STROBILANTHES PAPILLOSUS. (T. Anders.) A large shrub, stems more or less 4-angled, the younger ones acutely to exceedingly rough with short harsh hairs, leaves ovate acuminate crenate very asperous on both sides with short harsh hairs rising from numerous papillae 4-6 inches long by 2-3 broad, petioles about 2 inches long channelled on the upper side, spikes terminal and axillary short leafy, the peduncles 1/2-1 inches long, bracts leafy lanceolate securose, bracteoles and calyptrine segments linear ciliate, 2 of the latter longer than the other three, corol bluish 1 1/2 inches long glabrous on the outside somewhat hairy in the centre inside the tube more or less recurved suddenly narrowed in its lower half, lobes equal rounded, stamens 4, submonadelphous, the two centres one shorter, style slightly hairy. *Anders. Journ. Linn. Soc. Vol. IX, p. 466.*

Ootacamund, common in sholas at 7000 feet elevation, allied to *S. Perrottetianus.*

I rather think Dr. Anderson has confounded 2 species under this name, and that his description is partly taken from *S. Neelgherrensis.* (The dissections are taken from living specimens.)

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STROBILANTHES EXTENSUS. (Nees.) A small shrub, stems 4-angled slightly hairy or subglabrous below, glandularly hairy upwards, leaves ovate often cordate at the base acuminate coarsely serrate slightly rough and hairy on both sides, the lower ones petiolated, the upper sessile 1-2 inches long by 3/4 broad, petioles channelled 3/8 lines long the pair generally unequal. Spikes terminal and from the upper axils forming a sort of a panicle, bracts small and very early deciduous, bracteoles linear much smaller than the calyx early deciduous, subglabrous. Calyx segments rather unequal one of them generally longer than the others all linear and rounded at the apex glanduloso-hairy as are the bracteoles, corol deep purple 1-1 1/2 inch long, tube a little contracted at its base, stamens 4, submonadelphous, the tube very slightly hairy, the filaments glabrous the inner two shorter, style slightly hairy below, ovary puberulous at its apex. *Nees. DC. Prod. xi. 195.*

Western Mysore, near Manjeerabad, also in Sylhet, Assam and Khasya, and cultivated in the Lal Dagh Gardens at Bangalore.

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STROBILANTHES IXIOCEPHALUS. (Benth.) A small undershrub, stems glabrous or subglabrous, the small floriferous ramuli or leafy spikes setose with long silky white hairs, leaves membranaceous lanceolate acuminate crenate attenuate at the base into the petiole densely lanceolate and sparingly setose on both sides, up to 6 inches long of which the petiole is sometimes 2 inches, 1 1/2 inches broad. Spikes axillary, terminal or leaf-opposed, leafy below and densely setose, the heads few flowered oblong or ovate, the bracts much inb lambicate ovate leafy about 3/4 as long as the flower and with the bracteoles and calyx setose with gland tipped viscid hairs, bracteoles linear shorter than the calyx, calyxine segments linear subequal. Corol white about 1 inch long, much narrowed in its lower half, glabrous outside slightly setose within. Stamens 4 monadelphous, the 2 middle ones much shorter, filaments and style slightly hairy towards the base. *Benth. in Walp's. Ann. Vol. III. p. 218.*

South Canara, in the plains about Bellatangady not far from Mangalore, also on the ghats at no great elevation. My specimens were identified by Dr. Anderson.

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STROBILANTHES ANCEPS. (Nees.) A small undershrub, stems more or less strigose bluntly 4-sided, leaves membranaceous very variable and often the pair very unequal in size, ovate to elliptic acute or with a long acumen, attenuate at the base entire or obscurely toothed, up to 7 inches long of which the petiole is sometimes 1 1/2 inches, ciliate at the margin and sparingly hairy on both sides, particularly on the costa and veins and furnished with minute stinging glands. Spikes axillary and terminal generally naked and simple, sometimes leafy and branched, generally very flat and winged and much ciliate, flower heads short subglobose or cylindric, bracts large leafy ovate furnished with glands densely ciliate and more or less hairy as are the bracteoles and calyx, bracteoles linear, calyxine segments equal or subequal linear, flowers white very slightly hairy about 1 inch long, the tube narrowed below, stamens 4, monadelphous the middle 2 shorter, the longer filaments hairy, style glabrous. *Nees. in DC. Vol. XI. p. 189. S. punctatus, Nees l. c. p. 182.*

Anamallayas, South Canara ghats, Tinnevelly ghats, also in Ceylon. Easily recognized by its flat generally winged peduncles.

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Anamallayas, South Canara ghats, Tinnevelly ghats, also in Ceylon. Easily recognized by its flat generally winged peduncles.

Ruellia ? punctata, Wight Iconos 1563, is a true Strobilanthes, and may retain the name of punctata; it is not mentioned by Anderson; it is a large shrub with white flowers and very scabrous leaves, the hairs arising from hairy papillae. Wight's figure is very characteristic, so I shall not refigure it; it is very common on the Pulney hills 4000 feet, and I have found it on the Anamallayas, and elsewhere along our ghats.

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PLATE CCl.

STROBILANTHES EXTENSUS.

PLATE CXXII.

STROBILANTHES IXIOCEPHALUS.

PLATE CXXIII.

STROBILANTHES ANCEPS.
**STROBILANTHES VIOLACEUS.** (Bedd.) A large shrub, stems bluntly 4-angled glanduloso-pubescent above, leaves thickly membranaceous ovate to elliptic long petioled the pair often unequal acute or acuminate rather suddenly attenuated at the base, up to 8 inches long (of which the petiole is sometimes 2½ inches) by 3-3¼ inches long, petioles terminal lax glanduloso-pubescent, bracts at the ramifications small oblongo-linear, calycine bracteoles linear shorter than the calyx, and like it glanduloso-pubescent, calyx-segments linear or subequal, flowers 1½ inches long deep violet-purple, tube scarcely contracted except at the very base glabrous outside, hairy within, stamens 4 the 2 middle ones much shorter, filaments and style hairy towards the base.

Abundant about the head of the Sisparah ghat (Nilgiris), a very beautiful species; it is very rarely to be met with in flower.

**STROBILANTHES SEXENNIS.** (Nees.) A very large shrub up to 25-30 feet, old trunks up to 2-2½ feet in girth, the younger branches somewhat 4-angled and often glanduloso-pubescent, leaves lanceolate acuminate sessile and amplexicaul or decurrent down a short petiole, coarsely serrate quite glabrous or slightly hairy on both sides, always densely lineolate above, up to 17 inches long by 5-6 inches wide, but often only 8-9 inches long, veins not so numerous or regular as in violaceus, transverse veinlets inconspicuous, panicles terminal, scarcely lax glanduloso-pubescent as are the calyx bracts and bracteoles, bracts broad ovate, bracteoles linear lanceolate or spatulate equal in length to and broader than the narrow linear equal calycine-segments, flowers white, corol generally much curved about 1 inch long, tube scarcely contracted a little hairy inside, stamens 4 monadelphous the two middle ones much smaller, anthers all rounded at the base, filaments and style slightly hairy, ovary glabrous, capsule glabrous or oblong acuminate. *Nees in DC, l. c. p. 187. S. homotropus, Nees. l. c. 188. S. cerinoides, Nees. in Herb. Hook.*

Very common at Ootacamund and elsewhere on the Nilgiris at the higher elevations, also on the Pulneys, &C., 5000-7000 feet, and abundant at high altitudes in Ceylon; it is the largest of all our species, and in the Kockal shola on the Pulneys it grows to be quite a small tree with a hard woody trunk nearly 3 feet in girth.

**STROBILANTHES GRACILIS.** (Bedd.) A very large shrub, branches glabrous terete, leaves lanceolate acuminate sessile, auricled at the base and amplexicaul densely lineolate but otherwise quite glabrous or with a few weak seta, up to 8-9 inches long by 2 inches broad, panicles terminal lax glanduloso-pubescent or slightly viscous, bracts very small caduceus, bracteoles linear shorter than the calyx, calycine-segments all about equal linear lanceolate ciliate. *Bedd. in Trans. Linn. Soc. Vol. XXV. not Anders. S. Beddomei, T. Anders. Journ. Linn. Soc. Vol. IX. p. 422.*

Anamallay mountains, 4000-5000 feet elevation, nearly allied to Sexennis.

**STROBILANTHES ANDERSONII.** (Bedd.) A very large shrub up to 20 feet high. Stem terete hisrate, leaves submembranaceous ovate acuminate serrate up to 9-10 inches long by ½ inch broad, pairs of different lengths, petioles ½-2 inches long hisrate, spikes axillary 2-2½ inches long, flowers in short oblong dense heads, bracts large ovate obtuse ciliate, but otherwise glabrous densely hairy, bracteoles and calycine-segments all about equal linear lanceolate ciliate. Coral glabrous pale blue 1½ inch long, stamens 4 monadelphs the 2 middle ones a little shorter, filaments glabrous, anthers sagittate at the base. Style slightly hairy, ovary glabrous, capsule ovoid glabrous pointed. *Bedd. in Trans. Linn. Soc. Vol. XXV. p. 222.*

Anamallay mountains 6000 feet in moist woods, allied to the next species but with larger flowers.

**STROBILANTHES CALYCINUS.** (Nees.) A shrub 4-5 feet, stems in griseous or glabrous, leaves ovate or oblong acuminate attenuated at the base crenate hisrate, 6-7 inches long (of which the petiole is 4½-5½ inches) by 2-2½ inches broad, spikes axillary 2-2½ inches long (of which the peduncle is 2½ to 1 inch) erect or suberect ovate, bracts much innumerate large suborbicular or obovate-cuneate crenate glabrous or slightly glanduloso-hisrate, bracteoles and calycine segments narrow lanceolate all about equal and nearly or quite...
equaling the corol, corol dull yellowish red glabrous outside and within except a small tuft of hair, the tube only contracted at its very base, stamens 4 monadelphous slightly exerted, the two middle ones a little shorter, filaments glabrous, ovary and style glabrous. Nees DC. l. c. p. 185. S. coloratus, Nees. l. c.

Ceylon, central provinces, at 7000 feet elevation.

PLATE CCIX.

STROBILANTHES AURICULATUS. (Nees.) A much branched shrub, branches 4-angled slightly scabrous towards the apex, leaves elliptic acuminate serrate with the base cuneiform auricled and amplexicaul, 4-7 inches long by 1½-2 inches broad, slightly hairy on both sides. Spikes axillary and terminal 1-4 inches long narrow linear, the peduncles tetragonal, bracts densely imbricate orbicular cuspidate-mucronate, hirsute or glanduloso-hirsute, bracteoles none. Calycine segments somewhat unequal linear obtuse glanduloso-hirsute, flowers large ½ to 1 inch pale blue, tube much contracted at its base, stamens 4 slightly monadelphous the 2 inner ones shorter, filaments hairy. Nees l. c. p. 181.

Common about the Jubbulpore and Nagpore country, but I have never seen it further south. Common in a cultivated state in gardens.

PLATE CCX.

STROBILANTHES CILIATUS. (Nees.) A small shrub, branches terete or 4-sided fimbriate at the joints, leaves elliptic acuminate attenuated into the petiole serrate densely lineolate above and with a few setae on the costa and veins, lineolate and glabrous below subcoriaceous, 6-7 inches long by 2 broad. Spikes axillary 2-4 inches long generally simple with the peduncle bracteate jointed and reflex below the middle, sometimes somewhat branched and leafy, flowers small oval or ovate, flower heads small narrow oblong, flowers small white spotted with lilac about 1 inch long, bracts ovate or nearly orbicular pointed mucronate, bracteoles a little smaller than the calyx linear-lanceolate, calycine lobes equal or subequal linear-lanceolate glabrous or with a few hairs, corol with a very narrow tube below suddenly campanulate below the lobes very slightly hairy inside, lobes rounded, stamens 4 monadelphous the two inner a little shorter, filaments hairy below glabrous above, anthers purple, ovary and style glabrous. Nees l. c. p. 183;—Wight Icones tab. 1617. Strobilanthes Warreensis, Dalz. in Hook. Jouru. of Bot. ii. 341.

This is found about all our ghats from the very foot up to about 4000 feet, and it flowers I believe every year. I have refigured this although Dr. Wight published a drawing, as his is not characteristic and scarcely to be recognised.

PLATE CCXI.

STROBILANTHES BARBATUS. (Nees.) A large glabrous shrub often up to 12-15 feet, with numerous exposed roots from the lower part of the stem, branches 4-sided often completely and very broadly winged, sometimes quite naked, leaves lanceolate, acute or acuminate crenate or subentire coriaceous glabrous but densely lineolate on both sides, somewhat shining above paler beneath, 6-10 inches long by 2½-4 broad, petals naked or winged 1½-1⅞ inches long, spikes axillary and terminal 1-2½ inches long often leafy at the base, bracts densely imbricate rhombic-lanceolate long cuneate-acuminate lineolate and coarsely ciliate but otherwise glabrous, bracteoles similar to the bracts but a little smaller and narrower, flowers small, calyx 5-cleft to the middle the segments acuminate, corol white about 1 inch long the tube much contracted at the base and suddenly campanulate just below the lobes, lobes long ciliate and very hairy within with white hairs, stamens 4 monadelphous exerted, the middle 2 a little shorter, filaments hairy, sometimes the rudiment of a fifth stamen is present, ovary and style glabrous. Nees l. c. 179. Strobilanthes tetramerus, Dalz. in Hook. Jouru. of Bot. 1850. Vol. ii. p. 342.

One of the commonest species on our moist mountains up to 3000 feet elevation, from Canara down to Cape Comorin, forming often the chief undergrowth; in the Anamallays it covers miles of country; it only flowers about every 7th year, and then dies down; winged and wingless forms are to be found on the same plant.

PLATE CCXII.

STROBILANTHES CAUDATUS. (T. Anders.) A shrub 4-5 feet, stems glabrous below hirsute towards the apex; leaves lanceolate or linear-lanceolate with a very long ciliate acumination, lineolate on both sides, furnished above with a few distant setae, slightly hairy on the veins beneath, entire or obscurely crenate, 4-7 inches long by 1-1½ broad, pedioles 2-3 lines long, spikes axillary simple or branched, heads small subglobose 3-6 flowered, bracts bracteoles and calycine segments linear all densely villous and ciliate.
with very long white or brown often gland tipped hairs all subequal in length or the bract twice as long as the others and the calyx segments more or less unequal. Corol about 1 inch long whitish with a tinge of red, stamens 4 scarcely monadelphous included, the 2 middle ones a little shorter, style glabrous, ovary a little hairy at the apex. Anders. in Thw. Pl. Zey. p. 228.

Common on the Brumagberries in the Wynaad at 3500 feet elevation, also in Coorg and South Canara (Kudra Mukh) and in Ceylon (Hantani, at 2000-3000 feet.)

PLATE CCXIII.

STROBLANTHES JEPPORENSIS. (Bedd.) A large shrub, branches obtusely 4-angled a little hairy above glabrous below, leaves submembrauaceous broadly ovate with a long acumination suddenly attenuated at the base, densely lineolate and furnished with a few seta, slightly pubescent below with longish inconspicuous hair, 6.7 inches long without the petiole by about 4 broad, petioles 3 inches long. Spikes axillary trifid or single 3-4 inches long linear lanceolate flowered from nearly the base, bracts lanceolate and calyx glanduloso-pubescent and long subulate-acute, bracts lanceolate 3-nerved, bracteoles linear a little shorter than the calyx, calyx segments distinct to the base linear, flowers small, corol about 1 inch long white, tube contracted only at the very base, stamens 2 monadelphous, filaments hairy, style and ovary glabrous, capsule smooth mucronate much shorter than the calyx.

The Gudam hills near Golcondah (Vizagapatam district), 2500 feet elevation, also mountainous tracts in the Jeypore country.

PLATE CCXIV.

STROBLANTHES CANARICA. (Bedd.) A rigid shrub 3-4 feet. Stems hirsute obtusely 4 sided, leaves coriaceous ovate pointed prominently veined entire or subentire on the margins, when young densely lanate with white hair, in age sparingly hirsute on both sides or nearly glabrous above, 2-3 inches long by about 1 inches broad, petioles 3-6 lines long, spikes short dense terminal and from the upper axils generally crowded several together in each axil shorter than the leaves oblong and flowered from the base, bracts ovato-lanceolate hirsute, bracteoles linear-lanceolate hirsute shorter than the calyx, calyx cleft half down the segments linear-lanceolate acute, corol white puberulous outside a little hairy within, about 1 inch long, the tube contracted only at its very base, stamens 2 monadelphous, sometimes rather unequal, anther cells somewhat pointed at the base, filaments a little hairy. Style hairy, ovary glabrous.

South Canara, on the Kudra Mukhi mountain, elevation 6000 feet.

PLATE CCXV.

STROBLANTHES CONSANGUINEUS. (Nees) A large shrub, stems somewhat 4-angled glabrous or a little hairy, leaves membranaceous or sub-membranaceous ovate acute or acuminate, suddenly attenuated at the base, prominently and very regularly veined, glabrous on both sides but densely lineolate, or hairy beneath, quite entire or more or less crenate, without the petiole 4 5 inches long by 2 3/8 inches broad, petioles up to 4 inches long the pair often very unequal, spikes axillary 3-4 inches long very various from simple and filiform to much branched, and from nearly glabrous to densely hirsute, flowers white or pale blue about 1 inch long, bracts ovato-lanceolate nerved glabrous or a little hairy or densely hirsute, bracteoles shorter than the calyx linear-lanceolate acute, calyx cleft 1 down, segments linear-lanceolate acute, corol-tube contracted at the base, glabrous or puberulous outside, stamens 2 monadelphous, filaments glabrous or a little hairy, style hairy, ovary hairy at the apex. Ludopogon consanguineus, hypococcus, and amomum, Nees. l. c. p. 104.

A very common species on the ghat of the Nilghiri and Pulneys and other mountainous parts of our Western ghats, from the foot up to 5000 feet. One variety common in the Bomunputty valley, has the spikes much paniculate and densely hirsute, the variety figured is the commonest form.

PLATE CCXVI.

STROBLANTHES NIGRESCENS. (T. Anders.) A shrub 4-5 feet, stems erect tetragonal, leaves lanceolate acuminate serrate 4-5 inches long by 1-1 1/2 inches broad glabrous on both sides but densely lineolate above, petioles 8-18 lines long. Spikes axillary and terminal hispid shorter to a little longer than the leaves, bracts lanceolate with a long attenuated point 3-nerved glanduloso-hispid a little longer than the calyx, bracteoles linear and with the calyx glanduloso-hispid, calyx cleft down about 1/3, segments acute, corol about 1 inch long pale purple, tube contracted at the base, lobes ciliate. Stamens 2 submonadelphous, filaments glabrous, style hairy, ovary glabrous. Anders. l. c. p. 226.

Ceylon, Ambegamwa district, 3000 feet elevation.

PLATE CCXVII.
STROBILANTHES DEFLEXUS. (Anders.) A shrub 4-5 feet, stem glabrous somewhat 4-angled, leaves narrow-elliptic ciliate saccate, caudate serrate densely lineolate but otherwise glabrous; 2-3 inches long of which the petiole is sometimes 1 inch, 6-9 lines broad, peduncles axillary solitary or twin thickened towards the apex naked, deflex, heads capitate 6-8 lines long, bracts foliaceous, acute glabrous 6-8 at the apex of the peduncle, bracteoles filiform, calyx cleft to nearly the base, segments linear-lanceolate ciliate and sometimes pilose, coroll pale-purple 8 lines long the tube contracted at the base, stamens 2 submonadelphous, filaments glabrous, ovary and style glabrous. Anders, in. The. En. Pl. Zey. p. 227.

Ceylon, Hautani, at 4000 feet elevation.

STROBILANTHES THWAITESII. (T. Anders.) A shrub, branches tetragonal scabrous, leaves submembranaceous elliptic or ovato-elliptic acuminate serrate above, hirsute beneath, 5-6 inches long 1½-2 inches broad, petiole 3-6 lines long, peduncles tetragonal about as long as the pedirole, drooping simple or trifid at the apex, heads capitate 1-1½ inches long ovate about 3-flowered, bracts lanceolate acuminate bullato-coriaceous ciliate 7-10 lines long, bracteoles much smaller linear acut, calyx cleft to the middle, segments linear-lanceolate ciliate, coroll 1 inch long white glabrous outside a little hairy within, stamens 4 included the 2 middle ones much shorter, filaments and style hairy. Anders. l. c. p. 227.

Ceylon, Ambagamwa district.

STROBILANTHES HELICOIDES. (Nees.) A shrub 2-3 feet high, stem leaves ovato-oblong acuminate lanceolate glabrous coarsely and sharply serrate, 5-6 inches long by 2-2½ inches broad, petioles about 3 lines long, panicle-leaves ovate or ovato-lanceolate smaller than the stem leaves and gradually dwindling into bracts, panicles corymbose very long slender lax filiform and flexuose, pedicels slender 2-3 times longer than the calyx, bracts small linear-lanceolate, bracteoles linear-subphalate shorter than the calyx, calyx cleft to the middle, segments linear-lanceolate ciliate, flowers violet 1 inch long, tube inflated, lobes short rounded. Stamen 4 included submonadelphous, the 2 middle ones shorter, filaments and style hairy, ovary glabrous, capsule glabrous pointed about 6 lines long. Loptacanthus helicoides, Nees. l. c. 170.

Ceylon, Hautani and Ambagamwa districts, up to 3000 feet elevation.

PLATE CCXIX.

CORRECTIONS IN THE NOMENCLATURE OF PREVIOUS NUMBERS.

Plates 14, 15, 16, & 17. For Serissa read Saprosma.
18. For Nauclea tubulosa read Stepheyla tubulosa.
20. For Gardenia read Byrsophyllum.
37, 38, 39. For Griffithia read Randia.
40. For Diacarpis read Diplospora.
41, 42, 43, 44, & 45. For Saracena read Bocegana.
46. For Anaxagorea zeylanica, H. f. et T., read Anaxagorea Luzonensis, A. Grey.
71. For Oporheoa corea, Turr., read Oporheoa coruncen, Thev.
72. For Oporheoa obliqua, H. f. et T., read Oporheoa obliqua, H. f. et T.
75. For Popovia remossistam, Bedd., read Porrwia Beddomeana, H. f. et T.
96. For Stylorcorus, read Byrsophyllum (the sterile ovary is very badly represented in the lithograph).
114. For Zizyphus Wynnadensis, Bedd., read Ventilago Bombayensis, Baill.
123. For Diospyros calycina, Bedd., read Diospyros foliosa, Wall.
133. For Diospyros microphilla, Bedd., read Diospyros huxufolia, Miq.
163. For Memecylon unabile, Bedd., read Memecylon terminale, Dạt.
ACANTHACEÆ.

STROBILANTHES CUSPIDATUS. (Benth.) A large shrub, branches lanate when young, terete or obscurely 4-sided, leaves ovate acuminate a little attenuated at the base, irregularly crenate, in age glabrous above or with a few hairs, (when young densely lanate) densely lanate beneath, with the petiole 3–4 inches long by 1½–2 inches broad, prominently parallel-veined, petioles 1½–2½ inches long. Spikes axillary often leafy glanduloso-hispid, bracts lanceolate acuminate or cuspidate, bracteoles linear lanceolate as long as the calyx, calyx cleft down half-way, segments acute and glanduloso-hirsute as are the bracts and bracteoles. Corol about 1 inch long puberulous outside, tube very narrow at the base, stamens 3, filaments and style and apex of ovary hairy. *Benth.* in *Linn.* xxiv. 646.

Nilgiris, on the Seegoor ghat.

PLATE CCXXI.

STROBILANTHES WALKERI. (Nees.) Shrubby 2½–3 feet high, stems subglabrous tetragonal above, leaves elliptic to oval or suborbicular acuminate, acute at the base undulato-ereminate densely lineolate above and rather hairy and scabrous on both sides submembranaceous, without the petiole about 4 inches long by 2 broad, petals unequal up to 1½ or 2 inches long. Spikes axillary solitary or twin simple or trifid 1½–2 inches long, the peduncle sulcato-striate bracteate and jointed, heads 1½–2 inches long, bracts oval acute bullato-rugose slightly hairy and ciliate, bracteoles linear longer than the calyx, calyx cleft to nearly the base, segments linear-lanceolate ciliate, corol about ½ inch long white or pale purple, tube scarcely contracted at the base, stamens 4 all equal exserted submonadelphous, filaments and style glabrous. *Nees.* l. c. 181.

Ceylon, central provinces, 4000–7000 feet.

PLATE CCXXII.

STROBILANTHES LAXUS. (T. Anders.) Shrubby 4–6 feet, stems terete glabrous, leaves ovate acuminate cordate serrate subscabrous on both sides glandular beneath, without the petiole up to 6 inches long and 2½ broad, petals up to 2½ inches long. Spikes solitary or twin strobiliform axillary many-flowered often branched rather lax, 1½–3 inches long, bracts ½ inch long rotundato-ovate ciliate and furnished with waxy dots as are the bracteoles and calyx, bracteoles lanceolate, ciliate shorter than the calyx, calyx cleft to nearly the base, segments lanceolate acute equal or subequal ciliate broader than the bracteoles, corol ¼ inch long yellowish red, purple at the base, stamens 4 monadelphous of equal length exserted, filaments and style glabrous. *Anders.* in *Thw.* l. c. p. 228.

Ceylon, Hatana, 4000 feet elevation.

PLATE CCXXIII.

STROBILANTHES ZEYLANICUS. (Anders.) Shrubby, 3–5 feet high, stems erect 4-sided lineolate, leaves narrow-lanceolate acuminate, much attenuated at the base and often decurrent on the petiole lineolate on both sides but otherwise glabrous, entire or slightly scallop-toothed, 4½–5 inches long by 1 inch broad, submembranaceous paler beneath, primary veins distant about 4 on each side inconspicuous below, spikes axillary and terminal solitary, peduncles thickened towards the apex, 1½–2 inches long 1–2 jointed and with deciduous bracts at the joints, flower-heads oblong 1½–2 inches long, bracts, bracteoles and calyx lineolate but otherwise quite glabrous, bracts large obovate, bracteoles linear-ligulate much shorter than the calyx, calyx cleft to nearly the middle, segments acute 2 of them often more or less united, corol 1 inch long the tube funnel-shaped contracted only at its base glabrous out-

Anamallay mountains 4-5000 feet, and also in Ceylon. The plant figured is from the former locality and I have no Ceylon specimens for comparison; but Dr. Anderson refers my specimens to this species.

**PLATE CCXXV.**

The following South-Indian species are figured by Dr. Wight in his Icones.


" Knuthianus, *Wall.* (Phlebophyllum). Nilgiris higher ranges.

" Wightianus, *Nees.* Nilgiris and Pulneys, higher ranges.

" punctatus, *Nees.* (Ruellia punctata). Pulneys higher ranges.

" asper, *Wight* Nilgiris do do

" sessiloides, *Wight.* " do do

" sessilis, *Nees.* " do do

" Perottetianus, *Nees.* " do do

" Zonkerianus, *Nees.* (Endopogon Strobilanthes). Western ghats generally.

" foliosus, *Wight.* (Endopogon folius and capitatus). Western ghats generally.

" Strobilanthes microstachys, *Wight.* Western ghats generally.

" luridus, *Wight.* Western ghats generally.

" lupulinus, *Nees.* (Strob. rugosus, campanulatus). Western ghats generally.


" tristis, *Wight.* (Goldfussia tristis). Western ghats generally.


Of the following 5 Ceylon species I have no specimens.


Besides these Bentham describes (Walp. Ann. iii. 218) a South Canara species under the name of *S. microstachys,* which is unknown to me; and I do not know *S. rubicundus* (Leptacanthus, *Nees.*) a South Indian plant, and I have a new species only in leaf (somewhat allied to *S. perforatus*) from the higher ranges of the Anamallays; this gives a total of 59 species for Southern India and Ceylon.

**LEPIDAGATHIS GRANDIFLORA.** (Dalz.) Shrubby, branches 4-angled glabrous except a few hairs at the joints, leaves elliptic acute or acuminate, the upper ones sessile or subsessile, the lower petiolate, in age sub-glabrous on both sides or with a few scattered hairs, margins entire scabrous and ciliate, 5-8 inches and more long by $1\frac{1}{2}$ or more broad, petioles up to 2 inches. Spikes terminal and from the upper axils generally simple, bracts large oval penninerved, hirsute and long ciliate as are the bracteoles and calyx, bracteoles narrow lanceolate, calyx 5-cleft to nearly the base the upper segment broad lanceolate 5-nerved, the 2 lower narrow lanceolate 3-nerved, the lateral ones subulate; coroll 1½ or nearly 2 inches long pale blue deeply bilabiate, the upper lip bilabiate the 2 lobes emarginate, the lower lip 3-lobed, the convex palate furnished with long yellow hairs, anthers ciliate subsaggitate at the base, ovary and style hairy. *Dalz. in Hook. Journ. of Bot.* ii. 138.

South Canara, common at Bellatangady and elsewhere near the foot of the ghats; flowers in November and December. Also on the Syhadree mountains, Bombay: the whole plant turns black in drying.

**PLATE CCXXVI.**

**LEPIDAGATHIS CUSPIDATA.** (Nees.) Shrubby, stems pubescent at least towards the apex, leaves elliptic acuminate entire or somewhat repand glandulose-pubescent when young, in age glabrous or with a few hairs, often decurrent on the petiole, up to 8 inches long by $2\frac{1}{2}$ broad, petioles up to 3 inches long, spikes axillary 3-4 inches long, or elongated and leafy below, the leaves small.
not exceeding 1 inch in length, bracts oval 3-nerved about ½ inch long by 3-4 lines broad glandulos-pubescent and spinoso-mucronate
as are the bracteoles and calyx, bracteoles lanceolate much smaller than the calyx, calyx 5-cleft to nearly the base, the upper segment
broad lanceolate 3-nerved or sub 5-nerved, the 2 lower lanceolate 3-nerved the 2 lateral ones linear lanceolate all equal or subequal in
length or sometimes the upper one double as long as the others, corol shortly tubular a little hairy outside, limb bilabiate the lower
lip larger a little hairy inside below the anthers, 3-partite, the lobes rounded equal, the upper lip emarginate, the lower 3 lobed, filaments glabrous, anther-cells ciliate one above the other, style and apex of ovary hairy. Nees. DC. l. c. 258.

South Canara on laterite rocks about Soolay, quite in the plains ; also on the Bombay ghats. Dr. Wight's L. longifolia from
Malacca (Icones tab. 1564) is closely allied but has the anthers spurred.

PLATE CXXVII.

LEPIDAGATHIS FASCICULATA. (Nees.) Stems herbaceous somewhat procumbent villous, leaves membranaceous
ovate to elliptic acute or acuminate softly villous or hirsute, 1-2 inches long by ½-1 inch broad, sinuately dentate, petioles 2-4 lines long,
spike axillary and terminal simple or branched generally lower than the leaves and often leafy, bracts oval or elliptic 3-nerved
glandulos-pubescent as are the bracteoles and calyx, bracteoles lanceolate linear lanceolate shorter or as long as the calyx equal or unequal,
calyx 5-cleft to nearly the base, the upper one lanceolate 3-nerved the 2 lower linear-lanceolate, the 2 lateral segments equal in
length the upper one lanceolate 3-nerved the 2 lower deeply bifid, the 2 lateral ones lanceolate, all scarioso mucronate and densely hairy and ciliate chiefly at the apex with long woolly hair, corol bilabiate very hairy, upper lip emarginate, lower 3-lobed, filaments glabrous, anther-cells ciliate one above the other. Nees. DC. l. c. 256. Lep. Goensis, Dalz. l. c. 340.

Malabar, Canara, &c., also in Belgar, Ceylon and Birmah.

PLATE CXXVIII.

LEPIDAGATHIS RUFESTRIS. (Nees.) A low plant spreading close to the ground, stems suffruticose acutely 4-angled
or almost winged, the angles scabrous with thick hairs, leaves oblong sessile rough above with a transverse incision, scabrous on the
nerve beneath with coarse hairs ½-1½ inch long by 4-6 lines broad, flowers congested in a large woolly ball at the apex of the root,
bracts and bracteoles similar ovate or oval cuspidato-mucronate, calyx 4-partite the upper segment ovate 5-nerved the lower deeply
bifid, the 2 lateral ones lanceolate, all scarioso mucronate and densely hairy and ciliate chiefly at the apex with long woolly hair, corol bilabiate very hairy, upper lip emarginate, lower 3-lobed, filaments subequal, filaments glabrous, anther-cells ciliate one above the other. Nees. DC. l. c. p. 256.

Kurnool and Cuddapah plains, in black cotton-soil.

PLATE CXXIX.

VIOLACEAE.

IONIDIUM TRAVANCORICUM. (Bedd.) A perennial shrub 5 feet high, branches erect woody glabrous terete below,
angled towards the apex ; stipules subulate glandulos-puberulous, leaves linear lanceolate subacute, distally serrated glabrous 2½-3½
inches long by 6-10 lines broad, flowers pink, peduncles 6-8 lines long furnished with 2 puberulous bracteoles towards the apex, a little
below the flower and there jointed, sepals long subulate not keeled equal recurved, the lower petal with the long claw sarcate and
furnished with 2 spurs, the others subsulate, the upper 2 only ciliate, the 2 anthers nearest the large petal furnished with a round
glabrous spur at the base, seeds white 6 9.

Travancore and Tinnevelly hills 2-3000 feet elevation, very like the common I. suffruticosum, but a tall shrub.

PLATE CXXX.

EUPHORBIACEAE.

CLAOXYLON INDICUM. (Mull.) An undershrub, dioecious, young parts striate or nearly glabrous, leaves membranaceous elliptic more or less acuminate serrate the serratures often ending in a bristle, rather scabrous with rough dots but in age generally
without hairs except on the costa, 3-8 inches long by ½-2 inches broad, petioles ½-2 inches long with often 2 small glands at the
conjunction with the leaf, racemes axillary shorter than or nearly (particularly in the male) equaling the leaves, the racis glabrous or
subglabrous, the bracts and flowers more or less hairy, flowers in interrupted tufts along the racemes, the female with few bracts and 1-flowered, the male with numerous bracts and several flowers perianth or calyx 3-4 parted, the female with 3-4 narrow applanulate slightly hairy glands (or petals?) shorter than the sepals, ovary hairy 2-3 cells, styles 2-3 much lacinate, the male with about 30-32 stamens mixed with elevate very small glands the spicis of which are furnished with 2-3 long bristles, capsule about 3 lines diameter, the 3 rounded cocci strigose, a central column present in the middle. Mull. DC. xv. 782.

Anamalay and Tinnevelly hills up to 3000 feet. My specimens of the Ceylon plant, named C. longiflora by Thwaites and C. olistandrum by Muller, appear to be quite the same; they are however in very young bud as far as the male goes, and it is described by Muller as having fewer stamens. The drawing represents a female plant: 1, is a tuft from the male raceme; 2, a male bract; 3-4, male flowers showing 30 stamens and 3 or 4 sepals; 5, anthers; 6, one of the glands mixed with the anthers; 7, female flowers 2-3 styles; 8, the gland or petal removed from the same; 9, vertical section of the ovary; 10, transverse section; 11, fruit; 12, fruit, the cocci fallen off, showing the central column.

**PLATE CCXXXI.**

**MALLOTUS DISTANS.** (Wall.) A shrub often straggling but sometimes a small tree, young branches petioles and inflorescence densely clothed with short soft greenish stellate tomentum, petals opposite very unequal 1-2½ inches long, leaves membranaceous 3-nerved up to rather more than a foot long by 7 inches broad but generally smaller, broad ovate or rhomboide-ovate entire or obscurely toothed acute or acuminate, not petiole or very slightly so and furnished at the base on the upper side with 2-6 large black glands, in age glabrous above, beneath softly and densely stellate-pubescent and often minutely and inconspicuously aureo-punctilulate, bracts linear, female racemes from shorter to as long or longer than the leaves slender drooping 3-12 flowered, flowers distant solitary or pedicels about 3 lines long, elongating in fruit to 6-9 lines, calyx 3-5-parted, no disk, ovary densely and softly stellate-tomentose, capsule unarmed 3-lobed 1-6 lines in diameter stellately-infund. Male spikes more or less elongate, the flowers in interrupted distant sessile heads along the rachis, the heads each bearing 4-10 flowers and subtended by a single bract, calyx as in the female, no disk. Stamens about 45. DC. Prod. xv. 976. Croton distans, Wall. 7772-A.

Tinnevelly near Courtallam, very abundant on the Singamputty hills, south of Courtallum, 1000-2000 feet.

**PLATE CCXXXII.**

**CROTON RETICULATUM.** (Wall.) A shrub 3-5 feet, monoeious, young branches and young parts densely ferruginous with brown stellate scales, leaves submembranaceous ovato to oblango-lanceolate acuminate quite entire or nearly so at margins, in age glabrous above, silvery-white beneath with scales, up to 8 inches long by 2½ broad, but usually smaller, petioles up to 1 inch furnished at their very apex with 2 (rarely 4) pedicled clasping glands. Stipules small subulate deciduous, racemes terminal or from the upper axils up to 3-4 inches long many flowered, a few of the lower flowers female the others all male, all silvery-white, bracts inconspicuous, male flowers clustered about 1 line in diameter on short pedicels, the petals oblong ciliate and often lanate much larger than the calyxine segments, stamens 15-20, filaments glabrous, receptacle villous, the female flowers 2-3 times larger than the male, the hypogynous disk glabrous repando-crenate or sub 5-lobed, styles 3, each 2-cleft with the divisions again bifid, the stigma or arm truncate rigid glabrous subinvolute-curved, calyx increasing when in fruit, the capsule ferruginous with scales subglobose 6 lines long by about the same breadth. Seed brown mottled. Wall. cat. 7724-B.; — DC. Prod. xv. 580. Croton hypoleucus Dalz. in Hook. Journ. of Bot. 1853 Vol. III. p. 123.

Common in all our western moist forests up to 3-4000 feet elevation. In the analysis, fig. 1 is a fruit life size; 2, one of the cocci inner face, just burst and showing the seed; 3, the seed; 4 shows the central column from round which the 3 cocci have fallen off.

**PLATE CCXXXIII.**

**GRAMINEÆ.**

**OXYTENANTHERA MONOSTIGMA.** (Bedd.) A large rank reed, culms—7 leaves 8-10 inches long by 1-1½ broad lanceolate rounded or somewhat attenuated at the base, setaceo-acuminate at the apex, glabrous except minute asperous recurved points at or near the margin (sensible to the touch but not visible without the lens), primary veins 6-8 on each side. Sheaths striate glabrous, inflorescence terminal in very closely approximated dense globular heads about 2 inches in diameter, spikelets very numerous perfectly glabrous about 1 inch long and very narrow, 2-flowered, viz., one empty palea above the 2 unequal glumes and 1 terminal lipallaceous floret, lower palea very glabrous and shining with glabrous margins, apex much hardened and terminating in a long
articulated spiny point which is deciduous in age, upper palea convex and perfectly glabrous shorter than the lower; stamens 6 monadelphous in a long tube, anthers with a prominent bristle hairy at its apex, sessamoid none, style and ovary perfectly glabrous, stigma terminal terminating in a minute thickened point at its very apex, caryopsis narrow linear oblong, when ripe half as long as the upper palea in which it is closely folded.

Anamallay. It is at once distinguished from all the rest of the genus by the articulated very long spiny point to the lower palea of the terminal or fertile floret, the palea and glumes are perfectly glabrous even at their margins, and the style is glabrous with a simple stigma. Bedd. Fl. Syl. p. 233.

PLATE CCXXXIV.

RUBIACEAE.

NAUCLEA PEDUNCULARIS. (Wall.) A middling sized tree, glabrous, the branches a little compressed, leaves ovate-oblong acuminate glabrous about 6 inches long by 2 broad, peduncle terminal stout, pedicels 3 slender 1½-1½ lines long bracteate at the base, flower heads 8-9 lines in diameter, no bracteoles between the flowers, calyx-segments linear-spatulate rounded at the apex a little hairy, corol yellow turning to purple, tube a little hairy towards the apex outside and hairy within, lobes oblong hairy outside and there furnished with a short horn below the apex, filaments about as long as the anthers, stigma simple, ovules about 7 in each cell, the placenta pendulous from nearly the apex of the pistil. Wall. cat. 6091;—Walp. Rep. ii. 512.

Ceylon, Saffiram and contiguous districts, up to 1000 feet, not uncommon.

PLATE CCXXXV.

PSYCHOTRIA ANAMALLAYANA. (Bedd.) A large shrub or small tree, glabrous, stipules broad-lanceolate with a long sheathing, 1-2 inches long deciduous, deciduous, leaves cuneato-obovate shortly and abruptly acuminate, 8-12 inches long 2½ inches broad towards the apex, much attenuated towards the base, petiole 1-2 inches long, cymes terminal shortly pedunculate many flowered, flowers greenish large, bracts minute acute deciduous, calyx-tube very short villous in the jaws at the inserted of the anthers, lobes thick rather longer than the tube, filaments about as long as the anthers, stigma 2 ovate lobes, berry oblong about 9 lines long by 4 broad, crowned with the remains of the calyx. Grumilaela longifolia, Bedd. in. Linn. Trans. Vol. XXV. p. 218 (not Psychotria longifolia, Dalz.)

Anamallay forests, generally on banks of rivers at 3000-4500 feet elevation.

PLATE CCXXXVI.

RANDIA DECCANENSIS. (Bedd.) An unarmed tree 30 feet, young shoots tomentose, leaves broadly-ovate rhomboid-obovate or almost orbicular obtuse or emarginate scarcely coriaceous, above glabrous or subglabrous in age, beneath densely velvety, 3-4 inches long by 2-4 broad, petioles ½-1 inch long, cymes axillary or from the old axils a little shorter than the leaves subglabrous, rather loose, the branchlets 3-flowered, flowers 5-merous white 6 lines in expansion, calyx cup-shaped, the teeth small acute, corol hairy outside the tube scarcely as long as the lobes hairy in the jaws, lobes rounded. Stamens exerted quite separate, style linear, stigma scarcely exerted globular entire, ovary cells 5 ovuled, fruit not seen. Bedd. Fl. Syl. under Rubiaceae.

Nallaymallay mountains, Kurnool.

PLATE CCXXXVII.

PECTRONIA MACROCARPA. (Thw.) Shrubby subscandent, thorns axillary very stout recurved, branches torette rufo-pilose when young glabrous in age, leaves ovate sessile 1½-2½ inches long by ½-1½ breadth densely rufo-pilose beneath particularly on the prominent veins, sparingly pilose above, petiole 2½-3½ lines long pilose, cymes pilose solitary in the axils the peduncles 3-5 lines long, flowers numerous on the dichotomous branchlets with a single one in the fork, brownish white rounded at the apex in the bud, 5-merous, calyx minutely toothed, corol about 3 lines long contracted above the tube when in bud, the lobes lanceolate a little hairy on the outside at length reflexed and a little longer than the tube, tube pilose within. Stamens exerted, style hairy much exerted, stigma thick
ovoid entire sulcate, drupe roundish rather compressed emarginate 1 inch long. Seeds tuberculate. Canthium macrocarpum, Thw.

Ceylon, Hantani, at 3000 feet elevation.

**PLATE CCXXXVIII.**

**PLECTRONIA TRAVANCORICA.** (Bedd.) A middling sized tree unarmed, branches terete glabrous. Stipules with a long filiform subulate point (5 lines long) from a broad base; leaves ovate with a bluntish acumination glabrous membranaceous, about 2 inches long by 1 inch broad, much paler beneath, petioles 6-5 lines long, cymes glabrous slender many-flowered axillary or from tubercolae at the axils solitary or several together shorter than the leaves, pedicels elongate and slender, flowers 4-merous very small rounded in the bud campanulate, calyxine teeth subulate persistent, the tube and lobes of the corol each 1-1½ lines long, tube with a ring of hairs in its jaws, lobes ovate scarcely acute, stamens exerted, style much exerted glabrous, stigma globose sulcate, fruit not seen.

I have only met with this tree on the Travancore and Tinnevelly ghats.

**PLATE CCXXXIX.**

**SCYPIOSTACHYS COFFEOIDES.** (Thw.) A shrub, leaves lanceolate much attenuated at both ends acuminate at the apex glabrous subcarinose, 2½-5 inches long by ½-1½ inch broad, petioles 1-2 lines long, stipules entire at the margins glabrous inside subcarinose, peduncle very short or wanting, flowers solitary at first almost quite enclosed in the large sheathing subcarinose bracteole, fruit a red berry. Seeds oblong striated about 2 lines long. *Thw. En. Pl. Zey. p. 157.*

Ceylon, Ratnapoora district, abundant up to no great elevation, called Wal copee.

**PLATE CCXL.**
AGROSTISTACHYS INDICA. (Dalz.) A small tree up to 15 feet high, leaves subcoriaceous or coriaceous, 5-15 inches long by 1-6 inches broad, from narrow lanceolate elliptic to very broadly ovate, very coarsely serrated with the serratures incurved, or sometimes quite entire, margins much thickened, glabrous on both sides, primary veins very prominent and thick very variable in number, transverse veins also very prominent, petals up to 2 inches long, stipules ovato-lanceolate subulate acuminate striated soon deciduous, bracts broadly triangular-ovate acute concave sericeous, petals obvurate, connective obtuse produced beyond the anther-cells. Ovary hairy. Dalz. l. c.

Very common in our dense Ghats forests from Canara down to South Tinnevelly, 3-5000 feet elevation, also on the Bombay ghats, and in Ceylon 1-2000 feet elevation, and in Birmash and the Andamans.

PLATE No. CCXLII.

ASTERIACIAGMA MACROCARPA. (Bedd.) A large tree, dioecious, young shoots minutely aureo-pubescent, leaves exactly oblong with a short sudden point at the apex, quite entire, above glabrous or the costa very minutely pubescent towards the base, beneath glabrous except the costa and primary veins (which are minutely striate) and furnished with very minute white dots (under the lens) 10-12 inches long by 3½ broad, venation very prominent beneath, the primary veins much raised about 7 on each side alternate, veins parallel prominent with the vessels prominent and beautifully reticulated, petals 9-10 lines long pubescent, female flowers white about 1 inch across in few-flowered 1-1½ inches long fascicles on the older branches, pedicels 4-5 lines long thick, calyx segments rounded minutely puberulous or subglabrous, petals 12 shorter than the calyx ciliate oblong, stamens about 60 in 2 rows, anthers oblong small opening longitudinally along the outer edge, ovary sessile, petals 12, stamens about 70 in 3 rows rudiment of ovary 8-lobed. Bedd. Flora Sylvatica page ccxxxvi and Analytical Plate 25 male flowers only; tab. ccxvi, the female tree.

Travancore ghats, 2-3000 feet elevation.

PLATE No. CCXLIII.

SMITHIA SETULOSA. (Dalz.) 3-4 feet high, stems hispid with long deflexed hairs, leaves 4-5 inches long, leaflets 5-10 pair linear-oblong ending in a bristle glabrous on both sides, the margins long ciliate about 1-1½ inches long by 3-5 lines broad, the common petiole hispid, stipules minute setaceous-acuminate sericeous glabrous, flowers in a large terminal panicled, calyx striated strigose and ciliate, the segments entire very unequal the upper large suborbicular or obovate the lower boat-shaped acute, bracts small oval nearly half as long as the calyx, flowers bright yellow, legume 10-12 seeded reticulated. Dalz. in Hook. Journ. Bot. iii. p. 208.

Common in the Wynaad and elsewhere on our Western Ghats and in the Bombay Presidency; the specimen figured was gathered at the head of the Carcoor ghat at nearly 3000 feet elevation.

PLATE No. CCXLIV.

ACANTHACEAE.

EBERMAIERA LIGULATA (Bedd.) Shrubby erect 2-3 feet, stems terete glanduloso-pubescent, leaves membranaceous 1-3½ inches long by ½ inch broad spathulate and gradually decurrent down the petiole entire or obscurely crenate, glanduloso-pubescent
when young, glabrous or subglabrous in age, flowers axillary solitary, bracteoles 1-nerved subspathulate from shorter to much longer than the calyx glabulo-s-pubescent, as is the calyx; calyx cleft to nearly the base 4 of the segments subequal in length 2 being subulate and 2 spatulate, the 5th segment much longer and spatulate, corol about 4-5 lines long infundibuliform, anthers versatile fixed to the filaments near the apex, filaments hairy, stigma bident the lower tooth again inconspicuously bident. Capsule linear glabrous 3-4 lines long.

Coorg, about Koggatnad, not observed elsewhere.

PLATE No. CCXLV.

ADENOSMA PINNATIFIDA. (Dalz.) Herbaceous weak, stems obtusely 4-sided 1-2 feet all the parts glanduloso-pubescent, leaves 3-4 inches long 1-1 ½ broad petiolate deeply pinnatifid the segments 6-8 on each side linear-oblong obtuse, subentirate or lobulate, flowers solitary in the axils sessile, or congested in heads at the apex of the branchlets, bracts and bracteoles obovate foliaceous entire or sublobulate a little shorter than the calyx, calyx segments linear entire or lobulate, corol 5 lines long the palate bullate, filaments hairy only at the very base, ovary and style of the style puberulous. Nomaphila pinnatifida, Dalz. in Hook. Journ. Bot. iii. 38.

Canara and Coconac on the banks of streams.

PLATE No. CCXLVI.

RUNGIA APICULATA. (Bedd.) An erect plant stems linear 1-2 feet, leaves from ovate or ovato-lanceolate to narrow linear lanceolate acute or sub-acute membranaceous minutely lineolate entire or slightly scutellate 2¼-1 inches long by 3-12 lines broad, petioles up to 1 inch long, spikes axillary and terminal minutely glanduloso-pubescent, more or less secund, bracts obovate or rhomboid ovate with a long subulate acumination and a diaphanous margin, bracteoles linear-subulate like the equal calycine segments but a little shorter, corol 5 lines long the upper lip much shorter than the lower emarginate the lobes rounded, the lower lip with 3 short rounded lobes, anther-cells unequal oblique the lower one spurred, capsule pubescent.

Tinnevelly hills, 2-3000 feet, beds of rivers, ovate and linear leaves often occur on the same individual.

PLATE No. CCXLVII.

CALOPHANES DAZELLII. (Anders. MS.) Shrubby, stems villous or woolly, all the parts except the capsule glanduloso-pubescent, leaves ovate 1½ inches long by ¾ inch broad, submembranaceous prominently nerved beneath, peduncles axillary generally 3-flowered, bracteoles shorter and broader than the calyx, calycine-segments subulate ¾ as long as the corol, corol pubescent about 1 inch long, anthers sparsely.

Poona, on rocky hills, it has thicker, much smaller, more prominently veined, and more hirsute leaves, and fewer flowers than the common C. vagrans, and its spurless anthers at once distinguish it.

PLATE No. CCXLVIII.

GYMNOSTACHYUM HIRSUTUM. (Anders.) Stem erect 2-3 feet, leaves ovate acute attenuated at the base scabrous above, hirsute on the veins and veinlets beneath, 5-7 inches long by 2½-3 inches broad, petioles up to 2 inches long, panicles axillary and terminal very hirsute, bracts obovate foliaceous, bracteoles linear-subulate ciliate nearly equaling or a little shorter than the calyx, calyx 5-cleft to nearly the base the segments like the bracteoles, corol greenish-yellow equaling or a little longer than the calyx, hairy on the outside, the limb shortly bilabiate the lobes rounded, filaments hairy at the base, anthers white, ovary and style glabrous, capsule 8-12 seeded. And. in Thew. En. Pt. Zey. p. 233.

Ceylon, central provinces, at 3-5000 feet elevation.

PLATE No. CCXLIX.

GYMNOSTACHYUM OVATUM. (Anders. MS. in Herb. Bedd.) Stem erect 4-sided glanduloso-hirsute as is the whole plant, leaves ovate acute attenuated at the base entire furnished with a few hairs above and hirsute on the veins beneath, 2½-3 inches long by nearly 2 broad, racemes terminal and axillary often paniculate rather lax and somewhat recurved, bracts and bracteoles small and subulate, calyx cleft to nearly the base the segments subulate and glanduloso-ciliate, corol 2-3 times as long as the calyx a little
Gymnostachyum glabrum. (Dalz.) Suffrutosose glabrous or subglabrous except the inflorescence, stems obtusely 4-sided, leaves ovate or elliptic acuminate dentate deciduous in a ring down the petiole, 6-11 inches long (of which the petiole in 1 1/2-2 inches), panicles glanduloso-puberulous terminal large up to nearly 1 foot long, bracteoles subulate, calyx deeply 5-cleft 2 1/3 lines long, corol 8-9 lines long puberulous on the outside, white mottled with purple inside, the tube irregularly curved, limb bilabiate, upper lip 2 3/4 lower 3 3/4, filaments and style hairy at the base, ovary and capsule glanduloso-pubescent, seeds numerous. Dalz. in Hook. Journ. of Bot. ii. 338.

South Ceylon, in shady places.

Gymnostachyum paniculatum. (Anders.) 2-2 1/2 feet generally all of a purplish tint, stem somewhat 4-sided, leaves ovate subacute alternate at the base on to the petiole, a little hirsute or puberulous or quite glabrous, 3 1/2 inches long by 1 1/2-2 inches broad, panicles terminal many-flowered, flowers crowded purplish, calyx 2 lines long cleft to nearly the base, segments short lanceolate glanduloso-tomentose, corol 7 lines long externally a little tomentose, tube curved, limb somewhat bilabiate the 5 lobes rounded, base of the filament and the ovary hairy, style glabrous, capsule 1 inch long hairy. Anders, in Thw. En. Pl. Zey. p. 232.

Ceylon, Saffram and Galle districts, at 1600-2600 feet elevation.

Gymnostachyum latifolium. (Dalz.) Suffrutosose glabrous, stem 3-4 feet 4-sided, leaves exactly ovate to sub-orbicular acute entire or subcrenulate with the 3-4 inch petiole about 1 foot long by 6 inches broad, panicles or racemes axillary 3-5 inches long, bracts and bracteoles subulate minute, calyx segments 2-3 lines long subulate, flowers 1 1/2 inch long slightly puberulous outside the limb very shortly bilabiate the upper lip slightly emarginate, filaments hairy except at the apex, anthers subincluded the cells parallel hairy and ciliate, ovary style and capsule glabrous, capsule 1 inch long many-seeded. Cryptophragmium latifolium, Dalz. in Hook. Journ. ii. 137.

South Canara jungles about Eed, Mysore and Bombay ghats. In leaf very like Phlogacanthus latifolius of Wight, which is common in Coorg, but the flowers in that are much more numerous, more deeply bilabiate, the anthers glabrous and much exserted.

Gymnostachyum serrulatum. (Nees.) The whole plant glanduloso-pubescent. Stem erect, leaves ovate acute serrate about 6-7 inches long by 3 1/2-3 inches broad, pedioles up to 2 1/2 inches long, panicles axillary sub-spicate, flowers second, bracts and bracteoles subulate scarcely longer than the very short pedicel, calyx cleft to nearly the base, segments subulate 2-3 lines long, corol 7-8 lines long, tube slightly curved, limb very shortly bilabiate the 5 lobes rounded, filaments hairy at the base, ovary and style hairy, capsule 7-8 lines long the cells 12-seeded. Cryptophragmium serrulatum, DC. Prod. xi. 95.

South Ceylon ghats.

Gymnostachyum thwaitesii. (Anders.) Stem very short tomentose, leaves subradical ovate obtuse unequal at the base at least about 4 inches long by 1 1/2 inches broad, pedioles 1 to 1 inch long tomentose, panicles puberulent terminal elongate many flowered naked at the base, the branchlets opposite cymose form lax, bracts subulate, calyx 1 1/2-2 lines long the segments subulate, corol bilabiate 6 lines long, capsule 7-8 lines long a little hairy. Anders, in Thw. En. Pl. Zey. p. 232.

Ceylon, Ambagamwa district.
**Barleria pilosa.** (Wall.) A small weak much branched undershrub, the young branches glandulose-pilose, leaves exactly ovate inconspicuously toothed or subentire, acut, 1-2 inches long by ½-3 inches broad glandulose-pilose, pedicels 3-5 lines long pilose, peduncles axillary very short 1-flowered, bracteoles linear reflexed much shorter than the calyx pilose, the larger calyx segment 6-8 lines long equal ovato-orbicular repando-deutate ciliate and slightly hairy subscarioses and prominently 7-nerved and reticulated, the interior segments small narrow lanceolate dentate, corol about 1½-2 inches long pale sky-blue glabrous or subglabrous, tube incurved, lobes obtuse, stamens 2 fertile, and 3 perfectly sterile apiculate staminodes, stigma truncate. DC. Prod. xi. 234.

Tinnuvelly, common on the hills about Courtallum, 1000-1500 feet elevation.

**Barleria montana.** (Nees.) Suffraticose, branches glabrous the nodes distant, leaves oblongo-elliptic acute attenuated into the petiole, sparingly hairy and the margin ciliate when young, at length glabrous but lineolate above, about 5 inches long by 1½ broad, petioles 4-10 lines long, flowers axillary solitary sessile, bracts linear small a little hairy, the larger calyx-segments herbaceous oblongo-elliptic 1-1½ inch long equal entire ciliate and a little hairy or glabrous, the inner segments linear subulate much shorter, corol 2-3½ inches long blue, lobes obtuse, stamens 2 sterile and without any approach to anthers. DC. Prod. xi. 232.

Anamallays and elsewhere on our Western ghats up to 4000 feet, but not common; also in Central India, Jubbulpore, &c.

**Barleria beddomei.** (Anders. MS.) Shrubby, stems terete strigose, leaves lanceolate acute entire 3-4 inches long by 1-1½ broad strigose, petioles 2-3 lines long, flowers axillary subsesile solitary, bracteoles 2 small linear recurved strigose as is the calyx, the exterior calyx-segments large foliaceous lanceolate the lower one minutely bifid at the apex, the interior segments much smaller linear-subulate, corol hirsute on the outside ¾-4 inches long pure white, tube long slender, the fertile pair of stamens nearly as long as the corol, a pair of very short effete stamens with the connective of the sterile anthers spurred at the back, a 5th minute perfectly effete stamens between the latter.

Singulur, Bombay presidency.

**Strobilanthus gardnerianus.** (Nees.) 1-2 feet, stems hirsute upwards, leaves lanceolate acute entire 3-4 inches long by 1½ broad strigose, petioles 2-3 lines long, flowers axillary subsesile solitary, bracteoles 2 small linear recurved strigose as is the calyx, the exterior calyx-segments large foliaceous lanceolate the lower one minutely bifid at the apex, the interior segments much smaller linear-subulate, corol purple about 1 inch long a little hairy outside the lower half of the tube much contracted. Stamens 4 monadelphous the 2 middle ones shorter, filaments hairy at the very base only, ovary hairy at the apex, style glabrous. Endopogon gardnerianus, DC. Prod. xi. 723.

Ceylon, Hamburi, at 4000 feet elevation.

**Strobilanthus vestitus.** (Nees.) Herbaceous hirsute. Stem erect, leaves oval or ovate-oblong acuminate, the base obtuse or acute, dentate, hirsute on both sides, 5-8 inches long (without the petiole) by 1½-3½ broad, petioles up to 3 inches long, spikes axillary simple or branched the pedicels often geniculate at the apex, flowers 6-8 in a short oblong head, bracts large ovate lanceolate hirsute as are the calyx and bracteoles, bracteoles lanceolate large, calyx cleft about ½ way down, the segments lanceolate acute, corol purple about 1 inch long a little hairy outside the lower half of the tube much contracted. Stamens 4 monadelphous equal much exerted, filaments ovary and style glabrous. Nees. in D.C. vol. xi. p. 180.

Ceylon, Mataurata, elevation 5-7000 feet.
ACANTHACEÆ.

**Strobilanthes Arnottianus.** (Nees.) Shrubby erect, the whole plant hispid with whitish hair, leaves very scabrous above hairy beneath, oval or ovate to cordate acute and dentate, about 2 inches long by 1-1½ broad, pedicels unequal up to 1 inch long, peduncles axillary as long or longer than the leaves simple or branched geniculate-flexuose, spikes oval few flowered, bracts leafy oval, bracteoles linear lanceolate a little shorter than the calyx, about 6 lines long at nearly the base the segments linear-linearicate densely asbo-strigose, corolla 1 inch long whitish, campanulate the tube not much contracted the mouth wide, stamens 4 exerted the inner 2 a little shorter than the outer ones monadelphous in a tube at the base, filaments glabrous, ovary and style hairy. *DC. Prod.* xi. 179.

Ceylon, Newera Ellis, allied to S. Perottettia and vestitus.

**Plate No. COLXI.**

**Strobilanthes Hookerii.** (Nees.) 5-6 feet high leaves oval to oblongo-elliptic acuminate crenate, 4½ inches long by about 2 inches broad scabrous and a little hairy on both sides but particularly beneath, pedioles 1-1½ inches long, spikes axillary naked below, leafy towards the apex glabrous, from shorter to about as long as the leaves, bracts sessile broad orbicular subglabrous or ciliate and more or less hairy, bracteoles spathulate small, calyxine segments lanceolate acute equal a little hairy, corolla about 1½ inches long broadly campanulate at the mouth much exceeding the bracts, lobes rounded retruse, white marked at the tips with 3 purple longitudinal lines, stamens 4 all of the same length slightly monadelphous at the base, filaments exerted, filaments ovary and style glabrous. *DC. Prod.* xi. p. 188.

Ceylon, central provinces, elevation 7000 feet, nearly allied to S. calycinus and Bolampattianus.

**Plate No. CCLXII.**

**Barleria Vestita.** (Anders.) Herbaceous 6-8 feet, hirsute the hairs patent, leaves ovato-elliptic attenuate at both ends, petiole or subserice entire, 6-12 inches long; cymes long peduncled axillary or terminal sparingly flowered lax a little shorter than the leaves, bracts very narrow lanceolate acute. Calyx fulvous strigose the segments acute unequal lanceolate the two inner ones much smaller, the lower one entire or minutely bifid, corolla white or pale purple narrow infundibuliform 3 inches long the lobes a little shorter than the tube, stamens 2 long and fertile and 3 very short and effete, filaments ovary and style glabrous. *Anders.* in *Fl. Zey.* p. 230.

Ceylon, central provinces and in the Saffragram districts up to 5000 feet elevation.

**Plate No. CCLXIII.**

**Barleria Nutans.** (Nee.) Stem shrubby, leaves elliptic acuminate, glabrous and shining lineolate, about 2 inches broad, pedioles 1½ inches long. Spikes axillary and terminal as long or longer than the leaves naked below glandulose-hirsute, bracts and bracteoles small linear acute, calyx divisions lanceolate acute the upper one longer than the others 5-nerved, the lower one bifid at the apex, the 2 lateral ones narrow, flowers 1 inch long bluish-purple, stamens 2 long and fertile 2 very short and effete, filaments and apex of the ovary a little hairy. *Nees in DC.* xi. 227.

Ceylon, central provinces, 1000-3000 feet elevation.

**Plate No. COLXIV.**

**Gymnostachyum Ceylanicum.** (Arn. and Nees.) Stems pubescent 1-3 inches long rooting between the leaves, leaves spathulate to oblong or oval often decurrent down the petiole obtuse or subacute, 4-6 inches long by 1½-2 broad caco-pubescent beneath; linear above, panicles terminal 6-10 inches long pubescent, flowers fascicled, calyx and corolla pubescent, calyxine segments linear, corolla 3 lines long the tube pale purple the limb greenish yellow, anthers white scalare, filaments at the base and ovary a little hairy, capsule 5 lines long tetragonal 12-seeded. *DC. Prod.* xi. 93.

Ceylon, shady places in the hot drier parts of the island.

**Plate No. CCLXV.**
RUNGIA LONGIFOLIA. (Nees and Amt.) Stems slightly pubescent branched from the base, leaves unequal the lower oval or orbicular very small, the upper linear spatulate 3-4 inches long by 3 lines broad scapose lineolate, spikes small axillary or terminal solitary or twin, bracts 3 lines long broad oblong long-ciliolate mucronate and with a membranaceous margin, bracteoles narrower and smaller ciliolate, calyx glabrous, corol 4-5 lines long a little hairy on the outside, upper lip bifid, anthers a little hairy. DC. Prod. xi. 471.

Ceylon, Ramboda and Adam's Peak.

PLATE No. CCLXVI.

PETYSSIGLOTTIS RADICOSA. (Anders.) Stems creeping slightly pubescent, leaves distant oval obtuse lineolate and furnished with a few setae on the upper side glabrous or subglabrous beneath, 1½ inches long by about 1 inch broad, pedicles 4-6 lines long. Spikes terminal on longish peduncles (4-7 lines), bracts subulate, calyx segments subulate, corollas white 6 lines long the upper lip bifid segments acute, lower lip tripartite segments rounded, capsule 3 lines long, seeds tuberculate. And. in Thw. En. p. 235. Rhytidoglossa radicosa. DC. Prod. xi. 344. Restella granitacea, Zollinger PI. Java.; DC. 370.

Ceylon, hot drier parts of the island.

PLATE No. CCLXVII.

JUSTICIA HOOKERIANA. (Nees.) Stem suffruticose 4-6 angled, glabrous in age, leaves narrow lanceolate obtuse or acute 2-2½ inches long by 1½ lines broad glabrous deciduous on to a very short pedicle, spikes terminal, bracts and bracteoles linear or subspathulate, corollas 4-5 lines long. Adhatoda Hookeriana, Nees. in DC. Prod. xi. 403. Justicia, Anders. in Thw. En. PI. Zey. 233. Leptostachya Zeylanica, Nees in partim.

Ceylon, abundant on banks of streams in the central provinces.

PLATE No. CCLXVIII.

MONOTHECIUM ARISTATUM. (Wall.) Stems puberulous, leaves elliptic oblong furnished with a few hairs on the veins, 2-2½ inches long by 1-1½ lines broad glabrous decurrent on to a very short pedicle, spikes terminal, bracts and calyculate segments subulate glandulosous-pubescent, corollas slightly puberulous on the outside white the lower lip blotted with red. Justicia aristata, Wall. in Cat. 2481. Anthocometes aristatus, Nees in DC. xi. 312. Monothecium, And. in Thw. En. PI. Zey. p. 234.

Nilgiris and Ceylon.

PLATE No. CCLXIX.

GUTTIFERÆ.

GARCINIA PURPUREA. (Roxb.) A small tree, deciduous, leaves (red when young) lanceolate elliptic 3-4 inches long by 1-1½ broad, pennivened the primary veins irregular and not conspicuous; male, flowers peduncled 3-8 (generally 3) in the terminal axils 2-4 in the lateral ones, stamens very numerous on an entire short column, anthers oblong 2-celled delisising longitudinally, rudiment of ovary none; female, flowers sessile solitary or 2 and 3 together, sterile stamens in 4 phalanges in a ring round the ovary each phalanx with 2-7 staminodes in 1-2 rows, ovary cells and stigmas 5-8. Fruit globose not furrowed 1½ inches in diameter purple or white, edible. Roxb. PI. Ind. ii. 624.

A very common tree throughout North Canara where it is called Kokum; there are 2 varieties, one with white and the other with purple fruit the fruit has a very agreeable acid flavor and is much eaten, and a syrup is made from it. The seeds furnish the kokum, a concrete oil or soapy substance useful in healing chaps; the tree flowers in November and December and the fruit ripens in the hot weather.

PLATE No. CCLXX.

MELASTOMACEÆ.

KENDRICKIA WALKERI. (Hook. f.) An epiphytic scandent shrub, leaves 5-nerved oblong or ovato-oblong narrowed at both ends obtuse furfuraceous when young, subentire, or ciliato-dentate when young, 1½-3 inches long paler beneath, petioles 2½ lines long, pedicels about 1½ inches long and with the bracts and calyx sparingly ferrugineous, bracts oblong obtuse 2½ lines long.
65


Ceylon, one of the most beautiful plants in the island, covering the trunks and branches of trees at 3000-5000 feet elevation.

PLATE No. CCLXXI.

STYRACEÆ.

SYMPLOCOS OLIGANDRA. (Bedd.) A small or middling sized tree much branched, gemmae and young parts minutely puberulous, leaves coriaceous elliptic shortly pointed or rarely obtuse glabrous on both sides, shining above, pale beneath, quite entire or with a very inconspicuous tendency to crenation near the apex, about 2 inches long by ½ lines broad, petals 2-3 lines long channelled on the upper side and puberulous, racemes puberulous very short scarcely longer than the pedices 3-6 flowered, calyx puberulous scarcely a line long segments unequal, coroll glabrous about twice as long, stamens as long as coroll 12 (rarely only 10-11) generally hexaehphalous in pairs or irregularly pentadellphous, some in bundles of 2-3-4 the others solitary, ovary 3-celled, ovules 2, the upper one very small suberect the lower long and pendulous, fruit not seen. Bedd. Fl. Sylvatica p. et.

PLATE No. CCLXXII.

MYRTEÆ.

EUGENIA SINGAMPATTIANA. (Bedd.) A small dense tree, leaves opposite coriaceous oblong-ovate to broad ovate subcordate at the base rotund or subacute at the apex deep green above, very pale beneath, perfectly glabrescent, about 3 inches long by ½-2 inches broad, primary veins numerous and forming a continuous loop near the margins, flowers white in expansion about ½ an inch on very short terminal crowded racemes, calyx and bracts with a slight pubescence, petals 4 distinct, prominently veined and inconspicuously dotted.

I have only met this tree on the Singampatty hills (Tinnevelly ghats) at 3000 feet elevation in moist forests.

PLATE No. CCLXXIII.

RANUNCULACEÆ.

TALTHCTRUM DALZELLII. (Hook.) Stem erect 1 foot high, leaves 3-foliate rarely 2-ternate slightly sheathing at the base, leaflets ½ to ½ inches in diameter reniform deeply cordate 7-9 lobed lobes crenate or toothed, stipules oblong free, panicle subsimple small, flowers white, fascicled at the ends of the branches, filaments clavate about 50, achenes about 38 not compressed sessile, ribbed, furnished with long straight beaks hooked at the top. Hook. and Thom. Fl. Ind. 10.

Bababooden hills and Musara ghats, also in the Bombay Presidency (Harrisonänder.)

PLATE No. CCLXXIV.

RUTACEÆ.

PARAMIGNYA ARMATA. (Thw.) A large acaceous shrub, spines deflexed often recurved, leaves 1-foliate ovato-oblong to ovate with a sudden acumination, the apex obtuse or mucronate glabrous or slightly hairy on the under side and the costa puberulous, punctate, 1-3 inches long by 1-½ broad, pedicels slender articulate 3-12 lines long, calyx small 4-5-lobed puberulous, petals 4 oblong punctate imbricate. Stigmas 8-10, filaments hairy apiculate towards the apex dilated below, anthers oblong, ovary obovate subglobose to subglobose, ovules solitary pendulous, style and stigmas dilated, fruit distinct, green when ripe. Anthromous armatus, Thw. En. Pl. Exg. 47. Paramignya, Oliver on Aurantaece p. 43.

Common on our Western ghats, Wyud, Coorg, &c., up to 3-4000 feet elevation, also in Ceylon.

PLATE No. CCLXXV.

CAPPARIDEÆ.

CAPPARIS PARVIFLORA. (Hook. f. et Thom.) A spreading much branched large shrub, branches unarmed, leaves glabrous subcoriaceous very variable from narrow lanceolate to broad oblong or ovate, alternate or cordate at the base more or less
suddenly acuminate at the apex, 3-5 inches long by 1-2\(\frac{1}{2}\) inches broad, veins prominently looped well within the margin, petioles about 2 lines long, flowers whitish about 5 lines in diameter in axillary or subterminal 3-6 flowered subsessile or shortly peduncled umbels, pedicels 1-4 inches slender, calyx ciliate, petals oblong veined ciliate, stamens about 50, ovary oblong glabrous the gynophore \(\frac{1}{2}\) inch long, fruit pisiform scarcely \(\frac{1}{4}\) inch in diameter. *Flora of British India* p. 176.

Tinnevelly and Travancore ghats, common in the Pooneley pass and about Courtallum, &c., the leaves are very variable, some of my specimens having them very narrow.

**PLATE No. CCLXXVI.**

*Capparis pedunculosa.* (Wall.) A spreading branched shrub, branches pubescent at length glabrous, thorns short generally recurved, leaves glabrous suborbicular cordate at the base obtuse or retuse penniveined \(\frac{1}{2}-1\frac{1}{2}\) inches long by nearly as broad, shining above, petiole very short, flowers \(\frac{1}{2}-\frac{1}{4}\) inch diameter in 2-6 flowered terminal or axillary and shortly (\(\frac{1}{4}\) inch) peduncled umbels, pedicels 1-1\(\frac{1}{2}\) inches long slender, sepals equalling the petals ciliate at length reflexed, petals oblong ciliate, stamens about 26, ovary oblong glabrous, gynophore \(\frac{1}{2}\) inch long, fruit size of a cherry globose, several seeded. *Wall. Cat. 6,993* ;—*Fl. Brit. Ind. p. 176.*

Tanjore, Concac, &c.

**PLATE No. CCLXXVII.**

*Clematis triloba.* (Heyne.) A large climber, silky, leaves small simple ternate or pinnate entire or 1-3-toothed or-lobed, 1-2 inches, elliptic ovo\(\frac{1}{2}\) or cordate 3-nerved, panicle axillary many flowered, lower bracts leafy, flowers 1\(\frac{1}{2}-2\) inches in diameter white, sepals 4-6 spreading from the base, membranous oblong, silky outside, filaments about 30 narrow-linear glabrous or slightly hairy at the base, connective of anther not produced, achenes about 10, with long feathery tails. *Heyne in Roth. Nov. Sp. 251* ;—*Fl. of Brit. Ind. p. 3.*

Concan ghats and Mawal district.

**PLATE No. CCLXXVIII.**

*Malvaceae.*

*Dictostyles axillaris.* (Thw.) A middling sized tree, leaves entire ovato-lanceolate smooth 2\(\frac{1}{2}-4\frac{1}{2}\) inches long by 1\(\frac{1}{2}-2\) inches broad paler beneath, petioles 3-4 lines long, flowers axillary solitary, bracteoles \(\frac{1}{2}\) lanceolate subconnate at the base 1\(\frac{1}{2}\) inches long by 3-6 lines broad, calyx cupuliform 5-toothed \(\frac{1}{2}\) inch long, petals 5 oblong-spathulate ciliate and pubescent, staminal column short, ovary 2-celled 2-ovuled, style branches 2, stigmas large globose, fruit hispid. *Kydia axillaris, Thw. En. Pl. Zey. p. 30.* *Dictostyles, Benth. Gen. Pl. i. p. 207.*

Ceylon, near Badulla, elevation 2000 feet.

**PLATE No. CCLXXIX.**

*Julostylis angustifolia.* (Thw.) A middling sized tree sparingly branched, leaves narrow oblongo-lanceolate entire, gradually acuminate at the apex steilately hisrute, paler beneath 5-8 inches long by 1\(\frac{1}{2}-3\) inches broad, petioles 3-6 lines long, panicles large terminal pendulous steilately pubescent, flowers \(\frac{1}{2}\) inch broad, corol cupuliform, pale colored with the lower half reddish inside, style densely hairy. *Thw. En. Zey. p. 30.* *Kydia angustifolia, Arnt. Pug. Pl. Ind. Or. 4.*

Ceylon, south of the island, not uncommon.

**PLATE No. CCLXXX.**
CAPPARIDÆ.

**Capparis longispina.** (H. f. & Thun.) A shrub 4-6 feet, stems petiolar, leaves beneath costa of the leaf above bases of the thorns rufo-pubescent, leaves coriaceous orbicular-contort mucronate ½-¾ inches each way. Stipules or thorns as long or nearly as long as the leaf straight or slightly curved 2 to each leaf, pedicels slender glabrous 3-4 terminal on the branchlets and often 1 in the axil of the last leaf twice or nearly 3 times as long as the leaves, flowers glabrous, ovary oblong pointed glabrous, gynophore about ½ an inch.

Canara and Bombay ghats.

**PLATE No. CCLXXXI.**

ACANTHACEÆ.

**Ruellia prostrata.** (Poir.) Stems prostrate pubescent, leaves ovate obtuse or acute subintegument, 1-1¾ inches long by ½-¾ inch broad, pennivexed, petiolates 2-6 times long, flowers white or bluish 1-½ inches long, axillary solitary on short peduncles, bracts ovate petiolate longer than the calyx pubescent, calyx segments subulate pubescent 2-3 times long, corolla funnelliiform incurved puberulous outside, lobes obtuse regular, capsule glabrous or subglabrous 3 times as long as the calyx about 10-seeded. *Poir. Enc. Meth. 6. 349.* Diplogantium prostratus, *D.C. xi. 125,* and *D. depressus,* p. 125.

Common in the Cuddapah, Coimbatore and Tanjore Districts, also in Bengal and Ceylon.

**PLATE No. CCLXXXII.**

MYRTACEÆ.

**Eugenia terpenophylla.** (Thw.) A middling sized tree, branches terete, leaves submembranaceous lanceolate or obovate-lanceolate with a long acumination and more or less narrowed at the base, the younger ones ferrugineo-pilose, 2½-5 inches long by ½-2 inches broad, primary veins 6-8 on each side looped near the margin, petioles 1-½ inch long, peduncles axillary and terminal short few flowered rufus-pilosus as is all the inflorescence, pedicels about as long as the petals, petalos distinct white twice as long as the sepals, fruit spherical puberulous nearly as large as a cherry generally 1-seeded. *Thw. En. Pl. Zey. p. 114 and 417.*

Ceylon, Ambagamwa and Ratnapura districts and Keigam Cole up to no great elevation.

**PLATE No. CCLXXXIII.**

SAPINDACEÆ.

**Careya herbacea.** (Roxb.) Stems annual only a few inches high from a permanent ligneous root, leaves short petiolate obovate with a short acute point, succulent, 6-7 inches long by 3-4 inches broad, racemes short terminal, peduncles 1-2 inches long, calyx 9 lines long, petals 1½ inches long, exterior filaments sterile and exceeding the fertile ones, ovary 1-celled with 4 parietal receptacles, fruit obovate 2½ inches long by 1½ inches diameter. *Roxb. Fl. Ind. ii. 638.*

Jubbulpore, Sambulpore, &c., called Bui koombas; a very beautiful plant which should be introduced into our gardens.

**PLATE No. CCLXXXIV.**

**Euphoria gardneri.** (Thw.) A middling sized tree, leaves abruptly pinnate, subglabrous, leaflets 2-3 pair lanceolate coarsely and obtusely toothed, short petiolate glaucous beneath, about 3 inches long by 1 broad, racemes pubescent but the pubescence not stellate, sepals and petals acute and the latter much longer than the former otherwise as in *E. Longana.* — *Nephelium gardneri,* Thw. En. Pl. Zey. p. 55.

Ceylon. Putlam.

**PLATE No. CCLXXXV.**

**Schmidelia allophylla.** (D.C.) A small tree, leaves glabrous lanceolate, ovato-lanceolate or oblong acuminate entire or coarsely toothed near the apex, 5-10 inches long by ½-3½ inches broad, veins prominent and looped well within the margins,
petioles 1\frac{1}{2} inches long, flowers small villous in axillary racemes 6-12 inches long, petals with a very villous scale on their inner face and with a long claw, disk of 4 large glandular lobes, berry round size of a pea red. *DC. Prod.* i. 611.

Ceylon, Ambagamwa and Hinidou Districts up to 3000 feet elevation.

**PLATE No. CCLXXXVI.**

**SCHMIDELIA ACUMINATA.** (Thw.) A small tree, branches terete glabrous, leaves glabrous ovate obtusely rostrate-acuminate, 2\frac{1}{2}-4\frac{1}{2} inches long by 1\frac{1}{2}-2 inches broad, petioles 4-7 lines long, racemes elongate subglabrous few flowered, the petals with a very densely villous scale. *Thew. En. Pl. Zey.* p. 56.

Ceylon, Galagama on banks of streams 2000-3000 feet elevation; the analysis in the plate gives only male flowers.

**PLATE No. CCLXXXVII.**

**SCHMIDELIA VARIANS.** (Thw.) A small tree, branches terete glabrous, leaves glabrous lanceolate acuminate entire 1-6 inches long by 1\frac{1}{2}-1\frac{1}{2} inches broad, petioles 1-1\frac{1}{2} inch long, racemes puberulous 4-5 inches long, bracts very minute and very shortly pilose. *Thew. En. Pl. Zey.* p. 403.

Ceylon, central provinces, 2000-5000 feet elevation.

**PLATE No. CCLXXXVIII.**

**NEPHELIUM BIFOLIATUM.** (Thw.) A middling sized tree, 20-30 feet high, much branched, leaflets 1 pair, common petiole about 1 inch long glabrous entire lanceolate obtusely pointed shining above, reticulated, opaque and fuscous beneath, 3-5 inches long by 2\frac{1}{2}-4 inches broad, petiolules 2-3 lines long, petals pilose terminal and axillary as long or longer than the leaves, flowers numerous, calyx segments rounded glabrous ciliate, petals slightly longer oblong glabrous ciliate, with a sudden short claw and furnished with a small round long ciliate scale at the base, disk fleshy crenate, stamens generally 7 the filaments hairy at the base longer in the male flower, ovary glabrous 2-lobed. *Thew. En. Pl. Zey.* p. 7.

Ceylon, Lower Badulla road from Kandy at no great elevation, in flower in April. I have what appears to be the same only in young bud from the Kolay Mallaya in the Trichinopoly district of this Presidency.

**PLATE No. CCLXXXIX.**

**DISCOREACEAE.**

**TRICHOPODIUM ZEYLANICUM.** (Thw) Leaves bluntly hastate or triangular-deltoïd prominently 7-nerved, 4-5 inches long by 2-3 inches broad on petioles 4-7 inches long, flowers brownish red 4-5 lines long, fruit 12-14 lines long. *Thew. En. Pl. Zey.* p. 294.

Travancore hills (Singampatty) up to 3500 feet elevation. I have distributed specimens under the name of *T. Travancoricum* and it appears to differ from Dr. Thwaites' description of the Ceylon plant in its larger flowers and in the greater number of nerves in the leaf. I have not seen Ceylon specimens, but Dr. Thwaites does not seem to think this distinct as a species.

**PLATE No. CCXC.**

**CONVOLVULACEAE.**

**NEUROPeltIS RACEMOSA.** (Wall.) A large woody climber, stems glabrous in age, leaves ovate to lanceolate with a longish acumination entire glabrous in age but when young densely adpresso-pubescent above and sparingly hairy beneath, 3-5 inches long by about 2 inches broad, petioles 1-1\frac{1}{2} inch long, racemes straight axillary or from the old axils solitary or several together densely rufo-pubescent 2-3\frac{1}{2} inches long, flowers 3-4 lines long on peduncles 2 lines long which are furnished towards their apex with a large ovate acute cuculate bract, calyx about 1\frac{1}{2} lines long rufo-pubescent as are the bracts and petals, coroll nearly 3 times as long as the calyx deeply 5-cleft, lobes entire, ovary hairy, fruit not seen. *Wall. in Bot. Pl. Ind. ed. Wall.* ii. 44.
Near the foot of the Tambacherry ghat in the plains of Malabar, about Poodoopara. I have not seen the fruit, but as far as they go my specimens quite answer to Wallich's description of the Penang plant though it has not previously been found in India.

PLATE No. CCXCI.

LEGUMINOSÆ

ALYSICARPUS RACEMOSUS. (Benth.) Stems pilose with longish golden hairs, the upper leaves trifoliate the lower simple, leaflets oval to orbicular glabrous above at least in age silky beneath, the terminal ones 14-15 lines long by 3 lines broad, the lateral ones small, petioles 3-5 lines long, stipules scarious setaceous 4-5 lines long, racemes lax aureo-pilose, pedicels 8-9 lines long slender, calyx segments setaceous nervoso-atriate, legume exerted 3-6-articulated the lobes reticulated. Benth. in Linn. xxiv. 642.

Bolampatty hills (Coimbatore) 2500 feet elevation, also on the Nilgiris.

PLATE No. CCXCII.

GEISSASPI CRISTATA. (WA.) Herbaceous procumbent, leaves equally pinnated, pinnae 2 pair, cuneate obtuse slightly crenated, 5-6 lines long, racemes axillary and terminal on peduncles 1½ inches long, bracts large orbicular many-veined, long ciliate on the margins, flowers solitary in each bract small yellowish, legume 1-2-jointed tumid in the middle. WA. Prod. p. 218.

Coimbatore, Malabar and Tinnevelly.

PLATE No. CCXCIII.

STYLOSANTHES MUCRONATA. (Willd.) Suffruticose branched spreading, branches shortly hirsute, stipules scariose bristly on the back adnate, leaves trifoliate about 1 inch long, leaflets rigid oblongo-ovate stiffly mucronate slightly ciliate with short stiff bristles, in age glabrous, under side when young a little hairy, 6-8 lines long by 2-3 lines broad, veins prominent, flowers axillary sessile and solitary or forming small few-flowered terminal imbricated spikes, bracts ciliate rather short, calyx tube villous about 2 lines deep the plumose rudimentary stamens a little longer. Willd. Sp. 3 p. 1166; — WA. Prod. p. 218.

A rather common undershrub in different parts of the Presidency, also in Africa.

PLATE No. CCXCIV.

MILLETTIA SPLENDENS. (WA.) A lofty climber, young parts petioles and racemes clothed with golden or fulvous tomentum, leaves unequally pinnate, leaflets 2-3 pair with a terminal one oblongo-lanceolate suddenly acuminate, rather undulate at the margins, glabrous above, silky beneath, 5-7 inches long by 2-3½ inches broad, panicles axillary 1½ feet long many flowered, the lateral branches short few flowered, pedicels 2-3 lines long, calyx short 4 cleft the upper segment the broadest entire or bifid, vexillum silky outside, the wings hairy, ovary 5-ovuled, legume very velvety 3 inches long, 1-2 seeded. WA. Prod. p. 263.

Eastern slopes of the Nilgiris; the legumes in the drawing are very young.

PLATE No. CCXCV.

VIGNA WIGHTII. (Benth.) Stems herbaceous climbing a little hairy or glabrous, stipules very small lanceolate peltate, petioles 1-2½ inches long, leaflets 3 membranaceous clothed with adpressed grey hairs on both sides, the terminal one ovate-lanceolate acute 3-3½ inches long, petioles 6-7 lines long, lateral ones more ovate and unequal sided a little smaller and on very short petiolules, peduncles much thickened 2-7 inches long, furnished at the apex with 3-4 flowers, flowers large (1½ inch long) lilac very fragrant, calyx 3-6 lines long the teeth linear subulate nearly equalling the tube, the 3 upper ones slightly ciliate at the base the 3 lower equal all a little hisurate, corol 3-4 lines as long as the calyx, the bifid anatropic of the standard very prominent the keel curved at the point, pod linear straight terete 5 inches long blackish when ripe clothed with a very short pubescence, many seeded.

Wynad and elsewhere on our Western ghats up to 8000 feet, often called the Wynad sweet pea, its very fragrant beautiful flowers would render it a great favorite in gardens.

PLATE No. CCXCVI.
RHYNCHOSIA CODDORENSIS. (Redd.) Stems herbaceous climbing pubescent, stipules small setaceous deciduous, petioles 1½-1½ inches long whitish-pubescent, leaflets 3 the central one broad ovate to rhomboid-ovate acute up to 3 inches long by 2 broad, the petiolules 6 lines long the lateral ones smaller and unequal-sided membranaceous furnished on both sides with adpressed short pubescence, reticulated and paler on the underside, racemes lax few flowered-nearly as long as the leaves, flowers in pairs, bracts ovate to suborbicular broader than long acute or obtuse caducous, calyx pubescent ½-6 inch long the segments prominently veined ovato-lanceolate oblong longer than the base, the lowest a little longer than the others, corolla yellow not equaling the calyx, pod 3-4 lines broad 2-seeded not equalling the calyx slightly puberulous.

Codoor hills, Cuddapah District, rare.

PLATE No. CCXCVII.

MELASTOMACEÆ.

SONERILA GARDNERI. (Thw.) Stems terete, generally simple erect rather woody glanduloso-hirsute, reddish-black, 1-1½ feet high, leaves ovate or rotundate acute subcordate serrulate ½-1½ inches long 4-8 lines broad hirsute on both sides paler beneath, petioles glanduloso-hirsute, pedicels hirsute shorter than the calyx each furnished with a foliaceous bract, flowers 9-12 lines long, the calyx glanduloso-hirsute, petals reddish lanceolate acute, the centre nerve on the outside with a few glandular hairs, anthers cordato-lanceolate subacute capsule ovoid gibbous obscurely 6 costate muricato hirsute. THW. EN. PL. STR. p. 107.

Ceylon, below Horton Plains towards Galagama on wet rocks, elevation 5000 feet.

PLATE No. CCXCIX.

SONERILA LANCEOLATA. (Thw.) Suberect sparingly branched very glabrous, leaves 3-nerved linear-lanceolate serrulate above the middle, cordate at the base very shortly petioled, ½-3 inches long by 3-8 lines broad, racemes simple or branched, flowers 8-10 lines long, petals red rotundate acuminate, anthers subulate, capsule rather long and with the thickened pedicel deeply 6-sulcate. THW. I. C. p. 107.

Ceylon, Carawette Kanda near Ratnapora, elevation 1000 feet.

PLATE No. CCXC.

SONERILA ARNOTTIANA. (Thw.) 1-2 feet suberect subligneous, branched, branches more or less glanduloso-pilose, leaves 3-5-nerved lanceolate ovato-lanceolate ciliate-denticulate a little oblique and unequal, above glabrous beneath sparingly glanduloso-hirsute on the nerves, ½-3 inches long by 3-10 lines broad, paler beneath acute at both ends or the base rather rounded, pedicels glanduloso-pilose, flowers simple or forked glanduloso-pilose, petals ovate acuminate purple 3½ lines long, anthers cordato-oblong shortly acuminate, capsule hypocrateriform 6-ribbed muricato-setose about equaling the pedicel. THW. I. C. p. 108.

Ceylon, central provinces 4000-7000 feet. Anamallay mountains 5000 feet elevation.

PLATE No. CCC.
Phylanthus extensus Linn.
Eugenia engelmanniana Balf.
Rhododendron Dalzelliæ Redi.
Schimidelia varianæ (Koë.)