 mm. long.

Noticeable on account of the ternate leaves with large obovate light green glaucous leaflets, the inflorescences on the old wood, and the bright red calyx and filaments and glabrous pedicels articulated below the middle.

CODIA MONTANA Forst. Mt. Dore; abundant on low serpentine hills; 100 ft. 658. Ignambi; frequent in dry Niaouli association; 1900-2000 ft.; gneiss. 1860. Shrub 3 ft. Leaves greyish green. Flowers dull white, sweet-scented. Poume; frequent in serpentine scrub. 2373. Shrub 6 ft. Leaves with yellowish veins and margins. Corolla greenish.

C. ALBIFRONS Vieill. River Ngoyé; undergrowth of *Spermolepis* forest by riverside; 500 ft. 970. Shrub 3 ft. Leaves dark green above, whitish below, with a brown tinge.

C. NITIDA Schlechter. Comboui Mts.; abundant in serpentine scrub; 1000 ft. 2199. Shrub or small tree. Flower-heads white. Anthers pale yellow.

C. INCRASSATA Pamp., var. nov. MAJOR Bak. fil. *Frutex* elatus vel arbuscula circ. 20-pedalis ramulis fusco- vel rufo-pubescentibus; *foliis* 7-11 cm. x 6-8 cm. late ovatis vel ovato-orbicularibus rigidis discoloribus, costa subtus prominente, nervis lateralibus utrinque 7-8; *floribus* in capitula globosa 15-20 mm. diam. bracteis 4 involucrata; *sepalis* 5 lanceolatis crassiusculis, externe dense lanatis.

Tonine (far side of); margin of forest and fougères; 2500 ft. Mica schist. 1982. Flower-heads large, pinkish, slightly scented. Petioles short. Bracts 6-10 mm. long.

It differs from *C. incrassata* Pamp. by the larger leaves, the larger capitula, and the narrower sepals.

C. TINIFOLIA Bak. fil., sp. nov. *Fruticulus* circ. 2-pedalis ad *Pancheriam gatopensem* Vieill. accedens, ramulis cortice plumbeo vel cinereo obtectis; *foliis* sæpissime oppositis rigidis oblongis vel oblongo-oblanco-latis 5-6 cm. x 1.5-2.0 cm. margine recurvatis haud serratis pallide viridibus apice obtusis, costa subtus conspicua, petiolo brevi 3-5 mm. longo præditis; *floribus* in capitula 4-7 mm. diam. axillaria pedicellata glomeratis; *bracteis* parvis; *pedicellis* 8-18 mm. longis nunc solitariis nunc pedunculatis; *sepalis* scariosis; *petalis* scariosis; *staminibus* in floribus masculis 6-8, filamentis filiformibus, subulatis; *ovario* imperfecto; *floribus femineis* ignotis.

Tonine; scrub; 1200 ft. 2374. Small shrub 2 ft. Leaves stiff, light green, margins recurved. Flower-heads with white corolla and stamens. Sweet-scented.

This species, which is allied to *Pancheria gatopensis* Vieill., has light green glabrous leaves, resembling those of *Viburnum Tinus*. The margins are recurved, but not serrate. The capitula are small on slender pedicels.

CODIA FLORIBUNDA Brongn. & Gris. Taom; serpentine scrub 1500 ft. 2327. Shrub 3 ft. Leaves medium green, stiff, hard. Flowers white in spherical heads, sweet-scented.

PANCHERIA PINIFOLIA Brongn. & Gris. Ignambi; Niaouli association; 1000 ft. Gneiss. 1848. Small shrub 3 ft. Leaves shining above. Flower-heads greenish white, scentless. Leaves 3-4 cm. long, 10-17 mm. broad, petioles 2-3 mm. long. Heads of flowers 4-5 mm. in diameter. Petals 1.5 mm. long. Carpels 2 mm. long.

Noticeable on account of the rather small ternate verticillate elliptical or oblong-elliptical leaves and small heads of flowers.

P. RUBRIVENIA Bak. fil., sp. nov. *Frutex* circ. 6-pedalis ramulis validis cortice plumbeo vel cinereo obtectis; *foliis* rigidis 5-7 cm. \times 2.5-4.0 cm. verticillatis ellipticis vel ovato-ellipticis margine recurvatis et serratis costa subtus prominente nervis lateralibus 7-9 marginem versus furcatis et inter se conjungentibus, petiolo 2-4 mm. longo crasso præditis; *floribus* in capitula sphaerica \pm 10 mm. diam. pedunculata glomeratis; *pedunculis* fusco-vel rufo-tomentosis erectis 2.5-3.5 cm. longis; *capitulis* involucreatis; *bracteis* ovatis acuminatis; *petalis* ellipticis scariosis margine ciliatis; *staminibus* 6-8 exsertis; *ovario* imperfecto.

Tonine; mountain-top scrub; 3500 ft. 1935. Shrub 6 ft. Stems hard. Leaves stiff, dark green, reddish nerve, edges recurved somewhat puckered. Flowers on erect peduncles tinged with pink. Strong-scented.

Noticeable on account of the stiff, glabrous, elliptical, or ovate-elliptical, shortly petiolate leaves, with reddish nerves. The capitula are on erect fusco- or rufo-tomentose peduncles. In this species the capitula are involucre, but the leaves are whorled and serrate.

P. PINNATA Vieill. Plaine des Lacs; abundant on moderate slopes; 800 ft.; serpentine. 306. Shrub 6 ft., simple unbranched stem. Leaves in whorls of three. Flower-heads white.

P. LANCEOLATA Vieill. Poume; serpentine scrub; 500 ft. 2382. Shrub 5 ft. Leaves light green, midribs reddish yellow. Perianth brownish, filaments white.

P. COMMUNIS Bak. fil., sp. nov. *Frutex* circ. 5-pedalis; *foliis* coriaceis glabris 20-25 mm. \times 11-15 mm. quaternatim verticillatis oblongo-obovatis margine apicem versus serratis nervis lateralibus 5-6 marginem versus arcuatis et inter se conjungentibus, petiolis 1-2 mm. longis præditis;

floribus albis glomerato-capitatis; *pedunculis* strictis foliis longioribus; *floris masculi* sepalis membranaceis ± 2 mm. longis oblanceolatis vel oblongo-oblanceolatis; *petalis* membranaceis 3 mm. longis calyce longioribus albis; *staminibus* glabris exsertis; *carpellis* in floribus femineis extus pubescentibus, stylis brevibus erectis.

Plaine des Lacs; the most abundant shrub on the level plain. Serpentine scrub. 340. Diameter of flowering heads 8–10 mm., when fruiting 12 mm.

A shrub allied to *P. alaternoides* Brongn. & Gris, but the leaves are cuneate-obovate, and the petioles very short.

PANCHERIA OBOVATA Brongn. & Gris. Plaine des Lacs; abundant over dry serpentine slopes in scrub. 372. Shrub. Flower-heads white. Mt. Nekando; 1081. Shrub 8 ft.

The following may also probably belong here:—

Baie Ngo; 257. Common in serpentine scrub; 200 ft. Shrub 6 ft. Flowers white, sweet scent.

P. VIEILLARDII Brongn. & Gris. Mont Mou; margin of forest or scrub; 1800 ft.; serpentine. 431. Shrub or small tree. Flowers white. River Ngoyé; river-margin among rocks. 2048. Leaves stiff, hard, medium green.

P. ELEGANS Brongn. & Gris. River Dumbéa; abundant in flood plain; serpentine. 407. Flower-heads white. Shrub. River Kuakué; abundant among boulders along river-margin; serpentine; 100 ft. 899. Shrub 5 ft. Young stems reddish. Leaves dark green, shining above, almost glaucous beneath. Flower-heads white, scented. River Ngoyé; 2110.

P. ALATERNOIDES Brongn. & Gris. River Comboui; frequent in scrub on riverside serpentine alluvium; 100 ft. Shrub 8 ft. Buds pink. Corolla and filaments white. Sweet scent. Specimens from different branches growing close together showing variation in foliage. Baie Ngo; serpentine scrub; 265. Uncommon.

P. TERNATA Brongn. & Gris. Taom. Abundant in serpentine scrub; 500–2000 ft. 2295. Shrub 5 ft. Perianth reddish. Filaments white. Sweet scent.

P. ENGLERIANA Schlechter. Nekando; scrubby coniferous forest; 3500 ft. Serpentine. 2023. Shrub 10 ft. Leaves red when young. Perianth red. Filaments white. Anthers pale yellow, scentless. Mts. north of River Ngoyé; upland serpentine scrub; 3000 ft. 2068. Shrub 10 ft. Filaments white. Anthers brown.

WEINMANNIA DICHOTOMA Brongn. & Gris. Mont Mou; Coniferous forest; 3500 ft. 581 and 626. Tree 30 ft. Flowers white, scentless. Mt. Arago;

along streams in moist forest region. 1417. Tall tree 60 ft. Mont Canala; streamside woods, Niaouli region; 1000 ft. 1249. Tall tree 60 ft. Flowers pure white on green axis. Also from Ignambi, 1720, and Mont Panié, 1758.

CUNONIA PURPUREA Brongn. & Gris. River Ngoyé; creekside serpentine scrub area; 300 ft. 2099. Spikes long. Corolla rosy-pink. Filaments crimson. Anthers black. Scentless. River Ngoyé; riverside scrub, serpentine; 300 ft. 2146. Shrub or small tree. Short spikes. Pink corolla. Crimson filaments. River Dumbéa; river-banks; 200 ft.; serpentine. 828. Shrub 8 ft., stiff erect branches, and erect inflorescences. Flower dull red, petals reflexed. Stamens spreading.

The following are allied to *C. purpurea* Brongn. & Gris. River Ngoyé; riverside serpentine scrub; 200 ft. 2131. Small tree very like 2099 in vegetation characters, but the flowers are pure white except for pale green calyx and crimson anthers. Faint scent. River Ngoyé; riverside serpentine scrub; 200 ft. 2131. Small tree very like 2131, except that the white spikes are only half the length and the other leaves are all trifoliolate.

C. MONTANA Schlechter. Mont Mou; forest margin; 350 ft. 624. Shrub 6 ft. Flowers white, anthers red. Nekando; forest; above 3000 ft., serpentine. 2022. Shrub or small tree. Corolla white, reflexed. Ovary pale green. Anthers brown. Scentless.

C. PTEROPHYLLA Schlechter. Nekando; forest; 3000 ft.; serpentine. 2028. Tree 30 ft. Leaves shining above, paler beneath, margins irregularly reflexed. Anthers red, when young brown, after dehiscence. Slight scent.

CUNONIA LATIFOLIA Schlechter. Tonine; forest margin; 3500 ft. 1977. Small tree 25 ft. Flowers white, scentless.

C. ATRORUBENS Schlechter. Mountains north of River Ngoyé; margin of *Casuarina* forest and scrub; 3000 ft.; serpentine. 996. Tall shrub 12 ft. Leaves with red veins and margins. Capsule reddish. Mont Dore; abundant on stony hillsides and in upland scrub above 1000 ft. 684. Shrub 8 ft. Leaves yellowish green beneath. Flowers deep red.

C. VIEILLARDII Brongn. & Gris. Presqu'île Bogota; dry serpentine scrub; 1000–2000 ft. 1319. Shrub 3 ft. Light green leaves, red veins. Flowers dark rose-coloured, scentless. Mts. to north of River Ngoyé; *Casuarina* forest especially near edge; 3000 ft., serpentine. 993. Tree or shrub 30 ft. Flowers bright rose-pink. Anthers black. Scentless.

C. MACROPHYLLA Brongn. & Gris. Plaine des Lacs; moderate slopes especially where slightly moist; 1000 ft., serpentine. 308. Stems, petioles, and stipules red, the stipules often very waxy when old.

SPIRÆANTHEMUM COMPTONII Bak. fil., sp. nov. *Arbor* ramulis glabris; *foliis* majusculis verticillatis oblongo-ob lanceolatis vel anguste obovatis 12–16 cm. × 3–6 cm. supra viridibus subtus pallidioribus, costa superne impressa, nervis lateralibus utrinque 5–8 subtus subprominulis apice obtusis vel subobtusis basi in petiolum brevissimum angustatis; *floribus* in paniculas axillares dispositis; *paniculis* 5–8 cm. longis sæpe foliis brevioribus; *calyce* ± 2 mm. longo tubo brevi lobis oblongis; *staminorum filamentis* filiformibus antheris brevibus; *folliculis* pubescentibus calyce duplo longioribus apice in stylum gradatim attenuatis, cum stylis 3–4 mm. longis.

Plaine des Lacs; forest of sheltered valley; 1200 ft. 353. Flowers pinkish.

The noticeable features of this species are the verticillate glabrous rather large leaves, and the short panicles of flowers.

S. RUBESCENS Bak. fil., sp. nov. *Frutex* bimetralis sec. cl. detectorem ramulis longitudinalis striatis; *foliis* parviusculis 5–7 cm. × 2–3 cm. subcoriaceis glabris ellipticis vel oblongo-ellipticis apice obtusis basi in petiolum 8–12 mm. longum angustatis, costa superne impressa, nervis lateralibus 6–7; *floribus* in paniculas 2–3 cm. longas et axillares dispositis; *paniculis* foliis brevioribus; *calyce* ± 1.5 mm. longo tubo brevi lobis brevibus; *staminorum filamentis* filiformibus antheris minutis; *folliculis* pubescentibus 2–2.5 mm. longis calyce duplo longioribus.

Mt. Koghi; frequent in open serpentine scrub; 2000 ft. 735. Shrub 6 ft. Carpels going reddish on ripening.

The noticeable features of this species are the whorled elliptical or elliptical-oblong petioled leaves, and the small axillary panicles of flowers shorter than the leaves. The rachis of the inflorescence is pubescent.

This differs from *S. vitiense* A. Gray from Viti, but it closely resembles the plant which has been referred to this species from New Caledonia.

S. ELLIPTICUM Vieillard. Mont Mou; coniferous forest; 3500 ft. 620. Tree 25 ft. Fruits reddish.

The following probably also belongs here. Mont Mou; 499. Dry upland serpentine scrub; 3500 ft. Monœcious male flowers pale. Ovaries reddish. Shrub 6 ft.

S. UNDULATUM Vieillard. Paompai; creekside woods; 100 ft. 1867. Tree 30 ft. Smooth bark, widely spreading branches. Flowers pale greenish white.

POLYOSMA PODOPHYLLA Schlechter. Tonine Forest; 2000–3000 ft. 1941. Tree 25 ft. Flowers white, slightly scented. Corolla reflexed.

P. COMPTONII Bak. fil., sp. nov. *Frutex* vel *arbuscula* ramulis cortice cinereo obtectis; *foliis* ellipticis vel lanceolato-ellipticis 3–6.5 cm. × 1.5–2.0 cm. viridibus margine remote serratis vel undulatis apice acutis basi late-

cuneatis, nervis lateralibus tenuibus marginem versus arcuatis et inter se conjungentibus, petiolo mediocri 8–10 mm. longo præditis; *spicis* 3–5 cm. longis axillaribus petiolo 2–3-plo longioribus laxè floriferis; *floribus* albis suaveolentibus; *calyce* turbinato ± 1.5 mm. longo segmentis breviter triangularibus parvulis; *petalis* angustis 4 mm. longis lineari-oblongis; *stylo* subulato 2.5 mm. longo tenui dense piloso stigmate parvulo subcapitato.

Comboui Mts.; scrubby coniferous forest; 3500 ft.; serpentine. Shrub or small tree. 2178. Leaves medium green, midrib reddish below. Calyx and corolla creamy-white, petals spreading. Sweet-scented.

EUCRYPHIACEÆ.

PARACRYPHIA Bak. fil., gen. nov.

Perianthii segmenta 2 imbricata, extus hirta, concava, subcalyptratim caducissima. *Stamina* 8–10, subperigyna, antheris longitudinaliter dehiscentibus basifixis, flavis, filamentis post anthesin accrescentibus. *Ovarium* liberum, extus hirtum, 12–15 loculare, multiovulatum, ovulis in loculis paucis, angulo centrali 1-seriatim affixis. *Capsula* e valvulis 12–15 septicide dehiscentibus sistens, valvulis ab axi placentifero præter apicem solutis oligospermis.

Frutex vel *arbuscula* usque ad 20-pedalis. *Folia* simplicia fere glabra, coriacea, margine serrata, basi in petiolum attenuata, apice subacuminata, verticillata vel subverticillata. *Flores* superiores hermaphroditæ, inferiores masculi, parviusculi, in paniculas dispositi, ramis ferrugineo-hirtis (Pl. 18).

Allied to *Eucryphia*, but differing in the perianth, the character of the inflorescence, and the sessile stigmas. It agrees, however, as was kindly pointed out to me by Miss Gibbs, in the manner of dehiscence of the capsule, the valves of which dehisce septicidally and separate from the central axis, being only attached at length by two strands at the very apex. The ovary is 12–15-locular, the ovules being uniseriate and axile.

PARACRYPHIA SUAVEOLENS, sp. nov. *Frutex* vel *arbuscula* 6–7-metralis ramulis cortice cinereo obtectis; *foliis* oblanceolatis vel oblongo-oblanceolatis 5–11 cm. \times 12–30 mm. margine serratis coriaceis apice subacuminatis superne demum glabris, costa subtus conspicua, nervis lateralibus tenuibus, petiolis crassiusculis 10–20 mm. longis; *floribus* parviusculis in paniculam dispositis ramis ferrugineo-hirtis 3–4 cm. longis; *perianthii segmentis* concavis extus ferrugineo-hirtis caducissimis; *staminibus* 8–10 antheris 3–4 mm. longis longitudinaliter dehiscentibus filamentis post anthesin accrescentibus; *ovarii loculis* 12–15; *capsulis* septicide dehiscentibus 7–8 mm. longis valvulis oligospermis, 1–1.5 mm. latis.

Ignambi; forest; 3000–3500 ft.; gneiss. 1515. Leaves yellowish green. Perianth of brown scales, caducous; 8–10 stamens; filaments enlarged after

flowering (gall or abnormality). Sweet scent. Mt. Panié; forest; 1500 ft. 1772. Small tree 15 ft. Leaves drooping, red-toothed. Perianth of brown scales, caducous. Anthers yellow.

CRASSULACEÆ.

BRYOPHYLLUM CALYGINUM Salisb. Nouméa; abundant on roadside around town. 9. Widely distributed.

DROSERACEÆ.

DROSERA NEOCALEDONICA Hamet. Mts. to north of River Ngoyé; bare serpentine earth; 0-3500 ft. 2093. Herbaceous perennial; rosettes glandular, hairs red, rest of leaf pale green. Calyx and pedicels red. Corolla white, widely open, quickly withering.

RHIZOPHORACEÆ.

RHIZOPHORA MUCRONATA Lam. Nouméa, Port Ngéa; wettest part of mangrove swamp; 1a. Tree 22 ft. Petals white. Calyx light green. Viviparous. Wood very hard. Nouméa, Port Ngéa; mangrove swamps; 1. Tree 25 ft. Widely distributed.

CROSSOSTYLIS GRANDIFLORA Brongn. Mont Mou; streamside in damp gully; 600 ft., cretaceous; 552. Tree 30 ft. Adventitious roots from lowest 4 ft. of trunk not usually reaching ground. Fruit mucilaginous inside.

LYTHRACEÆ.

SONNERATIA ALBA Sm. Ouen Toro; 80. Mangrove aerating roots up to 9 in. in diameter branching at top, projecting about 1 foot from soil. Perianth greenish outside. Stamens incurved in bud, falling off early. Style long, bent, tubular, apical ring stigma. Australia, Java, etc.

COMBRETACEÆ.

TERMINALIA RUBRICARPA Bak. fil., sp. nov. *Arbor humilis 15-pedalis sec. cl. detectorem ramis cortice cinereo obtectis et cicatricibus foliorum delapsorum notatis; foliis suborbicularibus vel obovato-suborbicularibus 7-11 cm. x 8-11.5 cm. sæpe paullo latioribus quam longis apice truncatis vel emarginatis basi rotundatis glabris, nervis lateralibus 7-10 patentibus vel erecto-patentibus, petiolo brevissimo 3-4 mm. longo suffultis; floribus delapsis; fructu ovoideo apice acuminato 2 cm. longo, 10-13 mm. lato endocarpio durissimo, seminibus solitariis.*

Port Ngéa, Nouméa; littoral; 5. Fruit bright red, exocarp fleshy, endocarp very hard, thick, spongy, one central flat seed. Rachis of inflorescence 7-8 cm. long.

Belongs to Section *Myrobalanus*. Allied to *T. littoralis* Seem., but this has narrower leaves and different fruit,

MYRTACEÆ.

BÆCKEA VIRGATA Andr. (*Leptospermum parvulum* Labill.) Riv. Dumbéa ; abundant ; flood plain. 404. Tonghoué Mts. ; dry Niaouli hillsides. 162. Mt. Mou ; cretaceous and serpentine scrub. 636. Ignambi ; abundant in drier parts of Niaouli association ; 1000 ft. 1845. Small shrub 2 ft. Flowers white, the centre greenish when young, red when old. Slight scent. Also from Taom ; 2307.

B. PINIFOLIA DC. (*Leptospermum pinifolium* Labill.) Mt. Canala ; on rocks on open parts of stream ; 900 ft. and in dry Niaouli association ; 1167. Shrub 4 ft. Mont Panié ; Niaouli association ; 1200 ft. Gneiss. 178. Shrub 4 ft. Flowers white.

B. ERICOIDES Brongn. & Gris. Plaine des Lacs ; 349. Shrub 6 ft. 269 from Baie Ngo is probably a form of this species.

CALLISTEMON SUBEROSUM Brongn. & Gris. Plaine des Lacs ; 318. Low shrub on moderate slopes.

MELALEUCA VIRIDIFLORA Soland. Near Nouméa ; 15 m. Very abundant tree covering hillsides. The Niaouliué. Tonghoué Mts. Forming woods on dry hillsides ; 0-2500 ft. 160. Ignambi ; abundant on hillsides ; 0-2500 ft. 1718. Niaouli association. Tree 40 ft. Australia, Indian Archipelago, Malay Peninsula.

M. GNIDIODES Brongn. & Gris. River Ngoyé (Mts. to N.W.). Shrub abundant in scrub ; 2500 ft. Enters the *Casuarina* Forest at about this level as a tree. 998. Shrub or tree sometimes 40 ft. When a shrub, general shape a cone standing on its apex. Leaves small, hard, dark green. Stem with papery bark. Fruits sessile, reddish. Mts. to north of Ngoyé ; dry serpentine scrub and occasionally on bare crests ; 2000 ft. ; 2071. Flowers yellowish green, scentless. Also from Pome ; 2375.

M. ACICULARIS Brongn. & Gris. Plaine des Lacs ; dry slopes ; 316. Shrub 6 ft.

TRISTANIA CALLOBUXUS Niedenzu. Baie Ngo ; common on scrub ; 50 m. ; 248. Shrub or small tree. River Dumbéa ; frequent along river-banks ; 200 ft. ; serpentine mountain region ; 819. Shrub 6 ft. Dull golden-yellow flowers, honeyed, sweet-scented. Baie Kuakué ; frequent in scrub ; 1000 ft. ; 887. Flowers erect, yellow, honeyed.

T. GLAUCA Pancher. Plaine des Lacs ; dry slopes ; 317. Baie Kuakué ; the most abundant shrub in the scrub ; 0-1000 ft. ; just past flowering, 882. Shrub 8 ft. Light green, stiff leaves with yellowish-red midrib and edge. Terminal corymbs of small yellow sweet-scented flowers. Fruit spherical.

TRISTANIA GUILLAINII Heck. Cap Bocage; scrub; 900 ft. 1397. Shrub 4 ft. Leaves stiff, medium green. Flowers yellow, 4 petals, 5 clusters of stamens opposite petals.

CLAVIS SPECIERUM CLÆZIE.

- A. Flores axillares, solitarii. Folia elliptica, coriacea, supra vernicosa.
C. buxifolia Brongn. & Gris.
- B. Flores in cymas pluri- vel multi-floras dispositi.
- a. Folia subtus canescentia vel cinereo-velutina.
- Folia elliptica, coriacea. Calycis lobi 4 mm. longi. Petala oblongo-lanceolata. *C. Deplanchei* Brongn. & Gris.
 - ** Folia lanceolata vel elliptico-lanceolata. Calycis lobis ± 2.5 mm. longi. Petala obovata. *C. canescens* Brongn. & Gris.
 - *** Folia ovato-elliptica vel elliptica, obtusa. Calycis lobi 3.5 mm. longi. Petala ovato-lanceolata.
C. Comptonii, sp. nov.
 - **** Folia angustiora, lineari-oblonga. Calycis lobi ± 2.5 mm. longi. Petala oblongo-lanceolata. *C. angustifolia*, sp. nov.
- b. Folia glabra.
- Folia elliptica, breviter petiolata. Cymæ multifloræ.
C. floribunda Brongn. & Gris.
 - ** Folia ovata vel ovato-oblonga, sessilia. Cymæ plurifloræ.
C. sessilifolia Brongn. & Gris.
 - *** Folia elliptica vel lanceolata, breviter petiolata, supra vernicosa.
C. ligustrina Brongn. & Gris.

Buckea nelitroides Seem. is also a species of *Clæzia*. The earliest name for the genus is *Mooria* Montrouzier, 1860.

CLÆZIA COMPTONII Bak. fil., sp. nov. *Frutex* 6-pedalis ramis teretibus ramulis novellis canescentibus; *foliis* ellipticis vel ovato-ellipticis 3.5-4 x 1.5-2.0 cm. apice obfusus vel rarius subacutis subtus primum canescentibus, petiolo 1-1.5 mm. longo brevissimo suffultis, nervis lateralibus subtus prominulis; *cymis* axillaribus 1.3-1.8 cm. longis paucifloris pedunculis calycibusque canescentibus; *calycis* tubo 4-4.5 mm. longo turbinato lobis angustis 3-3.5 mm. longis lineari-lanceolatis; *petalis* ovato-lanceolatis brevissime unguiculatis 3-5 mm. longis flavescentibus; *fructu* ignoto.

Mt. Dore; *Casuarina* association in stream-bed; 200 ft.; rare. 703. Shrub 6 ft. Flowers dull yellow.

Allied to *C. Deplanchei* Brongn. & Gris and *C. canescens* Brongn. & Gris. A shrub about 6 ft. high with ovate-elliptical obtuse leaves, and few-flowered canescent cymes shorter than the leaves. The flowers are dull yellow.

CLÆZIA ANGUSTIFOLIA Bak. fil., sp. nov. *Frutex* 6–8-pedalis ramis subteretibus sursum bene foliatis deorsum cicatricibus foliorum delapsorum notatis; *foliis* lineari-oblongis vel lineari-oblongolatis superne glabris 4–5 cm. longis 8–13 mm. latis, subtus canescentibus apicē obtusis vel subacutis basi in petiolum 3–4 longum attenuatis; *floribus* in cymas axillares plurifloras vel multifloras dispositis cymis foliis 3–4-plo brevioribus; *calyce* 5 mm. longo tubo extus canescenti-pubescente lobis triangulari-acutis 2.5 mm. longis; *petalis* pallide flavis \pm 3 mm. longis calyce paullo longioribus extus pubescentibus oblongo-lanceolatis; *staminibus* inæqualibus; *ovario* extus pubescente 4–5-ovulato, stylo erecto.

Cap Bocage; serpentine scrub; 100–1300 ft.; abundant. 1375. Shrub 6–8 ft. Dense growth. Corolla pale yellow.

Allied to *C. canescens* Brongn. & Gris, differs by the narrower leaves and by the oblong-lanceolate petals. Differs from *C. Deplanchei* Brongn. & Gris by the narrower leaves and the calyx having shorter lobes.

C. FLORIBUNDA Brongn. & Gris. Mont Koghi; serpentine scrub; 2000 ft. 737. Shrub 6 ft. Flowers honeyed, sweet-scented. Corolla dull yellow. Kuakué; abundant in lowland scrub 0–1000 ft. 936. Shrub 8 ft. Leaves yellowish green. Fruit dull red, abundant. Port Bouquet; creek-side serpentine scrub-area; 100 ft. 2250. Shrub 4 ft. Twigs slender, flexible. Corolla and calyx teeth yellow.

C. LIGUSTRINA Brongn. & Gris. River Dumbéa; woods just above stream; 200 ft. Shrub 4 ft. The following also probably belongs here:—Kuakué; scrubby forest above river; 100 ft.; serpentine. 948. Small tree 20 ft., laxly branched with light green leaves.

METROSIDEROS OPERCULATA Labill. Ignambi; frequent in stony creeks in Niaouli area; 100 ft.; gneiss. 1660. Shrub 6 ft., branching copiously. Leaves dark green, shining above, dotted below. Perianth green, stamens white, anthers yellow. Scentless.

M. LAURIFOLIA Brongn. & Gris. Mt. Mou summit; 3800 ft.; scrub. 488.

M. NITIDA Brongn. & Gris. Ignambi; scattered throughout forest; 2500–4200 ft.; gneiss. 1516. Tree 30 ft., bushy rounded growth. Flowers copious, scentless. Calyx green-yellow. Corolla and filaments brilliant scarlet. Whole tree very conspicuous.

M. INTERMEDIA Vieill. Tonine; west side, forest margin; 2000 ft.; mica schists. 1980. Corolla pinkish before opening. Style and filaments white. Slight scent.

METROSIDEROS OPERCULATA Labill., var. **MYRTIFOLIA** Brongn. & Gris. Mt. Nekando; upland shrub; 3000 ft.; frequent. 1075. Shrub 8 ft. Stiff regularly arranged leaves. A form of this variety with the lamina of the leaves 9-11 mm. long and 5-7 mm. broad, the petioles being 1-2 mm. long. Calyx 5-6 mm. long, the lobes being 3-4 mm. long. Guillaumin also considers *Metrosideros Francii* Schlechter, a form of *M. operculata* Labill. (Not. Syst. i, 109.)

XANTHOSTEMON MULTIFLORUM Beauv. forma **FLAVUM** Pamp. R. Dumbéa; river-banks, infrequent; 100 ft.; plains region. 823. Tree 20 ft. Hard, leathery, retuse leaves. Flowers with very pale yellow corolla and much deeper yellow staminal filaments.

X. MYRTIFOLIUM Guillaumin. R. de Carénage. 375. Shrub 6 ft.; frequent along river-banks.

X. INTEGRIFOLIUM Bak. fil., comb. nov. (*Fremya integrifolia* Brongn. & Gris.) R. Dumbéa; river-banks, uncommon; 200 ft. 826. Shrub 6 ft. Small hard leaves with thickened margins. Erect flowers, white corolla with pale yellow filaments.

X. BEAUVISAGEI Pamp., var. nov. **POUMENSIS** Bak. fil. *Frutex* 6-pedalis ab typo differt; *calycis lobis* ovatis apice rotundatis; *petalis* pallide flavis.

Poume; lowland scrub creekside; 50 ft. 2384. Shrub 6 ft. Leaves stiff, hard, dark green. Calyx green. Stamens and corolla pale yellow. Scentless, honeyed.

X. AURANTIACUM Heck. Plaine des Lacs; abundant shrub on gentle and moderate slopes; 0-250 ft. 310.

X. CILIATUM Niedenzu. Poume; abundant in serpentine scrub; 500-1000 ft. 2360. Low shrub 2 ft., spreading habit. Flower with green calyx, crimson corolla and filaments. Fruit red when ripe. Ignambi; Niaouli association; 1000 ft. 1859. Small shrub 2 ft. Leaves small, medium green, shining above, very stiff. Fruit 3 carpels, dull red.

X. RUBRUM Niedenzu. River Comboui; scrubby woods, serpentine; 100 ft., occasional. 2012. Small tree 20 ft. Broad, flat, shining receptacle. Petal vivid crimson. Style and filaments the same. Scentless.

RHODOMYRTUS EMARGINATA Pancher in herb. Mt. Dore; in scrub; 2500 ft. 698. Shrub 3 ft. Flowers white. Leaves, lamina 12-20 mm. long, 8-12 mm. broad; petioles 2 mm. long. Calyx \pm 4 mm. long. Petals 5-5.5 mm. long, concave.

MYRTUS PROLIXA Bak. fil., sp. nov. *Arbor* 20-pedalis ramis teretibus vel subteretibus; *foliis* 4-6.5 cm. \times 17-32 mm. ovalibus vel oblongo-ellipticis

in sicco luteo-viridibus apice obtusis basi cuneatis, costa subtus conspicua, nervis lateralibus tenuibus subtus prominulis, petiolis 3-5 mm. longis; *floribus* albis suaveolentibus pedicellatis pedicellis strictis axillaribus; *bracteolis* minimis; *calyce* 3 mm. longo, tubo brevi turbinato lobis 5 suborbicularibus demum reflexis; *petalis* 5 suborbicularibus 5 mm. longis; *staminibus* antheris minimis; *stylo* erecto filiformi; *ovario* triloculari.

Plaine des Lacs; Kaori forest, in sheltered valley; 800 ft.; serpentine. 393. Tree slender and lanky. Flowers white, sweet-scented. Allied in some respects to *M. Vieillardii* Brongn. & Gris. A tree with oval or oblong-elliptical yellowish-green subcoriaceous petiolate glabrous leaves and pedicellate axillary flowers, with a trilocular ovary.

MYRTUS LUTEO-VIRIDIS Bak. fil., sp. nov. *Frutex* 4-pedalis ramulis cortice atro-cinereo obtectis; *foliis* coriaceis flavo-viridibus ellipticis vel ovato-ellipticis 3.5-4.5 cm. x 1.8-2.8 cm. apice sæpius emarginatis, costa subtus conspicua, nervis lateralibus tenuibus, petiolis 4-5 mm. longis; *floribus* pentameris paniculatis cymosis pedicellatis cymis folio brevioribus; *calycis* tubo subgloboso lobis obtusis; *petalis* albis calyce longioribus; *staminibus* numerosis; *ovario* 2-loculari; *fructu* globoso in sicco nigrescente.

River Ngoyé, Mts. to N.W.; scrub; 2500 ft. 1002. Shrub 4 ft. Leaves light yellowish green, stiff. Flowers white, scented. Fruit spherical. A shrub with elliptical or ovate-elliptical coriaceous yellowish-green petiolate leaves and cymes of pentamerous flowers. The fruit is spherical, the embryo curved.

M. RUFO-PUNCTATA Pancher. Mt. Mou; serpentine; 3000 ft., dry scrub. 627. Plaine des Lacs. 269. Shrub 4 ft.; dry slopes. Taom; frequent in upland serpentine scrub; 2500-3000 ft. 2330. Shrub 4 ft., much branched with dense foliage. Leaves glandular. Flowers white, scentless.

M. PAITENSIS Schlechter. River Ngoyé; riverside scrub; 400 ft.; serpentine. 2109. Shrub 6 ft. Stems reddish when young, thin, soft, slightly stiffened. Corolla ivory or greenish, widely open. Slight sweet scent.

M. NGOYENSIS Schlechter. Baie Kuakué; occasional in scrub; 1000 ft. 884. Shrub 6 ft. Copious dark green leaves, lighter beneath, with recurved margins. Flowers pendent, solitary, white, honeyed, sweet-scented.

M. VIEILLARDII Brongn. & Gris. Taom; lowland serpentine scrub; 400 ft. 2934. Shrub 3 ft. Leaves light green, shiny, petioles and young stem reddish. Flowers green. Calyx white, corolla sweet-scented,

EUGENIA. I have arranged the species in this collection under the following four sections:—

- I. *Eueugenia*. Flowers solitary or in fascicles. Petals distinct.
- II. *Jambosa*. Inflorescence cymose. Calyx usually with a thickened staminal disc. Flowers showy, usually 4-merous. Petals free and spreading.
- III. *Syzygium*. Flowers small, in compact cymes. Petals usually calyptrate. Berries small.
- IV. *Cupheanthus*. Flowers very large, showy, in few-flowered cymes. Calyx-tubes very long. Petals calyptrate. Small or large trees with large leaves.

EUGENIA (§ *Eueugenia*) *GYROSEPALA* Bak. fil., sp. nov. *Frutex* 3-pedalis ramulis cortice cinereo obtectis; *foliis* parvisculis oblongo-ellipticis vel oblongo-obovatis 2–3 cm. longis 12–20 mm. latis, glabris, apice sæpius emarginatis, costa subtus conspicua, nervis lateralibus haud conspicuis, petiolo brevissimo \pm 2 mm. longo suffultis; *floribus* albis solitariis vel subsolitariis axillaribus pedicellatis; *calycis tubo* brevi ad basin bracteolato lobis 4 obtusis; *petalis* albis; *staminibus* numerosis stylo erecto tenui; *ovario* biloculari.

River Ngoyé; among stones in river-bed. 958. White flowers, reddish buds, hard pent leaves.

A shrub with small leaves and solitary or subsolitary flowers and 4-lobed calyx, allied to *E. carissoides* F. v. Muell., from Queensland. 301 from Plaine des Lacs is closely allied.

E. *ANGUSTIBRACTEOLATA* Bak. fil., sp. nov. *Frutex* 5-pedalis ad *E. Pancheri* Brongn. & Gris accedens, ramulis glabris cortice atro-purpureo obtectis; *foliis* 4–7 cm. longis 2.5–4.0 cm. latis crassiusculis ovatis apice acutis basi late cuneatis in petiolum 3–4 mm. longum attenuatis, nervis lateralibus crebris supra prominulis, costa subtus prominente; *floribus* albis cymosis cymis ramosis axillaribus et terminalibus folia haud æquantibus; *calycis tubo* 2.5–3.0 mm. longo, campanulato pubescente lobis 2 mm. longis; *bracteolis* ad basin calycis linearibus tubo brevioribus calycis lobis 5 persistentibus obtusis; *petalis* albis 4.5–5 mm. longis concavis.

Presqu'île Bogota; occasional in dry serpentine scrub; 1500 ft. 1339. Shrub 5 ft. Corolla white, the buds patched with red. Faint sweet scent.

Compared at the Paris Herbarium. Allied to *E. Pancheri*. Differs in the ovate acute leaves, the nerves not being so prominent below, and the two bracteoles below the calyx are linear. The five calyx-lobes are persistent.

E. (§ *Eueugenia*) *MOUENSIS* Bak. fil., sp. nov. *Arbor* ramis teretibus cortice cinereo obtectis; *foliis* oblongis vel oblongo-lanceolatis vel elliptico-

oblongis 15–20 cm. longis 5–6.5 cm. latis, utrinque opacis apicem versus attenuatis basi late cuneatis vel subrotundatis, petiolis 3–5 mm. longis; *floribus* albis e trunco ortis brevissime pedicellatis; *calycis tubo* turbinato glabro 4 mm. longo, lobis 4 persistentibus 3–4 mm. longis obtusis; *petalis* albis carnosulis ± 7 mm. longis, orbiculari-ovatis obtusis haud unguiculatis; *staminibus* numerosis; *ovario* biloculari.

Mont Mou; stream edge in damp gully; 600 ft.; cretaceous. 554. Tree; flowers fleshy white on main trunk of tree.

A tree with oblong or oblong-lanceolate leaves and shortly pedicelled flowers from the trunk. There are four calyx-lobes, and the ovary is bilocular. Allied in character of inflorescence to *E. littoralis* Pancher and *E. Homei* Seem.

EUGENIA STEPHANOPHYLLA Bak. fil., sp. nov. *Arbuscula* ad 20-pedalis ramulis cortice cinereo obtectis; *foliis* oblongis vel oblongo-ellipticis 40–45 mm. \times 15–25 mm., apice obtusis vel subacutis basi in petiolum 2–4 mm. longum attenuatis nervis lateralibus tenuissimis inconspicuis; *floribus* inter mediocres generis fasciculatis e runco ortis fasciculis plurifloris pedicellis 18–22 mm. longis, gracilibus puberulis; *bracteolis* 1–5 mm. longis, sub calyce parvis oblongis calycis tubo brevioribus; *calycis tubo* ± 4 mm. longo, extus pubescente infundibuliformi lobis 4 obtusis 2 mm. longis persistentibus; *petalis* albis; *staminibus* numerosis; *ovario* 2-loculari.

Plaine des Lacs; sheltered valley; 1100–2000 ft. 360. Leaves in apical crown often reddish. Flowers on trunk white, fragrant, buds pink.

A small tree, with leaves in an apical crown and fascicles of slender pedicelled flowers from the trunk, allied to *E. Brongniartiana* Guill. (*E. crassifolia* Vieill.), but pedicels longer and not so hairy.

E. (§ *Syzygium*) BRACHYCALYX Bak. fil., sp. nov. *Arbuscula* ad *Syzygium lateriflorum* Brongn. & Gris accedens, ramulis teretibus cortice cinereo obtectis ramulis novellis glabris cortice brunneo obtectis; *foliis* glabris 9–10 cm. \times 5.5–6 cm. superne nitidis orbiculari-ovatis apice acuminatis apice ipso obtusis basi cuneatis in petiolum 4–5 mm. longum attenuatis, nervis lateralibus numerosis tenuissimis, costa subtus conspicua; *floribus* cymosis sat parvis cymis plerumque ex axilla foliorum delapsorum nascentibus ramoso-patentibus multifloris; *calyce* 1 mm. longo, tubo turbinato limbo truncato; *petalis* albis minutis ad anthesin persistentibus orbiculari-ovatis haud unguiculatis, 1.25–1.50 mm. longis et latis.

Mont Canala; streamside woods, Niaouli region; 1000 ft.; schists. 1256. Small tree, flowers white. Inflorescence 6–10 cm. long. Pedicels 1–1.5 mm. long.

Closely allied to *Syzygium lateriflorum* Brongn. & Gris. Differs by the broader leaves and smaller flowers; the petals are minute.

EUGENIA (§ Syzygium) HYDROPHILA Bak. fil., sp. nov. *Frutex* circ. 5-pedalis ramulis atro-brunneo corticatis; *foliis* oblongo-ovatis vel obovatis 3.5-5.0 cm. x 1.5-2.5 cm., costa subtus conspicua, nervis lateralibus tenuibus, apice obtusis basi in petiolum 2-4 mm. longum attenuatis; *floribus* cymosis sat parvis; *cymis* plerumque ex axilla foliorum delapsorum nascentibus multifloris; *calycis tubo* brevi subgloboso 2 mm. longo, apice truncato vel subtruncato; *petalis* 2.5 mm. longis, calyptratim concretis; *staminibus* numerosis filamentis flexuosis antheris brevibus; *fructu* ignoto.

River Dumbéa; flood plain; 414.

A shrub allied to *Syzygium lateriflorum* Brongn. & Gris, with oblong-ovate or cuneate-ovate punctate leaves, and lateral cymes of rather small flowers with a short subglobose calyx-tube and obsolete lobes.

E. (§ Syzygium) IGNAMBIENSIS Bak. fil., sp. nov. *Frutex* vel *arbuscula* ramulis strictis novellis angulatis; *foliis* oblongo-ovatis vel elliptico-ovatis 25-30 mm. x 10-20 mm., apice rotundatis margine revolutis utrinque opacis basi in petiolum 1-2 mm. longum, attenuatis, nervis lateralibus inconspicuis tenuissimis, costa subtus subprominula; *floribus* cymosis cymis brevibus paucifloris; *calycis tubo* turbinato 2 mm. longo, glabro limbo truncato; *petalis* calyptratim concretis; *fructu* axillari breviter pedunculato extus nigrescente 12-14 mm. diam.

Ignambi. 1512. Shrub or small tree. Flowers yellowish, tinged with red outside.

Allied to *Eugenia stricta* Brongn. & Gris in some respects, with elliptical-ovate very shortly petioled leaves and small flowers in few-flowered cymes. Calyx-tube turbinate short, limb truncate.

E. MAGNIFICA Brongn. & Gris. Mont Canala; intermediate woods and coffee plantation; 1500 ft.; schist. 1258. Tree 30 ft. Leaves puckered, dark green, cauliflorous. Petals white fleshy, stamens and anthers white.

E. PUNCTATA Bak. fil., comb. nov. (*Syzygium punctatum* Vieill.) Kuakué; very abundant on dry hillside scrub; 0-1000 ft. 934. Shrub 6 ft. Dull medium green leaves, yellowish-red midrib. Young fruits with remains of calyx and stamens.

E. (§ Syzygium) PATENS Pancher. River Comboui; alluvial serpentine soil. 2149. Shrub 4 ft. Red-brown receptacle. Petals pinkish outside. Stamens white, sweet-scented.

Other specimens are from River Comboui; 2166. Also from Ignambi, 1858, and from Kuakué, 941.

Eugenia ngoyensis Schlechter is very closely allied.

E. (§ Syzygium) ARBOREA Bak. fil., sp. nov. *Arbor* circ. 30-pedalis ramis cortice cinereo obtectis; *foliis* parviusculis viridibus oblongo-ovatis 3-4.5 cm. x 15-22 mm., apice obtusis basi cuneatis marginibus leviter

recurvatis, costa subtus conspicua, nervis lateralibus tenuissimis, petiolo 2-4 mm. longo suffultis; *floribus* paniculatis e ramis adultioribus ortis; *calyce* turbinato 20-25 mm. longo deorsum angusto sursum ampliato tubo ovario adhærente et ultra ovarium producto; *petalis* caducis; *filamentis* elongatis albis; *ovario* 2-loculari.

Ignambi; moist forest; 3000 ft. 1842. Leaves small, stiff, medium green, margin slightly recurved, young twigs yellowish. Flowers on old wood in groups of small panicles. Receptacle greenish white, shining, Perianth caducous. Filaments long, white, scentless. Calyx, the lower narrow portion is 18 mm., the upper broader portion 5-7 mm.

This is a tree 30 ft. high, with panicles of flowers from the older wood. The calyx is 20-25 mm. long. The leaves resemble those of *Syzygium Pancheri* Brongn. & Gris.

EUGENIA PANCHERI Brongn. & Gris. Kuakué; in forest by saw-mill close to the river; 898. Tree 25 ft., also flowers when a small shrub of 4 ft. Leaves medium green, stiff. Flowers white, quickly fading, sweet-scented, honeyed.

E. PTEROCALYX Bak. fil. (*Syzygium pterocalyx* Brongn. & Gris.) Kuakué; uncommon by stream in lowland scrub-area; 500 ft. 937. Small tree, 15 ft.

E. MULTIPETALA Bak. fil. (*Syzygium multipetalum* Brongn. & Gris.) Baie Ngo; 253. Medium-sized stout tree, 20 ft.; occasional along stream-side; 200 ft.; serpentine. Rim of receptacle deep red, stamens white, three perianth segments, and an operculum in bud. Kuakué; small tree 25 ft.; 927. Flood plain, also along river-banks. Light green leaves, with yellowish veins. Flowers white with crimson edge to receptacle. River Ngoyé; 1016. Abundant along edge of river; 0-500 ft. Tree 30 ft. Dark hard foliage. Stiff corymb of flowers with red stamens, honeyed. Scentless.

E. GRISII Bak. fil. [comb. nov.]. (*Syzygium nitidum* Brongn. & Gris.) River Dumbéa; frequent along river-banks; 816. Tree 20 ft., white flowers in corymbs, honeyed.

E. JAMBOS L. Tonine; forest; 1000 ft. 1953. Tree. Receptacle green, petals and filaments scarlet. Widely distributed.

CLAVIS SPECIERUM SECT. CUPHEANTHI.

A. Folia ampla, elongata, petiolata, flores in vetere ligno subumbellati 2-4.

E. austrocaledonica Bak. fil.

(*Cupheanthus austrocaledonicus* Seem.).

B. Folia ampla, oblonga, petiolata. Flores in vetere ligno pauci. Receptaculum rubrum, carnosum, 45-55 mm. longum.

E. Comptonii Bak. fil.

- C. Folia ampla, oblongo-obovata, brevissime petiolata. Receptaculum 25-30 mm. longum. *E. paniensis* Bak. fil.
- D. Folia ampla, oblongo-oblancoolata, brevissime petiolata. Receptaculum 55-60 mm. longum. *E. neocaledonica* Bak. fil.
- E. Folia ampla, oblancoolata, vel oblongo-oblancoolata, sessilia. Receptaculum 40-45 mm. longum. *E. toninensis* Bak. fil.

EUGENIA (§ Cupheanthus) COMPTONII Bak. fil., sp. nov. *Arbor* parva circ. 20-pedalis trunco erecto; *foliis* majusculis oblongis 16-18 cm. × 6-7 cm., costa superne impressa subtus conspicua, nervis lateralibus tenuibus numerosis juxta marginem nervo intramarginali conjungentibus apice obtusis basi lato cuneatis margine undulatis, petiolo 3-4 cm. longo præditis; *floribus* magnis in cymas paucifloras dispositis cymis e trunco ortis; *calyce* turbinato carnosio rubro elongato 45-55 mm. longo, ultra ovarium longissime producto limbo levissime lobato; *petalis* 3 caducis; *staminibus*, pallide flavis; *ovario* infero.

Ignambi; forest; 3000 ft. 1710. Small tree, erect trunk, 20 ft. Leaves large, simple, dark green, shining, stiff. Flowers on main trunk, not at base. Receptacle red, fleshy. Stamens bent inwards and downwards in bud. Filaments pale yellow, brown anthers. Petiole bearing a gland about the middle. A small tree with rather large oblong petiolate leaves, and flowers in few-flowered cymes arising from the main trunk.

E. (§ Cupheanthus) NEOCALEDONICA Bak. fil., sp. nov. *Arbuscula* circ. 25-pedalis cortice brunneo et papyraceo obtectis; *foliis* majusculis elongatis 4 dm. × 14-15 cm. oblongo-oblancoolatis, nervis lateralibus subtus conspicuis numerosis circ. 23-26 marginem versus arcuatis et inter se conjungentibus, petiolo brevi præditis; *floribus* caulifloris pedunculis strictis 6-7 cm. longis teretibus glabris 2-3-floris basin versus caulium ortis; *calycis* tubo subcylindrico 55-60 mm. longo 10-15 mm. lato, basi attenuato extus glabro supra ovarium longe producto limbi segmentis 3 brevibus; *petalis* 3 albis caducis 11-13 mm. × 12-15 mm. suborbicularibus; *staminibus* numerosis ore calycis insertis liberis filamentis filiformibus; *ovario* infero 2-loculari, stylo elongato.

Cap Bocage; moist forest; serpentine; sea-level. 1369. Stem usually simple. Bark light brown papery. Crown of thin leaves hard texture. Flowers numerous arising at base of trunk, among humus, 2-3 on peduncle, fleshy, pinkish-white receptacle. Petals white, caducous, usually eaten by snails.

E. (§ Cupheanthus) TONINENSIS Bak. fil., sp. nov. *Arbor* circ. 30-pedalis; *foliis* majusculis ± 47 cm. × 15 cm. oblancoolatis vel oblongo-oblancoolatis sessilibus ad summitatem ramorum verticillatis, subtus nervis lateralibus utrinque circ. 23 conspicuis nervo intermarginali conjungentibus costa

crassiuscula; *floribus* e trunco ortis pedunculis axillaribus 3-floris; *calycis* tubo subcylindrico 4-4.5 cm. longo, infundibuliformi coriaceo basi attenuato supra ovarium longe producto limbi segmentis sæpissime 3 apice rotundatis \pm 5 mm. longis; *petalis* albis caducissimis; *staminibus* numerosis ore calycis insertis liberis filamentis filiformibus antheris oblongis loculis parallelis; *ovario* infero 2-loculari, stylo elongato, stigmatæ capitato; *fructu* ignoto.

Tonine; 1943. Stem erect, rough bark. Flowers on main trunk especially at base. Thick cream-coloured receptacle. Petals white, caducous. Filaments white, scentless.

Closely allied to *E. neocaledonica* Bak. fil.

EUGENIA (§ Cupheanthus) PANIENSIS Bak. fil., sp. nov. *Arbor* alta; *foliis* amplis coriaceis oblongo-obovatis 23-23 cm. \times 12-13.5 cm. apice leviter emarginatis, costa subtus conspicua, supra impressa, nervis lateralibus numerosis juxta marginem inter se conjungentibus, petiolo 6-10 mm. longo suffultis; *floribus* cynosis e trunco vel e ramis adultioribus ortis; *cymis* 4-8-floris; *calyce* turbinato mediocri 25-30 mm. longo supra ovarium producto limbo undulato vix partito pedunculis pedicellisque glabris; *petalis* mox delapsis; *staminibus* numerosis albis exsertis; *ovario* 2-loculari, stylo erecto.

Mt. Panié; forest; 1200 ft. 1767. Flowers in cymes on main trunk and old branches. Receptacle white-red towards the top. Perianth forms a conical plug. Stamens infolded in bud. Scentless. Calyx 8-10 mm. broad near the apex. This species is a large tree with large leathery oblong-obovate leaves, and 4-8-flowered cymes. The calyx is 25-30 mm. long.

PSIDIUM KUAKUENSE Bak. fil., sp. nov. *Frutex* 8-pedalis ramis teretibus glabris; *foliis* orbicularibus ovatis 3-7.5 cm. longis 1.5-6 cm. latis, sessilibus vel subsessilibus chartaceis apice obtusis basi rotundatis vel subcordatis, nervis lateralibus tenuissimis, costa subtus conspicua; *floribus* inter mediocres generis in cymis axillaribus et terminalibus cymis paucifloris foliis longioribus pedicellis striatis floribus longioribus; *calycis* tubo glabro 3 mm. long., turbinato lobis 5 persistentibus obtusis 1.5-2.0 mm. longis; *staminibus* numerosis; *ovario* 2-loculari.

Kuakué; overhanging rocky stream in forest, serpentine; 50 ft. 930. Flowers white, petals fleshy, sweet-scented. Petals 6 mm. long.

Allied to *Psidium floribundum* Vieill., but receptacle is shorter, and leaves are sessile or nearly so. A shrub with orbicular-ovate leaves, and flowers in axillary and terminal few-flowered cymes. The calyx is glabrous and campanulate, the lobes persistent.

CARYOPHYLLUS ELEGANS Brongn. & Gris. Mont Panié; among stones by river; 1500 ft. 1764. Small much-branched shrub, 3 ft. Fruits fleshy, scarlet.

BARRINGTONIA NEOCALEDONICA Vieill. River Tchiem; abundant in courses of rivers and creeks; 0-500 ft. 2001. Tree 25 ft. Branches thick, but soft. Leaves and flowers on different branches. Leaves in terminal rosettes. Corolla pinkish in bud, white when open. Filaments white. Agrees with Vieillard 2630.

MELASTOMACEÆ.

MELASTOMA DENTICULATUM Labill. Mont Mou; moister parts of Niaouli region; 800 ft.; cretaceous. 526. Shrub 6 ft. Mont Canala; frequent by streams in Niaouli region and in old cultivated areas; 2000 ft. 1246. Shrub 6 ft. Corolla white. Ignambi; 1841. Samoa, Fiji, Friendly Islands, etc.

LYTHRACEÆ.

PEMPHIS ACIDULA Forst. Cap N'dona; on rocky places on littoral; 874. Shrub 6 ft. Hard leaves, white flowers, easily falling. Widely distributed.

SAMYDACEÆ.

CASEARIA MELISTAURUM Spreng. Ouen Toro, near Nouméa; littoral zone just within forest. 55. Stiff branched shrub, perianth greenish. Tchiem; creekside association. 2004. River Comboui; *Callitris* forest; 200 ft.; serpentine. 2156. Small shrub 3 ft. Branches spreading, dorsiventral. Leaves dark green, hard texture. Flowers white, scentless. Also from Poume; 2377. A plant from River Ngoyé 1011 is closely allied.

Dr. Schlechter seems to have overlooked the above species when he described his *C. silvana* in Engl. Bot. Jahrb. xxxix. 198, as he states: "Die hier beschriebene ist die erste Art welche von der Insel geworden ist." *C. silvana* Schlechter is probably not distinct from *C. Melistaurum* Spreng.

C. COMPTONII Bak. fil., sp. nov. *Frutex* circ. 2-pedalis ramulis teretibus lenticellosis; *foliis* oblongis vel oblongo-ovatis 8-10 cm. x 30-35 mm., apice obtusis basi rotundatis margine grosse serratis superne nitidis, costa subtus prominula, utrinque glabris nervis lateralibus utrinque 5-8 gracilibus, petiolo 6-10 mm. longo suffultis; *floribus* viridibus in axillis foliorum glomerulatis, glomerulis petiolis 2-3-plo brevioribus; *pedicellis* brevissimis basi bracteatis; *calycis* 3 mm. longo; *tubo* brevi lobis 5 ovatis; *staminibus* 10 cum staminodiis totidem hirsutis alternatis; *ovario* hirsuto in stylum subnullum attenuato, stigmatate capitato; *fructu* ignoto.

Taom; *Casuarina* woods; 200 ft.; serpentine. 2290. Shrub 2 ft.; simple stem, dorsiventral flowering shoots. Flowers green. Leaves glabrous, shining above.

Allied to *C. Melistaurum* Spreng., but differs by the smaller, grossly serrate leaves.

HOMALIUM GUILLANII Guillaumin. Kuakué; forest on alluvium; 50 ft. 895. Small tree 20 ft. Flowers white, in half-pendent racemes. Faint unpleasant smell.

H. AUSTROCALEDONICUM Seem. River Comboui; alluvial serpentine scrub near river; 100 ft. 2234. Small tree 12 ft. Catkins drooping. Flowers greenish white, slight sweet scent.

H. RUBIGINOSUM Warb. (*Blackwellia rubiginosa* Vieill.) Mont Canala; moist forest; 1500 ft.; mica schists. 1267. Small tree 20 ft. with spreading crown. Flowers greenish white. Racemes pendent.

H. SYLVICOLUM Bak. fl., sp. nov. *Arbuscula* circ. 27-pedalis sec. cl. detectorem ad *H. intermedium* Vieill. valde accedens; *foliis* subcoriaceis glabris ovato-lanceolatis 7-9.5 cm. x 3-4.5 cm., margine grosse serratis vel undulatis superne nitidis nervis lateralibus 6-8 marginem versus arcuatis et inter se conjungentibus nervis secundariis tenuibus reticulatis, petiolis 8-11 mm. longis suffultis; *floribus* subsessilibus in racemos spiciformes dispositis; *calyce* 5 mm. longo, tubo extus pubescente longitudinaliter striatis lobis 7 lineari-lanceolatis 2.5 mm. longis, apice subacuminatis petalis æquilongis; *petalis* 2.5 mm. longis, intus hirtis apice subobtusis; *staminibus* circ. 28; *stylis* 3; *ovario* hirtio.

Nekando; *Spermolepis* forest; 1000 ft.; serpentine. 948. Small tree 20 ft. The distinguishing features of this species are the subcoriaceous ± ovate-lanceolate glabrous petiolate leaves. The flowers are in lax spikes, and there are 7 calyx-lobes alternating with 7 petals, and about 28 stamens and 3 styles. 788 from Mt. Koghi is allied, but the flowers are only in bud.

H. KANALENSE Briquet. Plaine des Lacs; flood plain; 800 ft.; serpentine. 378. Shrub 6 ft. Flowers greenish.

ONAGRACEÆ.

JUSSIEUA SUFFRUTICOSA L. Canala; freshwater swamps and streams; 1309. Subshrub. Leaves light green, often turning red. Corolla yellow, falling readily. Erect white soft aquatic aerating roots. Ignambi; freshwater ditches, pools, and muddy creeks; 1606. Widely distributed.

PASSIFLOREÆ.

PASSIFLORA FETIDA L. Port Ngea, Nouméa; littoral also roadside weed, uncommon; 24. Calyx with long sticky glandular hairs. Petals white, incurved, Plant nauseous. Widely distributed.

CUCURBITACEÆ.

BRYONOPSIS LACINIOSA Naud. Paompai; forest margin and creekside woods; 50 ft. 1908. Tendril climber, herbaceous perennial. Monœcious. Corolla creamy yellow. Fruit oval, acute, glaucous between ridges. Widely distributed.

FICOIDEÆ.

MOLLUGO NUDICAULIS Lam. Mont Canala; denuded Niaouli area; 2000 ft.; schist. 1251. Small herb with basal rosette. Widely distributed.

SESUVIUM PORTULACASTRUM Lam. Anse Vata; sea-sand. 84. Creeping succulent. Perianth green outside, white within. Widely distributed.

UMBELLIFERÆ.

HYDROCOTYLE ASIATICA L. Ignambi; abundant in moister parts of Niaouli association; 3000 ft. 1714. Widely distributed.

DIDISCUS AUSTROCALEDONICUS Brongn. & Gris. Île Porc Épic; littoral zone on loose coral sand, plentiful. 922. Herbaceous leaves slightly thickened, light green. Flowers white. Fruit flattened.

APIUM AMMI Urban. Nouméa; wet roadside ditches. 39. Flowers white. Widely distributed.

APIUM AUSTRALE Thouars. Isle of Pines; coral sand. Perennial herb. Widely distributed.

ARALIACEÆ.

MYODOCARPUS CRASSIFOLIUS Dub. & Vig. Mont Koghi; forest, 3000 ft.; serpentine. 726. Tree 25 ft. Branching false dichotomous inflorescences terminal. Leaves tough, hard midrib yellow. Also in scrub as a bush of 4 ft.

M. FRAXINIFOLIUS Brongn. & Gris. Plaine des Lacs; common, especially on slight slopes; 800 ft.; serpentine. 305. Shrub; simple stem, sometimes branched at top. Winged whitish fruits. Protandrous stamens, very fugacious. Mt. Koghi; forest near summit; 3000 ft. 724. Tree 15 ft. Erect stem, terminal inflorescence.

M. VIEILLARDII Brongn. & Gris. Plaine des Lacs; abundant on slightly elevated parts of flood plain and on edges of pools; 800 ft.; serpentine. 344. Small shrub reaching 1 ft. without inflorescence. Flowers green. Comboui Mts.; scrubby coniferous forest; 3500 ft.; serpentine. 2182. Small tree 15 ft. Leaves dark green, shining above, stiff. Corolla reddish brown, caducous; anthers pale yellow. Scented,

MYODOCARPUS ELEGANS Dub. & Vig. Nekando; coniferous forest; 3000 ft.; serpentine: 1083. Small tree 15 ft.

DELARBREA COLLINA Vieill. Mont Mou; moist valley of Niaouli zone; 800 ft.; cretaceous. 514. Tree 25 ft., false dichotomous branches. Long yellowish inflorescences (spec. of distal $\frac{1}{3}$).

MERYTA CORIACEA Baill. Mont Humboldt; streamside forest; 1500 ft.; serpentine. 1037. Tree 25 ft.; erect, simple stem, crown of leaves some 4 ft. long. Inflorescence in terminal group. Inflorescence white, buds green.

M. MICROCARPA Baill. Ignambi; frequent in forest; 2500 ft. 1611. Small tree 12 ft.; simple stem, crown of leaves. Terminal panicles. Yellow scentless flowers.

From Ouen Toro 56 is another species of *Meryta*, but is without flowers.

SCHEFFLERA COMBOUIENSIS Bak. fil., sp. nov. *Arbuscula* circ. 20-pedalis ad *S. pachyphyllam* Harms accedens; *foliis* longiuscule (7-13 cm.) petiolatis digitatis 3-foliolatis glabris foliolis breviter obovatis vel oblongo-obovatis 8-11 cm. \times 3-5 cm., lamina sensim fere ad apicem petioli decurrente apice rotundatis, costa subtus prominente; *panicula* breviter pedunculata terminali ramosa ramulis umbellatim digestis pedicellis crassiusculis; *calycis* margine minute denticulato; *petalis* 5 valvatis crassiusculis; *ovario* 4-loculari stylis 3-4 arcte connatis in flore approximatis erectis in fructu recurvatis.

Comboui Mts.; forest; >3000 ft.; serpentine. 2181. Stems soft, mucilage exudes. Perianth of 5 segments, reflexed with upturned tip. Anthers yellow. Ripe fruits 12-13 mm. long, 7-8 mm. broad.

Allied to *Schefflera pachyphylla* Harms, but the leaflets are larger and the styles fewer. A small tree with digitately 3-foliolate leaves and flowers in terminal umbellate panicles, allied also to *S. Balansæna* Baill. and *S. Le Rati* R. Vig.

S. COMPTONII Bak. fil., sp. nov. *Arbuscula* circ. 20-pedalis late ramosa; *foliis* alternis palmatim 13-14 foliolatis foliolis oblongis vel oblongo-lanceolatis 10-16 cm. \times 25-43 mm. papyraceis, apice rotundatis vel emarginatis 15-30 mm. longa petiolulatis, nervis lateralibus tenuibus marginem versus furcatis costa subtus conspicua, petiolo communi \pm 29 cm. longo foliolis longiori; *inflorescentia* elongata \pm 41 cm. longa racemosa, ramis patentibus 6-7 cm. longis numerosis tenuibus, floribus minutis numerosis subsessilibus subviridibus; *calycis* *dentibus* brevissimis acutis; *petalis* triangularibus acutis; *staminibus* 5 petalis alternantibus; *ovario* infero 4-loculari ovulis solitariis pro loculo, stylis minutis.

Ignambi; forest; 1500-3500 ft.; gneiss, frequent. 1669. Soft wood. Leaves alternate. Long racemes of stiff spikes. Flowers greenish, segments reflexed.

The following clavis distinguishes this plant from its nearest allies in the genus :—

- A. Foliola 8, oblonga. *S. Candelabrum* Baill.
 B. Foliola 12, lanceolata, coriacea, apice acuta, petiolulis subnullis.
S. Vieillardii Baill.
 C. Foliola 13–14, oblonga vel oblongo-oblancoolata, apice emarginata
 vel rotundata, petiolulis mediocribus suffulta.
S. Comptonii Bak. fil.

DIZYGOTHECA POLYANTHA Bak. fil., sp. nov. *Arbuscula* 20-pedalis; *foliis* palmatis circ. 8-foliolatis foliolis oblongis vel oblongo-oblancoolatis 20–25 cm longis 7–8 cm. latis 2–3 cm. longe petiolulatis apice rotundatis papyraceis, nervis lateralibus utrinque circ. 12 tenuibus, costa subtus conspicua, petiolo communi longiusculo 30 cm. longo suffultis; *inflorescentia* ampla multiflora copiose ramosa umbellis circ. 4–8-floris pedicellis strictis glabris; *calyce* 1.5 mm. longo dentibus brevissimis tubo subcampanulato; *petalis* 3 mm. longis flavo-viridibus concavis; *stylis* connatis; *staminibus* petalis brevioribus, antheris 4-loculatis; *ovario* 6–8-loculari; *fructu* stigmatibus coronato.

Paompai; forest margin; 1500 ft. 1896. Inflorescence very large, terminal. Petals yellow-green, reflexed. A tree about 20 ft. in height with palmately foliolate petiolulate leaves, a very ample inflorescence, and 4-celled anthers.

D. PARVIFOLIA R. Vig. Pointe Bassalle; littoral edge of mangrove swamp. 639. Tree 25 ft. Flowers greenish, sweet-smelling, attracting bees.

D. VIEILLARDII R. Vig. Mont Canala; frequent in forest, a co-dominant tree; 1000 ft. 1175. Tree 50 ft. Crown of large palmate leaves. Large terminal umbel. Specimen of one branch of umbel.

EREMOPANAX CANALENSIS Bak. fil., sp. nov. *Arbor* sec. cl. detectorem 25-pedalis; *foliis* pinnatis multifoliolatis foliolis petiolulatis chartaceis præter costam fere glabris oblongis 11–15 cm. × 4–5.5 cm., apicé acutis vel subacutis basi late cuneatis, nervis lateralibus tenuibus marginem versus arcuatis et inter se conjungentibus petiolulis 15–30 mm. longis; *umbellulis* 3–12-floris in axillis foliorum simplicium dispositis; *calycis* limbo infundibuliformi dentibus brevibus; *petalis* triangularibus 3.5 mm. longis; *staminibus* 5 disco crasso in medio conico elevato; *ovario* uniloculari, ovulo solitario ex apice pendulo.

Mont Canala; forest; 1000 ft.; frequent. 1119. Large pinnate leaves, brown receptacle. Rachis of leaf 70–80 cm. long. The calyx is funnel-shaped and covered with a ferruginous tomentum, the tube is 6 mm. long. The ovary is unilocular with a single pendulous ovule.

No. 1126 from Mont Canala is closely allied. The fruits are 15 mm. long, 10 mm. broad.

OCTOTHECA PLERANDROIDES R. Vig. Mont Koghi; frequent in forest margin; 2000 ft.; serpentine. 789. Tree 30 ft. Flowers greenish white.

The following is closely allied: Mont Panié Forest; 1500 ft. 1787. Tree 20 ft. Buds black shining. Perianth green on inside, reflexed.

TIEGHEMOPANAX AUSTRORCALEDONICUM R. Vig. Mont Mou; frequent in forest; 1500 ft.; serpentine. 433. Tree 12 ft.; simple stem, crown of leaves. Terminal inflorescence.

T. DIOICUS R. Vig. (*Polyscias dioica* Harms.) Mont Koghi; forest-margin; 2000 ft.; serpentine. 785. Small tree 20 ft. Fruit a small dark berry. Kuakué; edge of scrubby forest; 100 ft.; serpentine. 950. Shrub or small tree. Fruit a reddish, slightly flattened berry.

T. SUBINCISUS R. Vig. Couline Neketé; forest; 1000 ft.; schists. 1278. Small tree. Leaves dark green, rachis and veins brown. Inflorescence axillary, flowers white.

ENOCHORIA Bak. fil., gen. nov.

Flores polygami. *Flos* ♀. *Calycis* *tubus* ovario adnatus limbus in lobos 6–8 divisus, lobis triangularibus acutis crassis ovario longioribus glabris. *Petala* 0. *Ovarium* 6–8-loculare e carpellis 6–8 sistens, carpello quoque stylo crasso et brevi coronato, stigmatē lineari in facie interiore decurrente, stylis nec in umbonem vel conum brevem connatis. *Ovula* in loculis solitaria, ab apice pendula; fructus ignotus. *Flos* ♂. *Stamina* 6–8, antheræ filamentis longiores, longitudinaliter dehiscentes. *Arbor* erecta. *Folia* digitatim composita, petiolata, foliolis ± 7 majusculis penninerviis glabris petiolulatis apice acutis basi cuneatis membranaceis, nervis lateralibus tenuibus creberrimis parallelis ab costa angulo recto vel fere recto abeuntibus margine undulatis vel crenulato-undulatis. *Florum capitula* secus ramos paniculæ sessilia, multiflora vel pluriflora, densa, bracteata, floribus singulis basi bracteatis. (Pl. 19.)

Tree; erect stem. Crown of large digitate leaves thin, medium green. Terminal fleshy inflorescence, flowers dull yellowish.

It is allied to *Brassaia actinophylla* from Queensland in which the flower-heads are rather numerous along the stout rachis of the racemes and not as in *Enochoria* sessile; and in *Enochoria* there are no petals or they are at an early period caducous. The leaves are somewhat similar to those of *Schefflera affinis* Baill. The genera *Strobilopanax* and *Botryodendron* have flowers in heads, but simple leaves.

ENOCHORIA SYLVICOLA, sp. nov. *Arbor* erecta; *foliis* palmatim compositis petiolatis foliolis ± 7 majusculis membranaceis oblongis vel oblongo-ellipticis

25–30 cm. × 8–10 cm., nervis lateralibus creberrimis ab costa angulo fere recto abeuntibus tenuibus parallelis marginem petentibus glabris subtus pallidioribus apice acutis basi cuneatis petiolulis 5–7 cm. longis; *florum capitulis* 8–12 mm. longis secus ramos paniculæ sessilibus densifloris bracteatis inflorescentia carnosula terminali sec. cl. detectorem; *floribus* polygamis in specimine hermaphroditis et femineis; *calyce* 4 mm. longo lobis 6–8 acutis 1.5 mm. longis; *ovario* 6–8-loculari stylis crassiusculis brevibus erectis vel suberectis ovulis in quoque loculo solitariis ab apice pendulis.

Canala; moist forests, schists; 1336. In flower June. Crown of large digitate leaves which are thin medium green. Terminal fleshy inflorescence. Flowers dull yellowish.

APIOPETALUM ARBOREUM Bak. fil., sp. nov. *Arbor* sec. cl. detectorem 30-pedalis; *foliis* obovatis vel elliptico-obovatis 25–30 cm. × 12–14 cm. subcoriaceis glabrescentibus margine insigniter et patenter serratis basi in petiolum 5–6 cm. longum attenuatis apice breviter acuminatis; *floribus* in umbellas compositas digestis umbellulis multifloris; *bracteis* 10–16 mm. longis angustis; *pedicellis* hirtis; *calycis lobis* 0.5 mm. longis triangularibus; *petalis* delapsis; *disco* conico crassiusculo; *ovario* 2-loculari extus hirto stylis brevibus connatis; *fructu* immaturo subduplo longiori quam lato.

Mont Mou; frequent on edge of summit forest; 3500 ft., serpentine. 633.

This differs from *A. velutinum* Baill. in being a tree 30 ft. high and having much broader leaves which are glabrescent.

POLYSCIAS BOTRYOPHORA Harms. Mts. to north of R. Ngoyé; lowland serpentine scrub and forest margin; 1000 ft. 2062 a. Small tree ≤ 12 ft. Crown of thick leaves. Inflorescence terminal, dark brown. ♀. Also same locality; 2062. Small tree < 12 ft. ♂. Taom; riverside pebbles; serpentine; 2321. Small tree.

P. SCHLECHTERI Harms. River Comboui; among rocks in river-bed; 500 ft., serpentine. 2198. Small tree. Inflorescence terminal. Petals deep red-brown, recurved. Anthers buff. Sweet-scented.

GAMOPETALÆ.

By SPENCER LE M. MOORE.

RUBIACEÆ.

BIKKIA FRITILLARIOIDES Schlechter. Nekando; serpentine scrub; 2000 ft. 2118. Shrub 4 ft. Flowers pendent, scentless. Corolla scarlet, slightly darker at base.

BIKKIA FULGIDA S. Moore, sp. nov. *Frutex* elatus fere trimetralis; *ramulis* validis glabris cortice purpureo-brunneo nitido obductis; *foliis* obovato-oblongatis basi in petiolum crassum gradatim extenuatis apice rotundatis coriaceis utrobique glabris costa media subtus optime eminente costis lateralibus paucis nequaquam conspicuis usque 17 cm. long., pet. 2 cm.; *stipulis* latis truncato-rotundatis 4 mm. long.; *floribus* in cymis extra-axillares plurifloras foliis breviores dispositis pedunculo usque 2.5 cm. long. pedicellis 2-3-nis 12-15 mm. long. fultis; *ovario* infundibuliformi quam pedicellus brevior; *calycis* segmentis oblongis vel obtusiusculis carnosulis glabris 4-6 mm. long.; *corolla* majuscula 5-mera dependente tubo campanulato-infundibulari intus prope basin piloso fere 5.5 cm. long. lobis late triangularibus obtusis 8 mm. long.; *filamentis* ima basi villosulis alibi glabris compressis 33 mm. long. antheris anguste linearibus inclusis 12-14 mm. long.; *stylo* corollæ tubo æquilongo glabro; *stigmatibus* clavellatis.

Baie Kuakué; abundant in serpentine scrub; 300-1000 ft. 886.

Can be told from *B. fritillarioides* Schlechter by the larger leaves, the pedunculate several-flowered inflorescences, narrower calyx-lobes and differently shaped corolla.

B. CAMPANULATA Schlechter. River Dumbéa; woods on steep slopes above stream; 200 ft.; serpentine. 814. Taom; serpentine scrub; 1000 ft. 2302. Poume; occasional in serpentine scrub; 1000 ft. 2383. Small shrub 2 ft. to tree of 25 ft. Flowers pendent, scarlet, scentless.

B. ALYXIOIDES S. Moore, sp. nov. *Frutex* fere bimetralis; *ramulis* validis 5 mm. diam. cinereis glabris foliorum mortuorum cicatricibus arcute approximatis signatis; *foliis* parvis 2.5-3.5 raro 4 cm. long. 8-10 mm. lat. anguste obovato-oblongis obtusissimis basi in petiolum brevem crassum angustatis margine cartilagineis revolutisque coriaceis utrinque glabris costis lateralibus obscurissimis; *stipulis* abbreviatis late triangularibus acutis; *floribus* in axillis superioribus solitariis vel perpaucis cymam valde abbreviatam efficientibus; *pedicellis* puberulis 5 mm. long. ovario oblongo-turbinato circiter æquilongis; *calycis* segmentis bilateraliter compressis linearibus obtusis latere interno ciliolatis 5.5-6 mm. long.; *corolla* 5-mera pendente campanulata intus basin versus pilosa ceteroquin glabra fere 5 cm. long. lobis triangularibus acutis 8.5 mm. long.; *filamentis* corollæ tubo plane brevioribus 30 mm. long. inferne pilosis antheris angustissime linearibus inclusis 11 mm. long.; *stigmatibus* clavellatis incluso 2 mm. long.

Comboui Mts.; serpentine scrub; 2500 ft. 2188.

To be referred here is 2019 from Nekando Forest, 3500-4000 ft., a small tree 25 ft. high with often broader and sometimes retuse leaves (up to 22 mm. in breadth) and cream-yellow corollas mottled with scarlet, of which the tube is a little shorter (4.5 cm. long). Distinguished from *B. campanulata*

Schlechter *inter alia* by the foliage, the smaller calyx and the straight (not twisted) anthers.

BIKKIA PARVIFLORA Schlechter & K. Krause (ex descript.). Nekando ; *Spermolepis* forest ; 1000 ft. 981. Uncommon shrub or small tree. Flowers white, pendulous, scentless.

B. ARTENSIS Guillaum. River Dumbéa ; on steep slopes above river ; 299 ft. ; serpentine. 813. Pic La ; serpentine scrub ; 1000 ft. 859.

B. TRUNCATA S. Moore, sp. nov. *Frutex* fere bimetralis ; *ramulis* fusco-brunneis glabris sat distanter cicatriciferis ; *foliis* petiolatis oblongo-oblongo-latis apice sæpissime breviter cuspidato-attenuatis ipso obtusis basi gradatim extenuatis coriaceis glabris 6-8 × 2.5-3 cm. (pet. 1 cm. long.) costis lateralibus paucis parum aspectabilibus ; *stipulis* abbreviatis truncatis ; *cymis* extra-axillaribus abbreviatis paucifloris pedunculo 5 mm. long. floribus solitatis vel binatis oriundis pedicello 5 mm. long. ; *ovario* turbinato 3 mm. long. ; *calycis* segmentis ovario circiter æquilongis subæqualibus compressis subulatis dorso carinatis ; *corolla* 4-meia tubuloso-campanulata ore truncato-undulata inferne transversim rugosa intus prope basin pubescente 3.5 cm. long. ; *filamentis* vix 30 mm. long. deorsum compressis pubescentibusque antheris inclusis anguste linearibus tortis 5.5 mm. long. ; *stylo* incluso 31 mm. long. stigmatate satis tenui bifido coronato.

Cap Bocage ; occasional in serpentine scrub ; 800 ft. 1391.

The smallish truncate corollas afford an easy means of recognising the species. To this belongs 1108 from Baie Mackan, Canala, serpentine scrub, 80 ft. Besides flowers these bear turbinate, sulcate, glabrous, shining fruits 7-8 × 4-5 mm.

B. COMPTONII S. Moore, sp. nov. *Frutex* circiter bimetralis ; *ramulis* validis quadrangularibus brunneis subdistanter cicatriciferis ; *foliis* breviter petiolatis late obovatis apice rotundatis nonnunquam retusis basi cuneatis tenuiter coriaceis glabris pag. utraque costa media uti costæ laterales perspicua 10-11.5 × 6.5-7 cm. (pet. 12-15 mm. long.) ; *stipulis* a basi lata triangularibus acuminatis 6 mm. long. ; *floribus* axillaribus solitariis pedicellis ovario paullulum brevioribus fultis ; *ovario* 16 mm. long. cylindrico-turbinato quadrangulati glabro ; *calycis* limbo 4 mm. long. glabro satis bene evoluto lobos subulatos vix semixequante ; *corolla* inferne cylindrica transversimque rugosa circiter a medio campanulatim amplificata 6.5 cm. long. lobis 4 latissime triangularibus apice brevissime cuspidulatis ægre 1 cm. long. ; *filamentis* usque medium pubescentibus 4 cm. long. antheris inclusis anguste oblongis obtusis rectis 2.3 cm. long. ; *stylo* incluso apicem versus piloso 5 cm. long. ; *stigmatate* incurvo vix ampliato.

Isle of Pines ; sub-littoral zone. 2259.

This is much like *B. mariannensis* Brongn., which has narrower and thinner leaves, differently shaped calyx segments, a still longer corolla and an elongated, clavate stigma.

LINDENIA VITIENSIS Seem. River Tchiem; creekside; 200 ft. 1978. Western Polynesia.

LUCINÆA NEOCALEDONICA S. Moore, sp. nov. *Frutex* scandens, sursum foliosus aliquanto viscidus; *ramulis* subteretibus striatulis minute puberulis; *foliis* vulgo 3.5-4 × 1.8 cm., breviter petiolatis ellipticis vel anguste oblongo-ovatis utrinque obtusis crassiusculo-coriaceis microscopice puberulis pag. sup. nitidis costis lateralibus paucis inconspicuis; *stipulis* petiolos longit. superantibus (5-9 mm. long.) connatis apice rotundatis; *capitulis* adusque 18 (sæpe vero paucius) -floris 7-8 mm. diam.; *ovario* 1 mm. long. breviter cylindraceo succo resinoso implicato; *calyce* cupulari ovarium adæquante; *corollæ* 5 mm. long. tubo ex calyce eminente a medio leviter ampliato extus puberulo intus in faucibus villosa lobis tubum æquantibus ovato-oblongis apice incrassatis recurvis quoque basi pilorum pulvino prædito; *antheris* semi-exsertis subsessilibus faucibus insertis oblongis acutis 1.5 mm. long.

No note of locality. 2304. The corollas examined were pierced by some insect, and the styles of such flowers could not be found.

No. 2368 from Poume, serpentine scrub, 500 ft., with somewhat smaller and relatively broader leaves, is to be referred here.

This Malayan genus has recently been reported from New Guinea (Valeton in Nova Guinea, Bot. viii. 462; Wernham in Trans. Linn. Soc., Bot. ser. 2, ix. 71), and its further extension to New Caledonia is a fact of some interest.

TARENNA LEIOLOBA S. Moore, comb. nov. (*Chomelia leioloba* Guillaum. ex descript.) Plaine des Lacs; *Dacrydium-Casuarina* association on dry slopes. 373.

Until quite recently this genus was not known to occur in New Caledonia, although it extends from India through the Archipelago to Australia and Polynesia. Guillaumin (Not. System. iii. 162) records four New Caledonian species.

RANDIA NGOYENSIS Hutchins. ms. in Herb. Kew. (*Gardenia ngoyensis* Schlechter). River Comboui; creekside forest in alluvial plain; 50 ft. 2226. Small tree 20 ft. Corolla white, scentless.

R. COMPTONII S. Moore, sp. nov. *Frutex* glaber, bimembris; *ramulis* subteretibus subdistanter foliosis; *foliis* (4-11 × 3-5.5 cm.) petiolatis ovatis vel ovato-oblongis obtusis nisi obtusissimis basi cuneatis coriaceis supra nitentibus costa media facie utraque facile aspectabili costis lateralibus utrinque 8-9 tenuibus pet. 1-2.5 cm. long.; *stipulis* ovatis acutis vel breviter acuminatis usque 7 mm. long.; *cymis* 3 × 3 cm. brevibus pedunculatis axillaribus

vel terminalibus paucifloris pedunculis 1.5–2.5 cm. long.; *bracteis* \pm 3 mm. long. parvis late subulatis pedicellis æquilongis; *ovario* ovoideo glabro 2.5 mm. long.; *calycis* limbo cupulari 2 mm. long. breviter dentato; *corolla* in sicco nigrescenti pro genere parva hexamera hypocraterimorpha tubo late oblongo quam lobi ovato-oblongi obtusi recurvi 5 mm. long. duplo brevior; *staminibus* ore corollæ insertis antheris subsessilibus oblongis obtusis 3 mm. long.; *ovario* 2-loculari; *ovulis* pluribus placentæ brevi affixis; *stylo* exserto 5.5 mm. long.; *stigmatibus* anguste clavato 2 mm. long.

Callitris forest by River Comboui; 100 ft.; serpentine. 2150.

In foliage most like *R. nigricans* Schlechter among New Caledonian species, but with several differences. It is more like the Australian *R. densiflora* Benth.

GARDENIA MOLLIS Schlechter. Ignambi; forest; 1000 ft.; gneiss. 1646.

The specimen is in fruit (without flowers) and for this reason, fruit being so far unknown, the identification is somewhat doubtful. Moreover Schlechter defines the species as a shrub, whereas Mr. Compton notes his specimen as from a "medium-sized tree," but perhaps Schlechter's material came from a precociously flowering source. The indumentum, a remarkable feature it may be noted in the genus, is identical in both cases. The hirsute fruit, apparently not yet ripe, is ovoid or ovoid-oblong, nearly or quite 2.5 cm. long by 12–13 mm. broad, and provided with a straight beak, 1–1.5 cm. in length, which is crowned by the persistent calyx.

No. 1237 from Mont Canala, moist forest 3000 ft., also in fruit, must be a variety of this if not a distinct and allied species. With broader leaves obtuse at base on petioles of 1–2 cm. and hairy all over the underside instead of on the nerves only, the latter contingency would seem the more probable. The sessile fruits are less hairy than those of the other specimen.

G. CERIFERA S. Moore, sp. nov. *Frutex* vel *arbuscula*, maxime viscida; *ramulis* saltē superne bene foliosis aliquanto tetragonis; *foliis* amplis 12–17 × 5.5–7.5 cm. petiolatis oblongo-ovatis apice cuspidato-attenuatis ipso obtusis basi obtusis coriaceis pag. utraque nitentibus costis lateralibus utrinque circiter 10 optime perspicuis perpauca proximalibus interdum oppositis (pet. \pm 1 cm. long.); *stipulis* 5 mm. long. cupulatis apice acutis; *floribus* in axillis superioribus solitariis pedunculatis 5-meris pedunculis 10 mm. long.; *ovario* anguste oblongo-ovoideo quam pedunculus paullo longiore; *calycis* lobis conspicuis foliosis 23 mm. long. obovato-spathulatis obtusissimis uti partes juveniles succa resinosa copiose obductis; *corollæ* albæ tubo superne gradatim ampliato calycis lobis æquilongis lobis ovato-oblongis obtusissimis quam tubus paullo longioribus (27 mm. long.); *antheris* inclusis; *stylo* breviter exserto 25 mm. long.; *stigmatibus* fusiformi apice bifido 5 mm. long.

River Comboui; *Callitris* forest; 200 ft.; serpentine. 2160.

Conspecific with this is Schlechter 1511, distributed and noticed (Engl. Bot. Jahrb. xxxix. 256) as *Gardenia lucens* Panch. & Sebert, a species

described as having oblong or lanceolate leaves 6×2 cm., sessile flowers, a toothed calyx and fruit the size of a "petite noix." There is no specimen of this in our herbaria, and though apparently allied to, it is manifestly different from Mr. Compton's plant.

To be referred here is:—No. 1012, River Ngoyé, *Casuarina* forest, 500 ft., serpentine; with smaller leaves ($6-10 \times 3-5$ cm.) and smaller calyx lobes (18×10 mm.). This is noted as a shrub or small tree with calyx persistent on the large orange-coloured fruit. The young resinous buds are chewed by the natives to produce a kind of sealing-wax.

GARDENIA SYLVESTRIS S. Moore, sp. nov. *Frutex* nisi *arbuscula* usquebimembris ramosa novellis puberulis floribusque exemptis glabra; ramulis erecto-ascendentibus deorsum nudis vel potius stipulis fuscis persistentibus præditis sursum paria foliorum pauca emittentibus glabris; foliis $2.5-5.5 \times 1.2-2.2$ cm. oblongo-oblanccolatis obtusissimis basi in petiolum brevem (2-3 mm. long.) cuneatim coartatis utrobique succam resinosa copiose efferentibus costa centrali pag. utraque optime eminente costis lateralibus utrinque circa 8 parum visibilibus inferioribus 2 sæpe oppositis suboppositisve; stipulis 2-3 mm. long. connatis abbreviatis truncatis diu persistentibus; floribus subsessilibus ex axillis summis solitatem oriundis; ovario turbinato calycis limbo paullo brevioribus; calycis lobis 5-7 mm. long. foliosis lineari-oblongis acutis vel obtusiusculis uti ovarium puberulis necnon valde resinosis; corolla alba suaveolente extus puberula intus juxta medium pilosa tubo subcylindrico (superne leviter gradatimque dilatato) 21 mm. long. lobis obovatis apice rotundatis quam tubus plane brevioribus (13×10 mm.); antheris fauci affixis breviter exsertis apice uncinulatis 13 mm. long.

Port Déspointes; woods. 225. There is doubt about the style which, in the case of the only flower examined, is perhaps not the entire organ: this measures to the tip of the 2-armed stigma only 5.5 mm. in length.

Evidently near *G. noumeensis* Schlechter & K. Krause, according to the description differing from it in the obtuse leaves, the calyx with lobes only half as long, the tube of the corolla quite or nearly twice as long and lobes much shorter than the tube, instead of equalling it in length or almost so, and finally in the stamens half as long again. As far as the incomplete description goes, it shows much agreement with *G. lucens* Panch. & Sebert, except that the calyx of this is said to be 5-toothed, certainly not a possible account of the foliaceously lobed calyx of *C. sylvestris*.

Conspecific with this are Deplanche 395 and Vieillard 2747 (neither number cited by Guillaumin), named at Kew "*Gardenia Fitzalanii* F. Muell." an entirely different plant.

ATRACTOCARPUS CUCUMICARPUS S. Moore, sp. nov. *Arbuscula*; foliis (uno solum viso) magnis breviter petiolatis ovato-oblongis obtusissimis basi late

rotundatis margine undulatis 30 × 14 cm. pergamaceis utrobique uti inflorescentia glabris costa media crassa maxime perspicua costis lateralibus utrinque 12–13 mediocriter visibilibus proximalibus oppositis vel suboppositis distalibus alternis; *stipulis* —; *cymis* axillaribus perpaucifloris usque 30 cm. long.; *foliis floralibus* amplis sessilibus basi cordatis apice rotundatis ipso mucronulatis 2–8 × 1–4 cm.; *ovario* cylindrico longitrorsum costato glabro 3 mm. long.; *calycis* circa usque medium divisi 3 mm. long. lobis ovatis acuminatis margine ciliatis; *corollæ* albæ tubo sursum gradatim leviterque amplificato 21 mm. long. lobis ovato-oblongis acutis tubum adæquantibus; *staminibus* fauci affixis; *antheris* inclusis; *stylo* incluso 13 mm. long.; *stigmatibus* ramis lineari-lanceolatis acutis 7 mm. long.; *fructu* (haud viso) “elongato, cucumerino, basi apiceque angustato, 10 unc. longo.”

Cap N'dona; littoral zone. 866.

Schlechter (Engler Bot. Jahrb. xl. 43) proposed the genus for a New Caledonian plant differing from *Randia* only in the long hard woody fruits. This plant (*A. bracteatus* Schlechter) he describes as having, compared with the present plant, smaller narrowly oblong shortly acuminate rigidly coriaceous leaves, smaller bracts (floral leaves), dentiform calyx lobes, a longer ovary at time of flowering and a smaller fruit. *Randia Brandzeana* Baill. (*Adansonia*, xii. 244) would appear to be a congener, and Guillaumin (*Not. System.* ii. 195) suggests that two species referred by Baillon (in MS. only) to *Genipa* belong to this genus.

ATRACTOCARPUS OBLONGUS S. Moore, sp. nov. *Frutex* elatus, fere bimetralis, glaber; *ramulis* validis cortice longitrorsum rimoso griseo-brunneo circumdatis; *foliis* 18–22 × 4.5–5.5 cm. oblongis obtusis vel obtusissimis basi in petiolum brevem cuneatim attenuatis coriaceis costa media pag. utraque optime aspectabili costis lateralibus utrinque circa 10 alternantibus proximalibus raro oppositis vel suboppositis; *stipulis* elongatis (3 cm. long.) lineari-lanceolatis acutiusculis mox dehiscentibus; *cymis* axillaribus perpaucifloris pedunculis ancipitibus quam folia certe brevioribus insidentibus floribus congestis; *foliis floralibus* approximatis suborbicularibus tenuiter coriaceis 2 cm. long.; *bracteis* 4 mm. long. ovatis obtusis margine ciliatis pedicellum brevem (2 mm. long.) vaginantibus; *ovario* subcylindrico quam calycis limbus longiore 7 mm. long.; *calycis* 3.5 mm. long. limbo tubuloso segmenta late deltoidea acuta margine ciliata excedente; *corollæ* albæ 5-meræ tubo infundibulari a medio gradatim amplificata 22 mm. long. lobis ovato-oblongis obtusissimis tubo vix æquilongis; *staminibus* inclusis antheris lineari-oblongis acutis 5.5 mm. long.; *stylo* 13 mm. long.; *stigmatibus* fusiformi breviter 2-ramoso apice solummodo exserto.

Plaine des Lacs; Kaori Forest; 600 ft.; serpentine. 395. Although without fruit, there seems no room for doubt concerning the genus to which this very distinct plant belongs.

TIMONIUS NGOYENSIS Schlechter. Nekando; *Spermolepis* forest; 1000 ft.; serpentine. 985. Small diffuse tree. Fruit with 5 carpels and 8 seeds in one row to each carpel: hard, stony endocarp.

T. *PLATYCARPUS* Montrouz. Baie Uié; serpentine scrub; 50 ft. 856. Nekando, *Spermolepis* forest; 1000 ft.; serpentine. 982. River Ngoyé; among rocks in stream-course; serpentine; 400 ft. 2094. Port Bouquet; lowland riverside serpentine scrub; 50 ft. 2243. Shrub or small tree up to 15 ft. Corolla white speckled with pink, or pink or red with the limb white. The female flowers have a 10-celled ovary, the hermaphrodite a 3-celled.

CYCLOPHYLLUM CYMOSUM S. Moore, sp. nov. *Frutex* glaber vel arbuscula; *ramulis* subteretibus fuscis; *foliis* amplis sessilibus subsessilibusve ovatis basi late rotundatis tenuiter coriaceis costis lateralibus paucis mediocriter conspicuis 12–13.5 × 5–6 cm.; *stipulis* triangularibus acuminatis usque 6.5 mm. long.; *floribus* in cymas breves axillares pedunculatas plurifloras foliis multo breviores (4 × 4 cm.) dispositis; *bracteis* parvis triangularibus acutis quam pedicelli paullo brevioribus; *ovario* 1.5–2 mm. long. turbinato pedicello ægre æquilongo; *calycis* limbo 1 mm. long. dentibus deltoideis acutis; *corollæ* hypocraterimorphæ tubo elongato 15 mm. long. sub limbo leviter ampliato ceterum cylindrico intus glabro lobis 5–6.5 mm. long. ovato-oblongis obtusis; *staminibus* fauci insertis antheris subsessilibus apice ex ori eminente oblongis obtusis 3 mm. long.; *stylo* corollæ vix æquilongo glabro; *stigma* pyriformi culmine excavato; *ovulo* ex apice ipso loculi pendente.

Ignambi; forest; 1500–2000 ft.; gneiss. 1681.

Being reluctant to describe this very distinct plant as the type of a new genus, it is proposed to place it in *Cyclophyllum* Hook. f., from which it differs in two points, namely the cymose (not solitary) flowers and the corolla with a naked throat, both of them, it must be admitted, characters of importance in Rubiaceæ. Hooker's type species, *C. Deplanchei*, has, as Baillon (*Adansonia*, xii. 183 *sqq.*) shows, several New Caledonian congeners; but the French botanist regards *Cyclophyllum* as a section merely of *Canthium*, thereby failing to recognise, besides the large corollas, two important differences, the pyriform stigma and the apical (not septal) insertion of the ovules.

MERISMOSTIGMA, *Rubiacearum* tribu *Vangueriearum* genus novum.

Calycis limbus cupularis, obscure denticulatus. *Corolla* subrotata lobis quam tubus latus longioribus, tubo intus pulvinis 5 lobis oppositis prædito. *Stamina* 5, corollæ ori affixa, filamentis brevibus antheris dorso affixis lineari-oblongis obtusis exsertis. *Discus* elevatus, prominens. *Ovarium* 2-loculare; *stylus* filiformis; *stigma* biramosum. *Ovula* in loculis solitaria, ab apice septi pendula. *Fructus* ——. *Arbuscula* glabra, in sicco fuscescens. *Ramuli* crebro foliosi. *Folia* petiolata, tenuiter coriacea. *Stipulae* breves, connatae, diutule persistentes. *Flores* submediocres, pedicellati, in cymas pedunculatas,

umbellatas, bracteatas, plurifloras, axillares et terminales digesti, ita paniculam terminalem referentes.

MERISMOSTIGMA NEOCALEDONICUM S. Moore, sp. unica. (Pl. 20.) *Ramulis* subteretibus ad nodos tumidis distanter cicatriciferis; *foliis* 7-10 × 2.5-4 cm. oblongo-oblanceolatis vel oblongo-obovatis obtusis nisi obtusissimis nunquam retusis basi cuneatim angustatis pag. utraque pallide nitentibus costis secundariis paucis mediocriter aspectabilibus petiolis 1-1.5 cm. long.; *stipulis* vix 3 mm. long.; *cymis* foliis ultimis imminutis circiter æquilongis (4 × 3 cm.); *pedunculis* pedicellos longe excedentibus illis 2-3 cm. iis 5 mm. long.; *bracteis* parvulis ovatis obtusis vel acutis; *ovario* fere 3 mm. long. ovoideo-turbinato quam calycis limbus paullulum longiori; *corollæ* albæ tubo ex calyce breviter eminente 4 mm. long. lobis cito reflexis oblongis obtusis crassiusculis 6 mm. long.; *filamentis* glabris 3 mm. antheris 6 mm. long.; *stylo* crassiusculo glabro 4 mm. long.; *stigmatis* ramis angustè linearibus obtusis.

Ignambi; forest; 2000 ft.; gneiss. 1482.

The chief characteristics of the genus are the inflorescence and the biramose stigma, the latter a very unusual feature of the *Vanguerieæ*.

IXORA YAHOUENSIS Schlechter. (*I. neocaledonica* Hochreut.) Mont Canala; forest; 2000 ft.; mica schist. 1115. Shrub 6 ft. Corolla with crimson tube and white spreading limb.

I. CAULIFLORA Montrouz. (ex descript.). River Ngoyé; frequent in *Spermolepis* forest; 350 ft.; serpentine. 1025. Small tree. Flowers from main stem on protruding lumps of callus: tube crimson at base, fading off to white at mouth. Stigmas pink. The specimen agrees well with the description so far as concerns the leaf, but the corollas are a little short. A main feature separating this species from others which are cauliflorous is the acute ending of the leaves.

I. KUAKUENSIS S. Moore, sp. nov. *Arbuscula* 8-metralis, glabra; *trunco* cortice griseo circumdato; *ramulis* compressiusculis saltem sursum foliatis; *foliis* 24 × 6.5 cm. valide petiolatis (pet. 2.5 cm. long.) oblongo-oblanceolatis obtusissimis basi gradatim angustatis coriaceis pag. sup. nitidis prominenter reticulatis costis lateralibus pluribus (utrinque circa 20) interjectis aliis brevioribus sed pariter prominentibus; *stipulis* triangularibus acutis quam petioli certe brevioribus (8 mm. long.); *cymis* paucifloris in trunco sessilibus; *pedicellis* ovario sæpius longioribus basi vel juxta medium vel apice bracteatis; *ovario* 1.5 mm. long. turbinato calyci tubuloso 4-dentato æquilongo; *corollæ* 4. cm. long. 4-meræ tubo calycem multoties superante quam lobi oblongi acuti 4-plo longiore; *staminibus* ori affixis exsertis filamentis quam antheræ 5 mm. long. brevioribus; *stigmatæ* primo fusiformi apiceque bifido dein e ramis 2 lineari-lanceolatis sistente.

Kuakué; forest on edge of alluvium; serpentine; 50 ft. 928.

Var. *BREVIFLORA*. A typo divergens solummodo ob flores breviores circa 2.5 cm. long. Mont Dore; valley forest; 200 ft.; serpentine. 845. Small tree 20 ft. Corolla with pink tube and white limb.

The species is easily distinguished from *I. cauliflora* Montrouz. by the blunt, more lengthily stalked leaves and the markedly pedicelled flowers.

IXORA FLORIDA S. Moore, sp. nov. *Frutex* 2½-metralis, glaber; *ramulis* sat validis cortice cinereo obductis foliorum cicatricibus prominentibus onustis; *foliis* 8–12 × 4.5–5.5 cm. ovato-oblongis ovatisve obtusis vel retusis basi in petiolum latum ± 10 mm. long. coartatis crasse coriaceis supra leviter nitidis costis lateralibus utrinque circa 8 parum prominulis reticulo submediocriter visibili; *stipulis* petiolis brevioribus (5 mm. long.) late ovatis acutis; *cymis* terminalibus paniculatis foliis circiter æquilongis multifloris; *floribus* 4-meris pedicellis ± 10 mm. long. bracteatis calyces facile excedentibus fultis; *ovario* 2.5 mm. long. turbinato calycem subæquante; *calycis* limbo fere basin usque diviso segmentis oblongis obtusissimis apice sæpe recurvis; *corollæ* albæ tubo elongato (31.5 mm. long.) lobos ovato-oblongos acutos 4-plo excedente; *staminibus* exsertis ore corollæ insertis; *stylo* exserto stigmatibus 2-ramoso coronato 36 mm. long.

Plaine des Lacs; uncommon on banks of Riv. du Carénage; serpentine; 600 ft. 300.

Var. *ANGUSTA*. *Folia* anguste oblongo-ovata, plerumque 8–11 × 2.5–3.5 cm. Ceteroquin uti in typo. Mont Dore; abundant in 12-foot scrub, 2000 ft.; serpentine. 692.

I. florida is evidently near *I. Francii* Schlechter & K. Krause judging from the description of the latter: the chief points of difference are seen in the longer-pedicelled flowers of *I. florida* and the obtuse segments of the calyx.

I. COMPTONII S. Moore, sp. nov. *Arbuscula* fere 5-metralis; *ramulis* validis glabris cortice cinereo obductis superne foliosis; *foliis* plerumque 11–20 × 6.5–9 cm. brevipetiolatis late ovato-oblongis apice rotundatis nisi obtusissimis vel subito cuspidulatis basi rotundato-cordatis pergamaceis costis pag. inf. ferrugineis exemptis glabris costis lateralibus utrinque 9–11 mediocriter visibilibus; *stipulis* ovatis acuminatis cito deciduis; *cymis* 4–6 × 7–10 cm. foliis brevioribus paniculatis multifloris; *pedicellis* circa 1 mm. long. bracteis subulatis 2–3 mm. long. onustis; *ovario* oblongo-ovoideo calyce brevioribus; *calycis* limbo 4-lobo 2.5 mm. long. lobis obtusis dorso carinulatis; *corollæ* puniceæ 4-meræ amygdalodoræ tubo superne levissime ampliato 27 mm. long. lobis ovato-oblongis acutis vel obtusis quam tubus plusquam 4-plo brevioribus; *staminibus* ore corollæ affixis antheris 5 mm. long. filamentis manifestis suffultis; *stylo* breviter exserto; *stigmatibus* ramis lineari-lanceolatis acutis.

Ignambi; creekside forest; 1000 ft.; gneiss. 1604.

This can be distinguished at a glance from *I. coccinea* L. by the foliage and the obtusely ending buds of the flowers.

PAVETTA OPULINA DC. Île Mouac; abundant in moister Niaouli association; sea-level. 2352. Shrub 6 ft. Corolla white, with slight scent. Western Polynesia.

COFFEA ARABICA L. Mont Mou; forest margin, 1000 ft.; serpentine. 469. Doubtless an escape from cultivation.

MORINDA CITRIFOLIA L. Baie Kuakué; uncommon in littoral zone. 880. From India through the Archipelago to Australia and Polynesia. Frequently cultivated.

M. FORSTERI Seem. Ouen Toro; in *Acacia spirorbis* woods; 0-500 ft. 775. Woody climber; stout stems. Fruits slightly fleshy with a few hard seeds. Polynesia.

M. FALLAX Schlechter. Mont Mou; edge of damp gully forest; cretaceous; 800 ft. 546. Liane reaching about 10 ft. Corolla white.

M. PHILLYREOIDES Labill. Taom; serpentine scrub; 2500 ft. 2344. Small shrub 2 ft. Flowers white, scented.

M. LIGUSTRINA S. Moore, sp. nov. *Arbuscula* glabra habitu fruticoso; ramulis sat gracilibus inferne nudis cicatricibusque foliorum delapsorum frequenter signatis brunneis superne crebro foliosis et saltem in sicco fuscis; foliis parvis $\pm 15 \times 7$ mm. raro usque 2.5 cm. long. petiolatis oblongo-ovatis obtusis basi obtusis firme membranaceis costis lateralibus utrinque 4-5 ut reticulum laxum inconspicuis pet. 4-5 mm. long.; stipulis connatis acutis sursum membranaceis necnon cito deciduis deorsum coriaceis decoloribus diutuleque persistentibus 1.5 mm. long.; capitulis axillaribus 2-3-floris (floribus revera interdum solitariis) breviter pedunculatis; ovario 2.5 mm. long. ovoideo calyce longiore; calyce tubuloso ore undulato-denticulato; corolla 4-mera 7 mm. long. in alabastro ampullæformi fere usque medium in lobos lineari-lanceolatos obtusos crassiusculos divisa intus minute puberula; staminibus juxta medium tubum insertis inclusis; stylo incluso glabro 3 mm. long.; stigmatibus ramis lineari-oblongis obtusis stylo subæquilongis; ovulo septo affixo.

Ignambi; scrubby summit forest, 4250 ft.; gneiss. 1580.

In appearance much like *M. phillyreoides* Labill., but smaller generally in the foliage and very different in flower.

PSYCHOTRIA SPECIOSA S. Moore, comb. nov. (*Mapouria speciosa* Beauvis. ex descript.) Mont Dore; *Casuarina* association; 300 ft.; serpentine.

840. Kuakué; abundant in alluvial plain forest; serpentine; 50 ft. 893. Comboui Mts.; forest near creek; 2500 ft.; serpentine. 2180. Shrub 5-6 ft. Corolla rose or pink, scentless. Berries spherical, blue-violet.

Var. LONGIFOLIA, var. nov. A typo discrepat ob folia longiora (usque ad 18×5 cm.) costa rubiginosa percursa, filamenta longiora ita stamina longius exserta, stigmatibus ramos, duplo longiores tenuioresque.

Riv. Ngoyé; in *Casuarina-Agathis* forest; 400 ft.; serpentine. 2061. Shrub 6 ft. Flowers rosy-red, scentless.

PSYCHOTRIA SUAVEOLENS S. Moore, sp. nov. *Frutex* bimetralis, glaber; *ramulis* tenuibus inferne cicatriciferis superne foliosis; *foliis* $4-6 \times 1.2-2$ cm. lanceolatis vel lanceolato-oblongis apicem versus sæpe acuminatis apice ipso obtusis vel acutis basi in petiolum $1-2$ cm. long. attenuatis membranaceis pagina utraque opacis costis lateralibus utrinque circa 6 inconspicuis; *stipulis* inter se liberis triangularibus acutis $2-3$ mm. long.; *floribus* 5-meris inter minores in cymam pedunculatam laxè trichotomam 3.5×4 cm. digestis; *pedicellis* filiformibus quam flores interdum brevioribus interdum usque 1 cm. long. bracteeas parvulas excedentibus; *ovario* 1 mm. long. turbinato quam calyx cupularis obscure denticulatus longiore; *corollæ* albæ tubo infundibulari intus in medio pubescente 7 mm. long. quam lobi ovato-oblongi obtusi paullo longiore; *antheris* juxta medium tubum insertis inclusis 2.5 mm. long.; *stylo* exserto ramis stigmatibus prominentibus coronato 8.5 mm. long.

Paompai; forest; 500 ft.; locally frequent. 1890.

Judging from Baillon's description, this must be near his *Uragoga ligustrina*, which is said to have oblong-obovate subcoriaceous leaves shining on the upper side, connate stipules, subdichotomous cymes, and a smaller "tubular" corolla. The flowers, although white when living, dry red, and this gives the specimens somewhat the appearance of *P. speciosa*, a plant in several respects diverse.

P. RUPICOLA Schlechter. Kuakué; 50 ft.; *Spermolepis* forest by river. 947. Nekando; *Spermolepis* forest; 500 ft. 2115. Unbranched, 3 ft., but certainly gets bigger than that. Inflorescence white. Corolla white with white hairs in throat.

P. COMPTONII S. Moore, sp. nov. *Fruticulus* ramosus metralis; *ramulis* subteretibus superne crebro foliosis in sicco nigrescentibus puberulis cito glabrescentibus; *foliis* $10-14 \times 2.5-5$ cm. lanceolato-ellipticis vel oblongo-obovatis apice breviter lateque acuminatis ipso obtusis basi in petiolum $1.5-2$ cm. long. extenuatis coriaceis supra glabris opacisque subtus minutissime argenteo-lepidotis; *stipulis* connatis canlem laxè vaginantibus apice obtusis margine ciliolatis $5-8$ mm. long.; *floribus* breviter pedicellatis in

paniculam cymosam laxam pluries trichotomam crebro bracteata puberulam 10 × 10 cm. ordinatis ramulis ultimis griseo-pubescentibus cymulam 2-3-floram ferentibus; *bracteis* 1.5-5 mm. long. oblongo-lanceolatis obtusis acutisve pedicellis longioribus; *ovario* oblongo-ovoideo griseo-pubescente quam calyx brevior; *calyce* 2.5 mm. long. campanulato fere glabro vix usque medium 5-lobo lobis ovatis obtusis; *corollæ* 5-meræ tubo 7.5 mm. long. infundibulari extus griseo-pubescente intus ore faucibusque villosa quam lobi oblongi obtusissimi ter longiore; *antheris* faucibus affixis oblongis obtusis inclusis 2 mm. long.; *stylo* incluso glabro 8 mm. long.

Cap Bocage; frequent in serpentine scrub; 100-1300 ft. 1373.

This is near *P. rupicola* Schlechter, but the latter's foliage, pedicelled flowers, calyx and corolla diverge in several respects.

PSYCHOTRIA FRONDOSA S. Moore, sp. nov. *Arbor* 9-metralis; *ramulis* validis compressis sursum foliosis uti inflorescentia et innovationes tomento ferrugineo vestitis deinde glabrescentibus; *foliis* 9-20 × 3.5-10 cm. amplis petiolatis ovatis apice sæpe cuspidato-attenuatis ipso obtusis basi cuneatis pergamaceis pag. sup. mox glabris pag. inf. in costis ferrugineo-pubescentibus; *stipulis* circa 3 mm. long. quam petioli multo brevioribus connatis cupularibus apice breviter dentatis diutule persistentibus; *floribus* sessilibus in cymam bis trichotomam paniculatam satis longe pedunculatam 7-9 × 5.5-7 cm. e cymulis pluribus plerumque 5-7-floris constantem dispositis; *bracteis* circa 2 mm. long. latissime rotundatis margine undulatis uti flores extus ferrugineis; *ovario* 1 mm. long. obovoideo quam calyx campanulatus ore breviter dentatus duplo brevior; *corollæ* albæ tubo infundibulari intus (basi exempta) pubescente quam lobi ovato-oblongi obtusi duplo longiore 12 mm. long.; *antheris* inclusis paullo infra fauces affixis oblongis obtusis 3 mm. long.; *stylo* incluso minute pubescente 7.5 mm. long.; *stigmatibus* ramis lineari-oblongis obtusis.

Mont Canala; forest; 1000 ft.; frequent; mica schists. 1176.

Recognised among New Caledonian species by the peduncled open inflorescences composed of flowers packed closely together in stalked few-flowered cymules—this together with the foliage and the indumentum.

P. PUBITUBA S. Moore, sp. nov. *Frutex* vel arbuscula; *ramulis* validis primo uti inflorescentia sparsim fulvo-velutinis cito glabris siccitate nigrescentibus; *foliis* 20 × 7.5 cm. longæ valideque petiolatis (pet. 6 cm. long.) oblongo-obovatis obtusis basi gradatim extenuatis papyraceis pag. sup. costa media prope basin ferruginea exclusa glabris pag. inf. in costis pubescentibus alibi sparsissime puberulis necnon microscopice lepidotis costis lateralibus utrinque 11 maxima pro parte oppositis vel suboppositis; *stipulis* late ovatis apice incisus dorso sparsim pubescentibus; *floribus* 5-meris in cymam laxam paniculatam pedunculatam ter trichotomam petiolis æquilongam e cymulis

multis plurifloris compositam ordinatis; *bracteis* 1.5–2.5 mm. long. ovatis obtusis acutisve; *ovario* subgloboso calyci æquilongo; *calyce* 1 mm. long. cupulari 5-dentato; *corollæ* dilute cæruleæ tubo lato subcylindrico extus dense pubescente intus infra fauces villosa 6.5 mm. long. triente sup. in lobos oblongos apice incurvo-incrassatos intus omnino extus fere omnino glabris; *staminibus* faucibus affixis exsertis filamentis 2 mm. long. quam antheræ longioribus; *stylo* breviter exserto glabro 7 mm. long.

Tonine; abundant in forest; 2000–3000 ft. 1974.

Near *P. Poissoniana* S. Moore, comb. nov. (*Uragoga Poissoniana* Baill.), but with a different indumentum, narrower leaves on shorter stalks, shorter corolla with lobes nearly glabrous outside instead of densely hairy like the tube, and stamens inserted in the throat instead of beneath it. The blue corollas, too, should be mentioned.

PSYCHOTRIA DECLIEUXIOIDES S. Moore, sp. nov. *Frutex* metralis fere omnino glaber; *ramulis* validis dichotomis cortice cinereo circumdati inferne nudis necnon intervallis brevibus prominenter cicatriciferis superne paucifoliatis; *foliis* 3–5.5 × 1.5–2.5 cm. obovatis vel obovato-lanceolatis obtusis vel obtusissimis ima basi in petiolum 5 mm. long. coartatis coriaceis supra glabris nitidisque subtus minutissime lepidotis; *stipulis* cupularibus truncatis ciliatis mox dehiscentibus; *cymis* terminalibus paniculatis 6 × 4 cm. ter trichotomis cymulis pluribus sæpius 2–3-floris floribus sessilibus brevissimeve pedicellatis; *bracteis* circa 1 mm. long. subulatis puberulis; *ovario* turbinato calyci æquilongo 7.5 mm. long.; *calyce* cupulari 5-dentato dentibus ciliatis; *corolla* sordide alba parva subrotata tubo 2.5 mm. long. cylindrico extus puberulo intus in faucibus villosa lobis oblongis obtusis tubo æquilongis; *staminibus* faucibus affixis subinclusis antheris obtusis 2.25 mm. long.; *stylo* incluso 2 mm. long.

Presqu'île Bogota; serpentine scrub; 1500 ft. 1325.

A distinct species with a fair amount of resemblance to some species of *Declieuxia*, whence the proposed trivial.

P. LAXISSIMA S. Moore, sp. nov. *Arbusecula* 8-metralis; *ramulis* aliquanto compressis cortice griseo-brunneo obductis puberulis mox glabris; *foliis* 14–16 × 5.5–5.7 cm. petiolatis (pet. 3–3.5 cm. long.) ovato-oblongis prope apicem attenuatis apice obtusis basi rotundatis levissimeque cordulatis membranaceis supra glabris subtus in costis minutissime puberulis costis lateralibus utrinque 13–14 pag. inf. magis prominentibus; *stipulis* connatis apice truncatis margine ciliolatis 4 mm. long.; *inflorescentia* pedunculata fere 20 × 14 cm. minute puberula laxissime cymoso-paniculata ramulis lateralibus ter trichotomis ramulo centrali pluries trichotomo cymulis 2–3-floris; *floribus* parvis 5-meris flore centrali sessili floribus lateralibus breviter pedicellatis; *bracteis* exiguis (circa 1 mm. long.) subulatis; *ovario* turbinato 1 mm. long. calycem cupularem denticulatum excedente; *corolla*

alba rotata tubo 1.2 × 2 mm. cylindrico intus in faucibus villosis lobis oblongo-lanceolatis apice incurvo-crassiusculis 2.25 mm. long.; *antheris* faucibus affixis breviter exsertis vix 1 mm. long.; *stylo* breviter exserto glabro 1.5 mm. long.; *stigmatis* ramis prominentibus.

Mont Canala; streamside in forest; 2000 ft.; mica schist. 1238.

In foliage this in some degree resembles *P. Baillonii* Schlechter, but the shining leaves of that species have fewer side nerves, its stipules are differently shaped, the inflorescence is greatly contracted and the flowers are considerably larger.

PSYCHOTRIA COLLINA Labill. Port Déspointes woods; Nouméa. 141. Mont Mou; margin of gully forest and Niaouli zone; cretaceous; 800 ft. 551. Flowers greenish. Inflorescence much larger and more effuse than is the case with Labillardière's co-type in the National Herbarium.

P. SUBPALLENS S. Moore, sp. nov. *Frutex* glaber ultrametralis; *ramulis* inferne subteretibus superne aliquanto compressis fere a basi foliosis pallidis; *foliis* 6.5–10 × 2–4.5 cm. lanceolatis vel lanceolato-ovatis acuminatis apice obtusis (nonnunquam retusis) basi in petiolum 3–8 mm. long. extenuatis margine leviter revolutis papyraceis costis lateralibus utrinque 6–8 pag. utraque mediocriter visibilibus; *stipulis* 2 mm. long. quadratis apice truncatis fugaceis; *cymis* terminalibus pedunculatis laxè paniculatis ter trichotomis usque 5 × 5 cm. *cymulis* pluribus plerumque 3-floris floribus breviter pedicellatis; *bracteis* 1 mm. long. subulatis; *pedicellis* 1–2 mm. long. ovarium plerumque excedentibus; *ovario* turbinato-oblongo quam calyx brevior; *calyce* 1.5 mm. long. cupuliformi ore denticulato; *corolla* parvula 4-mera tubo lato ex calyce haud eminente extus glabro intus in faucibus villosis 1 mm. long. lobis anguste oblongo-ovatis obtusis 2 mm. long.; *antheris* corollæ ori affixis exsertis fere 2 mm. long.; *stylo* vix exserto ramis oblongis obtusis; *fructu* 6 mm. long. ovoideo prominenter bicarinato calyce persistente coronato.

Mont Dore; stream-valley woods; 100 ft. 662.

Near *P. collina* Labill., differing from it in foliage and in some respects in the flowers.

P. RARIFOLIA S. Moore, sp. nov. *Frutex* vel *arbuscula* glabra; *ramulis* dichotomis in sicco nigrescentibus inferne nudis distanterque cicatriciferis superne paucifloris; *foliis* 4.5–8.5 cm. long. 2–3.5 cm. lat. breviter petiolatis oblongo-obovatis obtusis basi cuneatis coriaceis supra nitidis glabris costis lateralibus utrinque 6–10 mediocriter aspectabilibus; *stipulis* cito evanidis; *floribus* 5-meris in cymam terminalem circa 2.5 cm. in transversum sessilem oligantham (3–5) digestis pedicellis nullis vel subnullis; *bracteis* parvulis subulatis; *ovario* 2 mm. long. turbinato in longitudinem sulcato calycem

tubulosum impariter 5-dentato-lobulatum semixequante; *corollæ* albæ tubo subcylindrico (sursum gradatim leviter ampliato) extus glabro intus ore faucibusque breviter villosa alibi summum piloso 14 mm. long. lobis 9-10 mm. long. oblongis obtusis apice crassiusculis facie puberulis dorso glabris; *antheris* paullulum infra fauces insertis inclusis apiculatis 4 mm. long.; *stylo* glabro incluso 11 mm. long.

Mont Canala; forest; 2000-3000 ft.; mica schists. 1114.

Affinity with *P. microglossa* Guillaum., which it resembles a good deal in foliage, but the flowers of the two are different in several respects.

Under the same number there is a specimen, apparently conspecific, with narrower scattered pairs of leaves, longer corollas with the 18 mm. long tube sometimes much narrowed below but sometimes (on the same specimen, of course) cylindrical like that of the type, and a calyx with somewhat shorter teeth. This has ovate stipules, somewhat incised here and there and about 7 mm. long.

No. 1418 from Mont Arago, forest, 1000 ft., mica schists, has the narrow-tubed corolla just referred to: the leaves are like those of the type but somewhat smaller and, like them, dry green, whereas the scattered leaves of the other dry brownish.

PSYCHOTRIA ROSEO-TINCTA S. Moore, sp. nov. *Arbuscula* glabra fere 4-metralis; *ramulis* dichotomis cortice cinereo obductis inferne nudis necnon in nodis cicatriciferis apicem versus paucifoliosis; *foliis* 3.5-4 × 1.2-1.5 cm. oblanceolatis obtusis basi in petiolum 4-8 mm. long. breviter augustatis margine revolutis coriaceis costis lateralibus utrinque circa 4 obscuris; *stipulis* 3-4 mm. long. inter se liberis ovatis apice breviter bifidis diutule persistentibus; *floribus* 5-meris pedicellatis in cymas laxo trichotomas pedunculatas usque 5 × 5 cm. e cymulis perpauca pedunculatis 1-4-floris sistentes digestis; *bracteis* circa 2 mm. long. subulatis; *ovario* 1.5 mm. long. cylindrico quam calyx cupularis 5-dentatus paullo brevior; *corollæ* inferne albæ superne dilutissime roseæ tubo infundibulari extus et intus glabro 19 mm. long. lobis oblongis obtusis 7.5 mm. long.; *antheris* faucibus affixis inclusis 4 mm. long.; *stylo* 11 mm. long. incluso glabro; *stigmatis* ramis lineari-oblongis obtusis exsertis.

Ignambi; intermediate forest; 3000 ft.; gneiss. 1703.

To be inserted next to *P. calorhamnus* Guillaum., of which the foliage diverges in several respects.

P. CALORHAMNUS Guillaum. Poume; serpentine scrub; 400 ft.; rare. 2358. Low shrub 1 ft. Corolla white, slightly fleshy.

P. LEPIDOCALYX S. Moore, sp. nov. *Frutex* elatus 2½-metralis; *ramulis* dichotomis paucifoliosis uti innovationes ferrugineis cito glabrescentibus;

foliis 5-8 × 1.5-2.5 cm. oblanceolatis vel oblanceolato-oblongis obtusis basi in petiolum circa 7 mm. long. extenuatis margine apiceque pilosis supra glabris subtus in nervis appresse ferrugineis; *stipulis* 15-17 mm. long. oblongo-ovatis apice bifidis dorso pilis appressis strigillosis ferrugineis munitis; *cymis* usque 3 × 4 cm. terminalibus paucifloris pedunculo communi sæpius 0 vel fere 0 pedunculis ord. secundi dichotomis ord. tertii cymulam sæpissime 3-floram fulcientibus; *bracteis* circa 2 mm. long. lanceolatis; *floribus* brevissime pedicellatis; *ovario* 1 mm. long. subcylindrico uti pedicelli dense chryso-ferrugineo; *calyce* 5 mm. long. tubuloso-campanulato sparsim minuteque albo-lepidoto aliter fere glabro ore dentato dentibus ferrugineis; *corollæ* albæ 5-meræ extus dense ferrugineo-villoso tubo 14 mm. long. late infundibulari intus basin versus villosa ceterum glabro lobis ovato-oblongis obtusis 3 mm. long.; *staminibus* faucibus affixis inclusis antheris fere 3 mm. long.; *stylo* incluso glabro 11 mm. long.; *stigmatibus* ramis linearibus abbreviatis.

Ignambi; frequent in forest; 3500-4200 ft. 1583.

On comparing this with the description of *P. oubatchensis* Schlechter, two important discrepancies emerge without counting the subcapitate inflorescence, namely the stipules which are said to be short, whereas in the plant under notice they are remarkably large, and the calyx described as truncate and villous.

PSYCHOTRIA TONINENSIS S. Moore, sp. nov. *Frutex* 3-metralis; *ramulis* dichotomis inferne nudis superne sparsim foliosis uti innovationes dense ferrugineo-hirsutis subinde glabrescentibus; *foliis* 8-11 × 2.3-3 cm. petiolatis (pet. 1.5 cm. long.) oblongo-lanceolatis acutis basi obtusis margine crebro dentato-undulatis pag. sup. bullatis utrobique præsertim in nervis ferrugineo-hirsutis; *stipulis* circa 7 mm. long. fugaceis lanceolatis dorso ferrugineis; *cymis* foliis brevioribus usque 8 cm. in transversum laxè bis 2-3-chotomis ferrugineis pedunculo communi nullo cymulis pluribus plerumque 3-floris floribus sessilibus pedentibus; *bracteis* exiguis subulatis; *ovario* 1.5 mm. long. subgloboso dense ferrugineo calyci poculiformi ore denticulato sparsim hirsuto vix æquilongo; *corolla* alba 5-mera infundibulari tubo 20 mm. long. extus fulvo-vel sordide albo-villoso intus basin versus villosa alibi summum minute puberulo lobis triangularibus obtusis 4 mm. long.; *staminibus* faucibus affixis subinclusis filamentis 2 mm. long. antheris fere æquilongis; *stylo* incluso glabro 11 mm. long.; *stigmatibus* ramis plumulosis 4 mm. long.

Tonine; in forest shade; 3000 ft. 1940.

Affinity with the preceding. The bullate foliage is a striking feature.

P. GNEISSICA S. Moore, sp. nov. *Frutex* ramosus, glaber; *ramulis* inferne nudis cicatricibusque subsparsim signatis superne paucifoliatis; *foliis* 4.5-7 × 1.8-3 cm. anguste obovato-oblanceolato apice sæpe subito cuspidato-

attenuatis ipso obtusis interdum retusis basi in petiolum brevem coartatis tenuiter coriaceis costis lateralibus utrinque circa 5 tenuibus pag. sup. visu difficilibus; *stipulis* connatis ovatis apice bifidis; *cymis* 5-7 × 4-6 cm. terminalibus pedunculatis paucifloris semel vel bis 2-3-chotomis cymulis centralibus 2-3-floris floribus breviter pedicellatis; *bracteis* 2-3 mm. long. subulatis; *ovario* 2 mm. long. subcylindrico quam calyx breviter tubulosus 5-dentatus paullo brevior; *corolla* alba cylindrica intus minute sericea tubo 24 mm. long. lobis oblongis obtusis 14 mm. long.; *antheris* 5.5 mm. long. semi-exsertis juxta medium tubum affixis filamentis filiformibus circa æquilongis; *stylo* incluso 9 mm. long.

Ignambi; frequent in moist forest; 3500-4200 ft.; gneiss. 1514.

PSYCHOTRIA PATULA S. Moore, sp. nov. *Frutex* orgyalis, glaber; *ramulis* subteretibus cortice brunneo obductis omnimodo foliosis; *foliis* 6-10 × 1.8-3 cm. brevipetiolatis oblongo-ob lanceolatis acuminatis apice obtusis basi cuneatis papyraceis costis lateralibus paucis tenuibus mediocriter interdum male aspectabilibus; *stipulis* inter se liberis ovatis bifidis 6.5 mm. long.; *cymis* axillaribus graciliter pedunculatis (ped. 2-2.5 cm. long.) patulis semel 2-3-chotomis igitur 2-3 floris; *pedicellis* tenuibus quam flores brevioribus; *bracteis* circa 1 mm. long. subulatis; *ovario* 1.75 mm. long. subcylindrico calyci cupulari denticulato æquilongo; *corollæ* albæ 4-meræ tubo anguste infundibulari intus glabro 12 mm. long. lobis oblongis obtusis crassiusculis circiter æquilongo; *antheris* corollæ ori affixis breviter exsertis 4 mm. long.; *stylo* 6 mm. long.; *stigmatibus* ramis lineari-subulatis.

Mt. Panié; forest; 1500 ft. 1788.

Affinity apparently with *P. trichopodantha* (Guillaum.), which is described as having somewhat diverse membranaceous leaves and smaller solitary flowers.

P. MONANTHOS Schlechter. (*Uragoga monanthos* Baill. ex descript.) Nekando; *Spermolepis* forest; 1000 ft.; serpentine. 975. Comboui Mts.; creekside forest; 1500 ft.; serpentine. 2175.

This is the plant referred to by Schlechter (No. 15157) as *Psychotria phyllanthoides* Schlechter, said to be a synonym for *Uragoga phyllanthoides* Baill., which name does not appear in the 'Index Kewensis,' and, search for the description having failed, is presumed to be a *nomen nudum*. The specimens, however, answer the description of *U. monanthos* Baill. fairly well, especially as concerns the flower, although some doubt must naturally attach to the identification.

CEPHAËLIS BALANSÆ S. Moore, comb. nov. (*Uragoga Balansæ* Baill. ex descript.) Mt. Humboldt; 1020. Small tree, 20 ft. Mauve flowers.

Some uncertainty must remain here, as Baillon's description leaves several points of importance unnoticed. Baillon alludes to his plant as a small shrub 2-3 metres high, but this may have been a precociously flowering example.

CERPHAËLIS FAGUETI S. Moore, comb. nov. (*Uragoga Fagueti* Baill.) Ignambi; moist forest; 2500-4250 ft. 1851. Shrub 6 ft. Flowers white, woolly, scentless.

C. SCHUMANNIANA S. Moore, comb. nov. (*Psychotria Schumanniana* Schlechter.) Mt. Canala; fairly frequent in deep shade of forest; 1500-2000 ft. 1113. Shrub 2 ft. Flowers white, woolly.

Leaves narrower and with shorter petioles than those of *Schlechter* 15400, and inflorescence somewhat more open; the hairs, too, of the corolla are rusty instead of white. Possibly a distinct though closely related species, Guillaumin (Not. System. ii. 197) considers this to be a form of the preceding, but the two seem scarcely conspecific.

C. SALTIENSIS S. Moore, sp. nov. *Arbuscula* fere 4-metralis; *ramulis* patentibus interdum aliquanto anfractuosis apicem versus foliosis cortice cinereo rimoso obductis cicatriciferis (haud prominenter) glabris in sicco nigrescentibus; *foliis* 6-8 x 2.2-2.5 cm. oblanceolatis obtusis basi in petiolum \pm 5 mm. long. gradatim extenuatis pergamaceis supra glabris opacisque subtus minutissime furfuraceis necnon secus costæ mediæ dimidium proximale dense ferrugineis; *stipulis* 7-8 mm. long. connatis apice incisive dorso rubiginosis mox dehiscentibus; *inflorescentia* terminali quam folia multo breviori; *floribus* sessilibus in cymulas paucas paucifloras tandem usque 2 cm. pedunculatas digestis pedunculo communi 0; *bracteis* usque 5 mm. long. basi latiusculis plerumque incisive superne linearibus (interioribus integris) ciliatis; *ovario* subcylindrico calyce brevioris; *calyce* 2.5 mm. long. ultra medium in lobos inequales oblongos vel triangulares obtusos ciliatos divisos; *corollæ* sordide cyanæ tubo comparate lato cylindrico extus pubescente intus ore villosos 5 mm. long. lobis oblongis obtusis tubum fere duplo excedentibus; *staminibus* ori corollæ affixis exsertis filamentis 5.5 mm. long. antheris 2 mm. long.; *stilo* exserto glabro; *stigmatibus* ramis clavellatis; *fructu* subgloboso 5-costato in sicco nigro 4 x 3 mm.

Mt. Mou; coniferous forest; 3500 ft.; serpentine. 490.

C. RUBEFACATA S. Moore, sp. nov. *Frutex* elatus, ramosus, fere 4-metralis; *ramulis* superne paucifloris inferne nudis subdistanterque cicatriciferis rubiginoso-villosis dein glabrescentibus; *foliis* 11-20 x 4-5.5 cm. amplis obovato-oblongis apicem versus attenuatis apice obtusis basi in petiolum 1-1.5 cm. long. cuneatim attenuatis membranaceis in nervis pag. utriusque ferrugineo-villosis alibi sparsim appresse pubescentibus costis lateralibus utrinque circa 9 pag. sup. inconspicuis pag. inf. eminentibus; *capitulibus* circæ 4 cm. diam. terminalibus plurifloris rubiginoso-villosis; *bracteis* pluribus ovato-lanceolatis longe acuminatis uti calyx et ovarium rubiginoso-villosis circa 3 cm. long.; *ovario* turbinato circa 2 mm. long.; *calyce* 16 mm. long. sacculato-tubuloso

inæqualiter 5-6-lobato lobis triangularibus acutis 1-3.5 mm. long.; *corollæ* albæ ex calyce longe eminentis tubo infundibulari inferne glabro superne scabride pubescente intus in faucibus pubescente 4 cm. long. lobis 5 anguste ovato-oblongis obtusis extus scabride pubescentibus intus glabris; *antheris* 3.5 mm. long. corollæ faucibus affixis linearibus acutis quam filamenta longioribus; *stylo* exserto superne crebro minuteque papilloso 4.5 cm. long.; *stigmatæ* 2-ramoso.

Mt. Mou; forest of gully in serpentine; 1500 ft. 435.

Conspecific with this are undoubtedly fruiting specimens collected by Schlechter at Ngoyé (No. 15096). Its black pyrenes are subcordate in shape, flat on the opposed faces, and keeled down the back: they measure when moistened 11 mm. in length, and as much in width near the bottom. The affinity of the species is with *C. Pancheri* (*Uragoga Pancheri* Baill.), which has a diverse indumentum, leaves not drawn out at the base, longer peduncles, and smaller bracts, among other features.

CEPHAËLIS BOUVARDIODES S. Moore, sp. nov. *Frutex* bimetrals; *ramulis* superne foliosis fusco-villosis dein glabrescentibus; *foliis* 5-10 × 1-1.5 cm. petiolatis (pet. 5-10 mm. long.) oblongo-lanceolatis acutis basi angustatis firme membranaceis pag. sup. appresse villosulis pag. inf. griseo-villosotomentosis costis lateralibus utrinque pluribus (10-14) pag. inf. solummodo visibilibus; *stipulis* basi connatis ambitu obovatis extus villosis sursum in lobos plures anguste lineares acuminatus divisus usque 12 mm. long.; *capitulis* terminalibus breviter pedunculatis paucis ac densifloris villosis 1.5 cm. diam.; *bracteis* pluribus e basi lata integra incisave lineari-lanceolatis acuminatis ± 17 mm. long.; *floribus* subsessilibus 5-meris; *ovario* turbinato dense villosio 1 mm. long.; *calyce* 6.5 mm. long. tubuloso medio usque in lobos oblongos acutos diviso; *corollæ* albæ tubo superne brevissime dilatato extus villosio intus in faucibus piloso 29 mm. long. lobis 6 mm. long. ovato-oblongis obtusis tubo multo brevioribus extus villosis intus glabris; *antheris* faucibus affixis inclusis obtusis vix 3 mm. long.; *stylo* inclusio glabro 14.5 mm. long.; *stigmatibus* ramis prominentibus.

Ignambi; forest margin; 2000 ft.; frequent; gneiss. 1477.

This very distinct plant is quite unlike anything in our herbaria. In some respects Baillon's description of his *Uragoga Vieillardii* (Adans. xii. 224) would seem to fit it, except for the stipules, which are said to be ciliate only and subequal in length to the petioles (5 mm.); the corolla also is described as "breviuscula" (measurements are not given), which certainly is not the case with the plant under notice.

C. CARDIOCHLAMYS S. Moore, comb. nov. (*Uragoga cardiochlamys* Baill.) River Ngoyé; *Spermolepis* forest; 400 ft.; serpentine. 2052. Shrub 6 ft. Flowers white, sweet-scented.

NORMANDIA NEOCALEDONICA Hook. f. Baie Ngo; Plaine des Lacs; serpentine scrub; sea-level—2600 ft. 268, 297. Mt. Mou; dry serpentine scrub; 2000 ft. 430. Baie Kuakué; serpentine scrub; 300 ft. 885. Low, erect shrub 2 ft. Flowers white or with a slight pink tinge, scentless.

COMPOSITÆ.

AGERATUM CONYZOIDES L. A weed in ditches of town of Nouméa. 30, 94. Weed of wide distribution.

LAGENOPHORA BILLARDIERI Cass. Mt. Mou; serpentine scrub of summit; 3500 ft. 574. Mt. Dore; frequent in dry serpentine scrub; 800 ft. 675. S. and S.E. Asia and Indian Archipelago.

L. NEOCALEDONICA S. Moore, sp. nov. Acaulis, semispithamea vel fere spithamea; *foliis* ± 2.5 cm. long. 6–9 mm. lat. rosulatis e caudice crasso lanoso enatis oblanceolatis obtusis in petiolum ± 1 cm. long. sensim angustatis margine calloso-dentatis tenuiter coriaceis margine piloso-ciliatis utrobique microscopice papillois; *scapis* folia longe superantibus gracilibus monocephalis puberulis bracteis paucis 2–3 mm. long. linearibus distanter præditis 10–15 cm. alt.; *involucri* phyllis 3×1.25 mm. 2–3-serialibus ovato-oblongis obtusissimis margine leviter scariosis ciliatisque; *receptaculo* convexo; *radii* flosculis 14 disci 25 his omnibus versimiliter sterilibus; *ligulis* albis ovato-oblongis minute emarginatis 4 mm. long.; *styli ramis* angustis appendicibus lineari-lanceolatis coronatis in toto 1.5 mm. long.; *achæniis* radii oblongo-obovoideis apice brevissime contractis primo insigniter deinde multo minus compressis glabris epapposis 3 mm. long.

Taom; rare on bare red serpentine earth; 2500 ft. 2305.

Has leaves of thicker texture than those of *L. Billardieri* Cass. and a different involucre and ligules, besides smaller, less flattened ripe achenes with but slight indication of narrowing at the tip.

ERIGERON BONARIENSIS L. Mt. Mou; 800 ft. 555. A South American plant now widely dispersed.

E. NEOCALEDONICUS S. Moore, sp. nov. *Herba* summum metralis; *caule* erecto ramoso striato sicut ramuli graciles microscopice puberulo dein glabro; *foliis* inferioribus 3–5 cm. \times 2.5–4 mm. superioribus 1–2 cm. long. sessilibus linearibus vel anguste lineari-oblongis acute mucronulatis basi obtusis necnon subobscure decurrentibus junioribus gradatim imminutis; *capitulis* pro rata submediocribus heterogamis radiatis (etsi nequaquam manifeste) circa 30-flosculosis ad apicem ramulorum in paniculas apertas copiose bracteatas pleiocephalas circa 15×7 –8 cm. ordinatis; *involucri* 8×8 mm. campanulati 3-serialis phyllis anguste lineari-lanceolatis acutis interioribus sensim

longioribus intimis margine scariosis omnibus dorso microscopice puberulis; *ligulis* albis subexsertis 1-1.5 mm. long. 2-serialibus anguste lineari-spathulatis apice bidenticulatis; *styli ramis* leviter complanatis .5 mm. long. appendicibus æquilongis linearibus præditis; *achenis* aliquanto compressis oblongis minute pubescentibus obscure costatis 2 mm. long.; *pappi setis* leviter scabriusculis dilutissime rubiginosis 6 mm. long.

Nouméa; roadside weed. 36.

Affinity with *E. linifolius* Willd., but there are too many points of difference to require mention in detail.

CONYZA ÆGYPTIACA Ait. Mt. Mou; edge of forest and in Niaouli region; 800 ft. 556. Warmer regions of the Old World.

BLUMEA CANALENSIS S. Moore, sp. nov. *Herba fere orgyalis; caule erecto subtereti appresse griseo-pubescente; foliis* usque 20×6-8 cm. junioribus 8×3 cm. amplis subsessilibus ellipticis sub apice angustatis apice ipso acutis basi gradatim coartatis margine dentatis (dentibus approximatis) membranaceis supra sparsim subtus densius griseo-pubescentibus; *capitulis* medio-cribus paniculam terminalem pubescentem usque 20×13 cm. referentibus; *bracteis* ultimis linearibus plerisque quam pedunculi proprii brevioribus; *involucri* campanulati 7×8 mm. phyllis 3-serialibus anguste lineari-lanceolatis acuminatis dorso puberulis stramineis extimis quam cetera paullo latioribus; *flosculis* ♀ 50-56, ♂ 2-4; *styli ramis* anguste linearibus obtusis compressiusculis; *achenis* subcylindricis striatis setulosis adhuc crudis 1 mm. long.; *pappi setis* ima basi connatis levibus sordide albis fere 5 mm. long.

Mt. Canala; by streamside in forest at 1000 ft. in mica schist soil. 1168.

Differs from *B. balsamifera* DC. chiefly in the indumentum, smaller leaves with short petioles and smaller heads.

GNAPHALIUM LUTEO-ALBUM L. Anse Vata; sandpit and as weed of cultivation. 70. Ignambi, Niaouli association, 1500 ft. on gneiss. 1671. A widely diffused weed.

G. JAPONICUM Thunb. Niaouli-Gleichenia association; frequent at 2000 ft.; gneiss. 1585. E. Asia and Indian Archipelago to New Zealand.

PARTHENIUM HYSTEROPHORUS L. Nouméa; common weed in town, rarer outside. 33. An introduction from America.

ECLIPTA ERECTA L. Nouméa; roadside ditches and moist places. 221. Weed of wide distribution through warmer regions of the world.

WEDELIA BIFLORA DC. Ouen Toro; along shore. 60. Cap Bocage; with *Lantana Camara* in weedy area; 200 ft. 1396. Old World tropics.

WEDELIA UNIFLORA S. Moore, comb. nov. (*Wedelia Forsteriana* Endl.)
Île Ouéré; abundant; straggling over coral sand. 649. Polynesia. This is
Buphthalmum uniflorum Forst., the type of which is at the British Museum.
Hochreutiner (Bull. N. York Bot. Gard. vi. no. 21) has redescribed the plant
as *Lipochæta lifuana*. The ripe achenes (not seen by Hochreutiner) are
rather those of *Wedelia* than of *Lipochæta*, but the difference between the
two seems almost too slight to warrant generic separation.

SPILANTHES ACMELLA L. Nouméa; common in wet ditches. 37. Widely
diffused through warmer regions of the world.

TRIDAX PROCUMBENS L. Ignambi; roadside; 1000 ft. 1603. A tropical
American weed, now spreading in the Old World. It is not in Guillaumin's
list.

GOODENIACEÆ.

SCÆVOLA FRUTESCENS Krause. Tchiam; littoral sand. 2003. East
Indies, Australia, Polynesia.

S. SALIGNA Forst. f. River Dumbéa; serpentine scrub and in flood plain.
411. Kuakué; alluvial forest; sea-level; serpentine. 896. Port Bouquet;
lowland serpentine scrub and river alluvium; sea-level. 2236. Isle of
Pines; scrub of serpentine plateau; 200 ft. 2272.

The following are also referable to this species, namely:—

- (1) Ignambi; abundant in forest margin; 2000 ft.; gneiss. 1483.

The leaves of this are usually 7 cm. long. The name of *FORMA*
INTERMEDIA is proposed for it.

- (2) Plaine des Lacs; edge of flood plain; serpentine; 800 ft. 381.

Leaves mostly 9–10 cm. long. It may be termed *FORMA*
LONGIFOLIA.

S. BECKII Zahlbr. Kuakué; flood plain of river; 50 ft.; serpentine
lowland scrub. 905.

S. ROTUNDATA S. Moore, sp. nov. *Frutex* metralis; caule erecto simplici
valido superne folioso glabro; foliis 8–10 × 3·5–4·5 cm. approximatis obovatis
apice late rotundatis basin versus in petiolum 1·5–2 cm. long. extenuatis
margine revolutis coriaceis necnon aliquantulum carnosulis glabris supra
nitidulis subtus opacis petiolis basi amplificatis ibi intus villosis caulemque
arctissime amplectantibus; floribus in paniculam elongatam thyrsiformem
puberulam 20 cm. long. digestis; bracteis conspicuis oblongo-obovatis
obtusissimis pag. inf. puberulis ima basi villosis 8–12 × 5–7 mm. summis
4 × 2·5 mm.; corollæ albæ 10·5 mm. long. loborum dente terminali alas
paullulum superante; antheris apice truncatis 1 mm. long.; ovario ovoideo

sericeo calycis (itaque sericei) segmentis oblongis obtuse acuminatis æquilongo.

Baie Ngo ; serpentine scrub ; 200 ft. 262.

Differing from *S. Beckii* Zahlbr., besides the broad leaves rotundate at the top, in the long silky lobes of the calyx and shorter anthers with truncate (not rounded) tips. In Guillaumin's recent revision of the genus as represented in New Caledonia * six species are enumerated, the present plant therefore constituting the seventh.

CAMPANULACEÆ.

WAHLENBERGIA GRACILIS A. DC. Mt. Dore ; frequent on old cultivation and low serpentine hills ; 0-800 ft. 676. Ignambi ; in Niaouli association ; gneiss ; 1000 ft. 1613. East Indies to New Zealand.

EPACRIDACEÆ.

LEUCOPOGON DAMMARIFOLIUM Brongn. & Gris. Presqu'île Bogota ; very abundant in serpentine scrub ; 0-1500 ft. 1329.

L. SEPTENTRIONALE Schlechter. Plaine des Lacs ; abundant on moderate serpentine slopes, lowland. Mt. Dore ; abundant in serpentine scrub to 1000 ft. 700. No. 944*a* from Kuakué, with somewhat longer and relatively narrower leaves but without flowers or fruit, is probably conspecific.

L. CONCAVUM Schlechter. Mountains to north of Ngoyé River ; upland serpentine scrub ; 3000 ft. 2069.

L. ALBICANS Brongn. & Gris. Kuakué ; abundant in serpentine scrub ; 0-1000 ft. 939. Stony fruit with pinkish flesh.

L. CYMBULÆ Labill. Baie Ngo ; abundant in serpentine scrub at 150 ft. and upwards. 249, 256. Mt. Dore ; abundant in lowland serpentine scrub at 1000 ft. 699. Kuakué. 944*b*. Ngoyé ; among stones in river-bed ; abundant ; serpentine ; 100 ft. 961.

Var. *ANGUSTIFOLIUS* Brongn. & Gris. Mt. Mou ; abundant along edge of damp gully in Niaouli region ; 800 ft. ; cretaceous. 547.

CYATHOPSIS FLORIBUNDA Brongn. & Gris. Taoin ; occasional in serpentine scrub at 1000 ft. 2293.

DRACOPHYLLUM GRACILE Brongn. & Gris. River Ngoyé ; on serpentine margin. 2130.

* Not. System. iii. 59.

DRACOPHYLLUM RAMOSUM Panch. Baie Ngo; lowland serpentine scrub; 200 ft. 252. Mt. Dore; abundant in serpentine scrub; 100–2500 ft. 697. River Dumbéa; very common in scrub and woods and by streamsides; serpentine; lowland. 821. Port Bouquet; riverside pebbles and alluvium; 50 ft.; serpentine. 2235. Taom; abundant in serpentine scrub; 1000–2000 ft. 2299.

D. INVOLUCRATUM Brongn. & Gris. Mt. Panié; among rocks by river; 1500 ft. Gneiss. 1762.

D. COMPACTUM S. Moore, sp. nov. *Frutex* elatus (fere usque 4-metralis); *caule* pauciramoso erecto valido griseo-pubescente; *foliis* fere usque 30 cm. long. 2.5 cm. lat. imbricatis elongato-lanceolatis longe acuminatis apice obtusis basi vaginantibus margine integris (hac atque illac obsolete serrulatis) longitrorsum plurinerviis rigidis glabris leviter nitidis; *floribus* compactis in verticillos approximatos ordinatis secus rhachin strictissimam validam griseo-hirsutam 30 cm. long. digestos; *pedunculis* circa 1 cm. long. bracteis imbricatis omnino oclusis 1-floris; *bracteis* inf. 2.5–3 cm. sup. 4 cm. long. pluriseriatis ovato-lanceolatis acutis striatis ciliatis dorso puberulis; *sepalis* 3 mm. long. lanceolatis acutis striatis ciliatis; *corollæ* albæ tubo calycem vix excedente cylindrico extus glabro 4 mm. long. lobis oblongis obtusis tubum semixquantibus; *filamentis* tubo corollæ adnatis antheris 1.5 mm. long. vix omnino inclusis juxta medium filamentis affixis bifidis; *ovario* depresso-subgloboso glabro circa 1 mm. diam.; *stigmatibus* minuto 5-lobo.

Plaine des Lacs; abundant on dry slopes; serpentine lowland. 371.

Near *D. verticillatum* Labill., but readily known from it by reason of the strictly racemose inflorescence, peduncles covered with imbricating bracts, the narrower bracts and sepals, and relatively shorter corolla.

PLUMBAGINACEÆ.

PLUMBAGO ZEYLANICA L. Île Ouéré; littoral zone. 644. Canala; forest. 1335. A species of the Old World tropics now widely diffused.

PRIMULACEÆ.

LYSIMACHIA DECURRENS Forst. Canala; old native cultivation area; 1000 ft.; mica schist. 1173. East Asia, Indian Archipelago, Polynesia.

MYRSINACEÆ.

MÆSA NOVO-CALEDONICA Mez. Mt. Mou; moister part of Niaouli region in forest; 800 ft.; cretaceous. 533. Mt. Dore; stream valley in serpentine; 600 ft. 672. Mt. Humboldt; abundant in forest near creek;

1500 ft. ; serpentine. 1028. Ignambi ; frequent in forest margin ; 1000–2000 ft. Liane ascending to about 15 ft. 1843. Hienghene ; forest sea-level ; shales. 1923.

RAPANEA ASYMMETRICA Mez. Nekando ; Conifer forest ; 3500 ft. ; serpentine. 1084. Shrub 5 ft.

R. GRANDIFOLIA S. Moore, sp. nov. *Arbuscula* fere 6-metralis ; *caule* erecto simplici comparate gracili cortice cinereo aliquantum polito obducto ; *foliis* 30–33 × 9.5–10 cm. petiolatis ovato-oblongis basi sicut apice obtusis maxime coriaceis pallidissime nitidis glabris ; *inflorescentiis* plurimis ex caule toto erumpentibus pluri- necnon densifloris ; *floribus* 5-meris pedicellatis pedunculo 2–5 mm. long. validissimo bracteis parvulis onusto insidentibus ; *pedicellis* calycem paullulum excedentibus crassissimis 2.5 mm. long. ; *calycis* paullo ultra medium partiti incrassati segmentis ovatis obtusis margine microscopice papillosis pauci- (sæpius 4–6-) punctatis ; *corollæ* albæ brunneo-tinctæ tubo 1 mm. long. incluso lobis 3.5 mm. long. per anthesin mox patentibus anguste ovato-oblongis obtusis crassiusculis intus copiose papillosis ; *antheris* lobis versus basium insertis oblongis apice obtusis necnon paullulum incurvis fere 1.5 mm. long. ; *ovario* oblongo-ovoideo glabro 1.75 × 1.25 mm. ; *stigmatibus* magno pileato-capitato sulcato copiose papilloso 1.5 mm. diam.

Mountains north of Ngoyé ; on serpentine. 2065. Very distinct from all its New Caledonian congeners by reason of the large leaves and flowers.

TAPEINOSPERMA NECTANDROIDES Mez (ex descript.). Mt. Canala ; forest ; 800 ft. ; schists. 1166. Tree. Panicle with whitish branches. Flowers purple. The panicle is about 25 × 25 cm. ; its branches and branchlets are stout and very patent.

T. SCHLECHTERI Mez. Ignambi ; forest ; 2000 ft. ; gneiss. 1487. Small tree, branching, with crowns of leaves. Stone fruit very dark purplish black when ripe. No flowering specimen being to hand, some doubt must attach to this identification.

SAPOTACEÆ.

CHRYSOPHYLLUM GORDONIÆFOLIUM S. Moore, sp. nov. *Arbor* circiter 9-metralis ; *ramis* patulis cortice griseo longitrorsum rimoso lenticellifero cinctis ; *foliis* 14–17 × 4–6 cm. petiolatis (pet. ± 2 cm. long.) anguste ellipticis obtusis basi cuneatis margine undulatis vel undulato-dentatis coriaceis glabris costis lateralibus utrinque 11–13 intervallis ± 1 cm. interjectis pag. sup. planis pag. inf. prominentibus ; *floribus* pedicellatis in fasciculos sessiles paucifloros inter folia sitis vel ex caule jam foliis orbo oriundos digestis ; *pedicellis* 5–6 mm. long. albo-furfuraceis ; *calycis* 3 mm. long. ultra medium

partiti puberuli segmentis 5 suborbicularibus obtusissimis æstivatione quincuncialibus; *corollæ* albæ 6-8-lobæ tubo 2.5 mm. long. lobis 4 mm. long. ovato-oblongis obtusis cito reflexis; *staminibus* corollæ faucibus affixis filamentis 4 mm. long. crassiusculis quam antheræ ovatæ plane longioribus; *ovario* 2.5 mm. long. ovoideo minute puberulo 5-6-loculari in stylum 1.5 mm. long. desinente.

Paompai; forest; 100 ft. 1862.

This very distinct species is peculiar in having the corolla and andrœcium not quite isomerous with the calyx. Baillon (Bull. Soc. Linn. Paris, ii. 899) notes this also of a species he calls *C. ? pyriforme*, which, however, from the description he gives, certainly differs in foliage as well as in flower from the plant under notice.

CHRYSOPHYLLUM FLORIBUNDUM S. Moore, sp. nov. *Frutex?* ramosus ramulis glabris cortice cinereo circumdatis innovationibus sericeo-ferrugineis; *foliis* 6.5-10 × 2.7-3.7 cm. obovato-oblongis obtusissimis basi in petiolum brevem gradatim angustatis coriaceis supra glabris subtus dense appresseque ferrugineo-tomentosis costis lateralibus utrinque ± 20 satis approximatis pag. sup. mediocriter spectabilibus pag. inf. plus minus obscuris; *florum* fasciculis axillaribus (sæpe ex nodo foliorum delapsorum erumpentibus) sessilibus paucifloris; *pedicellis* circa 3 mm. long. ferrugineis; *calycis* ferruginei 2 mm. long. segmentis 5 oblongo-ovatis obtusissimis concavis; *corollæ* 5-meræ tubo calyce brevioris 1 mm. long. lobis erectis postea ascendentibus patentibusve ovato-oblongis obtusis margine membranaceis dorso minute ferrugineo-pubescentibus crassiusculis 2 mm. long.; *staminibus* corollæ basi segmentis affixis filamentis subulatis 1.25 mm. long. antheras ovoideas acutas excedentibus; *ovario* 1.25 × 1.5 mm. subgloboso villosa in stylum brevem deorsum villosum sursum glabrum 1 mm. long. exeunte.

No note of locality. No number.

Affinity with *C. leptocladum* Baill., but different in foliage among other features.

C. COMPTONII S. Moore, sp. nov. *Arbor*; *folio* unico solummodo viso magno (34 × 12 cm.) petiolato oblongo-obovato apice rotundato ipso retuso basi late cuneato margine undulato coriaceo supra glabro subtus minute appresse griseo-tomentoso costis lateralibus utrinque ultra 20 supra planis subtus eminentibus; *florum* fasciculis ± 12-floris pedunculis crassis pulvinatis parvibracteatis ex caule ipso genitis insidentibus; *pedicellis* 7-8 mm. long. calycem multo excedentibus sicut calyx griseo-pubescentibus; *calycis* ultra medium partiti 3.5 mm. long. segmentis late ovatis obtusissimis; *corollæ* albæ vix usque medium divisæ tubo 3.5 mm. long. lobis oblongis obtusissimis retusisve reflexis; *staminibus* exsertis filamentis ima basi loborum corollæ insertis 3 mm. long. antheris 1.5 mm.; *ovario* 5-loculari

ovoideo-oblongo striato fere glabro 1.5 mm. long. stylo quam sese tenuiore duploque longiore terminato.

Mt. Mou; damp stream-gully; 600 ft.; cretaceous. 550.

CHRYSOPHYLLUM PENINSULARE S. Moore, sp. nov. *Frutex* fere orgyalis; *ramis* glabris cortice cinereo tectis novellis subtilissime cinereo-pubescentibus; *foliis* 6.5–8.5 × 1.8–2.3 cm. oblongo-obovatis obtusissimis basi in petiolum 5–7 mm. long. gradatim desinentibus coriaceis supra glabris subnitidisque subtus rufo-tomentosis cito glabrescentibus costa media subtus valde prominente costis lateralibus utrinque ultra 12 obscuris nisi mediocriter perspicuis; *florum* fasciculis cauli jam foliis orbo insidentibus sessilibus paucifloris; *pedicellis* circa 1.5 mm. long. sicut calyx ferrugineis; *calycis* 1.5 mm. long. segmentis ovatis obtusis quam corollæ tubus paullo brevioribus; *corollæ* albæ 4-meræ fere 5 mm. long. lobis tubum semiquantibus ovatis retusis recurvis glabris; *staminibus* exsertis corollæ faucibus affixis filamentis 2 mm. long. quam antheræ plane longioribus; *ovario* 4-loculari 1 × 6 mm. ovoideo sericeo in stylum brevem crassum glabrum extenuato.

Presqu'île Bogota; occasional in serpentine scrub; 1500 ft. 1340.

This is close to *C. parvifolium* Schlechter, a species of which I have seen only material with flowers in very early bud. The leaves of Mr. Compton's plant are relatively longer and narrower than those of the other and ferruginous when very young, its flowers are always borne on the stem after the leaves have fallen, the pedicels are shorter and the calyx is broader, this indicating a difference in the expanded flowers.

LUCUNA BAILLONII Zahlbr. Riv. Combuti; riverside and creekside rocks; above 300 ft.; serpentine. 2208.

PLANCHONELLA SERPENTINA S. Moore, sp. nov. *Frutex* vel arbuscula; *ramis* saltem superne bene foliosis satis validis cortice cinereo circumdati; *foliis* plerisque 9–12 × 3.5–5 cm. obovatis vel obovato-oblongis apice late rotundatis sæpe emarginatis basi in petiolum 2 cm. long. desinentibus margine incrassatis leviterque revolutis crasse coriaceis supra fere glabris subtus primo tomento arcto furfuraceo ferrugineo indutis deinde subtilissime albo-sericeis costa media subtus prominente costis lateralibus utrinque 8–10 subtus optime eminentibus; *florum* fasciculis axillaribus paucifloris; *pedicellis* 2 mm. long. quam flores brevioribus incrassatis ut calyx furfure arcto ferrugineo præditis; *calycis* segmentis 5 4 × 3 mm. ovatis obtusis interioribus margine membranaceis; *corollæ* albo-viridulæ campanulatæ calyci æquilongæ medium usque divisæ lobis late rotundatis margine ciliolatis; *staminibus* inclusis corollæ faucibus insertis filamentis fere 1 mm. long. quam antheræ oblongo-ovoidæ acutæ duplo longioribus staminodiis ori affixis oblongis vel lanceolatis acutis obtusisve 1 mm. long.; *ovario*

subgloboso albo-sericeo 1 mm. long. in stylum brevem conoideum glabrum stigmatē parvo obscurissime lobulato terminatum desinente.

Comboui; serpentine scrub and scrubby wood; 2500 ft. 2183.

P. Wakere Pierre, to which this is evidently allied, has larger leaves with much longer petioles, longer pedicels to the flowers, corolla suddenly expanded at the limb, and a different ovary and style.

PLANCHONELLA SALIGNA S. Moore, sp. nov. Planta fruticosa trimetralis, erecta; ramis subteretibus saltem superne crebro foliosis cortice griseo obductis primo minute pubescentibus mox glabrescentibus; foliis 10 × 1–1.2 cm. alternis sat approximatis lineari-lanceolatis obtuse mucronatis basi in petiolum latum 5 mm. long. extenuatis coriaceis glabris; floribus in axillis solitariis pedicello brevi insidentibus; calycis segmentis 5 valde imbricatis, 4–4.5 × 2–2.5 mm. ovato-oblongis obtusis exterioribus (uti pedicelli) dorso pilis ferrugineis copiose præditis interioribus minoribus necnon glabris; corolla lactea calyce paullulum breviori extus glabra tubo 1.5 mm. long. lobis tubo æquilongis orbicularibus æstivatione valde imbricatis; staminibus tubo paullulum infra os staminodiis quam stamina paullo altius insertis his linguæformibus crassiusculis filamentis .75 mm. long. antheris haud visis; ovario basi villosa 5-loculari ut stylus 2 mm. long.; stylo crassiusculo glabro; ovulo apicem versus loculi affixo.

Mont Panié; among rocks by cascade; 1200 ft. 1826.

The glabrous willow-like leaves with the shortly pedicelled axillary flowers serve to distinguish this on sight.

PALAEQUIM NEOCALEDONICUM S. Moore, sp. nov. Arbor 9-metralis late ramosa ramis apicem versus foliosis cortice cinereo obductis; foliis 9–10 × 3–4 cm. breviter petiolatis oblongis obtusis basi rotundatis margine cartilagineis coriaceis utrobique glabris costa media subtus eminente costis lateralibus utrinque circa 12 interjectis aliis valoris minoris omnibus sicut rete sublauxum mediocriter aspectabilibus; floribus pedicellatis in fasciculos 5–8-flosos sessiles approximatos ex axillis foliorum mortuorum oriundos digestis; pedicellis circa 7 mm. long. flores pansos vix æquantibus sicut calyx subtiliter ferrugineo-sericeis; calycis fere 5 mm. long. segmentis 5 late ovatis apice rotundatis crassiusculis; corollæ sordide albæ tubo calyce paullo breviorē glabro lobis 5 mm. long. ovatis obtusis cito patentibus; staminibus 10 corollæ ori affixis filamentis 6 mm. long. exsertis crassiusculis glabris quam antheræ sagittatæ manifeste longioribus; ovario dense villosa 5-loculari 2 mm. long. stylo conoideo glabro 3 mm. long. coronato.

Ignambi; on gneiss in forest; 3500 ft. 1521.

Baillon's genus *Achradotypus* should apparently be merged in *Palaquium*, otherwise the genus, which from India extends over the Malay Archipelago and on to Samoa, has hitherto had no New Caledonian representative.

* TROPALANTHE, *Sapotacearum*, genus novum.

Calycis segmenta 5, biseriata, suborbiculata, æstivatione valde imbricata. *Corolla* late campanulata, ultra medium divisa, lobis 6-8 inter se sæpe aliquantulum inæqualibus, imbricatis. *Stamina* 12-18, corollæ ore inserta; filamenta exserta; antheræ lanceolatæ, apice obscure mucronulatæ, extrorsum dehiscentes. *Staminodia* 0. *Ovarium* compressum, basi villosum, 6-8-loculare; stylus crassiusculus, inclusus; stigma punctiforme. *Ovula* juxta medium loculi affixa.—*Arbor*, valide ramosa. *Folia* magna, petiolata, coriacea. *Flores* pro rata magni, fasciculati, ex nodis foliorum jam delapsorum emissi, pedicellati.

SPECIERUM CLAVIS.

- Folia pergamacea longit. 20 cm. excedentia. Pedicelli summum 1 cm. long. Ovarium glabrum..... *T. Sealyæ*.
 Folia coriacea 20 cm. vix excedentia. Pedicelli 1.5 cm. long. Ovarium basi villosum *T. Comptonii*.

T. SEALYÆ S. Moore, sp. nov. (Pl. 21. figs. 1-7.) *Arbor* ultra 20-metralis, *foliis* 24-30×10-13.5 cm. obovatis vel late obovato-oblongis apice breviter cuspidatis ipso obtusis basi in petiolum validum 4-5.5 cm. long. cuneatim angustatis margine undulatis pergamaceis supra glabris subtus primo pube ferruginea verisimiliter vestitis deinde fere glabris costis lateralibus utrinque ultra 20 marginem versus arcuatis; *fasciculis* pauci- (vix ultra 4-) floris; *pedicellis* circa 8 mm. long. segmentis suborbicularibus quam corollæ tubus paullulum brevioribus; *corollæ* roseæ lobis 6-8 late oblongis obtusissimis tubo paullo longioribus; *staminibus* 12-18 filamentis 8 mm. long. lineari-subulatis antheras oblongas basi mucronatas duplo excedentibus; *ovario* 4 mm. long. ovoideo glabro 6-8-loculari in stylum brevem glabrum extenuato.

Mt. Arago; fairly often in moist forest; 1500 ft.; mica schist. 1407. Mt. Panié; moist forest; 1500 ft.; gneiss. 1789. Trunk erect, bearing a crown of leaves.

The species is named in compliment to Mrs. R. H. Compton (*née* Sealy), who has rendered valuable assistance to Prof. Compton in arranging his collections.

T. COMPTONII S. Moore, sp. nov. *Arbor* circa 15-metralis, *foliis* oblongo-obovatis obtusissimis basi obtusis margine leviter undulatis coriaceis juvenilibus supra puberulis subtus minute ferrugineis vetustioribus utrobique glabris vel fere glabris 19-21.5×8 cm. costis lateralibus utrinque circa 18 marginem versus arcuatis petiolis 5-6 cm. long.; *fasciculis* summum 4-floris; *pedicellis* 1.5 cm. long. ut calyx minute arcteque ferrugineo-tomentosis; *calycis* in toto 10 mm. long. segmentis suborbicularibus margine

* Gr. τροπαλῖς, i. e. fasciculus.

membranaceis 8 mm. long.; *corollæ* albæ lobis 7-8 anguste obovato-oblongis obtusissimis 10 mm. long. tubum duplo excedentibus; *staminibus* 15 filamentis 13 mm. long. subulatis quam antheræ oblongæ triplo longioribus; *ovario* subgloboso basi villosa 7-loculari 4×5 mm. stylo filiformi glabro 6.5 mm. long. terminato.

Ignambi; fairly frequent in forest; 2000-3000 ft.; gneiss. 1522. Tree with spreading crown.

Pycnandra Benth., which these two plants resemble in general appearance and to which they are no doubt nearest allied, has corolla-lobes isomerous with the segments of the calyx and stamens at least five times as many as the lobes, and also more cells to the ovary.

EBENACEÆ.

By W. P. HIERN.

MABA BUXIFOLIA Pers., var. Cap Bocage; open scrubby association; 200 ft.; mica schist. 1400. Shrub 8 ft. Copious medium green leaves. Fruits acorn-like in 3-lobed calyx. From Tropical Africa through East Asia to North Australia.

MABA VIELLARDI Hiern, var.? *COMPTONI* Hiern, var. nov., foliis subtus subpallidioribus et fructibus minoribus (sc. modo 8×7 mm.). Cap Bocage; frequent in slightly sheltered parts of serpentine scrub and scrubby woods; 800 ft. 1399. Shrub 6 ft. Leaves stiff, light green. Fruits spherical in persistent 3-lobed calyx.

There being no flowers known of this plant, its status in the genus must at present remain doubtful.

M. FASCICULOSA F. Muell. Littoral, in *Acacia spirorbis* woods. 49, 778. Tree, drooping leaves. Ripe fruits green-brown. Calyx of 3 fleshy segments. The fruits of No. 778 are considerably larger than those of No. 49. Eastern Australia.

SYMPLOCACEÆ.

SYMPLOCOS (§ *Bobua*) *CALOPHYLLOIDES* S. Moore, sp. nov. *Arbor* elata, *ramulis* ultimis foliosis primo angulatis dein subteretibus sparsim puberulis cito glabris; *foliis* 6-8×4-4.5 cm. petiolatis (pet. 1-2 cm. long.) obovato-oblongis apice rotundatis ipso sæpe retusis basi obtusis integris coriaceis glabris; *racemis* 4-5 cm. long. simplicibus foliis plane brevioribus plurifloris puberulis; *pedicellis* validis quam calyx brevioribus; *bracteis* ovato-oblongis vel ovatis obtusis acutisve circa 3 mm. long.; *calycis* 5 mm. long. extus puberuli bracteas nullo negotio superantis lobis tubo æquilongis suborbicularibus margine ciliatis; *corollæ* albæ alte divisæ in toto 6 mm. long. segmentis ovatis obtusissimis glabris; *staminibus* circa 60 filamentis 6 mm.

antheris 75 mm. long.; ovario pæne omnino infero 3-loculari; stylo filamentis paullo brevioribus glabro.

Mt. Canala; forest; 200-300 ft.; mica schist. 1154. Tree often 80-100 ft.

Near *S. rotundifolia* Brongn., but with different leaves, considerably larger flowers subtended by bigger bracts, and corolla relatively shorter in comparison with the calyx. The broader ovary, moreover, suggests a difference in the shape of the fruit.

For *S. MUNDA*, sp. nov., see p. 415.

OLEACEÆ.

JASMINUM SIMPLICIFOLIUM Forst. Locality and number wanting. Australia and Polynesia.

J. DIDYMUM Forst. Mt. Mou; gully forest; 1500 ft.; serpentine. 455. Liane flowering about 25 ft. up. Corolla white, strong scent. Australia, Polynesia.

OSMANTHUS BADULA Hutchins. MS. in herb. Kew. (*Notelæa Badula* Vieill.) Plaine des Lacs; edge of flood plain; 600 ft.; serpentine. 382. Riv. Dumbéa; flood plain; 100 ft.; serpentine. 413. Riv. Ngoyé; riverside association; 300 ft. 2049. Shrub 4-8 ft., much branched, branches often lying on the ground. Flowers globular, scentless. Corolla white. No. 962 from Ngoyé (among stones in river-bed, serpentine, 200 ft.) would seem to be a narrow-leaved form of this species.

O. VACCINIOIDES Hochreut. (*Notelæa vaccinioides* Schlechter.) Nekando; serpentine scrub; 2000 ft. 2128. Shrub 4 ft. Leaves stiff, hard, light green. Flowers white, scentless. No. 188 would seem to be this in fruit—Baie Kuakué; serpentine scrub; 300 ft. Fruit ovoid, 7 × 4 mm.

APOCYNACEÆ.

MELODINUS BALANSÆ Baill. Riv. Dumbéa; scrubby woods above stream; 200 ft.; serpentine. 815. Low woody climber. White latex. Leaves dark green above, light below. Corolla white.

M. PHILLIRÆOIDES Labill. Ignambi; creekside forest; 1500 ft.; gneiss. 1666. Liane. White latex. Corolla white, with lobed pink corona at throat.

M. PAUCIVENOSUS S. Moore, sp. nov. Scandens, glaber; ramulis rigidis crebro foliosis subteretibus; foliis 5-7.5 × 2.5-4.5 cm. brevipetiolatis ovatis vel ovato-oblongis obtusis nisi obtusissimis basi rotundatis crasse coriaceis supra nitidis subtus opacis costis lateralibus comparate paucis (utrinque circa 8); cymis terminalibus vel ex axillis foliorum summorum oriundis

pedunculatis (ped. 1-2 cm. long.) foliis brevioribus plurifloris; *bracteis* late deltoideis ultimis calycis basin appropinquantibus 1 mm. long.; *calycis* 2 mm. long. segmentis deltoideis obtusis tubo circa æquilongis; *corollæ* albæ tubo superne levissime ampliata 6 mm. long. faucibus 10-squamatis (squamis antipetalis 0 vel minime aspectabilibus) lobis late obovatis tubo æquilongis; *staminibus* basin versus tubo insertis antheris lanceolatis obtusiusculis circa 1 mm. long.; *ovario* 1-25 mm. long. late ovoideo stylo 1.5 mm. long. coronato stigmate elevato-pileiformi apice breviter bifido 7 mm. long.

Riv. Ngoyé; scrubby *Casuarina* association by riverside; 400 ft.; serpentine. 2107. This can be distinguished on sight from *M. phillireoides* Labill. by its broader leaves with few lateral nerves. In nervature of the foliage it is more like *M. Balansæ* Baill., but this has larger flowers different in several respects.

MELODINUS CITRICARPUS S. Moore, sp. nov. Scandens; *ramulis* patentibus foliosis prominenter longitrorsum sulcatis glabris; *foliis* 6-13 × 3-4 cm. sessilibus oblongo-lanceolatis obtusis basi rotundatis vel brevissime cordatis et tunc levissime amplexicaulibus supra lucidis subtus opacis coriaceis glabris costis lateralibus utrinque 10-12 pag. sup. eminentibus; *cymis* sæpissime terminalibus 2-3 cm. long. plurifloris ut pedicelli bractæ calyx corollæque tubus subtiliter pubescentibus; *pedicellis* circa 2 mm. long.; *bracteis* 1-2 mm. long. ultimis calyci approximatis; *calycis* 3 mm. long. segmentis suborbicularibus tubo æquilongis; *corollæ* albæ tubo calyceem duplo excedente a basi gradatim amplificato intus ad mediam partem puberulo faucibus squamis 10 lobulatis onustis lobis suborbicularibus tubum semi-æquantibus; *staminibus* infra medium tubum insertis antheris lanceolatis obtusis 1.5 mm. long.; *ovario* 1.5 mm. long. ovoideo glabro stylo glabro paullo brevior terminato stigmate ovoideo bifido; *bacca* (fide cl. detectoris) sphaeroidea *citri aurantii* magnitudine.

Mouac islet; 2356. A woody liane. With much the appearance of *M. scandens* Forst. this has larger flowers with a differently shaped tube and more prominent lobes, larger anthers, and a larger ovoid (not subsphæroidal) ovary.

RAUWOLFIA SEMPERFLORENS Schlechter. Riv. Dumbéa; common in flood plain; 100 ft.; serpentine. 418. Mt. Dore; stream-valley woods; 200 ft.; serpentine. 694. Riv. Ngoyé; riverside forest margin; 400 ft.; serpentine. 2051. Shrub 3-10 ft. Corolla white, sweet-scented.

R. SUAVEOLENS S. Moore, sp. nov. *Frutex* glaber vel *arbuscula*; *ramulis* sat validis subteretibus striatis; *foliis* 12-17 × 3-4 cm. pro verticillo usque 4 oblanceolatis obtusis basi in petiolum 1-3 cm. long. gradatim extenuatis coriaceis costa media supra subplana subtus eminente costis lateralibus

pluribus difficile aspectabilibus; *cymis* 5-6 × 3-5 cm. verticillatis pelunculatis (ped. 3-5 cm.) foliis brevioribus cymulis plurifloris quam pedunculi brevioribus; *pedicellis* crassiusculis calycem sæpius paullo excedentibus; *calycis* 2 mm. long. segmentis ovato-oblongis obtusis tubo longioribus; *corollæ* albæ tubo cylindræo extus glabro intus præsertim in ore villosa 4 mm. long. quam lobi rotundati haud brevior; *staminibus* juxta medium tubum insertis antheris ovato-oblongis acutis 1.25 mm. long.; *disco* cupulari ovario fere æquilong; *ovarii* 1 mm. long. carpellis æte connatis ovatis compressis stylo brevi coronatis; *stigmatibus* submitriformi stylo longiore.

Mt. Arago; infrequent in moist forest; 1000 ft.; mica schist. 1416. Ignambi; fairly frequent in forest margin; 2000 ft.; gneiss. 1478. Mt. Panié; forest; 1500 ft.; gneiss. 1806. Shrub or small tree, 12 ft. Except for its larger obtuse leaves this has much the appearance of *R. amsoniaefolia* A. DC., but the flowers of the two are diverse in several respects.

ALYXIA LEUCOGYNE V. Heurck & Müll. Arg. Mt. Mou; edge of forest; 2000 ft. 619. Tree 25 ft. Flowers white; white latex.

A. SÆAVIS Schlechter. Comboui Mts.; serpentine scrub above 3000 ft. 2177. Small shrub, 4 ft., branches stiff, erect. Leaves light green, hard but brittle. Petals strongly reflexed, white, sweet-scented.

A. NUMMULARIA S. Moore, sp. nov. *Frutex* ramosus; *ramulis* tenuibus inferne noduloso-cicatriciferis superne crebro foliosis primo puberulis cito glabris; *foliis* parvis usque 15 × 17 mm. subsessilibus ternatim verticillatis suborbicularibus apice retusis margine cartilagineis coriaceis pag. sup. glabris necnon pallide lucidis pag. inf. microscopicè pubescentibus; *floribus* geminis (anne semper?) *pedicellis* calycem breviter excedentibus fultis; *calycis* 1 mm. long. ultra medium divisi segmentis late subulatis acutis; *drupa* 7-8 × 6 mm. simplici vel moniliformi et biarticulata articulis ovoideis terminali stylo persistente fusco indurato onusto microscopicè furfuraceis.

Mt. Dore; occasional in serpentine scrub; 1500 ft. 841. Shrub 5 ft. The flowers are not known, but the remarkable foliage seems to justify description.

A. JOHNSONIÆ S. Moore, sp. nov. *Frutex* glaber fere biorgyalis; *ramulis* gracilibus cito albescens ultimis foliosis; *foliis* 5-7 × 2.5-3.5 cm. oppositis ternisve petiolatis (pet. circa 5 mm. long.) ovatis vel ovato-oblongis apice cuspidato-attenuatis ipso obtuse acutis basi obtusis pergamaceis costis lateralibus utrinque ultra 20 tenuibus; *cymis* axillaribus abbreviatis paucifloris in toto circa 1 cm. long.; *pedicellis* calyci circa æquilongis; *calycis* 2 mm. long. segmentis ovatis obtusis tubo longioribus; *corollæ* tubo 5.5 mm. long. superne levissime amplificato extus glabro intus ore necnon juxta

medium piloso lobis late ovatis obtusissimis 3 mm. long.; *staminibus* supra medium tubum insertis antheris lineari-lanceolatis acuminatis 1 mm. long.; *ovario* ovoideo sericeo stylum longiorem (2 mm. long.) glabrum fulciete; *stigmatibus* capitellatis; *bacca* moniliformi e segmentis 3 ellipsoideis optime sulcatis sistentibus in toto 5 cm. long. segmentis $\pm 15 \times 8$ mm. intervallis 2-2.5 mm. long. sejunctis.

Mt. Mou; moist gully; 600 ft.; cretaceous. 543. Shrub 5 ft. Corolla white with yellowish tube.

The inflorescence in several respects is like that of *A. brevipes* Schlechter, but the foliage of the two is diverse. According to the description *A. Loesneriana* Schlechter has coriaceous leaves and larger flowers dissimilar in some points. The only flower examined shows no signs of moniliformity in its ovary. The berry would hence appear to be sometimes undivided.

ALYXIA SERPENTINA S. Moore, sp. nov. *Fruticulus* pauciramosus, glaber; *ramis* sat validis superne copiose foliosis inferne foliorum mortuorum cicatricibus signatis; *foliis* ± 4 cm. \times 3-6 mm. plus minus patentibus vulgo 4-natis verticillatis breviter petiolatis anguste oblongo-lanceolatis obtusis margine revolutis coriaceis nitentibus; *cymis* 2 \times 2 cm. pseudoterminalibus pedunculatis plurifloris; *bracteis* ovatis .5 mm. long. quam pedicelli crassiusculi manifeste brevioribus; *calycis* pedicello brevioris segmentis 1.5 mm. long. triangularibus acutis; *corollæ* tubo 2.5 mm. long. ex calyce breviter eminente late subcylindrico ore pilis recurvis onusto lobis suborbicularibus tubo æquilongis; *staminibus* medio tubo insertis antheris subsagittatis apiculatis circa 1 mm. long.; *ovario* late ovoideo 1.2 mm. long. *stigmatibus* sessili bifido .5 mm long. coronato.

Taom; serpentine scrub; 2500 ft.; uncommon. 2337. Shrub 2 ft. Corolla white, sweet-scented. In shape of leaf this is somewhat like *A. disphaerocarpa* v. Heurck & Müll. Arg., but in other respects very diverse.

The following specimens referable to the genus are specifically indeterminate:—

1. *A.* sp. (Apparently conspecific with Vieillard 2969 and Deplanche 205.) Port Déspointes; woods. 137. Small shrub, 4 ft. The specimens are flowerless. Berries very small, torulose.

2. *A. CLUSIOPHYLLA* Guillaun.? (*Gynopogon clusiophyllum* Baill.?) Mt. Mou. 625. Agrees with the description as to foliage. Baillon does not describe the fruit which is simple or moniliform, the drupes narrowly ovoid, longitudinally sulcate and transversely rugose, and 15 \times 7 mm. There are no flowers.

3. *ALYXIA*, sp. nov.? Plaine des Lacs; *Dacrydium* association; 800 ft. 319. Weak shrub, 5 ft. Leaves ternate, $\pm 5 \times 1$ cm., strongly shining above. Fruits moniliform, the portions ovoid, 9×4 mm. Nothing like this has come under notice, either by specimen or by description. Flowers are wanting.

4. *A.* sp. nov.? Mt. Humboldt; forest by stream; 1000 ft.; serpentine. 1035. Leaves ternate, oblanceolate-obovate, coriaceous, about 6×3 cm. Berries torulose, the segments $14-18 \times 8-9$ mm. Foliage rather like that of *A. obovatum* Schlechter. Flowers wanting.

CERBERA ODOLLAM Gaertn. Port Ngéu, Nouméa. 6, 8. Taom; stream-side association; 200 ft.; serpentine. 2287. East Indies to Australia and Polynesia.

PTEROCHROSIA COMPTONII S. Moore, sp. nov. (Pl. 22. figs. 1-6.) *Frutex* suborgyalis, fere glaber; ramis bene foliosis subteretibus levibus; foliis $9-10 \times 3-4$ cm. petiolatis (pet. 1.5 cm. long.) anguste obovato-oblongis obtusis vel obtusissimis basi cuneatim angustatis supra levissime nitidis subtus opacis; corymbis $8-11 \times 5-6$ cm. sublaxis plurifloris foliis subæquilongis; bracteis ovatis acutis mox deciduis $\pm 10 \times 5$ mm.; pedicellis gracilibus plerumque 12-15 mm. long.; calycis segmentis quam corollæ tubus manifeste brevioribus ovatis vel lanceolato-oblongis obtusis vel obtuse acutis inter se inæqualibus $5.5-6 \times 3$ mm.; corollæ tubi 13 mm. long. parte amplificata quam pars cylindrica ter longiore lobis tubo circa æquilongis oblongo-obovatis apice truncatis margine denticulatis; staminibus infra medium tubum insertis antheris oblongo-ovatis apiculatis 2 mm. long.; carpellis glabris 1×1.25 mm. stylum longiorem (fere 6 mm. long.) fulcientibus; samara oblonga apice rotundata ipso mucronata glabra calyce persistente stipata $3.2-3.4 \times 1.5-1.7$ cm.

Taom; riverside among pebbles; 300 ft.; serpentine. 2323. Shrub 5 ft. with copious white latex. Corolla white with yellow throat surrounded by purple marking, sweet-scented. Differs from *P. Vieillardii* Baill. (Pl. 22. fig. 7) in several points, notably the inflorescence and the oblong samaras.

P. NERIIFOLIA S. Moore, sp. nov. *Arbusecula*; ramulis crebro foliosis robustis striatulis subtiliter griseo-pubescentibus; foliis $8-12 \times 2.5-4$ cm. oblongo-oblanceolatis obtusis vel obtusissimis basin versus in petiolum 1-3 cm. long. angustatis utrinque leviter nitidis glabris; corymbis fastigiatis 14×12 cm. multifloris pubescentibus; bracteis albis $\pm 8 \times 5$ mm. ovatis obtusis puberulis diutule persistentibus; pedicellis satis validis circa 1 cm. long. pubescentibus; calycis albi segmentis $7-8 \times 3-5$ mm. obovatis vel obovato-oblongis obtusissimis puberulis; corollæ tubi 9 mm. long. parte amplificata parti cylindricæ æquilonga lobis obovatis obtusissimis 6.5 mm.

long.; *staminibus* supra medium tubum insertis antheris ovatis apiculatis 1 mm. long.; *carpellis* glabris 1×.75 mm.; *stylo* in toto 6.5 mm. long.

Among rocks of Riv. Comboui; 400 ft.; serpentine. 2168. Tree 25 ft.; rough dark bark; copious white latex becoming sticky at once. Corolla pinkish white, sweet-scented. Fruit not seen, but, judging from the carpels, very like that of *P. Comptonii*. No. 900 from Kuakué edge of forest by river-side, 100 ft.; serpentine, should be referred here. It is a shrub 4 ft. high with erect stem. Leaves somewhat more shining than those of *P. Comptonii*. Corolla white, tinged magenta, sweet-scented. This is apparently a state of the plant flowering before attaining its full stature.

Baillon in a short diagnosis of *Pterochrosia* (Hist. des Plantes, x. p. 194) says there is no difference as regards the flowers between it and *Cerbera*, *Pterochrosia* being characterized by its samaroid as distinguished from *Cerbera*'s drupaceous fruit. But he also says the corolla-lobes overlap to the right, whereas those of *Cerbera* (and of the two species here described) overlap to the left. In these circumstances, and seeing how the two statements are contradictory, we may assume that "dextrorsum" has been written inadvertently for "sinistrorsum" in Baillon's description. A formal diagnosis of the genus is appended herewith.

PTEROCHROSIA Baill., *Apocynacearum* e tribu *Plumeriearum* genus.

Calyx 5-partitus, intus eglandulosus. *Corolla* hypocrateriformis, tubo calycem excedente inferne cylindrico superne dilatato supra staminum insertionem squamis 5 pubescentibus onusto, faucibus haud vel vix contractis; limbo 5-lobo lobis sinistrorsum obtagentibus. *Stamina* supra vel infra medium tubum inserta; antheræ parvæ loculis basi inappendiculatis. *Ovarii* carpella 2, distincta; stylus filiformis, inferne sejunctus, superne in stigma crassum appendice prominente biloba onustum subito dilatatus; ovula quove in loculo 2. *Fructus* samaroidæus, abortu unicus, oblongus vel vespertilioniformis, coriaceus, 1-spermus. *Semina* compressa, exalbuminosa, cotyledonibus carnosis.—Frutices vel arbusculæ. Folia alterna, casu opposita vel subopposita, crebro penninervia, coriacea. • Flores mediocres prominenter bracteati, in paniculas vel corymbos ex racemis compositis constantes ordinati.

Generis species tres prima visu ita distinguendæ sunt:

§ *Euryptera*.

Samara alis latis transversis prædita *P. Vieillardii*.

§ *Leptoptera*.

Samara alis oblongis prædita—

Inflorescentia sublaxa. Bracteæ mox deciduæ.

Stamina infra medium tubum inserta *P. Comptonii*.

Inflorescentia fastigiata. Bracteæ diutule persistentes. Stamina supra medium tubum inserta

P. neriiifolia.

ALSTONIA VIEILLARDII V. Heurck & Müll. Arg. River Comboui; forest; 100 ft.; serpentine. 2010. Tree 25 ft. Branches of inflorescence purple-brown. Corolla bright yellow.

A. LANCEOLATA V. Heurck & Müll. Arg. Mt. Canala; transitional forest; 1500 ft.; frequent; mica schist. 1271. Ignambi; transitional forest; 2000 ft.; scarce; gneiss. 1719. Shrub or small tree. Corolla white, sweet-scented.

A. PLUMOSA Labill. Ignambi; forest; 2500 ft.; fairly frequent; gneiss. 1518. Tree 30 ft. Panicles drooping. Corolla creamy white, scentless.

A. LENORMANDI V. Heurck & Müll. Arg. Mt. Koghi; serpentine scrub; above 2000 ft.; frequent. 738. Shrub 4 ft. Corolla white, hairy at mouth, sweet-scented. The only specimen of this species seen (Vieillard, 919) is not very satisfactory, hence some doubt must attend the identification.

A. LANCEOLIFERA S. Moore, sp. nov. *Arbuscula* glabra; *ramulis* verticillatis subteretibus in nodis aliquantulum tumidis sursum foliosis; *foliis* $\pm 10 \times 2$ cm. plerumque oppositis raro ternis vel subternis petiolatis (pet. 5 mm. long.) oblongo-lanceolatis obtusis basi angustatis pergamaceis costa media supra impressa subtus prominente costis lateralibus utrinque 20 vel ultra subobscuris; *cymis* $6 \times 6-8$ cm. pseudoterminalibus foliis brevioribus pedunculatis ramosis laxe plurifloris; *pedicellis* calycem plane excedentibus; *calycis* 1.5 mm. long. segmentis late ovatis obtusissimis tubum circa æquantibus; *corollæ* glabræ tubo calycem paullo excedente cylindrico lobis dextrorsum obtegentibus suborbicularibus tubo circiter æquilongis; *staminibus* juxta medium tubum insertis antheris ovoideo-oblongis obtusis .75 mm. long.; *ovario* fere 1 mm. long. late ovoideo in stylum breviorē desinente; *stigmatē* elevato-pileiformi apice breviter bifido .5 mm. long.

Mt. Koghi; margin of valley forest; 1000 ft.; serpentine. 766. Tree 25 ft. Flowers creamy-white. This has much the foliage of *A. lanceolata* V. Heurck & Müll. Arg., but different flowers.

A. CORIACEA Panch. MS. ex Guillaum. *Frutex* altus glaber, *ramulis* ultimis sat validis foliosis; *foliis* $\pm 10 \times 2$ cm. oppositis oblongo-oblanco-latis obtusis basi in petiolum 1-2 cm. long. gradatim attenuatis coriaceis costis lateralibus utrinque ultra 20 pag. sup. nitida fere evanidis pag. inf. mediocriter perspicuis; *cymis* pseudoterminalibus circa 6×10 cm. pedunculatis ramosis laxe plurifloris; *pedicellis* 5 mm. long.; *calycis* 1.5 mm. long. fere usque basin divisi lobis late ovatis obtusis; *corollæ* tubo in medio aliquantulum dilatato 2.5 mm. long. lobos lanceolatos semiæquante; *antheris* juxta medium tubum insertis lanceolatis acutis .8 mm. long; *ovario* .5 mm.

long. ovoideo in stylum æquilongum desinente; *stigmatæ* ampullæformi apice breviter bifido 25 mm. long.

Plaine des Lacs; damper parts of *Dacrydium* association; 800 ft. 314. Shrub 6 ft. Corolla greenish white.

The type of this is Vieillard 2956 to which is appended the note: "Arbrisseau de 3 mètres. Plaines ferrugineuses arides." No. 693, also referred here, has shorter inflorescences (4 cm. long). Mt. Dore; common in scrubby woods; 2000 ft.; serpentine.

ALSTONIA LEGOUXII V. Heurck & Müll. Arg. Presqu'île Bogota, abundant in serpentine scrub; 0-1500 ft. 1324. Nekando; scrub at forest margin; serpentine. 2030. Shrub 4-6 ft. Corolla white with a pinkish-mauve tinge or a rosy streak on each lobe.

A. RETUSA S. Moore, sp. nov. *Frutex* ramosus, orgyalis, glaber; *ramulis* subteretibus aliquantulum nodosis sursum foliosis; *foliis* 3-4.5 × 1-2 cm. oppositis oblanceolatis vel oblanceolato-linearibus retusis basin versus in petiolum 5-8 mm. long. gradatim extenuatis coriaceis costa media supra insculpta subtus prominente costis lateralibus utrinque circa 10 tenuibus pag. sup. insculptis pag. inf. paullo eminentibus; *cymis* circa 4 × 2 cm. pseudoterminalibus foliis circiter æquilongis pauciramosis paucifloris; *pedicellis* 4 mm. long. calyces facile excedentibus bracteatis crassiusculis; *calycis* 2 mm. long. segmentis rotundatis tubum circiter æquantibus; *corollæ* pallide luteæ tubo ex calyce plane eminenti in medio constricto inferne superneque dilatato 6 mm. long. lobis dextrorsum obtegentibus oblongis obtusis tubum semi-æquantibus; *staminibus* tubo prope basin insertis antheris lanceolatis 75 mm. long.; *ovario* 1 mm. long. subgloboso stylum brevioris fulcimente; *stigmatæ* pileato apice bifido; *folliculis* linearibus tenuibus apice ipso paullulum attenuatis 7.5 cm. × 4-5 mm.

Poume: serpentine scrub; 500 ft. 2363. Shrub 6 ft. Branches erect, twiggy. The retuse leaves afford an easy means of recognising this species. The flowers are apt to become galled by puncture apparently of some insect.

A. DEPLANCHEI V. Heurck & Müll. Arg. Baie Kuakué; frequent in serpentine scrub; 500 ft. 883. Shrub 6 ft. Flowers white, scentless.

A. COMPTONII S. Moore, sp. nov. *Arbuscula* glabra; *ramulis* ultimis sat robustis compressis aliquantulum incrassatis; *foliis* 12-20 × 3-5 cm. oppositis decurrentibus oblongo-oblanceolatis obtusis vel obtusissimis basi in petiolum longum (sæpe 4-5 cm.) coartatis tenuiter coriaceis costa media pag. sup. insculpta pag. inf. prominente costis lateralibus numerosis (plerumque 30 vel etiam magis) tenuibus utrinque bene visibilibus; *cymis* pseudoterminalibus circa 10 × 12 cm. horum ramis gracilibus maxime divaricatis; *pedicellis* ± 4 mm. long. calyce multo longioribus; *calyce* ultra medium diviso lobis

suborbicularibus vel late ovatis obtusisque 1 mm. long.; *corollæ* albæ tubo calycem breviter excedente (2.25 mm. long.) medio parum dilatato lobis oblongis obtusis 4 mm. long.; *staminibus* prope medium tubum insertis antheris lanceolatis obtusis .75 mm. long.; *ovario* 1 mm. long. ovoideo in stylum brevem desinente; *stigmatibus* anguste pileiformi .25 mm. long.

Kuakué; scrub-forest; 200 ft.; serpentine. 953. Small tree, 20 ft. The long narrow *Rauwolfia*-like leaves coupled with the very divaricate branching of the cymes affords an easy means of recognising this plant.

ALSTONIA SALIGNA S. Mocre, sp. nov. *Frutex* glaber vel arbuscula; *ramulis* tenuibus fuscis superne foliosis; *foliis* 8-9 cm. × 6-8 mm. oppositis petiolatis (pet. 5-10 mm. long.) lineari-lanceolatis obtusis tenuiter coriaceis costa media pag. sup. insculpta pag. inf. eminente costis lateralibus numerosis parum aspectabilibus; *cymis* pseudoterminalibus 5 × 7 cm. laxè paucifloris; *floribus* parvis longipedicellatis pedicellis ± 6 mm. long.; *calyce* 1.25 mm. long. fere basin usque partito segmentis late ovatis obtusis; *corollæ* albæ tubo 2.25 mm. long. in medio aliquanto dilatato intus ore et prope staminum insertionem pubescente lobis dextrorsum obtegentibus oblongis obtusis 4 mm. long.; *antheris* juxta medium tubum insertis lanceolatis obtusis .3 mm. long.; *ovario* fere 1 mm. long. ovoideo-oblongo in stylum paullo breviorè excurrente; *stigmatibus* inferne tumido superne capitato bifidoque .3 mm. long.

Riv. Ngoyé; *Spermolepsis-Casuarina* forest; 500 ft.; serpentine. 1009. In the flowers this much resembles *A. Comptonii*, but its small narrow willow-like leaves are very distinct.

TABERNÆMONTANA CERIFERA Panch. & Sebert. Mt. Arago; streamside forest; 1000 ft.; schists. 1420. Tree. Flowers creamy white, twisted, with strong sweet scent. Copious white latex.

There is no specimen of this species in the country, and the description is very meagre, so that the determination must be regarded as provisional. Mr. Compton notes that the plant is "abundant in moist forests, sea-shore woods, etc." The old nomenclature has been used; in the new it would be an *Ervatamia*.

PARSONSIA CORYMBIFERA Baill. Mt. Mou; moist parts of Niaouli zone; 8000 ft.; cretaceous. 508. Flowers yellowish tinged with pink.

P. BRACHIATA Baill. Port Déspointes; woods. 227. I have been unable to trace a description under this name. Mr. Compton's plant is similar to Deplanche 72, cited by Guillaumin under *P. brachiata*. Flowers greenish white.

P. BALANSÆ Baill. Nekando; among rocks of streams; serpentine. 2018. Twining liane. Corolla spreading, white with a dull crimson blotch on the upper side of each petal, throat rich yellow, slightly scented. This

is evidently conspecific with Balansa 209 (at Kew), which is Baillon's type. Schlechter's 15105, referred to this species, so far at least as concerns the specimens distributed under this number to the British Museum and to Kew, is obviously a different plant.

PARSONSIA COMPTONII S. Moore, sp. nov. Planta scandens, ramis bene foliosis subteretibus uti petioli foliorum pagina inf. nec non inflorescentiæ axis tomento fulvo subtilissimo obductis deinde glabrescentibus; foliis usque 7 × 3 cm. petiolatis cordatis acutis pergamaceis pag. sup. primo subtiliter pubescentibus mox glabrescentibus et saltim in sicco fusciscentibus petiolis circa 2 cm. long.; cymis sæpissime ramulos breves juveniles terminantibus 4-6 × 3-5 cm. patenti-ramosis multifloris; pedicellis validis calycem excedentibus; calycis vix 2 cm. long. medium usque divisi fulvo-tomentosi segmentis deltoideis obtusis; corollæ tubo 3 mm. long. suburceolari ut lobi extus subtilissime tomentoso lobis triangularibus acutis tubo æquilongis; staminibus prope basin corollæ affixis filamentis dense barbatis superne glabris 4 mm. long. antheris breviter exsertis lanceolato-sagittatis acutis 3 mm. long.; disci squamis oblongis obtuse acutis ovario circa æquilongis; ovario ovoideo superne setoso 1.25 mm. long.; stylo glabro 3 mm. long.; stigmatibus antherarum medium attingente vix 1 mm. long.

Poume; scrub and scrubby woods; 1200 ft. 2370. Liane keeping low among shrubs; corolla grey outside, deep red inside, scentless. Its indumentum and the rather small cordate leaves are good first-sight points for distinguishing this species.

P. VARIABILIS Baill. Baie Ngo; serpentine scrub; 200 ft.; frequent. 263. Plaine des Lacs; abundant on slight slope. 377, 377 a. River Comboui; lowland serpentine scrub; 500 ft. 2219. Low liane. Lower leaves linear, upper broader. Corolla white with a purple blotch on each petal, scentless. (The corolla of No. 263 is described as white, but it seems to be only a form of this variable species.)

P. EFFUSA S. Moore, sp. nov. Caule volubili ramulos foliatos glabros emittente; foliis 7-8 × 3.5-4 cm. petiolatis (pet. 1.5-2 cm. long.) anguste ovato-oblongis breviter acuminatis basi truncato-rotundatis membranceo-coriaceis ubique glabris costis lateralibus utrinque 10-12 subtus aspectabilioribus; cymis 12 × 20 cm. terminalibus ramosis effusis multifloris glabris; pedicellis gracilibus ± 1 cm. long.; calycis glabri 3 mm. long. segmentis deltoideis obtusis tubo æquilongis; corollæ tubo 3.5 mm. long. cylindrico extus glabro intus ad fauces barbato quam lobi triangulares obtuse acuti paullulum brevioribus; staminibus prope basin tubo corollæ insertis filamentis complanatis inferne ciliatis antheris breviter exsertis lanceolato-sagittatis obtusis ambobus 3.5 mm. long.; disci squamis oblongis obtuse acutis ovarium

circa æquantibus; ovario 1.25 mm. long. compresso late ovoideo glabro; stylo superne leviter dilatato glabro vix 3.5 mm. long.; stigmatæ antherarum medium attingente 1.5 mm. long.

River Ngoyé; riverside scrubby *Casuarina* association; 400 ft.; serpentine. 2105. Corolla dull yellowish white. Differs from *P. Balansæ* Baill. *inter alia* in the texture of the somewhat differently shaped acuminate leaves, the very effuse cymes and much smaller corollas with narrow lobes. No. 352 from Plaine des Lacs appears to be a form of this with more acuminate leaves and smaller, comparatively few-flowered cymes.

PARSONSIA TAOMENSIS S. Moore, sp. nov. *Caule* scandente ramulos teretes subtiliter fulvo-tomentellos deinde glabrescentes gignente; *foliis* usque 5 × 2 cm. brevipedicellatis (pet. 3–6 mm. long.) oblongis vel anguste oblongo-ovatis apice rotundatis ipso subito brevissime attenuatis basi obtusis supra glabris pallideque lucidis subtus tomento minuto fulvo vel griseo obtectis costis lateralibus utrinque 4–6 facie utraque mediocriter aspectabilibus; *cymis* terminalibus abbreviatis (1.5 × 1.5 cm.) dense plurifloris; *pedicellis* calyce paullo brevioribus; *calyce* 2.25 mm. long. usque medium diviso ut *pedicelli* corollæque subtiliter tomentello lobis deltoideis acutis; *corollæ* 3.75 mm. long. tubo campanulato ore annulo pilorum onusto quam lobi triangulares acuti 2.25 mm. long. breviores; *staminibus* juxta basin corollæ insertis filamentis brevibus fere glabris antheris breviter exsertis lanceolato-sagittatis acutis 2 mm. long.; *disci* squamis oblongo-ovoideis obtusis; ovario subgloboso disci squamis circiter æquilongis .75 mm. long.; *stylo* glabro 1 mm. long.; *stigmatæ* anguste claviformi antherarum medium superante .75 mm. long.

Taom; serpentine scrub; 1500 ft. 2312. A low liane. Corolla green, without markings. *P. micans* Schlechter has foliage somewhat different in several respects, larger corollas (7 mm. long.) and filaments equal in length to the stamens.

Var. *FUSCESCENS*, var. nov. *Foliis* subtus puberulis siccitate fuscescentibus; *corollæ* tubo in ore pilis perpaucis prædito.

Taom; serpentine scrub; 1000 ft. 2311. A low liane. Flowers dull green with brown markings on inside of petals.

ASCLEPIADACEÆ.

ASCLEPIAS CURASSAVICA L. Tonghouè Mts. Weed of cultivation. 164. From the West Indies widely spread over warmer regions of the world.

SARCOSTEMMA AUSTRALÆ R. Br. Ouen Toro; littoral zone. 50. Île Ouéré; abundant in littoral zone; scrambling and twining among bushes. 642. Australia.

GYMNUMA SYLVESTRE R. Br. Île Ouéré; littoral sand on hill. 640.

This is not in Guillaumin's list, but there is a specimen of Vieillard's in the British Museum (No. 950). India and Archipelago, tropical Australia.

TYLOPHORA INSULINCOLA S. Moore, sp. nov. *Caule* volubili tereti distanter folioso subtiliter pubescente; *foliis* 3.5-4.5 x 1.5-2 cm. petiolatis (pet. ±1 cm. long.) ovato-oblongis obtusissimis apice ipso mucronatis basi obtusis subtenuiter crassiusculo-coriaceis supra mox glabris leviterque nitidis subtus costa media pubescente exempta puberulis; *cymis* plurifloris breviter pedunculatis 2-4 cm. long.; *pedicellis* longit. flores plane excedentibus uti pedunculi calycisque subtiliter pubescentibus; *calycis* 3 mm. long. alte partiti segmentis ovato-oblongis obtusis; *corollæ* rotatæ tubo 1 mm. long. lobis ovatis obtusis; *facie* utraque glabris 6.5 mm. long.; *coronæ* phyllis .5 mm. long. ovatis obtusis superne a gynostegio liberis incrassatis fuscis; *antherarum* appendicibus parvis quadratis super stigma vix eminentibus; *polliniis* .2 mm. long. ovoideis glandulæ subglobosæ conjunctis; *stigma* vertice convexiusculo .75 mm. diam.

Isle of Pines; roadside; coral-forest association; 100 ft. 2281. A low liane, right-handed twiner. Corolla pale yellow, sweet-scented.

T. biglandulosa F. Muell., from Norfolk Island, known to me only by description and figure, is a glabrous plant with larger leaves and considerably larger flowers. *T. tapeinogyne* Schlechter (New Caledonia) in its typical form is described as having puberulous stems, leaves and inflorescences, but its corollas have oblong lobes, the coronal leaves are oblong and the anther appendages overtop the depressed stigma. The three species are no doubt closely connected.

MARSDENIA ERICOIDES Schlechter. River Ngoyé; riverside and rocks in stream-course; 200 ft.; serpentine. 2133. Low shrub 1-2 ft. Pedicels and calyx brownish. Corolla white with spreading segments pink above, very sweet-scented. From same locality as Schlechter obtained his typical material.

M. ASSIMULATA S. Moore, sp. nov. *Caule* gracili scandente nisi volubile crebro subdistanterve folioso cito glabro; *foliis* 6-10 cm. x 1.5-3 mm. brevipetiolatis linearibus obtusis coriaceis glabris; *cymis* foliis multo brevioribus breviter pedunculatis plerisque 3-5-floris; *floribus* parvis pedicellis 2 mm. long. pedunculum æquantibus fultis; *calycis* 2 mm. long. alte partiti segmentis ovatis acutis glabris; *corollæ* parvulæ urceolaris tubo 3.5 mm. long. intus præsertim in faucibus pilis recurvis obsito lobis ovato-oblongis acutis crassiusculis 2 mm. long.; *coronæ* phyllis superne liberis lanceolatis acutis gynostegium leviter superantibus; *gynostegio* 1.5 mm. alt.; *antherarum* appendicibus lanceolatis acutis; *polliniis* ovoideis circa .05 mm. long. glandulæ oblongæ conjunctis.

Plaine des Lacs; gentle serpentine slopes; 500 ft. Trailing, ascending

among bushes. 337. Kuakué; river flood-plains; serpentine; 50 ft. 911. River Comboui; lowland scrub; 500 ft.; serpentine. 2224. The flowers are described as dull greenish, dull yellow and brown, and brownish outside, yellowish green inside, sweet-scented.

In foliage this is the counterpart of *M. Billardieri* Dene. and *M. microstoma* Schlechter: of this latter there is no specimen in the London herbaria; it is described as having *inter alia* 8-15-flowered cymes, corollas with sub-orbicular very obtuse lobes, and a corona of broadly trapeziform leaves entirely adnate to the gynostegæ. *M. Billardieri*, also not available for examination except for Schlechter's specimens so named (Nos. 14892 and 15200), with what appear to be the flowers injured by insects, is said to have 1-3-flowered cymes, corollas with bundles of hairs in the throat and deltoid lingulate coronal leaves: moreover, the corollas of this species would seem to be considerably the larger.

HOYA NEOCALEDONICA Schlechter. Ermitage stream; forest; 500 ft.; serpentine. 199. Taom; frequent in creekside forest; 300 ft.; serpentine; 2340. Twining liane. Flowers waxy, white, purple centre, sweet-scented.

H. LIMONIACA S. Moore, sp. nov. Scandens fere ubique glabra; caule subtereti ad nodos tumido distanter folioso crassiusculo; foliis 7-8 x 3-3.5 cm. petiolatis (pet. usque 15 mm. long.) ovatis apicem versus attenuatis apice ipso obtusis basi rotundato-obtusis 5-nerviis crassiusculo-coriaceis; umbellis paucifloris pedunculatis; pedunculo 2.5 cm. long. subtereti sparsim pilosulo florum rhachi abbreviata subglabrata coronato; pedicellis filiformibus glabris 12-15 mm. long.; calycis 1.5 mm. long. extus papilloso segmentis ovatis obtusis glabris; corollæ pansæ 1 cm. diam. medium usque divisæ lobis ovatis obtuse acutis intus subtiliter papilloso; coronæ phyllis patentibus superne rhomboideo-ovatis utrinque acutis dorso late canaliculatis usque 4 mm. radiantibus; antheris trapezoideis appendice tenera ovato-lanceolata obtusa onustis; pollinibus 6 mm. long. oblongo-pyriformibus quam glandula ovata 4-plo longioribus.

Isle of Pines; abundant in coral forests; 50 ft. 2253. Liane. Corolla pale yellow, slightly scented. Differs from *H. neocaledonica* Schlechter chiefly in the subglobose (not cylindrical) flowering rhachis, and the short pedicels to the smaller pale yellow (not white) flowers.

To this species may perhaps belong a yellow-flowered *Hoya* of Pancher's collecting (*Pancher*, sine no. in Herb. Mus. Brit.). This is not noticed by Guillaumin, whose list contains only one species of the genus, viz. Schlechter's mentioned above.

LOGANIACEÆ.

GENIOSTOMA BALANSÆANUM Baill. Nekando; serpentine scrub; 300 ft. 2025. Small shrub under 3 ft. Flowers erect, corolla white, stamens white spreading outwards between petals.

GENIOSTOMA GLAUDESCENS Schlechter. Ignambi; fairly frequent in forest; 2500–3500 ft.; gneiss. 1517, 1852. Small tree, 20 ft. Corolla white, easily falling, scentless.

G. THYMELEACEUM Baill. Comboui Mts.; *Spermolepis-Agathis* forest by creek; serpentine; 100 ft. 2174. Small weak shrub, 3 ft. Flowers pendent. Calyx green. Corolla white, faintly scented.

G. LOPEZIÆFOLIUM S. Moore, sp. nov. *Frutex* elatus glaber; *ramulis* brevissime 4-alatis crebro foliosis; *foliis* $\pm 4 \times 1.5$ cm. subsessilibus oblongo-lanceolatis lanceolatisve acutis nisi acuminatis basi sæpissime obscure cordatis integris membranaceis; *floribus* axillaribus solitariis; *pedunculis* usque 1.5 cm. long. filiformibus basin versus bracteolatis; *calyce* alte partito 3 mm. long. segmentis late ovatis obtusissimis margine microscopice ciliolatis; *corollæ* albæ late campanulatæ tubo quam calyx paullo longiore intus subtiliter puberulo lobis suborbicularibus tubum semiquantibus; *staminibus* exsertis faucibus affixis filamentis 1 mm. long. quam antheræ parvæ apiculatæ paullulum longiores; *ovario* depresso globoso glabro 2×4 mm. quam stylus crassus longiore; *stigmatibus* didymo.

Tonine; forest; 2000–3000 ft. 1964. Shrub 10 ft. Branches dorsiventral. Flowers pendent. This is much like *G. Novæ-Caledoniæ* Vieill., from which it can be told on sight by its short, broadly campanulate flowers.

G. CONSIMILE S. Moore, sp. nov. *Arbuscula* glabra; *ramulis* subteretibus copiose foliosis; *foliis* $3.5\text{--}5$ cm. $\times 12\text{--}15$ mm. brevipetiolatis oblongo-lanceolatis lanceolatisve breviter acuminatis basi rotundatis nonnunquam obscure cordatis margine undulatis membranaceis; *floribus* in axillis foliorum solitariis pedunculo gracili prope basin bracteolato circa 1 cm. long. insidentibus; *calycis* 2.5 mm. long. alte partiti segmentis late ovatis obtusissimis margine microscopice ciliolatis; *corollæ* urceolato-campanulatæ tubo calycem duplo excedente intus prope basin piloso lobis suborbicularibus 2×2 mm.; *antheris* subsessilibus corollæ faucibus insertis apice breviter appendiculatis vix 1.5 mm. long; *ovario* 2 mm. diam. globoso glabro in stylum 2.5 mm. long. crassum desinente; *stigmatibus* didymo 1 mm. in transversum.

Mt. Canala; forest margin; 1500 ft.; mica schists. 1255. Small tree, 20 ft. Branches dorsiventral. Flowers pendent. In many respects very like the last; the dendritic habit, subterete branches and narrow flowers, with quite different stamens, also the smaller ovary with longer style, are its chief distinguishing features.

G. RUPESTRE Forst. Mt. Panié; forest margin; 1000 ft.; gneiss. 1808. Small tree. Corolla pale greenish white, slight scent. Polynesia.

GENIOSTOMA DENSIFLORUM Baill. River Ngoyé; among rocks in creek; 300 ft.; serpentine. 2088. Shrub 10 ft. Branches erect, rather fastigiate. Corolla greenish white, limb spreading, unpleasant scent.

Near this are Schlechter's nos. 14748, 14828, 15084, 15405 referred to *G. fœtens* Baill. But the type of this (*Balansa* 2169), as represented in the British Museum, is a very different plant.

Like most of Baillon's descriptions of New Caledonian plants that given of *G. densiflorum* is unsatisfactory in several respects. The identification here made is therefore to be regarded as provisional.

G. FLUGGEOIDES S. Moore, sp. nov. *Frutex* ? glaber; *ramulis* subteretibus ad nodos aliquanto dilatatis foliosis; *foliis* $\pm 4-6 \times 2.5-3$ cm. petiolatis (pet. ± 1 cm. long.) oblongo-ovatis apice rotundatis nisi obtusissimis basi obtusis membranaceis; *floribus* in cymas axillares ramosas plurifloras $2 \times 2-2.5$ cm. digestis; *pedicellis* usque 3 mm. long. quam calyx sæpissime longioribus; *calycis* 2 mm. long. segmentis ovatis obtuse acutis tubo æquilongis; *corollæ* 4 mm. long. campanulatæ tubo calycem æquante intus in faucibus setoso lobis tubum æquantibus ovato-oblongis obtusis prope basin setosis; *antheris* subsessilibus corollæ ore insertis late oblongis minute apiculatis 1.55 mm. long.; *ovario* subgloboso glabro stylum gracilem brevioris fulcioris 1.5 mm. diam.; *stigmatibus* didymo; *capsula* ovoideo-oblonga obtusa 6 mm. long.

No locality. No number.

Near *G. celastrineum* Baill., which has differently shaped leaves and much narrower and acute calyx-lobes.

G. OLEIFOLIUM S. Moore, sp. nov. *Frutex*? ramosus glaber; *ramulis* ascendentibus vel patentibus crebro foliosis; *foliis* $2-3 \text{ cm.} \times 5-7$ mm. parvis lineari-oblongatis obtusis inferne in petiolum 5 mm. long. angustatis tenuiter coriaceis; *cymis* abbreviatis 2-paucifloris circa 6×5 mm.; *pedicellis* sat validis calyce paullo longioribus bracteolas parvas subulatas fulcioribus; *calycis* 1.5 mm. long. segmentis tubo longioribus ovatis obtusis margine ciliolatis; *corollæ* subrotatæ medium usque divisæ tubo calyci æquilongis intus in faucibus setoso lobis late oblongis obtusissimis intus setosis; *filamentis* brevibus corollæ ore insertis antheris lanceolatis apiculatis 1 mm. long.; *ovario* depresso globoso glabro 1 mm. diam.; *stylo* brevi crassiusculo 75 mm. long.; *stigmatibus* didymo 5 mm. long.

Mt. Arago; schists. 1434 a.

Under the name of *G. Pancheri*, Baillon gives an imperfect description of a species with leaves in shape and size evidently much like those of the plant just described, but membranaceous in consistence and with a fine velvety indumentum below. Moreover, the cymes of *G. Pancheri* are described as several-flowered and the corollas would appear to have a longer tube than have those of *G. oleifolium*,

FAGRÆA GRANDIS Panch. & Seb. Mt. Mou; damp parts of Niaouli association; 1000 ft.; cretaceous. 524.

GENTIANACEÆ.

ERYTHRÆA AUSTRALIS R. Br. Anse Vata; sandpit. 71. Australia.

BORAGINACEÆ.

CORDIA MYXA L. Nouméa; Mt. Montravel. 18. Isle of Pines; scrubby woods; serpentine; 100 ft. 2277. Large spreading shrub or tree, 20 ft. Old World tropics.

TOURNEFORTIA ARGENTEA L. Cap N'dona; littoral zone. 875. Sea coasts from tropical Africa to tropical Australia and Polynesia.

CONVOLVULACEÆ.

IPOMÆA PALMATA Forsk. Nouméa; Port Ngéa. 23. Common in littoral and roadsides round Nouméa. Tropics of both hemispheres.

I. CONGESTA R. Br. Kuakué; forest near shore; serpentine. 955. Queensland, Polynesia.

CONVOLVULUS PARVIFLORUS Vahl. Ouen Toro; littoral zone; climbing over shrubs and rocks. 771. East Indies, Malaya, tropical Australia, Polynesia.

EVOLVULUS ALSINOIDES L. Kuakué; among grass and ferns in undergrowth of *Casuarina* woods; 50 ft.; serpentine. 932. Warmer regions of both worlds.

CUSCUTA OBTUSIFLORA H. B. K. Tonghoué Mts.; parasitic on various plants. 170. This widely distributed species, although known from several parts of Australia, seems not to have been recorded hitherto as a native of New Caledonia. Distribution of the last.

SOLANACEÆ.

SOLANUM NIGRUM L. Mt. Dore; old cultivation area; 100 ft. 659. Ouen Toro; littoral sand. 781. A cosmopolitan weed.

S. PSEUDERANTHEMOIDES Schlechter. Ermitage stream; forests; 500 ft.; cretaceous. 150. Shrub 6-8 ft. Branches spreading horizontally. Petals white. Anthers yellow.

The anthers of Mr. Compton's specimens are all equal or nearly equal and polliferous instead of one being reduced to a staminode; they are also a

trifle longer (6 instead of 5 mm.). There are no flowers on Schlechter's specimens available for examination in the London herbaria, but one cannot think the difference above noted to be of specific value.

SOLANUM ARTENSE Montrouz. ex descript. Nouméa, Port Déspointes woods. 226. Shrub 4-6 ft. Corolla white, anthers yellow. Agrees with the description, except that the leaves are a trifle smaller.

S. TORVUM Sw. Nouméa; abundant in waysides and waste places. 17. Tropics of both worlds.

NICOTIANA SUAVEOLENS Lehm. Anse Vata; sandpit. 68. A form of this variable species with small flowers slightly if at all larger than those of the dwarf Australian desert plant called by me var. *rosulata*. Australia.

DUBOISIA MYOPOROIDES R. Br. Mt. Mou; forest; 1000 ft.; cretaceous. 458. Kuakué; abundant in moister parts of scrub; 50 ft.; serpentine. 906. Mt. Canala; edge of forest; 1500 ft.; mica schist. 1262. Ignambi; forest margin; 2000 ft.; gneiss. 1484. Australia.

SCROPHULARIACEÆ.

LINDERNIA NEOCALEDONICA S. Moore, sp. nov. *Herba* perennis, caule repente hac atque illac ramos simplices vel perpauciramulosos ascendentes quadrangulares summum spithameos uti folia glabros emittente; foliis plerisque 2-2.5 x 1.6-1.9 cm. comparate amplis sessilibus ovatis obtusis basi rotundatis margine undulatis trinerviis; floribus axillaribus solitariis pedicellis gracilibus 2 cm. long. suffultis; calycis 5 mm. long. segmentis a basi solutis lineari-lanceolatis acutis glabris; corollæ albæ tubo late subcylindrico quam calyx paullulum brevioris labio postico quadrato retuso 1.5 mm. long. antico 3 mm. long. hujus lobis suborbicularibus 2.5 mm. diam.; staminibus posticis inclusis anticorum filamentis aperte arcuatis basi appendice dentiformi auctis omnium antherarum loculis divergentibus apice haud confluentibus; ovario ovoideo ut stylus 2.5 mm. long.; capsula subglobosa calyce inclusa glabra 3.5 x 3 mm.; seminibus oblongis vel anguste ovoideis dilute brunneis 3-4 mm. long.

Tonine; ponds in stream-bed; 1000 ft. 1932.

The Australian *L. alsinoides* R. Br. would seem to be near this, but its habit, leaves, inflorescences and flowers are in several respects different. Hitherto, apparently, the presence of this genus in New Caledonia has not been recorded.

GESNERACEÆ.

CORONANTHERA DELTOIDIFOLIA Vieill. Mt. Panié; forest; 1000 ft.; gneiss. 1789. Tonine; forest margin; 2000 ft. 1981 Tonine; moist forest; 2500 ft. 1984. Shrub or small tree. Corolla noted as creamy white, creamy yellow, or red-brown.

CORONANTHERA ASPERA Clarke. Mt. Koghi edge of forest; 3000 ft.; 1044. Shrub 6 ft. Flowers dull yellow.

C. PEDUNCULOSA C. B. Clarke. Kuakué; scrub forest (*Spermolepis*); 200 ft.; uncommon. 949. Mts. north of Ngoyé; *Spermolepis* forest and river-side; 300 ft.; serpentine. 2073. Shrub 3-4 ft. Corolla dull yellow or dull red-brown.

DEPANTHUS, *Gesneracearum* e tribu *Cyrtandrearum* genus novum.

Calyx actinomorphic, 5-partitus, persistens. *Corolla* late campanulata; limbus breviter 5-lobus lobis inter se subæqualibus recurvis. *Stamina* 5, juxta basin corollæ affixa hujusque cum lobis alternantia, inter se similia; filamenta inclusa, inferne tomentosa; antheræ inter se liberæ loculis apice distinctis. *Ovarium* superum, 1-loculare, in stylum brevem excurrentis; stigma bilobum; placentæ parietales, ∞-ovulatæ. *Capsula* ovoidea, breviter rostrata, septicide dehiscens; exocarpium coriaceum; endocarpium lignosum; valvæ 2, usque ad apicem dehiscentes. *Semina* minuta, innumera.—*Arbuscula* præter inflorescentiam fere glabra. *Folia* opposita paribus sæpe inæqualibus. *Cymæ* axillares, longipedunculatæ, paucifloræ. *Flores* pro rata parvi, pedicellati.

D. GLABER S. Moore, sp. unica. (*Coronanthera glabra* C. B. Clarke, Monog. Cyrtand. 174.) (Pl. 23.) Mt. Canala; forest; 1000 ft.; mica schists. 1171. Tree 30 ft. or more. Corolla fleshy, cream-coloured.

No. 1956 from Tonine, forest, 500 ft., is a form of this with shorter and relatively somewhat broader leaves, rounded at the base. It is a tree 25 ft. high with dull yellow flowers.

Neglecting some minor points, the nearly actinomorphic campanulate corollas with the five similar stamens seem fully to warrant the separation of this plant from *Coronanthera*.

BIGNONIACEÆ.

DIPLANTHERA DEPLANCHEI K. Schum. Cap Bocage; frequent in serpentine scrub; 500 ft. 1376. Corolla (scentless) and filaments yellow.

TECOMA AUSTRO-CALEDONICA Bur. Couliné (Neketé); moist forest; 1000 ft.; schists. 1277. Ignambi; creekside forest; 1500 ft.; gneiss. 1664. Mt. Panié; forest; 1500 ft.; gneiss. 1804. Liane. Corolla white or cream, with a crimson blotch on inside of each hinder lobe.

ACANTHACEÆ.

ACANTHUS ILICIFOLIUS L. Mt. Dore; littoral zone, salt swamps. 656. Oubatche; mangrove swamps along edge of streams. 1608. A maritime species. Asia to Polynesia.

PSEUDERANTHEMUM TUBERCULATUM Radlk. Isle of Pines; coral forest; 50 ft.; frequent. 2258.

P. COMPTONII S. Moore, sp. nov. *Fruticosum*, ramosum; *ramulis* subteretibus ad nodos aliquanto tumidis paucifoliis puberulis mox glabrescentibus; *foliis* usque 5×2.5 cm. petiolatis (pet. 5–10 mm. long.) ovato-oblongis utrinque obtusis margine leviter undulatis membranaceis utrobique præsertim in nervis puberulis; *cymis* in toto 9×5 cm. nisi brevioribus ex axillis foliorum superiorum oriundis laxis paucifloris puberulis; *bracteis* uti bracteolæ subulatis puberulis 3 mm. long.; *calycis* 9 mm. long. segmentis lineari-setaceis puberulis 7 mm. long.; *corollæ* tubo incurvo extus puberulo faucibus dilatatis 27 mm. long. limbo plane bilabiato labio postico late oblongo 10 mm. long. postici lobis ovato-oblongis retusis 11×6 mm.; *antheris* breviter exsertis oblongis obtusis basi muticis 2.25 mm. long.; *stylo* breviter exserto apice minuto bifido 30 mm. long.; *capsula* acuta 18 mm. long.

River Ngoyé; *Spermolepis* forest near river; 350 ft.; serpentine. 1077. River Combou; *Callitris* forest; 200 ft.; serpentine. 2164. Shrub 2–3 ft. high. Corolla white, scentless. Known from other Polynesian species by the shape and size of the leaves, coupled with the large corollas with a markedly swollen throat.

JUSTICIA (§ *Rhaphidospora*) *PINENSIS*, S. Moore, sp. nov. *Frutex* ramosus circa bimetralis; *ramulis* subteretibus striatulis subdistanter foliosis novellis griseo-puberulis exemptis glabrescentibus; *foliis* $3-6 \times 1.5-1.8$ cm. ovatis vel ovato-oblongis obtusis nisi obtusissimis retusisve basi in petiolum 5–20 mm. long. cuneatim attenuatis margine integris vel leviter undulatis membranaceis glabris; *cymis* axillaribus laxè paucifloris ± 4 cm. long.; *bracteis* ± 1 cm. long.; *bracteolis* circa 1 mm. long. subulatis uti *cymæ* et bracteæ et calyces glanduloso-pubescentibus; *calycis* 4 mm. long. segmentis lineari-lanceolatis acuminatis; *corollæ* extus sparsim pubescentis tubo calyce paullulum longiore (4.5 mm. long) a basi gradatim amplificato labio postico late ovato breviter bifido 5.5×5 mm. labio antico quam posticum longiore (6 mm. long.) hujus lobis lateralibus anguste oblongo-ovatis lobo intermedio ovato palato optime intruso; *capsula* inferne stipitata sursum oblongo-ovoidea acuta pubescente 13 mm. long.; *seminibus* compressis suborbicularibus breviter crebroque tuberculatis circa 1 mm. diam.

Isle of Pines; coral reef; 50 ft.; abundant. 2254. Corolla white with a few purple spots on the lower lip, scentless.

Very close to the Indian *J. glabra* Koen.; differing in the obtuse leaves, the longer more acuminate segments of the calyx, the short upper lip of the corolla and the smaller much less prominently tubercled seeds.

DICLIPTERA PUBESCENS Juss. Isle of Pines; littoral coral sand. 2256.

MYOPORACEÆ.

MYOPORUM TENUIFOLIUM Forst. Port Ngéa ; littoral, just above high-tide mark. 46. Baie Ouémo ; low cliffs near sea. 240. Mouac islet ; maritime rocks and cliffs. 2391. (A form with leaves usually less, rarely a little more than 3 cm. in length.) Shrub 3-6 ft.

M. LÆTUM Forst. Ouen Toro ; sea-shore. 57. Shrub or small tree, 10 ft. Polynesia, New Zealand.

M. ROTUNDATUM S. Moore, sp. nov. *Frutex* ultra sesquimetralis glaber : *foliis* 6 × 3-3.5 mm. oblongo-obovatis apice late rotundatis basi in petiolum brevem gradatim angustatis pergamaceis uti ramuli pustulis parvulis onustis ; *pedicellis* in axillis fasciculatis complanatis 5-7 mm. long. ; *calycis* 5-partiti 2.25 mm. long. segmentis lanceolatis breviter acuminatis ; *corollæ* albæ tubo calyce longiore 4 × 4 mm. subcampanulato lobis 5 subæqualibus suborbicularibus 3 mm. long. ; *staminibus* 4 breviter exsertis ; *ovario* ovoideo 4-loculari 1.5 mm. long. in stylum filiformem 3.5 mm. long. excurrente.

Anse Vata ; littoral sand. 783.

Easily recognised by the leaves with their broadly rotundate tips.

VERBENACEÆ.

LANTANA CAMARA L. Nouméa. 13. Shrub forming dense thickets. Several varieties of flower-colour. Rapidly colonising pastures and becoming a serious pest all over New Caledonia. A tropical American plant now extensively naturalised.

: *L. SELLOWIANA* Link & Otto. Nouméa ; roadside. 98. An introduction from South America.

LIPPIA NODIFLORA Rich. Anse Vata. 65. Weed of cultivation. Cosmopolitan.

STACHYTARPHETA INDICA Vahl. Nouméa. 96. Very abundant weed in pasture all over New Caledonia. "*L'herbe bleue.*"

VERBENA BONARIENSIS L. Nouméa ; roadside weed and especially by ditches. 93. Another South American colonist.

PREMNA SAMBUCINA Wall. Ile Ouéré ; common in *Acacia spirorbis* association on hill. 650. India and Indian Archipelago.

GMELENA NEOCALEDONICA S. Moore, sp. nov. *Frutex* elatus (anne arbuscula ?) ; *ramulis* robustis superne foliosis minute fulvo-tomentosis mox glabrescentibus et cortice laxo cinereo longitrorsum grosse striato circumdatis ; *foliis* 12-17 × 8-14.5 cm. amplis petiolatis ovatis (raro fere suborbi-

cularibus) obtusis vel obtusissimis basi obtusis rotundatisve margine leviter revolutis trinervis coriaceis supra nitidis glabris subtus indumento arcto minutissimo farinoso albo vel dilute brunneo vestitis; *floribus* in cymas terminales paniculam oblongam densifloram fulvo-tomentosam 10 cm. long. referentes digestis; *calyce* campanulato 5-dentato 6.5 mm. long. extus uti corolla dense fulvo-tomentoso; *corollæ* tubo infundibulari 9 mm. long. lobis posticis oblongo-ovatis quam lobi antici inter se similes et suborbiculares longioribus; *staminibus* subinclusis; *ovario* 2 mm. long. ovoideo apice setuloso 4-loculari; *stylo* breviter exserto crassiusculo fere glabro; *stigmatis* lobo postico dentiformi quam anticus multo brevior; *ovulis* vix ex apice loculorum pendentibus.

Riv. Comboui; *Callitris* forest; riverside; 200 ft.; serpentine. 2158. Corolla white with two yellow blotches on the lower lip.

The genus, which is Indian and Malayan with three outlying species in Northern and North Eastern Australia, has not been reported hitherto from New Caledonia. The new species is very different from its congeners.

VITEX TRIFOLIA L. Nouméa; common on roadsides and along sea-shore. 10. East Asia to Polynesia; elsewhere naturalised.

V. RAPINI Beauvis. Canala; serpentine scrub; 1500 ft. 1317. Shrub 5 ft. Flowers yellowish pink.

OXERA GLANDULOSA Vieill. Kuakué; by rocky forest streams; serpentine. 931. Woody twiner. Lower lobe of corolla white, rolled back at end and edges; other lobes dull yellow, rolled back at edges.

O. NERIIFOLIA Beauvis. (ex descript.). Mt. Canala; forest; 2000 ft.; schist clay. 1112. Poume; moist Niaouli association; 50 ft.; serpentine. 2357. Shrub 10 ft. Calyx pale glistening. Corolla tube white, lobes yellowish except white front lobe; strong sweet scent.

O. NERIIFOLIA Beauvis. subsp. CORDIFOLIA Dubard (ex descript.). River Dumbéa; along river banks; 200 ft.; serpentine. 822. Shrub 4 ft. Corolla white, snowy.

O. MACROCALYX Dubard. No locality. No number.

O. PULCHELLA Labill. Port Ngéa; sea cliffs. 48. Shrub 4 ft.

O. BALANSÆ Dubard. Tonine; forest; 2000-3000 ft.; hornblende. 1965. Liane, thick woody stem. Corolla white, thick texture.

O. MORIERI Vieill. Mt. Arago; forest; 800 ft.; fairly open; mica schist. 1403. Tonine; forest; 1000 ft. 1925. Liane. Flowers pendulous, ivory-white, scentless. Native name (Poyes tribe) "Ouieip."

OXERA (§ Campanulatæ) *CRASSIFLORA* S. Moore, sp. nov. *Scandens*; *caule* robusto subtereti glabro lenticellis maxime eminentibus crebro onusto; *foliis* 13 × 8 cm. oppositis petiolatis (pet. 2-2.5 cm. long.) ovatis obtusis basi rotundatis penninerviis coriaceis utrobique glabris pallideque nitidis; *cymis* paucis plurifloris paniculam apertam verisimiliter terminalem 11 × 12 cm. efformantibus; *pedicellis* sat validis glabris 1-1.5 cm. long.; *calyce* parvo crasso glabro 6 mm. long. segmentis 4 brevibus deltoideis obtusis vel obtuse acutis; *corollæ* carnosæ glabræ tubo 25 mm. long. inferne cylindrico superne campanulati dilatato lobo postico 7 mm. long. suborbiculari quam laterales amplæ paullo longiore lobo antico suborbiculari 11 mm. long.; *staminibus* ex corolla circa 15 mm. eminentibus staminodiis clavatis fere 5 mm. long.; *ovario* glabro; *stylo* crassiusculo glabro breviter bifido 3 cm. long.

Mt. Canala; forest or by streams; 1000-2000 ft.; schists. 1153. Liane, thick woody stem. Corolla rich orange-coloured, scentless.

O. robusta Vieill., to which this is closely allied, has in its typical form (Vieillard, 996) markedly 3-nerved leaves, and other specimens with penninerved leaves have been referred to it in error. Besides the leaves (similar in many respects, except for the nervation) the new plant has still more fleshy corollas than the old, corollas drying light brown instead of dark brown or black and with a narrower tube, besides which the stamens and the much longer and differently shaped staminodes are inserted higher up in the corolla tube.

O. (§ Campanulatæ) *COMPTONII* S. Moore, sp. nov. *Arbor* fere 4-metralis; *caule* erecto simplici apice foliifero; *foliis* magnis 34 × 7-8 cm. subsessilibus oblongo-oblongatis obtusis a medio basin usque gradatim angustatis coriaceis opacis glabris; *floribus* in fasciculos cauli insidentes circa 20-flosos digestis; *pedicellis* filiformibus calyce brevioribus 1 cm. long. microscopice puberulis; *calycis* (nonnunquam ob segmenta unilaterali connata spathacci) in toto 2.6 cm. long. segmentis 2 inter se subæqualibus ovato-oblongis acutis membranaceis microscopice puberulis 2 cm. long.; *corollæ* albæ tubo 3 cm. long. a basi gradatim etsi haud magnopere ampliato leviter curvato extus puberulo limbi lobo postico (ut anticus) oblongo-ovato illo obtusissimo hoc retuso 12 mm. long.; *staminibus* extra corollam circa 7 mm. exsertis; *staminodiis* linearibus obtusis 4 mm. long.; *ovario* glabro; *stylo* breviter exserto glabro apice bifido 3.5 mm. long.

Mt. Panié; forest; 3000 ft. 1809.

Near *O. baladica* Vieill. and *O. arborea* Schlechter (which may possibly be only the former redescribed), but with important differences in the leaf and especially in the calyx.

OXERA (§ Campanulatæ) Gmelinoides S. Moore, sp. nov. *Ramis* validis subteretibus saltem superno crebro foliosis lenticellis optime prominentibus onustis; *foliis* 9-11 × 3-4 cm. petiolatis (pet. 1-1.5 cm.) oblongo-oblanco-latis obtusissimis interdum retusis basi cuneatis coriaceis pag. inf. minutissime fulfuraceis; *floribus* in paniculam racemiformem terminalem densam circa 7 × 6 cm. digestis; *calyce* parvulo campanulato 5-dentato 3 mm. long. uti pedicelli 5-7 mm. long. extus minute tomentoso; *corollæ* lacteæ extus brevissime arctissimeque fulvo-tomentosæ 3.2-3.5 cm. long. tubo incurvo inferne cylindrico superne gradatim amplificato limbi lobis tubo multo brevioribus lobo postico bipartito antico ceteris majori 6.5 × 4 mm.; *filamentis* adusque 13-15 mm. ex corolla eminentibus staminodiis 4.5 mm. long.; *ovario* minute tomentoso; *stylo* crassiusculo brevissime bifido circa 5 cm. long.

River Comboui; *Spermolepis-Casuarina* forest; by river; 100 ft.; serpentine. 2232. A small woody plant.

The affinity is with *O. sulphurea* Dubard, from which the coriaceous (not chartaceous) leaves and much longer fulvous-tomentose corollas afford an easy means of distinction. *O. Pancheri* Dubard has narrower "subacuminate" leaves and larger (4 cm.) flowers forming short, axillary, few-flowered inflorescences.

CLERODENDRON INERME L. Île Ouéré; abundant in littoral sand. 641. East Indies and Archipelago, Australia, Polynesia.

AVICENNIA RESINIFERA Forst. Port Ngéa, Nouméa; mangrove swamps. 2. A seashore plant also in Australia and New Zealand. Dr. Stapf named this for me.

LABIATÆ.

PLECTRANTHUS PARVIFLORUS Willd. Mont Mou; weed on old cultivation; 800 ft.; cretaceous. 599. Australia, Polynesia.

COLEUS SCUTELLARIOIDES Benth. Ermitage stream; on strong drifts; serpentine. 203. Corolla throat white, lower lip and tips of upper petals purple.

No New Caledonian record for this Malayan and tropical Australian species has been found.

PLANTAGINACEÆ.

PLANTAGO MAJOR L. Mont Canala; weed in pasture area. 1248. Cosmopolitan species.

MONOCHLAMYDEÆ.

By SPENCER LE M. MOORE.

NYCTAGINACEÆ.

MIRABILIS JALAPA L. Nouméa; weed in waste places. 35. From tropical America, spread over warmer regions of the Old World.

TIMEROYA CANALENSIS S. Moore, sp. nov. *Arbor*, aperte ramosa trunco apice foliigero; *foliis* usque 25 × 4–5 cm. sessilibus oblongo-lanceolatis prope apicem angustatis apice obtusis basi aliquanto attenuatis margine undulatis vel undulato-repandis membranaceis glabris; *floribus* in cymas plurifloras digestis paniculam longipedunculatam (ped. fere 20 cm. long.) laxam glabram 9 × 15 cm. efformantes; *bracteis bracteolisque* linearibus his pedicello brevioribus; *perianthio* infundibulari-campanulato medio levissime constricto 5.5 mm. long. lobis subquadratis tubo multo brevioribus; *staminibus* 11–12 filamentis leviter crassiusculis antheris perianthii os attingentibus anguste oblongo-ovatis obtusis; *ovario* anguste ovoideo-oblongo circa 1 mm. long; *stilo* crassiusculo breviter exserto 5.5 mm. long.; *stigmatibus* longiuscule fimbriato.

Mt. Canala; moist forest; schists; 1000–3000 ft. 1266. Known by the long, narrow, sessile, shining leaves, the long stout peduncles, and the comparatively large flowers with but few stamens.

AMARANTACEÆ.

CELOSIA ARGENTEA L. River Tchiem; among rocks in river course; sea-level. 1997. A common weed in the Tropics.

AMARANTHUS VIRIDIS L. Anse Vata; sand-pit weed. 69. A weed in the world's warmer regions.

CHENOPODIACEÆ.

CHENOPODIUM AMBROSIOIDES L. Anse Vata; sand-pit. 66. Isle of Pines (Vao); maritime coral sand. 2271. A weed of wide distribution.

ATRIPLEX JUBATA S. Moore, sp. nov. *Suffrutex* monoicus copiose ramosus furfura cinerea omnimodo arcte indutus etsi ramulis tandem glabrescentibus; *foliis* 2.25 × 1–2 cm. petiolatis (pet. 1.5 cm. long.) ovatis vel ovato-oblongis obtusis nisi obtusissimis basi cuneatis integris vel rarilobulatis crassiusculis; *floribus* in spicas breves bisexuales digestis; *perianthio* ♂ breviter 5-fido 2.5 mm. long. segmentis late ovatis inflexis concavis; *staminibus* 5 filamentis inferne dilatatis paullo supra basin inter se connatis; *ovarum rudimento* pyriformi acuto 5 mm. long.; *bracteolis* ♀ 3 × 3 mm. inter se inferne connatis obovatis trilobatis lobis deltoideis acutiusculis integris vel lobulatis; *ovario*

subgloboso 5 mm. long.; *stylis* ovario longioribus filiformibus; *utriculo* bracteolis satis auctis inferne maxime induratis superne membranaceis ovoideis dilute brunneis 4 mm. long. omnino immerso; *seminibus* ab apice funiculi elongati suspensis 1.5 mm. diam. testa rubro-brunnea præditis.

Île Ouéré, sprawling masses on shingle and coral sand. Littoral. Membranous part of bracteoles forming a reticulate-veined wing to the utricle.

To this must be referred Vieillard, 1073, of which there would seem to be no description, though the plant has lain long in herbaria. *A. jubata* is the only N. Caledonian species.

SALICORNIA AUSTRALIS Soland. Nouméa; forms extensive sheets on salt-flats above mangrove swamps. 99. This genus is not mentioned in Guillaumin's list. Australia, New Zealand.

SUEDA MARITIMA Dumort. Anse de la Mission; edge of mangrove swamps. 421. A common sea-coast plant of wide distribution.

SALSOLA KALI L. Ouen Toro; sea sand. 58. Temperate regions of both hemispheres.

PHYTOLACCACEÆ.

RIVINA LÆVIS L. Anse Vata; Nouméa; sand-pit by shore. 67. A native of tropical and subtropical America and the West Indies.

POLYGONACEÆ.

POLYGONUM BARBATUM L. Mont Mou; small freshwater swamp, edge of cultivation; 1000 ft.; cretaceous. 471. Old World tropics, Australia.

NEPENTHACEÆ.

NEPENTHES VIEILLARDII Hook. fil. Plaine des Lacs; valley forest; 200 ft.; serpentine. 355. Ibid.; sheltered valley forest by stream; 1500 ft. 356. Mont Mou; serpentine scrub of summit; 3500 ft. 632. Port Bonquet; lowland serpentine scrub; 100 ft. 2246. Poume; abundant especially by creeks; 500–1300 ft.; serpentine. 2380.

The pitchers are variously described as "green often tinged with red," "light green tinged with red," "pale greenish yellow with tinges of dark red round lips," "dull red"; the perianths as "green, red on fading," "red-purple inside," "dark chocolate."

N. HUMILIS S. Moore, sp. nov. *Frutex* erectus, humilis; *caule* satis robusto bene folioso glabro; *foliis* 10–13 × 4–4.5 cm. sessilibus leviter amplexicaulibus ovatis nisi obovato-oblongis obtusis basin versus angustatis

coriaceis prima juventute fulvo-tomentosis citissime supra fere glabris subtus præsertim in costa centrali appresse fulvo-hirtulis dein glabrescentibus; *cirro* adusque 4 cm. long. sub ascidio aliquanto dilatato fulvo-hirtulo; *ascidiis* parvulis summum 4.7 cm. long. cylindrico-infundibularibus primo pilis hirtulis appressis indutis cito glabrescentibus alis ventralibus 3 mm. lat. fere a basi usque ad os porrectis ciliatis ore elliptico postice breviter elongato intus triente superiori glabris nitentibus deducentibus inde glandulosis detinentibusque.

Mont Mou; dry serpentine scrub; 1500 ft. 500. Low shrubby plant 10 inches. Pitcher about 1.8 cm. wide at the middle, slightly ampullæform when moistened, 18 × 8 mm. at the mouth; peristome 1 mm. deep; operculum 13 × 15 mm.; spur only some 2 mm. in length. Flowers not seen.

Different from all forms of *N. Vieillardii* Hook. fil. in the lowly habit, the small broad leaves, and small pitchers with their very short spur.

PIPERACEÆ.

PIPER AUSTRO-CALEDONICUM C. DC. Canala; liane in coco-nut grove; 200 ft. 1334. Cap Bocage; abundant in forest; 500 ft.; serpentine. 1380. Paompai; creekside forest; 50 ft.; shales. 1907. All these are ♂ plants. Ermitage stream; forest; 300 ft.; serpentine. 149. (♀ specimens.)

P. COMPTONII S. Moore, sp. nov. *Frutex* scandens; *ramis* aliquanto compressis anfractuosis ad nodos tumidis pubescentibus mox puberulis; *foliis* petiolatis (pet. 1-1.5 cm. long.) late obovatis usque ad suborbicularibus apicè brevissime obliqueque cuspidatis ipso obtusis basi late rotundatis nonnunquam leviter cordatis fere a basi 6-8-nervibus papyraceis supra glabris subtus primo fulvo-tomentellis cito in nervibus pubescentibus 10-11 × 10-13 cm.; *spicis* circa 8 cm. × 3 mm. oppositifoliis brevipedunculatis (pedunculis petiolos subsequantibus) linearibus obtusis foliis brevioribus; *bracteis* arcte acervatis spicarum masc. peltatis orbiculatis circa 5 mm. diam.; *staminibus* verisimiliter 3.

Mont Pauié; forest; 1500 ft.; gneiss. 1805. Female spike not seen. In shape and clothing of the leaves this plant differs markedly from its two other New Caledonian congeners.

It should be noted that the spikes to hand not being mature, the stamens are still very minute and their number may perhaps have been stated incorrectly. The upper branches bearing the spikes hang freely from the support; the lower branches which do not hang are comparatively slender with ovate leaves only 5-7 × 4-5 cm.

PEPEROMIA ENDLICHERI Miq. Mont Mou; forest; 200 ft.; serpentine. 569. Ignambi; abundant in forest; 2500 ft. 1526. Norfolk Island, New Zealand.

No. 569 found in undergrowth, creeping among stones and logs. No. 1526 an epiphyte ascending trunks to 20 ft.

PEPEROMIA LEPTOSTACHYA Hook. & Arn. Mont Dore; among stones in shady valley; 100 ft.; 660. Île Porc Épic; littoral zone (probably belonging to forest association). 921. Herbaceous, 1 ft. high, erect or decumbent. Australia, Polynesia.

P. INSULARUM Miq. Mont Dore; open hillsides among scrub; 2200 ft.; serpentine. 696. Inflorescence green. A Sandwich Islands plant.

CHLORANTHACEÆ.

ASCARINA RUBRICAULIS Solms. Mont Koghi; in 12-foot scrub; 2000 ft.; serpentine. 787. River Ngoyé; mountains to N.W.; serpentine scrub; 3000 ft. 997. Nekando; serpentine scrub; 300 ft. 1085. Mont Canala; transitional forest; 1500 ft.; mica schists. 1193. Ignambi; abundant in forest; 1000-3500 ft.; gneiss. 1668. New Zealand.

MONIMIACEÆ.

HEDYCARYA SALIGNA S. Moore, sp. nov. *Arbor* fere 10-metralis; *ramulis* suberectis glabris ad nodos tumidis; *foliis* parvis $\pm 5 \times 1.8$ cm. petiolatis (pet. 7 mm. long.) oblongo-oblanco-latis obtusis vel obtusissimus nonnunquam emarginatis basi obtusis margine integris chartaceis glabris; *paniculis* florum ♀ 8-10 cm. long. cauli insidentibus pedunculatis (ped. 3-5 cm. long.) subplurifloris tomento subtili sordide albo indutis; *pedicellis* ascendenti-patentibus circa 8 mm. long. quam flores facile longioribus; *receptaculo* cupulari coriaceo extus albo-tomentoso 3 mm. alt. florendi temp. circa 7 mm. in transversum; *sepalis* 8 deltoideis obtusis 1×2 mm.; *carpellis* numerosis subturbinitatis receptaculum ægre omnino obtegentibus alveolis sat altis insertis circa 5 mm. long. apice truncatis crassis 1 mm. diam.

Tonine; forest; 2000 ft. 1972. Tree 30 ft. Flowers yellowish.

According to Miss Perkins's clavis ('Pflanzenreich,' iv. 101, Nachtr. 3), this should be placed next *H. parvifolia* Perk. and Schlechter, which it much resembles in foliage. The flowers, however, are very diverse.

H. ENGLERIANA S. Moore, sp. nov. *Arbor* glabra; *ramulis* ultimis subteretibus striatulis ad nodos aliquantulum tumidis; *foliis* usque $8 \times 3-3.7$ cm. rarissime suboppositis ovato-oblongis juxta apicem angustatis apice ipso obtuse acutis basi in petiolum 4-6 mm. long. coartatis integris membranaceis; *floribus* ♀ solummodo obviis in paniculam racemiformem usque $6-11 \times 8-19$ cm. ex caule oriundam digestis; *pedicellis* elongatis patentibus gracilibus 2-3 cm. long.; *receptaculo* disciformi margine leviter undulato

extus glabro intus in marginibus alveolarum satis altarum puberulo 9 mm. diam.; *carpellis* circa 20 receptaculum obtegentibus sessilibus obovoideis glabris 5 mm. long. stylo brevi persistente 3 mm. long. onustis.

Mont Arago; frequent in moist forest; 1000-1500 ft.; mica schists. 1434. Tree 30 ft.

This would seem to come near *H. grandiflora* Perk., differing from it to some extent in foliage and altogether in the inflorescence. Named at Mr. Compton's request in compliment to Mons. Numa Engler, of Oubatche, and in recognition of hospitality received from and assistance kindly rendered by that gentleman.

HEDYCARYA COMPTONII S. Moore, sp. nov. *Arbor* glabra; *ramulis* ultimis aliquanto compressis striatis ad nodos leviter tumidis; *foliis* 7-8 × 3.5-4.5 cm. petiolatis (pet. ± 1 cm. long.) obovatis vel obovato-oblongis apice obtusis retusisve basi cuneatis integris chartaceis; *racemis* axillaribus paucifloris foliis brevioribus circa 3 × 2.5-3 cm.; *pedicellis* sat elongatis (5-10 mm. long.) patentibus filiformibus; *receptaculo* ♀ (♂ ignoto) convexiusculo late alveolato margine undulato extus glabro intus sparsim puberulo sub fructu 7 mm. diam.; *carpellis* verisimiliter 15 receptaculum omnino tegentibus; *drupis* pro flore paucis sessilibus ovoideis stylo brevi persistente indurato coronatis 5.5 mm. long.

Mont Arago; occasional in moist forest; 1000 ft. 1419. Tree 40 ft. Receptacle seen only in the fruiting state, fleshy, white, transparent. Drupes yellow, when dried light brown.

Affinity with *H. dorstenioides* A. Gray; distinguished from it on sight by the shape of the leaves and the shorter inflorescences.

H. SYMPLOCOIDES S. Moore, sp. nov. *Arbuscula* fere 8-metralis; *ramulis* ultimis sat tenuibus angulatis glabris; *foliis* (nonnunquam suboppositis) obovato-oblongis obtusis vel obtusissimis (interdum emarginatis) nisi rotundatis basi in petiolum circa 2 cm. long. gracilemque cuneatim attenuatis chartaceis glabris 5-8 × 2-3.5 cm.; *floribus* in paniculas axillares racemiformes paucifloras microscopicè sericeas 2-3 cm. long dispositis; *pedicellis* floribus longioribus ♂ 1-2 cm. ♀ 5 mm. long.; *receptaculo* ♂ subplano crassiusculo extus breviter sericeo sepalis 8 (an semper?) late deltoideis obtusis instructo 10 mm. in transversum; *receptaculo* ♀ 4 mm. in transversum cupulari crassiusculo nequaquam alte alveolato extus breviter sericeo ore undulato; *staminibus* numerosis antheris oblongis connectivo apice suborbiculari indutis 1.5 mm. long.; *carpellis* 15 receptaculum totum vix obtegentibus clavatis .75 mm. long. stigmatè æquilongo coronatis.

Mont Panié; forest; 1200 ft. 1791. (Female plant.) Tonine; forest; 2000 ft. 1869. (Male plant.) Small tree, 25 ft. Flowers yellowish green.

This would seem to be near *H. dorstenioides* A. Gray, but the foliage is not

identical nor are the flowers in several respects. The leaves of the male plant are narrower at the tip than are those of the female, but there seems no reason to doubt the conspecificity.

HEDYCARYA SPECTABILIS Perk. Kuakué, *Spermolepis* forest; 100 ft.; serpentine. 909. River Ngoyé; low forest by riverside; 500 ft.; serpentine. 971. Small tree 12–25 ft. Flowers green.

H. PERKINSIANA S. Moore, sp. nov. *Arbor*; *ramulis* ultimis sat tenuibus angulatis glabris; *foliis* 5.5–7.5 × 2–2.7 cm. brevipetiolatis (pet. 4–5 mm. long.) oblongo-oblancoatis sub apice angustatis apice mucronatis basi obtusis vel obtusiusculis margine integris vel evidenter denticulatis membranaceis glabris; *paniculis* 12–15 × 8 cm. ex caule enatis laxe plurifloris puberulis; *pedicellis* gracilibus circa 1 cm. long; *receptaculo* plano membranaceo extus puberulo ore crebro undulato 12 mm. diam.; *staminibus* numerosis antheris late oblongis 1.5 × .75 mm. connectivo apice expanso subreniformi undulato coronatis.

Mont Canala; locally frequent in intermediate forest; 1500 ft.; schists. 1265. Tree 40 ft. Flowers cream-coloured.

To be inserted next *H. denticulata* A. Gray, which has larger leaves on longer petioles, shorter not cauliflorous inflorescences, and somewhat smaller ♂ flowers.

TRIMENIACEÆ.

By E. G. BAKER.

TRIMENIA NEOCALEDONICA Bak. fil., sp. nov. (Pl. 21. figs. 8–11.) *Arbuscula* circ. 30-pedalis copiose ramosa ramis glabris; *foliis* papyraceis elliptico-obovatis 7–10 cm. × 3–3.5 cm. apice acuminatis basi cuneatis supra lucidis subtus pallidioribus nervis lateralibus furcatis petiolatis oppositis, petiolis 10–12 mm. longis; *floribus* in cymas axillares dispositis; *sepalis* numerosis 10–12 arcte imbricatis concavis exterioribus minoribus 1–2 mm. longis interioribus gradatim majoribus 4–5 mm. longis; *staminibus* 12 filamentis brevissimis liberis antheris majusculis apiculatis 2.5 mm. longis longitudinaliter extrorsum dehiscentibus; *ovario* glabro 2–2.5 mm. longo 1-loculari, ovulis pendulis solitariis anatropis, stigmate sessili terminali coronato.

Mt. Panié; forest; 1200 ft. 1796. Ignambi; forest; 3000 ft. 1582. Small tree 30 ft., branching freely. Leaves bright green, reddish midrib. Perianth of scarious scales, caducous. Anthers white. Stigmas sessile.

I am indebted to Miss Gibbs for indicating the affinity of this plant. It is a most interesting extension of the geographical range of the genus, the first known species being from Fiji, then two from New Guinea, and the present one from New Caledonia.

It is easily distinguished by the character of its flowers and leaves from the previously known members of the genus:—

- A. Folia ovato-lanceolata, serrata..... *T. weinmanniaefolia* Seem. (Fiji).
 B. Folia elliptico-obovata, papyracea, margine integra *T. neocaledonica* Bak. fil. (N. Caledonia).
 C. Folia lanceolata, coriacea, margine obscure serrata..... *T. papuana* Ridley (N. Guinea).
 D. Folia oblonga, serrata *T. arfakensis* Gibbs (N. Guinea).

LAURACEÆ.

ADENODAPHNE, *Lauracearum* e tribu *Litseearum* genus novum.

Flores unisexuales, verisimiliter dioici, in vel extra axillis glomerulati vel racemum brevem terminalem constituentes. *Perianthii* tubus brevissimus, intus planus; segmenta 11, triseriata, extima 2 minora bracteolasque aliquanto mentientia, intermedia 4 quam intima 5 paullo majora. *Florum* masculorum stamina in toto 11–12 biseriata, addito uno (vel duo) seriei tertiæ, omnia antheris 4-locellatis introrsum dehiscentibus necnon glandulis 2 perspicuis donata. *Staminodia* 0. *Ovarii* rudimentum nullum. *Flores* feminei ignoti. *Arbuscula* glabra. *Folia* alterna nonnunquam subopposita, penninervia, coriacea. *Glomeruli* axillares, subsessiles, summopere pauciflori, bracteis parvulis stipati.

A. CORIFOLIA S. Moore, sp. unica. *Arbuscula*, ramulis sat validis subteretibus longitrorsum rimosis; *foliis* 5–6.5 × 2–3 cm. breviter petiolatis ovato-oblongis vel obtusissimis basi obtusis margine anguste cartilagineis; *glomerulis* quam folia multo brevioribus sæpius 2–4-floris; *bracteis* parvulis vix 1.5 mm. long. imbricatis pedunculatum plus minus obtegentibus ovatis acutis; *floribus* pedicellis robustis perbrevis insidentibus; *perianthii* segmentis suborbicularibus (intimis ovato-oblongis) plus minus concavis interioribus 3 × 2 mm. long. quam extima 1.5–2 mm. long. tenuioribus; *antheris* late ovatis obtusis filamentis 1 mm. long. crassiusculo glandulis subglobularibus onusto circa æquilongis insidentibus.

River Comboui; *Spermolepis-Casuarina* forest; 1000 ft.; serpentine. 2233.

LITSEA NEOCALEDONICA S. Moore, sp. nov. *Frutex* suborgyalis; *ramulis* erecto-ascendentibus subteretibus striatis primo minute griseo-pubescentibus dein glabrescentibus; *foliis* 5–9 × 2.5–5 cm. sparsis raro suboppositis petiolatis (pet. 1 cm. long.) oblongo-obovatis apice rotundatis basi (interdum aliquantulum obliquis) breviter cuneatis penninerviis coriaceis supra minutissime pubescentibus subtus griseo- vel fulvo-tomentosis; *floribus* in umbellas axillares pedunculatas (ped. 5 mm. long.) trifloras dispositis; *bracteis* stipantibus 4–5 ovatis et obtusissimis vel cymbiformibus cito reflexis

verisimiliter diu vel saltem diutule persistentibus 3·5 × 2-3 mm. ; *pedicellis* validis fulvo-tomentosis vix 2 mm. long. ; *perianthii* tubo brevissimo limbi segmentis plerumque 4 (nonnunquam vero abortione solummodo 2) oblongis obtusis extus puberulis circa 2 mm. long. ; *staminibus* perfectis 3-5 (-6?) filamentis latis angustisve pubescentibus glandulis sessilibus stipitatisve onustis antheris ovatis introrsum 4-ocularibus 1·25-vix 2 mm. long. ; *receptaculo* pubescente.

Nekando ; cloud forest ; 4000 ft. ; serpentine. 2121. Perianth delicate yellowish white. Female flowers and fruit not seen. There seems to be much variation in these flowers, due apparently to suppression ; moreover, in consequence of the smallness of the receptacle and its dense pubescence it is difficult to assign the stamens to their respective whorls, though these organs are sometimes more or less sepaline in shape, both as regards filament and anther, and such are presumably members of an outermost whorl. Stamens without glands occur now and then, though they are rarer than the others. *Litsea* is another instance of an Indian genus extending to Australia and hitherto unrecorded as New Caledonian.

CASSYTHA FILIFORMIS L. Port Ngéa ; sea cliffs ; 50 ft. 44. Île Ouéré ; littoral ; abundant on bushes and also creeping over sand. 653. Widely diffused through the tropics.

HERNANDIACEÆ.

HERNANDIA SONORA L. Île Porc Épic ; littoral zone. 918. A native of the West Indies.

H. CORDIGERA Vieill. Baie Ba ; by creek in Niaouli region, sea-level ; mica schists. 1383.

HERNANDIOPSIS VIEILLARDI Meissn. Mont Canala ; fairly often in moist and intermediate forest ; 1000-2000 ft. ; schists. 1198.

PROTEACEÆ.

BEAUPREA PANCHERI Brongn. & Gris. Mont Koghi ; forest near summit ; 3000 ft. ; serpentine. 725. Tree 20 ft. Inflorescence greenish.

B. MULTIJUGA S. Moore, sp. nov. *Arbuscula* ; *foliis* imparipinnatis 15-jugis 50 cm. long. rhachi subtereti striatula satis gracili petiolis 15 cm. long. ; *foliolis* brevipetiolulatis oblongo lanceolatis obtusis basi valde obliquis cuneatimque angustatis margine anteriori paucidentatis lobulatisve margine posteriori integris vel subintegris papyraceis 7-8 × 1·4-2 cm. ; *inflorescentia* terminali foliis circa æquilonga paniculam pendentem laxè permultifloram referente ; *bracteis* ovato-lanceolatis acuminatis pedicellos 1·5-2 mm. long.

adæquantibus; *perianthii segmentis* oblongo-lanceolatis obtusiusculis vix 1 mm. lat.; *squamis hypogynis* parvulis ovatis obtusissimis 2 mm. long.; *filamentis* paullo supra basin segmentis affixis antheris ovato-lanceolatis sub-æquilongis (1.25 mm. long.) harum connectivo excurrente mutico; *ovario* ovoideo glabro quam stylus obscure clavellatus glaber 1 mm. long. paullulum brevior; *stigmatate* capitato .35 mm. diam.

Ignambi; forest; 1000-2500 ft.; gneiss. 1673. Small tree, 20 ft. Flowers white, slightly scented. The place of this is next *B. asplenioides* Schlechter; its chief distinguishing features are the 15 (not 8 or 10) pairs of papery (not coriaceous) leaflets, the acuminate bracts, larger flowers, and different stamens.

BEAUPREA COMPTONII S. Moore, sp. nov. *Arbor*; *foliis* 37 cm. long. ex apicibus ramorum genitis imparipinnatis 3-6-jugis rhachi sat valida subtereti obscure striolata; *foliolis* subsessilibus oblongo-lanceolatis obtusis basi obliquis gradatim angustatis margine anteriori sæpius 2-4-dentatis margine posteriori 1-3-dentatis coriaceis pag. sup. nitentibus 7.5-10 × 2-2.5 cm.; *panicula* terminali quam folia plane breviori (20 × 20 cm) ramis ramulisque ascendentibus multifloris; *bracteis* sub floribus ovatis acutis quam pedicelli 3 mm. long. brevioribus; *perianthii segmentis* lanceolatis acutis marginibus inflexis 4.5 mm. long.; *filamentis* basin versus perianthii segmentis insertis .4 mm. long. quam antheræ lanceolatæ acutæ brevioribus; *squamis hypogynis* subevanidis; *ovario* ovoideo glabro 1.25 mm. long. stylo filiformi vix æquilongis; *stigmatate* capitellato .25 mm. diam.

Tonine; forest; 2500 ft. 1966. Tree 30 ft. Panicle much more compact than that of the preceding, with several reduced leaves springing from the lower axils. This has the coriaceous leaves of *B. asplenioides* Schlechter (but the leaflets are fewer in number) and also its short bracts. The flowers are more like those of *B. multijuga*, though with several points of disagreement. In its short panicles *B. Comptonii* markedly diverges from both species.

B. PANICULATA Brongn. & Gris. Mont Mou; serpentine scrub; 3000 ft. 492. Mont Koghi; open serpentine scrub above 2000 ft. 724. River Ngoyé (Mts. to N.W. of); abundant in serpentine scrub; 500-2500 ft. 998. Flowers white or white with a pink tinge.

GARNIERIA SPATULÆFOLIA Brongn. & Gris. Presqu'île Bogota; serpentine scrub; 1500 ft. 1318. River Ngoyé, margin of; 400 ft.; serpentine. 2106. Taom; serpentine scrub; 2500 ft. 2342. Tree or shrub. Perianth white, segments reflexed, sweet-scented. Fruits like a small plum.

KERMADECIA ELLIPTICA Brongn. & Gris. Mont Panié; forest; 1200 ft.; gneiss. 1798. Tall tree, 50 ft. Floral axes and flowers yellow.

ROUPALA VIEILLARDI Brongn. & Gris. (ex descript.). Plaine des Lacs ; forest in valley ; 1500 ft. ; serpentine. 362. Tree 25 ft. Apical crown of leaves. Cauliflorous. Flowers pale pinkish. The species is not represented in London herbaria, and, inasmuch as the description is very short and measurements are not given, it follows that this identification is a matter of some doubt.

GREVILLEA HETEROCHROMA Brongn. & Gris. River Dumbéa ; frequent in riverside scrub ; serpentine. 833. Shrub. Flowers white in horizontal spikes, all turning upwards.

G. VIEILLARDI Brongn. & Gris. River Ngoyé ; *Spermolepis* forest, edge of river ; 500 ft. ; serpentine. 1014. Shrub 6 ft. Flowers white in horizontal spikes.

G. GILLIVRAYI Hook. Baie Ngo ; scrubby woods ; 200 ft. ; serpentine. 261. Plaine des Lacs ; serpentine scrub, 800 ft, and scrubby woods. 309. River Dumbéa ; serpentine flood plain ; 50 ft. 415. Mont Dore ; low serpentine scrub ; 300 ft. 689. Isle of Pines ; serpentine scrub ; 200 ft. 2269. Shrub or tree 12–25 ft. The flowers are noted as white (415, 689), yellow (2269), or pinkish (309).

G. ACERVATA S. Moore, sp. nov. *Fruticulus* elatus ; *ramulis* sat validis cortice griseo obductis cito glabris (novellis minute sericeis) ; *foliis* 3–5 × 1.5–2.5 cm. petiolatis (pet. 10–15 mm. long.) oblongo-obovatis rarius ovato-oblongis vel etiam ovatis apice retusis basi obtusis pulchre nervosis coriaceis supra glabris pallideque nitidis subtus arcte argenteo- vel fulvo-sericeis ; *racemis* terminalibus pedunculatis usque 9 cm. long. densifloris minute albo-sericeo-tomentosis ; *floribus* brevipedicellatis (ped. vix 3 mm. long.) sericeis cerasinis ; *perianthio* anguste ovoideo 8 mm. long. segmentis oblongo-lanceolatis cito disjunctis 1.5 mm. long. ; *antheris* late ovatis obtusis .75 mm. long. ; *disco* parvulo semicirculari ; *ovario* stipitato obliquo glabro 1.3 mm. long. stipite 2.75 mm. ; *stylo* 20 mm. long. glabro ; *-stigmat*e obliquo convexo basi parum dilatato.

Cap Bocage in scrub ; 300–800 ft. 1398. Tall shrub 10–12 ft., scraggy growth. With much resemblance in respect of foliage to *G. Gillivrayi* Hook., this has markedly smaller, more densely arranged, shorter-pedicelled flowers, with a shorter-stiped ovary and convex (not conoidal) stigma.

G. COMPTONII S. Moore, sp. nov. *Frutex* vel *arbuscula* ; *ramulis* sat validis inferne nudis cicatricibus foliorum delapsorum parum perspicuis notatis superne foliosis ; *foliis* 6–8.5 cm. × 4–5 mm. sessilibus anguste linear-oblongis obtuse mucronulatis basin versus gradatim coartatis margine induratis necnon leviter revolutis coriaceis pag. sup. glabris pag. inf. subtilissime cinereo-sericeis ; *racemo* terminali folia facile excedente ima basi furcato

brevipedunculato multifloro fulvo-sericeo-tomentello 15×5 cm.; *floribus* pedicellatis (ped. 6-7 mm. long.) sericeo-pubescentibus saturate rubris; *perianthio* anguste ovoideo antice usque basin fisso 13 mm. long. segmentis lineari-lanceolatis superne incurvis cito omnino liberis 2.5 mm. long.; *antheris* late ovatis 1.2 mm.; *disco* subhippocrepiformi; *ovario* 1 mm. long. stipitato obliquo velut stipes 5 mm. long. glabro; *stylo* valido mox liberato arrectoque inferne puberulo ceterum glabro circa 2 cm. long.; *stigmatē* terminali breviter conoideo glabro.

River Dumbéa; waterside; serpentine; 50 ft. 416. Judging alone from Vieillard 1113, *G. Deplanchei* Brongn. & Gris, with similar foliage, has smaller flowers on shorter pedicels, the smaller expanded tips of whose perianth segments remain joined and imprison the comparatively short style much longer than is the case with the species under notice. Apparently referable to this, but with more silky indumentum, are the following:—River Dumbéa, abundant along river banks in plain and montane regions; serpentine. 834. Kuakué, abundant in stony flood-plain of river; 50 ft.; serpentine. 908. River Comboui among riverside rocks; 100-500 ft.; serpentine. 2211. (The flowers in these specimens are noted as crimson to rose-coloured.) To these should be added:—On hills near Ngoyé; Schlechter 15104 (distributed as *G. Deplanchei* Brongn. & Gris).

GREVILLEA PRODUCTA S. Moore, sp. nov. *Arbuscula*; *ramulis* superne foliosis cortice cinereo obductis novellis subtiliter sericeis; *foliis* ±5 cm. × 1.5-2 cm., penninerviis oblongo-oblanccolatis obtusis vel obtusissimis interdum emarginatis basi in petiolum 5-10 mm. long. extenuatis margine induratis parumque revolutis coriaceis supra glabris subtus arcte cinereo vel fulvo-sericeis; *racemis* 6-10 cm. long. sæpissime terminalibus pendulis pauciramosis (ramis patentibus) subdistanter plurifloris subtiliter albo-tomentosis; *floribus* pedicellatis (ped. 7-8 mm. long.) sericeis gilvis; *perianthio* anguste ovoideo antice omnino fisso 17 mm. long. segmentis lineari-oblongis diutule coalitis 2.25 × 1.75 mm.; *antheris* late ovatis obtusis; *ovario* 2 mm. long. stipitato obliquo ut stipes 3 mm. long. stylusque elongatus fere 4.5 cm. long. glabro; *stigmatē* obliquo basi dilatato medio parum elevato glabro.

Taom; riverside scrub among pebbles and alluvium; 300 ft.; serpentine. 2318. Small tree, 15 ft. *G. macrostachya* Brongn. & Gris, to which this seems nearest, has distinctly 3-nerved leaves, more densely flowered simple racemes, and smaller flowers with a much shorter style and markedly conoidal stigma.

STENOCARPUS ELEGANS Brongn. & Gris. Baie Uié; frequent in serpentine scrub just above littoral. 855. Isle of Pines; frequent on serpentine plateau; 300 ft. 2262. Noted as a tree 20 ft. high at Baie Uié, a 3 ft. shrub in the other locality. Flowers pale or dull yellow.

STENOCARPUS MILNEI Hook. Taom; river pebbles; 300 ft.; serpentine. 2319. Shrub 4 ft. Corolla white. Style green.

S. UMBELLATUS Schlechter. Plaine des Lacs; banks of River du Carénage; 800 ft.; serpentine. 376. Plaine des Lacs; dry serpentine slopes. 311, 376 a. River Dumbéa, banks of; 200 ft.; serpentine. 825. Baie Kuakué; serpentine scrub; 500 ft. 881. Shrub 4–8 ft. Flowers pale yellow. Style green.

S. LAURINUS Brongn. & Gris. Pic La; serpentine scrub; 1000 ft. 858. Shrub 8 ft. Flowers white, scentless.

S. HETEROPHYLLUS Brongn. & Gris. Taom; abundant in upland serpentine scrub; 2000–3000 ft. 2329. Procumbent shrub. Flowers creamy, scentless.

S. COMPTONII S. Moore, sp. nov. *Frutex* orgyalis, glaber, *ramulis* ascendentibus superne foliosis inferne prominenter cicatriciferis cortice cinereo-fusco circumdatis; *foliis* 3×2–2.5 cm. nonnunquam suboppositis obovatis apice rotundatis basi in petiolum latum 2–4 mm. long. cuneatim attenuatis margine aliquanto revolutis obscure 3-nerviis coriaceis; *umbellis* sæpissime ultra 20-floris pedunculo sat valido folia subæquante fultis; *pedicellis* pedunculo brevioribus necnon tenuioribus 1 cm. long.; *disco* subhippocrepiformi; *perianthii* segmentis lineari-oblongis apice in lobum cavum late ellipticum obtusum dilatatis 1.5 cm. long.; *antheris* ovatis obtusis 2 mm. long.; *ovario* 2 mm. long. longe stipitato filiformi stipite 9 mm. long.; *stylo* stipite paullo brevioribus; *stigmatibus* obliquo basi dilatato medio breviter lateque conoideo.

Mont Dore; open scrub; 2000 ft.; serpentine. 688. The short broad leaves with rotundate ends and the many-flowered umbels are the leading features of this species.

S. PHYLLODINEUS S. Moore, sp. nov. *Frutex* suborgyalis, glaber; *ramulis* inferne nudis superne foliosis cortice cinereo-fusco obductis; *foliis* 3.5–7 cm. × 5–10 mm. lineari-lanceolatis vel lineari-oblongis obtusis basi in petiolum 1 cm. long. extenuatis coriaceis subevanide nervosis; *pedunculis* filiformibus ± 2 cm. long.; *umbellis* 5–9-floris; *pedicellis* pedunculum semi-æquantibus; *perianthii* 11 mm. long. segmentis linearibus in lobum cavum suborbicularem augmentatis; *antheris* parvis suborbicularibus; *ovario* filiformi 1.25 mm. long. stipiti 8 mm. long. quam stylus æque filiformis longiori insidente; *stigmatibus* obliquo ambitu suborbiculari medio convexulo vix 1.5 mm. diam.

Taom; abundant in serpentine scrub; 500–1000 ft. 2314. Shrub 5 ft. The leaves of this plant are remarkably homoplastic with the phyllodes of *Acacia aneura* A. Cunn.

KNIGHTIA DEPLANCHEI Vieill. Presqu'île Bogota; frequent in dry serpentine scrub; 1500 ft. 1320. Mont Dore; frequent in serpentine scrub; 1000 ft. 844. Shrub 4 ft. Flowers yellow.

K. STROBILINA R. Br. Mont Canala; forest; 2500 ft.; schists. 1120. Tree 40 ft. Corolla salmon-coloured.

THYMELÆACEÆ.

WICKSTROEMIA INDICA C. A. Mey. Nouméa; Baie de l'Orphelinat; littoral coral sand and shingle. 242. River Dumbéa; woods on serpentine slopes just above stream; 200 ft. 824. E. Asia, Malaya, Australia, Polynesia.

LORANTHACEÆ.

LORANTHUS PUSTULATUS S. Moore, sp. nov. *Ramis* sat validis mox lignescentibus sursum foliosis deorsum nudis lenticellorum pustulis prominentibus signatis; *foliis* 5-8 × 3-5 cm. plerumque 3 vel 4-nis subsessilibus ovatis apice rotundatis basi rotundatis leviterque cordatis crasse coriaceis glabris; *cymis* ex ramis defoliatis oriundis plurifloris glabris pedunculis 2-2.5 cm. long. insidentibus; *pedicellis* umbellatis 5-7 mm. long.; *floribus* mediocribus plerumque 2-3-nis sessilibus; *bracteis* abbreviatis dentatis; *ovario* 5 mm. long. oblongo glabro quam calycis limbus brevis irregulariter denticulatus multo longiore; *petalis* 6 linearibus apice anguste spathulatis cito omnimodo solutis 3-3.5 cm. long.; *staminibus* petalo paullo infra medium insertis filamentis compressis glabris 1.5 cm. long. antheris linearibus obtusis dorso affixis 3 mm. long.; *stylo* 3 cm. long.

Ignambi; forest; 3000-4250 ft. 1577. A parasite on various trees. Petals and filaments scarlet. A very distinct species near *L. neocaledonicus* Schlechter, but besides certain floral divergences, easily known by the broad subsessile leaves slightly cordate at the base.

L. GLAUDESCENS S. Moore, sp. nov. *Ramis* validis mox lignescentibus glabris; *foliis* 10-11.5 × 2-3 cm. monente cl. detectori 2-3-5-nis oblongo-lanceolatis apice obtusis ipso mucronatis basi in petiolum fere 1 cm. long. angustatis crassiuscule coriaceis glabris siccitate glaucescentibus; *cymis* ramis vetustioribus foliis jam orbis insidentibus; *pedunculis* 1 cm. long. pedicellos duplo excedentibus floribus mediocribus plerumque 2-3-nis sessilibus; *bracteis* vix 1 mm. long. 3-lobis lobis patentibus; *ovario* turbinato glabro 4 mm. long. calycis limbum 8-plo excedente; *petalis* 5 linearibus basin usque cito solutis 3 cm. long.; *staminibus* infra medium petalo insertis; *filamentis* 13 mm. long. filiformibus glabris antheris linearibus dorso affixis; *stylo* 3.2 cm. long.

River Ngoyé; forests and riverside; 1000 ft. 969. Semi-parasite on various trees. Begins life with a root, losing it as it climbs the tree. Haustoria plug-like. Flowers bright scarlet. Inflorescence much like that of the last species, but foliage altogether different.

LORANTHUS COMPTONII S. Moore, sp. nov. *Ramis* sat robustis inferne nudis superne foliosis ad nodos tumidis cortice cinereo crebro lenticellifero cinctis; *foliis* 8-10 × 4-6 cm. oppositis nonnunquam suboppositis breviter petiolatis oblongo-ovatis obtusis basi obtusis coriaceis glabris; *floribus* majusculis ternis in cymas breves paucifloras axillares pseudoterminalisve digestis; *pedunculis* 1 cm. pedicellis 5 cm. long.; *bracteis* obliquis ovatis obtusis ovarium vix semiæquantibus; *ovario* 4 mm. long. cylindrico quam calycis limbus cupularis 4-plo longiore; *petalis* 6, 4 cm. long. glabris triente superiori angustis solutis decurvis inferne in tubum anguste ovoideo-oblongum connatis; *filamentis* 4 mm. long. crassiusculis quam antheræ basifixæ anguste lineari-lanceolatæ paullo brevioribus; *stylo* 4 mm. long.; *stigmatē* capitato leviter sulcato.

Mont Mou, Niaouli region; damp valley; 800 ft. 600. Corollas bright yellow, the free portions red on the inside and turning downwards when open. No described New Caledonian *Loranthus* could be mistaken for this fine species. In several respects the flowers are like those of *Deplanche*, 382, hitherto apparently undescribed, but the two are very distinct as regards foliage.

L. CANALENSIS S. Moore, sp. nov. *Ramis* superne foliosis inferne nudis cortice griseo rimoso obductis glabris; *foliis* 7-8.5 × 1.7-2.7 cm. oppositis oblongis vel anguste oblongo-ovatis obtusis basi in petiolum brevissimum angustatis coriaceis glabris; *cymis* axillaribus (anne semper?) brevibus paucifloris; *pedunculis* abbreviatis 5 mm. long. quam pedicelli paullo longioribus; *floribus* usque 5.5 cm. long. ternis centrali sessili lateralibus subsessilibus; *bracteis* 1 mm. long. obliquis rotundatis; *ovario* cylindrico 3.5 mm. long.; *calycis* limbo cupulari 1.5 mm. long.; *petalis* 6 extus sparsim pilosulis triente superiori vel ultra angustis necnon solutis inferne tubum fusiformem referentibus; *filamentis* 6 mm. long. crassiusculis antheras basifixas lineares acutas circiter æquantibus; *stylo* circa 5 mm. long.; *stigmatē* compresso ambitu suborbiculari.

Mont Canala; semiparasitic on forest trees; 2000 ft. 1110. Corolla yellow-orange. Near the last in respect of its flowers, but diverse in foliage.

L. ANGUSTIFLORUS S. Moore, sp. nov. *Ramis* superne foliosis ad nodos aliquanto tumidis glabris; *foliis* 4-5.5 cm. long. 4-5-nis brevipetiolatis ovato-oblongis obtusis vel obtusissimis basi obtusis crassiuscule coriaceis glabris; *cymis* verisimiliter ramis vetustioribus insidentibus; *pedunculis* 8 mm. long. pedicellos fere duplo excedentibus; *pedicellis* filiformibus ovario longioribus;

bracteis trilobis lobis patentibus 1 mm. long.; *floribus* 2.5 cm. long. ternis (anne semper?) sessilibus; *ovario* oblongo-turbinato 2.75 mm. long. calycis limbo brevi coronato; *petalis* 6 e basi brevi comparate lata anguste linearibus glabris; *filamentis* omnino adnatis antheris lineari-oblongis dorso affixis circa 1.5 mm. long.; *stylo* 2.2 cm. long.

Mont Nekando; conifer forest; 3500 ft. 1082. Parasitic on various trees. Haustoria woody. Petals crimson.

SANTALACEÆ.

EXOCARPUS PHYLLANTHOIDES Endl. Baie Ngo; serpentine scrub; 200 ft. 251. River Ngoyé; lowland serpentine scrub; 300 ft. 2148. New South Wales, Norfolk Island.

E. DILATATUS S. Moore, sp. nov. *Frutex* ramosus fere orgyalis; *phyllocladiis* oblongo-oblanccolatis obtusis basin versus gradatim extenuatis margine hac atque illac denticulatis crassiuscule coriaceis glabris siccitate haud nigrescentibus 5-8 x 2-2.5 cm.; *foliis* —; *floribus* in spicas vix 1 cm. long. ex phyllocladorum dentibus ortas paucifloras digestis; *ovario* supero; *nuce* subglobose glabro aliquanto glauco 1-loculo basi disco persistente cincto 6 x 5.5 mm.

Kuakué; serpentine woods; 200 ft. 901. Shrub 5 ft. Branches, at least the highest, ancipitous, usually 2-4 mm. thick.

Apparently to be referred here is:—Mont Mou; summit scrub; 3500 ft.; serpentine. 579. The cladodes of this are usually somewhat narrower (1.5-2 cm. broad), and the inflorescences a little longer (1 cm.), but so far as can be judged without flowers, the two seem conspecific. Vieillard 3159 is most likely this species, which is at once told from its New Caledonian congeners by the broad cladodes not turned black in dying.

BALANOPHORACEÆ.

HACHETTIA AUSTRO-CALEDONICA Baill. Mont Humboldt; moist forest; 2000 ft. 1019. Mont Canala; moist forest; 3000 ft.; mica schists. 1224. Mountains N. of Ngoyé; forest floor; 2000 ft.; serpentine. 2064. Inflorescence yellowish brown or whole plant noted as bright yellow. Fruits light orange. Young plants eaten by natives.

EUPHORBIACEÆ.

EUPHORBIA HIRTA L. Anse Vata; sand-pit; sea-level. 72. Widely diffused through the warmer regions of the world.

E. DRUMMONDII Boiss. Anse Vata; sandy seashore. 81. Australia.

EUPHORBIA NEOCALEDONICA Boiss. Nouméa; common weed in roads. 92. Foliage reddish. Used as a purgative. French name "Rougette."

E. EREMOPHILA A. Cunn. Cap N'dona; littoral zone on coral and shell sand just above high tide. 871. Leaves slightly thickened, pale glaucous green. Glands yellow. Uncommon. Australia.

E. CLEOPATRA Baill. Plaine des Lacs; in slightly elevated part of level swamp plain. 339. *Ibid.*; Kaori forest. 392. A shrub (339); tree 100 ft. (392). On Pancher's authority Baillon describes this as a tree 6-8 metres high. Pancher's specimens are thus from plants intermediate as regards size between those of Mr. Compton. The shrub (No. 339) may be regarded as flowering precociously; its leaves are shorter in the stalk and narrower than those of the tree, which may reach a length of 18 cm. and a breadth of 8.5 cm., although usually smaller and often markedly so.

RICINOCARPUS NEOCALEDONICUS S. Moore, sp. nov. *Frutex* circa metralis; *ramis* subteretibus superne foliosis cortice cinereo obductis glabris; *foliis* 2-3.5 cm. × 7-10 mm. interdum suboppositis vel vere oppositis lineari-oblanccolatis obtusis in petiolum 3-5 mm. long. attenuatis decurrentibus coriaceis supra glabris leviterque nitidis subtus minutissime fulvo-tomentosis citissime glabris; *racemis* paucifloris 3-5 cm. long. bracteis oblongis obtusis dorso minute fulvo-tomentosis mox glabrescentibus inferioribus 8-13 mm. superioribus 3-5 mm. long. præditis; *pedicellis* quam flores bractæque plane longioribus compressis glabris; *calycis* segmentis 3.5 mm. long. ovato-oblongis obtusis petala oblonga obtusa intus microscopice velutina basi pulvinulata circiter semiæquantibus; *disci* glandulis circa .5 mm. alt. globosis vel bilobis; *receptaculo* ovoideo a basi staminifero; *staminibus* numerosis antheris filamentis brevibus fultis; *floribus* fem. ignotis.

Port Bouquet; lowland serpentine scrub; 50 ft. 2244. Shrub 3 ft. Although the female flowers and, most important of all, the ripe seeds of this are unknown, the general appearance and male inflorescence are so exactly like those of *Ricinocarpus* that there seems no reason to doubt the true position of the plant under notice.

Hitherto the genus has comprised 15 species, all endemic in Australia, with none of which could the New Caledonian species be confused.

CLEISTANTHUS STIPITATUS Müll. Arg. Port Déspointes; fairly frequent in *Acacia spirorbis* woods; 0-500 ft. 140. Ouen Toro; frequent in *Acacia* woods. 774. Ouendjam; forest; streamside; 500 ft. 1988. Small tree, 20 ft. Flowers pale yellow.

C. STIPITATUS var. *HYPOLEUCUS* Müll. Arg. Port Bouquet; riverside scrub; 50 ft.; serpentine. 2237. Taom; dense serpentine scrub; 500 ft. 2309. Shrub or small tree. Flowers green or yellowish-cream, scentless.

DENDROPHYLLANTHUS.

Euphorbiacearum e tribu *Phyllanthearum* genus novum.

Flores monoici, petaliferi. Fl. ♂ : *Sepala* 3 inter se æqualia, æstivatione valvata. *Petala* 3 sepalis manifeste longiora. *Discus* subobsoletus. *Stamina* in centro floris 3 ; filamenta ima basi connata inde libera ; antheræ dorsifixæ, apice appendiculatæ, loculis extrorsum dehiscentibus. *Ovarii* rudimentum 0. Fl. ♀ : *Sepala* 3. *Petala* 3, quam sepala multo minora. *Discus* 0. *Ovarium* 3-loculare. *Styli* 3, liberi, indivisi. *Ovula* in loculis 2. *Capsula* subglobosa, in coccos 3 bivalves dissiliens ; exocarpium coriaceum uti endocarpium cartilagineum tenue. *Semina* pro loculo 2 (anne semper?), triangularia, lateribus duobus plana, dorso rotunda, ecarunculata.—*Arbor* parva. *Folia* alterna suboppositave, integra, pergamacea, nervis secundariis paucis primarios haud directe conjungentibus. *Flores* pedicellati, masculi in glomerulos axillares paucifloros digesti, feminei versimiliter ex axillis solitatem oriundi.

D. COMPTONII S. Moore, sp. unica. *Ramulis* subteretibus crebro foliosis pilosis ; *foliis* 4–6 × 2·5–3 cm. brevipetiolatis ovatis rarius ovato-oblongis obtusissimis basi breviter cordatis utrobique minutissime lepidotis subtus glaucis et præsertim in nervis pilosis ; *stipulis* 1·5 mm. long. subulatis mox reflexis ; *pedicellis* florum ♂ et ♀ filiformibus quam flores longioribus pilosis illis 5 mm. his 18 mm. long. ; *sepalis* fl. ♂ lanceolatis acutis dorso pilosis 3 mm. long. ; *petalis* sepalis fere duplo longioribus oblongis obtusis glabris ; *filamentis* crassiusculis quam antheræ oblongæ 25 mm. long. brevioribus ; *sepalis* fl. ♀ triangularibus obtusis dorso carinulatis pilosisque 1·5 mm. long. ; *petalis* minutis subulatis glabris ; *capsula* subglobosa puberula 6 mm. diam. ; *stylo* piloso 1·5 mm. long. coronata ; *seminibus* pallide brunneis dorso microscopice rugulosis fere 3 mm. long.

Kuakoué, streamside forest, 0–300 ft. ; serpentine. 935. Small tree, 20 ft. Trunk erect, slender. Branches falling off as a whole. Flowers pale yellowish green.

This genus is near *Cleistanthus*, from which it is distinguished by the trimerous flowers with, in the males, petals much longer than sepals, the members of each whorl being entirely free, the absence of a rudiment of the gynæcium from the male flowers, and the free sepals and petals of the female flowers which are without a disc.

GLOCHIDION BILLARDIERI Baill. Mont Mou ; edge of gully forest ; 1000 ft. ; cretaceous. 461. Spreading shrub or small tree. Small yellow hanging flowers.

G. GLAUCUM Müll. Arg. Mont Panié ; edge of forest ; 1200 ft. 1828. Oubatche ; Niaouli association ; 200 ft. ; gneiss. 1835. Shrub or small tree or small undershrub less than 1 ft. Flowers yellow, scented.

Var. PUBESCENS S. Moore, var. nov. Isle of Pines ; serpentine plateau ; 300 ft. 2276. Varietatem nobis videtur rite existimanda ob ramulos, foliorum paginam inferiorem, pedicellosque florum masculorum pubescentes.

PHYLLANTHUS BUPLEUROIDES Baill. Ignambi ; along edge of forest ; 2000 ft. 1481. Small woody plant with erect stem 4-5 ft. and leafy branches. No. 1326 from Presqu'île Bogota, shrub 6 ft., erect simple stem and crown of branches with opposite distichous leaves, is one of the small-leaved supposed forms of this very variable species. The pedicels of its ♂ flowers are 7 mm. in length ; of its ♀ not half so long.

P. SALICIFOLIUS Baill. Mt. Arago ; frequent by stream among rocks ; forest ; 1000 ft. 1432. This is the *α genuinus* of Müll. Arg.

P. SALICIFOLIUS Baill., var. DRACUNCULOIDES Müll. Arg. Mt. Panié ; among rocks by riverside ; 1500 ft. 1763. Small shrub, 2 ft. No latex. Flowers small pale yellowish, hanging below branches.

P. (§ Eleutherogynium) TRIQUETRUS S. Moore, sp. nov. *Frutex* monoicus metralis crebro ramulosus glaber ; *ramulis* erecto-ascendentibus bene foliosis compresso-triquetris ; *foliis* 2·5-4·5 × 1-1·5 cm. elliptico-lanceolatis obtusis basi in petiolum brevem attenuatis firme membranaceis ; *stipulis* minutis triangularibus ; *fasciculis* ♂ sparsifloris addito rarissime fl. unico ♀ fasciculis ♀ perpaucifloris vel floribus solitariis ; *pedicellis* ♂ 2·5 mm. long. floribus circiter æquilongis ; *sepalis* 5 late ovatis obtusis 1·5-2 mm. long. ; *disco* subobsoleto ; *staminibus* 5 filamentis liberis antheris longitrorsum dehiscentibus 5 mm. long. ; *pedicellis* ♀ 2·5 mm. long. compressis crassiusculis ; *sepalis* deltoideis obtusis circa 75 mm. long. ; *ovario* 3-lobo stylis 3 brevibus simplicibus parum curvatis rigidiusculis coronata ; *capsula* 3·5 mm. diam.

Mt. Canala ; by stream in Niaouli region near camp ; 900 ft. 1122. Evidently near *P. salicifolius* Baill., but different in the foliage and in the flowers.

P. (§ Eleutherogynium) DURUS S. Moore, sp. nov. *Frutex* ramosus glaber ; *ramulis* angulatis superne compressis vel compressiusculis paucifoliis ; *foliis* 3·5-5 × 2·3-3·5 cm. brevipetiolatis (pet. ± 4·5 mm. long.) oblongo-ovatis obtusissimis nonnunquam retusis basi obtusis rotundatisve coriaceis ; *fasciculis* pro pulvillo paucis bisexualibus ; *pedicellis* gracilibus 1·5-2·5 mm. long. ; *sepalis* ♂ exterioribus 1·5 mm. long. ovatis obtusis vel obtuse acutis interioribus suborbicularibus 2 mm. long. ; *disco* parvo ; *staminibus* 4-5 filamentis liberis quam antheræ late oblongæ obtusæ 5 mm. long. paullulum longioribus ; *sepalis* ♀ 1·5 mm. long. ovatis obtusis vel obtusissimis ; *ovario* subgloboso triloculari circa 1 mm. diam. ; *stylis* 3 brevibus liberis apice haud dilatatis 1 mm. long.

River Dumbéa ; serpentine scrub ; 100 ft. 832. Separable at first sight from others of this section by the foliage.

PHYLLANTHUS (§ Eleutherogynium) RHODOCLADUS S. Moore, sp. nov. *Arbuscula* glabra ; *ramulis* satis elongatis erecto-adscendentibus præsertim sub foliorum insertionem aliquanto compressis vivis rubris ; *foliis* 4-8 × 1.5-3.5 cm. lanceolatis vel ovato-lanceolatis raro ovato-oblongis acuminatis (raro cuspidulatis) apice mucronatis basi in petiolum 3.5 mm. long. cuneatim attenuatis membranaceis ; *stipulis* minutis lanceolatis ciliatis ; *floribus* solitariis vel binis utriusque sexus sejunctis pedicellis 3-4 mm. long. insidentibus ; *sepalis* ♂ imparibus ovatis obtusis vel acutiusculis sursum minute denticulatis 75-1.25 mm. long. ; *disco* subobsoleto ; *staminibus* 5 antheris 1 mm. long. ovatis obtusissimis filamentis filiformibus æquilongis fultis ; *sepalis* ♀ imparibus 75-1 mm. long. oblongo-ovatis acutis apice denticulatis coloratisque ; *ovario* 3-loculari depresso globoso trisulcato glabro ; *stylis* 3 elongatis simplicibus vel brevissime bifidis ; *capsula* 5 mm. diam.

Ignambi ; forest ; 2000 ft. 1642. Very distinct in foliage and the small solitary or binate flowers.

P. (§ Eleutherogynium ?) INDURATUS S. Moore, sp. nov. *Fruticulus* glaber ; *ramulis* compressis superne ancipitibus crebro foliosis ; *foliis* 4-5 × 2-2.5 cm. petiolatis (pet. 3-5 mm. long.) ovatis vel oblongo-ovatis obtusis obtusissimisve basi obtusissimis coriaceis ; *fasciculis* bisexualibus perpaucaefloris ; *floribus* ♂ breviter pedicellatis (ped. 2.5 mm. long.) ; *sepalis* 5 suborbicularibus fere 1 mm. long. ; *staminibus* 7 antheris sessilibus inter se liberis 5 mm. long. ; *floribus* ♀ subsessilibus ; *sepalis* iis maris similibus ; *ovario* depresso globoso 3-loculari 2.5 mm. diam. ; *stylis* 3.5 mm. long. bilobis.

Cap Bocage ; occasional in serpentine scrub ; 100-1200 ft. 1374. Small shrub 2 ft. The affinity of this would appear to be with *P. loranthoides* Baill., but if this be correct the heptandrous andrœcium necessitates a slight alteration in the definition of the section.

P. BALADENSIS Baill. Ignambi ; forest ; 2000 ft. ; gneiss. 1688. Small tree, 10 ft.

P. (§ Heteroglochidion) CASEARIOIDES S. Moore, sp. nov. *Suffrutex* metralis, glaber ; *ramis* patentibus tetragonis superne foliosis ; *foliis* magnis usque 15 × 10 cm. brevipetiolatis ovatis sub apice sæpe cuspidato-coartatis apice obtusis vel obtuse acutis basi late rotundatis tenuiter membranaceis ; *fasciculis* bisexualibus multifloris circa 1 cm. in transversum ; *pedicellis* ♂ quam ♀ brevioribus illis 2 mm. his 4 mm. long. ; *sepalis* ♂ 5 inter se sub-æqualibus ovatis obtusis 1 mm. long. ; *disci* glandulis prominentibus ; *staminibus* 5 filamentis 5 mm. long. liberis antheris quadratis longitudinaliter

dehiscentibus; *disco* ♀ obsoleto; *ovario* globoso 3-loculari vix 2 mm. diam.; *stylis* 3 liberis simplicibus filiformibus maxime incurvis fere 3 mm. long.

Tonine; rare in moist forest; 1500 ft. 1960. Small woody plant, 3 ft. Leaves sometimes even 20×12·5 cm., the lowest ones on a branch usually much smaller and sometimes only 6×4 cm. To be inserted next *P. baladensis* Baill., but in foliage, to go no further, quite distinct. In general appearance herbarium specimens recall to some extent *Casearia Melis-taurum* Spreng.

PHYLLANTHUS (§ Heteroglochidion) COMPTONII S. Moore, sp. nov. *Frutex* monoicus, usque biorgyalis fere omnino glaber; *ramulis* compressis aliquanto anfractuosis striatis plurifoliosis; *foliis* 7–10×6–8 cm. brevipetiolatis (pet. 5–7 mm. long.) late ovatis obtusis vel obtusissimis basi truncato-rotundatis nonnunquam levissime cordatis pergamaceis basi 3–5-nervibus supra glabris subtus ob furfuram minutissimam glaucis; *fasciculis* aut ♂ aut ♀ plurifloris; *pedicellis* ♂ floribus paullulum longioribus 2 mm. long. superne dilatatis; *sepalis* 5 1·5 mm. long. suborbicularibus integris; *disco* prominente annulari leviter undulato; *staminibus* 5 filamentis liberis antheris quadratis longitrorsum dehiscentibus 5 mm. long. æquilongis; *pedicellis* ♀ iis maris æquilongis; *sepalis* ovatis obtusis 1·5 mm. long.; *disco* obsoleto; *ovario* subgloboso primo 1·5 mm. diam. mox 8 mm. leviter pruinoso 3-loculari; *stylis* 3 brevibus inter se liberis indivisis; *capsula* ignota.

River Ngoyé; *Spermolepis* forest; 300 ft. 2089. Woody plant with slender erect stem sometimes reaching 12 ft. high. Abundantly distinct from *P. baladensis* Baill. in foliage and other features.

P. (§ Heteroglochidion) SALACIOIDES S. Moore, sp. nov. *Frutex* metralis microscopice griseo-lepidotus; *ramulis* angulatis paucifoliatis longitrorsum rimosis ad nodos tumidis; *foliis* 7–10×4–6 cm. petiolatis (pet. 7–10 mm. long.) ovatis utrinque rotundatis coriaceis; *glomerulis* bisexualibus multifloris circa 1·5 cm. diam.; *pedicellis* sub flore dilatatis usque 5–6 mm. long.; *sepalis* ♂ suborbicularibus inter se subæqualibus 2·5–3 mm. long.; *disco* satis evoluto; *staminibus* 5 filamentis 75 mm. long. liberis antheris oblongo-ovoideis obtusis æquilongis; *sepalis* ♀ oblongo-ovatis obtusis 4–5 mm. long.; *disco* obsoleto; *ovario* late ovoideo pruinoso circa 2 mm. diam.; *stylis* 3 integris apice nequaquam dilatatis fere 2 mm. long.; *capsula* cruda 4 mm. diam.

Baie Ngo; in scrub on dry serpentine. 267. Foliage much like that of *P. æneus* Baill., which belongs to another section of the genus. Irrespective of floral details, the leaves are quite different in shape and texture from those of *P. baladensis* Baill.

P. (§ Heteroglochidion) MAYTENIFOLIUS S. Moore, sp. nov. *Frutex* glaber circa sesquimetralis; *ramulis* patentibus subteretibus paucifoliatis; *foliis*

4-5 × 2-2.5 cm. obovato-oblancoelatis obtusis basi in petiolum 3-5 mm. long. cuneatim desinentibus coriaceis opacis; *glomerulis* bisexualibus pluri-vel multi-floris; *pedicellis* utriusque sexus petiolos subæquantibus ipso sub flore dilatatis; *sepalis* ♂ parum inæqualibus late ovatis obtusis 2 mm. long.; *disci* glandulis mediocriter evolutis; *staminibus* 5 filamentis liberis quam antheræ late oblongæ obtusæ fere 1 mm. long. brevioribus; *sepalis* ♀ inter se inæqualibus oblongo-ovatis obtusis usque 2.25 mm.; *disco* evoluta; *ovario* depresso globoso glabro circa 1 mm. diam.; *stylis* 3 liberis indivisis apice haud incrassatis 1.25 mm. long.

Kuakué; forest near river's edge; 50 ft.; uncommon; serpentine. 946. The glands of the ♀ flowers, fairly well developed, are not strictly correct for § *Heteroglochidion*, but there seems no other section for the reception of this species. In the case of 2096, however (River Ngoyé; riverside scrub; 400 ft.; serpentine), apparently a form of this with larger leaves (up to 6.5 × 3.5 cm.), the disc is less developed, and may fairly be termed rudimentary.

PHYLLANTHUS (§ *Heteroglochidion*) SERPENTINUS S. Moore, sp. nov. *Fruticulus* monoicus copiose ramosus glaber; *ramulis* vix semispithameis ascendentibus vel patentibus tenuibus superne aliquantulum compressis; *foliis* 1.5-3 cm. long. 6-13 mm. lat. subsessilibus lanceolatis vel ovato-lanceolatis raro ovatis obtusis basi obtusis rotundatisve coriaceis; *glomerulis* perpaucifloris uni-vel bisexualibus floribus omnibus breviter pedicellatis (ped. 1 mm. long.); *sepalis* ♂ suborbicularibus interioribus 1.5 mm. long. quam exteriora majoribus; *staminibus* 5 liberis intra discum annularem sat prominentem insertis antheris reniformibus .75 mm. long. quam filamenta longioribus; *sepalis* ♀ circa 1 mm. long. ovatis obtusis vel obtusissimis; *disco* obsoleto; *ovario* globoso glabro 2 mm. diam. *stylis* 3 brevissimis simplicibus liberis roseis onustis; *capsula* parva obscure sulcata glabra circa 4 mm. diam.

Poume; serpentine scrub; 500 ft. 2385. With its small leaves, flowers, and fruit very distinct in this section.

P. (§ *Heteroglochidion*) GNEISSICUS S. Moore, sp. nov. *Arbuscula* vel *frutex* glaber; *ramulis* angulatis necnon aliquanto compressis crebro foliosis; *foliis* 3.5-6 × 2-2.5 cm. rarissime suboppositis petiolatis (pet. 5-10 mm. long.) ovato-lanceolatis acuminatis apice obtusis vel retusis basi rotundatis pergamaeis; *glomerulis* pauci-vel pluri-floris bisexualibus masculisve; *floribus* pendentibus; *pedicellis* tenuibus ♂ 4.5 mm. ♀ 2-2.5 mm.; *sepalis* ♂ 5 subæqualibus suborbicularibus 2.5 mm. long.; *staminibus* 4 filamentis glandulis disci prominentis basi circumdatis quam antheræ ovoideæ obtusissimæ .75 mm. long. brevioribus; *sepalis* ♀ inter se imparibus .75-1.5 mm. long. late ovatis apice coloratis; *disco* obsoleto; *ovario* —; *stylis* 3 liberis verisimiliter brevibus indivisisque; *capsula* parva depresso globosa glabra 6 mm. diam.

Mont Panié; forest; 4000 ft.; gneiss. 1814. Small tree 15 ft., or more; usually a low shrub. Erect main stem, dorsiventral flowering branches. Flowers creamy, pendent below the branch. *P. baladensis* Baill. has leaves different in size, shape, and texture, pedicels equalling or slightly exceeding the petioles in length, and smaller flowers and fruit.

PHYLLANTHUS (§ Heteroglochidion) TONINENSIS S. Moore, sp. nov. *Arbuscula* vel *frutex* glaber; *ramulis* brevibus paucifoliatis compressiusculis sat gracilibus; *foliis* 3.5-5 × 1.8-2.8 cm. petiolatis (pet. 4-5 mm. long.) ovatis caudato-acuminatis apice obtusis basi late rotundatis firme membranaceis; *glomerulis* bisexualibus vel masculis solemniter 2-7-floris floribus pendentibus; *pedicellis* ♂ usque 18 mm. long. ♀ 3 mm. tandem 8 mm. long.; *sepalis* ♂ inter se subsimilibus suborbicularibus 3 mm. long.; *disco* prominente filamenta 5 libera .75 mm. long. basi cingente; *antheris* oblongis obtusis 1 mm. long.; *sepalis* ♀ .25-1 mm. long. ovatis obtusis margine leviter ciliolatis; *disco* obsoleto; *ovario* globoso leviter sulcato glabro 4 mm. diam.; *stylis* 3 brevibus liberis integris; *capsula* globosa circa 7 mm. diam. leviter sulcata.

Tonine; abundant in forest; 2000 ft.; hornblende. 1973. Closely allied to *P. gneissicus*, but with smaller leaves of different shape and consistence and larger flowers on much longer pedicels.

P. (§ Gomphidium) PTEROCLADUS S. Moore, sp. nov. *Frutex* suborgyalis leviter pruinosis; *ramis* sat validis angulatis crebro cicatriciferis; *ramulis* foliosis longitrorsum striatulis prominenter ancipitibus novellis aliquanto pruinosis; *foliis* 1.5-3 × 1-1.7 cm. oppositis superioribus vero alternis petiolatis (pet. 3 mm. long.) ovatis vel ovato-oblongis obtusissimis basi cordatis chartaceis glabris; *stipulis* triangulari-lanceolatis obtusis cito reflexis usque 5 mm. long. persistentibus; *sepalis* ♂ ovatis obtusis interioribus medio carinatis 1.5 mm. long.; *disco* evoluto; *staminibus* 3 filamentis liberis quam antheræ ovoideæ .3 mm. long. longioribus; *florum* ♀ pedicello 1 cm. long. valido superne insigniter incrassato perspicueque angulato; *ovario* globoso pruinoso stylis 3 brevissimis liberis simplicibus onusto; *capsula* juvenili leviter pruinosa matura 8 mm. diam. glabra in coccos 3 bivalvos dehiscente; *seminibus* 4 mm. long. testa dilute brunnea pallide nitente cinctis.

Taom; serpentine scrub; 2500 ft. 2332. Shrub 5 ft. Stem erect; flowering branches erecto-patent, dorsiventral. Branches about 5 mm. across; branchlets bearing in their leafless lower part the persistent stipules, as wide as the branches except towards the top, the wings about 1 mm. broad. This very singular species with its thin 2-edged branches, opposite leaves, and very stout pedicel to the female flowers should be inserted in the genus apparently near *P. Chamucerasus* Baill.

PHYLLANTHUS (§ *Gomphidium*) **CASTUS** S. Moore, sp. nov. *Frutex* submetralis; *ramulis* circiter spithameis angulatis superne compressiusculis glabris; *foliis* alternis rarissime suboppositis 4-6 × 1.5-2.5 cm. brevipetiolatis (pet. 3 mm. long.) oblongis apice obtusissimis sæpe emarginatis basi obtusis leviterve rotundatis tenuiter coriaceis supra glabris subtus microscopice albo-lepidotis; *glomerulis* bi- vel uni-sexualibus paucifloris; *pedicellis* utriusque sexus capillaribus ♀ superne dilatatis ♂ 1 cm. ♀ ± 1.5 cm. long.; *sepalis* ♂ oblongis vel oblongo-ovatis 2 mm. long. exterioribus obtusis nisi obtusissimis interioribus intensius coloratis apice truncatis; *disci* glandulis 3 bene evolutis; *staminibus* 3 filamentis brevissimis liberis antheris vix 1 mm. long.; *sepalis* ♀ inter se subæqualibus late ovatis obtusissimis ægre 1.5 mm. long.; *ovario* globoso glabro; *stylis* 3 brevissimis simplicibus crassiusculis 2 mm. long.; *capsula* globosa 7.5 mm. diam.

River Comboui; *Callitris* wood; by riverside; 200 ft. 2153. Small shrub, 2-3 ft. Branches erecto-patent, somewhat dorsiventral. A very distinct species: the styles being separated down to the base, it does not go well in this section.

P. BOURGEOISII Baill. Paompai, among stones by creek; 0-300 ft.; shales. 1879. Small shrub, 2-4 ft. Branches spreading, dorsiventral. Young stem red. Flowers pendulous, light green.

P. SIMPLEX Retz., var. **MYRIOCLADUS** Müll. Arg. Mont Mou; Niaouli region; old cultivation; 800 ft. 596 (in part).

P. SIMPLEX Retz., var. **PRATENSIS** Müll. Arg. Mont Mou; 800 ft.; cretaceous. 596 (in part). China, India, Australia, Polynesia, in various forms or varieties, of which the two under notice are endemic.

P. PERSIMILIS Müll. Arg. River Dumbéa; on rocks and especially on track by stream; 200 ft. 818. Small undershrub, twiggy branches with small, thin leaves, dull red especially on upper surface, folding together along stem. Minute green flowers.

P. SYLVINCOLA S. Moore, sp. nov. *Frutex* supermetralis fere omnino glaber; *ramulis* (præsertim sursum) compressis interdum aliquanto anfractuosus superne plurifoliatis; *foliis* 4-9 × 2.5-4.5 cm. alternis breviter petiolatis (pet. 3-6 mm. long.) cordatis apice obtuse acutis basi 5-nerviis tenuiter coriaceis glaucis subtus minutissime albo-furfuraceis; *glomerulis* axillaribus perpauca- (verisimiliter semper 2-) floris uni- vel bi-sexualibus; *pedicellis* ♂ circa 1 cm. long. inferne filiformibus superne valde dilatatis quam pedicelli ♀ circa 1 cm. long. omnimodo filiformes multo longioribus; *sepalis* ♂ 5 suborbicularibus incrassatis mox patentibus 4.5 mm. long.; *disco* evanido; *staminibus*

14 filamentis liberis crassiusculis quam antheræ oblongæ obtusæ longitrorsum dehiscentes 1·5 mm. long. brevioribus; *sepalis* ♀ ·5 mm. long. inter se haud æqualibus late ovatis obtusissimis; *ovario* 3-4-loculari; *stylis* 3-4 brevibus liberis indivisis crassiusculis circa 1 mm. long.; *capsula* depresso globosa glabra 10 mm. diam. in coccos 3-4 bivalves dehiscente.

River Comboui; *Callitris* forest; 200 ft. 2159. Small shrub, 4 ft. Flowers crimson.

This being inadmissible into any of Müller's sections, the following is proposed for its reception:—

POLYANDROGLOCHIDION, sect. nov. *Disci* glandulæ utriusque sexus obsoletæ. *Stamina* libera, usque 14; antheræ longitrorsum dehiscentes. *Ovarium* 3-4-loculare. *Styli* 3-4, liberi, indivisi.

PHYLLANTHUS LIGUSTRIFOLIUS S. Moore, sp. nov. *Frutex* metralis crebro ramosus glaber; *ramulis* erectis vel erecto-ascendentibus inferne subteretibus superne aliquantulum compressis; *foliis* 2-4·5 × 1-2 cm. lanceolatis vel anguste lanceolato-ovatis obtusis (casu lanceolato-obovatis obtusissimisque nisi retusis) basi in petiolum 2-3 mm. long. cuneatim coartatis tenuiter coriaceis; *stipulis* exiguis lanceolatis cito evanidis; *glomerulis* masculis vel bisexualibus paucis interdum perpaucifloris; *pedicellis* ♂ 7-13 mm. long. superne sensim sed leviter incrassatis quam pedicelli ♀ longioribus necnon gracilioribus; *sepalis* ♂ 5 suborbicularibus exterioribus paullo minoribus omnibus glabris 2·25 mm. long.; *staminibus* 7-10 filamentis ·5 mm. long. compressis inter glandulas disci optime prominentis insertis antheris ovatis vel ovato-oblongis obtusis 1 mm. long.; *sepalis* ♀ quam ea maris plane minoribus inter se imparibus ovato-oblongis obtusis glabris; *disco* obsoleto; *ovario* globoso glabro 1 mm. diam.; *stylis* 3 brevissimis inter se liberis simplicibus; *capsula* leviter depresso lactea in sicco dilute brunnea 6 mm. diam.

Ignambi; forest; 3500 ft.; gneiss. 1538, 1709. Small, much branched shrub, 3 ft.

A new section is required also for this, as follows:—

MEIANDROGLOCHIDION, sect. nov. *Polyandroglochidioni* affinis ab ea vero abhorrens ob disci florum ♂ glandulas optime evolutas staminaque pauciora.

BREYNIA DISTICHA Forst., var. NEOCALEDONICA Müll. Arg. Île Ouéré; littoral zone; abundant. 643. Paompai; forest; 50 ft. 1913. Polynesia.

LONGETIA BUXOIDES Baill. River Ngoyé; stones of river bed; 100 ft. 959. Shrub 6 ft.

BURAEAVIA CARUNCULATA Baill. Kuakué; by river's edge among big stones; uncommon. 904. Shrub 4 ft.

CROTON INSULARIS Baill. Port Déspointes; woods. 135. Very common in woods around Nouméa. Eastern Australia.

CODIÆUM INOPHYLLUM Müll. Arg. Mt. Mou; moist part of Niaouli zone; 800 ft.; cretaceous. 510. Shrub 10 ft.

BALOGHIA LUCIDA Endl. Mt. Mou; cretaceous gully in Niaouli region; 600 ft. 545. Shrub or small tree.

ACALYPHA PANCHERIANA Baill. Mt. Mou; cretaceous forest; Niaouli region; 800 ft. 534.

A. (*Acrandræ* § *Palminerviæ*) *FINITIMA* S. Moore, sp. nov. *Arbuscula*; *ramulis* subteretibus deorsum cicatriciferis sursum foliosis uti petioli fulvide velutino-pubescentibus dein pubescentibus; *foliis* 8-16 × 5-13 cm. petiolis 2-6 cm. long. insidentibus late ovatis sæpius cuspidato-acuminatis apice ipso obtusis basi cordatis necnon 5-7-nerviis margine dentato-serratis basin versus integris membranaceis supra sparsim appresse puberulis cito glabrescentibus subtus in nervis pubescentibus mox puberulis; *stipulis* lineari-subulatis pubescentibus circa 3 mm. long.; *spicis* femineis axillaribus plurifloris pubescentibus usque 4.5 cm.; *bracteis* 5 mm. long. unifloris dorso pubescentibus quando complanantur suborbiculari-cordatis vix usque triente superiori 11-dentatis dentibus triangularibus acutis basalibus imminutis; *ovario* globoso arcte etsi breviter tomentoso 1.25 mm. diam.; *stylis* fere usque ad basin crebro longaque pectinatis 5-6 mm. long. roseis.

Paompai; forest margin; 400 ft.; shales. 1869. Small tree, 20 ft. Male flowers unknown. Bracts green suffused with red at least in the upper part. *A. Pancheriana* Baill., to which this stands nearest, has smaller, narrower, more hairy leaves only slightly cordate at the base, strongly hispid ♀ bracts and more shortly branched styles, the branching commencing further up.

BOCQUILLONIA SPICATA Baill. (ex descript.). River Comboui; *Callitris* forest; 200 ft. 2157. Small erect woody plant; simple stem, 5 ft. Agrees with the description so far as that goes. One of the specimens is male, the other female.

CLEIDION MACROPHYLLUM Baill. Mt. Mou; forest in gully; 1500 ft.; serpentine. 463. Ignambi; frequent in forest below 3000 ft.; gneiss. 1680. Arboreous, 12-30 ft. Flowers reddish.

C. *VIRIDIFLORUM* S. Moore, sp. nov. *Arbuscula*, *trunco* simplici vel sparsim ramoso; *foliis* circa 50 × 12 cm. ad apicem trunci approximatis elliptico-oblancoelatis acuminatis apice ipso obtusis margine crenato-serratis

apicem versus revera crenatis inferne in petiolum 5 cm. long. gradatim extenuatis pergamaceis pag. sup. scabriusculis pag. inf. scabriusculis necnon in costa media nervisque appresse puberulis; *racemis* ♂ foliis longioribus (60 cm. long.) in glomerulis sparsis inter se ± 1 cm. distantibus multifloris consistentibus pubescentibus; *floribus* subsessilibus tomentellis; *sepalis* 3 ovatis obtusis 1.5 mm. long.; *staminibus* circa 40 filamentis compressis superne angustatis quam antheræ subquadratae 25 mm. long. paullulum longioribus; *racemis* ♀ usque 30 cm. long. gracilibus pubescentibus; *sepalis* 3, 5.5 mm. long. ovato-oblongis acutis obtusisve pubescentibus pedicellum sat validum pubescentem longit. æquantibus; *ovario* subgloboso tomentoso 3-loculari 2.5 mm. diam.; *stylis* basi connatis 6 mm. long. alte bipartitis ramis dense papilloso-pubescentibus roseis; *capsula* subtiliter pubescente 7 mm. diam.

Tonine; forest; 1000 ft.; locally abundant. 1931. Small tree; stem simple or slightly branched. Crown of alternate dark green leaves. In foliage very like *C. macrophyllum* Baill., but with the subsessile green (not red) male flowers in denser glomerules and, among other features, the entirely diverse calyx of the female flowers, abundantly different from it.

Balansa's 1919 from Mt. Canala and Vieillard's 2194 from Wagap, though with some differences in the shape and size of the leaves, appear to belong here.

CLEIDION VIEILLARDI Baill. Nekando; *Spermolepis* forest; 500 ft.; serpentine. 2116. Riv. Comboui; creekside forest; serpentine alluvium; 50 ft. 2231. Small tree, 15 ft.

C. SYLVESTRE S. Moore, sp. nov. *Arbuscula*; *foliis* usque $20 \times 5.5-7$ cm. approximatis oblanceolato-obovatis apice obtusissimis rotundatisve ipso mucronatis basi in petiolum 10-12 mm. long. sensim extenuatis tenuiter coriaceis utrobique leviter scabriusculis apicem versus undulatis vel sparsim undulato-denticulatis; *stipulis* ovatis obtusis sursum minute denticulatis aliquantulum resinosis 5 mm. long.; *racemis* ♂ 10-16 cm. long. cauli insidentibus microscopicè puberulis horum glomerulis paucifloris; *floribus* breviter pedicellatis pedicellis filiformibus; *sepalis* 3 reflexis ovatis obtusissimis vel obtusis microscopicè puberulis vix 2 mm. long.; *staminibus* valde numerosis antheris subreniformibus quam filamenta 5 mm. long. filiformia paullulum brevioribus; *racemis* ♀ ± 25 cm. long. axillaribus compressis flore paucos distantes binatim gignentibus nisi solitatim; *pedicellis* elongatis (± 5 cm. long.) superne incrassatis uti recemi axis et sejala et ovarium microscopicè puberulis; *sepalis* 3 ovatis acutis concavis 1.5 mm. max. 2 mm. long.; *ovario* subgloboso trigono tempore pollinationis calyci circiter æquilongo 2.25 cm. diam.; *stylis* basi connatis alte bipartitis dense papilloso-pubescentibus tandem 13 mm. long.; *capsula* 8 mm. diam. alte 3-sulcata.

Taom; creekside forest; 300 ft.; serpentine. 2338. Small tree reaching 25 ft.; flowering when only 2 ft. high. Among the differences between this and *C. Vieillardii* Baill. may be cited the base of the leaves, the broad stipules not nearly so long as the petioles, and the male racemes borne on the old stems and not axillary.

To be referred here, but with narrower leaves only 4 cm. or rather less at their widest part, is the following:—Mt. Humboldt; streamside forest; 1500 ft.; serpentine. 1040. Tree 25 ft., monœcious. Male inflorescence sometimes 3 ft. long, on old wood; perianth green. Female inflorescence shorter, on new wood up to 10 inches long. Fruits white.

CLEIDION PANDURATUM S. Moore, sp. nov. *Frutex* orgyalis; *foliis* majusculis 25 × 7 cm. panduriformibus apice rotundatis basi truncatis petiolo 5 mm. long. validissimo insidentibus coriaceis supra leviter scabriusculis subtus microscopicè puberulis; *racemis* ♀ solummodo lectis axillaribus foliis circiter æquilongis paucifloris compressiusculis; *bracteis* exiguis circa 1 mm. long. subulatis acutis; *pedicellis* validis angulatis pro rata brevibus primo 4–6 mm. postea 1 cm. long.; *sepalis* rubris late triangularibus acutis 1.5 mm. long. uti ovarium subglobosum 2 mm. diam. microscopicè puberulis; *stylis* 3 ima basi connatis alte bipartitis papilloso-pubescentibus 8 mm. tandem 18 mm. long. saturate roseis.

Kuakué, streamside forest, sea-level; serpentine. 933. Shrub 6 ft., probably becoming a tree. The fiddle-shaped leaves serve to distinguish this species at sight.

C. CLAOXYLOIDES Müll. Arg. Riv. Comboui; abundant in *Callitris* forest; 200 ft.; serpentine. 2161. Small woody plant reaching 8 ft. As the female inflorescence of this plant would seem to be still undescribed, the following short diagnosis is given:—

Racemi ♀ axillares, foliis breviores, pauci- (circa 4-) flores, usque 7 cm. long. *Pedicelli* superne incrassati, sub fructu 1.5 cm. long., sub flore verisimiliter immaturo 3 mm. solummodo adequantes. *Styli* 3, alte bipartiti, saturate rubro-papilloso, tandem 17 mm. long. *Capsula* subgloboso-trisulcata, leviter puberula, 7 mm. diam.

C. COMPTONII S. Moore, sp. nov. *Arbuscula*; *ramis* aliquanto compressis superne foliosis glabris; *foliis* haud approximatis oblanceolatis vel oblanceolato-oblongis acutis nonnunquam brevissime acuminatis basi in petiolum ± 15 mm. long. gradatim attenuatis margine dentato-serrulatis glabris 12–18 × 2.5–4 cm.; *racemis* utriusvis sexus axillaribus masculis foliis circa æquilongis ex axillis summis oriundis gracilibus glomerulos plures plerumque 4–8-flores ferentibus; *floribus* breviter pedicellatis (ped. 2 mm. long.) viridibus; *sepalis* 3 ovatis apiculatis extus microscopicè lepidotis vix

2 mm. long.; *staminibus* valde numerosis; *racemis* ♀ 5–7 cm. long. gracilibus paucifloris flores masculos revera itaque foventibus; *pedicellis* circa 12 mm. long. sub flore incrassatis; *sepalis* (1 mm. long.) 3 triangularibus acutis ovario griseo-pubescenti circiter æquilongis microscopicè lepidotis; *stylis* 3 basi connatis alte bipartitis papilloso-pubescentibus 1 cm. long.

Riv. Ngoyé; *Casuarina* forest by river-side; 500 ft.; serpentine. 2113. Small tree. This can be distinguished from *C. claoxyloides* Müll. Arg. by the acute leaves, the longer inflorescences, and the smaller female flowers with their hairy ovary and much shorter styles. From the same locality and conspecific apparently with the above, but distinguished from it by the leaves with shorter (5 mm. long.) and stouter petioles, longer ♀ racemes (10–17 cm. long.), and shorter pedicels to the ♀ flowers (5 mm. long. at time of pollination), is 2100, a small tree reaching 15 ft., flowering when about 5 ft. high. The bisexual racemes of *C. Comptonii* are a curious feature of seemingly hitherto unrecorded occurrence in the genus.

CLEIDION OBOVATUM S. Moore, sp. nov. *Arbuscula*; *ramis* ramulisque inferne nudis superne foliosis cicatricibusque foliorum mortuorum scutiformibus ornatis; *foliis* 5–15 × 3–7 cm. subsessilibus approximatis spathulato-obovatis apice rotundatis ipso sæpe mucronatis basi longè petioliformi-extenuatis margine ægre usque ad partem petioliformem prominenter crenato-serratis papyraceis in nervis paginæ utriusque appresse pubescentibus ceteroquin fere glabris; *stipulis* lanceolatis acuminatis dorso pubescentibus fere 5 mm. long.; *racemis* axillaribus ♂ usque 15 cm. long. pubescentibus quam ♀ sparsim puberuli 5–9 cm. long. longioribus; *glomerulis* ♂ satis approximatis plurifloris; *floribus* brevipedicellatis; *sepalis* 3 ovatis acutis apice breviter setosis vix 2 mm. long.; *staminibus* ultra 40 filamentis complanatis quam antheræ ovatæ longioribus; *pedicellis* ♀ 3–5 mm. sub fructu ±1 cm. long. sat validis sursum dilatatis appresse pubescentibus; *sepalis* 3 triangularibus acutis dorso carinatis microscopicèque puberulis 1.5 mm. long.; ovario breviter cylindrico pubescente 2 × 2.5 mm.; *stylis* 3 ima basi connatis alte bipartitis rubro-papillois circa 1 cm. long.

Paompai; forest; 100–1000 ft.; shales. 1864. Small tree, 20 ft. The foliage, among other features, at once serves to identify this species.

(1. PAUCIDENTATUM S. Moore, sp. nov. *Arbuscula* glabra; *ramis* patentibus sat validis superne foliosis; *foliis* 10–18 × 3.5 cm. petiolatis (pet. 1–2 cm. long.) oblongo-ob lanceolatis obtusis vel obtusiusculis interdum breviter cuspidato-acuminatis basi sensim extenuatis margine leviter revolutis paucidentatis coriaceis; *racemis* ♂ compositis foliis circa æquilongis paniculatis sat gracilibus florum glomerulis pauci- (sæpe 2–4-) floris satis approximatis onustis; *sepalis* 3 suborbicularibus 1.75 mm. long.; *staminibus* ultra 30 filamentis inferne compressis antheras subreniformes circa adæquantibus;

racemis ♀ masculis æquilongis paucifloris; *floribus* solitariis vel binis pedicellis deorsum filiformibus sursum incrassatis 12 mm. sub fructu 13-15 mm. long. fultis; *sepalis* 3 triangularibus obtusiusculis vix 1 mm. long.; *disco* in glandulis 3 oppositisepalis stipitatis suborbicularibus constito; *ovario* globoso 2 mm. diam. uti sepala minutissime lepidoto; *stylis* 2-3 inferne connatis adusque medium divisis dense papillosis saturate roseis 12 mm. long. Ignambi; intermediate forest; 300 ft.; gneiss. 1705. Small tree, irregularly spreading branches. Leaves toothed only for 1.5-3 cm. from the apex.

Remarkable for the leaves with only apical toothing and the glands of the female flowers.

MACARANGA ALCHORNEOIDES Pax & Lingelsh. (ex descript.). Baie Ba, wet seashore woods among swamp niaoulis; schists. 1402. Small tree, 15 ft. Flowers green. Answers the description well: the male spikes never exceed 25 cm. in length. The female flowers of this plant still remain to be discovered.

M. LONGISPICA S. Moore, sp. nov. *Arbor* fere omnino glabra; *foliis* 16-21 × 6.5-9 cm. juxta apicem ramulorum approximatis longipetiolatis (pet. 7-12 cm. long.) late ovato-lanceolatis rarius ovato-oblongis apice obtusis retusive basi eglandulosis breviter peltatis truncato-rotundatisque margine undulatis tenuiter coriaceis leviter nitentibus supra glabris subtus in nervis microscopice puberulis alibi minute pustulatis; *stipulis* subulatis cito deciduis; *racemis* ♂ modo cognitis ± 30 cm. long. glomerulis numerosis paucifloris in axi gracili glabro sedentibus; *floribus* subsessilibus dilute viridibus; *sepalis* 3 ovato-oblongis obtusis 1.5 mm. long.; *staminibus* 4-5 antheris quadratis quam filamenta parum brevioribus .5 mm. long.

River Ngoyé; forest; 500 ft.; serpentine. 2098.

Close to *M. alchorneoides* Pax & Lingelsh., but scarcely conspecific on account of the differently shaped leaves and the larger (male) flowers with longer and narrower sepals and only 4-5 stamens.

M. CORIACEA Müll. Arg. River Ngoyé; 400 ft.; serpentine. 2104. Small tree, 15 ft. Stigmas dull red. Anthers whitish. The characteristic glands at the base of the leaf are, if at all, never well developed in Mr. Compton's specimens.

M. MISTA S. Moore, sp. nov. *Arbuscula* innovationibus minute ferrugineo-lepidotis citissime glabrescentibus; *ramulis* subteretibus superne foliosis cortice cinereo subtiliter rimoso necnon lenticellifero prominenterque cicatricifero obductis; *foliis* 10-13 × 5-7 cm. sat longipetiolatis (pet. 3.5-5 cm. long.) ovatis apice cuspidato-acuminatis ipso obtusis vel obtusissimis nonnunquam emarginatis basi obtusis levissime cordatis glandulisque

destitutis margine sæpe leviter undulatis tenuiter coriaceis glabris pagina utraque aliquanto nitidis; *racemis* terminalibus axillaribusve usque 9 cm. long. masculis paniculatis cum vel absque floribus inferioribus femineis perpaucis femineis ipsis racemosis cum vel absque floribus paucis masculis racemis utriusque sexus fulvo-pubescentibus; *floribus* ♂ sessilibus in glomerulos plurifloros collectis ♀ plane pedicellatis; *sepalis* 3 (1 mm. long.) ovatis obtusis apice lepidoto-glandulosis; *staminibus* circa 18 antheris quadratis quam filamenta applanata brevioribus; *floribus* ♀ pedicellis sat validis fulvo-glandulosis fultis; *sepalis* 5 (anne semper?) lineari-lanceolatis dorso lepidotis; *ovario* quadrato-subgloboso dense sed subtiliter tomentoso 1.5 × 2.5 mm. postea 3 × 6 mm. stylis 2 ima basi connatis crassiusculis 3 mm. long. onusto.

Isle of Pines; creekside; 300 ft.; serpentine. 2268. Small tree, 18 ft. Flowers greenish. Besides the peculiar characteristic and often bisexual inflorescence, this differs from *M. coriacea* Müll. Arg. in the leaves narrowed above and wanting the two basal glands, also in the sepals, ovaries, and stigmas of the longer-pedicelled female flowers.

MACARANGA MREIOPHYLLA S. Moore, sp. nov. ; *Arbuscula* monoica; *foliis* subsessilibus pro rata parvis (5-7 × 2-3.5 cm.) petiolatis oblongo-ovatis rarius ovatis apice sæpe acuminatis ipso obtusis obtusissimisve basi cuneatis vel rotundatis ibique biglandulosis papyraceis supra glabris subtus punctuloso-glandulosis; *inflorescentiis* summum 10 cm. long. masculis nisi bisexualibus sc. floribus masculis cum perpaucis femineis intermixtis; *racemis* ♂ foliis circa æquilongis paniculatis fulvo-pubescentibus; *floribus* in glomerulos plurifloros aggregatis; *sepalis* uti præcedentis; *staminibus* 16 filamentis .3 mm. long. antheras longit. vix excedentibus; *pedicellis* florum ♀ brevibus validis pubescentibus; *sepalis* 3 (anne semper?) circa 1 mm. long. ovatis obtusis; *ovario* uti præcedentis; *stylis* 2 a basi liberis abbreviatis papilloso-pubescentibus rubescentibus 2 mm. long.

Paompai; creekside; 200 ft.; shales. 1880. Small tree, 25 ft. Has smaller and thinner leaves than *M. mista*, pustular-glandular the underside and provided with basal glands. Moreover, the stamens have shorter filaments, the sepals of the female flowers are much broader, and their shorter styles are quite separated at the base.

M. PORRECTA S. Moore, sp. nov. *Arbuscula*; *ramulis* validis tetragonis fulvo-tomentosis dein glabrescentibus; *foliis* 5 × 5 cm. longipetiolatis (pet. 8-12 cm. long.) suborbiculari-cordatis apice cuspidato-acuminatis ipso obtusis basi 7-9-nerviis necnon eglandulosis margine leviter undulatis pergamaceis supra costis pubescentibus exemptis cito fere glabris subtus præsertim in nervis pube grisea glandulisque permultis dilute flavis lucentibus obtectis; *stipulis* lanceolato-subulatis dorso tomentosis mox deciduis 2 mm.

long.; *inflorescentiis* ♂ 30 cm. long. in axillis superioribus solitariis flores innumeros exiguos subsessiles ferentibus fulvo-tomentosis; *floribus* ♀ ignotis; *sepalis* 3 orbicularibus concavis dorso apice sæpe pauciglandulosis 1 mm. long.; *staminibus* 10 antheris 4-locellatis .35 mm. long.

Hienghene; littoral zone. 2005. Branches 6-8 mm. across, light blue-grey when the tomentum has disappeared. Flowers pale green. A singular plant, apparently belonging to this genus.

MACARANGA INSULARIS Schlechter. Tonine; forest; 1500 ft.; hornblende. 1950. Small tree, 20 ft. Flowers dull green. Stigmas yellowish. Diverse from type in the smaller leaves (generally 7-9 × 2.5-4 cm.), the small sepals of the ♀ flowers, and the longer and broader styles, often (perhaps always in later stages when full lengthening has taken place) united for some distance below, yet in spite of these features apparently conspecific with it.

HOMALANTHIUS NUTANS Pax. Mt. Mou; margin of forest; 800 ft.; serpentine. 603. Mt. Panié; creekside forest; 500 ft.; gneiss. 1803.

H. REPANDUS Schlechter. Ignambi; forest; 2000 ft.; gneiss. 1644.

EXCÆCARIA AGALLOCHA L. Port Ngéa; Nouméa; littoral zone just above high tide. 27. Ouen Toro; littoral zone. 59. E. Asia, Indian Archipelago, Australia, Polynesia.

BALANOPSISACEÆ.

BALANOPS BALANSÆ Baill. Mt. Nekando; coniferous forest; serpentine. 1074.

B. RETICULATA S. Moore, sp. nov. *Arbor* glabra, sat elata; *ramulis* prominenter paucistriatis cortice brunneo-griseo obductis deorsum nudis cicatricibusque foliorum necnon florum occasorum notatis sursum foliosis; *foliis* 5.5-7 × 2-2.5 cm. breviter petiolatis plerisque verticillatis anguste obovato-oblongis apice obtusissimis vel emarginatis basi obtusissimis margine integris leviterque revolutis valde coriaceis opacis utrobique perspicue reticulato-nervis; *drupis* extra-axillaribus solitariis sessilibus subglobosis glabris nitidis cupula ex bracteis paucis 3-serialibus late rotundatis dorso dense griseo-tomentosis constituta arcte cinctis.

Ignambi; forest; 2000 ft.; gneiss. 1520. Tree 50 ft. *Cupule* 6 × 8 mm., its bracts increasing in size from below upwards, the uppermost 4 × 8 mm. *Fruit* (apparently not quite ripe) green, but drying brown, 6 × 6.5 mm., completely 2-celled, still crowned by the two short fleshy bipartite styles. *Seed* black, 2.5 mm. long at the stage reached when gathered.

Nearest *B. Balanœ* Baill., which has shining leaves more markedly narrowed at the base and not at all prominently reticulate, and moreover with much less tendency to a verticillate arrangement, also larger ciliolate cupulate bracts and larger oblong drupes.

BALANOPS PANCHERI Baill., var. *SIMPLEX* Baill. (ex descript.). Mt. Poumè ; abundant in serpentine scrub; 0-1300 ft. 2366. Low woody shrub reaching 4 ft., sometimes branched from the base, usually with simple stem. Answers the description so far as that goes, except for the somewhat smaller leaves (up to 13.5 × 2.8 cm. as against 15 × 4 cm.). The ripe fruits, hitherto undescribed, are broadly ovoid, and 2 cm. long by about 1.7 cm. in width. Baillon gives Mt. Poumè as the locality for this variety.

B. ACICARPA S. Moore, sp. nov. *Frutex* metralis glaber ; *caule* sæpissime simplici sub foliis subtereti cicatricibus foliorum florum gemmarumque crebro ornato cortice cinereo-nigro levi necnon nitenti obducto ; *foliis* 12-15 × 3.5-5 cm. saltem inferioribus fere constanter verticillatis oblongo-oblancoelatis apice obtusissimis nisi rotundatis basi in petiolum latum 1-1.5 cm. long. angustatis margine revolutis usque ad medium undulato-denticulatis aliter integris crasse coriaceis ; *floribus* femineis axillaribus solitariis ; *bracteis* pluribus circa 7-serialibus ovatis apice rotundatis ipso sæpe nigro-mucronatis exterioribus 1-2.5 mm. intermediis 5-6 mm. long. intimis acuminatis fere 10 mm. long. inferioribus fuscis glabrisque ceteris facie utraque præsertim vero exteriori albo-sericeis ; *fructu* adhuc immaturo compresso ovoideo-acuminato 2-loculari glabro fere 2 cm. long. ad medium 9 mm. in transversum stylosum 2 sat validorum puberulorum reliquiis onusto.

Cap Bocage ; frequent in dry serpentine scrub ; 100-1300 ft. 1365. Shrub 3-4 ft. Stem usually simple. Fruit in dry state a dull brick-red with a few longitudinal furrows.

At first this was thought to be a form possibly of *B. Theophrasta* Baill., a species not represented in our herbaria ; but this is described as having much larger leaves (up to 30 × 10 cm.) lengthily narrowing into the petiole, while the drupe (3 × 1.5 cm.) is invested by a cupule of bracts of which all are acuminate and are villous on the back and elsewhere glabrous.

TRILOCULARIA SPARSIFOLIA Schlechter. Mountains to north of Ngoyé ; *Casuarina* forest ; 2500 ft. 2067. Large tree, 35 ft. This is a fortunate discovery, the specimens being those of the male plant hitherto unknown. To the generic description (Bot. Jahrb. xxxix. 94) the following addition should be made :—

Flores masculi in amenta sparsa pauciflora disposita ex ramulis inter folia oriunda. *Stamina* sæpissime 3-5, quodque bractea minuta sæpius stipatum, feminei rudimentum parvulum 2-3-lobum circumdantia ; *antheræ* lateraliter dehiscentes.

Balanops, it may be remarked, has only one bract to each male flower and no female rudiment. The catkins are usually 1 cm. or so in length and the subcylindrical anthers 2 mm. Schlechter got his specimen (also at Ngoyé) from a shrub of $1\frac{1}{2}$ - $2\frac{1}{2}$ metres; apparently a case of precocious flowering.

URTICACEÆ.

TREMA ASPERA Bl., var. MICROPHYLLA Schlechter. Taom; serpentine scrub; 500 ft; rare. 2303. Shrub 2 ft. Australia (the species).

T. VIEILLARDII Schlechter. Mt. Mou; moist forest; 800 ft.; cretaceous, 506. Shrub 10 ft.

PARASPONIA ANDERSONII Planch. Mt. Mou; damp part of Niaouli zone; 800 ft.; cretaceous. 511. Shrub 10 ft. Flowers white. Polynesia.

MORUS ALBA L., var. INDICA Bur. Ignambi; creekside forest; 1500 ft.; gneiss. 1610. A widely cultivated plant.

MALAISSA TORTUOSA Blanco, var. VIRIDESCENS Bur. Port Déspointes woods. 224. E. Asia, Malaya, Australia, Polynesia (the species).

FIGUS MANGIFERIFOLIA Warb. Ignambi; forest; 2000 ft.; gneiss. 1629. Mt. Panié; frequent in rocky parts of forest; 1500 ft. 1801. A small tree (1629) or shrub 6 ft. (1801).

F. MUTABILIS Bur. Paompai; forest margin; 1000 ft.; shales. 1898. Shrub 6 ft. Fruits dark green.

F. NITIDIFOLIA Bur. Riv. Comboui: *Spermolepis* forest margin; 600 ft. 2202. Tree 20 ft. Fruits green when young, ripening through yellow to rose-red.

F. PROLIXA Forst. Ouen Toro; seaside forest. 52. Banyan with spreading roots and accessory trunks. Latex buff-coloured. Polynesia.

F. AUSTRO-CALEDONICA Bur. River Ngoyé, margin of; 500 ft.; serpentine. 2102. Tree 25 ft. Smooth grey bark. Trunk simple, branches spreading. Fruits red-brown with green blotches, soft and pulpy. Sticky white latex.

F. PROTEUS Bur. Mt. Mou; moister parts of Niaouli association; 1000 ft.; cretaceous. 521. Paompai; creekside wood; 50 ft.; shales. 1903. Tree 30-40 ft. Trunk simple. Branches wide-spreading. Fruits erect, green tinged brown. Latex creamy.

FICUS PROTEUS, var. *DENTATA* Bur. Paompai; among rocks by creekside; 50 ft. 1884. Small tree, 25 ft. Spreading branches. Fruits dull green tinged with brown. Latex creamy.

F. RACEMIGERA Bur. Mont Canala; wet forest; 1000 ft.; mica schists. 1203. Tree 25–40 ft. Weak milky latex. Fruits in big branching panicles on main trunk.

F. COMPTONII S. Moore, sp. nov. *Arbor magna*; *ramulis* haud validis sursum foliosis foliorum cicatricibus clypeiformibus crebro notatis minute puberulis cito glabris; *stipulis* oblongo-ovatis obtusis extus sericeis circa 4 mm. long.; *foliis* 12–17 × 3–5 cm. oblongo-oblanccolatis sub apice angustatis apice ipso obtusis retusisve basi in petiolum latum 1.5–2 cm. long. sensim angustatis chartaceis utrobique glabris costis lateralibus utrinque 8–10 medium usque fere rectis inde dichotomo-arcuatis uti costa media reticulumque satis arctum pagina utravis præcipue vero inferiori facile aspectabilibus; *receptaculis* parvis 7 × 6.5 mm. binis pedunculatis subglobosis secus rhachin efoliatam puberulam e trunco enatam 40 cm. long. ordinatis; *pedunculis* minute sericeis apice bracteas squamiformes rotundatas ciliolatas gerentibus; *bracteis* receptaculi externis ovatis obtusis quam interiores oblongæ obtusæ decurvæ 2 mm. long. brevioribus; *perianthii* (♀) segmentis 3 ovatis obtusis rubropunctatis 4 mm. long.; *ovario* subrecto quam perianthii segmenta paullo breviora in stylum vix terminalem apice subæqualiter bicurum exeunte.

Ignambi; forest; 2000 ft.; gneiss. 1643. Different from *F. racemigera* Bur., so far as regards naked-eye characters, in foliage and peduncled receptacles.

F. LEPTORHACHIS S. Moore, sp. nov. *Ramulis* tenuibus subteretibus pubescentibus cito puberulis; *stipulis* oblongis obtusis extus minute puberulis 7 mm. long.; *foliis* 8–10 × 2.2–3 cm. petiolatis (pet. 1 cm. long.) oblongo-lanceolatis obtusis vel obtusissimis basi obtusis chartaceis glabris costis lateralibus utrinque 8–10 pluribus aliis valoris minoris intervenientibus ultra medium dichotomis inde valde arcuatis ut costa media reticulumque pag. inf. optime manifestis; *receptaculis* 7 × 7 mm. binis pedunculatis secus rhachin tenuem rarissime foliatam puberulam dispositis; *pedunculis* minute puberulis receptaculo æquilongis supra medium bracteis parvulis squamiformibus rotundatis onustis; *receptaculi* bracteis internis lanceolato-oblongis obtusis deflexis 2 mm. long.; *florum* ♀ perianthii segmentis 3 lanceolatis acutis obtusisve 5 mm. long.; *ovario* ovoideo perianthium vix æquantem; *stylo* subterminali bicurro.

Mt. Mou; forest; 3000 ft.; serpentine. 584. Branchlets (as also flower-bearing rhachis) 1–1.5 mm. thick. Fruit turning orange-red when ripening. Easily distinguished from *F. Comptonii* by the small leaves and the longer peduncles bracteate near the middle. The perianth is difficult to see, owing

to its segments being pressed closely together and against the ovary. Hence the description in that respect may not be accurate.

FICUS OREADUM S. Moore, sp. nov. *Ramulis* tenuibus subtiliter pubescentibus cito glabrescentibus; *stipulis* lanceolatis acuminatis extus microscopice puberulis 7 mm. long.; *foliis* petiolatis (pet. 5-8 mm. long.) ovato-oblongis obtusis vel obtusissimis nonnunquam emarginalis basi rotundatis paullumque obliquis chartaceis glabris 6-8 × 3-3.5 cm. costis lateralibus utrinque 7-8 prope marginem dichotomis necnon arcuatis ut costa media reticulumque pag. utraque eminentibus; *receptaculis* usque 1 × 1 cm. binis sphaeroideis ramulis (secundum cl. detectorem itaque sæpe cauli) insidentibus; *pedunculis* abbreviatis (2 mm. long.) infra receptaculum bracteas parvulas squamiformes gerentibus; *receptaculi* bracteis externis late deltoideis acutis obtusisve .75 mm. long. internis oblongis obtusis 2 mm. long.; *perianthii* fl. ♂ segmentis 3 oblongis obtusis 1.25 mm. long.; *stamine* unico anthera quadrata quam filamentum paullo longiore; *perianthii* fl. ♀ segmentis 4 oblongis obtusis vix 1 mm. long. quam ovarium subglobosum longioribus; *stylo* laterali elongato apice bicruro.

Mont Mou; forest margin; 1000 ft.; serpentine. 468. Banyan, often cauliflorous. In shape the leaves of this are somewhat like those of *F. Proteus* Bur., but unlike them in texture and smoothness.

F. CRETACEA S. Moore, sp. nov. *Frutex* fere biorgyalis; *ramulis* sat tenuibus paucistriatis puberulis; *stipulis* ovatis acuminatis extus subtiliter sericeis 8 mm. long.; *foliis* petiolatis (pet. 1 cm. long.) oblongo-oblanccolatis obtusis raro retusis sub apice sæpe cuspidato-attenuatis basi rotundatis obscureque cordatis pergamaceis glabris 12-18 × 3-5 cm. costa media subtus prominente costis lateralibus utrinque 7-9 uti reticulum mediocriter arctum subtus bene aspectabilibus aperte arcuatis juxta marginem dichotomis; *receptaculis* 11 × 10 mm. solitariis axillaribus breviter pedunculatis subglobosis glabris; *pedunculis* receptaculo brevioribus infra medium bracteatis 5 mm. long.; *receptaculi* bracteis internis obovatis vel oblongo-spathulatis obtusis 1.5 mm. long.; *perianthii* ♀ segmentis 3 ovato-oblongis obtusis rubro-punctatis vix 2 mm. long. achænio late ovoideo paullo longioribus; *stylo* laterali ovario circiter æquilongo.

Mont Mou; moist forest; 800 ft.; cretaceous. 506. Shrub 10 ft. Branchlet of single specimen seen 2.5 mm. thick. In foliage a good deal like some New Caledonian specimens referred by authors, though apparently wrongly, to *F. Webbiana* Miq., but known on sight from these by the longer pedicels to the fruits.

F. CAMPICOLA S. Moore, sp. nov. *Frutex* suborgyalis; *ramis* mediocriter validis cicatricibus foliorum mortuorum clypeiformibus indutis puberulis mox glabris; *stipulis* ovatis acuminatis minute arcteque sericeis vix 1 cm. long.;

foliis petiolatis (pet. 2.5–3.5 cm. long.) basi trinerviis oblongis vel anguste oblongo-obovatis breviter acuminatis apice obtusis basi rotundatis coriaceis 15–16 × 3.5–4.5 cm. supra glabris subtus præsertim in nervis scabriusculo-puberulis costis lateralibus utrinque 8–10 sub margine dichotomis uti costa media reticulumque supra planis subtus bene eminentibus; *receptaculis* 12 × 12 mm. in axillis foliorum binis pedunculatis globosis glabris; *pedunculis* basi bracteatis microscopicè puberulis 7 mm. long.; *bracteis* receptaculi externis minutis internis paucis horizontalibus deltoideis acutis obtusisve 1 mm. long.; *perianthii* (♀) segmentis 4 ovatis vel obovatis obtusis vel obtusissimis 1.5–2 mm. long. *acheniiis* ovoideis obtusis stylo persistente laterali apice bicruro comitatis circa 1.5 mm. long.

Plaine des Lacs; *Agathis* forest; 800 ft. 347. Shrub 4 ft. Branch of the only specimen seen 4–5 mm. thick. Near the last, but the broader coriaceous 3-nerved leaves on longer petioles serve to distinguish it at sight.

PIPTURUS INCANUS Wedd. Mont Mou; forest margin; 1000 ft.; serpentine. 470. Mt. Canala; forest margin; 1000 ft.; schists. 1174. Tree 25–30 ft. Indian Archipelago, Polynesia.

P. ALBIDUS A. Gray. Ignambi; forest; 2000 ft.; gneiss. 1645 Mt. Panié; forest clearing; 1500 ft.; gneiss. 1802. Tonine; forest; 2000 ft.; hornblende. 1963. Sandwich Islands.

BOEHMERIA ACUMINATA Wedd. Paompai; forest margin and clearing; 200 ft. 1868. This has been distributed by Schlechter (*sub. no.* 15511) as "*Cypholophus heterophyllus* Wedd."

CASUARINACEÆ.

CASUARINA CUNNINGHAMIANA Miq. Nouméa; road to Anse Vata. 62. River Dumbéa; abundant along stream-banks. 409, 820. Mt. Mou; frequent in Niaouli zone; scattered or often forming local societies; 600–800 ft. 604. Mont Dore; characteristic of stream-valleys in low serpentine hills below 300 ft. 665. Taom; forms extensive pure woods on serpentine plain; 200 ft.; especially towards streams. 2288. Tree 30–40 ft. Very hard wood. Queensland and New South Wales.

C. EQUISETIFOLIA Forst., var. INCANA Poiss. Port Ngéa; Nouméa; border of littoral. 28. Tree of about 25 ft., graceful weeping habit. Tropical Africa through tropical Asia and the Archipelago to Australia and Polynesia.

C. NODIFLORA Forst. River Comboui; streamside; serpentine alluvium; 50 ft. 2225. Tree 30 ft. Branches weeping, greyish green. Polynesia.

C. DEPLANCHEANA Miq. Plaine des Lacs; abundant on moderate serpentine slopes; associated with *Dacrydium araucarioides* and resembling it in

its candelabrum form. 307. River Dumbéa; common in flood plains and on river banks; 100 ft.; serpentine. 417. Kuakué; abundant in scrubby forest on dry hillsides; up to 800 ft. 942. Nekando; open serpentine ridges; 2000 ft.; with *Dacrydium araucarioides*. 2124. Tree from 15-30 ft. (occasionally more). Wood hard.

CASUARINA POISSONIANA Schlechter. Mts. to N.W. of River Ngoyé; frequent in scrubby woods at low levels; at higher altitudes forms dense forests in which it is dominant; 0-3000 ft.; serpentine. 994. River Ngoyé; dominant over large areas; replacing *Spermolepis gummifera*; also along river margin; 0-2000 ft. 2046. Mts. to north of Ngoyé; forming dense forests; 1000-3000 ft.; serpentine. 2070. Tall tree reaching 60-70 ft. Candelabrum shape.

C. ANGULATA Poiss. River Tchiem; abundant and characteristic of open parts of river course; 0-100 ft. 1998. Tree 40 ft.

C. CHAMÆCYPARIS Poiss. Kuakué; occasional in flood-plains of river; 50 ft.; serpentine. 926. Cap Bocage; forming small local societies in mica schists; 200 ft. 1390. River Comboni; scrubby woods and *Callitris* association by river side; 100 ft. 2009. Taom; abundant in riverside pebble association, forests, and on low serpentine hills below 1000 ft. 2322. Small cypress-like tree, 15-30 ft.

To be inserted on p. 356 after *Symplocos callophylloides*.

S. (§ Bobua) MUNDA S. Moore, sp. nov. *Frutex* ultrametralis ramosus glaber; ramulis longitrorsum striatis cinereis sursum foliosis; foliis petiolatis (pet. 5 mm. long.) ovatis apice subito obtusatis raro rotundatissimis basi cuneatis margine leviter revolutis coriaceis pallide nitidis in sicco læte lutescenti-viridibus 4-5 × 2-2.5 cm. costa media supra impressa subtus eminente costis lateralibus utrinque 4 pag. utraque parum spectabilibus; spicis axillaribus plurifloris ± 1.5 cm. long.; bracteolis ovatis obtusis margine ciliolatis 1.2 mm. long.; calycis lobis tubum adæquantibus suborbiculatis 1.25 mm. long.; corollæ alte divisæ lobis 5 suborbicularibus albis 4 mm. long.; staminibus ultra 30 filamentis corollæ lobis nunc æquilongis nunc plane brevioribus; ovario uti stylus glabro hic 1.5 mm. long.

Canala, occasional in slightly sheltered serpentine scrub; 1338.

To be inserted in the genus next *S. montana* Brongn. & Gris, differing *inter alia* in the shape and size of the leaves, the considerably larger flowers with longer ovary and calyx-lobes, and the longer and broader lobes of the corolla.

DESCRIPTION OF THE PLATES.

PLATE 13. 1-4. *Acianthus*. 1. *A. bracteatus* Rendle, nat. size. 2. *A. corniculatus* Rendle, column of flower, side view, with front view of appendage above, $\times 5$. 3. *A. nanus* Rendle, nat. size. 4. *A. culiciferus* Rendle, nat. size. 5-7. *Phajus neocaledonicus* Rendle. 5. Flower, nat. size. 6. Lip flattened, nat. size. 7. Column, $\times 1\frac{1}{2}$. 8. Flower of *Culanthe neocaledonica* Rendle, nat. size. 9. Flower of *C. oreadum* Rendle, nat. size. 10. *Phreatia Comptonii* Rendle. 11. Flower of same, $\times 16$. 12. Lip of flower, $\times 16$. 13. Flower of *Dendrobium Comptonii* Rendle, nat. size.

PLATE 14. *Campynema neocaledonicum* Rendle. 1. Plant, nat. size. 2. Opening flower, $\times 3$. 3. Expanded flower, the stigmas have not yet spread, $\times 3$. 4. Front and 5. back view of a stamen, $\times 15$. 6. Fruit, $\times 3$. 7. Same in vertical section, $\times 3$. 8. Transverse section of 7, cut at $\times \times$. 9. Seed, $\times 8$.

PLATE 15. 1-6. *Comptonella* Bak. fil. 1. Portion of plant, nat. size. 2. Flowers, $\times 4$. 3. Flower, $\times 8$. 4. Longitudinal section of ovary, $\times 8$. 5. Transverse section of ovary, $\times 8$. 6. Fruit, $\times 4$. 7-9. *Montagueia* Bak. fil. 7. Portion of inflorescence, nat. size. 8. Bud, $\times 8$. 9. Flower, $\times 8$.

PLATE 16. 1-5. *Sphenostemon Comptonii* Bak. fil. 1. Portion of branch, nat. size. 2. Ground-plan of flower. 3. Flower with portion of calyx and corolla removed, $\times 4$. 4. Stamens, $\times 4$. 5. Longitudinal section of ovary, $\times 6$. 6-11. *Microsemma Comptonii* Bak. fil. 6. Portion of branch, nat. size. 7. Ground-plan of flower. 8. Flower showing ovary, $\times 2$. 9. Flower with portion of calyx and corolla removed, $\times 3$. 10. Longitudinal section of ovary, $\times 6$. 11. Transverse section of ovary, $\times 6$.

PLATE 17. *Salaciopsis* Bak. fil. 1. Portion of branch, nat. size. 2. Flower, $\times 4$. 3. Female flower with portion of calyx and corolla removed, $\times 4$. 4. Longitudinal section of ovary, $\times 4$. 5. Male flower, $\times 3$. 6. Stamen, $\times 4$.

PLATE 18. *Paracryphia* Bak. fil. 1. Portion of branch, nat. size. 2. Flower, $\times 3$. 3. Flower with part of perianth removed, $\times 6$. 4. Stamens, $\times 6$. 5. Ovary, $\times 6$. 6. Transverse section of ovary, $\times 9$. 7. Fruit, nat. size. 8. Single carpel, $\times 2$.

PLATE 19. *Enochoria* Bak. fil. 1. Leaf, $\frac{1}{2}$ nat. size. 2. Portion of inflorescence, $\frac{1}{2}$ nat. size. 3. Flowers, $\times 3$. 4. Female flower, $\times 8$. 5. Longitudinal section of two ovaries, $\times 8$. 6. Transverse section of ovary, $\times 6$.

PLATE 20. *Merismostigma neocaledonicum* S. Moore. 1. Branch, nat. size. 2. Corolla opened, $\times 3$. 3. Ovary in longitudinal section showing the two pendulous ovules, $\times 4$.

PLATE 21. 1-7. *Tropalunthe Sealyæ* S. Moore. 1. Leaf, $\frac{3}{4}$ nat. size. 2. Branch bearing flowers, nat. size. 3. Flower-bud, nat. size. 4. Corolla and stamens, nat. size. 5. Part of opened corolla, nat. size. 6. Stamen, $\times 8$. 7. Ovary in transverse section, $\times 4$. 8-11. *Trimenia neocaledonica* Bak. fil. 8. Flower, $\times 6$. 9. Same opened, $\times 6$. 10. Ovary opened longitudinally, $\times 6$. 11. Same in transverse section, $\times 6$.

PLATE 22. *Pterochrosia*. 1-6. *Pt. Comptonii* S. Moore. 1. Branch, nat. size. 2. Corolla opened, $\times 2$. 3. Stamen, $\times 8$. 4. Gynœcium, $\times 9$. 5. Carpel opened from the back to show the two ovules, $\times 9$. 6. Samara in transverse section showing a seed and the two wings, nat. size. 7. *Pt. Vieillardii* Baill. Samara, nat. size.

PLATE 23. *Depanthus glaber* S. Moore. 1. Branch, nat. size. 2. Corolla opened showing the five stamens and gynœcium, $\times 2$. 3. Anther, $\times 6$. 4. Same, one of the cells removed, $\times 6$. 5. Ovary in transverse section, $\times 8$. 6. Ripe capsule, nat. size. 7. Same, showing the separated valves, nat. size.

PLATE 24. 1-5. *Adenodaphne corifolia* S. Moore. 1. Branch, nat. size. 2. Male flower in longitudinal section, $\times 6$. 3-5. Stamens from the three whorls, $\times 10$. 6-11. *Dendrophyllanthus Comptonii* S. Moore. 6. Male and 7. female branch, nat. size. 8. Male flower, $\times 4$. 9. The three stamens drawn apart, $\times 7$. 10. Single stamen seen from outside, $\times 8$. 11. Showing column left by dehiscence of capsule, *p.* one of the persistent petals, $\times 7$.



A.B. Rendle anal.
P. Highley del. & lith.

C. Hodges & Son, imp.

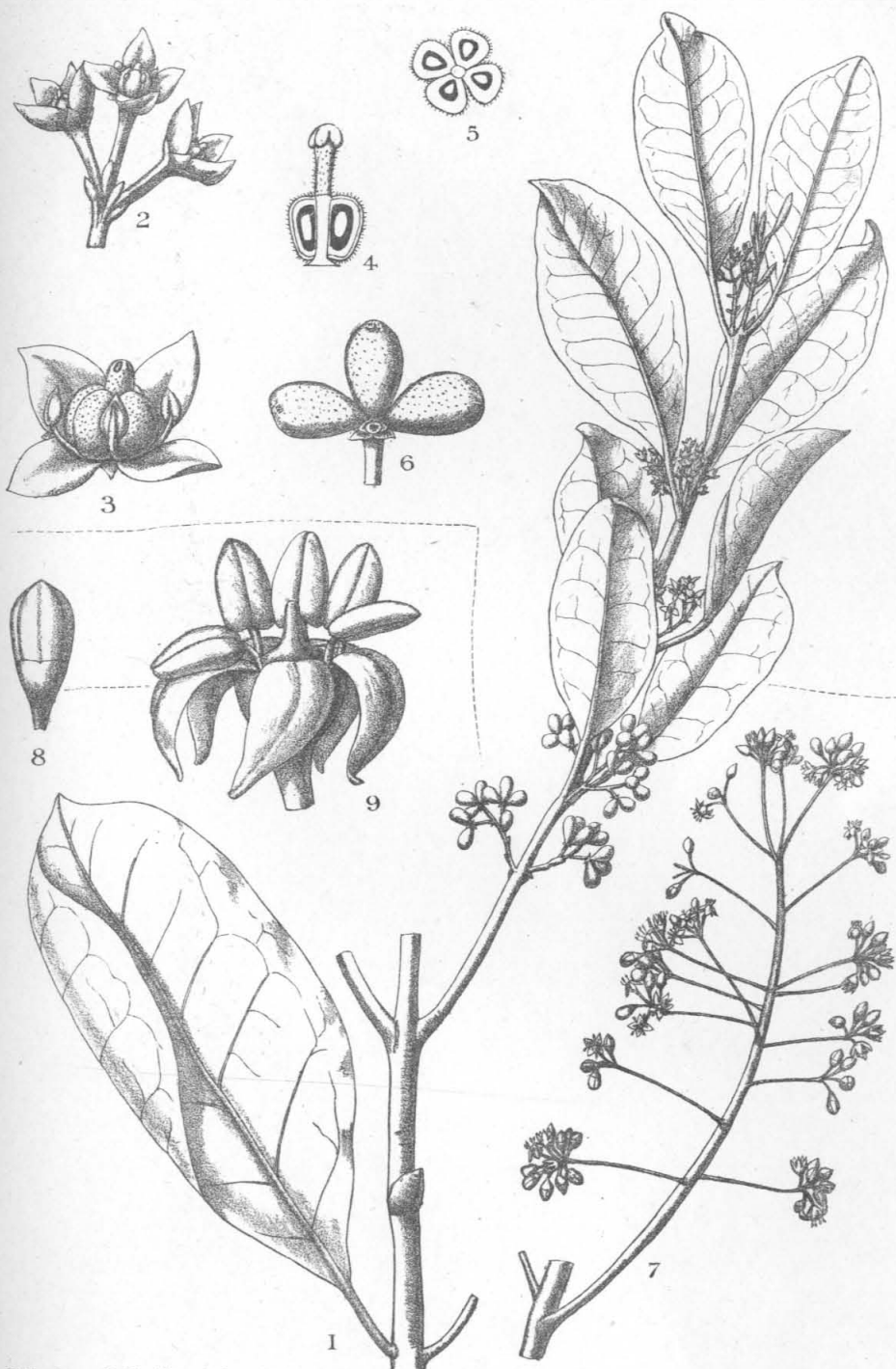
ORCHIDS from NEW CALEDONIA.



A.B. Rendle anal.
P. Highley del & lith.

C. Hodges & Son, imp

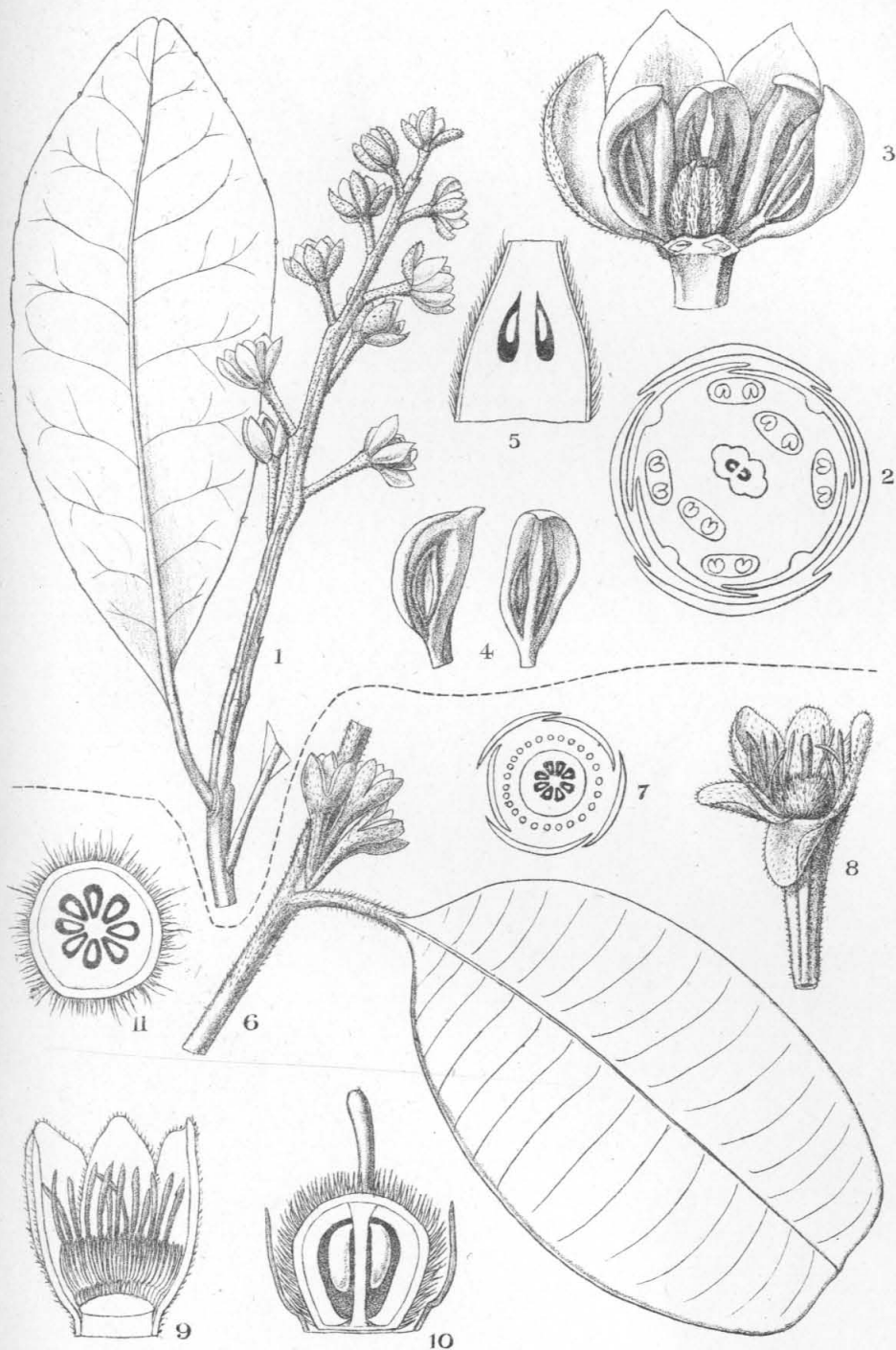
CAMPYNEMA NEOCALEDONICUM Rendle.



R. Cardew & P. Highley del.
P. Highley lith.

C. Hodges & Son, imp.

1-6, COMPTONELLA: 7-9, MONTAGUEIA.



R. Cardew del.
P. Highley lith.

C. Hodges & Son, imp.

1-5, SPHENOSTEMON COMPTONII Bak. fil.

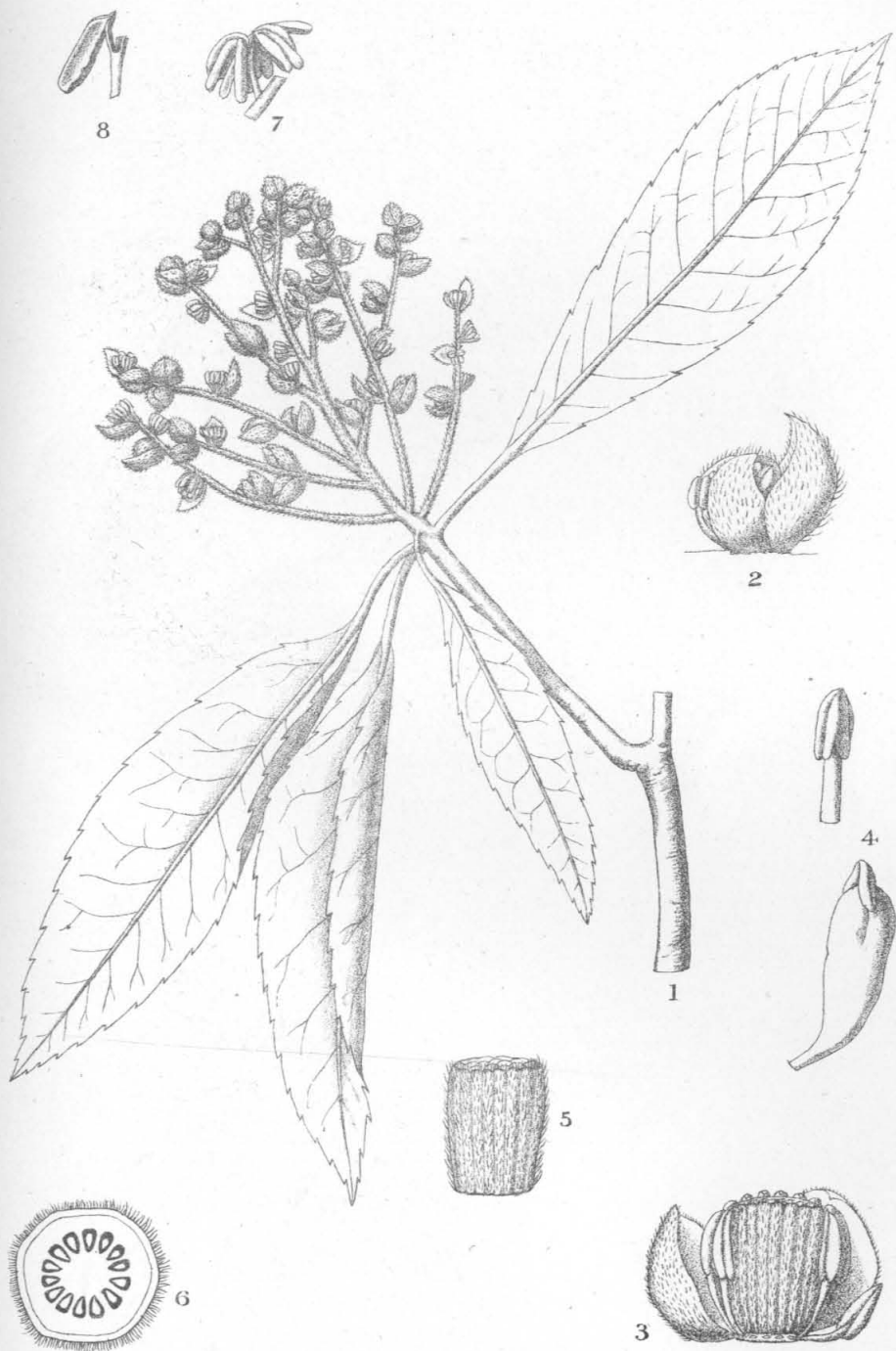
6-11, MICROSEMMA COMPTONII Bak. fil.



R. Cardew del.
P. Highley lith.

C. Hodges & Son, imp.

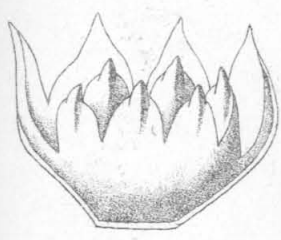
SALACIOPSIS NEOCALEDONICA Bak. fil.



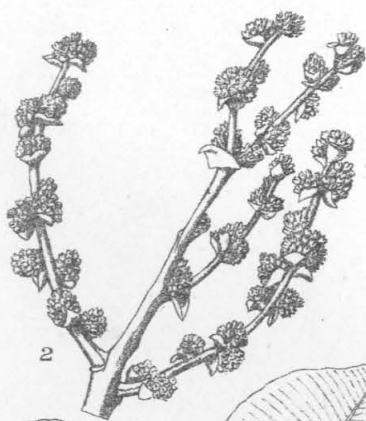
R. Cardew del.
P. Highley lith.

C. Hodges & Son imp.

PARACRYPHIA SUAVEOLENS Bak. fil.



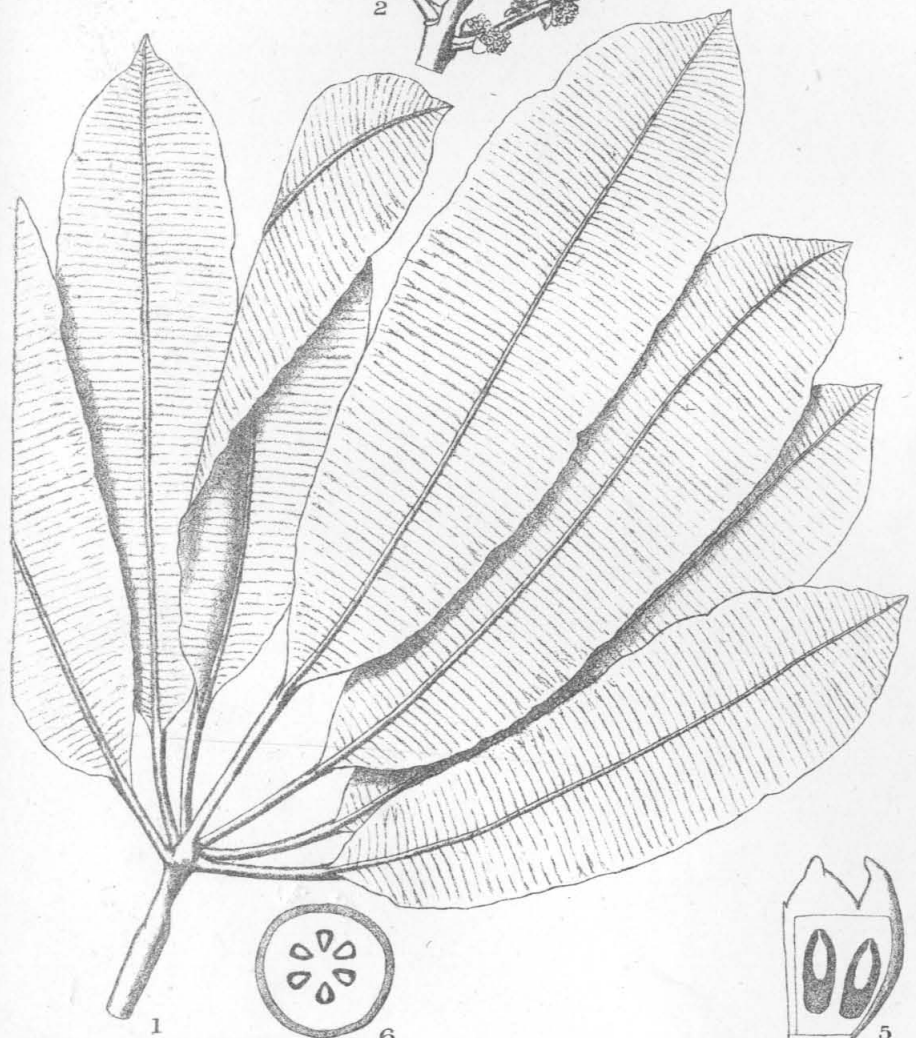
4



2



3



1



6



5

R. Cardew del.
P. Highley lith.

C. Hodges & Son imp.

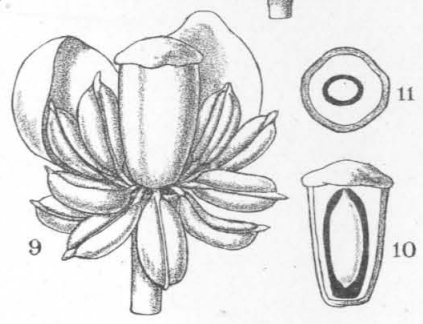
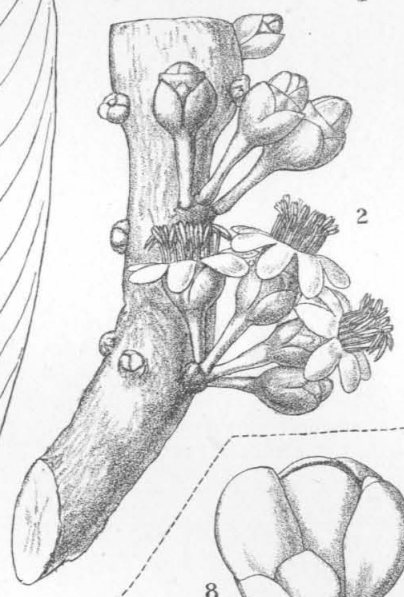
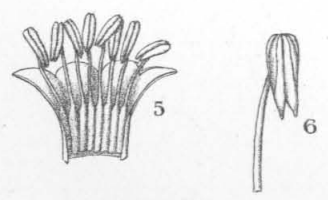
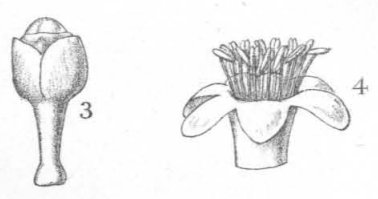
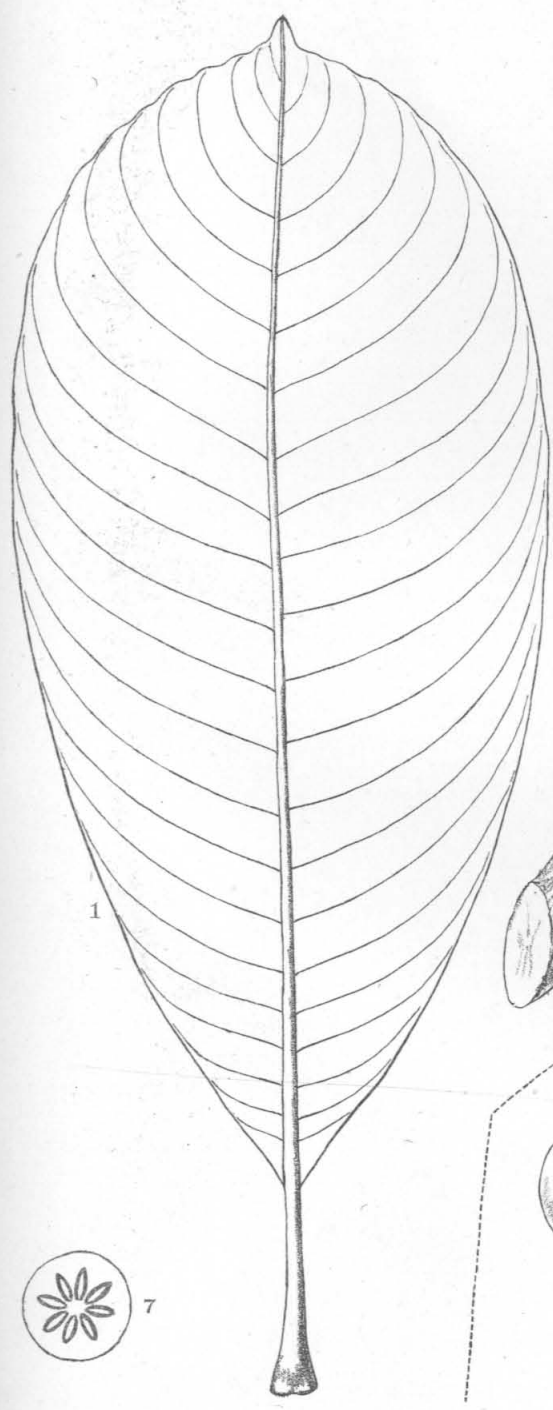
ENOCHORIA SYLVICOLA Bak. fil.



S. Moore anal.
P. Highley lith.

C. Hodges & Son, imp.

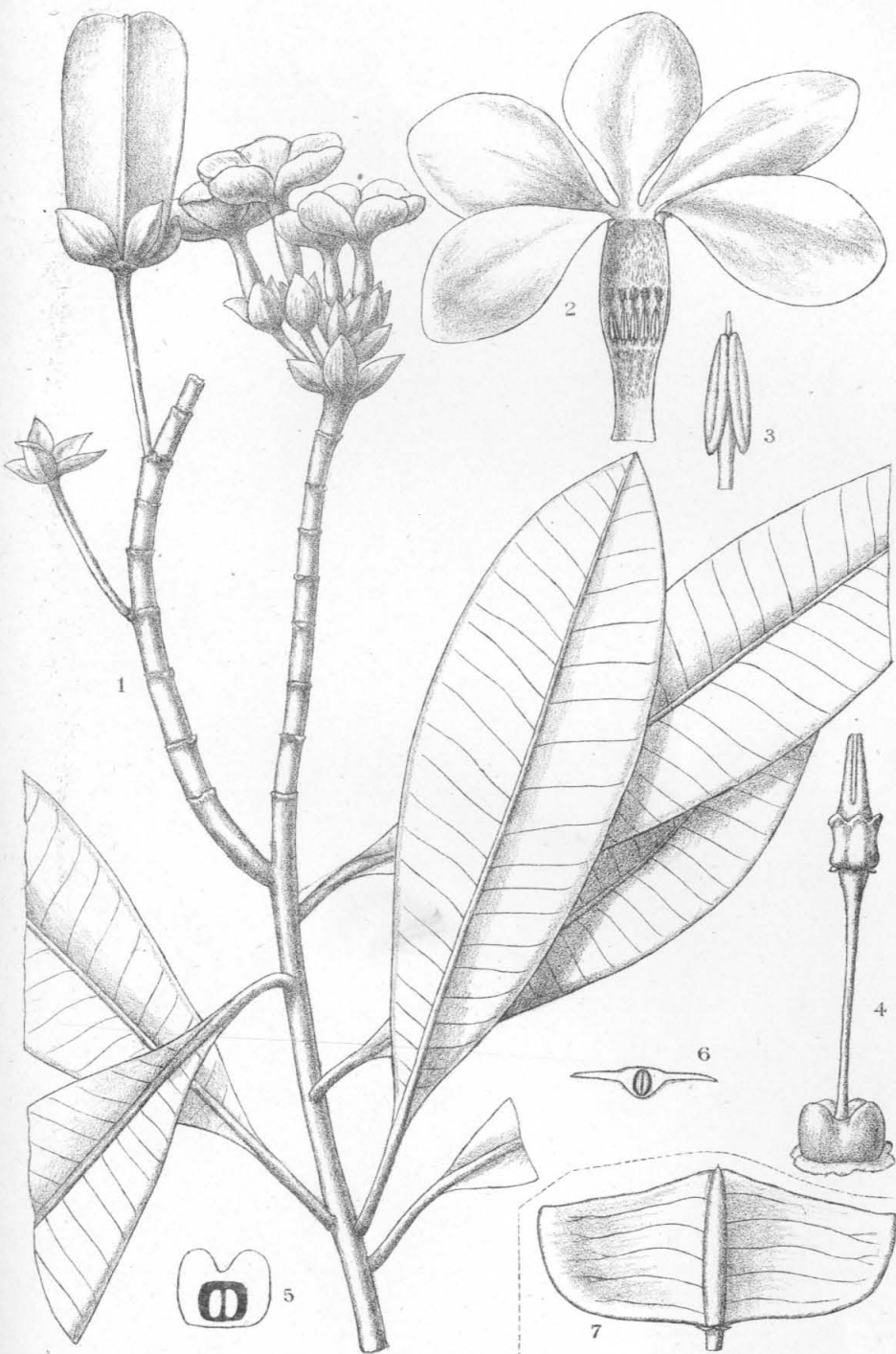
MERISMOSTIGMA NEOCALEDONICUM S. Moore.



R. Cardew & S. Moore anal.
P. Highley lith.

C. Hodges & Son, imp.

1-7, TROPALANTHE. 8-11, TRIMENIA.



S. Moore anal.
P. Highley lith.

C. Hodges & Son, imp.

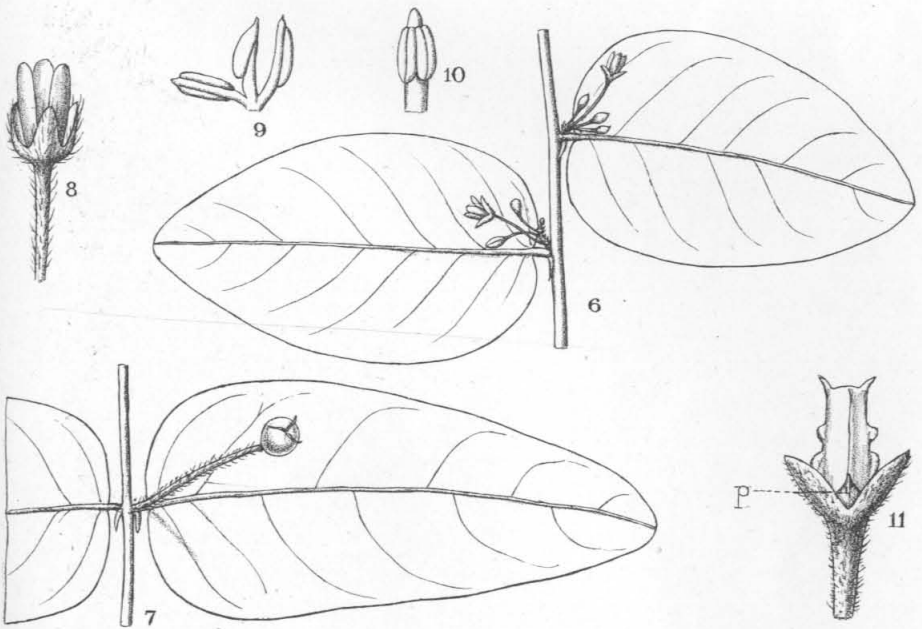
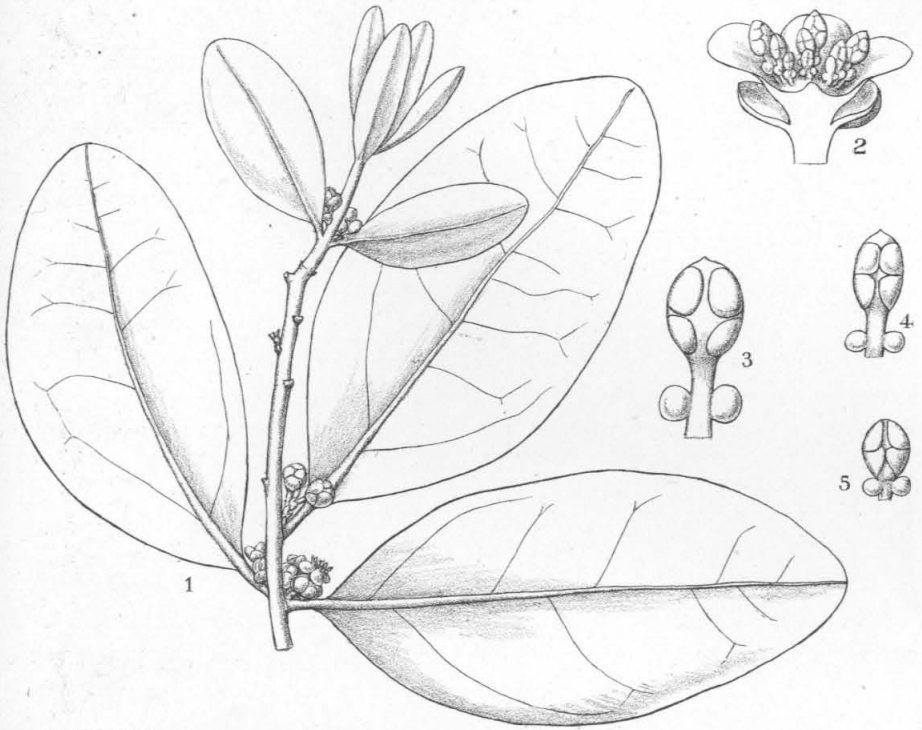
PTEROCHROSIA.



S. Moore anal.
P. Highley lith.

C. Hodges & Son, imp.

DEPANTHUS GLABER S. MOORE.



S. Moore anal.
P. Highley lith.

C. Hodges & Son, imp.

1-5, ADENODAPHNE. 6-11, DENDROPHYLLANTHUS.