

STUDIES IN AUSTRALIAN APOCYNACEAE AND ASCLEPIADACEAE, I.

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In 1942, at the suggestion of Mr. C. T. White, a revision of the Australian Apocynaceae and Asclepiadaceae was undertaken as a necessary accompaniment to a search for possible rubber-producing plants in Queensland, but since 1945 this work has progressed only in an intermittent way. While most of the systematic work has been completed, it may be some time before the revision is finalised, and it was felt that some of the more outstanding undescribed species and combinations should be published in a preliminary paper.

APOCYNACEAE.

Melodinus Bacellianus (F. Muell.) S. T. Blake, comb. nova.

Wrightia Bacelliana F. Muell. in Vict. Nat. viii, 178 (1892).

Melodinus Murpe F. M. Bail. Bot. Bull. x, 23 (1895).

Trichostemanthemum Bacellianum (F. Muell.) Domin in Biblioth. Bot. lxxxix, 520 (1928).

Wrightia Bacelliana was described from flowering specimens, *Melodinus Murpe* from fruiting ones. Having seen the types of both and having collected specimens in flower and fruit, I fully agree with Domin that they are conspecific, but I cannot accept his opinion that the species is generically distinct from *Melodinus*. The insertion of the stamens and the very thick dissected corona-lobes are rather different from the general trend in *Melodinus*, but the Indo-Malaysian *M. orientalis* Bl. shows an intermediate condition.

Cerbera dilatata S. T. Blake; species nova, affinis *C. floribundo* K. Schum., sed foliorum venis lateralibus plurioribus ad costam fere directis, sepalis persistentibus, tubo corollae medio superiore valde dilatato, fructu minore praecipue differt.

Arbor magna, latice perfluido albo viscido abundans; truncus erectus cylindricus cortice extus griseo dense squamato obtectus. Ramuli robusti, rugulosi, cicatricibus foliorum delapsorum crebre notati. Folia apicem ramulorum versus spiraliter conferta, glabra; petioli plerumque 1.5–2.5 cm. longi; laminae anguste oblongae vel oblanceolatae, breviter subabrupteque obtuse acuminatae vel raro subacutae, basin versus gradatim cuneatae, supra nitidulae subtus opacae, plerumque 12–20 cm. longae et 2.5–5 cm. latae; costa prominula; nervi laterales utrinsecus costam 23–30, tenues, haud prominuli, e costa angulo 70°–80° egredientes, fere recti, solum prope marginem curvati. Panicula terminalis, plus minusve corymbosa, densiflora, pedunculo valido circa 3 cm. longo incluso circa 10 cm. longa lataque; bracteae suboblongae,

incurvae, circa 1 cm. longae, mox caducae; pedicelli circa 1 cm. longi. Sepala oblonga admodum elliptica, apice rotundata, 7 mm. longa, persistentia, marginibus anguste membranacea repandula. Corolla (in vivo) alba; tubus 2 cm. longus, inferne subcylindricus circiter 1.5 mm. latus, medio superiore gradatim valde dilatatus usque 6 mm. latus, fauce ipsa constrictus; lobi oblique late ovati, leviter emarginati, circa 4.5 mm. longi. Stamina prope faucem inserta. Fructus cyaneus, subellipsoideus, acutus, facie adaxiali compressus, circa 5–6 cm. longus, 3–3.5 cm. latus.

QUEENSLAND.—Cook District: Danbulla, near Atherton, in rain-forest, 2,500 ft. and higher, common, Nov. 28th, 1942, *S. T. Blake* 14749 (tall rather slender tree with sparse irregularly spreading but not large crown with the leaves clustered at ends of branches and all parts with copious white latex; trunk cylindrical to base; bark pale grey, tessellately scaly or slightly corky in very large trees, with a tough black layer against sapwood which is very white; leaves dull green above, paler beneath; fruit green to purple; local name: milky pine) (in fruit); Yungaburra, Jan., 1918, *C. T. White* (leaves scattered, crowded towards ends of branches; very milky) (leaves only); Gadgarra, rain-forest, March, 1932, *W. D. Francis* (in flower); Gadgarra, in rain-forest, 800 m., common, July 24th, 1929, *S. F. Kajewski* 1141 (a very large tree up to 30 metres high, petals cream-pink, sweetly scented, sap milky, common name: milky pine) (in flower and very young fruit); near Malanda, at roadside, cleared rain-forest, yellowish soil, about 2,400 ft., Sept. 2nd, 1943, *S. T. Blake* 15249 (tree of 30 ft. with pale grey pustular bark with some longitudinal fissures and somewhat scaly, blackish immediately beneath surface and separating from inner ochraceous bark which has much white fluid sticky latex; sapwood whitish; wood white; leaves green, paler beneath; flowers white, strongly scented; occasional in rain-forest on yellowish, not red soils) (in flower); Mt. Bartle Frere, North Peak, near foot of western spur, about 2,450 ft., in rain-forest, August 31st, 1943, *S. T. Blake* 15244 (tall massive tree with cylindrical trunk with occasional protruberances and depressions; bark creamy grey closely tessellately fissured, brown to black beneath surface, more or less ochraceous towards whitish sapwood, with abundant white latex) (loose leaves and fruit from ground); near Goldsborough, upper Mulgrave R., in rain-forest, 230–500 ft., July 28th, 1943, *S. T. Blake* 15033 (tree 40–60 ft., straight or nearly so, with rather sparse crown of dark green leaves paler beneath; branches spreading; trunk not buttressed, cylindrical, bark grey, compactly scaly with longitudinal loosely anastomosing darker lines of lenticels, blackish beneath and readily separating from the deep cream inner bark, the latter together with the twigs, leaves and flowers with abundant very fluid very sticky white latex; flowers strongly scented; calyx greenish; corolla white; fruit from ground, said to be blue when fresh) (flowers and old fruits; TYPE); Mt. Toressa, in 1904, *F. M. Bailey* in Bellenden Ker Expedition, no. 72 (tree 60 ft. high, 2 ft. diam.) (foliage and remains of inflorescence); Deeral, near Babinda, occasional in rain-forest on rather steep slope, about 350 ft., July 13th, 1943, *S. T. Blake* 14970 (tree with rather sparse crown; branchlets and branches spreading; bark with vertical lines of packed dark lenticels and some transverse wrinkles, the outer layer grey on outside, black beneath, readily separating from the inner bark which is thicker, ochre-coloured and with much white latex; leaves green; flowers in terminal cymes, rather numerous, white, scented; corollas, fruit and leaves picked up from the ground) (loose leaves, corollas and fruits); Babinda, in rain-forest, rather common at 350 ft., July 25th, 1943, *S. T. Blake* 15024 (tree 30–40 ft.; crown fairly dense, main branches slightly spreading; trunk cylindrical with occasional small protruberances; outer bark greyish white indistinctly scaly, very dark brown beneath, readily separating from the rather thick ochre-coloured inner bark, which, together with twigs and flowers, has abundant very fluid very sticky white latex; leaves glossy green above, paler beneath, those on young trees up to $17\frac{1}{2} \times 3$ in.; flower-buds with pink tips; flowers strongly scented; calyx greenish white; corolla white withering to a dirty brown; fruit and seeds from ground) (flowering twigs and loose fruits); Jogo near Innisfail, a rain-forest tree on well drained ground about 50 ft., Sept. 10th, 1943, *S. T. Blake* 15270 (tall tree with rather compact crown and leaves at ends of branches; bark dark grey, longitudinally fissured with occasional protruberances; leaves and fruit from the ground) (loose leaves and fruit).

This species has been confused with *C. Manghas* L. and *C. Odollam* L., from both of which it differs in the narrower leaves with more widely spaced lateral veins, much smaller sepals and corolla lobes, the much inflated upper half of the corolla-tube, and in the smaller

ellipsoid blue fruits. It is more closely allied to *C. floribunda* K. Schum., and resembles it more closely in the field, but the more numerous finer lateral veins nearly straight for most of their length, the persistent sepals, shape of the corolla-tube and the rather smaller, more acute fruits sufficiently distinguish it. The size of the leaves varies considerably, and particularly on young shoots may greatly exceed the dimensions given in the above description.

Wrightia versicolor *S. T. Blake*; species nova, affinis *W. pubescenti* R.Br., sed foliis glabris, bracteolis minimis, sepalis dorso glabris praecipue differt.

Arbor 5–10 m. alta; truncus cortice griseo tandem squamoso lactescenti obtectus, basin versus canaliculatus. Ramuli tenues, teretes vel juniores plus minusve compressi, divaricati, glabri, lenticellis parvis sparsis praediti. Folia tempore sicco decidua, tempore florenti crescentia, prominule petiolata, glaberrima; petioli tenues, supra canaliculati, 4–8 mm. longi; laminae ovatae vel ellipticae, apice breviter acuminatae, basi subacutae vel admodum attenuatae, pro more 5–7.5 cm. longae, 2–3.5 cm. latae, membranaceae; nervi laterales utrinsecus costam 10–15, tenues. Cymae terminales, 2–8-florae, foliis breviores et usque ad 4 cm. longae, sessiles vel breviter pedunculatae, puberulae vel glabrescentes; bracteolae facillime caducae, suboblongae, acutiusculae, prominule 1-nerves, 1–3 mm. longae; pedicelli graciles, 6–9 mm. longi. Flores graviter melliodori, versicolores, extus subvirides vel subflavi, intus primum flavi tandem cremeobrunnei vel subaurantiaci corona aurantiaci antheris flavi. Calyx fere ad basin partitus; lobi ovati, obtusi, glabri vel margine anguste subhyalina minute ciliolati, 4 mm. longi, basi interiore 1–2 squamis hyalinis oblongis vel oblatis admodum denticulatis praediti. Corollae tubus subcylindricus supra medio minime dilatatus, fauce constrictus atque leviter incrassatus, glaberrimus, circiter 5–5.5 mm. longus, circiter 2.75 mm. latus; lobi tubo circa duplo longiores, oblongi, dense papilloso-puberuli, circiter 9–10 mm. longi, 5 mm. lati; corona aurantiaca, e squamis 10 carnosissimis planis apice diviso leviter penicillatis constructa, quarum 5 in corollae lobis sitae et eis dimidio inferiore (marginibus exceptis) adnatae, circiter 6 mm. longae, spathulatae, breviter irregulariterque 3–5-dentatae vel -lobae, apicibus exceptis glabrae, 5 in sinubus sitae, circiter 4 mm. longae, late lineares bilobae, lateribus inferioribus puberulae. Stamina flava, in cono angusto 6.5–7 mm. longo cohaerentia, filamentis et connectivo dense pubescentia. Pistillum circa 10.5 mm. altum; carpelli 2, a stylo uniti, circa 1.5 mm. alti. Folliculi lineares, valde lenticellati, 10–14 cm. longi; carpelli usque ad tempus maturitatis cohaerentes; semina 9–13 mm. longa, linearia, coma circiter 3 cm. longa praedita.

QUEENSLAND.—Cook District: Lizard Island, *C. Walter* (MEL; in flower); Fitzroy Island, coll. 29 (MEL; in flower); Mt. Surprise Creek, *W. Armit* 766 (MEL; in flower); 100 mile swamp, scrubs, *W. Armit* 807 (tree 40 ft. high, very handsome orange or yellow flowers) (MEL; in flower). North Kennedy District: 13 miles N. of Charters Towers in rather open monsoon forest on hard reddish sandy soil, Nov. 13th, 1942, *S. T. Blake* 14672 (slender straight tree, 15–25 ft., with rather sparse divaricately branched crown of light green leaves probably deciduous; all parts with copious white latex; trunk slightly fluted; bark grey outside, green within, rather scaly and rather prominently tessellated on NW. side, smoother on SE.; flowers with sickly honey scent; buds greenish yellow; corolla cream brown to nearly orange inside; corona lobes orange; anthers yellow) (in flower); Barrabas scrub, W. of Ravenswood, in monsoon forest on deep loose coarse whitish sand, about 1,000 ft., abundant, Nov. 17th, 1942, *S. T. Blake* 14702 (deciduous tree 20–30 ft. or more high with rather narrow rather pale but dull green crown; trunk

slightly fluted with grey tessellated slightly scaly bark, pale creamy brown with a very narrow green zone when cut; leaves dull light green above, paler beneath; buds greenish to yellowish; open flower with sickly honey scent, greenish yellow outside, yellow to cream brown inside with the corona more or less orange; anthers yellow. All parts with copious white latex) (in flower and fruit; TYPE); and from same place, April 1st, 1943, *S. T. Blake* 14893 (straight tree to 30 ft. with rather narrow green crown, slightly fluted trunk with grey tessellately scaly grey bark with green subsurface, white sapwood and copious flow of white latex; bark nearly smooth on small trees; leaves dull pale green above, paler beneath; follicles dark green with whitish pustules, sometimes distinct, but not seen just mature) (in fruit with old leaves; PARATYPE).

This species is readily and sharply distinguished from *W. pubescens* R.Br. by its entirely glabrous leaves and young shoots, variously coloured flowers (which are pure white in *W. pubescens*) and tiny bracts. The flowers of *W. versicolor* are greenish yellow outside, the inside at first yellow, turning to cream-brown or orange, with orange corona and yellow anthers.

Parsonsia fulva *S. T. Blake*; species nova, affinis *P. Langianae* F. Muell., sed foliis brevius acuminatis haud nitidis densius pubescentibus, floribus majoribus, corollae extus fere glabrae lobis tubo circiter duplo longioribus revolutis praecipue differt.

Liana robusta, lignea, altissime scandens, haud lactescens, partes juniores fulvo-pubescentes. Ramuli robusti, teretes, pilis fulvis tenuibus curvatis dense pubescentes. Glandulae axillares subulatae, circiter 0.8–0.9 mm. longae. Folia heteroblastica, longiuscule petiolata, fulvo-pubescentia, supra in sicco nigricantes; petioli plerumque 1.5–3 cm. longi, supra leviter canaliculati, ceterum subteretes; laminae adultae chartaceae, ovatae vel plus minusve ellipticae, $1\frac{1}{2}$ –2-plo longiores quam latae, breviter acuminatae ceterum obtusae, basi subacutae vel obtusae vel subtruncatae vel in surculis sterilibus saepius prominule cordatae, pro more 7–13 cm. longae et 3.5–8 cm. latae vel eae surculorum sterilium usque ad 17 cm. longae et 11.5 cm. latae, marginibus saepe leviter recurvae, subtus praecipue nervis dense pubescentes supra glabrescentes; nervi validi, supra impressi, subtus conspicue elevati, costam utrinsecus 5–8 laterales rectiusculi prope marginem curvati. Inflorescentia cymosopaniculata decomposita; paniculae laxiflorae plus minusve trichotomae, in axillaribus superioribus ramulorum, plerumque oppositae, dense fulvo-pubescentes, foliis breviores longioresve, 3.5–8 cm. latae, cymis ultimis laxis usque ad 8-floris; pedunculi tenuiores, petiolis longiores; pedicelli pro more 4–5 (raro 3.5) mm. longi. Flores flavi, in alabastro ovoidei fere in medio admodum constricti, obtusiusculi, circa 3.5 mm. longi. Calyx 1.8–2 mm. longus, usque ad basin partitus, intus basi 5 glandulis carnis subtriangularibus 0.2 mm. longis praeditus; lobi ovati, acuti vel fere acuti, erecti apice leviter patuli, dorso dense pubescentes, intus glabri pilis paucis apice sitis exceptis. Corolla breviter campanulata, calyce admodum brevior; tubus 1.5 mm. longus, subcylindricus, glaber vel extra fauce puberulus; lobi in alabastro fere valvati, tandem recurvi vel plus minusve reflexi, suboblongi (apice acuti basi dilatati), 2.7 mm. longi, 0.8 mm. lati, basi superiore pilis retrorsis barbati, ceterum glabri. Conus antherarum fere omnino exsertus, 2.2–2.3 mm. longus, nitidus; antherae dorso convexae; lobi basales steriles oblique obovati, oblique obtusi, 0.4 mm. longi, a sese styloque divergentes, margine externo recti ibique antheras proximas tangentes; filamenta fere in medio tubo corollae inserta, fere recta, dorso compressa, barbata, 1 mm. longa, basi a latere valde compressa. Squamae hypogynae liberae, quadratae, truncatae, 0.7 mm. longae, circum ovarium incurvae.

Ovarium ovoideum, glabrum, 0.7 mm. altum. Fructus lineari-subteres, fulvo-pubescent, 15–20 cm. longus; semina 7–9 mm. longa, coma 2.5–3 cm. longa fulvo-brunnea praedita.

QUEENSLAND.—Moreton District: Mt. Glorious, Jan., 1945, *M. S. Clemens*; (fruit); Mt. Glorious, in rain-forest, about 2,000 ft., Nov. 17th, 1946, *S. T. Blake* 17373 (tall woody liana with yellowish watery juice; leaves dark green above, somewhat tawny beneath, flowers yellow) (flowers); Tamborine Mtn., *J. Shirley* (flowers and fruit); Tamborine Mtn., Feb., 1917, *H. A. Longman & C. T. White* (fruit); Tamborine Mtn., Dec., 1921, *C. T. White* 1786 (flowers, juvenile leaves); Tamborine Mtn., common in rain-forest, May 16th, 1945, *C. T. White* 12724 (large liana; leaves dull dark green above, pale yellowish green beneath) (young fruit, also sterile twig); Tamborine Mtn., in rain-forest, about 1,700 ft., May 7th, 1945, *S. T. Blake* 15825 (tall woody climber with pale brownish thin sticky juice; leaves dull green above, tawny-tinted below) (old fruits); McPherson Range, Jan., 1917, *C. T. White* (flowers and fruit); Lamington National Park, 3,000 ft., Nov. 27th, 1942, *C. T. White* 11882 (common rain-forest climber) (flowers); Mt. Roberts, McPherson Range, common in rain-forest, about 2,900 ft., Nov. 20th, 1944, *S. T. Blake* 15467 (canopy liana; twigs with watery yellowish slightly sticky juice; leaves dark green above, paler and tinged tawny beneath, old leaves turning yellowish and finally dark brown above, paler and more tawny beneath; flowers scented, corolla tube tawny, lobes revolute, cream; anthers yellow) (in flower and fruit, also sterile shoots all from the same plant—TYPE); McPherson Range, very common between Mt. Roberts and Mt. Merino, in rain-forest, 1,600–3,800 ft., April 18th, 1943, *S. T. Blake* 14931 (stout canopy liana with abundant clear yellowish to brownish thin slightly sticky juice in twigs and bark; bark rather thick and hard, pustular, gray, more or less ochraceous when cut; leaves dark green above, more or less tawny beneath, the lower ones distinctly cordate, those on young shoots narrower, mostly sinuately lobed; fruit mature, tawny; foliage of tawny appearance when viewed against the light) (fruiting twigs, sterile twigs, juvenile foliage); Mt. Roberts, McPherson Range, in rain-forest, about 2,650 ft., Dec. 20th, 1943, *S. T. Blake* 15380 (stout liana climbing to tops of highest trees; bark rather thick and hard, pustular, grey, more or less ochre-coloured when cut, with rather copious flow of brownish juice; shoots with rather much clear yellowish thin slightly sticky juice; leaves dark green above, tawny beneath, the lower ones distinctly cordate, those on young shoots narrower, mostly sinuately lobed; flowers faintly scented; calyx somewhat tawny; corolla dull cream, lobes recurved; anther-cone dull brownish yellow; all specimens from same plant from which fruiting specimens of no. 14931 were obtained) (flowering twigs, young shoots and leaves from sterile shoots); Lamington National Park: near foot of Ballanjui Falls, in rain-forest, about 1,700 ft., Dec. 4th, 1943, *S. T. Blake* 15367 (tall canopy liana with copious watery pale brownish sap in branches; leaves dull green above, paler beneath, veins prominent on both sides, decidedly tawny beneath; young growth and inflorescence tawny; flowers faintly scented; calyx somewhat tawny; corolla cream, lobes recurved; anther-cone dull brownish yellow) (flowering and sterile twigs); Springbrook, 3,000 ft., Aug. 10th, 1930, *C. T. White* 7054 (common climber over rain-forest trees) (in fruit); Springbrook, 3,000 ft., Sept. 29th, 1930, *C. E. Hubbard* 4266 (rambling over trees and shrubs in rain-forest) (in fruit).

NEW SOUTH WALES.—North Coast: Beaury, common in rain-forest, May 29th, 1945, *C. T. White* 12754 (climber, leaves dull dark green above, paler beneath) (in young fruit); Richmond R., Oct., 1867, *I. A. Henderson* 76 (MEL); Rous, Richmond R., April, 1891, *W. Bauerlen* 251 (young fruit; NSW); Ballina to Bangalow, Nov., 1903, *Maiden & Boorman* (flowers; NSW).

A stout woody species, climbing to the tops of the highest trees in the rain-forest, rather abundant in the areas where it has been observed, but not noticed at an elevation below 1,700 ft. No latex is produced, but there is a fair abundance of yellowish to brownish clear thin slightly sticky juice in the bark and twigs. In the herbarium it has been confused with *P. velutina* R.Br. which is also tawny-pubescent on the leaves and inflorescences; but *P. velutina* has all mature leaves cordate at the base and smaller on the average, smaller dense-flowered panicles in which the sepals are more spreading, and the corollas are more urceolate in shape with short erect lobes. In both species the seedling leaves are thinner in texture and more or less hastately 3-lobed; in *P. velutina* all the

mature leaves are more or less prominently cordate, but in *P. fulva* cordate leaves are restricted to sterile shoots, while those on flowering twigs are at most subtruncate at base and are often more or less cuneate. *P. fulva* appears to be most closely allied to the North Queensland *P. Langiana* F. Muell., but this has leaves of a rather thinner texture, more oblong in shape and with a longer acumen, shining on the upper surface, less pubescent between the veins, and smaller flowers of which the lobes of the corolla are about as long as the tube and are incurved at the tips.

Parsonsia tenuis S. T. Blake; species nova, affinis *P. ventricosae* F. Muell., sed corollae tubo brevior cylindrico haud ventricosus, lobis longioribus, antheris minus carinatis differt.

Frutex gracillimus volubilis, praecipue novellis pilis patulis fulvis pubescens, haud lactescens. Ramuli teretes, striati, tandem glabri et lenticellos parvos sparsos gerentes. Glandulae axillares paucae, subulatae, fuscae, circiter 0.5 mm. longae. Folia prominule petiolata, homoblastica; petioli plerumque 7–12 mm. longi, pubescentes; laminae chartaceae, oblongo-lanceolatae, acute acuminatae admodum caudatae, basi obtusissimae vel subcordatae, 3–4-plo longiores quam latae, 3.7–7.5 cm. longae, 1–2.2 cm. latae, marginibus anguste recurvae vel revolutae ceterum planae, utrinque crebre papillosae pubescentesque vel supra tandem fere glabrae, subtus pallidiores; nervi haud prominuli, utrinque elevati, laterales gracillimi utrinsecus costam gracilem 7–10 egredientes. Cymae axillares vel pseudo-terminales, pedunculatae, laxae divaricatae, rariflorae, pubescentes, quam folia breviores, pedunculo excluso 1–2 cm. longae, usque ad 4 cm. latae; pedunculi tenuis, 0.5–2.5 cm. longi; bracteae bracteolaeque ovatae vel lanceolatae, 0.9–1.4 mm. longae; pedicelli graciles, 3–4 mm. longi. Flores cremei; alabastri oblongi, acuti, 5 mm. longi. Calyx usque ad basin fissus, extus parce pubescens, intus basi glandulis membranaceis ovatis bipartitis circiter 0.25 mm. altis praeditus; sepala similia, deltoidea, acuta vel anguste rotundata, 3-nervia, 0.8–1.7 mm. longa. Corolla rotata; tubus cylindricus, 1.8 mm. longus, 1.5 mm. latus, fauce admodum dilatata barbatus, ceterum glaber; lobi patuli, oblongi, obtusi vel breviter acuminati, apice marginibusque recurvi, 4 mm. longi, 1.7 mm. lati, extus parce pubescentes, intus praecipue basi barbati sursum saepe glabrescentes, apice minute ciliolati. Conus antherarum majore parte exsertus, 3 mm. longus, glaber, angulatus; antherae dorso elevato-carinatae; lobi basales steriles semielliptici margine exteriori recti a sese divergentes 0.7 mm. longi, ei antherarum contiguarum basin versus superpositi; filamenta in tertiam partem inferiorem corollae tubi posita, recta, 1 mm. longa, sursum pubescentia. Squamae hypogynae discretae, oblongae, subtruncate, crassae, 0.75 mm. longae. Ovarium semiovoideum, glabrum, laeve, 0.9 mm. altum. Folliculi 4.5–9 cm. longi, graciles, pubescentes vel glabrescentes, placentis distinctis. Semina circa 6 cm. longa, coma usque duplo longior.

QUEENSLAND.—Moreton District: Mt. Merino, McPherson Range, in beech (*Nothofagus*) forest, 3,650 ft., Oct. 4th, 1942, S. T. Blake 14657 (a slender twiner with rather scanty thin yellowish slightly sticky juice; leaves rather light green above, paler beneath; calyx light greenish; corolla cream) (in flower; TYPE); Mt. Merino, McPherson Range, in beech (*Nothofagus*) forest 3,650 ft., Oct. 12th, 1947, S. T. Blake 18172 (slender twiner with scant turbid watery juice, leaves dull green above, more or less olive green beneath, flowers cream) (in flower); Mt. Merino, McPherson Range, at cliff-edge of beech (*Nothofagus*) forest, 3,650 ft., Dec. 9th, 1943, S. T. Blake 15369 (slender twiner with watery juice; leaves dull green above, pallid green beneath; fruit pale green) (in fruit; PARATYPE); Lamington National Park, McPherson Range, close to Upper Coomera R., in rain-forest, about 2,400 ft., Oct.

4th, 1942, *S. T. Blake* 14659 (slender twiner, leaves green above, paler beneath; flowers cream) (in flower); Lamington National Park, near Mt. Hobwee, 4,000 ft., *C. T. White* 6182, Sept. 1st, 1929 (climber, flowers white) (in flower).

A very slender species closely resembling *P. induplicata* F. Muell. and *P. ventricosa* F. Muell. in vegetative characters, but in these the leaves are glabrous or nearly so, while in *P. induplicata* also the under surface, particularly of the younger leaves, is purplish in colour. In *P. tenuis* the leaves are rather distinctly papillose, and the under surface is permanently pubescent. *P. induplicata* is further distinguished by the inflexed corolla-lobes and scarcely keeled anthers. *P. ventricosa* has a nearly globose corolla-tube with short erect lobes and the anthers strongly ridged on the back, while *P. tenuis* has a short cylindrical corolla-tube with long spreading lobes with recurved margins and less prominently ridged anthers. The prominently ridged anthers of *P. ventricosa* and *P. tenuis* distinguish these two species from all others in the genus.

The genus *Lyonsia* R.Br. was originally distinguished on the grounds that the two placentae of the ovary were united in the fruit, while they remained free in *Parsonsia*. This difference, though marked enough in the original species, is quite uncorrelated with other characters in the more numerous species now known. Other botanists, e.g. Bentham, in Fl. Austral. iv, 320 (1869), relied on a supposed valvate aestivation of the corolla in *Lyonsia*, but I find the corolla-lobes overlapping in the bud in all species, though in some species very slightly so and only at the tips. There seems little doubt that F. Mueller (Fragm. vi, 126–130: 1868) was right in treating *Lyonsia* as synonymous with *Parsonsia*. The following transfers are accordingly made here:

Parsonsia largiflorens (F. Muell.) *S. T. Blake*, comb. nova.

Lyonsia largiflorens F. Muell. ex Benth. Fl. Austral. iv, 322 (1869).

Parsonsia latifolia (Benth.) *S. T. Blake*, comb. nova.

Lyonsia latifolia Benth. Fl. Austral. iv, 323 (1869).

Parsonsia plaesiophylla *S. T. Blake*, nomen novum.

Lyonsia oblongifolia Benth. Fl. Austral. iv, 323 (1869), non *Parsonsia oblongifolia* Merr. in Philip. Jour. Sci. xxvii, 50 (1925).

ASCLEPIADACEAE.

Marsdenia suberosa, *S. T. Blake*; species nova, ob corticem crassum suberosum, folia oblonga, corollae tubum fauce antrorsim inferne retrorsim barbatum distincta.

Frutex lactescens, alte volubilis; caules tenues, in parte majore cortice cremeo molli suberoso sulcato obtecti; novelli parce minuteque puberuli. Ramuli virides, laeves. Folia patentia; petioli puberuli, plerumque 1.5–2.5 cm. longi; laminae oblongae, apice obtuso apiculatae vel abrupte acuminatae, basi truncatae vel cordatae, 5.5–8.5 cm. longae, 1.8–3.4 cm. latae, circiter $2\frac{1}{2}$ – $3\frac{1}{2}$ -plo longiores quam latae, subtus pallidiores, tenuiter coriaceae, valide venosae nervis utrinque elevatis supra pallidioribus utrinsecus costam 6–8 lateralibus positis, paginae superioris basi glandulis multis (circiter 12–20) praeditae. Cymae e fasciculis florum dense aggregatis constructae, pedunculatae, pedunculis solitariis lateralibus puberulis 5–8 mm. longis; pedicelli 5–9 mm. longis. Flores albidi, odorati, in alabastro ovoidei, circiter 4 mm. longi et 3 mm. lati. Sepala suborbicularia, 1.9–2 mm. longa lataque, tenuiter herbacea,

marginibus hyalinis ciliata. Corolla globoso-campanulata, usque ad mediam vel paullo plus partita, extus glabra; tubus subviridis, intus subter lobis pilis retrorsis barbatus, sub fauce ipsa sinubusque glaber; lobi suberecti, albi, semiovati, obtusi, 1.8–2 mm. longi, 1.6–1.8 mm. lati, basi inter sinus linea elevata antrorsim curvata praediti et ibi antrorsim dense longeque barbati (i.e., faux corollae undulato-elevata antrorsim dense longeque barbata). Gynostegium: columna staminalis ovoidea, acuta, basin versus ad corollam adnata, pars libera conica, 1.5 mm. longa, 1.7 mm. lata; antherae subtriangulares, cum appendice alba triangulari 0.8 mm. longa 1.3 mm. longae; coronae squamae tenuiter membranaceae, subdeltoideae, apice acutae vel plus minusve truncatae, omni basi adnatae haud peltatae, 0.4–0.45 mm. longae, 0.3–0.4 mm. latae; pollinia compresse allantoidae, 0.3 mm. longa; styli apex late rotundus umbonulatus.

QUEENSLAND.—South Kennedy District: Crediton, July–Nov., 1947, *M. S. Clemens* (flowers, young fruits). Wide Bay District: Gympie, *F. H. Kenny* (sterile), and *J. Shirley* (sterile). Moreton District: Gold Creek, near Brisbane, Oct., 1928, *A. A. Girault* (flowers); Mt. Nebo, Samford Range, October 31st, 1934, *C. T. White* (flowers); Roberts Plateau, July, 1917, *S. H. McCarthy* (sterile); Mt. Roberts, McPherson Range, eastern slopes, light rain-forest, about 2,200–2,300 ft., Dec. 7th, 1946, *S. T. Blake* 17375 (twiner with fissured cream corky bark; much white latex in bark and pith; leaves deep green above, paler and duller beneath, those of younger parts with whitish veins; flowers scented, nearly white, mouth prominently bearded) (TYPE; flowers and coppice shoots); same locality and notes, Dec. 11th, 1943, *S. T. Blake* 15374 (flowers). Darling Downs District: Killarney, Nov. 25th, 1917, *C. T. White* (flowers); and Jan., 1912, *J. L. Boorman* (flowers; NSW, BRI).

NEW SOUTH WALES.—North Coast: Unungar, near Mt. Lindesay, moderately common at edge of light rain-forest, March 12th, 1944, *C. T. White* 12739 (“only sterile material available”); Tabulam to Drake, Dec., 1903, *J. H. Maiden* & *J. L. Boorman* (flowers; NSW, BRI).

Rather conspicuously distinct from other Australian species in the very corky bark of all but the youngest parts of the stems and branches, oblong leaves with the veins paler on the upper side and whitish on young plants, and in the corolla both antrorsely bearded at the throat and retrorsely bearded lower down the tube.

Cynanchum Bowmanii *S. T. Blake*, nomen novum.

Cynanchum ovatum (Benth.) Domin in Biblioth. Bot. lxxxix, 531 (1928), non (E. Mey.) Druce in Rep. Bot. Exch. Cl. Brit. Isl^{as} 1916, 618 (1917).

Vincetoxicum ovatum Benth. Fl. Austral. iv, 330 (1869).

Cynanchum dichasiale *O. Schwarz* in Fedde, Repert. xxiv, 94 (1927).

This is **Secamone elliptica** R.Br., as testified by specimens from the two collections he cites, *Bleeser* 244 (MEL) and *Bleeser* 586 (NSW).

Tylophora crebriflora *S. T. Blake*, nomen novum.

Tylophora floribunda Benth. Fl. Austral. iv, 335 (1869), non Miq. in Ann. Mus. Bot. Lugd. Bat. ii, 128 (1866).



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