The following is a list, in detail, of the plants which compose the Flora:—

ANONACEÆ.

Anona muricata, Linn.; DC. Prod. i. 84. Nom. vulg. Corosol. Cultivated.

Anona squamosa, Linn.; DC. Prod. i. 85; Bot. Mag. t. 3095. Nom. vulg. Atte. Established, and grows freely in many parts of the island, where well sheltered by trees.

PAPAVERACEÆ.

Argemone mexicana, Linn.; DC. Prod. i. 120; Bot. Mag. t. 243. Nom. vulg. Chardon.

A frequent weed near habitations. This plant is much used medicinally by the inhabitants.

CRUCIFERÆ.

Nasturtium officinale, $R.\ Br.$; $DC.\ Prod.$ i. 137; $Eng.\ Bot.$ t. 125. Nom. vulg. Brède cresson.

Grows abundantly in Rivière Pistache. There is some dispute as to whom belongs the credit of introducing this plant into the Mascarene Islands. By some M. de Reine, a captain of infantry, is allowed the honour. He, during his sojourn in Mauritius, having tried ineffectually to obtain seeds from France, on his return to the mother country sent some seed to père André at Pamplemousses in Mauritius, who successfully grew it. Others consider that Fusée Aublet, author of the Flora of French Guiana, introduced it about 1760. I have no record of its introduction into Rodriguez, but it now grows very abundantly in some of the rivers.

Brassica juncea, Hook. fil. and Thoms. Fl. Ind. i. 157.

Is cultivated, and is an escape in a few places.

CAPPARIDACEÆ.

Gynandropsis pentaphylla, DC. Prod. i. 238; Cleome pentaphylla, Bot. Mag. t. 1681. Nom. vulg. Brède caya.

A few plants found in waste ground near Mathurin. Is eaten in Mauritius as brède, but is too scarce in Rodriguez.

MORINGACEÆ.

Moringa pterygosperma, Gärtn. Fruct. ii. 314, t. 147, f. 2; Wt. Ill. t. 77. Nom. vulg. Brède mouroungue.

Cultivated at Port-Mathurin and also on Frigate Island for its leaves, which are

boiled and eaten like spinach. The pods also, when young, are eaten as brède and in curries. Many and various medicinal virtues are ascribed to this plant in Mauritius—laxative, antispasmodic, anthelmintic, antiseptic, &c.—the leaves, bark, and the juice of the root being used; but in Rodriguez the plants are few in number, and it is not much employed.

PITTOSPORACEÆ.

Pittosporum Senacia, Putterl.; Walp. Rep. i. 250; Senacia undulata, Lam. Nom. vulg. Bois malabar.

Is a common tree in the valleys. The wood is white and fine-grained, and is used for making handles for implements.

BIXACEÆ.

Ludia sessiliflora, Lam.; DC. Prod. i. 261. Nom. vulg. Goyave marron.

This Mascarene plant in Rodriguez is found growing only on the limestone plains of upraised coral reef, and as these only occur at the east and west ends of the island, there only is the plant found. The wood is hard and fine, but brittle, very durable, and is used in making "pirogues." Like many others on the island, this tree is heterophyllous. The leaves in young plants and on adventitious shoots of old trees are small, ovate acute, $\frac{1}{4} - \frac{1}{3}$ in. long, about $\frac{1}{12}$ in. across, with very short petiole, and the margin spinose dentate. The leaves in the adult, on the other hand, are obovate or elliptical, with a cuneate base, and quite obtuse, sometimes even retuse, about 2 in. long and an inch broad, with a distinct petiole. Lamarck, Dict. iii. 613, cites this from Mauritius, and specimens are in Kew Herbarium sent by Bouton, which exhibit the heterophyllous character. Lamarck records also a species L. myrtifolia from Bourbon, but this seems to be merely a form of L. sessiliflora, Lam.—the curved style, its only distinction, being of no specific value. L. heterophylla, Lam. another species recorded from Mauritius, is also identical with our plant. Clos in Ann. Sc. Nat. 4th ser. viii. 244, describes a species, L. bivalvis, from Mauritius on specimens in "Herb. Delessert." It is evidently the plant here mentioned. The genus Ludia then is monotypic, but the species is not confined to the Mascarene Islands, but occurs also at Zanquebar.

Aphloia mauritiana, var. theæformis, Baker Flor. Maur. Seych. 12; Aphloia theæformis, Benn.; Prockia theæformis, Willd.; DC. Prod. i. 261; P. serrata, Poir. (non Willd.). Aphloia madagascariensis, var. seychellensis, Clos in Ann. Sc. Nat. 4th ser. viii. 274, seems to be the same. Nom. vulg. Bois d'anémone.

I follow Baker in reducing to one species the several forms of this endemic Mascarene genus, and of these forms theæformis alone occurs in Rodriguez, though not very abundantly. It is heterophyllous. The specimens of this tree, however, which I gathered do not exhibit the heterophylly in such a marked degree as do some specimens (in herb. Kew) of the tree from Mauritius, where the young leaves

are distinctly pinnatifid, thence they pass through stages of greater or less dentations up to the adult form. Bory de St. Vincent, Voy. t. 24, gives a figure of a plant under the name of *Ludia heterophylla*, Lam. There is a mistake here as to the name, the plant represented being this *Aphloia mauritiana*, var. theæformis, Baker, and not a *Ludia*.

PORTULACEÆ.

Portulaca oleracea, Linn.; DC. Prod. iii. 353. Nom. vulg. Pourpier.

Common in waste ground and specially abundant on the barren ground towards the west of the island about Mount Pourpier, of which the name is probably derived from the plant. Is not infrequently eaten as a brède or salade.

It is interesting to read in Leguat's account of his sojourn in Rodriguez (p. 64) "that he did not find in this island any plant, tree, shrub, or herb, which grows "naturally in any part of Europe, that was known to us, except Purslain, which "is small and green. There's plenty of it in some places of the valleys, and that "which we sow'd, having brought some of the seed from the Cape, came up exactly "like the Purslain of the Island;" and he records how, when a green caterpillar appeared after a hurricane and destroyed the greater part of their crops, the Purslain was untouched.

GUTTIFERÆ.

Calophyllum Inophyllum, Linn.; Planch. et Trian. Mon. Guttif. 254; Wt. Ic. t. 77. Nom. vulg. Bois tatamaka malgache.

Only a few trees of this found in the higher parts of the island. Yields a soft gum-resinous wood.

MALVACEÆ.

Malvastrum tricuspidatum, A. Gray Pl. Wright 16; Malva borbonica, Willd.; DC. Prod. i. 430.

A very common plant.

Sida angustifolia, Lam.; DC. Prod. i. 459.

This may be merely a variety of S. spinosa, Linn.; DC. Prod. i. 460. It was found only at one spot on the island, at the mouth of a valley east of English Bay point.

Sida carpinifolia, Linn. fil.; DC. Prod. i. 461. Nom. vulg. Herbe à paniers.

Common everywhere, and assuming very various forms according to its position; from a dwarfed and stunted plant, with few and small leaves, to a small, freely branching under-shrub, about 5 feet high, clothed with large leaves.

Sida cordifolia, Linn.; DC. Prod. i. 464. Nom. vulg. Mauve.

Common everywhere. This, like the other species of Sida, is often used as a demulcent.

Abutilon indicum, G. Don Gen. Syst. i. 504; Wt. Ic. t. 12; Sida indica, Linn.; DC. Prod. i. 471. Nom. vulg. La mauve.

A very common weed.

Abutilon graveolens, W. and A. Prod. i. 56; Hook. Comp. Bot. Mag. t. ii.; Sida graveolens, Roxb.; DC. Prod. i. 473.

Only a few plants on the shore in Oyster Bay close to habitations.

Urena lobata, Linn.; DC. Prod. i. 441; Bot. Mag. t. 3043. Nom. vulg. Herbe à paniers.

A common weed.

Hibiscus liliiflorus, Cav.; DC. Prod. i. 446; H. fragilis, DC. Prod. i. 446; H. Genevii, Bojer in Bot. Mag. t. 3144.

This endemic Mascarene plant is not abundant on the island. It is remarkable from the variation in form of its leaves. On the youngest trees I met with, the leaves were rounded at the base, deeply trifid, the lobes being linear acuminate. In older specimens the lobation of the leaf gradually disappears, and we have ovate acute leaves. Finally, by a gradual transition of forms, we reach the leaves of mature plants, which are obovate, obtuse or deeply emarginate, and cuneate at the base. The venation also becomes more distinct in the adult leaves, and they are quintuplinerved. A hybrid from this plant, the male being H. Rosa-sinensis, Linn., is figured, Bot. Mag. t. 2891, from Mauritius, and it seems to possess the variable foliage of one parent; its flowers, though similar to, are much larger than those of Hibiscus liliiflorus. H. Genevii, Boj. Hort. Maur. 28; Bot. Mag. t. 3144, is probably only a form of this plant with more dentate leaves.

Hibiscus tiliaceus, Linn.; DC. Prod. i. 454; Paritium tiliaceum, Wt. Ic. t. 7. Nom. vulg. Vaur or Var.

Everywhere along the shores.

by the inhabitants. Of these (A.) Var blane is the more scarce, at least I met with it less frequently. It forms a tree about 25 to 30 feet high, but I am informed also in some places forms a thicket, though I did not meet with it in such condition. The wood is very hard, is heavy and close grained, and makes a good timber, though difficult to work from its hardness. The bark of the trunk and large branches is thick, quite smooth, and does not split or crack. The bast layers are light-coloured, and make a capital cordage, which is greatly used, as cattle will not gnaw or eat it. The leaves are pilose at the junction of the lamina and petiole, and the veins are puberulous. The calyx lobes are eglandulose. (B.) Var rouge.—This seemed to me the commonest variety, and forms dense tickets, and I do not recollect seeing it as a large tree. The wood is soft, porous, and very light, comparatively useless for carpentry, and only fit for burning. The bark is not so thick as in Var blane, is rough, cracking, and splitting after the manner of that of an Oak. The bast layers have a reddish tinge, and do not make so good a cordage as those of Var

blanc. The leaves are less coriaceous than those of Var blanc, and rather velutinous than pilose. The epicalyx seems more deeply cleft, and each lobe of the calyx has a linear median dorsal gland which is very conspicuous.

The forms are very easily distinguished at first sight by the bark. In no instance did I find any trace of heteromorphism in the leaves. This is interesting in connexion with an observation made in the Saharunpore gardens by Bell in 1863 (Trans. Bot. Soc. Edin. vii. 565), and again by King in 1868 (Journ. Linn. Soc. xv. 101) on Hibiscus (Paritium) tricuspis, Cav. A lateral branch of this tree curving downwards "entered the soil, and re-appearing about 2 feet from its point of entrance, gave rise to a large leafy bush." The leaves of this sport, unlike the parent, were not trifid, but like those of H. (Paritium) tiliaceus; and in addition to some other peculiarities, the calyx segments had each "a large oblong gland full of a viscid secretion on the back." It must therefore approach the Var rouge of Rodriguez. Thiselton Dyer, in a note appended to King's remarks, suggests that H. tricuspis, which is a South Sea Island plant, may be a local form derived from H. tiliaceus, and this I think is not at all improbable. It is, however, curious that in an island where heterophylly is so marked a character in many of the trees, no trace of it is observable in this species, although a heterophyllous variety is noted by Masters in Oliv. Flor. Afric. Trop. i. 208, as occurring in Africa.

Thespesia populnea, Corr.; DC. Prod. i. 456; Wt. Ic. t. 8; Hibiscus populneus, Linn. Sp. Pl. 976. Nom. vulg. Mahoe.

Frequently met with on the shores, specially towards the western end of the island. Gossypium herbaceum, Linn.; DC. Prod. i. 456; Wt. Ic. tt. 9, 10, 11. Nom. vulg. Coton.

Gossypium barbadense, Linn. DC. Prod. i. 456; Wt. Ill. tt. 28^a, 28^b, 28^c. Nom. vulg. Coton.

Both species of Gossypium are widely distributed over the island; G. barbadense is found most abundantly on Ile Pierrot, a small coral islet near the edge of the reef on the south side, covering it almost entirely to the exclusion of other plants. I believe it was introduced from an American ship, which was wrecked some years ago on the reef. The cotton produced is of very good quality, but the inhabitants are too lazy to pick it clean and make use of it.

Eriodendron anfractuosum, DC. Prod. i. 479; Wt. Ic. t. 400; Bot. Mag. t. 3360. Nom. vulg. Ouat.

A few trees of this are found planted about the habitations (now ruins) of the earliest settlers at the top of Soupir valley.

STERCULIACEÆ.

Dombeya acutangula, Cav. Diss. t. 38, f. 2; DC. Prod. i. 498.

An endemic Mascarene species of which I found only one specimen in leaf at the mouth of the Rivière de l'Est.

Dombeya ferruginea, Cav. Diss. t. 42, f. 2; DC. Prod. i. 499. Nom. vulg. Bois pipe. Is met with in the upper parts of the valleys. The wood is heavy, and as the popular name implies is used for making pipes. The leaves are hetermorphic. The adult leaves frequently are more cordate and less crenate than in the type, but all are densely ferrugineo-tomentose beneath. In young trees the leaves are lanceolate and taper to the base, and the under surface is pale green and glabrous, not in the least tomentose. Cavanilles l.c. says of the species "Folia sunt certe diversa," but this he applies only to the amount of lobation; and then, again, he says, "tomento rufescente, in junioribus albicante." His specimens were derived from Mauritius, so that in that island the species apparently varies in the same manner as in Rodriguez. This species is endemic in the Mascarene islands.

Melochia pyramidata, Linn.; DC. Prod. i. 490.

Is naturalised and grows everywhere.

TILIACEÆ.

Corchorus trilocularis, Linn.; DC. Prod. i. 504.

Established, and grows in abundance on the barren slopes of the western end of the island. The Rodriguez plant differs from the type slightly, the pods dehiscing usually by four or five valves.

Triumfetta glandulosa, Lam.; DC. Prod. i. 506. Nom. vulg. Herbe à paniers. A common weed. An infusion of the leaves is a favourite tisane.

GERANIACEÆ.

Oxalis corymbosa, DC. Prod. i. 696. Nom. vulg. Alleluia or Oseille.

A plant I found in leaf in Rivière des Acacies is referred to this species. The leaves closely resemble specimens of a plant so named sent from Mauritius by Bouton; and there is also a close resemblance to the figure of O. Martiana, Zucc., in Bot. Mag. t. 3938, a typical American species. As I got no flowers it is impossible to identify the plant with certainty.

Oxalis corniculata, Linn.; DC. Prod. i. 692; Wt. Ic. t. 18. Nom. vulg. Petite oseille.

Very common everywhere.

RUTACEÆ.

Zanthoxylum paniculatum, Balf. fil.

Arborea, ramulis validis teretibus, spinis paucis nigrescentibus uncinatis armatis; foliis imparipinnatis, 15–19 foliolatis, ad apicem ramulorum confertis, breviter petiolatis; foliolis oppositis, sessilibus, subcordato-oblongis, obtusis, basi inequaliter cordatis, glabris, subcoriaceis, supra nitidis, subtus pallidioribus, costa venisque pro-

minentibus; paniculis subsessilibus, patentibus, folio brevioribus, ramis puberulis, pedicellis brevibus; capsula globosa, bivalvi, glabra minute tuberculata, breviter stipitata.

Arbor glabra usque ad 20 pedes alta, cortice albido. Folia alterna, 5–8 poll. longa; foliola superiora sæpe majora, $2-3\frac{1}{2}$ poll. longa, $\frac{5}{6}$ poll. lata; gemmarum tegmenta extus glutinosa; petiolus communis brevis, teres, subpuberulus. Flores ignoti. Capsula fusco-nigrescens, $\frac{1}{4}$ poll. diam., usque ad basim in valvas duas fissa, stipite $\frac{1}{24}-\frac{1}{12}$ poll. longo. Semina ignota.

Nom. vulg. Bois Pasner.

I only found one or two trees of this near the shore of Anse Quitorze. The wood is white, fine grained, and very hard. It is not far removed from Z. Budrunga, DC. Prod. i. 728, but differs in the want of large glands at the leaf crenatures. Z. tomentellum, Hook. fil. Fl. Brit. Ind., i. 493, has some resemblance, but is more spiny.

Toddalia aculeata, Pers.; DC. Prod. ii. 83; Wt. Ill. t. 66.

Only in the higher parts of the island.

Toddalia paniculata, Lam.; DC. Prod. ii. 83.

A species confined to Mauritius and Rodriguez. Is not common. Only in secluded parts of the island. In Mauritius, infusions of the leaves of this and of the foregoing species are much used as expectorants, whilst the bark is said to be astringent.

Citrus medica, Linn.; var. medica proper, Hook. fil. Fl. Brit. Ind. i. 514. Nom. vulg. Citron.

Grows spontaneously everywhere, forming in many places impenetrable thickets. It fruits very freely, and the fruit is in great demand. The leaves and rind of the fruit are used in preparing tisanes for various maladies. The Citron is distinguished by the inhabitants from the real sour Citron, which, however, I was never fortunate enough to find, but I am informed it grows abundantly in Mauritius. I suppose this latter is the *var. acida*, Hook. fil. l.c. The natives say that if the seed of the sour Citron of Mauritius be sown in Rodriguez, it produces a less sour fruit and one like the Citron, and in fact becomes it.

Citrus Aurantium, Linn.; var. a. Aurantium proper, Hook. fil. Fl. Brit. Ind. i. 515. Nom. vulg. Oranger.

Only a few of these trees occur which fruit very freely.

Citrus Aurantium, Var. b. Bigaradia, Hook. fil. l. c.; Wt. Ic. 957. Nom. vulg. Bigarade.

This is the commonest *Citrus* on the island, and is very abundant, forming along with *C. medica* close and dense thickets. The fruit is not eaten raw, but is preserved in various ways; and the leaves and the rind of the fruit are used for tisanes in shiverings and colic.

Citrus decumana, Linn.; Hook. fil. Fl. Brit. Ind. i. 516. Nom. vulg. Pamplemousses.

One or two trees of this grow near some of the oldest habitations.

Besides those species and varieties mentioned the inhabitants speak of the "Vangasaille" which was described to me as about the size of a mandarin Orange, and the "Limon," said to be a little smaller than the Citron. I did not meet with these forms.

Triphasia trifoliata, DC. Prod. i. 536. Nom. vulg. Orangine.

Not common, and only near the dwellings of the early settlers, where many introduced plants occur.

SIMARUBACEÆ.

Suriana maritima, Linn.; DC. Prod. ii. 91.

Common along the shores where is coralline limestone and on all the coral islets of the reef.

MELIACEÆ.

Quivisia laciniata, Balf. fil. (Plate XIX.).

Frutex glaber, ramosissimus; foliis oppositis v. suboppositis, subsessilibus, nitidis, rigide coriaceis, reticulato-venulosis; adultis obovato-cuneatis, obtusis v. retusis, marginibus integris, junioribus profunde pinnatifidis, lobis 3-5 obtusis erectopatentibus, in formam adultam gradatim transeuntibus; floribus in cymas axillares bifloras brevissime pedunculatas collectis, pedicellis brevibus validisque, erectis v. suberectis; calyce cotyliformi, minute 4-dentato, strigoso, dentibus deltoideis; petalis 4 oblongo-ellipticis obtusis, patentibus; staminibus 8, tubo brevi; ovario dense strigoso; stylo versus apicem subito incrassato ibique strigoso nec non constricto; stigmate capitato, leviter umbilicato, obscure 4-lobato, lævi.

Frutex habitu Buxi. Folia diversiformia, $\frac{3}{4}$ -1 poll. longa, $\frac{1}{4}$ - $\frac{1}{3}$ poll. lata. Pedicellus $\frac{1}{8}$ - $\frac{1}{6}$ poll. longus, leviter strigosus. Alabastrus globosus, subtrigonus. Calyx $\frac{1}{12}$ poll. diam. Petala flava, $\frac{1}{6}$ - $\frac{1}{8}$ poll. longa, extus in medio strigosa, ad margines glabra. Staminum tubus $\frac{1}{16}$ poll. longus; anthera ovoidea, filamentis dimidio breviora. Fruct. ign.

Nom. vulg. Bois balais.

This handsome member of an endemic Mascarene genus is very abundant in Rodriguez. It produces a hard fine-grained wood which is greatly used for making spoons. It is nearly allied to *Q. filipes*, Baker Fl. Maur. Seych. 46, a Mauritian species, but is sufficiently distinguished by the short, thick pedicels, the larger size of the flowers, and the heteromorphic leaves.

Plate XIX. Fig. 1. Twig from adult plant. 2. From a younger plant showing the pinnatifid juvenile leaves. 3. From a plant younger than that of 2. 4. Flower

bud. 5. Expanded flower. 6. Corolla and andrœcium spread out. 7. Detached petal. 8. Four stamens detached. 9. Gynæcium enclosed in calyx. 10. Transverse section of nearly mature ovary. 11. Vertical section of nearly mature ovary. Figs. 1, 2, 3, about nat. size. Rest magnified.

An introduced species of Melia, called by the inhabitants Lilas, which furnishes a wood, termed *Bois de Singapore* is found planted in a few places on the island.

CELASTRACEÆ.

Elæodendron orientale, Jacq. Ic. t. 48; DC. Prod. ii. 10. Nom. Vulg. Bois d'olive.

This is the most frequently met with of all the trees in the island, and many specimens, where far removed from dwellings, have attained a large size. The leaves are heteromorphic. The young ones are linear and acute, about 8 in. long by $\frac{1}{6}$ in. broad, with no petiole, or an exceedingly short one, the midrib and veins being of a bright red colour, and the margins faintly undulate. From this we trace a succession of forms to the most mature, which are obovate or elliptico-oblong, obtuse or retuse, 3 to $3\frac{1}{2}$ in. long by an inch or more broad, and with a distinct petiole $\frac{1}{3}$ to $\frac{1}{4}$ in. long, the midrib and veins usually green and the margins distinctly crenate.

The inhabitants distinguish two varieties of this tree. One they call "ronge" the other "blane" according as the wood of the tree is red or not red, and the "blane" is the harder wood of the two. But it is impossible to recognise these varieties. The wood of the young plant is usually reddish, and as the plant grows the new wood tends to become paler, until in mature trees the new wood may be hardly red, or it may have a distinct red tinge. And so it happens that in every tree of this species the wood in some part of the diameter of the trunk has a reddish or pink colour. The wood is tough, and is used, more than any other tree, in carpentry and for making "pirogues." I think this must be the tree to which Leguat refers when he says, "The Tree bore a fruit something like an olive, and the parrots "lov'd the nuts of it mightily." From this tree exudes an enormous quantity of gum in the form of tears, which soon harden and form large masses in crevices of the stem or on the ground around.

RHAMNACEÆ.

Zizyphus Jujuba, Lam.; DC. Prod. ii. 21; Wt. Ic. t. 99. Nom. vulg. Masson. Is occasionally met with on the island. The infusion of the leaves is frequently used for cough and cold.

Scutia Commersonii, *Brong. in Ann. Sc. Nat.* x. 363, t. 15, f. 1; Sc. indica, *Brong.* l.e. Nom. vulg. Bois senti.

Frequently met with in the less frequented valleys, where it is very annoying

from its recurved spines. It also occurs on some of the most elevated hill slopes. The bark has great repute in Mauritius as an astringent.

Gouania Retinaria, DC. Prod. ii. 40; Retinaria scandens (volubilis in icon.), Gärtn. Fruct. ii. 187. t. 120, f. 4.

This endemic Mascarene twiner is not common. I only found it in two localities, both in the higher parts of the island. Baker (Fl. Maur. Seych. 52), following Bojer (Hort. Maur. 77), makes this species a synonym of G. tiliæfolia, Lam., a Bourbon plant according to De Candolle, Prod. l.c.; but I cannot identify them. The description of G. Retinaria "fructibus alato-triquetris" seems to me irreconcilable with that of G. tiliæfolia "fructibus subovatis apteris."

SAPINDACEÆ.

Cardiospermum Halicacabum, Linn., var. microcarpum; C. microcarpum, H.B.K.; DC. Prod. i. 601. Type figured Bot. Mag. t. 1049; Wt. Ic. t. 508. Nom. vulg. Bonnet des prêtres.

Is a common twiner.

Allophyllus Cobbe, Blume; Hiern in Hook. fil. Fl. Brit. Ind. i. 673; Schmidelia Cobbe, Wt. Ill. t. 141.

This is a glabrous form of the species and the leaves are almost entire. It is not common, only found in one or two of the valleys.

Sapindus trifoliatus, Linn.; Hiern in Hook. fil. Fl. Brit. Ind. i. 682; S. emarginatus, Vahl; Wt. Ill. t. 51; DC. Prod. i. 608. Nom. Vulg. Bois savon.

A few trees are found on the shore a little east of Venus Point.

Dodonœa viscosa, Linn.; DC. Prod. i. 616; D. Burmanniana, DC. Prod. i. 616; Wt. Ill. t. 52. Nom. vulg. Bois gournable.

Very common on the hill slopes.

ANACARDIACEÆ.

Sclerocarya castanea, Baker Fl. Maur. Seych. 63. (Plate XX.)

Arbor ramulis validissimis, teretibus; foliis imparipinnatis 7–11–foliolatis, ad apicem ramulorum confertis, petiolatis; foliolis oppositis, sessilibus, rarius brevissime petiolulatis, oblongis v. ovatis, acutis v. breviter acuminatis, basi inæqualiter rotundatis, obscure crenulatis, submembranaceis, supra nitidis glabrisque, subtus medio nervo subhirsutis; floribus dioicis?, breviter pedicellatis, in racemis brevibus sessilibus v. breviter pedunculatis solitariis in axillis foliorum terminalium dense confertis; a sepalis 5 minutis, rotundatis, ciliatis; petalis 5 oblongis, obtusis, reflexis, imbricatis; disco crenato-lobato; staminibus 10, partim anantheris; ovario oblongo, glabro, biloculari (?); stylis 5 validis, distantibus, brevibus, erectis, divari-

catis, sub apicem ovarii sitis; stigmatibus capitatis, spongiosis; ovulis solitariis, pendulis.

Arbor parva, glabra, usque ad 30 pedes alta. Folia 6–9 poll. longa; foliola $2\frac{1}{2}$ – $3\frac{1}{2}$ poll. longa, $\frac{3}{4}$ – $1\frac{1}{2}$ poll. lata, inferiora minora, latioraque; petiolus communis hispidulus, $1\frac{1}{2}$ –2 poll. longus. Racemus petiolum subœquans. Petala albida, $\frac{1}{12}$ poll. longa, sepalis triplo longiora. Stamina basi disci inserta, alterne breviora. Styli $\frac{1}{24}$ poll. longi. Fructus ignotus.

In the valley of the Rivière Palmiste and at the top of the valley of the Rivière Mouruc.

This is a rare tree 20-30 ft. high, and I found it only in the two localities mentioned. I have followed Baker in describing it as a species of Sclerocarya; but its five-symmetrical flowers and crenated disk are marked points of difference from the description of that genus. Of the many points of agreement I specially would note the mode of attachment of the ovule to the placenta, which is very peculiar. It answers much more closely the description of Harpephyllum, an imperfectly known monotypic Cape genus; the male flowers of which are alone described in Bentham and Hooker's Genera Plantarum (see also Harv. and Sond. Fl. Cap. I. 525), but of the female flowers I have seen a MS. description at Kew. Unfortunately the male flowers of my plant are unknown; but the female flowers correspond so closely with the description that I should have been inclined rather to place it in this genus had Baker not previously described it as Sclerocarya; and as our information regarding the genera is imperfect I prefer to leave it so. May not this species bring Sclerocarya and Harpephyllum into one genus? It seems to me to point in that direction, but with such fragmentary material as we possess it is impossible to decide.

Plate XX. Fig. 1. Terminal portion of twig with leaves and inflorescence. 2. Flower bud. 3. Expanded flower. 4. Vertical section of flower. 5. Detached stamen. 6. Style detached with stigma. 7. Branchlet bearing fruit. 8. Transverse section of unripe fruit. Fig. 1 nat. size. Rest magnified.

Mangifera indica, Linn.; DC. Prod. ii. 63; Bot. Mag. t. 4510. Nom. vulg. Le mangue.

Many forms of this tree occur on the island. The inhabitants told me that the seed of the Mango in Rodriguez never contains a small grub which is always, or nearly always, present in the Mango in Mauritius. The trees not being in fruit during my stay I had no opportunity of verifying the statement. But supposing it true, it seems to point to the probable absence from Rodriguez of some insect which is present in Mauritius and visits the Mango flower. May this have anything to do with the fertilisation of the Mango? I may mention in this connexion that a great number of Mango trees which flowered most profusely showed no signs of producing fruit.

LEGUMINOSÆ.

Crotalaria retusa, Linn.; DC. Prod. ii. 125; Bot. Mag. t. 2561. Nom. vulg. Casse-cavelle.

This is found under two forms on the island. One, an erect branching plant with bright green leaves nearly two inches long, grows in the valleys, and places where the scrub has not been shortened. The second form is a dwarfed and stunted irregularly spreading plant with smaller leaves, which are more silky; this grows on the barren plains and open ground, where the vegetation is kept short by the cattle.

Arachis hypogæa, Linn.; DC. Prod. ii. 474; Mart. Fl. Bras. xv. pt. 1, t. 23, f. 1. Nom. vulg. Pistache.

Cultivated as an article of diet.

Indigofera argentea, Linn.; DC. Prod. ii. 224. Nom. vulg. Indigo batat.

Is found in many places.

Indigofera tinctoria, Linn.; DC. Prod. ii. 224; Wt. Ic. t. 365.

Formerly was cultivated largely on the island, especially on the higher parts, and it has escaped in several places and is now naturalised.

Tephrosia purpurea, Pers.; DC. Prod. ii. 251. Nom. vulg. Indigo sauvage.

A common weed on the island.

Desmodium incanum, DC. Prod. ii. 332. Nom. vulg. Gros treff.

Grows everywhere.

Desmodium mauritianum, DC. Prod. ii. 334. Nom. vulg. Petit treff.

Everywhere on the grass slopes.

Desmodium triflorum, DC. Prod. ii. 334; Wt. 1c. t. 292. Nom. vulg. Petite oseille marron.

Common.

Desmodium, sp.

I got a single specimen of a *Desmodium*, but not in flower or fruit, which resembles a specimen in like condition gathered by Horne in Seychelles, and which Baker (Fl. Maur. Seych. 75), considers as most likely *D. adscendens*, DC. Prod. ii. 332; Bot. Reg. t. 815.

Abrus precatorius, Linn.; DC. Prod. ii, 381. Nom. vulg. Reglise.

A few plants only near Mathurin.

Clitoria Ternatea, Linn.; DC. Prod. ii. 233; Bot. Mag. t. 1542. Nom. vulg. Ambrevade marron.

Not common. Only near the shore at English Bay Point.

Teramnus labialis, Spreng. Syst. Veg. iii. 235.

Common on the hill slopes.

Erythrina indica, Lam.; DC. Prod. ii. 412; Wt. Ic. t. 58. Nom. vulg. Mouruc.

This tree is occasionally found in most parts of the island, but is specially abundant at the mouth of the valley Rivière Mouruc, on the south side of the island, to which it gives the name.

Atylosia scarabæoides, Benth. Pl. Jungh, 242.

Common near the shore.

Rhynchosia minima, DC. Prod. ii. 385.

Common everywhere. This plant is not reported from Mauritius nor from Seychelles.

Cæsalpinia Bonducella, Flem. in Asiat. Res. xi. 159; Guilandina Bonduc, Boj. Hort. Maur. 117. Nom. vulg. Cadoc.

Common everywhere.

Cæsalpinia sepiaria, Roxb. Fl. Ind. ii. 360; Wt. Ic., t. 37. Nom. vulg. Cassie. Is not common, but is met with in a few valleys.

Hæmatoxylon campechianum, Linn.; DC. Prod. ii. 485; Bentl. and Trim. Med. Pl. t. 8. Nom. vulg. Bois campêche.

This tree is planted as a hedge around gardens in the vicinity of Mathurin.

Poinciana regia, Boj. Hort. Maur. 119; Bot. Mag. t. 2884. Nom. vulg. Flamboyant.

A few trees of this are found planted on the links at Port Mathurin, in front of Government House, where they flower and fruit very freely.

Cassia occidentalis, Linn.; DC. Prod. ii. 497; Bot. Reg. t. 83. Nom. vulg. Casse puante.

A few plants of this are found upon the island. It is often used medicinally.

Tamarindus indica, Linn.; DC. Prod. ii. 488; Bentl. and Trim. Med. Pl. t. 92; T. officinalis, Hook. Bot. Mag. t. 4563. Nom. vulg. Tamarin.

Is found scattered over the island. It is said that the early Dutch settlers introduced this tree to Mauritius. It is used very extensively by the Creoles in treating disease. The bark is said to be astringent and tonic. The pulp of the fruit is well known as a mild laxative.

Mucuna gigantea, DC. Prod. ii. 405; Wt. Illustr. in Hook. Bot. Misc. ii. 351. Suppl. t. 14. Nom. vulg. Mort aux Rats.

Common in many places. The popular name indicates the power ascribed to it by the natives.

Mucuna, sp.

I have the leaves of another *Mucuna* which I have not been able to identify with any species. The leaves are thick and coriaceous, and are more oblong-oval than those of *M. gigantea*. The flower and fruit I have not seen. It is a common climber in the valleys, forming very thick festoons from tree to tree.

Canavalia obtusifolia, DC. Prod. ii. 404.

Grows on the shore at English Bay, interlacing with Ipomæa pes-capræ, Roth.

Canavalia ensiformis, DC. Prod. ii. 404; Bot. Mag. t. 4027. Nom. vulg. Cocorico.

Only found in the upper part of Rivière Cascade valley.

Phaseolus lunatus, Linn.; DC. Prod. ii. 393; Wt. Ic. t. 755. Nom. vulg. Haricot vert.

Is cultivated on the island, and is occasionally found as an escape. Many varieties of Haricot were formerly cultivated, but lately a caterpillar has appeared and so damaged the crops that they are now less commonly cultivated.

Cajanus indicus, Spreng Syst. iii. 248; Cajanus bicolor, DC. Prod. ii. 406; Bot. Reg. t. 31. Nom. vulg. Ambrevade.

This is cultivated occasionally, and the seeds are used as Dholl. In some places it has escaped and grows spontaneously. This plant is reputed most efficacious medicinally as diuretic.

Desmanthus virgatus, Willd.; DC. Prod. ii. 445; Bot. Mag. t. 2454.

Grows abundantly in the neighbourhood of Port Mathurin.

Leucæna glauca, Benth. in Hook. Lond. Journ. Bot. (1842) iv. 416. Nom. vulg. Acacie.

This plant was introduced into the island about 30 years ago, and now has spread everywhere, filling up completely many of the valleys, and destroying the indigenous vegetation. The young twigs are a favourite food for the goats, and the straight stems of the young trees are used as poles for propelling "pirogues."

Acacia farnesiana, Willd.; DC. Prod. ii. 461; Rchb. Fl. Germ. Ic. t. 2052.

A few plants of this occur planted as hedges along with *Hæmatoxylon campechianum* L., near Mathurin.

Albizzia Lebbek, Benth. in Hook. Lond. Journ. Bot. (1844) iii. 87. Nom. vulg. Bois noir.

Is found abundantly on the island. This tree is said to have been introduced into Mauritius about 1767, from Bengal, by Cossigny, but I have no record of its reaching Rodriguez.

ROSACEÆ.

Prunus communis, Benth. et Hook. f. Gen. Plant. i. 610.; Amygdalus communis, Linn.; DC. Prod. ii. 530. Nom. vulg. La pêche.

Is naturalised.

Rubus rosæfolius, Smith; DC. Prod. ii. 556; Hook. Ic. Pl. iii. t. 349. Nom. vulg. Framboise.

Everywhere on the island.

CRASSULACEÆ.

Bryophyllum calycinum, Salisb.; D.C. Prod. iii. 396; Bot. Mag. t. 1409. Nom. vulg. Soutu fafan.

Not common on the island. Is used as an application to bruises.

COMBRETACEÆ.

Terminalia Benzoin, Linn. fil Suppl. 434 (excl. syn. et loc.); T. mauritiana, Lam.; DC. Prod. iii. 11. Nom. vulg. Bois charron.

This endemic Mascarene species is one of the heterophyllous trees of the island. It occurs abundantly. The contrast between the leaves of young plants and the adult form is so great that it was some time ere I could convince myself they belonged to the same species. The young leaves are linear and about 2 inches long, and $\frac{6}{8}$ in. broad, very shortly petiolate, clustered at the ends of the branchlets, densely pubescent with undulated and recurved margins. The adult leaves are quite glabrous, with long petioles almost equalling the lamina, which is over 2 inches long and nearly an inch or more broad; oval-oblong with a crenate margin and coriaceous. T. angustifolia, Jacq. Hort. Vind. iii. t. 100, is a form of this with leaves narrower than usual. The wood of the tree is very hard, and is the best for the purpose of wheelwrights, hence the common name. The bark is supposed to be a good astringent.

Terminalia Catappa, Linn.; DC. Prod. iii. 11; Bot. Mag. t. 3004. Nom. vulg. Badamier.

Common on the island.

MYRTACEÆ.

Psidium pomiferum, Linn.; DC. Prod. iii. 234; P. pyriferum, DC. iii. 233. Nom. vulg. Goyave.

Frequent. The fruits are frequently preserved by the inhabitants.

Psidium Cattleianum, Sabine; Bot. Reg. t. 622. Nom. vulg. Goyave de Chine.

I doubt very much if this is really my plant. The fruit in the figure is purple, and is quite globular. Mine has a pyriform fruit which is bright yellow. It may be, however, a variety such as we have in the case of *Ps. pomiferum L.*

Eugenia uniflora, Linn. Sp. Pl. 673; E. Michelii, Lam.; DC. Prod. iii. 263; Plinia pedunculata, Bot. Mag. t. 473. Nom. vulg. Roussaille.

Often met near habitations.

Eugenia Jambos, Linn. Sp. Pl. 672; Bot. Mag. t. 1696; Jambosa vulgaris, DC. Prod. iii. 286. Nom. vulg. Jamrosa. Jamrose.

Very common in the valleys. I am told that in the seed of this fruit in Mauritius a grub is always found, just as in the Mango, but it is absent in the fruit as grown in Rodriguez.

Eugenia Jambolana, Lam. Encyc. iii. 198; Wt. Ic. t. 535; Syzygium Jambolanum, DC. Prod. iii. 259. Nom. vulg. Jamlongue.

A few trees near habitations at Oyster Bay.

Eugenia Balfourii, Baker Fl. Maur. Seych. 116.

Arborea, ramosissima, ramulis glabris tetragonis; foliis breviter petiolatis, oblongis v. ovali-oblongis v. oblanceolatis acutis, basi cuneatis, glabris, rigide subcoriaceis, pellucido-punctatis, penninerviis, nervis tenuibus plurimis arcte positis; paniculis longe pedunculatis, paucifloris, axillaribus, folia æquantibus, glabris, ramis late patentibus; floribus sessilibus v. brevissime pedicellatis, paucis; calyce obscure dentato, dentibus deltoideis.

Arbor parva, glabra, usque ad 15 pedes alta, cortice albido corrugato. Folia opposita, $2\frac{1}{2}$ -3 poll. longa; petiolus $1\frac{1}{2}$ poll. longus. Panicula $1\frac{1}{2}$ -2 poll. lata. Calyx $\frac{1}{4}$ poll. longus. Fructus $\frac{1}{2}$ poll. diam., globosus, ruber, lobis calycis persistentibus coronatus.

Nom. vulg. Bois clou.

"Near E. Jambolana, from which it differs by its smaller leaves, with much closer veining and fewer larger flowers, Baker, l. c." This is a small tree which I found growing in the higher part of the island, which has a remarkably white bark, and Baker has considered it a new species. It agrees very well, however, with the descriptions of Syzygium paniculatum, DC. Prod. iii. 259, collected by Commerson, in Bourbon, where it is known as Bois à écorce blanche, which is Eugenia paniculata, Lam. Dict. iii. 199. Unfortunately my specimens are very imperfect, wanting flower and perfect fruit, and I have found no specimens of Commerson's plant in the Kew herbarium with which to compare it, and it is therefore very difficult to determine the point, but I do not think it improbable that my plant is this species. In the meantime I have followed Baker.

Eugenia sp.

Growing on the slopes of the Grande Montagne I found another species of *Eugenia*, only in leaf, which is not far removed from the foregoing, but it is impossible to determine it.

Eugenia cotinifolia, Jacq. Obs. iii. t. 53. Nom. vulg. Bois de fer.

Specimens of a small shrub, about 12 feet high, with a habit very like a Holly, growing very abundantly on the island, but of which I neither got flowers or fruit, has been referred by Baker l. c. to the above species. The wood of the tree is very hard and heavy, hence its popular name. I think this species is probably heterophyllous, for I have found bushes with leaves much less rounded than the adult, but have no positive evidence.

Fætidia mauritiana, Lam. Ill. t. 419; DC. Prod. iii. 295. Nom. vulg. Bois puant.

This peculiar Mascarene plant is very common. The tree is heterophyllous, but the specimens of heteromorphism I got show by no means so extensive a variation as do many other trees. The heterophylly, so fas as I observed it, is most marked when the plant is growing on the seashore, the young leaves then being more elongated and approaching a linear form. The plant receives its name Bois puant on account of the sickening and disgusting odour exhaled from the leaves when the sun shines on it. The wood is very good, and is often used for making "pirogues."

LYTHRACEÆ.

Pemphis acidula, Forst.; DC. Prod. iii. 89. Nom. vulg. Bois matelot. Grows abundantly on the shore where there is coralline limestone.

Punica Granatum, Linn.; DC. Prod. iii. 3; Bot. Mag. 1832, A and B. Nom. vulg. Grenade.

Is sometimes found naturalized. Of it the inhabitants distinguish two varieties, Grenade rouge and Grenade blanc, the difference lying in the colour of the endocarp of the mature fruit, which in one case is tinged with red. These would correspond respectively to the varieties a, rubrum, and b, albescens, distinguished by De Candolle, l. c. I cannot say that I satisfied myself of the validity of the distinction. Used as a powerful astringent.

TURNERACEÆ.

Mathurina, Balf. fil. in Linn. Soc. Journ. xv. 159. (Plate XXI.)

Sepala 5, ovato-lanceolata v. elliptico-oblonga acuminata, costa prominente, glandula magna bilobata intus basi adnata. Petala 5, subhypogyna, obcuneata v. obovata acuta, nuda, subunguiculata, basi sepalis leviter adnata, reclinata et corrugata. Stamina 5, subhypogyna, exserta; filamentis subulatis calycis glandulis in fundo imo vix adhærentibus; antheris lineari-oblongis introrsis. Ovarium sessile, uniloculare, liberum, oblongum, glabrum; ovula adscendentia; styli 3, filiformes, terminales stigmatibus dilatatis subfimbriatis. Capsula oblonga, triquetra, glabra, 3-valvis, poly sperma. Semina obovoideo-cylindracea, lente curvata, funiculo brevi, arillo longe piloso-sericeo basim seminis circumdante, testa crustacea extus foveo-lata, albumine carnosa; embryo axilis, rectus, cotyledonibus ovatis plano-convexis, radicula tereti.

Arbor parva. Folia alterna, petiolata, lanceolata, sæpe obovata, acuta, crenatoserrata; petiolus 2-glandulosus; stipulae glanduliformes, deciduæ. Flores magni, pedunculati, vulgo solitarii, axillares, nonnunquam in cymas trifloras dispositi, albi; pedunculi infra medium articulati, 2-bracteolati; bracteolæ subfoliaceæ, serratæ v. crenatæ, lineares.

M. penduliflora (species unica).

Arbor parva, usque ad 20 pedes alta, ramis erectis, foliorum cicatricibus magnis. Folia lanceolata v. obovata v. obcuneata, acuta, 3–4 poll. langa, 1 poll. lata, penni-

nervia, nervis tenuibus nervulis intramarginalibus conjunctis, sed per adolescentiam linearia vel ligulata, $\frac{1}{8}$ poll. lata, in formam adultam gradatim transeuntia; petiolo brevi, margine utroque versus medium glandula instructo, lamina decurrente. Flores albidi; pedunculi 1–2 pell. longi; bracteolæ lineares. Glandulæ sepalorum intus sulcatæ, pubescentes, apice emarginatæ. Sepala petalaque 1 poll. longa. Stamina perianthium dimidio excedentia. Ovarium glabrum, oblongum, 1 poll. longum; stylis incurvatis.

Nom. vulg. Bois gandine.

Usually found on the higher parts of the island. The stem is usually thickly clad with lichens, and the wood is light coloured and fine grained. The tree is heterophyllous. The young leaves are quite linear, about $\frac{1}{8}$ inch broad, with slight widely separated serrations, but the adult leaves are usually obovate or obcuneate, almost an inch broad, and with very marked crenatures. The nearest affinity is with the monotypic genus *Erblichia* of Seemann, a native of Panama, from which, however, it is distinguished by the sepaline gland, absence of petaline fringes, stigmas, and the arillate seeds.

Plate XXI. Fig. 1. From a photograph. 2. Twig from adult with typical leaves. 3. Leaf from a young tree, more linear and elongated. 4. Twig with leaves from a very young plant or adventitious shoot. 5. Flower spread out. 6. Detached sepal. 7. Detached petal. 8. Gynæcium. 9. Apex of style. 10. Fruit dehiscing. 11. Transverse section of fruit. 12. Seed (nat. size). 13. Seed magnified, 14. Embryo.

PASSIFLORACEÆ.

Carica Papaya, *Linn. Sp. Pl.* 1466; *Bot. Mag.* tt. 2898, 2899; Papaya vulgaris, *DC. Prod.* xv. 1,414. Nom. vulg. Papaye.

Grows now spontaneously in several places. The juice is used most extensively, specially as an anthelmintic, and also for several other diseases. The inhabitants hold the common idea that fresh killed meat if hung up under this tree for an hour or two becomes quite tender.

CUCURBITACEÆ.

Lagenaria vulgaris, Ser.; DC. Prod. iii. 299; Wt. Ill. t. 1057. Is cultivated.

Momordica balsamina, Linn.; DC. Prod. iii. 311. Nom. vulg. Margose. Cultivated and occasionally an escape.

Citrullus vulgaris, Schrad. in Eckl. et Zeyh. Enum. 279. Nom. vulg. Melon d'eau.

Cultivated and sometimes found as an escape.

The Water melon was one of the plants introduced by Leguat. He says they

brought five seeds from the Cape of Good Hope, and the plants springing from those he describes thus:—"Among our five plants of water melons there were two sorts, " red and white; the first were the best. The rind was green and the inside red;

- "they are very refreshing, and never do any hurt, no more than the others (i.e.
- " ordinary melons): they are so full of water that one may easily go without drink "when they are eaten; sometimes they were so big that all eight of us could
- "hardly eat up one of them. These several kinds of melons grew without taking
- " pains about them, as I have said already, and produced fruit in great abundance.
- "When we mingled a little ashes with the earth in the place where they were sown
- " it made 'em grow and fructify extraordinarily, and the fruit was more than
- " ordinarily delicate."

Citrullus Colocynthis, Schrad.; Naud. in Ann. Sc. Nat. 4th ser. xii. 99; Wt. Ic. t. 498; Cucumis Colocynthis, Linn.; DC. Prod. iii. 302.

A plant which is provisionally referred to this species is found in several places on the island, usually on coral or on sandy soil. The specimens are too imperfect for absolute determination. Seeds are, however, sown at Kew.

CACTACEÆ.

Opuntia Tuna, Mill.; DC. Prod. iii. 472. Nom. vulg. Raquette. Occurs near habitations, often planted as a hedge.

FICOIDEÆ.

Sesuvium Portulacastrum, Linn.; DC. Prod. iii. 453; Bot. Mag. t. 1701. Everywhere on the shore about high water mark.

UMBELLIFERÆ.

Hydrocotyle bonariensis, Lam.; DC. Prod. iv. 60.

Grows in many valleys.

Daucus Carota, Linn.; DC. Prod. iv. 211; Eng. Bot. t. 515. Nom. vulg. Carotte sauvage.

Common on the hills.

ARALIACEÆ.

Gastonia cutispongia, Lam.; DC. Prod. iv. 256; Polyscias cutispongia, Baker Fl. Maur. Seych. 127; Polyscias repanda, Baker, pars quo ad habitat Rodriguez. Nom. vulg. Bois blanc.

A scarce tree only growing on coralline limestone. I have referred my plant to this, the solitary species of an endemic Bourbon genus, but the Rodriguez plant is not typical. The leaves are more rounded at the base, are less coriaceous and have distinct petioles; the calyx is smaller; the fruit also is more globular, the style disk longer and style branches shorter and more recurved, and the whole more deeply umbilicated than in the type form. These variations might almost be considered specific, but as my specimens are not perfect, I think it is better to include it under this species, which seems to be very variable, until more complete specimens are obtained.

Baker, Fl. Maur. Seych. 126, unites Gastonia with the genus Polyscias and refers my plant to Polyscias repanda, Baker, to which he also refers Gilibertia repanda, D.C. I cannot agree with him. Polyscias and Gastonia are very closely allied, but the articulated pedicels and the calyculus of the former are very characteristic, as also the few-celled ovary, and keep them sufficiently distinct. P. repanda, Baker, so far as the description applies to the Mauritian plant is a true Polyscias; but the Rodriguez plant, which he also includes, is a Gastonia, and if not a variety of, is very nearly allied to, Gastonia cutispongia, Lam., as above mentioned.

RUBIACEÆ.

Danais corymbosa, Balf. fil.

Herba scandens volubilisve, ramulis tenuibus, glabris, tetragonis; foliis oppositis, breviter petiolatis, oblongis v. lanceolatis acutis v. acuminatis, basi cuneatis, integris, glabris, subcoriaceis, reticulato-venulosis, subtus pallidis; stipulis minutis; cymis corymbosis axillaribus in axillis foliorum terminalium, densifloris, breviter pedunculatis, pedicellis erectis, tenuibus, brevibus, bracteolis minutissimis; calyce 5-dentato, tubo campanulato, dentibus lanceolatis; corolla hypocrateriformi, segmentis oblongo-spathulatis acutis, patentibus, tubo dimidio brevioribus, fauce dense villosa; florum brevistylium staminibus longe exsertis; stylo furcato tubum corollæ æquante, ramulis teretibus clavatis; capsula globosa, glabra.

Herba lignosa, late scandens. Folia pallide-virescentia, ad extremitatem utramque attenuata, 2–4 poll. longa, $\frac{1}{2}$ – $\frac{1}{6}$ poll. lata, marginibus siccitate revolutis sub-repandis; petiolus $\frac{1}{6}$ – $\frac{1}{4}$ poll. longus; stipulæ deltoideæ, $\frac{1}{12}$ poll. longæ. Corymbus $1\frac{1}{2}$ –2 poll. diam; pedunculus $\frac{1}{2}$ poll. longus; pedicelli sub-puberuli, $\frac{1}{12}$ – $\frac{1}{3}$ poll. longi. Corolla $\frac{1}{12}$ poll. longa, calyce triplo-longior. Anthera $\frac{1}{12}$ poll. longa. Capsula profunde loculicida $\frac{1}{6}$ poll. diam. Semina plurima, minuta.

This species is not common on the island and only occurs in the higher districts. DeCandolle, Prod. iv. 361, records four species of this Mascarene genus, three from Mauritius and one common to Mauritius and Bourbon. Of these, three, namely, D. fragrans, Comm., D. rotundifolia, Poir., and D. laxiflora, DC., are merely forms of one species, and they have been all reduced to one D. fragrans, Comm., by Cordemoy in Adansonia x. 356, whom Baker follows, Fl. Maur. Seych. 137. D. sulcata, Pers., the fourth species mentioned by De Candolle, is probably also a form of D. fragrans, Comm. The Rodriguez plant is not unlike some of the forms of D. fragrans, Comm., but differs conspicuously in the form and long petiolation of its

leaves and its longer paniculate inflorescence, the rachis exceeding considerably the petiole. The flowers in this genus formerly considered diœcious have been shown by Cordemoy l.c. to be really dimorphic. I only collected the short-styled form in Rodriguez.

Oldenlandia Sieberi, Baker, var congesta.

Herba perennis dense cæspitosa, caule brevi, ramis confertis stellatim patentibus, tetragonis, subalatis; foliis oppositis $\frac{1}{6}$ poll. longis, ovatis v. oblongo-ovatis v. obovatis obtusis, inferne in petiolum brevem attenuatis, glabris incrassatis, coriaceis, nitidis.

This plant grows only in tufts on the coralline limestones along with a small species of *Ærua*. Baker, Fl. Maur. Seych. 138, considers it a distinct species, but I do not think the characters are sufficient to separate it from the Mauritian O. Sieberi, Baker. Its congested habit, which is the only marked point of distinction, is quite accounted for by its habitat on dry limestone soil; the type O. Sieberi, Baker, being a plant of roadsides and damp ground. O. callipes, Griseb. of Coll. Wright, Pl. Cub. n. 2678 in Kew herbarium seems also a very close ally.

Randia heterophylla, Balf. fil. Plate XXII.

Suffrutex glaber, ramulis tetragonis; foliis oppositis, breviter petiolatis, rigide coriaceis, glabris, supra nitidis, adultis oblongis v. ellipticis, obtusis mucronatis v. emarginatis, ad extremitatem utramque rotundatis, vel sæpe lanceolatis et versus extremitates attenuatis, juvenilibus lineari-lanceolatis, elongatis, acutis, hispidulis, gradatim in formam adultam transeuntibus; stipulis brevibus, connatis, subtruncatis; cymis solitariis, extra-axillaribus, patentibus, 1–5-floris, pedunculis glabris petiolum longe excedentibus, bracteolis fere obsoletis; floribus sessilibus v. brevissime pedicellatis, erectis; calyce anguste-infundibuliformi, minute 5-dentato; corolla hypocrateriformi, fauce breviter villosa, segmentis lanceolatis; antheris partim exsertis, ligulatis, acutis; ovario 5-gono; fructu ovoideo-oblongo 5-angulato.

Suffrutex inermis. Folia heteromorpha, opposita, adulta $2\frac{1}{2}$ –6 poll. longa, $1\frac{1}{2}$ – $2\frac{1}{2}$ poll. lata, juniora pedem excedentia vixque poll. lata; petiolus $\frac{1}{6}$ poll. longus; stipulæ $\frac{1}{6}$ poll. longæ, extus glabræ, intus piloso-sericeæ. Pedunculus glaber $\frac{3}{4}$ –1 poll. longus. Calyx angulatus, dentibus obscure deltoideis, ciliatis. Corollæ tubus $\frac{1}{2}$ poll. longus, calycem sextuplo excedens, segmentis tubo longioribus. Discus pulvinaris. Anthera $\frac{1}{3}$ poll. longa. Fructus costatus, coriaceus, $1\frac{1}{2}$ –2 poll. longus.

Nom. vulg. Café marron.

This is one of the prettiest and most interesting plants from Rodriguez, belonging, as it does, to a genus hitherto unknown in the Mascarene Islands, though abundantly represented in Africa. It is one of the few relics of the old Flora of the island, and is only found in most unfrequented spots at the heads of the valleys. It is heterophyllous as is represented in the plate. I am inclined to think there are two species on the island, one of which in the adult has elliptical leaves or leaves

rounded at both ends, and the other with leaves narrowing to both ends; but my specimens are not sufficient to determine the point, and where we find, as we do in this flora, such variations in individual characters amongst so many species, we must allow a very wide range of specific variation. The parts of this plant are not put to any use by the natives, and indeed it is so scarce many of them are unaware of its existence. The wood is hard and white.

Plate XXII. Fig. 1. Twig from a young plant, with narrow but not very long leaves. 2. Leaf from a younger plant. 3. Leaf from an adult, typical form. 4. Flower bud. 5. Flower expanded. 6. Stamens detached. 7. Vertical section of ovary, with style attached. 8. Transverse section of ovary. 9. Fruit not mature. 1, 2, 3, 4, 9, nat. size. Rest magnified.

Fernelia buxifolia, Lam.; DC. Prod. iv. 398. Plate XXIII. Nom. vulg. Bois bouteille.

This small tree or shrub is very common on the island, and exhibits a very marked heterophylly; the leaves or young plants and on adventitious shoots being very minute, oval, and rigid, but not spiny. In the adult they become almost orbicular and lose much of their rigidity. This is one form of what I have referred to in my introductory remarks as the first type of heterophylly. To illustrate this a figure of the plant is given, but the heterophylly is not so clearly marked in the plate as I could wish for. This variation accounts for the multiplication of species in this genus. In DC. Prod. iv. 398, there are two described in addition to F. buxifolia, Lam., viz., F. obovata, Lam., and F. pedunculata, Gärtn., but these have rightly, I think, been reduced by Baker, Fl. Maur. Seych. 142, to the type species, F. buxifolia, Lam. So that we have in Fernelia a Mascarene endemic monotypic genus.

Some confusion as to the popular name of this tree has arisen, and it is often referred to as Bois de ronde. This is the name of *Psiadia rodriguesiana*, Balf. fil., a Composite plant. But the name Bois de ronde is often erroneously given to *Carissa Xylopicron*, Pet. Th., an Apocynaceous plant, of which the leaves, and specially the young leaves, are very like those of *Fernelia buxifolia*, Lam., and hence the name Bois de ronde has been sometimes associated with *F. buxifolia*, Lam. The wood is hard, but not used for any special purpose.

Plate XXIII. Fig. 1. Twig from an adult plant. 2. Twig from a young plant. 3 and 4. Leaves of a different form from an adult plant. 5. Flower expanded. 6. Flower in vertical section. 7. Fruit. 8. Fruit in vertical, 9. in transverse section. 10. Seed in vertical section. 11. Embryo. Figs. 3-6 from Mauritius specimens.

Antirrhea frangulacea, DC. Prod. iv. 460. Nom. vulg. Bois goudron.

A shrub 9-10 feet high I found growing on the coralline limestone at the south-west end of the island, unfortunately not in flower or fruit, resembles in foliage this endemic Mascarene species. The wood is bright yellow.

Vangueria edulis, Vahl; DC. Prod. iv. 454. Nom. vulg. Vavangue, Voavang. A common plant on the island.

Pyrostria trilocularis, Balf. fil.; Plectronia? trilocularis, Baker Fl. Maur. Seych. 147. Plate XXIV.

Frutex ramosus glaber, ramulis tetragonis; foliis rigide coriaceis, marginibus leviter revolutis, glabris, nitidis, penninerviis, subtus costa prominente, adultis breviter petiolatis, oblongo-ovalibus v. oblongis v. fere obovatis acutis, juvenilibus sub-sessilibus, linearibus, mucronatis; stipulis connatis glabris, deciduis, longe cuspidatis; floribus axillaribus; fructu 3-rarius 2-loculari, globoso, subtrigono, breviter stipitato.

Folia heteromorpha, 2-5 poll. longa, $1-1\frac{1}{2}$ poll. lata, petiolus $\frac{1}{4}$ poll. longus; juvenilia $1-1\frac{1}{2}$ poll. longa, $\frac{1}{6}$ poll. lata; stipulæ cuspide laminam æquante, $\frac{1}{4}$ poll. longæ. Drupa rubra, $\frac{5}{12}$ poll. diam., pyrenis $\frac{1}{6}$ poll. longis; seminibus infra medium affixis; embryone axili, curvo; cotyledonibus cordatis, compressis; radicula tereti, inferiore.

Nom. vulg. Bois chauve souris.

This is a small heterophyllous tree or shrub about 15-25 ft. high, of very erect habit, the young leaves being narrow and linear and acute, becoming in the adult broader and more obtuse and usually shorter. It is very abundant and bats feed greatly on its fruit, hence its common name.

I have had considerable difficulty in determining to what genus to refer this plant, and its position in the genus Pyrostria must only be regarded at present as provisional, as my specimens are imperfect, I have no flowers. With Pyrostria it agrees in most points; the fruit is, however, fewer-celled than is common in that The embryo of the Rodriguez plant is slightly curved, and has an inferior radicle. Of Pyrostria the embryo is at present unknown, but the genus is located amongst the Vangueriae, Benth. et Hook. Gen. Plant. ii. 22, a group characterised by a superior radicle. An important result then of the confirmation of this plant as a Pyrostria will be the removal of that genus from its present position to one in the tribe Ixoreæ, where the radicle is inferior when it would come near Myonima and Coffea. With Myonima the plant has many points of resemblance, more especially with a species, M. heterophylla, Boj. Hort. Maur. 169, but it differs therefrom in its axillary clustered inflorescence, not terminal panicles. With Coffea also it has certain resemblances, but there are sufficient characters to keep it out of that Baker refers it doubtfully to Plectronia, but it is impossible to put it there, as in that genus the radicle is superior.

Plate XXIV. Fig. 1. Fruit bearing twig from an adult tree with type leaves. 2. Twig from a younger tree with narrower leaves. 3. From a still younger plant, or from an adventitious shoot. 4. Fruit. 5. Fruit in vertical section. 6. Fruit in transverse section. 7. Pyrene in vertical, 8. in transverse section. 9. Seed in

profile. 10. Seed from the side of attachment. 11. Embryo. Figures of leaves natural size. Rest magnified.

Scyphochlamys, Balf. fil.

Calycis tubus campanulatus; limbus truncatus v. obscure 4-lobatus, coriaceus, persistens. Corolla infundibularis, tubo brevi, fauce villosa; limbi lobi 4-5(6?) lanceolato-triquetri, acuti, incrassati, valvati. Stamina 4-5(6?) ore corollæ inserta, filamentis brevibus, antheris dorso infra medium affixis, vix exsertis, lanceolato-acutis. Discus annularis v. pulvinaris. Ovarium 4-5(6?) loculare; stylus validus, profunde 4-fidus; ovula in loculis solitaria, infra apicem loculi pendula. Fructus pyriformis, costatus (maturum non vidi). Semina pendula, non compressa.

Arbores parvæ, glaberrimæ, ramulis subtetragonis. Folia opposita, breviter petiolata, rigide-coriacea, penninervia; stipulæ interpetiolares, latæ, connatæ, coriaceæ, persistentes. Flores in capitulum 6–12-florum densum pedunculatum congesti. Capitula intra bracteas duas oppositas conniventes crasse coriaceas persistentes in involucrum cyathiforme connatas inclusa.

S. revoluta, Balf. fil. Plate XXV.

Arbor parva, ramosa; foliis heteromorphis, adultis breviter petiolatis, ellipticis v. late ovato-oblongis, nitidis, venulosis, marginibus revolutis, $3\frac{1}{2}$ –4 poll. longis, $1\frac{1}{2}$ – $2\frac{1}{2}$ poll. latis (petiolo excluso $\frac{1}{6}$ – $\frac{1}{4}$ poll. longo); juvenilibus linearibus 4–6 poll. longis $\frac{1}{8}$ poll. latis; stipulis $\frac{1}{3}$ poll. longis; capitulis solitariis, axillaribus, erecto patentibus; pedunculis petiolum excedentibus, $\frac{1}{3}$ – $\frac{5}{12}$ poll. longis; involucro $\frac{1}{2}$ poll. diam., basi intus tuberculis appressis brevibus teretibus linearibus dense vestito; corolla $\frac{1}{4}$ poll. longa, calyce triplo longiore; fructu in singulo involucro solitario.

Nom. vulg. Bois mangue.

This small tree grows commonly along with Randia heterophylla, Balf. fil. in secluded parts of the island, and is not common. I am unable to refer it to any known genus, and have taken it as the type of a new one. Its nearest affinity is with Pyrostria, but it is distinguished by the sessile anthers, which are included or sub-included; the style, which is thick and is deeply 4-cleft; but the most prominent feature is the large bracts, which form a complete involucre to the flowers. These bracts are clothed at the base within by many short conical adpressed processes, which may represent abortive flowers. The embryo in the single immature fruit obtained is unfortunately too decayed to determine its relations. This tree is heterophyllous. The leaves of young plants being linear pass through a gradation of forms to the adult type, which in many cases is almost orbicular.

Plate XXV. Fig. 1. Twig from an adult tree, with type form of leaf. 2. From a younger plant. 3. From a very young plant or adventitious shoot. 4. One half of involucre. 5. Flower bud removed from involucre. 6. Flower expanded. 7. Corolla and andrecium opened out. 8. Stamen detached. 9. Gynæcium with portion of calyx attached. 10. Transverse section of ovary. 11. Vertical section of ovary,

with portion of calyx attached. 12. Single not ripe fruit enclosed in involucre. 13. Vertical section of unripe fruit. 1, 2, 3, 4, 12, 13, nat. size. Rest magnified.

Coffea arabica, Linn.; DC. Prod. iv. 499; Bot. Mag. t. 1303. Nom. vulg. Café. Has been largely cultivated on the island, but now seldom; but many good-sized trees are found in the vicinity of old plantations.

Psychotria? lanceolata, Balf. fil.

Frutex glaber, ramulis tetragonis; foliis oppositis, lanceolatis, acutis, inferne in petiolum brevem gradatim attenuatis, coriaceis; stipulis deciduis; floribus minutis, breviter pedicellatis in paniculam corymbosam pedunculatam ebracteatam v. minutissime bracteatam dispositis, paniculis in axillis foliorum superiorum congestis; calyce late cupuliformi, truncato, obscure 5-dentato; corolla subcampanulata, lobis lanceolatis incrassatis tubo brevioribus, fauce dense pilosa; antheris dorso affixis, filamentis brevibus; disco magno; ovario 2-loculari; ovulo oblongo-ovato, compresso, in singulo loculo solitario, erecto, basilari; stylo furcato, ramis brevibus. Fruet. ign.

Frutex erectus. Folia opposita, 3–4 poll. longa, $\frac{3}{4}$ –1 poll. lata, internodiis brevibus; petiolus $\frac{1}{3}$ poll. longus. Pedunculus petiolo triplo longior, pedicelli petiolo breviores. Corolla $\frac{1}{6}$ poll. longa, calycem triplo excedens, tubo $\frac{1}{8}$ poll. longo. Antheræ $\frac{1}{12}$ poll. longæ.

Nom. vulg. Bois lubine.

This small shrub is exceedingly rare. I only know of one plant in the island on the slopes of the Grande Montagne. My specimens are very imperfect, as I have only flower-buds, and no fruit. It is difficult therefore to be certain of the genus, but the 2-celled ovary, with a solitary basilar erect ovule in each loculus, places it distinctly in the tribe Psychotriæ, and it seems to fall most naturally into the genus Psychotria.

COMPOSITÆ.

Ageratum conyzoides, Linn.; DC. Prod. v. 108; Hook. Exot. Flor. i. 15. Nom. vulg. Abgrat.

A common weed.

Eupatorium triplinerve, Vahl. Symb. iii. 97; E. Ayapana, Vent.; DC. Prod. v. 169. Nom. vulg. Ayapana.

Frequently met with. A reputed panacea. Was introduced into Mauritius from Rio Janeiro in 1797 by Captain Augustin Baudin. The story is, that he having heard at that port of its medicinal virtues, and having endeavoured in vain to obtain living plants, the night before leaving stole a plant from the window of one of the houses, which he carried to Mauritius.

Psiadia rodriguesiana, Balf. fil.

Suffrutex, ramulis teretibus pubescentibus; foliis lanceolatis, acutis, superne pro-

funde-serratis, inferne cuneatis integrisque in petiolum pilosum brevem attenuatis, dense pilosis, nervo centrali subtus prominente nervos 7–9 adscendentes parallelos subtus prominulos emittente; capitulis breviter pedunculatis, in corymbos laxos axillares patentes dispositis; bracteis involucri glabri interioribus lanceolatis v. oblongis acutis margine submembranaceis, exterioribus brevioribus post anthesin patentibus; achæniis radii compressis angulatis, rugis calvis, inter rugas strigosis, pappo rigido setoso-scabriusculo.

Folia 3-4 poll. longa, $\frac{3}{4}$ -1 poll. lata; petiolus $\frac{1}{4}$ - $\frac{1}{3}$ poll. longus. Cymæ oligocephalæ; pedunculi breves, puberuli; bracteæ interiores $\frac{1}{12}$ poll. longæ.

Nom. vulg. Bois de ronde.

This is now a very rare plant in Rodriguez. It must have existed formerly in great abundance, as the limestone plains are in many places thickly strewn with fragments of branches and stems. The wood is very hard, and has a dark ochry colour. It differs from most species of *Psiadia* in Mauritius in being velutino-pubescent, not glutinous, and resembles many of the Bourbon species, originally described as species of *Conyza*, but now referred to *Psiadia*.

Psiadia Coronopus, Benth. et Hook. Gen. Plant. ii. 285; P. trinervia, Willd. var. macrodon, Baker Fl. Maur. Seych. 172; Sarcanthemum Coronopus, Cass.; DC. Prod. v. 367. Plate XXVI.

Suffrutex ramulis teretibus glutinosis; foliis anguste oblongo-lanceolatis, basi attenuatis, apice serratis, triplinerviis, coriaceis; capitulis breviter pedunculatis in corymbos terminales dispositis; involucris hemisphæricis floribus paulo brevibus; receptaculo paleaceo fimbrillifero; florum tubo crasso ampliato; achæniis radii glabris compresso-obovatis pappo setoso paleaceo.

This is a very interesting plant. It is very rare on the island. I only found it at one point, on the shore, near the mouth of the Rivière Poursuite. It differs from all other species of *Psiadia* in the presence of scales on the receptacle, and in the dilatation at the base of the corolla tube.

The plant was originally described by Lamarck, Encyc. ii. 89, as Conyza Coronopus, from specimens brought by Commerson from Rodriguez. I have compared my plants with the original specimens of Commerson in the Museum at Paris, and have confirmed their identity. Cassini in Bull. Philom. 1818, p. 74 (see also Dict. Sc. Nat. xlvii. 349, and DC. Prod. v. 367), created a new genus, Sarcanthemum, for the plant, distinguishing it by the receptacle and dilated corolla tube. But Bentham and Hooker, Gen. Plant. l.c., place Sarcanthemum under Psiadia, remarking planta Mascarensis a nobis non visa ex charactere dato a Psiadia non differt nisi corollis basi crassis ampliatis." The specimens brought now from Rodriguez admit of a full examination of the plant, with the result that it is confirmed as a species of Psiadia, although it differs slightly from that genus in the corolla, and also in the fimbrilliferous centre of the receptacle.

Baker, Fl. Maur. Seych. 173, refers it as a variety to *P. trinervia*, Willd., but this it is certainly not. Cordemoy in Adansonia x. 21, supposes Commerson's plant may be *P. retusa*, Lam., but this also is erroneous. As to the distribution of the plant, I believe it to be endemic in Rodriguez. De Candolle l.c. puts Mauritius as a locality on the authority of Sprengel, but querries it. Sprengel himself, Syst. Veg. iii. 510, only says, "Ins. Mascaren," which does not necessarily refer to Mauritius. And neither Bojer, Hort. Maur. 179, nor Bouton, knew the plant there. Bourbon is also given by De Candolle l.c., on the authority of Bory, from whom he received specimens, but I am inclined to think there has been some confusion as to the locality. Cordemoy knows nothing of the plant in Bourbon.

Plate XXVI. Fig. 1. Capitulum isolated. 2. Capitulum in vertical section. 3. Flower of ray with an involucral scale. 4. Flower of disk with basal scale. 5. Stamens and style from flower of disk.

Parthenium Hysterophorus, Linn.; DC. Prod. v. 532; Bot. Mag. t. 2275. Nom. vulg. Herbe blanche.

A common weed in waste ground near habitations. An infusion of this plant is a favourite tisane.

Siegesbeckia orientalis, Linn.; DC. Prod. v. 495; Wt. Ic. t. 1103. Nom. vulg Herbe de flacq.

A common weed near habitations.

Bidens pilosa, Linn.; DC. Prod. v. 597. Nom. vulg. Ville bague.

Common near habitations.

Tridax procumbens, Linn.; DC. Prod. v. 679.

Abundant on the coralline limestone of Rodriguez and on the coral islets around.

Abrotanella rhynchocarpa, Balf. fil. Plate XXVIIA.

Herba pusilla, pulvinata, glabra, caulibus dense confertis; foliis imbricatis, stellatim patentibus recurvatis, late amplexicaulibus, lyrato-pinnatifidis v. pinnatipartitis, rarius et solum versus apicem ramulorum simplicibus spathulatisque, acutis, coriaceis, uninerviis, nervo prominente; capitulis solitariis sessilibus, singulo 6–10-floro; involucro 6-phyllo, bracteis ciliatis, exterioribus plurinerviis latioribus, interioribus 2–3-nerviis angustioribus; receptaculo foveolato; floribus 3–4 exterioribus femineis, interioribus hermaphroditis fertilibus; feminea corolla basi globosa, 3-dentata, stylo exserto breviter bifido; hermaphrodita corolla 4-dentata; antheris inclusis, ovoideis acutis, inappendiculatis; stylo valido tubo corollæ subæquilongo, alte bifido, ramis ciliatis; achæniis obovatis, compressis, calvis, lente curvis, obscure 4-5 angulatis, apice in rostrum primùm tortum demum rectum elongato.

Caules cæspitosi, $1-1\frac{1}{2}$ poll. longi, inferne foliis vetustioribus dense obsiti. Folia $\frac{1}{4}-\frac{3}{8}$ poll. longa, $\frac{1}{16}$ poll. lata, lobis erectis, rotundatis, nervo prominente. Capitula $\frac{1}{4}$ poll. lata. Bracteæ $\frac{1}{9}$ poll. longæ. Flores flavi. Corollæ dentibus tubus quadruplo longior. Achænia $\frac{1}{8}$ poll. longa.

This interesting little plant grows only on the coralline limestone, and there in no great abundance. The young leaves are undivided and gradually become pinnatifid as they get older. This is hardly to be considered a form of heterophylly comparable to what is so common in many of the plants from the island.

The genus Abrotanella, to which it is referred, originally founded by Cassini for a species A. emarginata, brought by Gaudichand from the Falkland Islands, now contains about nine species, and these are all Australian, New Zealand, or Antarctic forms. The Rodriguez plant, while it closely resembles the other species of the genus, its nearest ally apparently being A. (Ceratella) rosulata, Hook. fil. Fl. Antarct. i. 25, a species from Campbell's islands, possesses a very remarkable peculiarity in the ovary and fruit. The apex of the ovary and of the young fruit is prolonged into a beak, which coils on itself upon the top of the ovary, making usually one complete turn, and to its extremity is jointed the corolla tube. In the mature fruit this beak becomes straightened out into a long process. The genus is unknown in the other Mascarene islands.

Plate XXVIIA. Fig. 1. Capitulum enclosed in leaves. 2. Flower of ray with outer involucral scale. 3. Flower of disk with inner involucral scale. 4. Flower of disk in vertical section. 5. Achene with beak still coiled on the summit. 6. Achene with beak straightened.

Senecio linearis, DC. Prod. vi. 375; S. Lingua, Poir.; DC. l. c.; S. salicifolius, Pers.; DC. l.c.; S. Boutoni, Baker Fl. Maur. Seych. 181.

This plant is common on the island, but under two forms. When growing near the sea the leaves and stems usually become more succulent and fleshy than they are when the plant grows inland.

The species was founded by De Candolle on specimens from Mauritius in the herbarium of the Museum at Paris. The type specimens I could not find for comparison, nor did I find named specimens of S. Lingua, Poir., and S. salicifolius, Pers. There are, however, specimens unnamed, both in the general herbarium and in Jussieu's herbarium from Mauritius and Bourbon, collected by Commerson, which are identifiable with the descriptions of the above-mentioned species, S. linearis, DC., S. Lingua, Poir., and S. salicifolius, Pers., and which are manifestly mere insular variations of one species, to which the Rodriguez plant may also be referred. There is also a specimen at Paris from Bourbon, collected by Abbé Pourret and named in MS. S. borbonicus, which is clearly this plant; and a specimen of Commerson's from Madagascar is probably the same. I have no hesitation in uniting the four species in one. Baker, l.c., from want of sufficient information as to S. linearis, DC., describes the Rodriguez plant as S. Boutoni. The species is exclusively Mascarene.

Sonchus oleraceus, Linn. sp. Plant. 1116; Eng. Bot. t. 810. Nom. vulg. Lastron.

Common. Two forms of this occur. When grown on coralline limestone it becomes much stunted, and the leaves are exceedingly narrow and congested. The leaves of this plant are frequently eaten as salad, and as a brède.

In a letter to me at Rodriguez Mr. Horne mentioned that a collector in 1864 brought to Mauritius a yellow flowered *Achillea* from Rodriguez, but I do not know it.

CAMPANULACEÆ.

Lobelia vagans, Balf. fil.

Annua; caulibus repentibus, tenuibus, glabris; foliis membranaceis, inferioribus ovato-lanceolatis v. elliptico-ovato-acutis v. obovatis, basi cuneatis integrisque, apice crenatis, breviter petiolatis, superioribus linearibus acutis v. obtusis retusis v. submucronatis subsessilibus crenato-serratis; floribus solitariis in axillis foliorum superiorum, pedicellatis, pedicellis bracteis brevioribus; calycis tubo obconico laciniis subulatis sub-æquilongo v. breviter excedente; corollæ tubo calycis lobis quadruplo longiore, lobo inferiore obovato-oblongo acuto, superiore lineari; antheris 2 inferioribus apice barbatis, superioribus pilosiusculis; stylo longo, stigmate bilobato; capsula obovoidea.

Caulis late patens, gracilis. Folia 1–2 poll. longa (petiolo incluso $\frac{1}{4}-\frac{1}{12}$ poll.), $\frac{1}{4}-\frac{2}{3}$ poll. lata, superiora $\frac{1}{6}$ poll. lata. Pedicelli adscendentes, $\frac{1}{4}-\frac{1}{2}$ poll. longi. Corolla alba, $\frac{1}{2}$ poll. longa, labio inferiore profunde inciso. Capsula tubo calycis triplolongior, $\frac{1}{5}$ poll. longa.

Grows abundantly in the upper and shady parts of the valleys. Is very closely allied to *L. serpens*, Lam.; DC. Prod. vii. 368, and which I take to be the same as *L. filiformis*, Lam.; DC. Prod. vii. 368. It is distinguished, however, from these species by the larger size of the flowers and its distinctly two-lobed stigma and the much broader leaves.

Lobelia Cliffortiana, Willd.; DC. Prod. vii. 372.

Only a few plants on the shore at the mouth of the Rivière Grande.

PLUMBAGINEÆ.

Plumbago zeylanica, *Linn.*; *DC. Prod.* xii. 692; *Bot. Reg.* t. 23. Very common everywhere.

MYRSINACEÆ.

Ardisia, sp. Nom. vulg. Bois de bœuf.

There are several forms of Ardisia growing in Rodriguez. Unfortunately they were only in fruit during my visit, and my material is not sufficient for the determination of species. But there is certainly more than one.

SAPOTACEÆ.

Sideroxylon, sp. Nom. vulg. Bois des pommes.

This tree I obtained in fruit only. It is undoubtedly a *Sideroxylon*, and is not improbably a new species. It has some resemblance to the Mauritian *S. Bojeranum*, DC. Prod. viii. 179, but differs from all the Mauritian species by its very large fruit and seed, the former being as large as a pigeon's egg.

EBENACEÆ.

Diospyros diversifolia, *Hiern in Trim. Journ. Bot.* iv. 353. t. 172. Nom. vulg. Bois d'ebène.

A not uncommon endemic heterophyllous tree, usually about 16-20 feet high. The young leaves being narrow and linear, the older much broader. This heterophylly in *Diospyros* is quite a novelty. Hiern l. c. remarks, "I am acquainted "with no parallel to this diversity of foliage in the case of any other species "throughout the order." One seldom meets with a large tree. In all the large ones I met with the dark heart wood was quite decayed, leaving a shell of newer wood outside. I was told by inhabitants that this rotting of the centre always takes place in this species after it attains a certain height.

OLEACEÆ.

Olea lancea, Lam.; DC. Prod. viii. 286. Nom. vulg. Bois tambalacoq.

This Mascarene species is a common tree in Rodriguez.

In addition to the fore-mentioned, I have leaves of another very abundant small tree, which is probably an *Olea*, and Baker, Fl. Maur. Seych., makes it a variety latifolia of *Olea lancea*, Lam. I doubt its being so, as the tree differs in habit and general facies from *Olea lancea*, Lam., but it is impossible to decide what it is from my materials. It is known on the island as Bois d'olive petites feuilles.

APOCYNACEÆ.

Carissa Xylopicron, Pet. Th.; DC. Prod. viii. 333. Plate XXVIIB. Nom. vulg. Bois sandal.

This Mascarene tree is remarkably heterophyllous. The young leaves are small, about $\frac{1}{4} - \frac{1}{2}$ in. long, spinose dentate on the margins, and with the apex obtuse or slightly retuse; also the branchlets bear a number of interpetiolar spines, one between each pair of leaves. In the adult the leaves are 1-2 in. long by $\frac{2}{3}$ -1 in. broad, with entire recurved margins and the apex deeply emarginate or obtuse, and there are no spines or rarely on the branchlets. Between these two forms all stages are found. This belongs to the first type of heterophylly referred to in my introductory remarks, and is well represented in the plate.

The tree is very common on the island. The wood is very hard and dense, quite like boxwood, and is much used for making netting needles and such like articles.

The wood is not unlike that of the Bois de ronde (*Psiadia rodriguesiana*, Balf. fil.), but the heart wood is of a much brighter yellow. The plant is abundant still on the island, but formerly existed in enormous quantity, for the limestone plains are in many places strewn with dead branches and stems of it mixed with those of Bois de ronde.

Plate XXVIIB. Fig. 1. Twig from an adult plant with type form of leaf. 2. Twig from a young plant with small and spinose leaves. 3. Twig from a young shoot with smaller leaves. 4. Flower bud. 5. Flower expanded. 6. Corolla spread out with stamens included. 7. Style. 8. Ovary in transverse section. 1, 2, 3, nat. size. Rest magnified. Fig. 3 and the analyses are of Mauritian specimens.

Vinca rosea, Linn.; DC. Prod. viii. 382; Bot. Mag. t. 248. Nom. vulg. Chaponière.

Of this there are the two varieties *rosea* and *alba*, known to the natives as *Chaponière rouge* and *C. blanc* respectively—both abundant. The leaves are said to make an excellent infusion for bronchitis and other chest affections.

ASCLEPIADACEÆ.

Tanulepis, Balf. fil.

Calyx minutus, 5-partitus, basi intus 5-glandulosas. Corolla subrotata, profunde 5-fida, subvalvata. Coronæ squamæ 5, lineari-lanceolatæ, elongatæ, petalis subæquilongæ, antheras breviter excedentes, subincrassatæ, basi connatæ, gynostegioque adhærentes. Stamina filamentis latis brevibusque basi annulo coronæ affixa; antheræ apice cuspidatæ, conniventes; pollen granulosum, in quoque loculo in massas duas subcohærens, appendicibus latis orbicularibus corpusculorum longe stipitatorum applicitum. Stigma 5-gonum. Folliculi divaricati, tenues, subteretes, subcostati. Semina comosa.—Suffrutex volubilis, glaber. Folia opposita, nitidula. Cymæ laxe ramosæ, ad apices ramorum breviter pedunculatæ. Flores parvi, pedicellati. Bracteæ minutissimæ.

T. Sphenophylla, Balf. fil. Plate XXVIII.

Caulibus tenuibus; foliis membranaceis, breviter petiolatis, lanceolatis acuminatis v. oblanceolatis, basi cuneatis, $1\frac{1}{2}-2\frac{1}{2}$ poll. longis (petiolo excluso $\frac{3}{8}$ poll.), $\frac{1}{3}-\frac{1}{2}$ poll. latis, integris, nitidis, subtus pallidioribus, penninerviis; cymis paucifloris, pedunculis $\frac{1}{6}$ poll. longis, bracteis deciduis, pedicellis $\frac{1}{3}-\frac{1}{2}$ poll. longis; corollæ lobis $\frac{1}{8}$ poll. longis; stipite corpusculorum appendicem duplo excedente; foiliculis fusco-nigris, glabris, 2–3 poll. longis, $\frac{1}{12}-\frac{1}{8}$ poll. latis; seminibus compressis, bisulcatis, $\frac{1}{8}$ poll. longis.

This twiner is fairly abundant, and is also found on Frigate Island. Its nearest congener is *Brachylepis*, W. and A., a monotypic East Indian genus, from which the elongated corona scales, its inflorescence, and the arrangements of the stamens exclude it. The Madagascar monotypic *Harpanema*, Done, is also not far removed,

but the same characters separate them. I only obtained the plant in fruit, and the flowers are described from specimens sent home by Bouton.

Plate XXVIII. Fig. 1. Flower bud opened. 2. Flower expanded with a portion of one of the corona scales removed. 3. Stamen seen from the inner side. 4. Flower with corolla, corona, and stamens removed. 5. Corpuscles. 6. Follicles.

Sarcostemma viminale, R. Br.; DC. Prod. viii. 538. Nom. vulg. Liane calé. Plate XXIX. Figs. 1-3.

Very abundant. The Rodriguez plant differs slightly from the type in having puberulous not glabrous receptacles.

Plate XXIX. Fig. 1. Portion of a stem with inflorescence. 2. Flower expanded. 3. Flower still more magnified and with corolla and portion of one of the seales of the inner corona removed.

Sarcostemma Odontolepis, Balf. fil. Plate XXIX. Figs. 4-10.

Planta aphylla scandens v. decumbens, caulibus teretibus, glabris, carnosis, ad nodos articulatis ibique squamis minutis oppositis in loco foliorum instructis; umbellis solitariis ad nodos sessilibus breviterve pedunculatis v. terminalibus; receptaculo paleis vestito; floribus breviter pedicellatis; calycis segmentis ovatis v. suborbicularibus, concavis, margine ciliatis, extus puberulis; corolla profunde lobata, laciniis oblongo-ellipticis glabris; corona exteriore corollæ adnata profunde 5-partita, lobis tridentatis, singulo squamæ interiori adhærente, dente centrali maximo; corona interiore exteriorem triplo excedente, segmentis superne saccatis dolabriformibus gynostegio subæquilongis; stigmate apiculato, obscure bilobato, umbilicato.

Pedicelli subpuberuli, $\frac{1}{6}$ - $\frac{3}{8}$ poll. longi: Corollæ laciniæ $\frac{1}{6}$ poll. longæ, calyce quadruplo longiores.

Nom. vulg. Liane calé.

This plant resembles the foregoing species in almost every point save in the flower, and therein it differs in the corona. In place of the sinuose-dentate cyathiform outer corona, characteristic of Sarcostemma, and well seen in S. viminale, R. Br., the outer corona consists of 5 scales, distinct except at the very base, each tridentate, the central tooth being largest. These are connected with the inner corona scales, which are twice as long as the outer scales, but shorter than the gynostegium, whereas in S. viminale, R. Br., the inner scales are thrice the length of the outer, and are longer than the gynostegium. This is a very important difference in this family. But on examining a large series of flowers, I discovered one in which there was an arrangement of the corona exactly half-way between the two forms I have described. The cyathiform outer corona of S. viminale, R. Br., was divided about half-way down into five tridentate lobes, and the relations of length between outer and inner scales was intermediate. This then connects the two forms. It is then a question, have we to deal with two or one species? I rather incline to the former view, that there are two distinct species, for we find certain other

minute differences between them, and at Rodriguez I was led to suspect there might be two species, from a certain difference in facies of the plant in different situations. However we consider them, the character of the genus must be slightly emended. Should they turn out to be one species, we have here a species varying beyond the generic limits. Acting on the opinion expressed, I have described a new species of *Sarcostemma*.

Plate XXIX. Fig. 4. Portion of a stem bearing inflorescence. 5. Unopened flower bud. 6. Flower expanded and magnified. 7. Flower still more magnified and with corolla and portion of the scales of inner corona removed. 8. Pollen-masses. 9. Gynostegium. 10. Ovary in transverse section.

Two species of Asclepiadaceous twiners are occasionally met with, but as I only obtained them in leaf, and they are unlike any known Mascarene or Seychelles species, it is impossible to determine them.

LOGANIACEÆ.

Buddleia madagascariensis, Lam.; DC. Prod. x. 447; Bot. Mag. t. 2824.

The leaves of a plant, which seems to be this Mascarene species, occurs near the dwellings of the early settlers.

BORRAGINACEÆ.

Tournefortia argentea, Linn. f.; DC. Prod. ix. 514. Nom. vulg. Voultie.

Common on the coralline limestone, on the shore of Rodriguez, and on most of the coral islets.

Heliotropium (Heliophytum) indicum, Linn.; DC. Prod. ix. 556; Bot. Mag. t. 1837. Nom. vulg. Herbe à papillons.

An occasional weed. The juice of this is said to be an excellent vulnerary, and also the infusion as a wash for ulcers.

Trichodesma zeylanicum, R. Br.; DC. Prod. x. 172; Bot. Mag. t. 4820. Nom. vulg. Madame Tombé.

A common weed.

CONVOLVULACEÆ.

Argyreia tiliæfolia, Benth. et Hook. Gen. Pl. ii. 869.

Is very common.

Ipomœa paniculata, R. Br. Prod. 486; Bot. Reg. t. 62; Batatas paniculata, Choisy in DC. Prod. ix. 339.

A plant I obtained in leaf, which seems to be this, is common.

Ipomœa purpurea, Lam.; Pharbitis hispida, Choisy in DC. Prod. ix. 341.

Is not common.

Ipomœa fragrans, Boj. MSS.; Pharbitis fragrans, Boj.; Choisy in DC. Prod. ix. 341.

A plant in leaf resembling this occurs on Gombrani and some of the other coral islets. I never found this on the main island.

Ipomea Nil, Roth.; Pharbitis Nil, Choisy in DC. Prod. ix. 343.

On the coast in many places, and on the coral islets.

Ipomea (Calonyction) muricata, Roxb. Fl. Ind. 499 (non Cav.); Choisy in DC. Prod. ix. 353.

Very common.

Ipomœa Batatas, Lam. Nom. vulg. Patate or Batat.

Many varieties are cultivated, and it is the chief staple of food on the island, being easily grown, and not affected by hurricanes.

Ipomœa Pes-Capræ, Sw.; Choisy in DC. Prod. ix. 349. Nom. vulg. Batatran.

Very common on the shores. In English Bay it grows mixed with *Canavalia obtusifolia*, DC., and it is difficult at sight to discover the one from the other. A curious example of mimicry.

Ipomœa peltata, Choisy in DC. Prod. ix. 359.

Only found at the top of valley of Rivière Coco, where it grows in great profusion, covering the trees.

Ipomœa Turpethum, R. Br.; Choisy in DC. Prod. ix. 360; Bot. Reg. t. 279. Occurs pretty frequently in the valleys.

Ipomœa tuberosa, Linn.; Choisy in DC. Prod. ix. 362; Bot. Reg. t. 768.

I have leaves of a twining plant very probably this species. It grows frequently in the valleys.

Ipomea obscura, Ker; Choisy in DC. Prod. ix. 370; Bot. Reg. t. 239.

Very common on the shore.

Ipomea leucantha, Jacq.; Choisy in DC. Prod. ix. 382.

Very common on the coralline limestone.

Ipomœa palmata, Forsk.; Choisy in DC. Prod. ix. 386.

Common in the valleys.

Dichondra repens, Forst.; Choisy in DC. Prod. ix. 451.

Only on coralline limestone towards the south-west of the island. Usually along with *Hypoestes inconspicua*, Balf. fil. and *Selaginella Balfouri*, Baker.

SOLANACEÆ.

Lycopersicum cerasiforme, Dunal in DC. Prod. xiii. 1. 26. Nom. vulg. Pomme d'amour.

Is cultivated and is seen near habitations occasionally.

Solanum nigrum, Linn.; Dunal in DC. Prod. xiii. 1. 50. Nom. vulg. Brède martin.

A very common plant, much used by the inhabitants as a brède.

Solanum indicum, Linn.; Dunal in DC. Prod. xiii. 1.309; Wt. Ic. t. 346. Nom. vulg. Petite anghive.

Is not common.

Solanum macrocarpon, Linn.; Dunal in DC. Prod. xiii. 1. 353. Nom. vulg. Bringelle.

A specially Mascarene form not very common on the island.

Solanum Melongena, Linn.; Wt. Ill. t. 166. Nom. vulg. Gros bringelle.

In the vicinity of dwellings.

Solanum sanctum, Linn.; Dunal in DC. Prod. xiii. 1.369. Nom. vulg. Bringelle marron.

Very common in the vicinity of dwellings.

Physalis Peruviana, Linn.; Dunal in DC. Prod. xiii. 1. 440. Nom. vulg. Pocke-pocke.

Common.

Capsicum frutescens, Linn.; Dunal in DC. Prod. xiii. 1. 413. Nom. vulg. Petit piment.

Abundant everywhere.

Capsicum cordiforme, Mill.; Dunal in DC. Prod. xiii. 1. 427. Nom. vulg. Gros piment.

Not common.

Leguat speaks of certain trees "that bear a sort of pepper, and are not a little "like plum trees of a moderate size; their leaves are much like that of the jessa-"mine; they bear their fruit in little bunches, and it did very well in our sauces." I suppose it is to one of these species of *Capsicum* he refers.

Lycium tenue, Willd., var. Sieberi, Dunal in DC. Prod. xiii. 1. 515.

Usually on the coralline limestone near the sea. Specially abundant on the coral islets. In one spot at the top of the valley Rivière de l'Est, I found this plant inland, and it there had lost its stunted, short-branched, rigid character, and formed a widely-spreading, long and slenderly-branched plant. The leaves also were larger and less fleshy. The description of this species answers my specimens, but they differ rather from the specimens named *L. tenue*, Willd., in the herbarium at Kew. It is a Cape species, but the variety *Sieberi* is Mauritian. I have seen no type specimen of the variety. The inland form of the Rodriguez plant most resembles the Kew specimens of *L. tenue*, Willd.

Datura alba, Nees; Dunal in DC. Prod. xiii. 1. 541; Wt. Ic. t. 852. Nom. vulg. Herbe du diable.

A frequent weed.

Nicotiana Tabacum, Linn.; Dunal in DC. Prod. xiii. 1. 557; Hayne Gewächse 12. t. 41. Nom. vulg. Tabac.

Cultivated and in some places now grows spontaneously.

SCROPHULARIACEÆ.

Herpestis Monnieria, H.B.K.; Benth. in DC. Prod. x. 400; Bot. Mag. t. 2557. Common in the streams towards the west end of the island where the woods have been destroyed and the streams pass over barren plain.

ACANTHACEÆ.

Barleria cristata, Linn.; Nees in DC. Prod. xi. 229; Wt. Ic. t. 453; Bot. Mag. t. 1615.

Not at all uncommon near habitations and also in some of the more frequented valleys.

Barleria Prionitis, Linn.; Nees in DC. Prod. xi. 237; Wt. Ic. t. 452.

Only found in the Champ de Roi near Port Mathurin, but there abundant.

Hypoestes rodriguesiana, Balf. fil. Plate XXX.

Herba parva, ramosissima, glabra, ramis crassis lignosis; foliis longe petiolatis ovato-lanceolatis, inferne deltoideis, integris, subcoriaceis, substrigulosis; racemis breviter pedunculatis in axillis foliorum confertis, bracteis obovatis v. oblanceolatis capitulis unifloris oppositis arcte dispositis; involucro tubuloso, subventricoso, tetraphyllo, ad medium discreto, lobis inæqualibus, exterioribus longioribus ovato-acutis, extus plaga lineari lateraliter notatis, interioribus lanceolatis brevioribus; calyce brevi, extus hispidulo, laciniis tubo brevioribus, ciliatis; corolla profunde bifida, pilosa, labiis tubo subæquilongis, superiore oblongo, inferiore tridentato v. trifido; staminibus 2, filamentis exsertis; ovario oblongo, compresso, glabro; stylo filiformi, exserto.

Herba humilis, cortice albido. Folia $1-1\frac{1}{2}$ poll. longa; petiolus $\frac{1}{4}-\frac{1}{2}$ poll. longus. Capitula uniflora, opposita decussataque, brevissime pedunculata; involucrum $\frac{3}{4}$ poll. longum, lobis integris hispidulis. Calyx $\frac{1}{6}$ poll. longus. Corolla uncia longior, eburnea, labio superiore integro obtuso v. acuto. Filamenta glandulosa; anthera oblonga.

A rare plant and not far removed from the Madagascar *H. Bojeriana*, DC. Prod. xi. 507, but distinguished by its densely clustered racemes, unequally lobed involucre, and large flowers. I only found one plant on the top of Malartic, one of the highest points on the island, growing in a very exposed situation, which may account for the dwarfed growth, for it did not rise more than 6 inches from the ground.

Plate XXX. Fig. 1. Flower bud enclosed in involucre. 2. Involucre opened out with calvx included. 3. Calvx spread out. 4. Flower expanded. 5. Corolla

opened out with andrecium and gynæcium. 6. Stamen detached. 7. Transverse section of ovary. 8. Vertical section of ovary.

Hypoestes inconspicua, Balf. fil.

Herba tenuis, caule repente valde articulato, ad nodos radicante; foliis oppositis distantibus, ovalibus v. obovatis, obtusis v. subacutis, strigosis, integris, inferne in petiolum subæquilongum longioremve attenuatis; capitulis solitariis axillaribus subsessilibus, bracteis nullis; involuero unifloro, strigoso tetraphyllo, laciniis linearilanceolatis inæqualibus usque ad medium connatis, exterioribus dimidio longioribus; calyce brevissimo, lobis lanceolatis acuminatis, involuero multo breviore; corolla involuero longiore; cæt. ign.

Caulis ramosissimus, glaber sed extremitate strigosus. Folia $\frac{1}{6}$ - $\frac{1}{4}$ poll. longa; Petiolus $\frac{1}{4}$ - $\frac{5}{12}$ poll. longus. Involucrum $\frac{1}{4}$ poll. longum. Calyx $\frac{1}{24}$ poll. longus.

A very small plant discovered on one small patch of coralline limestone at the western end of the island growing along with *Dichondra repens*, Forst., and *Selaginella*, *Balfouri*, Baker. It has some affinity with *H. serpens*, R. Br.; Nees in DC. Prod. xi. 501, and *H. Alsine*, Nees in DC. Prod. xi. 502, but is distinguished by its non-pubescent involucre and very minute calyx.

MYOPORINEÆ.

Myoporum mauritianum, A. DC. Prod. xi. 711.

A very curious Mascarene plant. Rare in Rodriguez, only a few plants having been seen on the coralline limestone on the shore in Anse Coton at the east end of the island. A. De Candolle described the species from Mauritian specimens in Sieber's herbarium, including it doubtfully in *Myoporum*. For whilst most characters place it there it is peculiar in having a distinctly 4-lobed stigma. The Rodriguez plant differs from De Candolle's description in its 5, not 4-lobed corolla.

VERBENACEÆ.

Nesogenes decumbens, Balf. fil. Plate XXXI.

Herba diffusa perennis, ramis laxis, oppositis v. suboppositis, teretibus, tenuibus, divaricatis, humifusis, glabris sed versus extremitatem biseriatim pilosis; foliis oppositis, lanceolatis v. rhomboideis acutis, integris, margine ciliatis, basi in petiolum brevem attenuatis, siccitate non nigrescentibus; floribus in cymas 1–2-floras axillares dispositis, pedicellis brevissimis pubescentibus; calyce amplo, $\frac{1}{4}$ poll. longo, alte 5-dentato, dentibus acutissimis crenatis, extus intusque glandulosis; corollæ lobis subæqualibus, rotundatis, tubo quintuplo v. sextuplo brevioribus; antheris oblongis; fructu lævi compresso, apice hispido, basi glabro, stylo mucronato calyce cineto.

Caulis ab basi ramosus. Folia breviora $\frac{1}{4} - \frac{3}{4}$ poll. longa, $\frac{1}{4} - \frac{1}{3}$ poll. lata; petiolus $\frac{1}{8} - \frac{1}{6}$ poll. longus. Calyx $\frac{1}{4}$ poll. longus, laciniis tubo æquilongis. Anthera oblonga. Ovarium ovoideum, stylo filiformi incluso.

Only found in one place, on a patch of coralline limestone about $\frac{3}{4}$ of a mile from the sea, at the west end of the island, close to where *Hypoestes inconspicua*, Balf. fil., and *Dichondra repens*, Forst., were found.

A most interesting plant belonging to a hitherto Polynesian monotypic genus. The other species, N. Euphrasioides, Hook. and Arn., was first described from Whitsunday Island in Botany of Beechey's Voyage 67, and there doubtfully referred to Myoporum. De Candolle, Prod. xi. 703, constituted the genus Nesogenes for that species including it in Myoporaceæ. But it is now referred by Bentham and Hooker, Gen. Plant iii. 1141, to Verbenaceæ and placed near to Spartothamnus. In Kew herbarium are specimens from Sow Island, Chain Island, and one or two islands of the Dangerous Archipelago, so that the species is probably common there. But it is curious that another species should occur so sparingly in Rodriguez, an island almost antipodal.

Plate XXXII. Fig. 1. Expanded flower. 2. Corolla and androccium spread out. 3. Detached stamens. 4. Gynæcium. 5. Apex of style. 6. Fruit enclosed in calyx. 7. Fruit removed from calyx. 8. Transverse section of fruit. 9. Vertical section of fruit. All magnified.

A species of *Lantana* was shown to me in Mauritius by Mr. Horne, who informed me it came from Rodriguez. I found no such plant there, which is strange, as species of *Lantana* usually grow so freely and spread so widely it is not likely it should be overlooked.

Stachytarpheta indica, Vahl; Schauer in DC. Prod. xi. 564. Nom. vulg. Queue des rats.

A very common weed. The juice is said to have a styptic action, and is often used for wounds.

Premna serratifolia, Linn.; Schauer in DC. Prod. xi. 632. Nom. vulg. Bois sureau.

Not at all uncommon.

Clerodendron laciniatum, Balf. fil. Plate XXXII.

Frutex v. arbor parva; foliis oppositis, petiolatis, coriaceo-membranaceis, poroso-punctatis, adultis ovatis v. ovato-oblongis, acutis, basi subdeltoideis, integris, glabris, subtus pallidis, juvenilibus filiforme-tripinnatipartitis segmentis distantibus puberulis ligulatis obtusis, per formas varias in adultam transeuntibus; cymis axillaribus, paucifloris, bis trifidis, patentibus, breviter pedunculatis, bracteolis minutissimis; calyce cupuliformi truncato, ore integro v. obscure lobato, glabro, demum patulo; corolla infundibuliformi calycem sextuplo excedente, tubo intus resino-papillato, laciniis obtusis tubo brevioribus; genitalibus breviter exsertis.

Rami teretes, cinerei, apice puberuli. Folia heteromorpha graveolentia, 2–3 poll. longa; petiolus $\frac{1}{2}$ –1 poll. longus. Cymi corymbosi, 2–3 poll. diam.; pedunculi $\frac{1}{6}$ – $\frac{5}{12}$ poll. longi; pedicelli breves $\frac{1}{12}$ – $\frac{1}{8}$ poll. longi. Calyx $\frac{1}{12}$ poll. longus.

Nom. vulg. Bois cabri.

A small endemic fairly abundant tree exhibiting an extreme form of heterophylly well represented in the plate. It is very closely allied to the Mauritian and Bourbon species, *C. heterophyllum*, R. Br., but its larger pinnatipartite leaves on the young plant and relative size of the parts of the flower sufficiently distinguish them.

This small tree is easily recognised by its disagreeable odour, which has occasioned its popular name. The wood is very white and close-grained, but is not put to great use, save for burning, probably on account of the odour. I have no doubt this is the tree to which Leguat refers when he says, "There is a tree we call the "Nasty tree because it stunk. 'Tis the best wood of all for carpenter's use, but "'twas of no service to for us it stinks so, that it makes all the places about "it smell of it, and the smell is very offensive." Some have thought he refers to the Bois puant (Fætidia mauritiana, Lam.), but the odour of that tree though exceedingly objectionable is only apparent when the sun shines upon it, and is evanescent, and not at all like the persistent odour which the Bois cabri emits.

Plate XXXII. Fig. 1. Twig with flowers. 2. Leaves from adult, typical form. 3. Leaf from a young tree. 4. Leaf from a still younger tree. 5. Twig with leaves from a very young tree, or from an adventitious shoot. 6. Flower bud. 7. Expanded flower. 8. Corolla and androccium opened out. 9. Anthers detached. 10. Gynæcium enclosed in calyx. 11. Transverse section of immature fruit. 12. Vertical section of immature fruit. 1, 2, 3, 4, 5, natural size. Rest magnified.

LABIATÆ.

Ocimum canum, Sims; Benth. in DC. Prod. xii. 32; Bot. Mag. t. 2452. A few plants in the vicinity of Port Mathurin.

Salvia coccinea, Linn.; Benth. in DC. Prod. xii. 343.

Is very common in the valleys.

Stachys, sp.

A plant which is apparently a species of *Stachys* was found in leaf only in the valley of Rivière Grande des Bamboux (Cascade).

Leonurus Sibiricus, Linn.; Benth. in DC. Prod. xii. 501.

Frequently found near dwellings.

PLANTAGINEÆ.

Plantago major, Linn.; Done in DC. Prod. xiii. 1. 694; Eng. Bot. 2nd edit. t. 1162.

This occurs abundantly near the top of Valley Rivière Baleine on the south side of the island along with a species of Rumex.

NYCTAGINACEÆ.

Mirabilis Jalapa, Linn.; Choisy in DC. Prod. xiii. 2. 427; Bot. Mag. t. 371.

Nom. vulg. Belle de nuit.

Occasionally found near habitations.

Pisonia viscosa, Balf. fil. Plate XXXIII.

Arbor inermis; foliis petiolatis, ovatis v. obovatis, obtusis v. acutis v. breviter cuspidatis, basi deltoideis, membranaceis, subrepandis, primum subpuberulis demum scaberulis, siccitate nigrescentibus; petiolo tenui; 5 panicula corymbosa in axillis foliorum terminalium oriente, brunneo-pubescente, densa, pedunculo compresso, bracteolis minutis deciduis; perianthio infundibuliformi, extus piloso, breviter 5 dentato, dentibus reflexis; staminibus 10 exsertis; 9 panicula laxe lateque patenti, pedicellis erecto-patentibus; perigonio elongato, 5-angulato, angulo singulo tuberculis brevibus uncinatis glandulosis seriatim instructo.

Arbor parva, ramis validis. Folia 3-4 poll. longa, $1\frac{1}{2}$ -2 poll. lata; petiolus $\frac{1}{4}$ - $\frac{1}{2}$ poll. longus. 5 Panicula $1\frac{1}{2}$ - $2\frac{1}{2}$ poll. diam., folia superans; pedunculus $\frac{1}{6}$ poll. longus; bracteolæ subulatæ glanduloso-pubescentes; flores subsessiles. Perianthium $\frac{1}{4}$ poll. longum, tubo extus papillis subrigidis erectis 5-seriatis instructo. Stamina basi coalita; anthera rotundata. Ovarium breviter stipitatum; stylus crassus; stigma capitatum subfimbriatum. Panicula 6-8 poll. diam.; pedicelli $\frac{1}{6}$ - $\frac{1}{2}$ poll. longi. Perigonium $\frac{1}{2}$ poll. longum. Fructús loculus semine impletus.

Nom. vulg. Bois mapou.

This tree is very abundant on a small ledge of coralline limestone on the west side of Frigate Island, where it is the favourite nesting place of the Fou, but it is not so abundant on the main island. The wood is very soft, and of no practical value. The plant has some affinity with P. ovalifolia, DC. Prod. xiii. 2. 441, a Mauritian species of which the Mauritian P. lanceolata, DC. Prod. xiii. 2. 442, is also probably a form, but is distinguished by the structure of the flowers, and the bristly fruit with the seed filling up the whole cavity.

Plate XXXIII. Fig. 1. Male flowers. 2. The same cut open. 3. Portion of female inflorescence. 4. Single female flower. 5. The same more enlarged in transverse section. 6. Embryo. Fig. 3 nat. size. Rest enlarged.

Berhaavia diffusa, Linn.; Choisy in DC. Prod. xiii. 2. 452.

Widely spread in the island; when growing on the coralline limestone it has a more stunted and woody habit.

POLYGONACEÆ.

Rumex crispus, Linn.; Meissn. in DC. Prod. xv. 44.

A plant exceedingly closely allied to this, if it be not identical, grows abundantly with *Plantago major*, Linn., in the valley of Rivière Baleine.

AMARANTHACEÆ.

Amaranthus tristis, Linn.; Moq. in DC. Prod. xiii. 2. 260; Wt. Ic. tt. 514, 713. Nom. vulg. Brède malabar.

Very common near habitations, and is very much used as a brède by the inhabitants.

Ærua congesta, Balf. fil.

Herba perennis, dense cæspitosa, ramosissima, pulvinata, ramis firmis lignosis humifusis; foliis alternis petiolatis, obovato-spathulatis, obtusis v. acutis, subcoriaceis, glabris, junioribus subtus pilosis; spicis oblongis v. subrotundatis, in axillis villosis foliorum superiorum sessilibus solitariis erectis, bracteolis deltoideis perianthio brevioribus, glabris; perianthii segmentis oblongo-lanceolatis uninerviis, exterioribus duobus latioribus pilosiusculis, interioribus tribus angustioribus denseque pilosis; antheris rotundis; staminodiis minutissimis; utriculo compresso suborbiculari glabro; semine inæqualiter reniformi, minute tuberculato, margine obtuso.

Herba pusilla, ramis patentibus usque ad 2–3 poll. Folia $\frac{1}{8}$ – $\frac{1}{4}$ poll. longa. Spica $\frac{1}{8}$ poll. longa. Perianthii segmenta $\frac{1}{24}$ poll. longa bracteolas albidas dimidio excedentia. Semen nitidum nigrum.

A small tufted plant growing only on coralline limestone, along with such plants as *Abrotanella rhynchocarpa*, Balf. fil., and *Oldenlandia Sieberi*, Baker var. *congesta*, and frequent on the coral islets of the reef.

Achyranthes aspera, Linn.; Moq. in DC. Prod. xiii. 2. 314; Wt. Ic. 1777. Nom. vulg. Herbe l'argent.

Very common weed.

Achyranthes argentea, Lam.; Moq. in DC. Prod. xiii. 2. 315; Sibth. Fl. Græc. t. 244. Nom. vulg. Herbe l'argent.

Occurs on the coralline limestone near the shore and on the coral islets. Perhaps is a mere form of the foregoing. An infusion of the root of Herbe l'argent is said to be of great service as a cure for cough. The juice of the leaf is a vulnerary of great repute.

Alternanthera sessilis, R. Br.; Moq. in DC. Prod. xiii. 2. 357; Wt. Ic. t. 727. A common weed.

CHENOPODIACEÆ.

Chenopodium ambrosioides, Linn.; Moq. in DC. Prod. xiii. 2. 72. Wt. Ic. t. 1786.

Is an occasional weed in waste ground in the vicinity of Port Mathurin.

BASELLACEÆ.

Basella rubra, Linn.; Moq. in DC. Prod. xiii. 2. 222. Nom. vulg. Brède d'angole. Is cultivated and used much as a brède.

LAURACEÆ.

Persea gratissima, Gärtn.; Meissn. in DC. Prod. xv. 1. 52; Wt. Ic. t. 1823; Bot. Mag. t. 4580. Nom. vulg. Avoca.

A few trees at the top of valley Rivière Palmiste, near the site of some old dwellings.

Tetranthera laurifolia, Jacq. Hort. Schæn. t. 113; Meissn. in DC. Prod. xv. 1. 178; T. apetala, Roxb. Cor. t. 147. Nom. vulg. Bois Zozo.

Planted near Port Mathurin.

Cassytha filiformis, Linn.; Meissn. in DC. Prod. xv. 1. 255; Wt. Ic. t. 1847. Nom. vulg. Liane sans fin.

Very abundant, covering the ground and trees in many places.

URTICACEÆ.

Obetia ficifolia, Gaud. Atl. Bon. t. 82. Nom. vulg. Figue marron.

Occasionally found in the upper parts of the valleys.

Pilea Balfouri, Baker Fl. Maur. Seych. 276. Plate XXXIV.

Herba parvula monoica perennis glaberrima, caule brevi 4-gono basi cæspitose ramoso, ramis patentibus oppositis, exsiccatis cystolithiferis; stipulis deltoideis minutissimis; foliis oblongis rhomboideis, acutis v. acuminatis, basi cuneatis integrisque, apice profunde inciso-crenatis, triplinerviis, nervis usque ad apicem productis, laminis exsiccatis membranaceis, paginis utrisque cystolithis linearibus suffultis; cymis patentibus, multifloris, breviter pedunculatis, axillaribus, petiolo brevioribus; floribus breviter pedicellatis; 5 perianthio bilobato, lobis concavis subcucullatis acutis; 2 achæniis lævibus, acute marginatis, compressis, ovoideis, vix segmentum intermedium perigonii superantibus.

Rami late patentes. Folia 1-4 poll. longa, $\frac{3}{4} - \frac{1}{4}$ poll. lata, opposita, internodiis longis usque ad 2 poll.; petiolus $\frac{3}{4} - 1\frac{1}{4}$ poll. longus. † Alabastrus $\frac{1}{16}$ poll. longus, exsiceatus cystolithiferus. Calycis lobi $\frac{1}{24}$ poll. longi.

Common in the shady and moist spots in the upper part of valleys. This is a near ally of *P. cunciformis*, Wedd. in DC. Prod. xvi. 1. 133, a Mauritian species, but is distinguished by its habit, longly petiolate leaves, and spreading inflorescence.

Plate XXXIV. Fig. 1. Portion of male inflorescence. 2. Male flower opened. 3. Perianth of female flower. 4. Female flower.

MOREÆ.

Artocarpus integrifolia, Linn. Suppl. 412; Roxb. Cor. t. 250; Bot. Mag. tt. 2833, 2834. Nom. vulg. Jacque.

Frequent near habitations. There are said to be two varieties, *Jacque labou* and *Jacque blanc*, but I never found any plant which could be considered a variety.

Ficus consimilis, Baker Fl. Maur. Seych. 286. Nom. vulg. La fouche.

Is very common. The bark is said to be astringent and the juice good for warts. The bast layers make excellent cordage which is much used. The fruit is not edible. The wood is very hard and tough.

Ficus rubra, Vahl. var. amblyphylla, Baker Fl. Maur. Seych. 285. Nom. vulg. La fouche rouge or La fouche petite feuille.

Common. The fruit of this tree is said to be edible. I have followed Baker, l. c., regarding this plant and the preceding. My specimens are not sufficient to allow of a very satisfactory determination.

Leguat speaks of "a wonderful tree whose branches are so round and so thick "its impossible for the sunbeams to penetrate through it. Some of these trees are so big that two or three hundred people may stand under them and be sheltered from the sun or the weather. The vast extent of it is occasioned thus. Some of the great branches naturally tend downwards, and reaching the ground, take root and become new trunks themselves which make a sort of little forest."

He refers evidently to a species of *Ficus*, and gives a figure of it, but I do not know to what species, certainly neither of those above mentioned, for he describes it more particularly:—

"The Rodrigo Kastas (for I sought to keep the Indian name at least in the Indies) bear leaves as broad as one's hand, pretty thick and somewhat like that of a lilach or heart in shape, they are softer than satin to touch. Their flower is white and smells well. Their fruit is red and round, and as big as a black damask plum. Their skin is hard and within it is a thin seed, a little like that of a fig. The fruit is not prejudicial to health, but 'tis insipid. The batts commonly feed on it, and multitudes of them nest in the tufted branches of the tree."

I found no species which would answer this description, which if accurate indicates a species formerly extant, now extinct, or at least of which all the large individuals are destroyed, only young and inconspicuous ones left.

Mr. Horne showed me in the Botanic Gardens at Pamplemousses, Mauritius, a third species of *Ficus* which he said Mr. Duncan got from Rodriguez, but I do not know what this is.

EUPHORBIACEÆ.

Euphorbia pilulifera, Linn.; Boiss. in DC. Prod. xv. 2. 21.

A common weed.

Euphorbia thymifolia, Burm.; Boiss. in DC. Prod. xv. 2. 47.

Common specially on coralline limestone.

Euphorbia daphnoides, Balf. fil.

Suffrutex caule tenui, ramulis lignosis teretibus; foliis ad apicem ramulorum confertis, breviter petiolatis, oblanceolatis v. anguste oblongis, obtusis, mucronatis,

tenuiter coriaceis, glabris, cito deciduis, exstipulatis; cymis terminalibus, peduncuatis, bracteis 2 magnis coriaceis ovalibus v. suborbicularibus mucronatis v. retusis v. emarginatis; involucris campanulatis, breviter pedicellatis, glabris, lobis brevibus, glandulis 5 sæpe rubris rotundatis v. lunatis poroso-punctatis integris; stylo brevi; capsula glabra sub-depressa trisulcata transverso diametro majore, coccis paullum compressis; semine glabro, irregulariter papillato, ovoideo.

Suffrutex glaber, habitu Daphnes. Folia 2-4 poll. longa, $\frac{1}{2}$ - $\frac{3}{4}$ poll. lata. Bracteæ ultimæ $\frac{1}{4}$ - $\frac{1}{8}$ poll. longæ; pedicelli glabri, $\frac{1}{4}$ poll. longi. Involucrum $\frac{1}{2}$ poll. longum. Capsula $\frac{1}{4}$ poll. diam. Stylus $\frac{1}{12}$ poll. longus. Semen $\frac{1}{12}$ poll. longum.

Not a common plant. Only found in the valley Rivière de l'Est, and on the flanks of the Mount au Sel. It forms a very handsome undershrub and of it there are two varieties, one with red glands in the flower, whilst in the other they are uncoloured.

Euphorbia peploides, Gouan; Boiss. in DC. Prod. xv. 2. 141.

In waste ground near dwellings.

Securinega durissima, Gmel.; Mull. Arg. in DC. Prod. xv. 2. 447.

Nom. vulg. Bois dur.

A tree, apparently referable to this Mascarene species is very abundant on the island. I only obtained specimens in leaf, which are therefore not fully determinable.

Phyllanthus Niruri, Linn.; Mull. Arg. in DC. Prod. xv. 2. 406.

Nom. vulg. Ananellé.

Common around Port Mathurin.

Phyllanthus dumetosus, Poir.; Mull. Arg. in DC. Prod. xv. 2. 398.

Abundant in Anse Baleine. This is one of the plants Commerson brought from Rodriguez, where it is endemic.

Phyllanthus Casticum, Willem.; Mull. Arg. in DC. Prod. xv. 2. 348.

Nom. vulg. Castique.

Not uncommon in many places. Many forms of this Mascarene tree occur, varying slightly in the leaves, but all referable to the one type. Is said to be a powerful astringent.

Manihot utilissima, Pohl.; Mull. Arg. in DC. Prod. xv. 2. 1064; Jatropha Manihot, Bot. Mag. 3071.

Nom. vulg. Manioc. Cassava.

Commonly cultivated. There are several varieties which grow well when planted in a dry soil, otherwise the roots rot. It is always planted in sheltered situations on the hill slopes. Some varieties ripen in 3 months, others not for 14. The roots are boiled whole, or ground down and made into small round cakes known as *Coup de poing manioc*, or large flat ones called *Gullet manioc*.

Ricinus communis, Linn.; Mull. Arg. in DC. Prod. xv. 2. 1017; Bot. Mag. t. 2209. Nom. vulg. Tang-Tang.

Forms dense thickets in many places, and in some places produces a spiny fruit; in other places the fruit is quite smooth.

Claoxylon parviflorum, A. Juss.; Mull. Arg. in DC. Prod. xv. 2. 785.

A tree greatly resembling this Mascarene species occurs on the island, but as I only obtained it in leaf, it is not fully determinable.

PIPERACEÆ.

Peperomia hirta, Balf. fil.

Herba repens pilosa, caule simplici v. ramoso, e nodis radicante; foliis oppositis, petiolatis, ellipticis v. oblongo-ellipticis v. obovatis, 5-nerviis, utrinque villosis, nervulo obscuro juxta marginem currente, petiolo villoso. Cæt. ign.

Caules pedali minores $\frac{1}{12}$ poll. crassi. Folia $\frac{1}{4}$ poll. longa; petiolus $\frac{1}{3}$ - $\frac{1}{4}$ poll. longus.

Discovered within a few yards of the summit of Mount Limon, and nowhere else seen. Its nearest affinity is with *P. elliptica*, Dietr.; C.DC. in DC. Prod. xvi. 1. 440, a Mauritian species from which its pilose character sufficiently separates it. Of this plant I have only leaves, and I am indebted to M. Casimir de Candolle for the specific determination.

Peperomia reticulata, Balf. fil. Plate XXXV.

Herba carnosa repens, caule simplici v. uniramoso, in parte inferiore e nodis radicante, versus apicem adscendente; foliis oppositis petiolatis, summis ternis, ellipticorhomboideis, apice emarginulatis v. acutis, utrinque glabris, 5-nerviis, et reticulatovenulosis, nervulo obscuro juxta marginem currente; amentis solitariis, axillaribus, folia terminalia superantibus, breviter pedunculatis, bracteis subrotundato-peltatis, breviter stipitatis; ovario globoso immerso, stigmate umbilicato, prominente, glabro.

Caules $\frac{1}{2}$ -1 ped. longi, $\frac{1}{8}$ - $\frac{1}{6}$ poll. crassi. Folia 1-2 poll. longa; petiolus $\frac{1}{6}$ - $\frac{5}{12}$ poll. longus. Amenta 2-4 poll. longa, $\frac{1}{8}$ poll. crassa; pedunculus glabrus petiolum superans. Fructus $\frac{1}{24}$ poll. diam.

A small trailing plant not uncommon in the shady parts of the valleys. It is nearly allied to an Indian species, *P. dindygulensis*, Miq.; C.DC. in DC. Prod. xvi. 1. 442, but differing in the glabrous leaves, shorter petioles, and non-puberulous stigma.

Plate XXXV. Fig. 1. Portion of spike. 2. Bract. 3. Flower. 4. Stamen detached. 5. Fruit in vertical section. All magnified.

Peperomia Rodriguezi, Balf. fil.

Herba ramosissima, carnosa, repens, caulibus ad nodos radicantibus subpilosis;

foliis oppositis, petiolatis, obovato-ellipticis, basi cuneatis, obtusis utrinque glabris, ciliolatis, subtus albido-pallidis subtiliter 3–5 nerviis enervulosis, petiolo piloso. Cæt. ign.

Caules subpedales, $\frac{1}{12}$ poll. crassi. Folia $\frac{1}{2}$ - $3\frac{1}{4}$ poll. longa; petiolus $\frac{1}{5}$ - $\frac{1}{2}$ poll. longus.

This small species I found only on the southern slopes of Mount Piton creeping over the surface of large boulders. Its nearest ally is *P. Ventenati*, Miq.; C.DC. in DC. Prod. xvi. 1. 446, an East Indian species. I only obtained the plant in leaf, and should not myself have ventured on a specific determination; but M. Casimir de Candolle has kindly examined the specimens, and pronounced it a novelty.

LORANTHACEÆ.

Viscum tenioides, Comm.; DC. Prod. iv. 283.

Only in the valley of Rivière Baleine, and abundant there on the branches of *Fernelia buxifolia*, Lam. This plant is peculiar to the Mascarene Islands.

MUSACEÆ.

Musa paradisiaca, Linn.; Trew Ehret. tt. 18-20; Red. Lil. t. 443. Nom. vulg. Banane. Cultivated.

Musa sapientum, Linn.; Trew Ehret. tt. 21-23. Nom. vulg. Banane. Cultivated.

Ravenala madagascariensis, Sonnerat Voy. ii. 223. tt. 124-6; Jacq. Hort. Schen. t. 93; Urania speciosa, Willd.; Boj. Hort. Maur. 333. Nom. vulg. Ravenal.

A few trees near dwellings of old settlers.

ORCHIDACEÆ.

Mr. S. Le M. Moore has kindly determined the Orchids.

Oberonia brevifolia, Lindl. Gen. and Sp. Orch. 16; Fol. Orch. No. 36.

Not very common. Only found in valley Rivière Baleine on Fernelia buxifolia, Lam., along with Viscum tænioides, Comm.

Bulbophyllum incurvum, Thouars Orch. Afr. t. 95.

A Mascarene plant not uncommon on the branches of trees.

Aeranthus arachnites, Lindl. Bot. Reg. sub. t. 817; Bot. Mag. t. 6034. Var. Balfourii. Leaves 10 in. long; lateral sepals $1\frac{1}{4}$ in. long.

A distinct variety of this Mascarene species. It is very common on the branches of trees.

Listrostachys Aphrodite, Balf. fil. and S. Moore in Baker Fl. Maur. Seych. 354. Plate XXXVI.

Caulibus erectis, validis, $\frac{1}{2}$ -1 ped. altis; foliis subimbricatis, carnosis, linearioblongis, oblique-emarginatis, $2\frac{1}{2}$ -3 poll. longis, $\frac{1}{3}$ poll. latis v. latioribus; racemis

adscendentibus foliis oppositis, fere 5 poll. longis, squamis nonnullis lagis lentis scariosis vaginantibus infra flores vestitis; bracteis rotundatis, $\frac{1}{6}$ poll. longis; sepalis lanceolatis, acuminatis, fere $\frac{1}{2}$ poll. longis; petalis brevioribus, linearibus, labello ovato-rotundato, 3-lobato, lobis lateralibus crenulatis, infra circum columnam convolutis, lobo centrali auguste-lineari, integro vix $\frac{1}{6}$ poll. longo; calcare $\frac{1}{12}$ poll. longo fere recto; polliniis oblongo-ovoideis, caudiculis linearibus leviter in glandulam ovatam attenuatis; lobis rostelli verticaliter resupinatis.

Nom. vulg. Fahame.

An endemic plant only occasionally met with on stems and branches of trees.

Plate XXXVI. Fig. 1. Flower bud partly open. 2. Front view of expanded flower. 3. Side view of column.

Angræcum, sp. near A. caulescens, Thouars.

Too far advanced for description. A very common plant.

AMARYLLIDACEÆ.

Crinum asiaticum, Linn.; Kunth. Emum. v. 547; Bot. Mag. t. 1073. Nom. vulg. Fleur de lis.

Very abundant at the mouth of the Rivière aux Huitres, and also near Mont Plaisir in the centre of the island.

Agave americana, Linn.; Kunth. Emum. v. 819; Bot. Mag. t. 3654 is a variety. Nom. vulg. Aloe.

Very common, especially on the slopes of Mount Piton.

Fourcroya gigantea, Vent.; Kunth. Emum. v. 841; Bot. Mag. t. 2250. Nom. vulg. Aloe vert.

Equally common with the last. The fibres of this are much used for cordage.

DIOSCOREACEÆ.

Dioscorea sativa, Linn.; Kunth. Emum. v. 340. Nom. vulg. Cambare.

Cultivated. Formerly the yam was largely grown, but since whalers ceased to visit the island regularly the cultivation has greatly decreased.

Dioscorea alata, Linn.; Kunth. Emum. v. 387.

I have the leaves of a plant which resembles this somewhat. I found it in waste ground near dwellings.

BROMELIACEÆ.

Ananassa sativa, Lindl. in Bot. Reg. sub. t. 1068; Bromelia Ananas, Linn.; Bot. Mag. t. 1554. Nom. vulg. Ananas.

Very common in many places.

LILIACEÆ.

Aloe lomatophylloides, Baker in Fl. Maur. Seych. 372.

Subacaulescens, foliis paucifariis stellatim patentibus, ensiformibus versus apicem gradatim attenuatis, acutis deltoideis dentibus paullum incurvatis subrigidis armatis, carnosis, subtus convexis, supra concavis, paginis lævibus atroviridibus; scapo ramoso striato compresso inferne subalato, alis obscure dentatis, ramulis 2–3 adscendentibus racemos densos gerentibus, bracteis lanceolatis membranaceis; floribus breviter pedicellatis; perianthio obclavato, segmentis lanceolatis, tubum oblongum rectum dilatatumque dimidio superantibus; staminibus perianthio subæquilongis, filamentis membranaceis alatis, basi dilatatis; capsula angulari ovoidea.

Folia $1\frac{1}{2}$ ped. longa, 3 poll. lata. Scapus $\frac{1}{2}$ ped. longus, ramuli 3–6 poll. longi; bracteæ $\frac{1}{8}$ poll. longæ; pedicelli apice articulati, primum $\frac{1}{4}$ poll. longi, demum $\frac{2}{3}$ poll. longi. Perianthium $\frac{2}{3}$ poll. longum. Capsula $\frac{1}{2}$ poll. longa.

Nom. vulg. Ananas marron.

A very common and very distinct species, characterised by the smooth non-spotted leaves and the compressed rachis of the flower scapes.

Asphodelus fistulosus, Linn.; Kunth Emum. iv. 557, var. tenuifolius; A. tenuifolius, Cav.; Kunth En. iv. 558.

This plant I did not find on the main island, but only upon two of the coral islets, Gombrani and Pierrots, on the southern reef.

Dracæna angustifolia, Roxb.; Baker in Linn. Journ. xiv. 526. Nom. vulg. Bois chandelle.

Very common, attaining a height of about 14 feet or more, and frequently with the aërial roots at the base very numerous.

Dracena reflexa, Lam., var. angustifolia, Baker in Linn. Journ. xiv. 531. Nom. vulg. Bois chandelle.

Not common only at the top of valley Rivière aux Huitres.

Asparagus umbellulatus, Sieber; Baker in Linn. Journ. xiv. 611. Nom. vulg. L'Asperge.

Common.

Asparagus racemosus, Willd:; Baker in Linn. Journ. xiv. 623. Nom. vulg. L'Asperge.

Common.

Two other species of Asparagus occur, but I obtained them only in leaf and the material is too imperfect for identification.

COMMELYNACEÆ.

Commelyna communis, Linn.; Kunth Emum. iv. 36; C. B. Clarke Commelyn. Beng. t. 1. Nom. vulg. Herbe à cochons.

A common plant. The leaves and young shoots are eaten as a salad.

PALMÆ.

Latania Verschaffelti, Ch. Lem. Ill. Hort. t. 229. Nom. vulg. Latanier.

Found in every part of the island. Perhaps no plant on the island is put to more uses than the Latanier. The wood is very hard and durable, of a rich mottled black appearance, and used for building huts, though now this is interdicted as the trees are becoming more scarce. The leaves are chiefly used for thatching huts and are also made into baskets. The fibres of the petiole form a very excellent material for cordage and the reticulum is also put to various uses.

Male and female trees exist in about equal numbers. This is the *Latania* aurea of horticulturists, and has been known in Europe for some years. The original description of the plant in Ill. Hort. l.c. errs in the description of the pyrenæ, which are represented as inverted, the apex being described as the base and vice verså.

Leguat speaks of this tree as the "plantane," and thus quaintly describes it,—

"The plantane is a sort of palm tree, and the arborists place it in the same class." Our plantanes have a straight trunk, which seems to be formed of large rings at an equal distance. They have no such prickly scales as I have talked of in the palm tree. At the top of the trunk is a cabbage, very like to that of the palm tree. At the foot of this cabbage instead of palm boughs are broad leaves, with stalks about six or seven foot long; these leaves are strong and thick, and like a fan when it is open; the sticks of which come a little out of the circumference, and are pointed at Some of these leaves are eight foot diameter, insomuch that they serv'd to make rare coverings for our cabbins. We cut 'em out into little pieces, and made hatts and umbrello's of them. The stalk is four inches broad, an inch thick, and a little roundish at the sides; at the bottom where it joyns to the tree, it widens and grows like a flat shell which sticks to the trunk, and in part embraces it. This wide and hollow plate is sometimes above a foot diameter, and of the thickness of a crown piece. We made use of it for dishes, plates, and sawcers. rind of the stalk served us instead of ropes, and the fibres of the second made good thread to sow with. One might have wove stuffs with it, had it been prepar'd.

"We cou'd not perceive any difference in the tast, or in any other qualities of the palm tree or plantane. This liquor is whitish like white whey, and so sweet, that no other sweetness, if I may judge of it, can compare to it: the newer it is, the more agreeable. In three or fuor days it begins to turn sowre, and in seven or eight, 'tis as sharp as the strongest vinegar, without changing its colour.

"The dates of the plantane are bigger than those of the palm tree. Having abundance of better things to feed on, fish and flesh, fruits, &c., we left the dates for the turtles and other birds, particularly the *Solitaires*, of which we shall hereafter make mention.

"About the cabbage of the plantane, near the bottom of it, and between the stalks of its broad leaves, is a sort of cotton of a limon colour, which all thro'

India is known by the name of *capoc*. We made very good quilts of it. It may be wove and manufactur'd for all the uses that cotton is put to. Perhaps we might have thought of making a sort of stuff, both of the capoc and the fibres of our plantane leaves; but we had stuff enough of our own to serve a long time, and the air is so mild, so sweet, that we did not make much use of our cloaths."

The genus Latania is Mascarene and is represented by three species. Of these one here mentioned is endemic in Rodriguez. Another, Latania Loddigesi, Mart. Hist. Palm. iii. 224. t. 161. f. ii. 10–14, the L. glaucophylla of horticulturists, is found only on Round Island near Mauritius, while the third species, L. Commersoni, Gmel. Syst. viii. 1035, and which includes L. rubra, Jacq. Frag. Bot. 13. t. 8, and L. borbonica, Lam. Encyc. iii. 427, is distributed in both Mauritius and Bourbon. The three species are easily distinguished specially by the pyrenæ. It is curious to note the similarity of constitution and distribution of this genus with another Mascarene one, Hyophorbe.

Phœnix dactylifera, Linn, Nom. vulg. Le Datte.

Is not abundant and occurs occasionally on some of the coral islets.

Hyophorbe Verschaffelti, Wendl. in Ill. Hort. tt. 462, 463. Nom. vulg. Palmiste marron.

A palm spread over the whole island, but never occurring on the coralline limestone. It is of a very striking appearance by reason of the bulging which takes place in the stem towards the middle, the stem on both sides of the swelling decreasing in size. If the tree be lofty, there may be a second ventricosity. But the tree seems rarely to attain an altitude above 20–25 feet. The external hard part of the stem is very thin, not more than an inch thick, and within it is a soft succulent mass of cellular tissue and fibro-vascular bundles. The juice from this tree is said by the inhabitants not only to be unwholesome, but even poisonous, causing, if taken in small quantities, severe emesis. The leaves have an exceedingly plumose appearance, and with their yellow stripe beneath are very picturesque. The parts of the tree are put to no use.

Hyophorbe, to which the species belongs, is a Mascarene genus represented by only three species. Of these the one here mentioned is endemic in Rodriguez. H. amaricaulis, Mart. Hist. Palm. iii. 309, formerly cultivated in Europe under the name Areca speciosa, is a second species endemic in Round Island, about 6 miles from Mauritius. This, from its habit, is not unfrequently termed in Mauritius the "bottle palm," and hence it has for long been confounded with the Chilian bottle palm, Jubwa spectabilis, with which, however, it has no connexion. The Rodriguez palm I should have said has also been confounded with Jubwa. The Round Island palm is very distinct from the Rodriguez plant. The third species is the most delicate. Originally described as Hyophorbe indica by Gärtn. de Fruct. ii. 186, the name H. Commersoniana was substituted by Martius Hist. Palm. iii. 164.

There seems, however, no sufficient ground for the alteration. Bory St. Vincent, Voy. ii. 296, mentions and describes this palm as *Areca lutescens*, under which name it is frequently and most commonly met with in gardens. The species has a wider distribution than the others, occurring in both Mauritius and Bourbon. It is in these islands confined to the shady parts of the woods and valleys and is now extremely rare. It differs in habit from the other species in having a slender tapering stem not dilated and with no ventricosities.

Dictyosperma album, Wendl. in Linnæa xxxix. 181. var. aureum; Areca alba, Bory Voy. i. 306.

Palma typo minor tenuiorque usque ad viginta pedes alta; folia 4–8 ped. longa; petiolus communis curtus, 8 poll. longus, intus paullo-convexis squamulis adspersis munitis; vagina 1–2 ped. longa; pinnæ lineari-lanceolatæ, anguste acuminatæ, $1\frac{1}{2}$ –2 ped. longæ, 1 poll. latæ, venulis secundariis obscuris; spadix fastigiatus ramulosus, ramulis rigidis erectis 9–11 poll. longis, omnino rectis v. ad basim tortilibus; flores illis typi dimidio minores; fructus violaceus, $\frac{2}{3}$ – $\frac{3}{4}$ poll. longus, $\frac{1}{3}$ – $\frac{5}{12}$ poll. latus, cylindro-conicus; semina $\frac{1}{2}$ poll. longa. Plantæ juveniles aurantiaceæ, pinnis fere linearibus, spinulis vestitæ.

Nom. vulg. Palmiste bon.

This palm is very abundant in Rodriguez, growing freely both on the volcanic soil and on the coralline limestone. It has for many years been cultivated in the gardens of Europe as *Areca aurea*.

The genus Areca has long been a receptacle for many species of doubtful affinity, but Wendland has recently revised the genus and removed therefrom many of its hitherto contained species. As a result of his revision the genus is unrepresented in the Mascarene islands. Some Mascarene species are referred, as already noted, to Hyophorbe; two others, Areca rubra, Bory, and A. crinita, Bory, constitute the endemic Mascarene genus Acanthophænix, and the old Areca alba, Bory, is the type of a new genus, Dictyosperma. This is a very variable plant, and by reason of this several garden names have been given to its forms under cultivation. Thus we have Dictyosperma furfuraceum, D. rubrum, and D. aureum. These are, however, all varieties of the one palm, Dictyosperma album, Wendl., and the last mentioned is that form which occurs in Rodriguez.

Leguat mentions only one species of "palm tree" in Rodriguez, and it is difficult to determine whether he refers to *Hyophorbe* or *Dictyosperma*. He thus describes it.—

"Our palm trees are commonly 30-40 ft. high, their trunk is straight and without leaves, but 'tis cover'd with a sort of prickly scales, whose prickles stand out a little. Some have a smoother bark than others. On the top of the trunks grow those boughs of palm, of which no man ever saw a lively picture. These boughs form a great knot and fall down all about it in plumes. Below these boughs, or rather

below the trunk from which they grow, are produc'd long bunches, each fruit or grain as big as a hen's egg, and of the same shape, known by the name of dates.

"In the center of this great knot, and at the summet of the trunk, is what we call the cabbidge. One cannot see it, being hidden by the boughs that rise a little all about it. This summet consists of tender leaves which closely embrace each other, joyn together, and form a mass something like that of a cabbage lettice, or common cabbage; 'tis about two foot high if the tree is large, and of the same bigness with the trunk. The large outside leaves of this mass are white, soft, pliable, and as strong as buff, which it resembles. They will serve also for linen, satin, for napkins, table-cloths, and any thing what you please. The membrana, or inside leaves, are tender and brittle, like the heart of a lettice. They are good to eat raw, and tast like a filberd; but we made an admirable ragout of them when we fricasi'd them with the fat and liver of a turtle. We put them also in our soops.

"We come now to the liquor, or rather the nectar of the Isle of Rodrigo. 'Tis call'd palm-wine all over the Indies. There are two ways of drawing out the juice. We make a hole in the trunk of the tree at about a man's height, as big as one's two fists. We presently put a pot or other vessel there to receive the delicious liquor, which runs out fast enough, otherwise we dig the cabbage, and make a little cistern at its head. We need only go twice or thrice a day and draw this rare wine at the fountain head, and we may be abundantly supply'd with it. The wine of the trunk, and that of the cabbage, are in my opinion of an equal goodness.

But those who would be good husbands of their trees (for as for us we were lavish enough of them), the first way is the best, because after the cabbage has yielded its liquor for about a month, it withers, and the tree decays and dies. 'Tis the same thing if you tear off the cabbage, when its head and brain are gone it dies almost suddenly.

"Whereas if you only pierce its side the tree do's not die, provided the wound is not too deep; but the liquor will not run out at that hole above four days. The wounded tree must afterward have time to recover. I do not know what is done elsewhere, but I can tell by experience what I have said here, we having made trial of it daily for two years together. The bark of this tree is very hard, 'tis an inch thick, porous and tender in the inside. If one make the hole on the side of the trunk too wide, there is reason to fear 'twill weaken the tree there, and that then the next hurricane will break it."

"The fruit or grain as big as a hen's egg" makes it difficult to refer his palm to either *Hyophorbe* or *Dictyosperma*, and points rather to the Latanier. And then the trunk "covered with a sort of prickly scales whose prickles stand out a little," does not agree well with either, and least with *Hyophorbe*. But then he says afterwards, "The bark of this tree is very hard, 'tis an inch thick, porous and

"tender in the inside," which more nearly corresponds with Hyophorbe than with Dictyosperma. But, on the other hand, the inhabitants say the juice of Hyophorbe Verschaffelti, Ch. Lem., is poisonous, whilst Leguat and his companions seem to have used it much. It is then a difficult matter to decide, but if we discard the statement as to the size of the fruit, I think we may most safely consider that Leguat failed to diagnose two species of Palm tree, and in his description includes both species. And as pointing in this direction I think we may take his remark "Some have a smoother bark than others;" for the bark of Hyophorbe Verschaffelti, Ch. Lem. is much smoother than that of Dictyosperma album, Wendl.

Cocos nucifera, Linn.

A few trees of this occur in the compound of the Government House at Port Mathurin, and one or two trees are found on the south side of the island. The introduction of this plant was on this wise as described by Leguat:—"The sea "having thrown us up some Cocos which began to bud, we planted some of that fruit some months after our arrival, and when we left the place, the trees were "four foot high."

PANDANACEÆ.

Pandanus heterocarpus, Balf. fil.

Arbor ramosa, caudice lævi, radicibus aëreis plurimis, ramis patentibus; foliis lanceolatis acuminatis, basi amplexicaulibus dilatatis, erecto-patentibus, coriaceis, strictis, viridescentibus basi sæpe glaucescentibus, subplanis, marginibus per totum costaque subtus a medio distanter rubrospinosis, spinulis subincurvatis; & spadicibus laxe racemosis odoris 15-spicatis, spathis subito acuminatis, carinatis, basi latis, spicas trigono-oblongas excedentibus, marginibus costaque subtus per totum spinescentibus; staminibus laxe dispositis, filamento communi brevi, 5–10 ramoso, ramulis patentibus, antheris lineari-oblongis mucronatis; \$\phi\$ capitulis solitariis globosis subdepressis v. elliptico-oblongis nunc longe nunc breviter pedunculatis, pendulis v. inclinatis, spathis pluribus brevibus deciduis; drupis 5-locularibus, obpyramidalibus, non compressis, 5–6-gonis, fere per totum coadunatis, apice humiliter pyramidale rarissime convexo sæpius applanato v. umbilicato, distincte 5–6 angulato, areola centrali 2–5 stigmata plana sessilia reniformia suberosa cingente instructo.

Arbor umbraculiformis, usque ad 20 pedes alta. Caudices fuscobrunnei, 5–7 poll. diam., læves, erecti, oblique annulati, ramosissimi, ramulis terminalibus non adscendentibus, radices aereas plures seriatim spinescente-tuberculatas emittentes. Folia ensiformia, recta v. rarius recurvata v. dependentia, $1\frac{1}{2}$ –3 ped. longa, $1\frac{1}{2}$ – $2\frac{1}{2}$ poll. lata, supra non sulcata, non reduplicata, pallide v. atro-virentia, supra nitida, subtus opaca venulis lateralibus subtiliter striata, marginibus incarnatis a basi spinosis, spinis sæpe in medio deficientibus acutis rubris subincurvatis adscendentibus, costa subtus pallidiori subrosea a medio spinescente, spinis in margine majoribus intervalloque longiore dispositis. Spadices masculi 1 ped. longi 15-spicati penduli, spicæ basales

3 poll. longæ, spathæ sursum sensim minores cymbiformes cuspidatæ abrupte angustateque acuminatæ basi submembranaceæ latæ, spicas amplectentes pollibicus pluribus superantes, marginibus carinaque subtus per totum spinulescentibus. Staminum filamentum commune $\frac{1}{6}$ poll. longum, ramuli singuli breves patentes $\frac{1}{24}$ poll. longi; antheræ albidæ $\frac{1}{8}$ poll. longæ. Capitula 60–70-drupata, nunc 35, rarius 100, $4\frac{1}{2}$ – $6\frac{1}{2}$ poll. longa, $4\frac{1}{2}$ – $5\frac{1}{2}$ poll. lata; pedunculus trigonus plerumque 8–12 poll. rarius 3 v. 15 longus, $\frac{7}{12}$ – $\frac{11}{12}$ poll. crassus. Drupæ $\frac{11}{12}$ – $1\frac{1}{6}$ poll. longæ, 1– $1\frac{1}{2}$ poll. latæ horizontaliter, $\frac{3}{4}$ –1 poll. in diam. verticaliter, usque ad $\frac{5}{6}$ – $\frac{7}{8}$ a basi coadunatæ, parte conjuncta maturitate rubra v. flava, apicis margine nonnunquam ruguloso; areola centrali distincte marginata; stigmatibus $\frac{1}{8}$ – $\frac{1}{4}$ poll. diam. reniformibus, pelvis centrum versus spectante; putamine rotundato lateribus lævibus apice applanato processibus 2–5 instructo; mesocarpio spongioso, amplo; semine $\frac{1}{3}$ poll. longo.

Nom. vulg. Vacoa calé rouge, V. calé blanc, V. sac, V. poteau, V. parasol, V. mâle.

It is a very variable tree, and the popular names indicate this. It occurs very abundantly everywhere on the island from the seashore to the highest points. And according to its situation, its habit and appearance vary. Thus when on sites exposed to the wind it has a stunted habit. The branches are few, thick, and short, and the leaves are also short and are erect. In such situations it is known as the Vacoa calé. The inhabitants make a distinction between two varieties of this according as the head, peduncle, and united parts of the drupes are red, or are greenish yellow or yellow. The former they style rouge the latter blanc. The first of the characters on which they base their varieties by the colour of the head and peduncle is worthless, and the difference in colour of the bases of the drupes is found in all the forms of the species, but is not sufficient to characterise varieties. If the tree grows in suitable soil, and in a sheltered position where it has room to develop its branches properly, then it forms a dense and compact dome and the branches may droop downwards, so far as almost to conce al the stem, and is then known as Vacoa parasol.

When in any situation the tree develops a trunk of good size, and is allowed to grow until the wood is hard and firm to the centre, and is capable of being used as a post for a house, then the tree is called V. poteau. The name V. sac is given to the young plants when the leaves are long and broad, and may be made into bags or sacs. V. mâle is of course the male tree, known by the inhabitants as not bearing fruit.

It is not only in habit that the tree varies, but few plants exhibit such an amount of variation in the fruit and it well deserves its specific designation. It is impossible here to enter into a consideration of these which will form the subject of a separate memoir. This species belongs to the *Utilis* group of the species of *Pandanus*. It has a close affinity with *P. utilis*, but is sufficiently distinguished in habit and in fruit.

Leguat gives a curious description of the Screw pines of Rodriguez as follows:— " Among the great number and variety of trees in this island planted by nature, "there is one which is wonderful and worthy our particular observation for its " beauty, bigness, roundness, and the rare symmetry of its exact branches, the ends " of which are very much tufted, and its leaves so great and thick that they fall "down almost to the ground all about it, so that come which way you will at this " tree, you can perceive but a small part of its trunk, and that at the bottom of it, " and sometimes you can see nothing at all of it. It being as one may imagine, all " shady in the middle; the branches are within-side like dry poles, which seem to " be the work of a carpenter, and set there to bear up the plumes or branches which " are quite about it, and thus make a sort of cage or tent of the tree. "Tis true, the " greatest beauty of this tent, is in its charming outside, though the coolness and " shelter of the inside have also their charms: 'twas unhappy that its fruit was not good to eat. Those of us who had the curiosity to eat it, found it sour, and knew " by experience that was all the hurt that was in it. It had the smell of a very "fine quince. 'Tis a sort of a grape, the seeds of which are close and altogether; " it looked at a distance like the fruit of the ananas, for which reason we us'd to " call these trees Ananas, tho' there's a great difference between the two plants: " as for me I was calling it the pavilion or tent. The leaves are of an admirable " green, and the stalks of them are so short, that one wou'd think they grew imme-"diately to the wood. The greatest are four or five inches broad, sharp at the end, " and about five inches long. They form a great bunch, and here and there one " may see the grapes, which are of divers colours, according as they are more or less I have often taken pleasure to survey these natural palaces, and was " equally ravish'd with its largeness and singular beauty."

Pandanus tenuifolius, Balf. fil.

Arbor parva, caudice lævi, radicibus aëreis paucis, ramis erectis crassis; foliis angustate lineari-lanceolatis acuminatissimis, apice subflagellatis, basi dilatatis lateque amplexicaulibus, coriaceis recurvatis pendulisque, subplanis atro-viridibus sæpe basi dealbatis, marginibus subincrassatis per totum costaque a medio rubrospinosis, spinis brevibus acutis incurvatis adscendentibus; capitulis solitariis paucidrupatis subglobosis, pedunculo curvato pendulosis; spathis pluribus deciduis; drupis subpyriformibus 2–5-locularibus, non compressis, usque ad $\frac{2}{3} - \frac{3}{4}$ a basi coadunatis, parte conjuncta 5–6-gona obpyramidali, apice libero rubiginoso rotundato umbraculiformi obscure 5–6-angulato, vertice applanato v. depresso, areola marginata 2–5 stigmata plana sessilia reniformia cingente instructo.

Arbor usque ad 15 pedes alta plerumque magnum spatium instar arbustum occupans, rare solitaris. Caudices fusci, læves, 3 poll. diam., ramos erectos validos abrupte terminantes angulo acuto emittentes. Folia 8 poll.— $2\frac{1}{4}$ ped. longa, $\frac{1}{4}-\frac{7}{12}$ poll. lata, supra non sulcata, subplana, non reduplicata, supra nitida, infra opaca, lateralibus nervulis subtiliter striata, marginibus subincrassatis a basi spinosis, spinis

sæpe in medio deficientibus, rubris, arcte dispositis, incurvatis v. subappressis, adscendentibus, costa prominente rubra, a medio spinis distantibus acutis longioribus instructa. Capitula 20–40-drupata, $3-5\frac{1}{4}$ poll. diam.; pedunculus trigonus, curvatus, 5–11 poll. longus, $\frac{1}{3}-\frac{5}{12}$ crassus. Drupæ breviter pyriformes, $1\frac{1}{2}$ poll. longæ, parte superiore $\frac{1}{3}-\frac{1}{4}$ libera, horizontaliter $1\frac{1}{4}-1\frac{1}{2}$ poll. latæ, verticaliter $1\frac{2}{3}-1\frac{5}{6}$ poll. latæ, parte conjuncta maturitate rubra; stigmatibus $\frac{1}{8}-\frac{1}{3}$ poll. diam., reniformibus, pelvi centrum versus spectante; putamine rotundato lateribus lævibus apice depresso 2–6 processus gerente; mesocarpio crasso spongioso; seminibus $\frac{1}{3}$ poll. longis.

Nom. vulg. Vacoa chevron.

A small and very graceful tree, usually growing in clusters and forming frequently a very regular dome. It is confined to the higher parts of the island and the upper parts of valleys. Though nearly allied to, it is easily distinguished from the foregoing by its arching narrow delicate leaves, and its few large druped fruits. It is also a very much smaller plant. But certain trees on the island seem to possess characters intermediate between these two species and may be hybrids. This is, however, a difficult matter to settle. Its local name is derived from its common use as a rafter for huts, for which its close-grained and hard wood when mature well fits it.

These are the only two species I found on the island, but Sir Henry Barkly has sent home figures of two (and of one a specimen) other species from the island. These are P. utilis, Bory, and P. odoratissimus, Linn. f. His figures and specimen of the former are most distinctly those of P. utilis, Bory, but whilst I do not dispute the fact that this plant may have existed or may exist on the island, I may notice that Sir Henry Barkly's drawing and specimen are of a tree grown in the Botanic Garden in Mauritius from seeds which Mr. Duncan is said to have brought from Rodriguez. I think this takes away considerably from the value of the observation, especially as the trees Mr. Horne pointed out to me as from Rodriguez are growing closely surrounded by Mauritius ones. At the same time I may remark that in the young state, before many branches have been given off, P. utilis, Bory, and P. heterocarpus, Balf. fil., are so much alike as to be almost undistinguishable, and I may have in that way missed P. utilis, Bory, in Rodriguez. odoratissimus, Linn. f., I can only say I never saw it, and it must be very scarce, if there at all; and it seems to me very strange that such a very marked form should be unknown by the inhabitants, especially as several of them were employed by Mr. Jenner, the magistrate of the island, at the request of Sir Henry Barkly, to collect Pandani for him. Mr. Horne showed me trees of this in the Botanic Gardens at Mauritius, said to have grown from seeds brought from Rodriguez by Mr. Duncan, and as this may have been the source of Sir H. Barkly's figures the same objection may be urged as in the case of P. utilis, Bory. It seems to me very strange that no mention is made by Sir H. Barkly of P. tenuifolius, Balf. fil., from Rodriguez, which is very abundant, whilst P. utilis, Bory, and P. odoratissimus, Linn. f. must be very scarce, if there. Bojer in his Hortus Mauritianus says of P. muricatus, Pet. Thouars, that it grows naturally at Rodriguez. I believe Bojer visited Rodriguez, and he ought to have known the Pandani, but he says nothing about P. heterocarpus, Balf. fil. or P. tenuifolius, Balf. fil., which are so common on the island. He appends to his notice of P. muricatus, Pet. Thouars, that some trunks are to be found at Grand Port. To recognise a species of P and anus by leaves, fruit, and stem is in many cases difficult enough, but to discriminate species by stems only is very fallacious, if not impossible. I am convinced the species does not now exist on the island; and, indeed, Petit Thouars only recorded it from Madagascar. In the Botanic Gardens in Mauritius a species was shown me by Mr. Horne which he supposed might be P. muricatus, Pet. Thouars, but this is merely a form of P. utilis, Bory, with drupes much divided at the apex.

AROIDEÆ.

Colocasia antiquorum, Schott Prod. 138; Arum colocasia, Linn.; Wt. Ic. t. 786; Caladium esculentum and nympheæfolium, Vent. Nom. vulg. Songe rouge.

Grows very abundantly in the streams. Is eaten in times of scarcity by the inhabitants, but is said to produce a severe form of skin eruption if much eaten. It is chiefly used to feed pigs when they can get nothing else.

Alocasia macrorhiza, Schott Prodr. 146; Arum macrorhizum, Linn.; Boj. Hort. Maur. 356. Nom. vulg. Songe blanc.

Grows abundantly with the former, and is the better to eat of the two.

NAIADACEÆ.

Ruppia maritima, Linn.; Kunth Enum. iii. 123; R. rostellata, Koch; Reich. Ic. ii. 66. t. 174.

Abundant at the mouth of English Bay River.

Zannichellia palustris, Linn.; Kunth Enum. iii. 124.

Abundant, especially in Rivières Bouteille and De l'Est. This plant is not recorded from Mauritius.

Halophila ovalis, Hook. fil. Fl. Tasman. ii. 45; H. ovata, Gaud. in Freyc. Voy. 429. t. 40. f. 1.

Grows abundantly on the sandy flats on the reefs, and is left uncovered at the fall of the tide.

Halophila stipulacea, Aschers. in Linnæa xxxv. 172; Thalassia stipulacea, $K\ddot{o}nig$; Kunth Enum. iv. 120.

Abundant on the sandy flats on the reefs, specially where there is a current, and does not seem to be left uncovered by the tide.

CYPERACEÆ.

Cyperus lævigatus, Linn.; var. albidus, Beklr. in Linnæa, xxxv. 487.

Very common species, occurring under several forms, according to situation.

Cyperus polystachyus, Rottb.; Kunth Enum. ii. 13; Beklr. in Linnæa, xxxv. 477.

Not uncommon on the island.

Cyperus dubius, Rottb.; Beklr. in Linnæa, xxxvi. 336. Nom. vulg. Herbe à oignon.

Common everywhere, and is a great pest.

Cyperus distans, Linn. fil.; Kunth Enum. ii. 93; Beklr. in Linnæa, xxxv. 612. Frequently found.

Cyperus, sp.

A species without flower I found close to Gabrielle village.

Kyllingia monocephala, Rottb.; Beklr. in Linnæa, xxxv. 427.

Very common.

Fimbristylis glomerata, Nees; Beklr. in Linnæa, xxxvii. 47.

Common, especially on coralline limestone.

Fimbristylis communis, Kunth Enum. ii. 235.

Common.

Carex gracilis, R. Br.; Kunth Enum. ii. 513; Boott Car. i. 59. t. 154–156. Nom. vulg. Herbe Madame Pitelle.

Very common.

GRAMINEÆ.

Coix Lachryma, Linn.; Kunth Enum. i. 20; Bot. Mag. t. 2479. Nom. vulg. Larme de Job.

Very abundant, especially near habitations on the banks of streams.

Zea Mays, Linn.; Kunth Enum. i. 19; Mart. Flor. Bras. ii. 2. t. 11.

Cultivated, but not so much as it might be. Is exported to Mauritius. A good head is supposed to yield 640 grains, and each plant bears usually two heads. In planting three seeds are put in each hole, and five heads are expected from the three plants.

Paspalum scrobiculatum, Linn.; Kunth Enum. i. 53; Trin. Sp. Gram. ii. t. 143. Nom. vulg. Herbe filé.

Very common.

Panicum brizoides, Linn.; Kunth Enum. i. 78; Trin. Sp. Gram. ii. tt. 158-9. Common.

Panicum fluitans, Retz.; Kunth Enum. i. 78.

Panicum maximum, Jacq. Ic. t. 13.

Panicum plicatum, Lam.; var. P. costatum, Roxb. Fl. Ind. i. 314; Kunth Enum. i. 94.

Commonest grass on the island.

Panicum serpens, Kunth Enum. i. 117.

Panicum Balfourii, Baker Fl. Maur. Seych. 438.

Frequently met with in the valleys. Closely allied to P. undulatifolium, Ard.

Stenotaphrum complanatum, Schrank.; Kunth Enum. i. 137.

Common.

Stenotaphrum subulatum, Trin. Sp. Gram. iii. t. 360.

Only growing on Gombrani and Pierrot islets.

Cenchrus echinatus, Linn.; Kunth Enum. i. 166. Nom. vulg. Herbe cateaux. Is widely dispersed.

Zoysia pungens, Willd.; Kunth Enum. i. 471.

Very common on the sandy and coral islets on the reef.

Saccharum officinarum, Linn.; Kunth Enum. i. 474; Hook. Bot. Misc. t. xxvi.

Formerly much cultivated. It grows well, but is not much cultivated now, on account of the difficulties in manipulation from want of water.

Andropogon contortus, Linn.; Kunth Enum. i. 486.

Andropogon muricatus, Retz.; Kunth Enum. i. 505. Nom. vulg. Vetivert or Cuscus.

Grows in abundance on the slopes of Mount Malartic, and the roots used much by the natives for scenting their cabinets and apparel.

Andropogon Schenanthus, Linn.; Kunth Enum. i. 493. Nom. vulg. Citronelle.

An infusion of this is a very favourite tisane. It grows abundantly on the slopes of Mount Limon.

Andropogon foliatus, Steud. Syn. Gram. 389. Probably a variety of A. Schænan-thus.

Andropogon finitimus, Hochst.; Steud. Syn. Gram. 385.

Andropogon halepensis, Sibth.; Kunth Enum. 502. Nom. vulg. Petit mille. Cultivated.

Sporobolus virginicus, Kunth Enum. i. 210.

Aristida adscensionis, Linn.; Kunth Enum. i. 190.

Cynodon Dactylon, Pers.; Kunth Enum. i. 259. Nom. vulg. Chiendent.

On the shores where sandy, and on most of the coral islets.

Eleusine indica, Gärtn.; Kunth Enum. i. 272; Trin. Sp. Gram. i. t. 71. Everywhere on the island.

Chloris barbata, Sw.; Kunth Enum. i. 264; Trin. Sp. Gram. iii. t. 306. Nom. vulg. Esquine.

Very common.

Phragmites communis, Trin.; Kunth Enum. i. 251.

On the banks of the stream in valley Rivière Grande des Bamboux.

Bambusa, sp.

Abundant on the banks of the streams.

LYCOPODIACEÆ.

Lycopodium Phlegmaria, Linn.; Spring. Monog. Lycop. i. 63.

Not common. Only at the top of the valley of the Rivière aux Huitres.

Psilotum triquetrum, Sw.; Boj. Hort. Maur. 423.

Very common.

Selaginella Balfouri, Baker Fl. Maur. Seych. 522.

Caulibus decumbentibus dense cæspitosis ad 3–4 poll. procumbentibus, ramulis compositis plurimis curtis adscendentibus instructis; foliis majoribus obliquis, oblongis, obtusis, patentibus, $\frac{1}{16}$ poll. longis, albo-viridibus, membranaceis, ciliatis, summis marginibus conniventibus; foliis minoribus obovatis, mucrone longa armatis; spicis $\frac{1}{4}$ – $\frac{1}{2}$ poll. longis, tetragonis; bracteis uniformibus, deltoideis, cuspidatis.

The specimens from which this species is described are from two localities. On the coralline limestone growing along with *Dichondra repens*, Forst. and *Hypoestes inconspicua*, Balf. fil., a plant of which the leaves have a reddish and dried appearance was found. Other specimens of a pale green and fresher look were obtained in the valley Rivière Grande des Bamboux (Cascade).

Baker l. c. considers the plants from both localities one species as above described. Professor MacNab informs me that he believes the two forms belong to different species, and he thus describes them:—

Form 1. Growing on coralline limestone. Large leaves ovate, rather obtuse, $\frac{35}{1000}$ long, $\frac{20}{1000}$ broad, margin serrated, midrib central, base wide, lower side rounded not produced, upper side produced not so short, denticulate auricle; small leaves $\frac{25}{1000}$ long, $\frac{12}{1000}$ broad, contracted below, widest above middle, then narrowed into an acute point, margin of leaf denticulate, base with lower side produced into a long denticulate auricle, inner margin with a very minute auricle.

Form 2. Growing in moist localities in valley Rivière Grande des Bamboux (Cascade). Large leaves elongate, widest in middle, narrowed towards each end, apex rather blunt yet pointed, $\frac{54}{1000}$ long, $\frac{25}{1000}$ broad, upper side of leaf with a rounded outline, lower side nearly straight and less serrated, vein nearer lower than upper margin, base auricled, upper auricle long curved and almost ciliate, lower ciliate and denticulate; small leaves $\frac{45}{1000}$ long and $\frac{15}{1000}$ broad, contracted below, widest above middle, then narrowed into an acute point, margin denticulate, base

with outer margin produced into a large denticulate auricle, inner margin with a very minute auricle.

Selaginella rodriguesiana, Baker Fl. Maur. Seych. 523.

Caulibus decumbentibus, non-articulatis, ad pedem procumbentibus, ramulis compositis plurimis distantibus adscendentibus instructis; foliis majoribus obliquis, oblongis, obtusis, falcatis, $\frac{1}{12}$ poll. longis, viridibus, membranaceis, integris obscure ciliatis, summis marginibus conniventibus; foliis minoribus obovatis, longe mucronatis; spicis $\frac{1}{4}$ - $\frac{1}{2}$ poll. longis, tetragonis; bracteis uniformibus, deltoideis, valide cuspidatis.

Very abundant. A species not far removed from S. concinna, Spring. Monog. Lycop. ii. 199. Professor MacNab says of this plant, "the form of the large leaves "is like S. concinna, Spring., but the expression foliis rigidis longe biauriculatis'

- " can hardly apply, the leaves being soft, thin, and with very small auricles. Then
- "the small leaves are much more oblique, and by no means 'aristato-mucronatis.'
- "The species comes near one I have from Kew Gardens cultivated as S. concinna,
- " but locality unknown to me."

OPHIOGLOSSACEÆ.

Ophioglossum reticulatum, Linn.; Hook. & Baker Syn. Fil. 446. Amongst the grass on the slopes in a few of the valleys.

FILICES.

Trichomanes cuspidatum, Willd.; Hook. & Baker Syn. Fil. 73.

On the rocks at the sides of streams, only near their source. A Mascarene plant. Not very abundant.

Davallia mauritiana, Hook. & Baker Syn. Fil. 96.

A Mascarene species common on the dry slopes of the valleys.

Adiantum caudatum, Linn.; Hook. & Baker Syn. Fil. 115. Nom. vulg. La capillaire.

Very common everywhere. An infusion of this is used as a tisane in fevers.

Adiantum Capillus-Veneris, Linn.; Hook. & Baker Syn. Fil. 123.

Not common only in the valleys of Rivière Cascade and Rivière Poursite, a few plants growing on moist rocks.

Adiantum hispidulum, Swartz; Hook. & Baker Syn. Fil. 126.

Common in the upper parts of valleys.

Pellæa (Platyloma) hastata, Link.; Hook. & Baker Syn. Fil. 152.

Very abundant everywhere.

Pteris flabellata, Thunb.; Hook. & Baker Syn. Fil. 161.

Not very common. Grows in shady places in the upper parts of valleys.

Asplenium (Thamnopteris) Nidus, Linn.; Hook. & Baker Syn. Fil. 190. Nom. vulg. Langue de bœuf.

Common on trees in the valleys.

Asplenium hirtum, Kaulf.; Hook. & Baker Syn. Fil. 205.

Common on the banks of streams.

Asplenium falcatum, Lam.; Hook. & Baker Syn. Fil. 208.

Not common. Growing on dry stony slopes of valleys.

Asplenium furcatum, Thunb.; Hook. & Baker Syn. Fil. 214.

Common on banks of streams.

Asplenium (Anisogonium) decussatum, Sw.; Hook. & Baker Syn. Fil. 243.

Only found at the foot of Cascade Victoire.

Nephrodium (Lastrea) crinitum, Desv.; Hook. & Baker Syn. Fil. 265.

A Mascarene species abundant in all the valleys near the bed of the stream.

Nephrodium unitum, R. Br. (non Sieb.); Hook. & Baker Syn. Fil. 289.

Grows in large patches on the dry slopes of some valleys.

Nephrodium molle, Desv.; Hook. & Baker Syn. Fil. 293.

Very abundant in all valleys.

Nephrodium elatum, Baker; Hook. & Baker Syn. Fil. 502.

Only at the foot of the Cascade Victoire with Asplenium decussatum.

Nephrolepis exaltata, Schott.; Hook. & Baker Syn. Fil. 301.

Everywhere.

Nephrolepis acuta, Presl.; Hook. & Baker Syn. Fil. 301.

Everywhere. This and the foregoing species in many places cover the ground for several acres, notably on the eastern side.

Polypodium (Niphobolus) adnascens, Sw.; Hook. & Baker Syn. Fil. 349.

Abundant on dry rocks near the mouths of the valleys.

Polypodium (Phymatodes) phymatodes, Linn.; Hook. & Baker Syn. Fil. 364. Nom. vulg. Polypod.

Everywhere abundant. An infusion of the rhizome is an excellent tisane for cough. Mr. Horne showed me in the Herbarium of the Botanic Gardens, Mauritius, specimens of a crested form of this from Rodriguez.

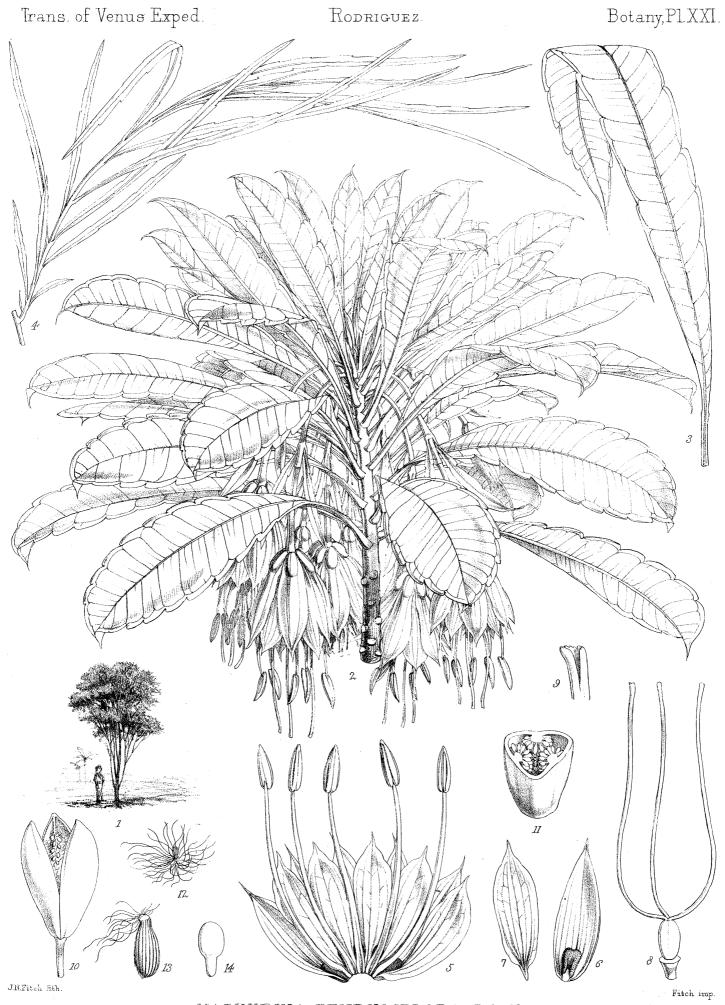
There are specimens of a *Nephrodium* (*Lastrea*) grown by Lady Barkly at Reduit, which is said to have come originally from Rodriguez, in the Herbarium at the Botanic Gardens, Mauritius. I do not know what species, and I did not gather it.

In a letter to me at Rodriguez, Mr. Horne mentions that in 1864 a collector brought from Rodriguez *Nephrolepis splendens*, but there must be some mistake as to the name, as there is no such species.

Lindsaya acutifolia, Desv., is also reported from Rodriguez, but I have not seen specimens.

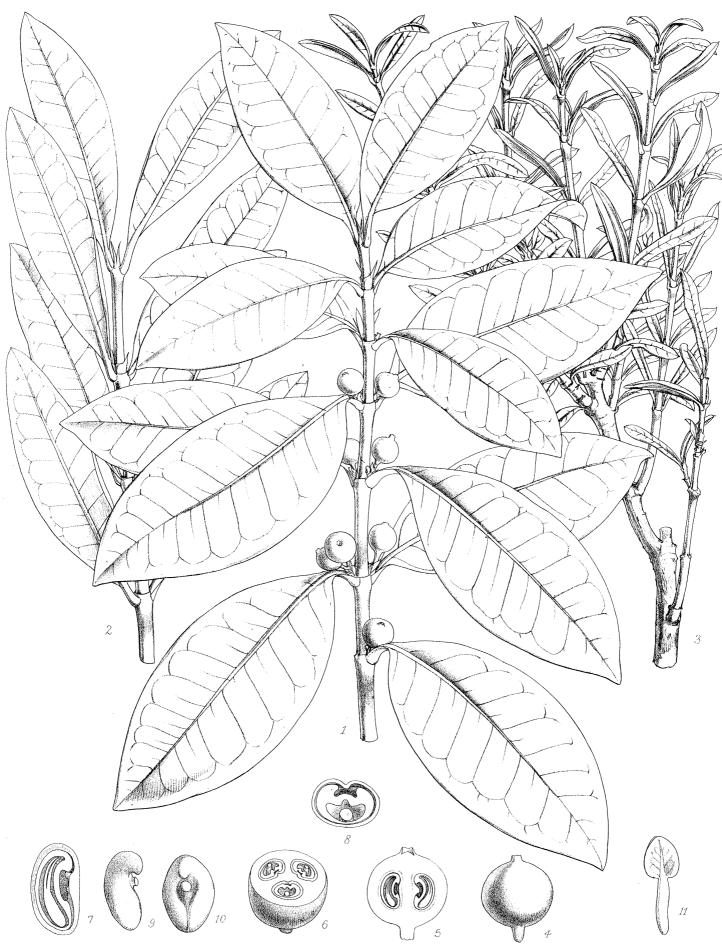


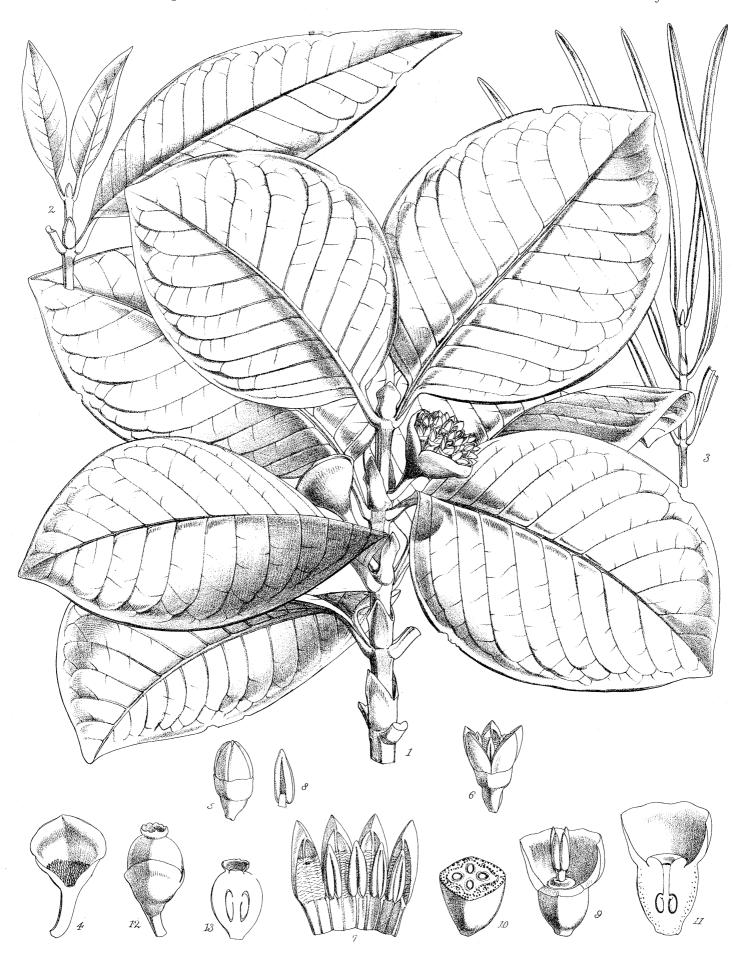












J.N.Fitch lith.

SCYPHOCHLAMYS REVOLUTA, Balf. Al.

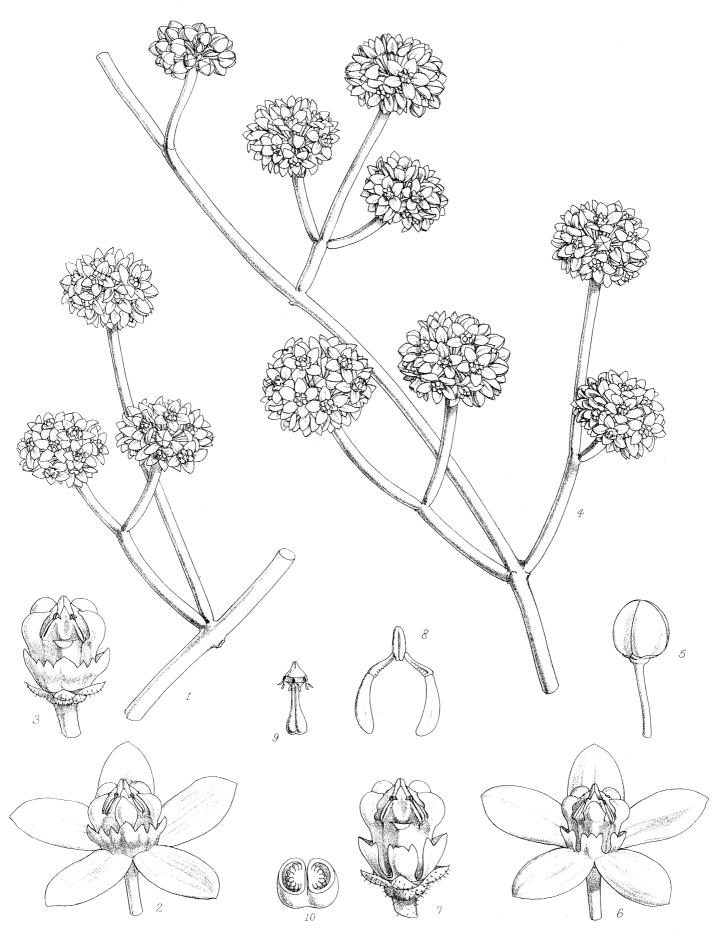




A ABROTANELLA RHYNCHOCARPA, Balf fül. B. CARISSA XYLOPICRON, Pet. Th.



Fitch Imp.



J.N.Fitch lith.

Fitch imp.



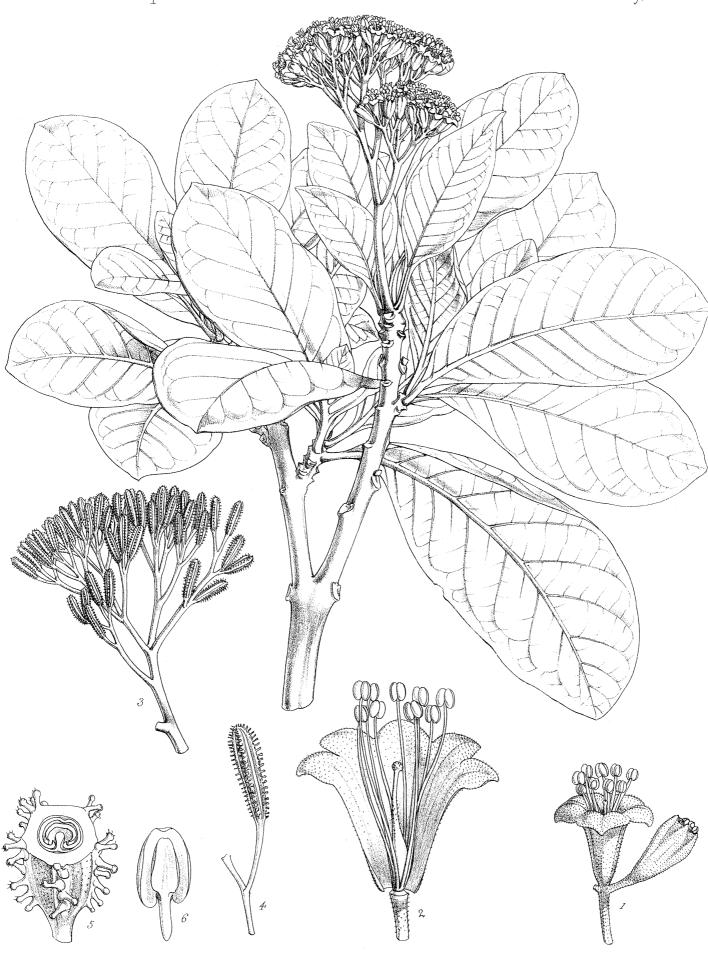
J.N.Fitch lith



J.N.Fitch lith.

NESOGENES DECUMBENS, Balf. Rt.



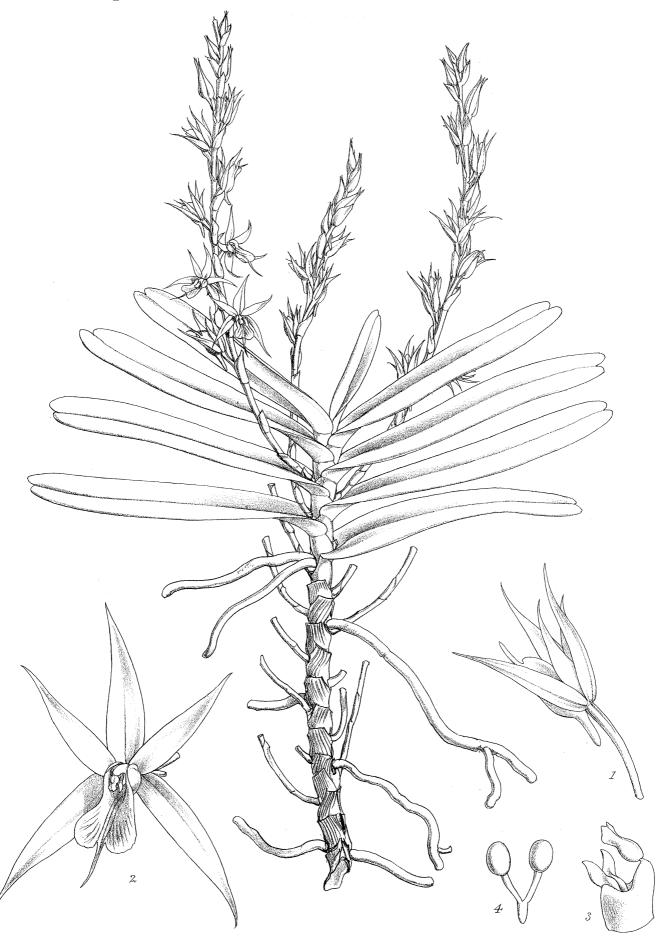


J.N.Fitch lith.

Fitch imp.







J.N.Fitch lith.

Fitch imp.

