

Further Contributions to the Flora of Madagascar.

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SINCE I last reported to the Linnean Society on the Flora of Madagascar, in the Session of 1884–85, two large boxes of plants have been received from our indefatigable correspondent, the Rev. R. Baron, F.L.S. One of these, owing to the unsettled state of political affairs in the island, did not reach us for more than a year after the letter announcing it came to hand, so that we had quite given it up for lost. These two boxes carry up his collecting-numbers to nearly 5000. The present paper contains descriptions of the principal new genera and species included in these boxes of which the specimens were sufficiently complete. There appear to be seven new genera—one in Menispermaceæ, one in Geraniaceæ, two in Melastomaceæ, one in Rubiaceæ, and two in Compositæ. The species are distributed through the primary divisions as follows, viz.:—Thalamifloræ 51, Calycifloræ 48, Gamopetalæ 93, Incompletæ 31, Monocotyledons 27, Vascular Cryptogamia 5.

As before, the great bulk of the new species belong to the large, well-known, widely-spread tropical genera, such as *Garcinia*, *Hibiscus*, *Begonia*, *Vernonia*, *Vitis*, *Ficus*, *Piper*, and *Cyperus*. Of characteristically Cape types we have *Pelargonium*, *Stoebe*, *Belmontia*, and *Cineraria* added to the flora of Madagascar, a second species of *Crassula*, several fleshy-leaved Kleinoid *Senecios*, and a curious dwarf *Aloe*, allied to the Cape *Aloe aristata* of Haworth. Of familiar European genera we have *Celtis* and *Deyeuxia* added and new species of *Nasturtium* and *Ajuga*. Of the endemic Madagascar genera we get new species of *Asteropeia*, *Rhodolæna*, *Dichætanthera*, *Veprecella*, *Gravesia*, *Kitchingia*, *Dicoryphe*, *Oncostemum*, *Mascarenhaisia*, and *Dypsis*. There is nothing materially fresh affecting the relations of Madagascar to Tropical Africa, Mauritius, and Bourbon. The feeble affinity of the Madagascar to the Indian and Malayan flora is strengthened by the discovery of the genus *Cyclea* and of new species of *Alyxia*, *Didymocarpus*, and *Strobilanthes*. Of types of certain or possible economic interest we have species of *Dalbergia*, *Macaranga*, and *Strychnos*, two species of *Commiphora* (*Balsamodendron*) and four of *Garcinia*. A curious Euphorbiaceous

plant seems to belong to the American genus *Pedilanthus*, but the material is incomplete.

For convenience of reference I give a list of the recent papers which have appeared in English periodicals, in which new or imperfectly known plants from Madagascar have been described.

	Genera.	Species.
1876. Ferns collected by Mr. and Mrs. William Pool. Baker, Journ. Linn. Soc. xv. p. 411	...	26
1877. Ferns collected by Miss Helen Gilpin. Baker, Journ. Linn. Soc. xvi. p. 197.....	...	21
1879. Flowering Plants collected by L. Kitching. Baker, Journ. Linn. Soc. xviii. p. 264	2	33
1880. Ferns collected by L. Kitching. Baker, Journ. Bot. 1880, p. 326.....	...	13
1880-85. Endemic Genera figured in Icones Plantarum. <i>Micronychia</i> , Oliver, t. 1337; <i>Epallage</i> , DC. t. 1394; <i>Rhaphispermum</i> , Benth. t. 1402; <i>Cardiochlamys</i> , Oliv. t. 1403; <i>Bembicia</i> , Oliv. t. 1404; <i>Xerochlamys</i> , Baker, t. 1413; new ...	3	3
1882. New Plants collected by Messrs. Baron and Parker. Baker, Journ. Bot. pp. 17, 45, 67, 109, 137, 189, 218, 243, 266; reprint paged differently	2	108
New Plants collected by Messrs. Baron and Parker. Baker (with synopsis of <i>Cyperus</i> by C. B. Clarke), Journ. Linn. Soc. xx. pp. 87-304	5	392
1883. New Monocotyledons collected by Deans Cowan. Ridley, Journ. Linn. Soc. xx. p. 329	1	10
1884. On <i>Hyalocalyx</i> , a new genus of Turneraceæ. Rolfe, Journ. Linn. Soc. xxi. p. 256, t. 10	1	1
New Plants collected by Baron. Baker, Journ. Linn. Soc. xxi. pp. 317, 407	8	190
Cyperaceæ novæ. Ridley, Journ. Bot. p. 13.....	...	3
Ferns collected by Humblot. Baker, Journ. Bot. p. 139	...	15
1885. Complete list of all the known Orchids of Madagascar, with descriptions of new and little-known species. Ridley, Journ. Linn. Soc. xxi. p. 456 .		74
New Orchids collected by Fox and Baron. Ridley, Journ. Linn. Soc. xxii. p. 116	...	19
1886. The present paper	7	255
	29	1163

THALAMIFLORE.

POPOWIA MICRANTHA, n. sp.

Arborea, glabra, ramulis gracilibus purpurascentibus copiose lenticellatis, foliis oblongis petiolatis, floribus axillaribus solitariis longe pedicellatis, sepalis parvis orbicularibus, petalis 6, exterioribus orbicularibus, interioribus oblongis, staminibus carpellis æquilongis, carpellis 8-9 ovoideis brunneo-sericeis.

A tree, glabrous in all its parts except the carpels, with copious, very slender branchlets. Leaves alternate, distinctly petioled, $1\frac{1}{2}$ –2 in. long, moderately firm in texture, green on the upper surface, glaucous beneath, with fine inconspicuous veins. Flowers copious, solitary, axillary, on very slender spreading pedicels, sometimes an inch long. Calyx persistent, $\frac{1}{8}$ in. in diam. Petals deciduous, outer $\frac{1}{8}$ in. long and broad, inner about half as broad. Carpels very small in the flowering stage, densely silky.—*Baron* 4773! *Popowia* is united to *Unona* by Baillon. There are several Madagascar species already known.

CYCLEA MADAGASCARIENSIS, n. sp.

Sarmentosa, glaberrima, caulibus gracilibus angulatis, foliis ovatis acuminatis subcoriaceis nitidis venulis ad faciem inferiorem omnibus exsculptis, petiolo supra basin insertis, floribus masculis in paniculas parcas axillares dispositis, pedicellis flore longioribus, sepalis 6 oblongis basi solum coalitis, petalis in corollam globosam coalitis ore crenato, columna staminea apice peltata corolla æquilonga.

A shrub, with slender angled twining stems. Leaves glossy, firm in texture, 2–3 in. long, green on both sides, with the petiole inserted a short distance above the truncate or slightly emarginate base, with 5 veins radiating from its insertion upwards and 2 horizontally, all the veins and veinlets raised on the under surface. Flowers in narrow peduncled axillary panicles, as long as or shorter than the leaves; pedicels articulated at the apex, $\frac{1}{2}$ –1 line long. Bud globose, blackish, not more than half a line in diameter. Corolla shorter than the calyx.—*Baron* 3766! Adds this well-known Indian and Malayan genus to the Madagascar flora.

GAMOPODA, genus novum Menispermacearum.

Dioicum. Flores masculi. Calyx polyphyllus, sepalis 6 oblanceolatis obtusis imbricatis extus dense pilosis. Petala 6 oblonga glabra concava, calyce 2–3plo breviora. Stamina 3–4, filamentis deorsum connatis apice liberis, antheris terminalibus adnatis tetragonis bilocularibus. Flores fœminei ignoti.

G. DENSIFLORA, *Baker*.

Species sola.

An erect shrub, with slender terete woody branchlets, clothed with dense short persistent brown pubescence. Leaves alternate, shortly petioled, ovate-lanceolate, entire, acute, 3–5 in. long, 1–2 in. broad below the middle, rigidly coriaceous, green

and glabrous above, clothed with deciduous brown hairs on a glaucous groundwork beneath, all the main veins and anastomosing veinlets raised. Flowers many, arranged in dense sessile or shortly peduncled congested cymes in the axils of the leaves. Calyx $\frac{1}{2}$ in. long, densely clothed with brown-drab hairs on the outside. Petals brownish, at most $\frac{1}{4}$ in. long. Stamens about as long as the petals, the square anthers entirely adnate to the tip of the filaments.—*Baron* 2927! Allied to *Triclisia*, Benth., from which it differs by its adnate anthers and flower-wrapper divided out into a distinct calyx and corolla.

NASTURTIUM MILLEFOLIUM, n. sp.

Annuum, caulibus dense cæspitosis brevibus cæspitosis humifusis, foliis petiolatis oblongis decompositis segmentis minutis crassis oblongis, floribus axillaribus solitariis breviter pedicellatis, sepalis parvis oblongis, petalis obovatis unguiculatis albis calyce duplo longioribus, staminibus calyci æquilongis, fructu oblongo-lanceolato stylo brevi apiculato.

An annual, with a fusiform root, with many short stems a few inches long radiating from its crown. Leaves $\frac{1}{2}$ – $\frac{3}{4}$ in. long, decomposed like those of *Sisymbrium Sophia*, with very small ultimate segments. Flowers solitary from the axils of the leaves all down the stem; pedicels short, erecto-patent. Calyx $\frac{1}{6}$ in. long. Petals $\frac{1}{8}$ in. long. Pod $\frac{1}{8}$ – $\frac{1}{4}$ in. long, tipped with a short persistent style.—*Baron* 4428! Antananarivo, *Hildebrandt* 4056, ex parte.

APHLOIA MINIMA, n. sp.

Fruticosa, ramosissima, glabra, foliis parvis oblongis breviter petiolatis supra basin argute serratis, floribus solitariis terminalibus breviter pedicellatis, sepalis orbicularibus, staminibus demum calyci æquilongis, ovario ampullæformi stigmate peltato.

A very much branched small shrub, glabrous in all its parts. Leaves alternate, $\frac{1}{3}$ – $\frac{1}{2}$ in. long, moderately firm in texture, green and glabrous on both surfaces, obtuse, cuneate and entire at the base. Flowers solitary, terminal; pedicels $\frac{1}{8}$ – $\frac{1}{6}$ in. long. Bud $\frac{1}{8}$ in. in diam.; sepals 5, orbicular, the two outer thicker and darker in colour than the three inner. Stamens very numerous. Ovary glabrous; stigma large, capitate.—*Baron* 4514!

PITTOSPORUM PACHYPHYLLUM, n. sp.

Fruticosum, glabrum, ramulis validis, foliis breviter petiolatis sparsis vel verticillatis oblanceolatis obtusis crassissimis rigidissimis e medio ad basin angustatis, umbellis paucifloris sessilibus terminalibus, pedicellis

fructui æquilongis, gynophoro nullo, valvis 2 percrassis rigidissimis divaricatis, ovulis ad placentam singulam 8–10, seminibus globosis castaneis.

An erect shrub, glabrous in all its parts. Leaves 2–3 in. long, $\frac{3}{4}$ –1 in. broad above the middle, very thick and rigid in texture, green above, drab beneath, the veins fine and immersed; petiole $\frac{1}{4}$ – $\frac{1}{3}$ in. long. Umbels sessile at the end of the branchlets, bracteated by full-sized leaves. Flowers not seen. Fruit-pedicels $\frac{1}{3}$ – $\frac{1}{2}$ in. long. Valves of the fruit orbicular, under $\frac{1}{2}$ in. long, very thick and rigid, brown on the outside.—*Baron* 1174! 3950!

PITTOSPORUM VERNICOSUM, n. sp.

Fruticosum, ramosissimum, glabrum, foliis irregulariter confertis breviter petiolatis oblongis vel lanceolatis rigidulis utrinque viridibus facie nitidis, umbellis multifloris terminalibus, pedicellis fructu longioribus, fructu globoso glabro brunneo magnitudine pisi valvis 2 patulis, gynophoro brevi, seminibus 2 castaneis nitidis.

An erect shrub, glabrous in all its parts, with irregularly crowded leaves. Leaves $1\frac{1}{2}$ –2 in. long, about $\frac{1}{2}$ in. broad at the middle, acuminate, glossy green above, paler green beneath, with fine immersed veining. Flowers as many as 12, arranged in sessile terminal umbels, with many full-sized leaves at and near the base; fruit-pedicels $\frac{1}{4}$ – $\frac{1}{3}$ in. long. Fruit globose, brown, coriaceous, $\frac{1}{6}$ in. long and broad, tipped with a short slender style, the rigid valves finally spreading horizontally. Seeds 2, subglobose, mahogany-brown, arising one each from the base of the two placentas. Flowers not seen.—*Baron* 4942!

POLYGALA LEPTOCAULIS, n. sp.

Annua, caule erecto gracillimo pubescente virgato simplici vel furcato, foliis subsessilibus glabris linearibus vel lanceolatis, racemo terminali elongato laxissimo, pedicellis brevibus inferioribus cernuis, sepalis pallidis viridi venosis, exterioribus parvis oblongis, interioribus magnis obovatis venis sursum anastomosantibus, petalis cæruleis calyce paulo longioribus, carina apice parce cristata, fructu oblongo calyci æquilongo.

An annual, with slender erect finely pubescent stems $\frac{1}{2}$ – $1\frac{1}{2}$ ft. long. Leaves extending all the way up the stem to the base of the raceme, laxly disposed, erecto-patent, 1-nerved, 1 – $1\frac{1}{2}$ in. long. Raceme 2–5 in. long; pedicels much shorter than the calyx. Outer sepals $\frac{1}{16}$ in. long; inner above $\frac{1}{8}$ in. long, with the 3 green veins connected upwards with cross-veinlets. Upper petals $\frac{1}{6}$ in. long; keel rather longer, with a small crest at the tip of the midrib. Stamens as long as the keel-petal. Capsule oblong, compressed, $\frac{1}{8}$ – $\frac{1}{6}$ in. long, emarginate at the apex.—*Baron* 4548! 4590! 4598! Allied to *P. hyssopifolia*, Bojer.

GARCINIA CERNUA, n. sp.

Arborea, glabra, foliis brevissime petiolatis subcoriaceis obovato-oblongis cuspidatis basi deltoideis venis subtilibus inconspicuis, floribus fœmineis ad foliorum axillas brevissime pedicellatis cernuis, sepalis 4 orbicularibus parvis, ovario ampullæformi, stigmate tenui plano peltato lobis 8 orbicularibus patulis.

A tree, glabrous in all its parts. Leaves 4–5 in. long, about 2 in. broad, moderately firm in texture, with 20–25 indistinct veins on each side of the midrib. Flowers solitary, drooping. Calyx $\frac{1}{8}$ in. long; sepals 4, decussate, suborbicular. Petals and stamens not seen. Ovary narrowed gradually into a long neck. Stigma $\frac{1}{8}$ in. in diam., thin, flat, with 8 orbicular spreading lobes.—*Baron 2653!*

GARCINIA ORTHOCLADA, n. sp.

Arborea, glabra, foliis brevissime petiolatis rigide coriaceis oblongis obtusis basi deltoideis venis faciei superioris exsculptis faciei inferioris immersis, floribus fœmineis axillaribus et terminalibus breviter pedicellatis, ovario globoso, stigmate crasso peltato 4-lobato lobis recurvatis.

A tree, glabrous in all its parts, with long straight main branchlets. Leaves very thick and rigid in texture, 2–3 in. long, 1–1½ in. broad, with all the main veins raised on the upper surface in the dried specimens, but not so conspicuous beneath. Flowers produced from the side and tip of the young leafy branchlets. Calyx, sepals, and petals not seen. Ovary $\frac{1}{2}$ in. in diam. after the calyx and corolla fall; stigma $\frac{1}{8}$ in. in diam., with 4 deflexed lobes.—*Baron 3633!*

GARCINIA CAULIFLORA, n. sp.

Arborea, glabra, foliis magnis rigide coriaceis obovato-oblongis breviter petiolatis venulis subtilibus, floribus fœmineis ad ramos crassos vetustos breviter pedicellatis, sepalis oblongis acutis coriaceis, petalis oblongis, ovario globoso ampullæformi, stigmate magno peltato 4-lobato lobis deflexis.

A tree, glabrous in all its parts. Leaves rigid in texture, 6–7 in. long, 2–3 in. broad above the middle, deltoid at the apex, narrowed gradually from the middle to the base, the numerous veins and veinlets but little raised. Flowers produced from thick leafless branches; pedicels $\frac{1}{4}$ – $\frac{1}{3}$ in. long. Sepals and petals reflexing, each 4, oblong, $\frac{1}{2}$ – $\frac{5}{8}$ in. long, imbricated. Ovary globose, $\frac{1}{3}$ in. in diam. before the petals and sepals fall, narrowed suddenly to a short neck; stigma thin, $\frac{1}{4}$ in. in diam., with 4 orbicular deflexing lobes.—*Baron 1786!*

GARCINIA POLYPHLEBIA, n. sp.

Arborea, glabra, foliis breviter petiolatis oblongis obtusis basi deltoideis rigide coriaceis venis primariis multijugis venulisque pulchre exsculptis, floribus fœmineis terminalibus pedicellatis, ovario subgloboso, stigmate crasso umbilicato lobis 4 rotundatis recurvatis.

A tree, glabrous in all its parts. Leaves 2–3 in. long, 1–1½ in. broad, very rigid in texture, bright green, deltoid at the base, both the nearly spreading main veins and the intermediate veinlets raised on the under surface. Pedicels erecto-patent, ⅓ in. long. Calyx, stamens, and petals not seen. Ovary ½ in. long and broad after the petals and sepals fall; stigma ⅙ in. diam., thick, brown, umbilicate in the middle, with 4 recurved semiorbicular lobes.—*Baron* 3064 ! 3101 !

RHODOLÆNA BAKERIANA, *Baill. in Bull. Linn. Soc. Par.* (1886) pp. 566, 571, = *R. altivola*, *Baker in Journ. Linn. Soc.* xx. p. 95.

Dr. Baillon tells me that the plant which I described in detail (*Baron* 1980 ! 2173 !) is distinct specifically from the original type of Thouars, which has lately been regathered by Humblot (24). Mr. Baron says that *R. Bakeriana* is a tall erect tree, with an edible fruit, and that its native name is *Fotona*. *R. altivola*, Thou., is a climber.

HIBISCUS XIPHOCUSPIS, n. sp.

Herbaceus, caulibus elongatis erectis sursum parce pilosis, foliis petiolatis glabris margine ciliatis inferioribus serratis ovatis simplicibus vel trilobatis, superioribus lanceolatis integris, floribus inferioribus solitariis axillaribus superioribus corymbosis longe pedunculatis, bracteolis pluribus linearibus hispidis, calycis segmentis deltoideis acuminatis, petalis violaceis glabris, capsulæ valvis ovatis acuminatis.

A herb, with very slender elongated stems. Leaves distant, alternate; lower broad ovate, entire, or palmately 3-lobed, 1½–3 in. long; upper lanceolate, entire, shortly petioled, rounded at the base. Flowers in a corymb at the end of the stem and solitary from the axils of the upper leaves; peduncles slender, ¾–1½ in. long. Calyx ⅓ in. long; tube campanulate. Epicalyx of about 10 adpressed hispid linear bracteoles. Petals oblong, ½–¾ in. long. Valves of the hairy capsule rather longer than the calyx.—*Baron* 4533 ! 4581 ! 4675 ! 4679 ! 4797 !

HIBISCUS CYTISIFOLIUS, n. sp.

Annuus, caulibus gracilibus elongatis scabris, foliis parvis petiolatis simplicibus vel digitatim trifoliolatis foliolis linearibus vel lineari-oblongis,

floribus solitariis axillaribus, bracteis pluribus liberis linearibus dense setoso-ciliatis, calycis tubo campanulato segmentis lanceolato-deltoides tubo æquilongis, petalis luteis calyce duplo longioribus, genitalibus inclusis, fructu membranaceo globoso piloso magnitudine pisi.

An annual, with slender green stems a foot or more long. Leaves sometimes all simple, sometimes all trifoliolate; leaflets $\frac{1}{2}$ – $\frac{3}{4}$ in. long, usually linear or linear-oblong, rarely ovate, moderately firm in texture, green and scabrous on both surfaces. Pedicel ascending, about an inch long. Calyx, capsule, and bracteoles all about $\frac{1}{4}$ inch long. Petals glabrous, obovate unguiculate. Capsule splitting to the base into 5 oblong-lanceolate valves $\frac{1}{8}$ in. broad.—*Baron* 703! 3942! 4594!

HIBISCUS OBLATUS, n. sp.

Fruticosus, ramulis lignosis, foliis longe petiolatis integris orbiculari-oblatis subcoriaceis facie viridibus scabris dorso dense pubescentibus, floribus magnis axillaribus breviter pedicellatis solitariis, bracteolis 5 in cupulam magnam rigidam dentibus deltoideis coalitis, calycis tomentosi segmentis parvis ovatis, petalis pannosis obovato-unguiculatis, genitalibus longe exsertis.

A shrub, with terete woody branchlets, thinly clothed upwards with grey lepidote tomentum. Leaves 6–8 in. broad, 4–6 in. long, cordate at the base, broadly rounded at the apex, entire or nearly so, greenish and scabrous above, persistently matted beneath with soft whitish-drab tomentum. Epicalyx drab, above $\frac{1}{2}$ in. long. Calyx under an inch long, matted with whitish-drab pubescence; segments $\frac{1}{8}$ in. long and broad. Petals pale brown, $1\frac{1}{4}$ in. long, densely pubescent. Column of stamens exserted nearly an inch beyond the petals.—*Baron* 3353! A very distinct large striking fruticose species, allied to *H. Ellisii*.

HIBISCUS NUMMULARIFOLIUS, n. sp.

Herbaceus, perennis, caulibus gracilibus apice stellato-pilosis, foliis petiolatis orbicularibus serratis facie calvatis subtus parce hispidis, floribus paucis axillaribus et terminalibus, bracteolis pluribus linearibus hispidis, calycis segmentis lanceolato-deltoides, petalis violaceis glabris calyce duplo longioribus.

A much-branched perennial herb, with short slender stems. Leaves orbicular, subcoriaceous, under an inch long and broad; petioles $\frac{1}{3}$ – $\frac{1}{2}$ in. long; stipules lanceolate, persistent. Flowers mainly solitary at the end of the branches. Calyx $\frac{1}{4}$ in. long; segments twice as long as the tube. Epicalyx of 10–12 linear

adpressed pectinate bracteoles. Petals $\frac{1}{3}$ – $\frac{1}{2}$ in. long. Capsule not seen.—*Baron* 4827! Nearly allied to *H. xiphocuspis*, but quite different in the leaves.

DOMBEYA ACERIFOLIA, n. sp.

D. ramulis validis, stipulis orbicularibus pilosis persistentibus, foliis magnis longe petiolatis cordato-orbicularibus breviter palmatifidis denticulatis rugulosis utrinque pilosis, umbellis simplicibus multifloris axillaribus longe pedunculatis, pedicellis elongatis dense patentim pilosis, calycis dense hirsuti segmentis lanceolatis, petalis latis scariosis magnitudine mediocribus, staminodiis oblanceolatis, staminibus fertilibus 10 tubo urceolato.

A shrub, with stout woody branchlets. Leaves sometimes nearly a foot long and broad, with many unequal deltoid lobes, a basal sinus 1–1½ in. long, rugose like the leaf of a *Salvia*, thinly bristly above, lacunose and more densely pilose beneath; petiole 6–8 in. long; stipules persistent, coriaceous, cuspidate, $\frac{3}{4}$ in. in diam. Peduncles 5–6 in. long, densely clothed with soft brown spreading hairs. Umbel 4 in. in diam.; pedicels capillary, 1½ in. long. Calyx $\frac{1}{2}$ in. long, densely pilose. Petals $\frac{3}{4}$ in. long, reddish, scariose. Staminodia $\frac{1}{4}$ in. long. Anthers $\frac{1}{12}$ in. long. Style reaching nearly to the tip of the petals.—*Baron* 3446! A very handsome species, near *D. platanifolia*, Bojer.

DOMBEYA MEGAPHYLLA, n. sp.

D. ramulis lignosis sursum tenuiter lepidotis, foliis longe petiolatis integris cordato-orbicularibus subcoriaceis facie viridibus glabris dorso tenuiter albido-lepidotis, floribus parvis in cymas densas axillares dichotomiter furcatas pedunculatas aggregatis, bracteis lanceolatis, calyce lepidoto segmentis oblongo-lanceolatis, petalis cuneatis scariosis, staminibus petalis brevioribus fertilibus 10 tubo brevi cupulari.

Branchlets stout, only thinly lepidote. Leaves $\frac{1}{2}$ –1 ft. long and nearly as broad, entire, deeply cordate at the base, with strongly-raised veins beneath connected by cross veinlets; petiole 2–4 in. long. Flowers in dichotomous axillary cymes much shorter than the leaves. Bracts $\frac{1}{16}$ in. long. Calyx $\frac{1}{6}$ in. long, rough with persistent drab pubescence. Petals scariose, twice as long as the calyx. Staminodia linear, reaching to the tip of the petals. Stamens connate only at the very base.—*Baron* 3443! Allied to *D. spectabilis*, Bojer (*D. Humblotii*, Baillon). *D. lucida*, Baillon in Bull. Linn. Soc. Par. (1885) p. 496, is the same species as *D. floribunda*, Baker, founded on *Baron's* 2373.

DOMBEYA INSIGNIS, n. sp.

D. ramulis stellato-pilosis, foliis longe petiolatis cordato-ovatis acutis inciso-crenatis subcoriaceis facie viridibus calvatis dorso dense pubescentibus, floribus maximis solitariis cernuis axillaribus, bracteis persistentibus laceratis, calycis dense pilosi segmentis lanceolatis, petalis latis scariosis cuneatis, staminodiis longissimis, staminibus fertilibus 30 et ultra tubo brevi cupulari.

A shrub, with slender branches thinly tomentose upwards. Leaves 3–4 in. long, dotted over when young with stellate tufts of hairs above, densely matted beneath with pale brown pubescence; petiole $1\frac{1}{2}$ –2 in. long, densely pubescent. Flowers solitary in the axils of the leaves; peduncle about an inch long. Bracts $\frac{1}{2}$ in. long. Calyx $1-1\frac{1}{4}$ in. long, densely roughly stellato-pilose. Petals nearly 2 in. long, $\frac{3}{4}$ –1 in. broad. Staminodia an inch long. Anthers linear, $\frac{1}{4}$ in. long, as long as the free part of the filament. Style reaching the tip of the petals.—*Baron 3388!* Nearly allied to *D. macrantha*, Baker (*Baron 710! Hildebrandt 3895!*). Belongs to the section *Trochetiantha* of Baillon.

DOMBEYA BIUMBELLATA, n. sp.

D. ramulis dense brunneo-pilosis, foliis longe petiolatis cordato-orbicularibus obscure palmatis trilobatis utrinque pilosis, umbellis furcatis axillaribus longe pedunculatis, pedicellis elongatis dense patentim pilosis, calycis dense pilosi segmentis ovato-lanceolatis, petalis cuneatis scariosis calyce sesquolongioribus, staminibus petalis brevioribus urceolo brevissimo, fertilibus 10.

A shrub, with branchlets, peduncles, and pedicels densely clothed with short soft brown pubescence. Leaves 6–8 in. broad, subcoriaceous, persistently pilose on both sides; petiole about as long as the lamina. Stipules deciduous. Umbels forked, about 2 in. in diam.; pedicels $\frac{1}{2}$ – $\frac{3}{4}$ in. long. Calyx $\frac{1}{4}$ in. long, densely pilose. Petals much imbricated, truncate, $\frac{1}{3}$ in. long. Anthers and free filaments each $\frac{1}{2}$ in. long. Ovary densely pilose; style $\frac{1}{6}$ in. long.—*Baron 3752!* Allied to *D. viburnæfolia*, Bojer.

DOMBEYA (§ *HILSENBERGIA*) *BARONI*, n. sp.

D. ramulis pilosis, stipulis deciduis, foliis longe petiolatis cordato-orbicularibus obscure palmatis utrinque persistenter pilosis, pedunculo elongato cernuo, floribus in cymam densam dichotomam dispositis, calycis dense pilosi tubo campanulato segmentis lanceolatis, petalis cuneatis rubellis scariosis calyce æquilongis, filamentis in tubum cylindricum calyce duplo longiorem coalitis, staminibus fertilibus circiter 15, staminodiis staminibus æquilongis, stylo exserto.

A shrub with pilose branches. Leaves 6–8 in. broad, deeply cordate, obscurely palmately lobed in the upper half, clothed with

short persistent pubescence on both sides ; petiole 3–4 in. long. Peduncle 6–8 in. long. Cyme dense, 3–4 in. in diam. Calyx densely pilose ; segments $\frac{1}{2}$ in. long. Staminal tube more than twice as long as the calyx and corolla. Anthers $\frac{1}{6}$ in. long ; free apex of filament as long as the anther. Style exerted $\frac{1}{4}$ in. beyond the stamens.—*Baron* 3432 ! Closely allied to *D. cannabina*, Bot. Mag. t. 3619.

MELOCHIA (§ *REIDLEIA*) *BETSILIENSIS*, n. sp.

M. ramulis gracilibus apice obscure pilosis, foliis petiolatis ovato-lanceolatis serratis glabris, stipulis lanceolatis persistentibus, floribus axillaribus solitariis vel ad ramorum apice paucis corymbosis pedicellis brevibus, bracteolis 3 linearibus, calycis tubo campanulato dentibus parvis deltoideis, petalis lilacinis, filamentis in tubum cylindricum connatis apice liberis, fructu globoso haud inflato, stylis basi connatis.

A shrub with long slender terete brownish branches. Leaves 1–2 in. long, moderately firm in texture, green and glabrous on both surfaces, acute, rounded at the base, sharply serrated ; petiole $\frac{1}{4}$ – $\frac{1}{2}$ in. long. Stipules $\frac{1}{6}$ in. long. Flowers not more than 2–3 at the end of the branches, and one each from the axils of the upper leaves ; pedicels hairy, at most $\frac{1}{4}$ in. long ; bracteoles $\frac{1}{8}$ in. long. Calyx $\frac{1}{12}$ in. long and broad ; teeth much shorter than the tube. Petals $\frac{1}{8}$ in. long. Stamens longer than the calyx. Capsule $\frac{1}{6}$ in. diam., setose.—*Baron* 271 ! 4678 ! 4757 ! Nearly allied to the widely-spread *M. corchorifolia*, Linn.

BYTTNERIA *MELLERI*, n. sp.

Arborea, ramulis rectis lignosis lepidoto-rugosis, foliis petiolatis cordato-orbicularibus apice profunde emarginatis lobis rotundatis rigide coriaceis facie viridibus glabris dorso dense lepidotis venis venulisque exsculptis, cymis axillaribus paucifloris, fructu magno globoso lepidoto echinato, valvis 5 lignosis e basi ruptis.

A tree 20 feet high, with stout woody branchlets. Leaves 2–3 in. long and broad, very thick, the apical sinus $\frac{1}{2}$ – $\frac{3}{4}$ in. deep, the erecto-patent main veins of the under surface much raised, 4 radiating from the apex of the petiole, which is 1–1 $\frac{1}{2}$ in. long. Flowers not seen. Capsule 1 $\frac{1}{2}$ in. long and broad, with 5 woody valves, armed with spreading prickles $\frac{1}{4}$ in. long, rough outside with scales, smooth inside, each half valve $\frac{1}{2}$ in. broad.—*Anevoca*, by streams and moist places in woods, *Dr. Meller* ! Allied to *B. biloba*, Baill. Adans. x. 178.

BYTTNERIA *BAUHINIODES*, n. sp.

B. ramulis gracillimis apice tenuiter lepidotis, foliis petiolatis ovatis glabris

utrinque viridibus basi truncatis ex apice ad medium bifidis lobis deltoideis acutis, cymis axillaribus multifloris, bracteis deciduis, pedicellis flore longioribus, sepalis ovatis nigris lepidotis, petalis apice appendicibus ovatis præditis, urceolo stamineo calyce breviori.

A shrub, probably sarmentose, with slender blackish branches lepidote towards the tip only. Leaves about 3 in. long, moderately firm in texture, quite glabrous, cleft down to the middle or a little beyond; petiole slender, $1-1\frac{1}{4}$ in. long. Cymes about as long as the petiole; pedicels $\frac{1}{6}$ in. long, slender, lepidote; bracts brown, lanceolate, deciduous. Calyx $\frac{1}{8}$ in. long, blackish and thinly lepidote; segments connate at the base. Petals brown-purple, the brown tip exerted beyond the calyx. Staminal urceolus campanulate, dark purple. Fruit not seen.—*Baron 4627!* Allied to *B. heterophylla*, Hook. Bot. Misc. i. 291, t. 61.

CORCHORUS HAMATUS, n. sp.

Annuus, caulibus elongatis erectis gracilibus glabris, foliis breviter petiolatis membranaceis glabris lanceolatis vel oblongo-lanceolatis acutis argute serratis basi bi-aristatis, floribus paucis axillaribus brevissime pedicellatis, sepalis oblongis membranaceis cuspidatis, petalis orbiculari-unguiculatis luteis, antheris linearibus filamentis brevibus, fructu duro cylindrico curvato rugoso rostro cylindrico integro.

An annual, with elongated slender glabrous stems. Leaves 2-3 in. long, $\frac{1}{2}-\frac{3}{4}$ in. broad, thin in texture, sharply serrated, with a large awn from each side at the base; petiole very short; stipules lanceolate acuminate, persistent. Flowers 3-4 from the axils of the leaves. Sepals membranous, $\frac{1}{6}$ in. long, with a large cusp at the tip. Petals bright yellow, $\frac{1}{4}-\frac{1}{3}$ in. long. Stamens about 30; anthers linear, $\frac{1}{6}$ in. long, twice as long as the filaments. Capsule sickle-shaped, abruptly curved, $\frac{1}{2}$ in. long, $\frac{1}{8}$ in. in diam., narrowed gradually into a cylindrical beak $\frac{1}{4}$ in. long, obscurely lobed at the tip only.—*Baron 4712!* Mojanga, *Hildebrandt 3409!*

ELÆOCARPUS DALECHAMPIOIDES, n. sp.

Arborea, ramulis pilosis, foliis petiolatis alternis vel oppositis obovato-oblongis obtusis subintegris rigide coriaceis subtus pilosis, pedicellis cernuis, sepalis subcoriaceis tomentosiss lanceolato-delloideis reflexis, petalis latis cuneatis rubellis pubescentibus margine laciniatis, antheris apiculatis dense pilosis.

A tree, with moderately stout pilose branchlets. Leaves 4-5 in. long, $1\frac{1}{2}-2\frac{1}{2}$ in. broad, very obtuse, entire or obscurely denticulate, rounded at the base, green and glabrous on the upper surface when mature, softly pilose, especially on the main veins

beneath, with 6-8 pairs of much-raised main veins on each side ; petiole $\frac{1}{3}$ - $\frac{1}{2}$ in. long. Pedicels cernuous, $1-1\frac{1}{2}$ in. long. Calyx coriaceous, $\frac{1}{3}$ in. long ; sepals connate above the base. Petals an inch long, nearly an inch broad, dark red, much imbricated, pubescent on the outside mainly on the flabellate ribs. Stamens very numerous, half as long as the petals ; anthers densely pilose, narrowed into an apiculus $\frac{1}{8}$ in. long above the cells.—*Baron 3822!* Allied to *E. rhodanthus* and *quercifolius*.

PSOROSPERMUM EMARGINATUM, n. sp.

Fruticosum, ramulis glabris ancipitibus, foliis distincte petiolatis oblongis obtusis vel emarginatis basi deltoideis utrinque viridibus glabris, umbellis multifloris pedunculatis terminalibus, pedicellis elongatis glabris, sepalis oblongis glabris valde nigro-lineatis, petalis calyce sesquilogioribus facie dense pilosis, staminibus pentadelphis antheris circiter 35.

A shrub, glabrous in all its parts except the face of the petals, the branchlets distinctly flattened towards the tip. Leaves 2-3 in. long, moderately firm in texture, green and glabrous on both sides ; lower surface paler ; main veins distinct, distant ; petiole $\frac{1}{4}$ - $\frac{1}{3}$ in. long. Flowers 15-30 in an umbel ; peduncle $1-1\frac{1}{2}$ in. long ; pedicels $\frac{1}{3}$ - $\frac{1}{2}$ in. long. Calyx $\frac{1}{6}$ in. long ; sepals glabrous, with copious black lines and dots outside. Petals $\frac{1}{4}$ in. long, very hairy on the face. Stamens as long as the calyx. Free styles as long as the ovary.—*Baron 4397!*

PSOROSPERMUM POPULIFOLIUM, n. sp.

Fruticosum, ramosissimum, ramulis apice ferrugineo-pilosis, foliis distincte petiolatis oblongis acutis obscure crenulatis adultis utrinque glabris viridibus, umbellis terminalibus multifloris, pedicellis pilosis flore longioribus, sepalis oblongis pilosis, petalis oblanceolatis calyce duplo longioribus facie pilosis, staminibus pentadelphis antheris circiter 40.

A much-branched erect shrub, the slender branchlets pilose towards the tip only. Adult leaves 2-3 in. long, acute, generally narrowed to the base, moderately firm in texture, green on both sides, the main veins distant, arcuate ; young leaves matted with brown pubescence on both sides. Umbels 1-2 from the axils of the top leaves ; peduncle and pedicels brown-pilose, the latter $\frac{1}{4}$ - $\frac{1}{3}$ in. long. Calyx $\frac{1}{12}$ in. long. Petals $\frac{1}{6}$ in. long, lineolate and hairy on the face. Stamens and pistil both as long as the petals.—*Baron 4611! 4617! 4810! 4812!* Allied to *P. Fanerana*, Baker, in Journ. Bot. 1882, p. 19.

PELARGONIUM (§ PELARGIUM) MADAGASCARIENSE, n. sp.

Perenne, caulibus erectis elongatis pilosis, foliis petiolatis membranaceis cordato-orbicularibus parce pilosis breviter lobatis inciso-crenatis, umbellis 3-4-floris, bracteis ovato-lanceolatis, pedicellis flori æquilongis, calycis calcare brevi segmentis ovato-lanceolatis, petalis parvis anguste cuneatis pallide lilacinis superioribus majoribus deorsum venosis, carpellorum rostro cylindrico pubescente.

A perennial, with a fusiform root and tufted leafy erect pubescent stems above a foot long. Basal leaves with a petiole 3-4 in. long, and a blade 3 in. broad, and basal sinus an inch deep; upper growing gradually smaller; lobes 3-5, shallow. Umbels produced from the axils of the leaves all down the stem; pedicels under $\frac{1}{2}$ in. long; bracts 5-6, membranous, pilose. Calyx $\frac{1}{4}$ in. long, exclusive of the short spur. Petals $\frac{1}{3}$ in. long. Beak of the carpels $\frac{1}{2}$ in. long, with a short style and 5 revolute stigmas.—*Baron* 3422! This is the first *Pelargonium* that has been found in Madagascar. It is allied to the Cape *P. alchemiloides* and the Abyssinian *P. glechomoides*.

IMPATIENS HILDEBRANDTII, *Baill. in Bull. Linn. Soc. Par.* (1886) p. 595.

Herbacea, perennis, glabra, caulibus erectis simplicibus gracilibus, foliis oblongis vel oblongo-lanceolatis acutis integris vel parce dentatis breviter petiolatis, floribus corymbosis longe pedicellatis, sepalis lateralibus parvis lanceolatis, postico magno ovato-naviculari calcare gracillimo unciali, petalis rubellis supremo orbiculari inferioribus cuneatis bifidis sepalo postico longioribus, ovario clavato glabro.

A herbaceous perennial, glabrous in all its parts, with slender simple erect stems a foot or more long. Leaves 10-12 to a stem, distant, membranous, 1-3 in. long, narrowed from the middle to the apex and base, often furnished with 1-2 bristles at the apex of the petiole. Flowers many to a stem from the top and axils of the upper leaves; pedicels very slender, 1-2 in. long. Blade of the spurred sepal $\frac{1}{3}$ in. long. Petals reddish, the two lower $\frac{1}{2}$ - $\frac{5}{8}$ in. long. Capsule glabrous, narrowed from the middle to the apex and base.—*Baron* 3704! 3935! Also *Hildebrandt* 3828, from shady woods in the province of Imerina. Nearly allied to *I. formula*, Baker. Hildebrandt's 3382, also named *I. Hildebrandtii* by Dr. Baillon, is *I. emirnensis*, Baker.

TRIMORPHOPETALUM, gen. nov. Balsaminearum.

Sepala 3, 2 lateralia parva lanceolata viridia; posticum maximum galeatum haud calcaratum petaloideum venosum. Petala 3, anticum externum concavum sepalo postico simile; lateralia orbiculato-cuneata

unguiculata, unguibus basi unilateraliter auriculatis. Stamina 5, filamentis cohærentibus circiter ovarium conniventibus, antheris apicalibus. Ovarium obliquum 5-carpellatum, ovulis multis axillis superpositis, stigmate sessili capitato. Fructus maturus ignotus.

T. DORSTENIOIDES, *Baker*.

Species sola.

Root-stock slender, creeping, sending out simple, erect, rather fleshy fragile stems 6–9 in. long, glanduloso-viscose, especially towards the top. Leaves 5–6 to a stem, all arising from its upper half, ascending, distinctly petioled, oblong, acute, membranous, glabrous, $1\frac{1}{2}$ –2 in. long, deltoid and entire at the base, shallowly broadly toothed, with little glandular cusps in the sinuses. Flowers solitary, lateral, pedicellate, with two small bracteoles outside the two lateral sepals. Green membranous lateral sepals $\frac{1}{12}$ in. long. Upper galeate sepal $\frac{1}{3}$ in. long, veined with brown on a drab-whitish groundwork, like an *Aristolochia*. Lateral petals with a blade $\frac{1}{8}$ in. long and broad, and a claw $\frac{1}{8}$ in. long, auricled on the outer side. Ovary and stamens $\frac{1}{8}$ in. long before the petals fall.—*Baron* 4476! A very distinct new generic type nearest *Impatiens*.

ERYTHROXYLUM SPARSIFLORUM, n. sp.

Ramosissimum, glabrum, foliis parvis breviter petiolatis oblongis obtusis subcoriaceis utrinque viridibus basi cuneatis, stipulis ovatis, floribus 1–2-nis axillaribus pedicellis brevibus, sepalis ovatis acutis basi coalitis, petalis oblongis calyce 2–3plo longioribus, staminibus petalis subæquilongis.

A much-branched shrub, glabrous in all its parts; branchlets slightly compressed. Leaves rigid in texture, 1– $1\frac{1}{2}$ in. long, narrowed from the middle to the base and point, the main veins raised beneath, anastomosing by cross veinlets close to the margin; petiole very short; stipules and bracts ovate, acute. Flowers 1–2nate; pedicels $\frac{1}{8}$ – $\frac{1}{6}$ in. long. Calyx $\frac{1}{2}$ line long. Petals $\frac{1}{12}$ in. long. Stamens nearly equalling the petals; anthers oblong, minute; filaments joined at the base in a cup.—*Baron* 4519!

ERYTHROXYLUM AMPULLACEUM, n. sp.

Glabrum, ramulis compressis, stipulis ovatis, foliis breviter petiolatis oblongis obtusis subcoriaceis basi deltoideis, floribus 1–2nis axillaribus, pedicellis elongatis, sepalis oblongo-lanceolatis, filamentis elongatis basi coalitis, fructu ampullæformi.

A shrub, glabrous in all its parts, with flattened branchlets.

Leaves alternate, laxly disposed, moderately firm in texture, 2–2½ in. long, green and glabrous on both surfaces, with about 12 pairs of raised veins beneath anastomosing by cross veinlets some distance from the edge; petiole very short; stipules $\frac{1}{8}$ in. long. Pedicels $\frac{3}{4}$ in. long. Sepals oblong-lanceolate, reflexing, persistent, $\frac{1}{2}$ in. long. Free filaments $\frac{1}{2}$ in. long. Immature fruit ampullæform, $\frac{1}{4}$ – $\frac{1}{3}$ in. long.—*Baron* 3688!

TRISTELLATEIA EMARGINATA, n. sp.

Sarmentosa, ramulis glabris, foliis petiolatis oblongis subcoriaceis emarginatis basi cuneatis utrinque viridibus glabris, racemis paucifloris brevibus, pedicellis elongatis, sepalis oblongo-lanceolatis, ovario conico piloso, stylo brevi, samaræ alis circiter 18 rigidis cuneatis patulis basi pilosis.

A climber, with terete glabrous branchlets. Leaves 2–3 in. long, moderately firm in texture, green and quite glabrous on both surfaces, obtuse, conspicuously emarginate, deltoid at the base. Racemes 4–6 in. long, short peduncle included; pedicels 1–1½ in. long, lower sometimes branched. Calyx $\frac{1}{8}$ in. long. Petals and stamens not seen. Wings of the fruit $\frac{1}{3}$ in. long, $\frac{1}{8}$ in. broad at the tip, narrowed gradually to the base.—*Baron* 3078!

TRISTELLATEIA STENOPTERA, n. sp.

Sarmentosa, foliis oppositis longe petiolatis subcoriaceis ovatis facie glabris dorso pubescentibus, racemis laxis longissimis, pedicellis arcuatis flore longioribus, sepalis oblongis crispatis dense pilosis, petalis oblongis unguiculatis, antheris lanceolatis filamentis longioribus, ovario piloso globoso, stylo elongato, samaræ alis circiter 15 angustis pubescentibus.

A climber, with slender terete branchlets. Leaves 3–4 in. long, moderately firm in texture, slightly cordate, deltoid at the apex, when mature green and glabrous above, thinly coated with pale pubescence beneath, with about 6 pairs of arcuate main veins. Racemes axillary and terminal, the end ones 8–9 in. long; lower pedicels $\frac{3}{4}$ –1 in. long. Calyx $\frac{1}{8}$ in. long. Petals bright yellow, $\frac{1}{3}$ in. long. Wings of the fruit $\frac{1}{2}$ in. long, $\frac{1}{2}$ in. broad at the tip, sometimes emarginate.—*Baron* 4754!

EVODIA DISCOLOR, n. sp.

Arborea, ramulis apice pubescentibus, foliis simplicibus lanceolatis vix petiolatis obscure pubescentibus facie viridibus dorso pallidis, floribus tetrameris in paniculam densam terminalem ramis deltoideis dispositis, pedicellis brevibus pubescentibus, calycis segmentis orbicularibus, petalis

oblongis crebre nigro-punctatis, staminibus exsertis, pistillo in flore masculo rudimentario.

A tree, with branchlets pubescent and flattened at the tip. Leaves subcoriaceous, subobtuse, sometimes half a foot long, an inch broad at the middle, narrowed to the base, greenish white beneath, with raised main veins and copious minute immersed dots. Panicles on pubescent peduncles from the axils of the large uppermost leaves. Calyx $\frac{1}{2}$ in. in diam., brown, pubescent. Corolla $\frac{1}{2}$ in. long. Female flower and fruit not seen.—*Baron 3754!*

EVODIA FLORIBUNDA, n. sp.

Arborea, ramosissima, glabra, foliis longe petiolatis trifoliolatis, foliolis oblongis cuspidatis basi attenuatis, floribus tetrameris in paniculas densas terminales corymbosas dispositis, pedicellis pubescentibus flori æquilongis, calycis pilosi segmentis orbicularibus, petalis oblongis pallidis dense glanduloso-punctatis, staminibus exsertis, pistillo in flore masculo rudimentario.

A much-branched erect tree, with slender terete brown glabrous branchlets. Petiole 1–2 in. long; leaflets 2–4 in. long, moderately firm in texture, green and glabrous on both surfaces, dotted with copious minute immersed black glands, cuneately narrowed at the base into a short winged petiolule. Flowers in copious ample dense terminal panicles, about as long as the upper leaves; branches erecto-patent; final branchlets densely corymbose. Calyx $\frac{1}{2}$ line in diam., brown, densely pubescent. Petals $\frac{1}{8}$ in. long. Filaments finally as long as the petals; anthers oblong, versatile.—*Baron 2221!*

OCHNA MACRANTHA, n. sp.

Glabra, ramulis gracilibus, foliis breviter petiolatis oblongo-lanceolatis subobtusis denticulatis, cymis axillaribus paucifloris, pedicellis elongatis, sepalis oblongis magnis inæqualibus, petalis magnis luteis orbiculari-unguiculatis, staminibus permultis antheris linearibus, carpellis maturis turbinatis.

A tree, glabrous in all its parts, with slender terete branchlets. Leaves moderately firm in texture, 3–4 in. long, an inch broad at the middle, rather glossy above, green on both sides, finely veined, ciliato-denticulate; petiole not more than $\frac{1}{8}$ – $\frac{1}{6}$ in. long. Cymes axillary, 3–4-flowered; pedicels spreading, $\frac{1}{2}$ – $\frac{3}{4}$ in. long. Sepals $\frac{1}{2}$ – $\frac{3}{4}$ in. long, green, glabrous, firm in texture. Petals bright yellow, an inch long, with a blade $\frac{1}{2}$ in. broad, cuneate at the base, and a distinct claw. Stamens half as long as the petals.

Fruit-carpels much shorter than the persistent calyx.—*Baron* 3927! 4811! 4818! Native name *Lanary*. Allied to *O. ciliata*, Lam.

Apodytes emirnensis, n. sp.

Arborea, ramulis glabris, foliis petiolatis oblongis acutis basi deltoideis dorso obscure pubescentibus, floribus in paniculas multifloras axillares pedunculatas dispositis, pedunculis pedicellisque pilosis, calyce parvo dentibus deltoideis, petalis oblanceolatis obtusis, staminibus petalis æquilongis antheris oblongis, ovario ovoideo stylo brevi.

A tree, with slender woody naked branchlets. Leaves 3-4 in. long, 18-21 lines broad, quite entire, moderately firm in texture, finely veined, only slightly pubescent on the midrib beneath. Panicles 2-3 in. in diam., 3-4-pinnate; branches pubescent; ultimate pedicels much shorter than the flowers; bracts minute, ovate. Flowers pentamerous. Calyx $\frac{1}{3}$ line in diam., pubescent. Bud oblong, glabrous, $\frac{1}{12}$ in. long. Anthers as long as the filaments, oblong, reaching to the tip of the petals.—*Baron* 4791! 4865! Nearly allied to the Mauritian *A. mauritiana*, Planch.

Turræa rhombifolia, n. sp.

Glabra, foliis parvis rhomboideis breviter petiolatis, floribus solitariis tetrameris terminalibus breviter pedunculatis, calycis parvi tubo campanulato segmentis ovatis acutis, petalis luteis oblongo-lanceolatis longe unguiculatis, tubo stamineo cylindrico petalis æquilongo, staminodiis parvis lanceolatis profunde bifidis, antheris dense pilosis connectivo producto apiculatis, stigmate exserto capitato.

A tree or shrub, with slender glabrous branchlets. Leaves moderately firm in texture, not more than $\frac{1}{2}$ – $\frac{3}{4}$ in. long, cuneate at the base, green and glabrous on both surfaces. Pedicels slender, glabrous, $\frac{1}{4}$ in. long. Calyx $\frac{1}{8}$ in. long. Petals an inch long, $\frac{1}{8}$ – $\frac{1}{4}$ in. broad. Filaments united in a cylindrical column an inch long; teeth 8, laciniated at the tip; anthers $\frac{1}{12}$ in. long, very hairy. Style reaching to the tip of the anthers; stigma capitate.—*Baron* 4569!

Turræa venulosa, n. sp.

T. ramulis pilosis, foliis oblongis acutis rigide coriaceis facie nitidis viridibus dorso obscure pubescentibus venis exsculptis, floribus solitariis tetrameris breviter pedicellatis, calycis pilosi segmentis lanceolatis, petalis oblanceolatis unguiculatis, tubo stamineo cylindrico petalis æquilongo, dentibus quadratis bifidis, antheris 8 glabris connectivo producto apiculatis, stylo longe exserto.

A tree or shrub, with long slender pilose branchlets. Leaves 1–2 in. long, shortly petioled, rigid in texture, bright green above, dull green beneath, with the main veins much raised and connected by arches within the margin. Pedicels $\frac{1}{4}$ in. long, Calyx $\frac{1}{4}$ in. long; teeth shorter than the tube. Petals $1\frac{1}{2}$ in. long. Filaments united in a cylindrical tube as long as the petals, with 8 minute quadrate bifid teeth. Anthers $\frac{1}{12}$ in. long. Style exerted half an inch beyond the stamens.—*Baron* 4199!

COMMIPHORA (BALSAMODENDRON) FRAXINIFOLIA, n. sp.

Arborea, glabra, ramulis validis inermibus, foliis imparipinnatis longe petiolatis utrinque viridibus glabris, foliolis 5–7 ovatis vel oblongis sessilibus, paniculis axillaribus laxis foliis brevioribus, ramis inferioribus paucis brevibus corymbosis, pedicellis gracilibus flore interdum longioribus, calycis segmentis ovatis, petalis angustis calyce paulo longioribus, ovario ampullæformi glabro stigmate sessili coronato.

A tree, with stout glabrous brown sulcate branchlets. Leaves 8–9 in. long, including the 2–3 in. petiole; leaflets 3–4 in. long, shallowly crenate, moderately firm in texture, green and glabrous on both surfaces. Panicles crowded at the end of the branchlets, contemporary with the young leaves, 2–3 in. long, very lax, the lower branches sparingly compound; pedicels slender, $\frac{1}{8}$ – $\frac{1}{4}$ in. long. Calyx glabrous, $\frac{1}{8}$ in. long; tube short, campanulate; segments acute, firm in texture. Petals oblanceolate, $\frac{1}{8}$ in. long. Ovary glabrous, narrowed very gradually to the sessile stigma.—*Baron* 4404!

COMMIPHORA (BALSAMODENDRON) LAXIFLORA, n. sp.

Arborea, ramulis validis junioribus pilosis, foliis longe petiolatis imparipinnatis utrinque viridibus pilosis, foliolis 5–7 oblongis cuspidatis serratis, racemis elongatis laxissimis breviter pedunculatis, pedicellis crassis brevibus infimis furcatis, calycis segmentis ovatis rigide coriaceis glabris.

A tree, with stout branchlets, at first pilose. Leaves 8–9 in. long, including the 3-inch petiole; leaflets 2–4 in. long, the end one largest, minutely serrated, rounded at the base, moderately firm in texture, green and obscurely pilose above, paler and more hairy beneath, with 8–10 pairs of fine ascending raised main veins. Racemes axillary, as long as the leaves; rhachis slender, glabrous; flowers few, distant, solitary except the very lowest; pedicels $\frac{1}{12}$ – $\frac{1}{8}$ in. long. Sepals 4, ovate, decussate, $\frac{1}{12}$ in. long. Petals and fruit not seen.—*Baron* 4837! Closely allied to *C. grandifolia*, Engler.

GYMNOSPORIA CUNEIFOLIA, n. sp.

Glabra, ramulis virgatis angulosis spinosis, foliis parvis obovatis obtusis fasciculatis brevissime petiolatis, floribus in cymis axillaribus paucifloris dispositis, pedicellis brevibus, calycis segmentis ovatis, fructu valvis tribus latis patentibus emarginatis, seminibus ovoideis castaneis.

A shrub or tree, with long slender angled branchlets, bearing tufts of leaves in the axils of pungent straight slender spines $\frac{1}{6}$ – $\frac{1}{4}$ in. long. Leaves firm in texture, very obtuse, pale green and glabrous on both surfaces, usually about half an inch long. Cymes usually one from each of the fascicles of leaves, which they slightly overlap, few-flowered; pedicels finally $\frac{1}{6}$ in. long. Petals and stamens not seen. Fruit-valves rigidly coriaceous, $\frac{1}{8}$ in. long and broad. Seeds ovoid, bright brown, 2 to each cell.—*Baron* 4201! Closely allied to *G. berberidacea*, Baker, which has just the same *Berberis*-like habit.

ELÆODENDRON GYMNOSPOROIDES, n. sp.

Fruticosa, glabra, ramulis gracilibus, foliis parvis oblongis obtusis obscure crenulatis, floribus in cymis 2–3-floris dispositis, pedicellis strictis flore longioribus, calycis tubo brevissimo dentibus ovatis, petalis orbicularibus, staminibus brevibus, disco pentagono, ovario obconico stigmatibus sessili.

An erect shrub or small tree, with very slender branchlets. Leaves alternate, shortly petioled, $\frac{3}{4}$ –1 in. long, deltoid or rather rounded at the base, finely veined. Cymes axillary or terminal; pedicels $\frac{1}{12}$ – $\frac{1}{8}$ in. long. Bud globose. Calyx $\frac{1}{12}$ in. in diam. Corolla greenish yellow, $\frac{1}{8}$ in. in diam. Fruit not seen.—*Baron* 3735!

VITIS (§ AMPELOCISSUS) SPHÆROPHYLLA, n. sp.

Sarmentosa, glabra, cirrhifera, foliis membranaceis longe petiolatis digitatis, foliolis 5 longe petiolulatis magnis orbicularibus denticulatis, floribus pentameris in paniculas bipinnatas ramulis racemosis dispositis, pedicellis brevissimis, calyce patellæformi piloso subintegro, petalis oblongis, staminibus brevibus.

A large climber, with rather stout angled woody stems. Leaves digitately 5-foliolate; petiole 2 in. long; upper leaflets 3–4 in. long and broad, much imbricated, rounded or shallowly cordate at the base, with distinct petiolules $\frac{1}{2}$ –1 in. long; two outer leaves smaller, cuneate at the base. Panicles thyrsoid, peduncled, lateral; branches pubescent. Buds globose. Flowers very small. Fruit not seen.—*Baron* 4841!

VITIS (§ *AMPELOCISSUS*) *RHODOTRICHIA*, n. sp.

Sarmentosa, cirrhifera, ramulis gracilibus lignosis sursum ferrugineo pubescentibus, foliis simplicibus cordato-ovatis denticulatis facie viridibus glabris dorso ferrugineo-pubescentibus, paniculae ramis dense corymbosis pedunculis pedicellisque dense ferrugineo-pilosis, floribus pentameris, calyce obscure dentato, petalis parvis glabris sordide purpureis, ovario glabro.

A climbing shrub, with slender woody branchlets, clothed upwards, like the panicle and underside of the leaves, with dense bright ferruginous pubescence. Leaves 3–4 in. long and broad, moderately firm in texture, ferruginous on the raised veins beneath, with a broad open basal sinus. Panicles thyrsoïd, with distant short erecto-patent densely corymbose main branches; pedicels finally longer than the flowers. Bud globose, under a line in diameter. Calyx patellæform, densely ferrugineo-pubescent. Petals not more than a line long. Ovary glabrous; style as long as the ovary.—*Baron* 4749! 4838! *Nossi-bé*, *Hildebrandt* 2876!

VITIS (§ *CISSUS*) *VOANONALA*, n. sp.

Sarmentosa, copiose cirrhifera, ramulis gracillimis brevissime pubescentibus, foliis bipinnatis membranaceis glabris, foliolis serratis obovatis vel oblongis, floribus tetrameris corymboso-paniculatis, pedunculis pedicellisque pubescentibus, calyce patellæformi vix dentato, petalis parvis ovatis viridibus, fructu immaturo turbinato glabro.

A climber, with very slender stems and copious tendrils. Fully-developed leaves 6–8 in. long, including the long petiole; blade simply pinnate in the upper half, bipinnate at the base; leaflets 12–20 to a leaf, about an inch long, bright green, deltoid or rounded at the base. Panicles lax, axillary or terminal, 1–3 in. broad; pedicels very short. Flower-calyx $\frac{1}{2}$ lin. in diam. Bud globose. Ovary globose; style very short; stigma capitate.—*Baron* 4561! *Dr. Parker*! Native name *Voanonala*. Allied to *V. microdiptera*, Baker. In a fully-developed leaf there are 5 leaves above a branch, 2 branches with 3 pairs of leaves and 2 with 5 pairs.

LEEIA *CUSPIDIFERA*, n. sp.

Fruticosa, ramis pubescentibus, foliis longe petiolatis rhomboideis tripinnatis, foliolis ovatis vel oblongis serratis conspicue cuspidatis facie viridibus glabris dorso pallide viridibus ad venas hispidis, floribus copiose corymboso-paniculatis, pedicellis calyci æquilongis, calycis tubo campanulato dentibus ovatis, petalis rubellis, tubo stamineo ad medium quinquefidio dentibus quadratis erectis emarginatis.

A climbing shrub, with pubescent woody branchlets. Petiole 5 in. long; blade 6–8 inches long and broad; leaflets $\frac{3}{4}$ – $1\frac{1}{2}$ in. long, moderately firm in texture, bright green above. Panicle dense, 2 in. in diam.; branches densely pubescent; bracts minute, lanceolate. Calyx pubescent, $\frac{1}{2}$ in. in diam.; teeth shorter than the tube. Petals reflexing, $\frac{1}{8}$ in. long. Corona rather shorter than the petals, deeply 5-cleft.—*Baron* 4785!

TINA VELUTINA, n. sp.

Arborea, ramulis velutinis, foliis confertis subcoriaceis facie parce dorso dense brunneo-pilosis, foliolis 11–13 oblongis acutis serratis venulis faciei inferioris exsculptis, floribus paniculatis, pedicellis brevibus, bracteis minutis deltoideis, calycis segmentis parvis obtusis, petalis calyce duplo longioribus, fructu turbinato glabro.

A tree, with the leaves and panicles crowded towards the end of the velvety branchlets. Leaves half a foot long including the short petiole; upper leaflets 2–3 in. long, acute or obtuse, with a cusp; texture slightly coriaceous; main veins of the under surface numerous, prominently raised. Panicles about as long as the leaves; pedicels finally $\frac{1}{8}$ in. long. Calyx $\frac{1}{8}$ in. in diam.; segments very short, obtuse. Fruit turbinate, glabrous.—*Baron* 1457! 1522! 3968! Differs from *T. dasycarpa* by its acute serrated leaflets.

CALYCIFLORÆ.

BYRSOCARPUS BARONI, n. sp.

B. ramis crebre lenticillatis, ramulis dense pubescentibus, foliolis 20–24 petiolulatis oblongis obtusis glabris, floribus cum foliis immaturis productis, cymis densis paucifloris, pedicellis pubescentibus prope apicem articulatis, sepalis ovatis obtusis pilosis, petalis oblanceolatis calyce 3–4plo longioribus, staminibus longioribus petalis paulo brevioribus, carpellis pilosis, stylo brevi, stigmate capitato.

A shrub or tree, with densely pubescent final branchlets. Fully developed leaves 4–5 in. long, including the short petiole; leaflets thin, about an inch long. Flowers contemporary with the young leaves. Calyx very hairy, $\frac{1}{2}$ in. in diam.; segments pilose, much imbricated. Petals $\frac{1}{6}$ in. long. Filaments long; anthers small, globose. Carpels hairy, about as long as the calyx. Fruit not seen.—*Baron* 4922! The genus *Byrsocarpus* is united by Dr. Baillon with *Rourea*.

CROTALARIA LUTEO-RUBELLA, n. sp.

Fruticosa, glabra, ramulis gracilibus, foliis longe petiolatis trifoliolatis

foliolis magnis oblongis acutis, racemis terminalibus laxis multifloris, pedicellis elongatis, bracteis minutis caducis, calyce glabro tubo campanulato dentibus acutis tubo æquilongis, petalis glabris calyce duplo longioribus, vexillo rubello carina alisque luteis, legumine oblongo-clavato rigidulo 2-3-spermo longe stipitato.

A much-branched shrub, with slender terete virgate branchlets. Petiole $1\frac{1}{2}$ -2 in. long; leaflets membranous, sometimes 3-4 in. long, green and glabrous on both sides. Racemes 4-5 in. long; lower pedicels $\frac{1}{4}$ in. long. Calyx broadly campanulate, $\frac{1}{8}$ in. in diam.; teeth lanceolate from a broad base. Corolla $\frac{1}{3}$ in. long; keel broad, with a conspicuous erect beak. Pod glabrous, rigid in texture. Pod 1 in. long, $\frac{1}{4}$ in. in diam., with a slender gynophore $\frac{1}{3}$ in. long.—*Baron* 4708! 4856! *Hildebrandt* 3441! Near *C. striata*, DC., and *C. Pervillei*, Baill.

CROTALARIA MACROPODA, n. sp.

Fruticosa, ramulis gracilibus obscure strigillosis, stipulis minutis caducis, foliis trifoliolatis facie viridibus glabris dorso tenuiter pilosis, foliolis oblongis acutis vel obtusis, racemis laxis terminalibus paucifloris, pedicellis calyci æquilongis, bracteis minutis ovatis caducis, calyce dentibus lanceolatis tubo duplo longioribus, petalis rubellis glabris calyce duplo longioribus, ovario oblongo 4-ovulato.

A much-branched erect shrub, with slender terete branchlets. Petiole 1-1 $\frac{1}{2}$ in. long; leaflets 1-2 in. long, moderately firm in texture, green on both surfaces. Racemes copious, lax, 1-2 in. long; pedicels finally $\frac{1}{4}$ in. long. Calyx $\frac{1}{4}$ in. long, slightly silky; tube very short; teeth lanceolate acute. Corolla $\frac{1}{2}$ in. long; standard $\frac{1}{3}$ in. broad; keel broad, rostrate, up-curved. Mature pod not seen.—*Baron* 3789! 3862! Near *C. striata*, DC.

INDIGOFERA DESMODIOIDES, n. sp.

Fruticosa, ramulis apice strigillosis, stipulis linearibus, foliis imparipinnatis breviter petiolatis rigidulis siccitate nigrescentibus utrinque albo-strigillosis, foliolis 25-27 lanceolatis petiolulatis mucronatis, racemis densis subsessilibus axillaribus multifloris, pedicellis brevibus, calyce parvo late campanulato dentibus parvis lanceolatis, petalis glabris calyce multo longioribus, legumine curvato conspicue toruloso 4-6-spermo.

A shrub, with long slender woody branchlets. Leaves 2-3 in. long; leaflets about $\frac{1}{2}$ in. long, $\frac{1}{2}$ line broad, firm in texture, turning blackish when dried, like those of *I. Anil* and *I. tinctoria*. Racemes copiously produced in the axils of the leaves; pedicels about as long as the calyx, finally cernuous. Calyx $\frac{1}{2}$ line in diam.; tube campanulate, strigillose. Corolla $\frac{1}{8}$ in. long. Pod sickle-

shaped, under an inch long, conspicuously torulose, naked when mature, black.—*Baron* 889! 3965! Group of *I. tinctoria*.

INDIGOFERA ORMOCARPOIDES, n. sp.

Fruticosa, ramulis gracilibus obscure strigillosis, stipulis lanceolatis minutis, foliis membranaceis petiolatis utrinque obscure albo-hispidulis, foliolis 5-7 oblongis petiolulatis stipellatis, racemis axillaribus, floriferis densis brevibus subsessilibus, fructiferis elongatis, pedicellis calyci æquilongis, bracteis lanceolatis caducis, calyce parvo piloso dentibus deltoideis, petalis pilosis sordide luteis, legumine gracili elongato toruloso 5-6-spermo.

A shrub, with slender terete branchlets. Leaves 3-4 in. long, including the $\frac{3}{4}$ in. petiole; leaflets opposite, 1-2 in. long, mucronate, thin in texture, thinly clothed with adpressed white bristles on both surfaces. Flower-racemes about an inch long, nearly sessile, much shorter than the leaves. Calyx oblique, broadly campanulate, $\frac{1}{2}$ lin. in diam.; teeth minute. Corolla $\frac{1}{6}$ in. long. Pod 2 in. long whilst still immature, glabrous, conspicuously torulose.—*Baron* 4607! 4734! 4822! Group of *I. tinctoria*.

MUNDULEA LAXIFLORA, n. sp.

Fruticosa, ramulis gracilibus velutinis, stipulis lanceolatis persistentibus, foliis imparipinnatis subcoriaceis facie tenuiter dorso dense sericeis, foliolis 7-9 obovatis vel oblongis petiolulatis, racemis laxis, pedicellis calyci æquilongis, bracteis caducis, calyce sericeo tubo campanulato dentibus acuminatis, petalis rubellis sericeis, legumine velutino.

A shrub, with slender terete woody velvety branchlets. Leaves 3-4 in. long, including the $\frac{3}{4}$ -1 in. petiole; upper leaflets 1-1 $\frac{1}{2}$ in. long; side ones opposite; upper subacute; lower shorter, obovate, obtuse. Racemes 2-4 in. long; lower pedicels $\frac{1}{6}$ in. long. Calyx silky, broadly campanulate, $\frac{1}{6}$ in. long; teeth deltoid-cuspidate; upper as long as the tube, lower longer. Corolla $\frac{1}{2}$ in. long; standard silky on the outside. Pod linear, not seen fully mature.—*Baron* 3861!

LEPTODESMIA CONGESTA, Benth.

The Madagascar *Desmodium lespedezioides*, Benth. in Plant. Junghuhn. p. 223, of which we have specimens from Ellis, Bojer, and Parker, seems to be conspecific with the Indian *Leptodesmia congesta*, Benth. MSS.; Baker in Hook. fil. Fl. Brit. Ind. ii. p. 152. *Hallia*? *Bojeriana*, Baill. in Bull. Linn. Soc. Par. p. 432, is a

very distinct second species of *Leptodesmia*, endemic in Madagascar. We have specimens from Bojer and Justice Blackburn. It has a 1-jointed 1-seeded suborbicular compressed legume $\frac{1}{6}$ in. long, tipped with the short curved style.

CLITORIA ZANZIBARENSIS, *Vatke in Æster. Bot. Zeitschrift*, 1878, p. 261.—Baron's 4586 and 4615 quite agree with Hildebrandt's 1189 from Zanzibar, on which this is founded. It seems to me only a variety of *C. heterophylla*, Lam., receding from the type by its lanceolate or oblong-lanceolate leaflets 1–1½ in. long, and larger flowers.

MUCUNA (§ *STIZOLOBIUM*) *AXILLARIS*, n. sp.

Herbacea, volubilis, ramulis tenuibus pilosis, foliis longe petiolatis membranaceis facie tenuiter dorso dense adpresse hispidulis, floribus paucis axillaribus fasciculatis brevissime pedicellatis, calycis pilosi tubo campanulato dentibus ovatis acutis tubo æquilongis, vexillo petalis reliquis duplo breviori, legumine cylindrico exalato dense persistenter hispidulo-velutino.

A herbaceous climber, with very slender densely pilose stems. Stipules minute, lanceolate; petiole 1½–2 in. long; leaflets 2–3 in. long; end one oblong; stipellæ minute. Flowers in nearly sessile fascicles in the axils of the leaves. Calyx $\frac{1}{4}$ in. long, very silky; tubes broadly campanulate; teeth deltoid or lanceolate. Corolla above an inch long; petals all obtuse. Pod curved, 1½ in. long, $\frac{1}{3}$ in. in diam., clothed with spreading grey bristles.—*Baron* 4877! Native name *Agy*. Allied to *M. pruriens*, DC.

RHYNCHOSIA TRICHOCEPHALA, n. sp.

Volubilis, ramulis dense pilosis, foliis longe petiolatis trifoliolatis subcoriaceis facie parce dorso dense pilosis, foliolo terminali cordato-ovato, racemis densis axillaribus et terminalibus, bracteis magnis ovatis dense pilosis, pedicellis calyci æquilongis, calycis pilosi tubo campanulato dentibus lanceolatis, petalis conspicue venosis calyce duplo longioribus, ovario dense piloso.

A climber, with slender terete woody densely pilose branchlets. Stipules scariose, lanceolate; petiole 1–1½ in. long; leaflets 2–3 in. long, acute, shallowly cordate, green and slightly hairy above, persistently pubescent beneath. Racemes copious, few-flowered, dense; bracts ovate acuminate, $\frac{1}{4}$ in. long. Calyx pilose, $\frac{1}{6}$ in. long; teeth all acute. Corolla $\frac{1}{3}$ in. long; petals conspicuously veined with reddish brown on a yellowish ground. Stamens and style abruptly up-curved.—*Baron* 3393! Near *R. viscosa*, DC.

DALBERGIA SCORPIOIDES, n. sp.

D. ramulis gracilibus glabris, foliis petiolatis imparipinnatis firmis glabris, foliolis 9-11 oblongis alternis petiolulatis, floribus copiose paniculatis, paniculæ ramis scorpioideis, pedicellis subnullis, bracteis late ovatis persistentibus, calyce tubo infundibulari dentibus tubo vix æquilongis, petalis calyce duplo longioribus, staminibus isadelphis, ovario piloso.

An erect shrub or tree, with glabrous branchlets and leaves. Leaves 3-6 in. long, including the 1-1½ in. petiole; leaflets 1-1½ in. long, the upper larger and oblong, the lower shorter and sub-orbicular; petiolules ½ in. long. Flowers in copious terminal panicles with scorpioid pubescent branchlets. Calyx ½ in. long, with a pair of small persistent ovate obtuse bracts clasping its base; teeth obtuse. Petals obtuse, twice as long as the calyx. Stamens in two bundles of 5 each, nearly as long as the petals.—*Baron 4583!*

DALBERGIA POOLII, n. sp.

D. ramulis validis glabris, foliis longe petiolatis firmis glabris lucidis, foliolis 5-7 alternis longe petiolulatis oblongis vel ovatis, floribus dense corymboso-paniculatis, paniculæ ramulis pilosis, pedicellis brevibus, calyce glabro tubo campanulato glabro dentibus difformibus, petalis calyce duplo longioribus, staminibus monadelphis.

A tree, glabrous in all its parts. Leaves 4-6 in. long, including the 1-1½ in. petiole; end leaflet 2-3 in. long; lower shorter, ovate, acute; petiolules ⅙-¼ in. long. Panicles terminal; lower branches from the axils of large leaves. Calyx ½ in. long; lower teeth as long as the tube; upper semiorbicular, much shorter. Corolla ⅙ in. long; standard orbicular. Stamens 10, monadelphous. Ovary hairy along the upper suture. Fruit not seen.—*Baron 4393!* Mr. Pool brought us in 1876 four different kinds of Voamboana timber, from one of which, he says, handsome furniture is manufactured. The present species is allied to the Indian *D. latifolia*, Roxb.

LONCHOCARPUS PAULLINIOIDES, n. sp.

Sarmentosus, ramulis gracilibus teretibus glabris, foliis longe petiolatis trifoliolatis glabris, foliolis oblongis acutis, racemis elongatis laxis, floribus fasciculatis, pedicellis brevibus, bracteolis ovatis obtusis persistentibus, calyce sericeo tubo campanulato dentibus brevibus obtusis, petalis latis rubellis calyce 3-4plo longioribus, legumine lineari villosa.

A scandent shrub, with slender terete woody branchlets. Petiole 1-2½ in. long; leaflets shortly stalked, the end one the largest, 2-4 in. long, moderately firm in texture, green and gla-

brous on both surfaces. Flowers in lax racemes and also in fascicles from the axils of the leaves; pedicels unequal, sometimes $\frac{1}{4}$ – $\frac{1}{3}$ in. long. Calyx $\frac{1}{8}$ in. long, with a pair of ovate persistent bracteoles at the base; teeth obtuse, much shorter than the tube. Petals silky, $\frac{1}{2}$ – $\frac{3}{4}$ in. long. Pod straight, linear, densely deltoid, with short persistent brown pubescence.—*Baron* 4748! 4828! 4807! 4863! 4853!

DICHROSTACHYS UNIJUGA, n. sp.

Fruticosa, ramulis gracilibus lignosis, stipulis ovatis scariosis striatis, foliis breviter petiolatis, pinnis unijugis, foliolis 10–25-jugis parvis confertis rigidulis inæquilateraliter lineari-oblongis obtusis, floribus in capitulis oblongis axillaribus breviter pedunculatis aggregatis, superioribus densioribus staminibus antheriferis, calyce sessili obconico segmentis ovatis, petalis oblongo-lanceolatis.

A shrub, with long slender woody glabrous branchlets. Pinnæ 1–1½ in. long, erecto-patent; rhachis slender, pubescent; leaflets deciduous, $\frac{1}{6}$ in. long, green and glabrous on both surfaces, produced at the base on the lower side. Heads $\frac{1}{2}$ in. in diam., on short peduncles from the axils of the leaves. Corolla $\frac{1}{2}$ line long, three times as long as the calyx. Staminodes reddish, protruded $\frac{3}{8}$ – $\frac{1}{2}$ in. beyond the tips of the lower flowers. Pod not seen.—*Baron* 4602! 4758! 4765!

PIPTADENIA LEPTOCLADA, n. sp.

Fruticosa, inermis, glabra, ramulis gracillimis, foliis bipinnatis, petiolo glandula magna ad apicem prædito, pinnis 12–18-jugis, foliolis multijugis rigidulis parvis oblongo-lanceolatis confertis, floribus pentameris in capitulis oblongis axillaribus breviter pedunculatis aggregatis, calyce basi bracteato tubo infundibulari dentibus deltoideis, petalis lanceolatis luteis, staminibus longe exsertis.

A shrub, glabrous in all its parts, with long slender branchlets. Leaves 2–3 in. long, including the $\frac{1}{2}$ in. petiole, which bears a large conical brown gland on one side at the top; pinnæ $\frac{1}{2}$ in. long; leaflets $\frac{1}{12}$ in. long, crowded, firm in texture, bright green. Heads solitary from the axils of the upper leaves, on short erecto-patent peduncles, $\frac{1}{4}$ in. in diam. Petals $\frac{1}{12}$ in. long. Stamens twice as long as the petals. Legume not seen.—*Baron* 4730!

MIMOSA MYRIOCEPHALA, n. sp.

Fruticosa, ramulis validis angulatis glabris cum foliorum rhachibus aculeis copiosis uncinatis parvis stramineis armatis, foliis bipinnatis, pinnis 10–12-jugis, foliolis multijugis inæquilateraliter oblongis rigidulis obscure ciliatis

basi postice productis, floribus tetrameris in capitula parva globosa pedunculatis copiose paniculatis dispositis, calyce glabro tubo infundibulari dentibus parvis deltoideis, petalis oblongis, legumine tenui curvato glabro inermi 6-8-spermo.

A shrub, with stout strongly angled branchlets, armed, like the leaf-rhachides, with copious small toothed prickles. Leaves sometimes a foot long; pinnæ 2-3 in. long; leaflets firm in texture, obtuse, imbricated, $\frac{1}{3}$ - $\frac{1}{2}$ in. long. Panicle a foot or more long, the lower branches produced from the axils of large leaves; heads globose, $\frac{1}{3}$ in. in diam. Stamens yellow, much exserted. Legume 3 in. long, $\frac{1}{2}$ in. broad.—*Baron* 990! 2096! 3410! 4700. Near *M. latispinosa*.

ACACIA XIPHOCCLADA, n. sp.

Arborea, ramosissima, glabra, ramulis angulatis, foliis propriis bipinnatis, pinnis 5-6-jugis, foliolis multijugis parvis oblongis confertis, phyllodiis rigidulis lanceolatis subsessilibus, floribus in capitula parva axillaria globosa breviter pedunculatis aggregatis, calyce obconico vix dentato, corollæ segmentis luteis oblongo-lanceolatis, staminibus breviter exsertis, legumine ignoto.

A much-branched tree, glabrous in all its parts. Proper leaves apparently only produced when it is young, 3 in. long, including the short petiole, with pinnæ under an inch long, with very numerous small crowded leaflets. Phyllodia rigidly coriaceous, flat, simple, 2-4 in. long, $\frac{1}{4}$ - $\frac{1}{2}$ in. broad at the middle, vertically ribbed, narrowed gradually to the base and apex. Heads globose, $\frac{1}{6}$ in. in diam., produced in the axils of the phyllodes on short erecto-patent pedicels. Flowers 20-30 to a head. Calyx $\frac{1}{3}$ in. long. Pod not seen.—*Baron* 1695! 4384! Closely allied to *A. heterophylla*, Willd., of Mauritius.

ALBIZZIA TRICHOPETALA, n. sp.

Fruticosa, ramulis pubescentibus, petiolo medio glandulifero, pinnis 5-6-jugis, foliolis 10-20-jugis parvis oblongo-rhomboideis confertis facie glabris viridibus dorso albidis pilosis, floribus in capitula glabra axillaria pedunculatis aggregatis dispositis, pedicellis pilosis flori æquilongis, calyce piloso segmentis parvis deltoideis, corollæ pilosæ dentibus ovatis, tubo staminali petalis breviori, ovario lineari glabro.

An erect shrub or tree, with slender pilose branchlets. Petiole 1-1 $\frac{1}{2}$ in. long, with a single large gland at the middle; blade 3-4 in. long; upper pinnæ 2 in. long; lower shorter, with fewer leaflets; leaflets $\frac{1}{6}$ in. long. Heads 1 $\frac{1}{2}$ in. in diam., produced singly in the axils of the upper leaves on slender erecto-patent

peduncles 2 in. long. Calyx $\frac{1}{8}$ in. long. Corolla $\frac{1}{6}$ in. long, densely pilose. Stamens protruded $\frac{3}{4}$ in. beyond the corolla. Legume not seen.—*Baron* 4644! Near the Cape *A. Forbesii*, Benth.

PARINARIUM EMIRNENSE, n. sp.

P. ramulis gracilibus apice pubescentibus, foliis breviter petiolatis obovato-oblongis obtusis subcoriaceis lucidis glabris, floribus laxe corymboso-paniculatis, ramulis pubescentibus, pedicellis brevibus, sepalis ovatis tomentosis, petalis oblongis unguiculatis, ovario globoso obliquo tomentoso, stylis 2 glabris ovario æquilongis.

An erect shrub or tree, with slender branchlets. Petiole $\frac{1}{8}$ — $\frac{1}{6}$ in. long; blade 2–3 in. long, 1–1½ in. broad, green and glabrous on both surfaces, with 5–6 pairs of arcuate raised main veins beneath. Panicles both axillary and terminal; branchlets and pedicels grey-tomentose. Calyx $\frac{1}{8}$ in. long. Petals dark purple. Ovary globose, densely pubescent, seated obliquely on the base of the calyx.—*Baron* 3672!

WEINMANNIA LEPTOSTACHYA, n. sp.

Fruticosa, ramulis gracilibus pubescentibus, foliis distincte petiolatis imparipinnatis rigidulis glabris venis exsculptis, foliolis 7–9 oblongis obtusis inciso-crenatis, floribus parvis pentameris spicatis, calycis tubo campanulato segmentis ovatis, petalis oblongis calyce duplo longioribus, staminibus inclusis, ovario hispido.

A shrub, with slender terete copiously lenticellate purplish branchlets, pubescent towards the tip. Leaves 2–3 in. long including the $\frac{1}{3}$ – $\frac{1}{2}$ in. petiole; rhachis winged between the leaflets, which are $\frac{1}{2}$ –1 in. long. Flowers arranged in copious slender spikes 2–3 in. long, with a pubescent rhachis. Calyx slightly hairy, $\frac{1}{3}$ line long. Petals obtuse, twice as long as the calyx. Stamens shorter than the petals. Fruit not seen.—*Baron* 4434!

CRASSULA FRAGILIS, n. sp.

Annua, fragilis, pubescens, caulibus gracillimis dichotomiter furcatis, foliis sessilibus oblongo-spathulatis acutis, floribus pentameris solitariis pedicellis filiformibus elongatis, calyce campanulato piloso tubo brevissimo segmentis lanceolatis, petalis rubris oblongis calyci paulo superantibus, genitalibus calyci æquilongis.

A fragile annual, with erect dichotomously forked pubescent stems not more than an inch long. Leaves crowded, opposite, fleshy, $\frac{1}{6}$ in. long, narrowed from above the middle to the base. Flowers solitary, on terminal hairy pedicels $\frac{1}{8}$ in. long. Calyx

$\frac{1}{2}$ in. long. Petals reddish, oblong, a little longer than the calyx. Anthers small, red, globose. Carpels as long as the petals; style short.—*Baron* 3348! Belongs to the section *Filipedes*, as defined in 'Flora Capensis.'

KALANCHOE BREVICAULIS, n. sp.

Perennis, glabra, caulibus brevibus flexuosis, foliis parvis confertis sessilibus carnosis obovato-cuneatis obtusis dimidio superiori serratis, pedunculo stricto brevi, floribus multis in paniculam terminalem modice densam dispositis, pedicellis flore interdum æquilongis, calyce haud laxo tubo brevi dentibus lanceolato-deltoides acutis. corollæ rubellæ tubo infundibulari segmentis oblongis acutis tubo æquilongis, stylis brevibus.

A fleshy erect perennial, with tortuose branching stem under half a foot long. Leaves crowded towards the top of the stems, ascending, decussate, $\frac{3}{4}$ –1 in. long, cuneate and entire in the lower half. Peduncle slender, naked, erect, 2–3 in. long. Panicle 1–2 in. in diam., dichotomous; branches and pedicels slender, glabrous; lower $\frac{1}{2}$ in. long. Flowers tetramerous, reddish. Calyx $\frac{1}{3}$ in. long. Corolla $\frac{1}{2}$ in. long. Stamens reaching halfway up the corolla-segments. Ovaries narrowed gradually into the short styles.—*Baron* 3542! Near *K. pumila*, Baker in Journ. Linn. Soc. xx. p. 139, which is the same as *K. multiceps*, Baill. in Bull. Linn. Soc. Par. 489, and Hildebrandt's 3576.

KALANCHOE BRACHYCALYX, n. sp.

Perennis (foliis ignotis), pedunculo elongato, floribus permultis in paniculam densam corymbosam dispositis, paniculæ ramis pubescentibus, pedicellis brevibus, calyce stricto tubo pubescente campanulato, dentibus latis brevissimis, corollæ rubræ pubescentis tubo oblongo-cylindrico segmentis parvis oblongis, stylis brevibus.

A perennial, with elongated erect flower-stems, ending in dense corymbose panicles, with flowers, pedicels, and branches all covered with short drab pubescence. Pedicels at most as long as the calyx. Calyx $\frac{1}{2}$ in. long and broad. Corolla $\frac{1}{4}$ in. long; tube $\frac{1}{2}$ in. in diam.; segments oblong, acute, $\frac{1}{4}$ as long as the tube. Stamens and style protruded from the throat of the corolla-tube. Ovaries glabrous, nearly as long as the corolla-tube.—*Baron* 4319!

KALANCHOE PUBESCENS, n. sp.

Perennis, caule valido elongato pubescente, foliis petiolatis orbicularibus crenatis carnosus, pedunculo elongato, floribus multis in paniculam corymbosam dispositis, paniculæ ramis pubescentibus, pedicellis flori interdum æquilongis, calyce pubescente haud inflato tubo campanulato dentibus

deltoideis, corollæ tubo infundibulari segmentis parvis oblongis, stylo ovario æquilongo.

A robust erect perennial, with pubescent erect flowering-stems 2 feet long. Leaves in distant pairs, with a petiole as long as the blade, which is 2 in. long and broad. Panicle half a foot broad, with erecto-patent main branches; pedicels sometimes $\frac{1}{2}$ in. long. Calyx $\frac{1}{6}$ in. long and broad; segments as long as the tube. Corolla $\frac{5}{8}$ in. long. Stamens reaching out of the corolla-tube.—*Baron 3574!*

KALANCHOE GOMPHOPHYLLA, n. sp.

Perennis, glabra, caulibus brevibus, foliis obovato-cuneatis sessilibus subintegris, pedunculo elongato, floribus parvis permultis in paniculam thyrsiodeam ramis corymbosis dispositis, pedicellis flore brevioribus, calyce campanulato tubo brevissimo segmentis deltoideis, corollæ luteæ tubo ovoideo segmentis parvis ovatis, stylis brevibus.

An erect perennial, with flowering-stems about a foot long. Lower leaves an inch long, arranged in decussate pairs, very obtuse, cuneate in the lower half. Panicle of several dense corymbs; main branches erecto-patent, the lower subtended at the base by small leaves. Calyx $\frac{1}{16}$ in. long. Corolla $\frac{1}{6}$ in. long, the tube $\frac{1}{12}$ in. in diam.; segments $\frac{1}{3}$ – $\frac{1}{4}$ as long as the tube. Stamens and style just exerted from the corolla-tube.—*Baron 3543!* Nearly allied to *K. Hildebrandtii*, Baill.

KALANCHOE INTEGRIFOLIA, n. sp.

Perennis, glabra, caule brevi, foliis crassis sessilibus oblongo-cuneatis obtusis integris, pedunculo stricto nudo elongato, floribus pro genere parvis in paniculam densam cymosam dispositis, ramis pubescentibus, pedicellis brevibus, calyce stricto parvo tubo brevissimo segmentis ovatis, corollæ segmentis oblongis tubo ovoideo æquilongis, stylis brevibus.

A perennial, with stiffly erect flowering-stems under a foot long. Leaves crowded, glabrous, very thick, $1\frac{1}{2}$ in. long, $\frac{1}{2}$ – $\frac{3}{4}$ in. broad, narrowed gradually to the sessile base from above the middle. Peduncle naked, stiffly erect, 6–7 in. long. Panicle dichotomously branched, very dense, $1\frac{1}{2}$ –2 in. in diam.; pedicels $\frac{1}{12}$ – $\frac{1}{6}$ in. long. Calyx $\frac{1}{8}$ in. in diam., $\frac{1}{12}$ in. long. Corolla dull reddish, $\frac{1}{3}$ in. long. Stamens reaching halfway up the perianth-segments. Style as long as the ovary.—*Baron 4377!*

KALANCHOE (KITCHINGIA) SULPHUREA, n. sp.

Perennis, glabra, foliis caulinis sessilibus oblongis obtusis carnosius, floribus paucis laxè cymosis, pedicellis elongatis cernuis, calyce laxo tubo



Baker, John Gilbert. 1887. "Further Contributions to the Flora of Madagascar." *The Journal of the Linnean Society. Botany* 22(148), 441–472.
<https://doi.org/10.1111/j.1095-8339.1887.tb00472.x>.

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