

Family 270. RUBIACEAE

Literature:

- Alejandro, GD & S. Liede. 2003. *The Philippine Rubiaceae genera: updated synopsis in Intkey databases of the DELTA system*. Blumea 48: 261-277.
- Ridsdale, CE. 1978. *A revision of the tribe Naucleae, s.s. (Rubiaceae)*. Blumea 34: 177-275.

Acranthera Arnott

Revision:

- Bremekamp, C.E.B. 1947. *A monograph of the genus Acranthera Arn. ex Meisn.* [Rubiaceae]. Journal of the Arnold Arboretum 28:261-308.

Acranthera philippinensis Merr., PJS 8 c (1913) Bot. 32; EPFP 3 (1923) 517. --Type: Merrill 8309 (L*, US*, iso). Mindanao: Zamboanga, Sax River, in ravines along small streams, altitude 700-900m, 27 Nov 1911.

MINDANAO: Zamboanga, Lanao del Sur. In ravines along small streams, altitudes up to 900m.

Aidia Loureiro

Revision:

- Ridsdale, CE. 1996. *A review of Aidia sensu lato (Rubiaceae) in Southeast Asia and Malesia*. Blumea 41:135-179.

Aidia acuminata (Blume) Wong, Malayan Nat. J. 38 (1984) 54; --Ridsd., Blumea 41 (1996) 167; Gymnopachys acuminata Blume, Cat. Gew. Buitenzorg (1823) 48. --Type from Java.

Randia umbellata Elmer, LPB 1 (1906) 31; --Merr., EPFP 3 (1923) 528; 4 (1925) 247. --Type: EB Copeland 1302 (US*, iso). Mindanao: Davao, Todaya, Apr 1904.

Randia boerlagei Koord. & Valetón., Bijdr. Boomsoort. Java 8 (1902) 269.

Sumatra, Peninsular Malaysia, Java, Borneo (Sarawak, Kalimantan, Sabah), Philippines, Sulawesi, Moluccas (Seram).

LUZON, MINDORO, CATANDUANES, SIBUYAN, PANAY, BOHOL, LEYTE, SAMAR, MINDANAO.

Aidia auriculata (Wall.) Ridsd., Blumea 41 (1996) 161; --Randia auriculata (Wall.) Steudel, Nom. Bot. 2 (1841) 430; --K Schum. in Engl. & Prantl, Pflanzenfam. 4⁴ (1891) 75; --Merr., EPFP 3 (1923) 527. --Type from Peninsular Malaysia (Penang).

var. auriculata

Thailand, Sumatra, Banka, Peninsular Malaysia, Singapore, Borneo (Sarawak, Brunei, Sabah, Kalimantan), Philippines.

LUZON, MINDORO, NEGROS, LEYTE, MINDANAO, BASILAN. Forests at low altitudes.

Aidia bakeri (Merr.) Ridsd., Blumea 41 (1996) 165; --Anomanthodia bakeri (Merr.) Tirveng. in Tirveng. & Sastre, Bull. Mus. Nat. Hist. Nat., B, Adansonia, 4e sér., 8 (1986) 279; --Randia bakeri Merr., PJS 10 c (1915) Bot. 109; EPFP 3 (1923) 527. --Type: CF Baker 3253 (cited but not seen by Ridsdale, 1996). Luzon: Quezon prov., hills near Malinao, 7 May 1914.

Anomanthodia alveolata (Elmer) Tirveng. in Tirveng. & Sastre, Bull. Mus. Nat. Hist. Nat., B, Adansonia, 4e sér., 8 (1986) 279; --Randia alveolata Elmer, LPB 9 (1934) 3266. --Type: Elmer 16050 (distributed as Randia faveodehiscens Elmer) (A, L*, US*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, forest along a ridge at 1000ft, May 1916.

LUZON: Quezon, Sorsogon (Mt Bulusan), SAMAR. Lowland primary forests.

Aidia foveata Ridsd., Blumea 41 (1996) 166. --Type from Sabah.
Borneo (Kalimantan, Sarawak, Sabah) and Philippines. MINDANAO, *RS Williams 2161*.

Aidia pulcherrima (Merr.) Ridsd., Blumea 41 (1996) 173; --*Gymnopachis pulcherrima* (Merr.)
Tirveng. in Tirveng. & Sastre, Bull. Mus. Nat. Hist. Nat., B, Adansonia, 4e sér., 8 (1986) 285;
--*Randia pulcherrima* Merr., PJS 3 c (1908) Bot. 164; EPFP 3 (1923) 528. --Lectotype
(Tirvengandum & Sastre, 1986): Clemens 765 (not seen); syntypes: FB 7863 (US*),
Elmer 9127
(A, L, NY*, US*);

LUZON: Laguna, Quezon (Lucban; Mt Banahaw), Camarines, CATANDUANES,
MINDANAO: Lanao del Sur. Medium altitude primary forests.

Aidia racemosa (Cav.) Tirveng., Nord. J. Bot. (1983) 455; --Tirveng. & Sastre, Bull. Mus. Nat.
Hist. Nat., B, Adansonia, 4e sér., 8 (1986) 262; --Ridsd., Blumea 41 (1996) 149; --*Petunga*
racemosa (Cav.) K Schum. in Engl. & Prantl, Nat. Pflanzenfam. 4⁴ (1891) 80; --Merr., PJS 2 c
(1907) Bot. 426; --Elmer, LPB 3 (1911) 1007; *ibid.* 4 (1912) 1345; --Merr., EPFP 3 (1923) 533;

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Randia racemosa Roxb., Hort. Beng. (1814) 15, nom. nud.; Fl. Ind. ed. 2 (1824) 144; --Fern.-
Villar,
Novis. App. (1880) 108; --Merr., EPFP 3 (1923) 528; --*Stylocoryna racemosa* Cav. Icon. 4
(1798)

45, t. 368. --Type: Nee sn, 1793 (MA, cited but not seen by Ridsdale, 1996).

Petunga roxburghii DC, Prodr. 4 (1830) 399; --Hook.f., Fl. Brit. Ind. 3 (1880) 120.

Nicobar Isls, Peninsular Thailand, Vietnam, Hainan, Taiwan, Peninsular Malaysia, Java,
Borneo, Lesser Sunda Isls, Philippines, Sulawesi, Christmas Is, New Guinea, Solomon
Isls, Australia (Northern Territory; Queensland; Western Australia), Nauru, Samoa,
Tonga, Wallis-Futuna Isls, Caroline Isls, Marianas, Marshall Isls.

N LUZON (Cagayan) to PALAWAN and MINDANAO, in most islands and provinces.
Chiefly in secondary forests at low altitudes.

Amaracarpus Blume

Amaracarpus pubescens Blume, Bijdr. 16 (1826) 954.

ssp. microphyllus (Miq.) AP Davis, Blumea 49 (2004) 35.

Amaracarpus apoensis Elmer, LPB 8 (1915) 2804; --Merr. EPFP 3 (1923) 568. --Type: Elmer 10737 (PNH,
holo; iso: A, L, NY*, P). Mindanao: Davao del Sur prov., Mt Apo, Todaya, May 1909.

Philippines, Sulawesi, Moluccas (Halmahera; Seram).

MINDANAO: Davao del Sur (Mt Apo). In primary forests, altitude about 1050 m.

Andria Puttock, ined.

Andria loheri (Merr.) Puttock, **ined.**; --*Randia loheri* Merr., PJS 27 (1925) 57; EPFP 4 (1925) 254.

--Type: BS 12067 Loher, cited by Merrill as '12967' in the protologue (A*, iso). Luzon: Rizal prov.,
Montalban, Paningtingan. Oct 1909.

LUZON: Rizal. Merrill (1925) listed two collections, from rather adjacent localities on the
foothills of the Sierra Madre.

Antherostele Bremekamp

Revision:

Bremekamp, CEB. 1940. *Antherostele* genus novum Rubiacearum Urophylllo affine. Journal of
the Arnold Arboretum 21: 25–31.

Antherostele banahaensis (Elmer) Bremek., J. Arnold Arb. 21 (1940) 27, 28; --Urophyllum banahaense Elmer, LPB 1 (1906) 70; --Merr., EPFP 3 (1923) EPFP 522. --Type: Elmer 7746 '7946' in the protologue (L*, holo). Luzon: Quezon prov., Lucban, May 1906.

LUZON: Isabel (Palanan), Rizal (Mt Lumutan), Quezon (Mt Binuang; Mt Banahaw de Lucban), Laguna (Mt Makiling), Sorsogon (Mt Bulusan). In damp primary forests at low and medium altitudes, ascending to 1000m.

Antherostele callophylla Bremek., J. Arnold Arb. 21 (1940) 29. --Type: BS 33326 Ramos (A*, holo). Luzon: Ilocos Norte prov., Mt Palimlim. Aug 1918.

LUZON: Ilocos Norte (Mt Palimlim). Habitat not noted.

Antherostele grandistipula (Merr.) Bremek., J. Arnold Arb. 21 (1940) 30; --Urophyllum grandistipulum Merr. PJS 8 c (1913) Bot. 61; --Merr., EPFP 3 (1923) EPFP 522. --Type: BS 15372 Ramos (US*, holo). Leyte: Leyte prov., mountains near Dagami, in forests, 13 Aug 1912.

LUZON: Camarines, MINDORO, CATANDUANES, LEYTE: Leyte (Mtns near Dagami), Southern Leyte (Cabalian), SAMAR: Catubig River. In damp primary forests at low or medium altitudes.

Antherostele luzoniensis (Merr.) Bremek., J. Arnold Arb. 21 (1940) 30; --Urophyllum luzoniense Merr., PJS 12 c (1917) Bot. 161; --Merr., EPFP 3 (1923) EPFP 523. --Type: BS 26522 Ramos & Edaño (US*, holo; iso in A*). Luzon: Aurora prov., Mt Dingalan, in forest, altitude at least 300m, 8 Sept 1916.

LUZON: Isabel (Mt Moises), Aurora (Mt Dingalan). Primary forests, probably above 300m.

Antirhea Commerson ex Jussieu

Revisions:

Jansen, ME. 1984. *A synopsis of Guettardella Benth. and the Old World species of Antirhea (Rubiaceae: Guettardeae)*. Blumea 29: 565–588.

Chaw, Shu-Miaw & SP Darwin. 1992. *A systematic study of the Paletropical genus Antirhea (Rubiaceae: Guettardeae)*. Tulane Studies in Zoology & Botany 28: 25–118.

Antirhea attenuata (Elmer) Chaw in Tulane Stud. Zool. Bot. 28 (1992) 75; --Timonius attenuatus Elmer, LPB 1 (1906) 34. --Type: FB 1867 Ahern's Collector (NY*, US*, isolecto). Luzon: Rizal prov., Bosoboso, Sept 1904

Antirhea hexasperma (Roxb.) Merr., EPFP 3 (1923) 540; --Guettardella hexasperma (Roxb.) ME Jansen, Blumea 29 (1984) 575. --Type:

LUZON: Ilocos Norte, Cagayan, Rizal, Batangas, Camarines. Lowland forests.

Antirhea benguetensis (Elmer) Valetton, Beih Bot. Centralbl. 34, 2, (1916) 44, *in obs.*; --Merr., EPFP 3 (1923) 540; --Timonius benguetensis Elmer, LPB 1 (1906) 35. --Type: Elmer 6396 (NY*, US*, iso). Luzon: Benguet prov., Twin Peaks, on bluffs along Bued Rivers, May 1904.

Guettardella microphylla (Bartl. ex DC) ME Jansen, Blumea 29 (1984) 577; --Antirhea microphylla *sensu* Merr., EPFP 3 (1923) 540, *pro parte*.

LUZON: Benguet, Nueva Ecija, Rizal. Low altitude thickets or forests, c. 300m.

Antirhea bombysia Chaw in Tulane Stud. Zool. Bot. 28 (1992) 78. --Type: PNH 12400 Sulit (L*, holo). Palawan: Victoria Mtns, SE slopes, stunted ridge forest, altitude 1000m, 18 May 1950.

PALAWAN: Victoria Mtns. Ridge forest, presumably on ultramafics.

Antirhea caudata (ME Jansen) Chaw in Tulane Stud. Zool. Bot. 28 (1992) 80; --Guettardella caudata ME Jansen, Blumea, 29 (1984) 572. --Type: PNH 12315 Sulit (L*, holo; iso L*). Palawan: Victoria Mtns, SE base, dense forest along Karaniogan River, altitude 100m, 10 May 1950.

Antirhea philippinensis Elmer, LPB 3 (1911) 1009; *ibid.* 4 (1912) 1329, *non* Rolfe. As to (cite collections).
Guettardella microphylla (Bartl. ex DC) ME Jansen, Blumea, 29 (1984) 577.
PALAWAN.

Antirhea edanoi Chaw in Tulane Stud. Zool. Bot. 28 (1992) 83. –Type: BS 44015 Ramos & Edaño (NY*, iso). Tawi-tawi, Jul-Aug 1924
Antirhea livida Merr. EPFP 3 (1923) 540, *pro parte*,
SULU

Antirhea foveolata Chaw in Tulane Stud. Zool. Bot. 28 (1992) 85. –Type:
Antirhea microphylla sensu Merr. (1923) *non* Bartl. ex DC,
LUZON

Antirhea hexasperma (Roxb.) Merr., EPFP 3 (1923) 540. –Type:
Guettardella hexasperma (Roxb.) ME Jansen, Blumea 29 (1984) 575.
Non-Philippine!

Antirhea livida Elmer, LPB 4 (1912) 1327. –Type: Elmer 12768 (BISH*, L*, NA*, NY*, U*, US*, iso).
Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), 'good moist soil with gravelly
subsoil in humid woods or forests along the river at 250ft', Apr 1911.
Guettardella livida (Elmer) ME Jansen, Blumea 29 (1984) 576.
PALAWAN:

Antirhea microphylla (Bartl. ex DC) Merr., EPFP 3 (1923) 540; --*Guettardella microphylla* (Bartl.
ex DC) ME Jansen, Blumea 29 (1984) 577. –Type:
LUZON:

Antirhea paxillata Chaw in Tulane Stud. Zool. Bot. 28 (1992) 100.
LUZON: Mt Babatgin

Antirhea philippinensis (Benth.) Rolfe, J. Linn. Soc. 21 (1884) 312; --*Guettardella philippinensis*
Benth. in Hook., Kew J. 4 (1852) 197. –Type:
BOHOL

Antirhea ramosii Chaw in Tulane Stud. Zool. Bot. 28 (1992) 103. –Type: BS 46597 Ramos & Edaño (NY*, iso). Luzon: Cagayan prov., Peñablanca, Apr 1926.
Antirhea microphylla sensu Merr. (1923), *pro parte*, *non* Bartl. ex DC.
LUZON

Antirhea tayabensis Chaw in Tulane Stud. Zool. Bot. 28 (1992) 109. –Type: BS 28869 Ramos & Edaño (NY*, holo). Luzon: Quezon prov., Mt Binuang, May 1917.
Antirhea livida Merr., EPFP 3 (1923) 540, *pro parte*, *non* Elmer (1912), as to BS 28514, 28869 & 28982
Ramos & Edaño.
LUZON

Antirhea ternata Chaw in Tulane Stud. Zool. Bot. 28 (1992) 113.
SIARGAO.

Anthocephalus A Richard =Neolamarckia

Argostemma Wallich

Literature:

Bakhuizen van den Brink, RC Jr. 1953. *Notes on Malaysian Rubiaceae*. Blumea 7: 329-338.
Bremer, B. 1989. *The genus Argostemma (Rubiaceae-Argostemmataceae) in Borneo*. Annals of the Missouri Botanical Garden 76: 7-49.

Argostemma arachnosum Merr., PJS 20 (1922) 465; EPFP 3 (1923) 504. –Type: BS 36830
Ramos & Edaño
MINDANAO: Zamboanga. Along streams at low altitudes.

Argostemma bryophilum K Schum. in K Schum. & Lauterb. Nachtr. Fl. Deutsch. Sudsee (1905) 393. –Type from New Guinea.
Argostemma maquilangense Elmer, LPB 9 (1934) 3242. –Type: Elmer 17637 (PNH, holo, lost; iso BISH*, L*, MO*, NY*, US*). Luzon: Laguna prov., Mt Makiling, Jun-Jul 1917.
Argostemma rupestrinum Elmer, LPB 9 (1934) 3244. Type: Elmer 16175 (PNH, holo, lost; iso MO*, NY*, US*). Luzon: Sorsogon prov., Mt Bulusan, May 1916.
Borneo (Sarawak), Philippines, New Guinea.
LUZON: Laguna (Mt Makiling), Sorsogon (Mt Bulusan). **Ecol.**

Argostemma distichum Valetton, Nova Guinea 8 (1911) 447.
subsp. quadripetalum (Elmer) Bakh.f., Blumea 7 (1953) 333; --Argostemma quadripetalum Elmer, LPB 1 (1908) 361; (1906) 63, sphalm. 'quadripetiolata' --Merr., EPFP 3 (1923) 504. –Type: Elmer 7944.
LUZON, LEYTE, MINDANAO. Along shaded streams and in dense forests at medium altitudes, ascending to 1200m.

Argostemma neesianum Walp., Nov. Act. Acad. Nat. Cur. 19 (1843) Suppl. 1: 349; --Merr., EPFP 3 (1923) 503. –Type: FB 3368 Ahern's Collector.
LUZON: Pangasinan, Bataan, Rizal, Laguna. On damp shaded ledges and banks along small streams at low altitudes.

Argostemma solaniflorum Elmer, LPB 1 (1906) 2; --Merr. PJS 2 (1907) Bot. 305, 3 (1908) Bot. 436. –Type: Elmer 6211 (US*, iso). Luzon: Benguet prov., Sablan, damp shady streambanks, Apr 1904.
Ryukyus, Taiwan, Lanyu, and the Philippines.
BATAN ISLS; N LUZON and MINDANAO and the SULU Archipelago. Chiefly in the mossy forest at and above an altitudes of 900m, but also along mountain streams at lower altitudes. According to Merrill (1923), not certainly distinct from the Malayan *A. montanum* Blume.

Argostemma stenophyllum Merr., PJS 10 c (1915) Bot. 100; EPFP 3 (1923) 504. –Type: BS 20566 Ramos (US*, iso). Luzon: Laguna prov., San Antonio, on rocks along the river, 10 Mar 1913.
LUZON: Laguna, CATANDUANES. On damp banks along shaded streams at low or medium altitudes.

Argostemma timorense Benn., Pl. Jav. Rar. i. (1838) 95.
Argostemma pedicellatum Elmer, LPB 9 (1934) 3243. –Type:
Philippines, Lesser Sunda Isls (Timor).
LUZON, LEYTE, MINDANAO. Along shaded streams and in dense forests at medium altitudes, ascending to 1200m.

Argostemma wallichii Walp., Nov. Act. Acad. Nat. Cur. 19 (1843) Suppl. 1: 350; --Merr., EPFP 3 (1923) 504. –Type:
LUZON: Benguet, Bulacan, Rizal, Laguna, Batangas. On damp banks and cliffs along small shaded streams at low altitudes.

Unplaced:

Argostemma umbellatum Elmer, LPB 9 (1934) 3245, nom. illeg., non Geddes, 1927. --Type:

Atractocarpus Schechltner & K Krause

Literature:

Ridsdale, CE. 1979. *The taxonomic position of Sulitia (Rubiaceae)*. Blumea 25: 301–303

Atractocarpus obscurinervius (Merr.) Puttock, Austral. Syst. Bot. 12 (1999) 304; --Sulitia obscurinervia (Merr.) Ridsd., Blumea 25 (1979) 301; --Gardenia obscurinervia Merr., PJS 11 c (1916) Bot. 32; EPFP 3 (1923) 531. --Type: BS 23492 Ramos (A*, L*, NY*, US*, iso). Luzon: Sorsogon prov., Mt Pocdal, 1 Aug. 1915.

Sulitia longiflora Merr., PJS 29 (1926) 494. --Type: FB 29445 Sulit (not seen). Mindanao: Sultan Kudarat (formerly part of a bigger Cotabato) prov., near Lebak, Apr & May 1903. Reportedly epiphytic.

LUZON: Laguna, Sorsogon, CATANDUANES, MINDANAO: Sultan Kudarat. In primary forest at low altitudes.

Badusa A Gray

Literature-

Ridsdale, CE 1982. *A revision of the genus Badusa (Rubiaceae, Condamineae, Portlandiinae)*. Blumea 28:145–150.

Soejarto, D. et. al. 1996. *The true provenance and identity of Badusa philippica (Rubiaceae)*. Taxon 45:487–492.

Badusa palawanensis Ridsd., Blumea 28 (1982) 146. Type: PNH 80766 HG Gutierrez & RA Espiritu (L*). Palawan: Palawan prov., Quezon, Lipuun Point, rocky summit of limestone hill, altitude 500ft [=m], 24 Mar 1963.

PALAWAN: Quezon, Lipuun Point. Rocky summit of limestone hill.

Badusa corymbifera (G Forst.) A Gray, Proc. Amer. Acad. Arts 4 (1860) 308; --Soejarto et al., Taxon 45: 487-492.

Badusa philippica (Cav.) Vidal, Rev. Pl. Vasc. Filip. (1888) 150. --Type: Nees *sn*, *prope* Manila in Sta. Cruz de Laguna (not traced in MA).

Bikkia Reinwardt

Literature:

Darwin, S. 1979. Allertonia 2(1): 22.

Bikkia philippinensis Valetton, PJS 23 (1923) 6; --Merr., EPFP 3 (1923) 492.

CEBU, SULU ARCHIPELAGO (SIBUTU), MINDANAO: Surigao. In thickets along the seashore.

Boholia Merrill

Boholia nematostylis Merr., PJS 29 (1926) 493. --Type: BS 43107 (A*, US*, iso). Bohol: Bilar, damp forest, altitude c. 600m, Aug 1923.

Sumatra, Lesser Sunda Island and C Philippines.

BOHOL (Bilar; Kalingohan). Presumably on limestone.

Borreria GFW Meyer =Spermacoce

Caelospermum Blume

Revision:

Johansson, JT. 1988. *Revision of the genus Caelospermum (Rubiaceae, Rubioideae, Morindeae)*. Blumea 33: 265–297

Caelospermum volubile (Merr.) JT Johansson, Blumea 33 (1988) 281, Fig. 11; --Morinda volubilis (Blanco) Merr., PJS 1 (1906) Suppl. 137; EPFP 3 (1923) 574. --Type: FB 2290 Meyer (K, lecto, selected by Johansson, 1988; isolecto: F, NY). Luzon: Bataan prov., Mt Mariveles, Lamao River, Dec 1904.

LUZON: Zambales, Bataan, Laguna, CATANDUANES, MINDORO. Lowland secondary forests to above 100m. Fl. Jul, Aug, Dec.

Canthium Lamarck

Literature:

Bridson, DM. 1992. *The genus Canthium (Rubiaceae-Vanguerieae) in tropical Africa*. Kew Bull. 47.

Canthium amplifolium (Elmer) Co, *comb. nov.*; --Plectronia amplifolia Elmer, LPB 9 (1934) 3261. --Type: Elmer 16739 (BISH*, L*, NA*, NY*, US*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Jul 1916. LUZON: Sorsogon

Canthium brunneum (Merr.) Merr., PJS 35 (1928) 7; --Plectronia brunnea Merr., PJS 17 (1920, publ. 1921) 441; EPFP 3 (1923) 535. --Type: BS 28791 Ramos & Edaño (US*, iso). Luzon: Quezon prov., Mt Binuang, May 1917.

LUZON: Quezon, Camarines. Mossy forest, altitude c. 1000m.

Canthium confertum Korth., Ned. Kruidk. Arch. 2 (1851) 235; --KM Wong in FS Ng (ed.) Tree Fl. Malaya 4 (1989) 342.

?**Canthium villarii** Vidal, Phan. Cuming. Philipp. (1885) 120, 182. --Type: Peninsular Malaysia, Borneo and Philippines.

Canthium culionense (Elmer) Merr., PJS 35 (1928) 7; --Plectronia culionensis (Elmer) Merr., EPFP (1923) 535; --La iso). Culion: Halsey, in dry forests, Dec 1902.

CULION. Lowland dry secondary forests and thickets.

Canthium dicoccum (Gaertn.) Merr., PJS 35 (1928) 8; --Plectronia dicocca (Gaertn.) Merr., EPFP (1923) 536; --Psydrax dicoccos Gaertn., Fruct. 1 (1788) 125, t. 26.

Canthium didymum Gaertn.

India to Malaya.

LUZON: Benguet, Pangasinan, Zambales, Bataan, Rizal, Batangas, MINDORO, PALAWAN, TICAQ, GUIMARAS, NEGROS, MINDANAO, BUCAS GRANDE. Lowland primary and secondary forests. (Merrill, 1923).

Malesian materials hitherto distributed and interpreted as *C. dicoccum* (= *Psydrax dicocca* Gaertn.) were possibly misidentified according to Bridson, Kew Bull. 40 (1985), as this taxon is restricted to Sri Lanka and S India. *Canthium didymum* Gaertn. is a synonym of *Psydrax dicocca* Gaertn., the type species of *Psydrax*. In Malaya, several entities previously annotated in herbaria as *C. didymum* have now been placed under *Psydrax* by KM Wong (Tree Fl. Malaya 4 (1989) 400). Similar case for some Philippine entities currently under *Canthium*?

Canthium edanoi Co, *nom nov.*; --*Canthium longistipulum* Merr. & Quisumb., *non* Merr., Mitt. Inst. Allg. Bot. Hamburg 7 (1937) 291. --Type: PNH 151 Edaño (L*). Palawan: Brookes Point, Mantalingahan Range, Mt Balabag, mossy forest, altitude 1573m, 13 May 1947.
PALAWAN: Brookes Point, Mt Mantalingahan.

Canthium ellipticum (Merr.) Merr., PJS 35 (1928) 8; --*Plectronia elliptica* Merr., PJS 12 c (1917) 166; EPFP 3 (1923) 536. --Type: BS 29594 Ramos & Edaño
LUZON: Nueva Ecija, Rizal. Medium altitude forests.

Canthium elmeri Merr., PJS 35 (1928) 8; --*Plectronia gracilipes* Elmer, LPB 3 (1911) 1008, *non* Kurz; --Merr., EPFP 3 (1923) 536. --Type: Elmer 12550
SIBUYAN. Forests along streams, altitude c. 225m.

Canthium fenicis (Merr.) Merr., PJS 35 (1928) 8; --*Plectronia fenicis* Merr., PJS 8 c (1913) Bot. 166; EPFP 3 (1923) 536. --Type: BS 12693 Fenix (not seen). Luzon: Benguet prov., Sablan, growing on slopes, 23 Nov 1910.
LUZON: Benguet, **Tayabas**, CEBU (Danao). Medium altitude secondary forests.

Canthium glandulosum (Blanco) Merr., PJS 35 (1928) 8; --*Plectronia glandulosa* (Blanco) Merr., Sp. Blancoanae (1918) 365; EPFP 3 (1923) 536; --*Ixora glandulosa* Blanco, Fl. Filip. (1837) 61. --Type: None extant; 'illustrative specimen': Merrill Sp. Blancoanae 897 (US*).
Polyozus bipinnatus Blanco, Fl. Filip. ed. 2 (1845) 43; *ibid.* ed. 3, 1 (1877) 79. --Type: None extant; 'illustrative specimen': Merrill Sp. Blancoanae 897 (US*).
Plectronia viridis Merr., PJS 1 (1906) Suppl. 131; --Elmer, LPB 3 (1911) 1008. --Type: Merrill 3945 (US*, iso). Luzon: Bataan prov.
LUZON: Cagayan, Bataan, Rizal, Quezon, MINDORO, SIBUYAN, NEGROS, MINDANAO. Low and medium altitude forests.

Canthium gynochthodes Baill., *Adansonia* 12 (1878) 199; --*Plectronia gynochthodes* (Baill.) Merr., EPFP 3 (1923) 536. --Type:
Lanyu, Lutao, and the Philippines.
N LUZON to PALAWAN and MINDANAO, in most islands and provinces. Low and medium secondary forests generally, ascending to 1500m.

Canthium horridum Blume, *Bijdr.* (1826) 966; --KM Wong in FS Ng (ed.). *Tree Fl. Malaya* 4 (1989) 341; --*Plectronia horrida* (Blume) Benth. & Hook.f. *ex* Kurz in J. As. Soc. Beng. 46, 2 (1877) 153; --Merr., EPFP 3 (1923) 537.
Canthium pauciflorum Blanco, Fl. Filip. (1837) 165. --Type: Not extant. 'Illustrative specimen': Merrill Sp. Blancoanae 143 (US*)..
Burma, Indochina, Peninsular Malaysia, Java, Borneo, Philippines.
LUZON: Pangasinan, Zambales, Bulacan, Rizal, Camarines, Sorsogon. Lowland dry thickets.

Canthium leytense (Merr.) Merr., PJS 35 (1928) 8; --*Plectronia leytensis* Merr., PJS 8 c (1913) 166; EPFP 3 (1923) 537. --Type: BS 15383 Ramos (US*, iso). Leyte: Leyte prov., mountains back of Dagami, in the mossy forest, Aug 1912.
LUZON: Quezon (E coast), LEYTE. Primary forests, probably at c. 1000m.

Canthium megacarpum (Merr.) Merr., PJS 35 (1928) 8; --*Plectronia megacarpa* Merr., PJS 4 c (1909) Bot. 326; EPFP 3 (1923) 537. --Type: FB 8232 Curran & Merritt (US*, iso). Luzon: Zambales prov., near Sta Cruz, altitude 100m, Dec 1907.
LUZON: Benguet, Cagayan, Zambales, Quezon. Lowland forests.

Canthium merrillianum Mabb., *Taxon* 26 (1977) 532; --*Canthium cordatum* (Merr.) Merr., PJS 35 (1928) 7, *nom illeg.*, *non* Dillwyn, 1839; --*Plectronia cordata* Merr., PJS 12 c (1917) Bot. 166; EPFP 3 (1923) 535. --Type: BS 26549 Ramos & Edaño (A*, US*, iso). Luzon: Aurora prov., Mt Dingalan,

Aug-Sept 1916.

LUZON: Aurora. Forested slopes, altitude c. 2000m.

Canthium monstrosum (A Rich.) Merr., PJS 35 (1928) 8; --*Plectronia monstrosa* A Rich., Mém. Rub. (1830) 109; --Merr., PJS 8 c (1913) Bot. 48; Sp. Blancoanae (1918) 365; EPFP 3 (1923) 538. --Type: Perrottet *sn* (P, 2 sheets, cited by Merrill, 1913).

Canthium bipinnatum (Blanco) Merr., Govt. Lab. Publ. (Philip.) 27 (1905) 53; --*Ronabea bipinnata* Blanco, Fl. Filip. (1837) 162. --Type: Not extant. "Illustrative specimen": Merrill Sp. Blancoanae 248, leg. M Ramos (US*). Luzon: Rizal prov., Antipolo, 19 Jan 1913.

Canthium mite Bartl. ex DC., Prodr. 4 (1830) 474; --*Plectronia mitis* (Bartl. ex DC.) Elmer, LPB 1 (1906) 28.

Canthium arboreum (Blanco) Vidal, Phan. Cuming. Philip. (1885) 119, 181; Rev. Pl. Vasc. Filip. (1886) 155; --*Ronabea arborea* Blanco, Fl. Filip. ed. 2 (1845) 114; idem. ed. 3, 1 (1877) 204. --Syntype: Cuming 776 (L*, NY*). Luzon: Quezon prov.

Philippines, N Sulawesi.

LUZON: Ilocos Norte, Ilocos Sur, Abra, La Union, Apayao, Mountain Province, Benguet, Cagayan, Isabela, Nueva Vizcaya, Pangasinan, Zambales, Bataan, Pampanga, Bulacan, Rizal, Laguna, Cavite, Quezon, LEYTE, NEGROS. Low and medium altitude secondary forests, often common.

Canthium oblongifolium Quisumb. & Merr., PJS 37 (1928) 200. --Type: BS 46109 Edaño (NY*, US*, iso). Panay: Capiz prov., Haman-ay, forested slopes at low altitudes, 13 Oct 1925.

PANAY: Capiz. Lowland forest.

Canthium obovatifolium (Merr.) Merr., PJS 35 (1928) 8; --*Plectronia obovatifolia* Merr., PJS 12 c (1917) Bot. 167; EPFP 3 (1923) 538. --Type: BS 26526 Ramos & Edaño (A*, US*, iso). Luzon: Aurora prov., Mt Dingalan (Mt Dalingdingan in the protologue), forested slopes at medium altitudes, 9 Sept 1916.

LUZON: Aurora. Medium altitude forests.

Canthium oligophlebium (Merr.) Merr., PJS 35 (1928) 8; --*Plectronia oligophlebia* Merr., PJS 17 (1920) 442; EPFP 3 (1923) 538. --Type: BS 29342 Ramos and Edaño (A*, US*, iso). Luzon: Rizal prov., Mt Susong Dalaga, mossy forest at the summit, apparently at or above 900m altitude, 7 Aug 1917.

LUZON: Rizal. Known only from the type collection.

Canthium paucinervium (Merr.) Merr., PJS 35 (1928) 8; --*Plectronia paucinervia* Merr., PJS 8 c (1913) Bot. 51; EPFP 3 (1923) 538. --Type: Merrill 8263 (not seen). Mindanao: Zamboanga, Sax River mtns back of San Ramon, in damp forest, altitude c. 900m, 29 Nov 1911.

LUZON: Camarines, MINDANAO: Zamboanga, BUCAS GRANDE. Mossy forest, altitude c. 900m at the type locality. Possibly at lower altitude elsewhere.

Canthium pedunculare Cav., Icon. 5 (1799) 21, t. 436. --Type:

Plectronia peduncularis (Cav.) Vidal, Cat. Pl. Prov. Manila (1880) 33; --Elmer, LPB 1 (1906) 28; idem. 4 (1912) 1346; --Merr., PJS 1 (1906) Suppl. 131; idem. 8 c (1913) Bot. 50; Fl. Manila (1912) 454; Sp. Blancoanae (1918) 364; EPFP 3 (1923) 538.

Canthium monoflorum Blanco, Fl. Filip (1837) 166. --Type: Not extant. 'Illustrative specimen': Merrill Sp. Blancoanae 380 (US*). Palawan: Taytay, dry thickets and open places, May 1913

Plectronia lycioides (A Rich.) Elmer, LPB 1 (1906) 28; --*Canthium lycioides* A Rich., Mém. Rub. (1830) 108. --Type:

LUZON: Pangasinan, Bataan, Bulacan, Rizal, PALAWAN. Lowland dry thickets.

Canthium ramosii (Merr.) Merr., PJS 35 (1928) 9; --*Plectronia ramosii* Merr., PJS 17 (1920, publ. 1921) 443; EPFP 3 (1923) 539. --Type: BS 28973 Ramos & Edaño (NY*, US*, iso). Luzon: Quezon prov., Umiray, forest along the Umiray River at low altitudes, 1 Jun 1917.

LUZON: Quezon (Umiray). Lowland forests.

Canthium sarcocarpum (Merr.) Merr., PJS 35 (1928) 9; --Plectronia sarcocarpa Merr., PJS 10 c (1915) Bot. 114; EPFP 3 (1923) 539. --Type: BS 10968 Ramos (not seen). Luzon: Laguna prov., San Antonio, in thickets, Aug 1910.

LUZON: Laguna, Quezon, Sorsogon. Lowland forests.

Canthium subcapitatum (Merr.) Merr., PJS 35 (1928) 9; --Plectronia subcapitata Merr., PJS 17 (1920) 443; EPFP 3 (1923) 539. --Type: BS 28117 Fenix (L*, NY*, US*, iso). Luzon: Apayao prov., Ngagan, on forested slopes, 10 May 1917.

LUZON: Apayao. Medium altitude forests.

Canthium subsessilifolium (Merr.) Merr., PJS 35 (1928) 9; --Plectronia subsessilifolia Merr., PJS 12 c (1917) Bot. 168; EPFP 3 (1923) 539. --Type: BS 27205 Ramos (A*, US*, iso). Luzon: Ilocos Norte prov., in thickets at low altitude, 2 Mar 1917.

LUZON: Ilocos Norte. Lowland thickets.

Canthium trichophorum Quisumb. & Merr., PJS 37 (1928) 201. --Type: BS 46759 Ramos & Edaño (A*, NY*, iso). Luzon: Isabela prov., San Mariano, Ambulawan, along forested streams, altitude c. 400m, 16 Mar 1926.

LUZON: Isabela (San Mariano, Ambulawan; Mt Moises). Along forested streams, altitude 400-900m.

Canthium wenzelii (Merr.) Merr., PJS 35 (1928) 9. --Plectronia wenzelii Merr., PJS 9 c (1914) Bot. 387; EPFP 3 (1923) 539. --Type: Wenzel 399 (A*, US*, iso). Leyte: Leyte prov., 30 Aug 1913.

LEYTE. Lowland forest, altitude c. 60m.

Ceriscoides (Hooker *filius*) Tirvengadam

Literature:

Wong, KM. (1984): *The genera of Peninsular Malaysian Rubiaceae formerly confused with Randia*. Malayan Nat. J. 38: 1–57.

Ceriscoides curranii (Merr.) Tirveng., Nordic J. Bot. 3 (1983) 456; --Gardenia curranii Merr., Sp. Blancoanae (1918) 363. --Type:

LUZON: Pangasinan, Bataan, Rizal, Batangas. In thickets and forests at low altitudes.

Chassalia Commerson ex Jussieu

Literature:

Deb, DB & B. Krishna. 1982. *Taxonomic studies of the genus Chassalia Comm. ex Poir. in India and adjoining regions*. Bulletin of the Botanical Survey of India 24 xxxxx.

Chassalia curviflora (Wall.) Thwaites, Enum. Pl. Zeylan. (1859) 150; --Elmer, LPB 1 (1906) 3; idem. 3 (1911) 1033; --Merr., EPFP 3 (1923) 565; --Psychotria curviflora Wall. in Roxb. Fl. Ind. 2 (1824) 167. --Type from Sri Lanka.

Chassalia lurida (Blume) Miq., Fl. Ind. Bat. 2 (1857) 282; --Merr., PJS 10 c (1915) Bot. 140; --Psychotria lurida Blume, Bijdr. (1826) 959. --Type from Java.

var. ophioxylodes (Wall.) DB Deb & B Krishna, Bull. Bot. Surv. India 24 (1982, publ. 1983) 222. India, Sri Lanka, E Himalayas, Bangladesh, Nicobar Isls, Burma, Thailand, Borneo, Philippines.

MINDORO, PALAWAN, BALABAC, TICAQ, BANTON, SIBUYAN, PANAY, LEYTE, MINDANAO: Cotabato, BALUT. Lowland primary forests.

Chassalia obscurinervia Elmer, LPB 3 (1911) 1033. --Type: Elmer 11200 (BISH*, GH*, NY*, US*,

iso). Mindanao: Davao del Sur prov., Mt Apo, Todaya, 'dry forests of fertile soil along the Sibulan River and the Baracatan Creek from 1250-2500ft', Jul 1909.
MINDANAO: Davao del Sur (Mt Apo).

Coelospermum Blume =Caelospermum

Coprosma JR & G Forster

Revision:

Heads, 1996. Candollea 51:

Coprosma granadensis (Mutis ex L.f.) Heads, Candollea 51 (1996) 388; --Nertera granadensis (Mutis ex L.f.) Druce, Bot. Exch. Club Brit. Isles Rep. 4 (1917) 637; --Yang TYA in Huang, TC (ed). Fl. Taiwan, ed. 2, 4 (1998) 306, pl. 138, photo 186.

Nertera depressa Banks & Solander ex Gaertn., Fruct. 1 (1788) 124; --Merr., EPFP 3 (1923) 571.

Coprosma dentata (Elmer) Heads, Candollea 51 (1996) 389; --Nertera dentata Elmer, LPB 1 (1906) 15. – Type:

var. granadensis.

Temperate S hemisphere to tropical Asia, Madagascar, Australia, New Zealand, Pacific islands, Andes to Mexico.

LUZON: Abra, Mountain Province, Benguet, Zambales, Laguna, Quezon, MINDORO, NEGROS, MINDANAO: Davao. In mossy forests on the tops of the higher mountains, sometimes in shaded ravines as low as 1500m.

Coptosapelta Korthals

Literature-

Valeton, Th. 1922. *Die Gattung Coptosapelta Korth.* Rec. Trav. Bot. Neerl. 19: 281–292. pl. X, XI.

Coptosepelta olaciformis (Merr.) Elmer, LPB 5 (1913) 1856; --Merr., EPFP 3 (1923) 507; --*Randia olaciformis* Merr., PJS 3 c (1908) Bot. 163. –Type:

LUZON, LEYTE, MINDANAO. In primary forests at low and medium altitudes.

Cowiea Wernham

Cowiea philippinensis Merr., PJS 20 (1922) 459; EPFP 3 (1923) 533. –Type: BS 36819
MINDANAO: Zamboanga. Damp forests along streams at low altitudes.

Damnacanthus Gaertner

Literature-

Robbrecht, E. et al. 1991. *The genera Mitchellia and Damnacanthus. Evidence for their alliance, comments on the campylophy in the Rubiaceae and the circumscription of the Morindeae.* Blumea 35: 307–345.

Damnacanthus indicus Gaertn., Fruct. 3 (1805) 18, t. 182;

India (Assam), Bangladesh, Burma, S China, Taiwan, C & S Japan, Korea (Cheju Do), Philippines.

LUZON: Quezon (Mt Banahaw). On forested slopes, 1400-2000m.

Dentella JR & G Forster

Literature:

Airy Shaw. 1934. **Kew Bull ?**: 290

Dentella repens (L.) Forst., Char. Gen. (1776) 26, t. 13; --Merr., Fl. Manila (1912) 447, EPFP 3 (1923) 492; --Oldenlandia repens L., Mant. 1 (1767) 40..

Mauritius, Sri Lanka, India, E Himalayas, Bangladesh, S China, Taiwan, Burma, Thailand, Peninsular Malaysia, Java, Philippines, Sulawesi, Moluccas, Northern Territory, Queensland, New Caledonia.

Throughout the Philippines in open waste places in and about towns at low and medium altitudes. Introduced in Mexico.

Diplospora de Candolle

Literature:

Ali, SI & E Robbrecht. 1991. *Remarks on the tropical Asian and Australian taxa included in Diplospora or Tricalysia (Rubiaceae-Ixoroideae-Gardenieae)*. Blumea 35: 279–305.

Diplospora fasciculiflora (Elmer) Elmer, LPB 3 (1911) 113; --Merr., EPFP 3 (1923) 534; --Tricalysia fasciculiflora (Elmer) Merr., PJS 10 c (1915) Bot. 13; EPFP 3 (1923) 534, *pro parte*.; --Randia fasciculiflora Elmer, LPB 1 (1906) 4, --Type: Elmer 6900 (NY*, iso). Luzon: Bataan prov., Mt Mariveles, Nov 1904.

Tricalysia fasciculiflora (Elmer) Merr. var. oblongifolia Merr., EPFP 3 (1923) 534. --Type: FB 1117 Ramos (US*, iso). Luzon: Rizal prov., Bosoboso, Jul 1906

LUZON: Mountain Province, Benguet, Cagayan, Nueva Ecija, Bataan, Bulacan, Rizal, Batangas, Quezon, Camarines, CULION, PALAWAN, MASBATE, MINDANAO: Cotabato. Low and medium altitude primary forests, ascending to 1600m.

Diplospora puberula (Merr.) Ali & Robbrecht, Blumea 35 (1991) 299; --Tricalysia puberula Merr., PJS 10 c (1915) Bot. 113; EPFP 3 (1923) 535. --Type: BS 20431 Ramos (US*, iso). Luzon: Laguna prov., San Antonio, Feb 1913.

LUZON: Isabela, Laguna, CATANDUANES. Lowland primary forests, ascending to 300m.

Diplospora tinagaoensis (Elmer) Ali & Robbrecht, Blumea 35 (1991) 299; --Tricalysia tinagaoensis Elmer, LPB 1 (1906) 34; --Merr., EPFP 3 (1923) 535. --Type: Ahern 417, leg. Quadras (US*, iso). Tinago Island, Mar-May 1901.

Phaleria axillaris Elmer, LPB 8 (1915) 2840. --Type:

NEGROS, LEYTE, SAMAR, MINDANAO: Zamboanga, Lanao del Sur, Agusan del Norte, DINAGAT, TINAGO. Low and medium altitude primary forests, ascending to 900m.

Tricalysia negrosensis Elmer, LPB 2 (1908) 518; --Merr., EPFP 3 (1923) 535. --Type: Elmer 9685 NEGROS. Primary forests, altitude c. 1050m. Presumably to be placed in *Diplospora sensu str.* (fide Ali & Robbrecht, Blumea 35 (1991) 303).

Generic position to be determined:

Diplospora sessilis Elmer, LPB 4 (1912) 1329. --Type: Elmer 13139 (L*, NY*, US*, iso).

Tricalysia sessilis (Elmer) Merr., EPFP 3 (1923) 535.

PALAWAN. On gravel bar along Iwahig River, altitude c. 150m.

Discospermum Dalzell

Literature:

Ali, SI & E Robbrecht. 1991. *Blumea* 35: 279.

Discospermum whitfordii (Elmer) Ali & Robbrecht, *Blumea* 35 (1991) 301; 302; --*Randia whitfordii* (Elmer) Merr., *PJS* 1 (1906) Suppl. 130; EPFP 3 (1923) 529; --*Gardenia whitfordii* Elmer, LPB 1 (1906) 4. --Type: Elmer 6643 (NY*, iso). Luzon: Bataan prov., Mt Mariveles, common in the woods at 600m, Nov 1904.

Philippines.

Dolicholobium A Gray

Revision:

Jansen, ME & CE Ridsdale. 1983. *A revision of the genus Dolicholobium (Rubiaceae)*. *Blumea* 29: 251-311.

Dolicholobium philippinense Trelease, LPB 3 (1911) 984; --Jansen & Ridsd., *Blumea* 29 (1983) 278. --Type:

Dolicholobium hirsutum Elmer, LPB 9 (1934) 3247.

LUZON, SIBUYAN, SAMAR. In rainforest understorey, but often in more open situations like streambanks or exposed ridges; on well-drained to swampy soils, sea level - 1500(-1900) m.

Fagerlindia Tirvengadum

Revision:

Ridsdale, C.E. (1985). *The genus Fagerlindia (Rubiaceae) in the Philippines*. *Blumea*. 31: 239–244.

Fagerlindia emanuelssoniana Ridsd., *Blumea* 31 (1985) 243, t. 2. --Type: SMHI 1238 J Dransfield (L*, holo). Palawan: Km 36, Puerto Princesa to Roxas, (erroneously cited in protologue as Mt Victoria). Extremely degraded forest on ultramafic rocks, alt. 10m, 12 May 1984.

PALAWAN. Apparently restricted to ultramafic rocks.

Fagerlindia microcarpa (Bartl. ex DC) Ridsd., *Blumea* 31 (1985) 243; --*Randia microcarpa* (Bartl. ex DC) Merr., EPFP 3 (1923) 527, *comb. illeg., non* Sessé & Mocino (1888). --Type: Haenke *sn* (G-DC)

Randia cumingiana Vidal, Phan. Cuming. Philip. (1885) 179; Rev. Pl. Vasc. Filip. (1886) 153; --Merr., Philip. Bur. Forestry Bull. 1 (1903) 53; *PJS* 1 (1906) Suppl. 130; Fl. Manila (1912) 449; --Elmer, LPB 1 (1906) 32. --Type: Cuming 1366 (L, lecto). Syntypes: Vidal 388 (L), Herb. Propr. 39

LUZON: widespread, in most provinces, GOLO, MINDANAO: Zamboanga. Lowland thickets and secondary forests, common. (Merr., 1923)

Randia ticaensis Merr., *PJS* 5 c (1910) Bot. 245; --Merr., EPFP 3 (1923) 528. --Type: BS 12547 Rosenbluth (US*, iso). Ticao: Linadlaran Point, on steep hillside, altitude c. 30m, 24 Dec 1908. TICA. Lowland forests. Allied to *R. cumingiana* Vidal (=Fagerlindia microcarpa).

Galium Linnaeus

Literature:

Royen, P. van. 1983. *Galium* in The Alpine Flora of New Guinea 4: 2763–2776.

Galium philippinense Merr., *PJS* 1 (1906) Suppl. 238; *ibid.* 5 c (1910) Bot. 391; --Elmer, LPB 3 (1911) 1046. --Type: Elmer 6557.

Galium ciliare Elmer, LPB 1 (1906) 4, *non* Hook.f.

LUZON: Mountain Province, Benguet. Open grassy slopes, 1600-2400m.

Galium subtrifidum Reinw. ex Blume, Bijdr. 16 (1826) 944.

Galium gaudichaudii DC, Prodr. 4 (1830) 607; Benth. Fl. Austral. 3 (1866) 446; --Elmer, LPB 1 (1906) 4; --Merr., PJS 5 c (1910) Bot. 391; EPFP 3 (1923) 575.

N Sumatra, Java, N Philippines, Lesser Sunda Isls (Buru), New Guinea.

LUZON: Mountain Province, Benguet. On rocks, ledges, and open banks, altitude 1300-2000m.

Gardenia Linnaeus

Literature:

Wong, KM. 1982. *Notes on Gardenia and Acranthera (Rubiaceae) from Peninsular Malaysia*. Gardens Bulletin Singapore 35: 21–32.

Gardenia longiflora Vidal, Rev. Pl. Vasc. Filip. (1886) 153; --Merr., EPFP 3 (1923) 530, nom. illeg., non Ruiz & Pavon 1799, nec (Salisb.) WT Aiton, 1810.

LUZON: Cagayan, Isabela, Rizal, Laguna, Tayabas, Camarines, Sorsogon, BUSUANGA, PALAWAN, SAMAR, SIBUYAN, MINDANAO: Zamboanga. In primary forest at low altitudes.

Gardenia pseudopsidium (Blanco) Fern.-Villar, Novis. App. (1880) 109; --Merr., EPFP 3 (1923) 531; --Sulipa pseudopsidium Blanco, Fl. Filip. (1837) 497.

Gardenia barnesii Merr., Publ. Govt. Lab. (Philipp.) 17 (1904) 47. --Type: FB 163 Barnes (NY*, US*, iso). Luzon: Bataan prov., Lamao River, Jan 1904.

Gardenia segmenta Elmer, LPB 4 (1912) 1331; --Merr., EPFP 3 (1923) 531. --Type: Elmer 13153 (A*, L*, NY*, US*, iso). Palawan: Mt Pulgar. May 1911.

Gardenia megalocarpa Merr., PJS 20 (1922) 463; EPFP 3 (1923) 530. --Type: BS 38919 Ramos (A*, US*, iso). Mindoro: Mindoro Occidental prov., Paluan. In forest at low altitudes, Apr 1921.

LUZON: Cagayan, Benguet, Nueva Vizcaya, Pangasinan, Tarlac, Rizal, Bataan, Batangas, Laguna, Quezon, Camarines, MINDORO, BUSUANGA, PALAWAN, MASBATE, NEGROS, SAMAR, MINDANAO: Cotabato, Davao. In primary forest at low altitudes, common.

Gardenia ramosii Merr., PJS 29 (1926) 489. --Type: BS 43323 Ramos (A*, iso). Bohol: BOHOL

Non-naturalized cultivated species:

Gardenia jasminioides (L.) Ellis, Philos. Trans. 51 (1761) 935.

Gardenia Auga (L.) Merr., Interp. Herb. Amb. (1917) 485; EPFP (1923) 531.

Gardenia florida L., Sp. Pl. ed. 2 (1762) 305; --Merr. Fl. Manila (1912) 449.

Cultivated for ornamental purposes, but nowhere spontaneous. Only the double-flowered form occurs in the Philippines.

Gardenia philastreii Pierre ex Pit. in Lecomte et al. (ed.) Fl. Indo-Chine 3 (1923) 253.

Geophila D Don

Geophila repens (L.) IM Johnst., Sargentia 8 (1949) 281.

Geocardia repens (L.) Bakh.f. in CA Backer & RC Bakhuizen van der Brink, Bekn. Fl. Java 15(173) (1956) 144; --Carinta repens (L.) LB Sm. & Downs, Sellowia 7 (1956) 88; --Psychotria repens (L.) L., Amoen. Acad. 5 (1760) 377; --Rondeletia repens L., Syst. Nat. ed. 10, 2 (1759) 928.

Geophila herbacea (Jacq.) K.Schum. in HGA Engler & KAE Prantl, Nat. Pflanzenfam. 4(4) (1891) 119; --Kuntze, Rev. Gen. Pl. (1891) 300; --Merr. EPFP 3 (1923) 565.

Geocardia herbacea (Jacq.) Standl., Contr. U. S. Natl. Herb. 17 (1914) 445.
Carinta herbacea (Jacq.) W.Wight, Contr. U. S. Natl. Herb. 9 (1905) 216.
Mapouria herbacea (Jacq.) Muell.-Arg. in CFP von Martius & auct. suc. (eds.), Fl. Bras. 6(5) (1881) 427.
Cephaelis herbacea (Jacq.) Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 46(2) (1877) 140.
Psychotrophum herbaceum (Jacq.) Crantz, Inst. Rei Herb. 2 (1766) 259.
Psychotria herbacea Jacq., Enum. Syst. Pl. (1760) 16.

Pantropic.

BATAN, LUZON: Bataan, Laguna, Quezon, Sorsogon, BALABAC, BILIRAN, LEYTE, MINDANAO, BASILAN, SULU. Chiefly in forest at low altitudes.

Greenea Wight & Arnott

Greenea hirsuta Elmer = Timonius hirsutus (Elmer) Merr.

Greeniopsis Merrill

Greeniopsis discolor Merr., PJS 12 c (1917) Bot. 163; --EPFP 3 (1923) 504. --Type: *BS 26448 Ramos & Edaño*.

LUZON: Nueva Ecija. In primary forest at or above 300m altitudes.

Greeniopsis euphlebica Merr., PJS 17 (1920, publ. 1921) 319; --EPFP 3 (1923) 504. --Type: *BS 35134 Ramos & Pascasio*.

BUCAS GRANDE. Lowland open forests.

Greeniopsis megalantha Merr., PJS 12 c (1917) Bot. 164; --EPFP 3 (1923) 505. --Type: *BS 34587 Ramos & Pascasio*.

MINDANAO: Surigao del Norte. Low and medium altitudes forests.

Greeniopsis multiflora (Elmer) Merr., PJS 4 c (1909) Bot. 325; --Elmer, LPB 3 (1911) 981; --EPFP 3 (1923) 505; --Mussaendopsis multiflora Elmer, LPB 1 (1906) 14. --Type: *FB 490 JF Quadras* (not seen). Dinagat, Mar-May 1905.

Greeniopsis sibuyanensis Elmer, LPB 3 (1911) 982. --Type:

Greeniopsis philippinensis Merr., PJS 4 c (1909) Bot. 324; --EPFP 3 (1923) 505. --Type: *Merrill 5216* (L* 2 sheets, NY*, US*, iso). Samar: Eastern Samar prov., Borongan, along border of a nipa swamp, Oct 1906.

Greeniopsis pubescens Merr., PJS 5 c (1910) Bot. 230; --EPFP 3 (1923) 505. --Type:

LUZON: Cagayan, Isabela, Camarines, Sorsogon, LEYTE, SAMAR, MINDANAO: Surigao, DINAGAT. Low altitude forests. Often on ultramafics.

Guettarda Linnaeus

Guettarda speciosa L., Sp. Pl. (1753) 991; --Merr., Fl. Manila (1912) 450, Tropical Asia and Australia to Polynesia.

Throughout the Philippines along seashore.

Guettardella Champion & Bentham = Antirhea

Gynopachis Blume = Aidia

Gynochthodes Blume

Gynochthodes lenticellata (C Robinson) Merr., EPFP 3 (1923) 571. --Type: FB 13689 Curran. NEGROS. Lowland forests.

Gynochthodes mindanaensis Merr., PJS 17 (1920, publ. 1921) 425; EPFP 3 (1923) 571. --Type: BS 34677 Ramos & Pascasio. MINDANAO: Surigao. Forests, altitude 400-700m.

Gynochthodes nigra (Merr.) Merr., EPFP 3 (1923) 571; --*Tetralopha nigra* Merr., PJS 8 c (1913) Bot. 58. --Type: BS 15877 Fenix (L*, US*, iso). Mindanao: Agusan del Norte prov., near Butuan, 30 Aug 1912. PANAY, MINDANAO: Agusan del Norte. Lowland forests along streams.

Gynochthodes philippinensis (Elmer) Merr., EPFP 3 (1923) 571; --*Tetralopha philippinensis* Elmer, LPB 3 (1911) 1. *Tetralopha polillensis* C Robinson, PJS 6 c (1911) Bot. 226. --Type: LUZON: Apayao, Rizal, Quezon, Camarines, POLILLO, SIBUYAN, SIARGAO, BUCAS GRANDE. Lowland forests.

Hedyotis Linnaeus

Hedyotis atropurpurea Merr., PJS 17 (1920, publ. 1921) 426; EPFP 3 (1923) 495. --Type: BS 28578 Ramos & Edaño. LUZON: Quezon (Mt Binuang). Forests, altitude c. 1000m.

Hedyotis bambusetorum Merr., PJS 20 (1922) 469; EPFP 3 (1923) 495. --Type: Merrill 9214. PALAWAN. Low altitude bamboo thickets along trails.

Hedyotis brachyantha Merr., PJS 17 (1920, publ. 1921) 427; EPFP 3 (1923) 496. --Type: BS 28769 Ramos & Edaño. LUZON: Quezon (Mt Binuang). Forested slopes, altitude c. 200m.

Hedyotis cagayanensis Merr., PJS 5 c (1910) Bot. 231; EPFP 3 (1923) 496. --Type: BS 7502 Ramos. LUZON: Apayao, Cagayan. Low altitude forests.

Hedyotis camarinensis Merr., PJS 20 (1922) 468; EPFP 3 (1923) 496. --Type: BS 33604 Ramos & Edaño. LUZON: Camarines Norte (Paracale). Lowland clearings near thickets.

Hedyotis capitellata Wall. ex G Don, Gen. Hist. 3 (1834) 527. *Oldenlandia capitellata* (Wall. ex G Don) Kuntze, Revis. Gen. Pl. 1 (1891) 292. var. *pubescens* Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 46(2) (1877) 135. *Hedyotis kingiana* Elmer, LPB 4 (1912) 1334; --Merr., EPFP 3 (1923) 498. --Type: Merrill 796. *Hedyotis prainiana* Elmer, LPB 1 (1906) 17, non King. Burma, Philippines. PALAWAN. Low altitudes, in thickets and among coarse grasses.

Hedyotis cardiophylla Quisumb. & Merr., PJS 37 (1928) 202. --Type: BS 45585 Ramos & Edaño

LUZON: Quirino (Mt Alzapan).

Hedyotis catanduanensis Merr., PJS 17 (1920, publ. 1921) 428; EPFP 3 (1923) 496. –Type: BS 30443 Ramos.

CATANDUANES. Low altitude primary forests.

Hedyotis caudata Merr., PJS 8c (1913) Bot. 33; EPFP 3 (1923) 496. –Type: Loher 6419 (not seen). Without locality data.

LUZON: Probably Rizal. Possibly from medium altitude forest.

Hedyotis diffusissima Merr., PJS 17 (1920, publ. 1921) 429, EPFP 3 (1923) 497. –Type: BS 28387 Fenix

LUZON: Ilocos Norte, Apayao. Primary forests, altitude c. 1000m.

Hedyotis edanoi Quisumb. & Merr., PJS 37 (1928) 203. –Type: BS 47327 Ramos & Edaño.

LUZON: Isabela (Mt Moises).

Hedyotis eucapitata Merr., PJS 2 c (1907) Bot. 303; EPFP 3 (1923) 497. –Type: Merrill 5726.

MINDORO: Mindoro Oriental (Mt Halcon). Mossy forests, altitude 1500-1800m.

Hedyotis humilis Merr., PJS 8 c (1913) Bot. 33; EPFP 3 (1923) 497. –Type: BS 14691 Ramos (not seen). Camiguin: Camiguin prov., Mt Mahinog, in mossy forests, Apr 1912.

CAMIGUIN, MINDANAO: Agusan del Norte (Mt Urdaneta =Hilong-hilong). Mossy forests above 1000m.

Hedyotis laxiflora Merr., PJS 17 (1920, publ. 1921) 430., EPFP 3 (1923) 498, *non* Walp. 1852. –Type: BS 30313 Ramos.

CATANDUANES. Forested ravines, altitude c. 400m.

Hedyotis longipedunculata Merr., PJS 17 (1920, publ. 1921) 430; EPFP 3 (1923) 498. –Type: BS 30551 Ramos.

CATANDUANES. Low altitude forests along streams.

Hedyotis luzoniensis Merr., PJS 12 c (1917) Bot. 160; EPFP 3 (1923) 498. –Type: BS 26580

Ramos & Edaño (US*, iso). Luzon:

LUZON: Mountain Province, Aurora (Mt Dingalan). Forests, altitude at least 300m.

Hedyotis macgregorii Merr., PJS 5 c (1910) Bot. 160; EPFP 3 (1923) 498. –Type: BS 8490

McGregor (US*, iso). Luzon: Benguet prov., Pauai, Jun 1909.

Luzon: Benguet. Mossy forest, altitude c. 2100m.

Hedyotis mindorensis Quisumb., PJS 41 (1930) 361, t. 25. –Type: BS 46363 Ramos (PNH, holo, possibly lost; iso in A*). Mindoro: Mindoro Oriental prov., Puerto Galera, forested slopes, altitude 700m, Nov-Dec 1925.

Mindoro: Mindoro Oriental (Puerto Galera). Known only from the type collection.

Hedyotis montana Merr., PJS 2 c (1907) Bot. 304; EPFP 3 (1923) 498. –Type: Merrill 5782.

MINDORO: Mindoro Oriental (Mt Halcon). Open heaths, altitude c. 2400m.

Hedyotis perhispida Elmer, LPB 4 (1912) 1333; –Merr., EPFP 3 (1923) 498; –*Lasianthus hispidus*

Elmer, LPB 1 (1906) 10, *non* H. hispida Retz. –Type: Merrill 767 (NY*, US*, iso). Palawan:

Palawan

prov., Ewiig (=Iwahig) River, Feb 1903.

Exallage perhispidia (Elmer) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 48(2) (1952) 142.

PALAWAN (Iwahig River; Thumb Peak). Lowland streamside thickets or gravelly creeks, up to c. 75m.

Hedyotis radicans (DC) Miq., Fl. Ind. Bat. 2 (1857) 181; --Merr., EPFP 3 (1923) 499. --Type: Haenke *sn* (not seen).

BATANES, LUZON: Cagayan, Camarines, Sorsogon, PANAY, NEGROS, MINDANAO: Agusan del Norte, Surigao del Norte. Low altitude forests.

Hedyotis scaberrima Merr., PJS 17 (1920, publ. 1921) 432; EPFP 3 (1923) 500. --Type: BS 30940 Ramos & Edaño (A*, US*, iso). Panay: Capiz prov., Jamindan, thickets along streams, 27 May 1918.

PANAY: Capiz (Jamindan). Low altitude thickets along streams.

Hedyotis sibuyanensis Elmer, LPB 3(1911) 977; --Merr., EPFP 3 (1923) 500. --Type: Elmer 12311 (PNH, holo, lost; iso GH*, L*, MO*, NY*, US*, iso). Sibuyan: Mt Giting-giting, Magallanes (=Magdiwang), clayey soil of a forested ridge, altitude 1500ft, Apr 1910.

SIBUYAN. Ridge forest, altitude c. 450m.

Hedyotis simplex Merr., PJS 17 (1920, publ. 1921) 433; EPFP 3 (1923) 500. --Type: BS 30389 Ramos (US*, iso). Catanduanes: in forests, Nov 1917.

CATANDUANES, BILIRAN (Mt Suiro), MINDANAO: Zamboanga. Primary forests, altitude 300-600m.

Hedyotis subevenosa Merr., PJS 17 (1920, publ. 1921) 432; EPFP 3 (1923) 500. --Type: Weber 1563 (A*, US*, iso). Luzon: Cagayan prov., Abulug River, Jan 1912.

LUZON: Cagayan. Low and medium altitude forests, said to be common at altitude 180-250m.

Hedyotis subvelutina Elmer, LPB 3(1911) 978; --Merr., EPFP 3 (1923) 500. --Type: Elmer 12441 SIBUYAN. Streamside thickets, altitude c. 225m.

Hedyotis trisecta Elmer, LPB 9 (1934) 3249. --Type: Elmer 14885 (PNH, holo, lost; MO*, NY*, US*, iso). Luzon: Sorsogon prov., Mt Bulusan (Irosin).

Unplaced:

Hedyotis bartlingii Merr., PJS 5 c (1910) Bot. 388; EPFP 3 (1923) 495. --Type: Haenke *sn*

LUZON: Mountain Province, Benguet, Bulacan, Quezon, MINDORO, PANAY. Open places at low and medium altitudes, ascending to 1300m.

Hedyotis microphylla Merr., PJS 1 (1906) suppl. 239; EPFP 3 (1923) 498, non Kunth (1820). --Merrill 4693

LUZON: Ifugao, Mountain Province, Benguet. Mossy forests, altitude 2000-2600m.

Hedyotis oligantha Merr., PJS 17 (1920, publ. 1921) 431; EPFP 3 (1923) 498. --Type: BS 29425 Ramos & Edaño.

LUZON: Ilocos Norte, Bataan, Pampanga, Rizal. Shaded banks in forests, altitude 300-900m.

Hedyotis phanerophlebia Merr., PJS 8 c (1913) Bot. 34; EPFP 3 (1923) 499. --Type: FB 4552 Mearns & Hutchinson (US*, iso). Mindanao: Misamis Occidental prov., Mt Malindang, in forests,

altitude c. 1800m, May 1906.

MINDANAO: Misamis Occidental (Mt Malindang). Forest, altitude c. 1700m.

Hedyotis pilosissima Merr., PJS 5 c (1910) Bot. 232; EPFP 3 (1923) 499. --Type: Merrill 6704 (not seen). Panay: Capiz prov., Dumarao. Damp shaded ravines along streams, altitude c. 100m, 25 Mar 1910. LUZON: Bulacan, Laguna, Quezon, Camarines Sur (Maagnas), Albay, CATANDUANES, PANAY, SAMAR, MINDANAO: Agusan, Zurriago del Norte. Lowland forests and damp ravines.

Hedyotis pinatubensis Elmer, LPB 10 (1939) 3778. --Type: Elmer 22194 (MO*, NY*, iso). Luzon: Pampanga prov., Mt Pinatubo (Camp Stotsenburg). May 1927.

Hedyotis whiteheadii Merr., PJS 2 c (1907) Bot. 303; EPFP 3 (1923) 501. --Type: Merrill 5733 (US*, iso). Mindoro: Mindoro Oriental prov., Mt Halcon
MINDORO: Mindoro Oriental (Mt Halcon). Dense mossy forests on exposed ridges, altitude c. 2400m.

Hydnophytum Jack

Literature:

Huxley, CR & MH Jebb. 1991. *The tuberous epiphytes of the Rubiaceae 1: A new subtribe- The Hydnophytinae*. Blumea 36: 1–20.

Huxley, CR. 1993. The tuberous epiphytes of the Rubiaceae. 6: a taxonomic history of the Hydnophytinae. **Blumea 37.**

Hydnophytum angustifolium Merr., PJS 3 c (1908) Bot. 162; EPFP 3 (1923) 568.
MINDANAO: Zamboanga, Lanao del Sur. Epiphytic in forests, altitude 200-600m.

Hydnophytum brachycladum Merr., PJS 10 c (1915) Bot. 142; EPFP 3 (1923) 568. Type: BS 924 Mangubat.
MINDORO. Epiphytic in lowland forests.

Hydnophytum formicarum Jack, Trans. Linn. Soc. 14 (1823) 124; --Merr., EPFP 3 (1923) 568.
Hydnophytum orbiculatum Elmer, LPB 5 (1913) 1860; --Merr., EPFP 3 (1923) 569. --Type: Elmer 14046 Indochina, Sumatra, Peninsular Malaysia, Borneo, Philippines.
LUZON: Quezon, POLILLO, MINDANAO: Agusan del Norte. Mangrove to ridge forests c. 600m.

Hydnophytum intermedium Elmer, LPB 3 (1911) 1039; --Merr., EPFP 3 (1923) 569. --Type: Elmer 10782.
MINDANAO: Davao del Sur (Mt Apo). Epiphytic in damp forests, altitude c. 1100m.

Hydnophytum leyense Merr., PJS 8 c (1913) Bot. 390; EPFP 3 (1923) 569. --Type: Wenzel 45
LUZON: Laguna, Sorsogon, LEYTE. Epiphytic in primary forests, altitude 200 to 400m.

Hydnophytum membranaceum Merr., PJS 10 c (1915) Bot. 143; EPFP 3 (1923) 569. --Type: FB 3720 Merritt
MINDORO, DINAGAT. On trees at low altitudes, the type from the mangrove swamps.

Hydnophytum mindanaense Elmer, LPB 3 (1911) 1039; --Merr., EPFP 3 (1923) 569. --Type: Elmer 10874

MINDANAO: Davao, Cotabato. Epiphytic in lowland forests, ascending to 450m.

Hydnophytum mindorensse Merr., PJS 10 c (1915) Bot.143; EPFP 3 (1923) 569. –Type: Merrill 6182

LUZON: Quezon, MINDORO. Epiphytic in primary lowland forests.

Hydnophytum nitidum Merr., PJS 2 c (1907) Bot. 307; EPFP 3 (1923) 569; Elmer, LPB 3 (1911) 1039. –Type: Merrill 6181

LUZON: Bataan, MINDORO. Epiphytic in primary forests, altitude 900-1400m.

Hydnophytum philippinense Becc., Malesia 2 (1885) 149, t. 33, Fig.14-19; --Rolfe, J. Bot. 23 (1885) 213; --Vidal, Rev. Pl. Vasc. Filip. (1886) 158; --Elmer, LPB 1 (1906) 7; --Merr., EPFP 3 (1923) 569. –Type: RS Williams 2178.

LUZON: Camarines, MINDANAO: Zamboanga, Davao, Agusan del Norte, Surigao del Norte. Epiphytic in lowland forests, sometimes in mangroves.

Hymenodictyon Wallich

Hymenodictyon orixense (Roxb.) Mabb., Taxon 31 (1982) 66.

Hymenodictyon excelsum (Roxb.) Wall. in Roxb. Fl. Ind. 2 (1824) 149; -Merr., EPFP 3 (1923) 506.

Sri Lanka, W Himalayas, India, E Himalayas, Nepal, Bangladesh, Burma, Thailand, Laos, Cambodia, Vietnam, Peninsular Malaysia, Java, Philippines.

LUZON: Abra, Ilocos Sur, Pangasinan, Nueva Ecija, Tarlac, Pampanga, Bulacan, Rizal. PALAWAN, GUIMARAS, MINDANAO: Davao; BASILAN. Deciduous lowland forest, frequently on limestone, often about cliffs near the sea, rarely apparently in lowland evergreen forest.

Hypobathrum Blume

Hypobathrum coriaceum Merr., PJS 29 (1926) 490. –Type: BS 42615 (UC*, holo; iso: A*, US*).

Bohol: Bohol prov., Bilar. On forested slopes, altitude c. 600m, Sept 1923.

BOHOL. Medium altitude forest, altitude c. 600m.

Hypobathrum longifolium (DC) KM Wong in F Ng (ed.), Tree Fl. Malaya 4 (1989) 354; --

Higginsia longifolia Blume ex DC., Prodr. 4 (1830) 399; --Petunga longifolia DC, Prodr. 4 (1830) 399; --Merr., EPFP 3 (1923) 533.

Peninsular Thailand, Sumatra, Peninsular Malaysia, Java, Borneo, S Philippines, Sulawesi.

MINDANAO: Agusan del Norte. Lowland secondary forests.

Hypobathrum multibracteatum Elmer, LPB 9 (1934) 3250. –Syntypes, : Elmer 15925 (NY*) May 1916; Elmer 15674 (NY*). Luzon: Sorsogon prov., Irosin, Mt Bulusan

LUZON:

Hypobathrum purpureum (Elmer) Merr., EPFP 3 (1923) 534; --Tricalysia purpurea Elmer, LPB 1 (1906) 70. –Type:

LUZON, ALABAT, SAMAR, LEYTE. In primary forests at low and medium altitudes.

Hypobathrum purpuricarpum (Elmer) Ridsd., ined.

Randia purpuricarpa Elmer, LPB 9 (1934) 3267.

Involucrella (Hooker *filius*) ined.

Involucrella coronaria (Kurz) ined.

Hedyotis coronaria (Kurz) Craib, Fl. Siam. 2 (1932) 38; --*Scleromitron coronarium* Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 46(2) (1877) 136.

Oldenlandia connata (Hook.f.) K Schum. in HGA Engler & KAE Prantl, Nat. Pflanzenfam. 4(4) (1891) 25; --*Hedyotis connata* Wall., Cat. (1828) No. 856, *nom. nud.*, --Hook.f., Fl. Brit. Ind. 3 (1880) 62, *sphalm.* As 'coronata'; --Merr., EPFP 3 (1923) 496.

Assam, Burma, China (Yunnan), Peninsular Malaysia, Philippines.

LUZON: Pangasinan, Nueva Ecija, Bataan, Rizal, Laguna, MINDANAO: Davao. Lowland forests along streams.

Ixora Linnaeus

Literature:

Bremekamp, CEB. 1937. *The Malaysian species of the genus Ixora (Rubiaceae)*. Bulletin du Jardin Botanique du Buitenzorg, ser. 3, 14: 197–367.

Bremekamp, CEB. 1940. *The Malaysian species of the genus Ixora (Rubiaceae). Additions and emendations*. Bulletin du Jardin Botanique du Buitenzorg, ser. 3, 14: 276–299.

Ixora amplexifolia K Schum. & Lauterb., Fl. Deutsch. Sudsee, (1901) 572; --Bremek., Bull. Jard. Bot. Buitenz. Ser. 3, 14 (1937) 347. --Type from New Guinea.

Ixora auriculata Elmer, LPB 3 (1911) 1018; --Merr., EPFP 3 (1923) 546. --Type: Elmer 12483 (L*, NY*, US*, iso). Sibuyan: Magallanes (=Magdiwang), Mt Giting-giting. Densely wooded flats of woodland streams, 750-1000 ft., May 1910.

Ixora inaequifolia C Robinson, PJS 6 c (1911) Bot. 222; --Merr., EPFP 3 (1923) 548.

Philippines, New Guinea.

LUZON: Cagayan, Isabela, Nueva Ecija, Rizal, Camarines, POLILLO, SIBUYAN. In primary forests at low and medium altitudes.

Ixora angustilimba Merr., PJS 17 (1920, publ. 1921) 320; EPFP 3 (1923) 546. --Type: BS 34588

Ramos & Pascasio (US*, iso). Mindanao: Surigao del Norte prov.

BUCAS GRANDE, DINAGAT, MINDANAO: Surigao del Norte. On dry forested slopes and ridges at low altitudes.

Ixora bartlingii Elmer, LPB 3 (1911) 1020; --Merr., EPFP 3 (1923) 546; --Bremek., Bull. Jard.

Bot. Buitenz. Ser. 3, 14 (1937) 299. --Type: Elmer 12323 (PNH, holo, lost; A*, BISH*, MO*, NY*, iso). Sibuyan: Magallanes (=Magdiwang), Mt Giting-giting, wet alluvial soil of dense forest near the Pauala River at 1000ft, Apr 1910.

Philippines, N Sulawesi.

LUZON: Isabela, Zambales, Bataan, Batangas, Cavite, Laguna, Rizal, Quezon, Camarines, MINDORO; SIBUYAN; MASBATE; BILIRAN; MINDANAO: Cotabato. In forests at low and medium altitudes.

Ixora bibracteata Elmer, LPB 1 (1906) 8; --Merr., EPFP 3 (1923) 546. --Type: HN Whitford 789 (not seen). Luzon: Quezon prov., Tinnan River, Sept 1904.

LUZON: Ilocos Norte, Quezon, Nueva Ecija, Rizal. In primary forests, ascending to 400m.

Ixora capitulifera Merr., PJS 5 c (1910) Bot. 233; EPFP 3 (1923) 546. --Type: BS 686 Foxworthy (NY*, US*, iso). Palawan: Mt Victoria, in forests along streams, altitude c. 1050m, 23 Mar 1906.

PALAWAN. Along streams in forests, c.1000m.

Ixora chartacea Elmer, LPB 5 (1913) 1861; --Merr., EPFP 3 (1923) 547. --Type: Elmer 13806 (BISH*, L*, MO*, NY*). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta (=Mt Hilong-hilong), in dry, humus-covered soil of forested ridges at 3250ft, in the depression of Duros and Kawilanan Peak, Sept 1912

var. chartacea

MINDANAO: Agusan del Norte. In forests, c.1000m.

var. membranacea Elmer, LPB 5 (1913) 1862; --Merr., EPFP 3 (1923) 547. --Type: Elmer 13767
LUZON: Sorsogon, MINDANAO: Agusan del Norte, SIARGAO. Medium altitude primary forests, ascending to 900m.

Ixora confertiflora Merr., PJS 17 (1920, publ. 1921) 321; EPFP 3 (1923) 547. --Type: BS 35206
Ramos & Pascasio (NY*, US*). Dinagat, May 1919.
DINAGAT. Low altitude primary forests.

Ixora crassifolia Merr., PJS 5 c (1910) Bot. 233; EPFP 3 (1923) 547. --Type: FB 9439 Whitford & Hutchinson (US*, iso). Mindanao: Zamboanga del Sur prov., Port Banga, in dipterocarp forest, altitude 30-50m, Feb 1908.
BASILAN, MINDANAO: Zamboanga, Lanao. Low altitude primary forests.

Ixora cumingiana Vidal, Phan. Cuming. Philipp.(1885) 183; --Merr., EPFP 3 (1923) 547. --Type: Cuming 1233 (L*.MO*, syntypes). Luzon.
N LUZON to PALAWAN and MINDANAO, in most all islands and provinces. Low altitude primary forests.

Ixora ebracteolata Merr., PJS 5 c (1910) Bot. 234; EPFP 3 (1923) 548. --Type: FB 5845 Curran (NY*, US*). Luzon: Zambales prov., Mahumaling, on dry cogonales (Imperata grassland) slopes, Jan 1907
LUZON: Cagayan, Isabela, Pangasinan, Zambales, Quezon, Sorsogon, SIBUYAN. Low altitude forests.

Ixora filipes Valetton, Icon. Bog. (1913) t. 359; --Bremek., Bull. Jard. Bot. Buitenz. Ser. 3, 14 (1937) 307.
Ixora gracilipes Merr., PJS 10 c (1915) Bot. 119., EPFP 3 (1923) 548, nom. illeg. --Type: BS 20723 Escritor (not seen). Luzon: Quezon prov., Mt Cadig, near Guinayangan, Mar 1913.
Philippines, Talaud, Sulawesi.
LUZON: Quezon (Mt Cadig), Camarines, SAMAR. Lowland forests.

Ixora fulgens Roxb., Hort. Beng. (1814) 10, *nom. nud.*; Fl. Ind. Ed. Carey I (1820) 378; --Merr., EPFP 3 (1923) 548.
Peninsular Malaysia and archipelago.
LEYTE; MINDANAO: Zamboanga, Misamis, Lanao del Sur, JOLO. Low altitude primary forests.

Ixora gigantifolia Elmer, LPB 5 (1913) 1864; --Merr., EPFP 3 (1923) 548. --Type: Elmer 14206 (BISH*, L*, NY*, US*, i
hilong), Oct 1912.
Ixora platyphylla Merr., PJS 10 c (1915) Bot. 120. --Type: FB 18250 Miranda (not seen). Mindanao: South Cotabato prov., Glan, Jun 1912.
MINDANAO: South Cotabato, Agusan del Norte, SIARGAO. Low altitude forests to c.1000m.

Ixora ilocana Merr., PJS 12 c (1917) Bot. 168; EPFP 3 (1923) 548. --Type: BS 27325 Ramos (US*, iso). Luzon:
LUZON: Ilocos Norte. In forests along streams at low altitudes.

Ixora intermedia Elmer, LPB 4 (1912) 1336; --Merr., EPFP 3 (1923) 549. Type: Elmer 12957 (BISH*, L*, MO*, NY*, US*, iso). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar [=Thumb Peak], 'stony soil of dense woods along a dry stream bed at 50ft', Apr 1911.
PALAWAN. In forests at low altitudes.

Ixora irosinensis Elmer, LPB 9 (1934) 3251.
LUZON:

Ixora javanica (Blume) DC, Prodr. 4 (1830) 487; --Bremek., Bull. Jard. Bot. Buitenz. Ser. 3, 14 (1937) 253; --Corner, Wayside Trees 1 (1940) 206; --KM Wong in FSP Ng (ed). Tree Fl. Malaya 4 (1989) 360.

Ixora magnifica Elmer, LPB 5 (1913) 1865; --Merr., EPFP 3 (1923) 550. --Type: Elmer 13424 (BISH*, L*, MO*, NY*, US*, iso). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta (=Hilong-hilong), very moist fertile soil of dense wood or forests from 500-1500ft altitude, Aug 1912.

var. *javanica*

India, Tenasserim, Indochina, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines.
PALAWAN, MINDANAO: Agusan del Norte, Davao. Lowland primary forests, ascending to 500m.

Ixora leucocarpa Elmer, LPB 4 (1912) 1337; --Merr., EPFP 3 (1923) 549. --Type: Elmer 12894 (BISH*, L*, NY*, US*, iso). Palawan: Puerto Princesa, 'in fertile adobe or otherwise fertile soil of low lightly flats of woodland, or in humid forest at a somewhat higher elevation 250 to 750ft altitude', Mar 1911.

PALAWAN. Primary forests ascending to 300m altitude.

Ixora leytenensis Elmer, LPB 1 (1906) 69; --Merr., EPFP 3 (1923) 549. --Type: Elmer 7044 (not seen).
LEYTE, SAMAR. Lowland forests.

Ixora longissima Merr. PJS 5 c (1910) Bot. 235; EPFP 3 (1923) 549. --Type: FB 16975 Rosenbluth (not seen). Leyte: without definite locality, Mar 1909.
LEYTE, BILIRAN, SAMAR. In primary forests ascending to 900m.

Ixora longistipula Merr., PJS 5 c (1910) Bot. 236; EPFP 3 (1923) 549. --Type: FB 13625 Curran & Foxworthy (US*, iso). Negros: Negros Occidental prov., Mt Marapara, Sept 1909
MINDORO: Mindoro Oriental (Mt Halcon), PANAY, NEGROS: Negros Occidental. Low and medium altitude primary forests

Ixora luzoniensis Merr., PJS 17 (1920, publ. 1921) 434; EPFP 3 (1923) 549. --Type: BS 29956 Fenix (US*, iso). Luzon: Pangasinan prov., San Isidro Labrador, in forests, altitude 350-400m, 4 Nov 1917.
LUZON: Ilocos Norte, Pangasinan, Cagayan (Pamplona), Zambales. Lowland forests.

Ixora macgregorii C Robinson, PJS 6 c (1911) Bot. 223; --Merr., EPFP 3 (1923) 549. --Type: BS 10219 McGregor (L*, NY*, US*, iso). Polillo. Oct-Nov 1909.
POLILLO. Lowland forests.

Ixora macrophylla Bartl., in DC, Prodr. 4 (1830) 487; --Merr., EPFP 3 (1923) 549. --Type: *Ixora arborea* Blanco, Fl. Filip. (1837) 61; ed. 2 (1845) 45; ed. 3, 1 (1877) 78, non Roxb. --Type: non extant; Illustrative specimen: Merrill Sp. Blancoanae 734 (US*). Luzon: Batangas prov., Mt Batulao, in forest, 25 Jul 1914.
Philippines, Sulawesi.
BATAN and BABUYAN ISLS to MINDANAO and BASILAN, in most or all islands and provinces. Lowland forests.

***Ixora mearnsii* Merr.**, PJS 5 c (1910) Bot. 235; EPFP 3 (1923) 549. –Type: BS 2999 Mearns (not seen). Luzon: Aurora prov., Casiguran, 1 Jun 1907.
LUZON: Aurora (Casiguran; Baler). Lowland forests.

***Ixora mindanaensis* Merr.**, PJS 5 c (1910) Bot. 237; EPFP 3 (1923) 550. –Type: FB 9010 (Whitford & Hutchinson (not seen). Mindanao: Zamboanga del Sur prov., Port Banga, 29 Nov 1907.
MINDANAO: Zamboanga del Sur, Misamis Occidental (Malabug River, trail to Mt Malindang), Lanao del Sur (Lake Lanao, Camp Keithley). Low and medium altitude forests.

***Ixora myriantha* Merr.**, PJS 20 (1922) 461; EPFP 3 (1923) 550. –Type: Merrill Philip. Pl. 1700 (L*, MO*, NY*, US*, iso). Samar: no further locality data. Apr 1914.
SAMAR. In damp forests at low altitudes. Possibly not distinct from *I. cumingiana* Vidal, differing mainly in the crowded shorter flowers.

***Ixora oblongifolia* Elmer**, LPB 5 (1913) 1867; --Merr., EPFP 3 (1923) 550. –Type: Elmer 13775 (BISH*, L*, MO*, NY*, hilong), humus-covered soil of steep densely wooded slopes at 3000ft along Dalahion River, Sept 1912
LUZON: Camarines, MINDANAO: Agusan del Norte, Surigao del Norte. In forests up to an altitude of 900m.

***Ixora palawanensis* Merr.**, PJS 5 c (1910) Bot. 238; EPFP 3 (1923) 550. –Type: BS 793 Foxworthy (US*, iso). Palawan: Forested ravines c. 1.5 miles NW of Iwahig, 22 Apr 1906.
CULION, PALAWAN. Lowland forests.

***Ixora philippinensis* Merr.**, PJS 5 c (1910) Bot. 238, Fl. Manila (1912) 452; EPFP 3 (1923) 550; --Bremek., Bull. Jard. Bot. Buitenz. Ser. 3, 14 (1937) 343. –Type: FB 2299 Meyer (NY*, US*, iso). Luzon: Bataan prov., Mt Mariveles, Lamao River, Dec 1904.
Ixora philippinensis Merr. var. *brevituba* Merr., PJS 5 c (1910) Bot. 240; EPFP 3 (1923) 551. --Type: FB 15527 Merritt & Darling (not seen). Luzon: Ilocos Norte prov., Pasuquin, on limestone formation, hillsides, altitude c. 100m, 3 Nov 1908.
Ixora filmeri Elmer, LPB 4 (1912) 1338. –Type: Elmer 12719 (BISH*, NA*, NY*, US*, iso). Palawan: Brookes Point, Addison Peak, Mar 1911.
Ixora littoralis Merr., PJS 5 c (1910) Bot. 240; EPFP 3 (1923) 549. --Type: BS 1274 McGregor (not seen). Bohol: Tagbilaran, on beach cliff, Jul 1906
Lutao (off Taiwan), Philippines, Banguay Is (off Sabah), N Sulawesi, Moluccas (Sula IsIs).
BATAN and BABUYAN Islands and N LUZON to PALAWAN, BALABAC, BOHOL, MINDANAO and BASILAN in most or all islands and provinces. Common in thickets and secondary forests at low altitudes, including coastal bluffs and inland limestone formation.

***Ixora pilosa* Merr.**, PJS 8 c (1913) Bot. 39; EPFP 3 (1923) 551. –Type: BS 13371 Ramos (not seen). Luzon: Quezon prov., Tagcawayan, Mar 1911.
LUZON: Quezon. Lowland forests.

***Ixora propinqua* Merr.**, PJS 8 c (1913) Bot. 39; EPFP 3 (1923) 551. --Type: Merrill 8254 (not seen). Mindanao: Zamboanga, Sax River Mtns back of San Ramon, in damp forest, altitude c. 800m, Nov 1911.
MINDANAO: Zamboanga. In primary forests, c. 800m.

***Ixora salicifolia* (Blume) DC**, Prodr. 4 (1830) 487; --Merr., EPFP 3 (1923) 551; --Bremek., Bull. Jard. Bot. Buitenz. Ser. 3, 14 (1937) 240.

Java, Borneo, Philippines.

LUZON, PALAWAN, MASBATE, PANAY, BILIRAN, LEYTE, BUCAS GRANDE, SIARGAO, DINAGAT, MINDANAO. In primary forests at low altitudes.

Ixora samarensis Merr., PJS 10 c (1915) Bot. 121; EPFP 3 (1923) 551. --Type: BS 15399 Ramos (US*, iso). Samar: Western Samar prov., Catbalogan, Jul 1912.

SAMAR. Lowland primary forests.

Ixora sparsiflora Elmer, LPB 1 (1906) 8; --Merr., EPFP 3 (1923) 551. --Type: Elmer 6641 (NY*, iso). Luzon: Bataan prov., Mt Mariveles, Nov 1904.

LUZON: Bataan. In primary forests at low or medium altitudes.

Ixora tenuipedunculata Merr., PJS 17 (1920, publ. 1921) 321; EPFP 3 (1923) 551. --Type: BS 34475 Ramos & Pascasio (Iso in A*, US*). Mindanao: Surigao prov., no definite locality cited, damp forest at low altitudes, 30 Apr 1919.

MINDANAO: Surigao. In primary forests at low altitudes.

Cultivated:

Ixora chinensis Lam., Encycl. 3 (1879) 344; --Merr., EPFP 3 (1923) 547; Fl. Manila (1912) 452, India to S China, widely cultivated in the tropics for ornamental purposes.

Ixora coccinea L., Sp. Pl. (1753) 110; --Merr., EPFP 3 (1923) 547; Fl. Manila (1912) 452.

Native to India. Cultivated throughout the tropics for ornamental purposes.

Ixora finlaysoniana Wall., Cat. (1832) No. 6166 *nom. nud.*; --G Don Gen. Syst. 3 (1832) 512; --Merr. Fl. Manila (1912) 451; EPFP 3 (1923) 547.

Commonly cultivated in Manila and other large towns, but apparently never producing fruits and nowhere spontaneous.

Ixora rosea Wall. in Roxb. Fl. Ind. 1 (1820) 398;

Cultivated in the larger towns for its pink flowers. Synonymized under *Ixora stricta* Roxb. (= *I. chinensis* Lam.) but Merrill (1923) consider it to be distinct.

Knoxia Linnaeus

Literature:

Bhattacharjee, R & DB Deb. 1985. *A revision of Knoxia (Rubiaceae)*. J. Econ. Tax. Bot. 6: 73–95.

Puff, C & E Robbrecht. 1989. *A survey of the Knoxieae (Rubiaceae-Antirheoideae)*. Bot. Jahrb. Syst. 110: 511–588.

Knoxia sumatrensis (Retz.) DC, Prod. 4 (1830) 569.

var. sumatrensis

Knoxia corymbosa Willd., Sp. Pl. 1 (1797) 582; --Merr., EPFP 3 (1923) 535.

Tropical Asia to Australia.

LUZON, CULION, PALAWAN, MINDANAO. In open places, on banks, etc., sometimes at sea level, more commonly at medium altitudes, ascending to 1500m.

Lasianthus Jack

Literature:

Igersheim & E. Robbrecht. 1993. *Opera Bot. Belg.* 6: 77.

Lasianthus acuminatissimus Merr., PJS 20 (1922) 467; --Type: BS 38058 Ramos & Edaño
S China and the Philippines: LUZON. In mossy forests, c. 1800m.

Lasianthus attenuatus Jack, Trans. Linn. Soc. 14 (1823) 126.

Lasianthus bordenii Elmer, LPB 1 (1906) 11; --Merr. EPFP 3 (1923) 565. --Type: Elmer 6997 (NY*, iso).

Luzon: Bataan prov., M

Lasianthus copelandii Elmer, LPB 1 (1906) 10; --Merr. EPFP 3 (1923) 566. --Type: EB Copeland *sn* (not seen). Negros: Gimogon River, in forests, Jan 1905.

Lasianthus wallichii Wight, Calcutta J. Nat. Hist. 6 (1846) 503; --HJ Li & HY Liu, Fl. Taiwan ed.2, 4 (1998) 295, pl. 133, photo 180.

Trop. & Subtrop. Asia: Assam, E Himalayas, Nepal, Tibet, C & S China, Hainan, Taiwan, Ryukyu Isls, Burma, Thailand, Laos, Cambodia, Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, New Guinea.

LUZON, MINDORO, POLILLO, CATANDUANES, BILIRAN, LEYTE, NEGROS, PANAY, MINDANAO. In primary forests at low altitudes to 900m

Lasianthus biflorus (Blume) M Gangop. & Chakrab., J. Econ. Taxon. Bot. 16 (1992) 338; --

Litosanthes biflora Blume, Cat. Gew. Buitenz. (1823) 21; --Merr. EPFP 3 (1923) 568.

China (S Yunnan), Hainan, C & S Taiwan, Thailand, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi.

LUZON, MINDORO, CATANDUANES, LEYTE, NEGROS, MINDANAO. In damp primary forests, chiefly at medium altitudes, ascending to 1400m.

Lasianthus chinensis (Champ.) Benth., Fl. Hongk. (1861) 160; --*Nonatelia chinensis* (Champ.)

Kuntze, Revis. Gen. Pl. 1 (1891) 291; --*Mephitidia chinensis* Champ., Hooker's J. Bot. Kew Gard.

Misc. 4 (1852) 196.

S & C China, Hainan, Taiwan, Thailand, Laos, Cambodia, Vietnam, Peninsular Malaysia, Philippines.

PALAWAN.

Lasianthus clementis Merr., PJS 3 c (1908) Bot.164; --Merr. EPFP 3 (1923) 565.

Lasianthus bulusanensis Elmer, LPB 9 (1934) 3252.

Philippines, Sulawesi.

LUZON: Sorsogon, LEYTE, MINDANAO. In primary forests, ascending to 700m.

Lasianthus cyaneus (Elmer) Merr., EPFP 3 (1923) 566.

LUZON, MINDANAO. In primary forests, 800-1300m.

Lasianthus cyanocarpus Jack, Trans. Linn. Soc. London 14 (1825) 125; --Chao, Fl. Taiwan 4

(1978) 289; --HJ Li & HY Liu, Fl. Taiwan ed. 2, 4 (1998) 280, pl. 125; --Merr. EPFP 3 (1923) 565.

Nonatelia inaequalis (Blume) Kuntze, Revis. Gen. Pl. 1 (1891) 291; --*Mephitidia inaequalis* (Blume) DC,

Prodr. 4 (1830) 453; --*Lasianthus inaequalis* Blume, Bijdr. (1826) 996; --Type: Merrill 863 (not seen). Palawan.

India, Andaman Isls, Nicobar Isls, Burma, Thailand, Vietnam, S China, Taiwan, Ryukyu Isls, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Moluccas, New Guinea.

LUZON: Cagayan, Rizal, Laguna, Quezon, Camarines, CATANDUANES, BUSUANGA, PALAWAN, BILIRAN, NEGROS, LEYTE, PANAY, MINDANAO: Bukidnon, Agusan. In damp primary forests at low altitudes.

Lasianthus fordii Hance, J. Bot. 23 (1885) 324; --Chao, Fl. Taiwan 4 (1978) 292; --HJ Li & HY Liu, Fl.

Taiwan ed. 2, 4 (1998) 284, pl. 126, photo 178.

Lasianthus submembranifolius Elmer, LPB 5 (1913) 1871; --Merr. EPFP 3 (1923) 567.

Lasianthus zambalensis Elmer, LPB 9 (1934) 3209.

Mephitidia tashiroi (Matsum.) Nakai, Trees Shrubs Japan (1922) 396; --*Lasianthus tashiroi* Matsum., Bot.

Mag. Tokyo 15 (1901) 37; --Merr. EPFP 3 (1923) 567.

S Japan, Ryukyu Isls, S & C China, Hainan, Taiwan, Thailand, Cambodia, Vietnam, Java, Philippines, Sulawesi, New Guinea.
LUZON (Zambales), NEGROS, MINDANAO. Chiefly in the mossy forests, altitude 1000-2000m.

Lasianthus furcatus (Miq.) Bremek., Candollea 16 (1957) 94, in adnot.; --*Canthium furcatum* Miq., Fl. Ned. Ind. 2 (1857) 252.
Geniostoma acuminatissima Merr., PJS 20 (1922) 432; EPFP 3 (1923) 309.
Java, Philippines?, New Guinea, Bismarck Archipelago.

Lasianthus hirsutus (Roxb.) Merr., J. Arnold Arb. 33 (1952) 229; --*Triosteum hirsutum* Roxb., Fl. Ind. 1 (1820) 538.
Lasianthus everettii Merr., PJS 3 c (1908) Bot. 265.
Trop. & Subtrop. Asia: India, Bangladesh, Nicobar Isls, Burma, Thailand, Vietnam, S China, Hainan, Taiwan, Ryukyu Isls, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Moluccas, New Guinea

Lasianthus hispidulus (Drake) Pit. in H Lecomte, Fl. Indo-Chine 3 (1924) 393; --*Mephitidia hispidula* Drake, J. Bot. (Morot) 9 (1895) 239.
Lasianthus bunzaensis Simizu, Trans. Nat. Hist. Soc. Formosa 34 (1944) 301; --Chao, Fl. Taiwan 4 (1978) 286; --HJ Li & HY Liu, Fl. Taiwan ed. 2, 4 (1998) 277, pl. 122.
S & China, Thailand, Vietnam, Hainan, Taiwan, Ryukyu Isls, Sumatra, Borneo, Philippines.

Lasianthus lucidus Blume, Bijdr. (1826) 997.
Nonatelia lucida (Blume) Kuntze, Revis. Gen. Pl. 1 (1891) 291; --*Mephitidia lucida* (Blume) DC., Prodr. 4 (1830) 453.

var. lucidus

India (Assam), Burma, S China (Yunnan), Hainan, Vietnam, Thailand, Peninsular Malaysia, Java, Lesser Sunda Isls, Philippines, Sulawesi, Moluccas, New Guinea.

Lasianthus microphyllus Elmer, LPB 5 (1913) 1870; --Merr. EPFP 3 (1923) 566; --Chao, Fl. Taiwan 4 (1978) 298; --HJ Li & HY Liu, Fl. Taiwan ed.2, 4 (1998) 290, pl. 130.
Taiwan. Malesia: Java, Philippines.
LUZON, MINDORO, PANAY, LEYTE, NEGROS, MINDANAO. Chiefly in the mossy forest, 1000-2200m.
Perhaps better treated as a variety of *L. fordii*

Lasianthus rigidus Miq., Fl. Ind. Bat. 2 (1857) 321
Lasianthus humilis Elmer, LPB 2 (1908) 519; --Merr. EPFP 3 (1923) 565. Type: Elmer 9678, Negros.
China (S Yunnan), Assam, Sumatra, Java, Philippines.
NEGROS. On forested ridges, c.1000m.

Lasianthus sikkimensis Hook.f., Fl. Brit. Ind. 3 (1880) 180.
Lasianthus mindananensis Merr., PJS 20 (1922) 466; --Merr. EPFP 3 (1923) 567. --Type: BS 38795 Ramos & Edaño.
Assam, E Himalayas, Bangladesh, C & S China, Hainan, Taiwan, Thailand, Vietnam, Philippines.
MINDANAO, In damp forests, c. 1000m.

Lasianthus stipularis Blume, Bijdr. (1826) 997; --Merr. EPFP 3 (1923) 567; --*Mephitidia stipularis* (Blume) DC, Prodr. 4 (1830) 453.

var. stipularis

Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi.
MINDORO, LEYTE, MINDANAO. In damp primary forests at low altitudes.

Lasianthus trichophlebus Hemsl. ex FB Forbes & Hemsl., J. Linn. Soc., Bot. 23 (1888) 388.

var. trichophlebus.

S China (Guangdong), Hainan, Thailand, Vietnam, Taiwan, Sumatra, Peninsular Malaysia, Java, Philippines, Sulawesi.

var. latifolius (Miq.) H Zhu, Syst. Geogr. Pl. 72 (2002) 93; --Lasianthus sylvestris var. latifolius Miq., Ann. Mus. Bot. Lugduno-Batavi 4 (1869) 248.

Lasianthus tomentosus var. hiiranensis (Hayata) H Zhu, Acta Bot. Yunnan. 20 (1998) 156; --Lasianthus hiiranensis Hayata, Icon. Pl. Formos. 9 (1920) 62; --Chao, Fl. Taiwan 4 (1978) 295; --HJ Li & HY Liu, Fl. Taiwan ed.2, 4 (1998) 287, pl. 128, photo 179.

Hainan, SE Taiwan, Thailand, Vietnam, Sumatra, Peninsular Malaysia, Java, Philippines.

Lasianthus verticillatus (Lour.) Merr., Trans. Am. Phil. Soc. n. s. 24, 2 (1935) 372.

Lasianthus morus Elmer, LPB 1 (1906) 73; --Merr. EPFP 3 (1923) 567. --Type: Elmer 7050 (NY*, iso). Leyte: Leyte prov., Palo, wooded ravines along the Bangon River, Jan 1906.

Lasianthus obliquinervis Merr., PJS 1 (1906) Suppl. 136; --Chao, Fl. Taiwan 4 (1978) 301; --HJ Li & HY Liu, Fl. Taiwan ed.2, 4 (1998) 293, pl. 132.

India, Andaman Isls, Nicobar Isls, S & C China, Hainan, Taiwan, Ryukyu Isls, Burma, Thailand, Laos, Cambodia, Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi.

BABUYAN ISLS, LUZON, MINDORO, LEYTE, SAMAR, MINDANAO. In primary forests, mostly at low and medium altitudes, ascending to 1400m.

Notes- On-going revision is being done by Zhu Hua, where according to him about 21 species occur in the Philippines. But it could be more.

Litosanthes Blume =Lasianthus

Lucinaea de Candolle =Schradera

Ludekia Ridsdale

Revision:

Ridsdale, CE. 1978. *A revision of the tribe Naucleae s. s. (Rubiaceae)*. Blumea 24: 307–366.

(note: Starts with p. 335).

Ludekia bernardoi (Merr.) Ridsd., Blumea 24 (1978) 335; --Neonauclea bernardoi (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 539; --EPFP 3 (1923) 511; Nauclea bernardoi Merr., PJS 10 c (1915) 102. --Type: FB 20446 Bernardo (not seen). Luzon: Cagayan prov., May 1913.

LUZON: Cagayan, Laguna (Mt Makiling), Camarines, MASBATE, LEYTE, SAMAR, MINDANAO: Zamboanga, Davao. Lowland primary forests. (Merrill 1923).

Metadina Bakhuizen filius

Revision:

Ridsdale, CE. 1978. *A revision of the tribe Naucleaceae s. s. (Rubiaceae)*. Blumea 24: 307–366.

Metadina trichotoma (Zoll. & Mor.) Bakh.f., Taxon 19 (1970) 472; --Ridsd., Blumea 24 (1978) 350-351.

Adina zschokkei Elmer, LPB 3 (1911) 987; --Merr., EPFP 3 (1923) 507. --Type: Elmer 12176
India (Assam), Bangladesh, Burma, Thailand, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi, Moluccas, New Guinea.
PALAWAN, SIBUYAN. Lowland thickets.

Mitracarpus Zuccarini ex Schultes & Schultes *filius*

Mitracarpus hirtus (L.) DC, Prodr. 4 (1830) 572; --Spermacoce hirta L., Sp. Pl. ed. 2 (1762) 148.
Native of tropical America, introduced elsewhere.

Mitragyna Korthals

Revision:

Ridsdale, CE. 1978. *A revision of Mitragyna & Uncaria*. Blumea 24: 43–100.

Mitragyna diversifolia (Wall. ex G Don) Havil., J. Linn. Soc. Bot. 33 (1897) 71, *pro parte*; --
Ridsdale, Blumea 24 (1978) 65; --Stephegyne diversifolia (Wall. ex G Don) Brandis, Forest Fl. NW
India (1874) 263; --Nauclea diversifolia Wall. ex G Don, Gen. Hist. 3 (1834) 467.

Mitragyna rotundifolia (Roxb.) Kuntze, Rev. Gen. Pl. (1891) 289; --Merr. Fl. Manila (1912) 446; EPFP 3
(1923) 508; --Nauclea rotundifolia Roxb., Fl. Ind. 2 (1824) 124.

Nauclea adina Blanco, Fl. Filip., ed. 2 (1845) 102.

Stephegyne tubulosa Fern.-Villar in Blanco, Fl. Filip., ed. 3, 4(13A) (1880) 104.

Stephegyne parvifolia Vidal, Sinopsis Atlas (1883) t. 56, Fig. A.

Bangladesh, Burma, Thailand, Cambodia, Laos, Vietnam, S China, Peninsular Malaysia,
Java, Philippines.

LUZON: Abra, Benguet, Nueva Vizcaya, Pangasinan, Zambales, Nueva Ecija,
Pampanga, Bataan, Bulacan, Rizal, Batangas, MINDORO, MASBATE, GUIMARAS.
Low and medium altitude dry thickets.

Mitragyna speciosa (Korth.) Havil., J. Linn. Soc. Bot. 33 (1897) 69; --Elmer, LPB 1 (1906) 12;
--Merr., EPFP 3 (1923) 508; --Ridsdale, Blumea 24 (1978) 65; --Stephegyne speciosa Korth.,
Verh.

Nat. Geschaft Bot. (1839-43) 160.

Nauclea luzoniensis Blanco, Fl. Filip., ed. 2: 102 (1845).

Peninsular Thailand, Sumatra, Peninsular Malaysia, Borneo, Philippines, New Guinea.

LUZON: Cagayan, MINDORO, MINDANAO: Davao, Agusan. Lowland forests.

Morinda Linnaeus

Literature:

Wong, KM. 1984. *A synopsis of Morinda (Rubiaceae) in the Peninsular Malaysia*. Malay. Nat. J.
38: 89–98.

Igersheim, A. & E. Robbrecht. 1993. *The character states and relationships of the
Prismatomerideae (Rubiaceae-Rubioideae)*. Opera Bot. Belg. 6: 61–79.

Johansson, JT. 1994. *The genus Morinda (Morindeae, Rubioideae, Rubiaceae) in New Caledonia:
taxonomy and phylogeny*. Opera Bot. 122.

Morinda bartlingii Elmer, LPB 4 (1912) 1340; --Merr., EPFP 3 (1923) 572. --Type: Elmer 13037.
PALAWAN. Lowland thickets. According to Merrill (1923), very close to *M. celebica* Miq.

Morinda celebica Miq., Fl. Ind. Bat. 2 (1857) 246; --Merr., EPFP 3 (1923) 572.
Borneo, Philippines, Sulawesi.
BUSUANGA, PALAWAN, SULU ARCHIPELAGO (UBIAN)

Morinda citrifolia L., Sp. Pl. (1753) 176; --Merr., Fl. Manila (1912) 453; EPFP 3 (1923) 573
var. citrifolia

Trop. & E. Asia to SW. Pacific. 36 CHH 38 KZN NNS OGA TAI 40 ASS IND SRL 41 CBD?
MYA NCB THA VIE 42 BOR CKI JAW LSI MLY MOL PHI SUL SUM XMS 43 BIS NWG SOL
50 NTA QLD WAU (60) nwc PHX SAM TOK ton VAN (61) coo mrq sci tua tub (62) crl mrn
mrs (63) haw (79) mxt (80) blz cos hon nic pan (81) jam lee trt win (83) clm.

India to Indochina, Malesia, Australia and Polynesia. Throughout the Philippines.
Lowland thickets, chiefly along the seashore.

var. bracteata (Roxb.) Kurz, J. Asiat. Soc. Bengal 46(2) (1877) 151; --Hook.f., Fl. Brit. Ind. 3 (1880)
156, nom. illeg.; --Morinda bracteata Roxb., Fl. Ind. 2 (1824) 198, nom. illeg.; --Merr., Fl. Manila
(1912) 453; EPFP 3 (1923) 572.
Malesia (widespread). Throughout the Philippines in most islands and provinces.
Lowland thickets and secondary forests.

Morinda coriacea Merr., PJS 17 (1920, publ. 1921) 435; EPFP 3 (1923) 573. --Type: BS 34439
Ramos & Pascasio
MINDANAO: Surigao del Norte. Lowland thickets and forests.

Morinda elliptifolia Quisumb. & Merr., PJS 37 (1928) 204. --Type:
MINDANAO:

Morinda microcephala Bartl. ex DC., Prodr. 4 (1830) 449.
Morinda microphylla D.Dietr., Syn. Pl. 1 (1839) 784.
Philippines. 42 PHI.

Morinda nitida Merr., PJS 17 (1920, publ. 1921) 435; EPFP 3 (1923) 573. --Type: BS 35074 Ramos &
Pascasio
BUCAS GRANDE. Lowland dry forest.

Morinda parvifolia Bartl. in DC, Prodr. 4 (1830) 499; --Merr., EPFP 3 (1923) 573. --Type: Haenke
sn.
Morinda cumingiana Vidal, Phan. Cuming. Philip. (1885) 184.
Lucinaea cumingiana Vidal, Phan. Cuming. Philip. (1885) 216.
SE China, Hainan, Taiwan, Vietnam, and the Philippines.
BABUYAN ISLS, LUZON: Ilocos Norte, Cagayan. Lowland thickets.

Morinda philippinensis Elmer, LPB 3 (1911) 1044; --Merr., EPFP 3 (1923) 573. --Type: Elmer
12460
N Borneo, Philippines.
MINDORO, PALAWAN, SIBUYAN. Lowland thickets and forests.

Morinda platyphylla Merr., PJS 11 c (1920) Bot. 33; EPFP 3 (1923) 573. --Type: BS 23414 Ramos
LUZON: Sorsogon. Forest, altitude c. 1000m.

Morinda umbellata L., Sp. Pl. (1753) 176; --Merr., EPFP 3 (1923) 574.
subsp. umbellata.

Sri Lanka, India, S China, Hainan, Taiwan, Ryukyus, Thailand, Vietnam, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Bismarck Archipelago, Solomon Isls, Australia (Queensland), Marianas, Samoa.

LUZON: Cagayan, Zambales, Sorsogon, MINDORO, CULION. Lowland thickets and forests.

Doubtful taxa:

Morinda coreia Buch.-Ham., Trans. Linn. Soc. London 13: 537 (1822).

Morinda tinctoria Roxb., Hort. Beng. (1814) 15, *nom. nud.*; Fl. Ind. 2 (1824) 197; --Merr., EPFP 3 (1923) 572.

Sri Lanka, India, Thailand, Vietnam, Java.

LUZON: Benguet, NEGROS. Thickets and forests up to 500m altitude.

According to Merrill (1923) identification of Philippine materials not certain as the material is imperfect.

Mussaenda Burman ex Linnaeus

Revisions:

Jayaweera, DMA. 1963. *The Rubiaceae genus Mussaenda: The morphology of the Asiatic species*. Journal of the Arnold Arboretum 44: 111–126.

Jayaweera, DMA. 1963. *The Rubiaceae genus Mussaenda: The species of the Philippine Islands*. Journal of the Arnold Arboretum 45: 101–139.

Mussaenda acuminatissima Merr., PJS 17 c (1920) 436; EPFP 3 (1923) 517; --Jayaweera, J. Arn.

Arb. 45 (1964) 104, Fig. 4 o-q. --Type: BS 33133 (NY*, lecto, designated by Jayaweera, 1964).

Luzon: Ilocos Norte prov., Mt Nangapatan, dry slopes, altitude 700m, Aug 1918.

LUZON: Ilocos Norte (Mt Nangapatan). Known only from the type collection.

Mussaenda albiflora Merr., PJS 5 c (1910) Bot. 241; EPFP 3 (1923) 518; --Jayaweera, J. Arnold

Arb. 45 (1964) 105, Fig. 1 h-i, 3 a-e. --Type: FB 17358 Curran (NY*, lecto, designated by

Jayaweera, 1964; islecto: US*). Negros: Negros Occidental prov., Faraon, Sept 1909.

NEGROS: Negros Occidental (Faraon; Iglamgam); PANAY: Aklan (Libacao), Capiz (Jamindan), Antique. Humid gullies to c. 300m. Fl. Apr-Jun, Sept; fr. Sept.

Mussaenda anisophylla Vidal, Phan. Cuming. Philipp. (1885) 178; --Merr., EPFP 3 (1923) 518; --

Jayaweera, J. Arnold Arb. 45 (1964) 108, Fig. 3 j-s. --Lectotype: Cuming 918 (BM, designated by

Jayaweera, 1964; islecto: G). Luzon: Albay prov.

LUZON: Kalinga (Balbalan), Pangasinan (Mt San Isidro Labrador), Bataan (Mt Mariveles, Lamao River), Rizal (Antipolo), Laguna (Mt Makiling; San Antonio), Batangas, Quezon (Lucban), Albay, ALABAT, MINDORO: Mindoro Oriental (Mt Halcon; Mt Ilong), NEGROS: Gimogaan River, DINAGAT. Near water courses in deeply shaded ravines in mossy forests, medium altitudes up to 800m.

Mussaenda attenuifolia Elmer, LPB 5 (1913) 1874; --Merr., EPFP 3 (1923) 518 (sphalm.

'attenuatifolia'); --Jayaweera, J. Arnold Arb. 45 (1964) 109, Fig. 1 f. --Type: Elmer 13304 (A, lecto;

islecto: GH, L*, NA*, NY*, US*). Mindanao: Agusan del Norte prov., Mt Urdaneta (=Hilong-hilong). Fairly well-scattered in wet earth and upon rock ledges of the wooded banks of the Catangan Creek, Jul 1912

MINDANAO: Agusan del Norte (Mt Urdaneta, =Hilong-hilong). Along wooded stream embankments, altitude 150-450m. Known only from the type collection.

Mussaenda benguetensis Elmer, LPB 1 (1906) 13; EPFP 3 (1923) 518; --Jayaweera, J. Arnold

Arb. 45 (1964) 111, Fig. 1l, 3 x, y, z, aa. --Type: Elmer 5935 (PNH, holo; iso in NY*, US*). Luzon:

Benguet prov., Baguio, Mar 1904.

LUZON: Abra, Mountain Province, Ifugao, Benguet. In thickets on open slopes, in ravines, etc., altitude 1200-2200m.

Mussaenda chlorantha Merr., PJS 8 c (1913) Bot. 47; EPFP 3 (1923) 518; --Jayaweera, J. Arnold Arb. 45 (1964) 112, Fig. 1b-c; 2 d-e. --Type: Merrill 770 (US*, lecto, cited by Jayaweera, 1964). Luzon: Benguet prov., Mt Tonglon (=Mt Sto Tomas), in forests, altitude c. 1800m, May 1911.

LUZON: Benguet (Mt Sto Tomas; Twin Peaks), Pampanga (Mt Pinatubo, Camp Stotsenburg). Mossy forests, 1800-2000m. Fl. May.

Mussaenda grandifolia Elmer, LPB 1 (1906) 12; --Merr., EPFP 3 (1923) 518; --Jayaweera, J. Arnold Arb. 45 (1964) 115, Fig. 1q; 4 a-c. --Type: Merrill 817 (US*, lecto, designated by Jayaweera, 1960-61). Palawan: Palawan prov., Point Separation, 20 Feb 1903.

PALAWAN. Lowland forests. Fl. & fr: Feb and Mar. Known from two collections.

Mussaenda lanata C Robinson, PJS 6 c (1911) Bot. 47; --Merr., EPFP 3 (1923) 518; --Jayaweera, J. Arnold Arb. 45 (1964) 116, Fig. 1a; 2 a-c. --Type: Merrill 6681 (US*, lecto). Luzon: Benguet prov., Antamok, May 1909.

LUZON: Ilocos Sur (Concepcion, Mt Tirad; Cervantes Trail), Abra, Mountain Province, Benguet (Sabangan; Sablan; Baguio; Itogon; Antamok), Zambales. Streamside thickets, altitude 900-1600m. Fl. Mar, Apr, May, Aug, Oct, Dec; fr. Oct, Nov, Dec.

Mussaenda macrophylla Wall. **var. brevopilosa** Jayaweera, J. Arnold Arb. 45 (1964) 117. --Type: BS 3770 Fenix (NY, holo; iso US). Batan, Jun 1907.

Mussaenda macrophylla Merr., PJS 3 c (1908) Bot. 437; EPFP 3 (1923) 518, *non* Wall. in Roxb. (1824).

BATAN, CALAYAN, CAMIGUIN DE BABUYANES, BOHOL, CAMIGUIN DE MINDANAO, SIARGAO. Lowland thickets and forests.

Mussaenda magallanensis Elmer, LPB 3 (1911) 996; --Merr., EPFP 3 (1923) 519; --Jayaweera, J. Arnold Arb. 45 (1964) 119, Fig. 1d; 2 f-h. --Type: Elmer 12451 (A, lecto; isolecto: BISH*, L*, GH, MO*, NY*, US*). Sibuyan: Magallanes (=Magdiwang), 'light woods along the coast or in the first hills', May 1910.

LUZON: Isabela (San Mariano; Palanan), Laguna (Mt Banahaw), MINDORO: Mindoro Occidental (Sablayan, Ligaya), Mindoro Oriental (Puerto Galera; Calapan; Baco River; Bongabon and Pinamalayan; SIBUYAN (foothills of Mt Giting-giting), PANAY: Capiz, LEYTE: Leyte (Dagami). Low altitudes from sea-level to 300m, along rivers, mountain slopes, brushlands and thickets. Fl. Jan-May, Aug, Oct-Dec; fr. Jan, Aug-Nov.

Mussaenda milleri Elmer, LPB 10 (1939) 3780, not validly published, no Latin diagnosis; --Jayaweera, J. Arnold Arb. 45 (1964) 121. --Type: Elmer 22694 (no materials extant, possibly lost). Luzon: Nueva Ecija prov., Camp Labi, 'upon the summit mountain ridge at c. 3500ft [=1067m], Mar 1937. --Neotype (designated by Jayaweera, 1964): BS 26468 Ramos & Edaño (NY*). Luzon: Nueva Ecija prov., Mt Umingan (=Mingan), Aug-Sept 1916.

LUZON: Nueva Ecija (Mingan Mtns), altitude c. 1000m. Ridge summit vegetation, altitude c. 1000m. Fl. Mar; fr. Aug-Sept. Apparently known only from this general locality.

Mussaenda multibracteata Merr., PJS 11 c (1916) Bot. 34; EPFP 3 (1923) 519; --Jayaweera, J. Arnold Arb. 45 (1964) 123, Fig. 4 f-n. --Type: BS 23585 Ramos (NY*, lecto, designated by Jayaweera, 1964; isolecto: US*). Luzon: Sorsogon prov., Mt Pocdal, on damp slopes in open forests, 10 Aug 1915.

LUZON: Cagayan (Mt Dos Cuernos), Isabela (Mt Moises; Palanan), Aurora (Casiguran), Quezon (Mt Tulaog; Mt Binuang), Camarines Norte (Minasag River), Camarines Sur (Her-it River; Mt Isarog), Albay (Mayon Volcano), Sorsogon, CATANDUANES (Mt Tagmasuso; Bato trail to Viga). Along streams, damp slopes, forests, from sea-level to 2100m. Fl. May-Aug; fr. Jul-Sept, Nov, Dec.

Mussaenda nervosa Elmer, LPB 3 (1911) 994; --Merr., EPFP 3 (1923) 519; --Jayaweera, J. Arnold Arb. 45 (1964) 124, Fig. 1e; 2 i, j, k, ka. --Type: Elmer 10510 (A, lecto, designated by Jayaweera, 1964; islecto: BISH*, GH, L*, MO*, NY*, US*). Mindanao: Davao, Todaya, Mt Apo, 'open exposed hill at 4000ft [=1219m]', May 1909

LUZON: Nueva Ecija, MINDANAO: Bukidnon, Davao del Sur (Mt Apo). Degraded forests up to c. 1200m.

Mussaenda palawanensis Merr., PJS 10 c (1915) Bot. 103; EPFP 3 (1923) 519; --Jayaweera, J. Arnold Arb. 45 (1964) 125, Fig. 1k. --Type: BS 15531 Fenix (US*, lecto, designated by Jayaweera, 1964). Palawan: Alphonso XIII (=Quezon), Jul 1912.

PALAWAN (widespread). Lowland thickets and old clearings, up to c. 150m.

Mussaenda philippica A Rich., Mém. Rubiac. (1830) 165; Mem. Soc. Hist. Nat. Paris 5 (1834) 245; --Merr., EPFP 3 (1923) 519; --Jayaweera, J. Arnold Arb. 45 (1964) 128, Fig. 1j; 3 f-i. --Type: Perrottet *sn.*

Mussaenda philippica A Rich. forma *aurorae* (Sulit) Jayaweera, J. Arnold Arb. 45 (1964) 131; --*Mussaenda philippica* A Rich. var. *aurorae* Sulit, Philip. J. Forestry 2 (1939) 39, pl. 3, Fig. 1. --Type: FB 24876 Mabesa (US*, islecto). Luzon: Laguna prov., Mt Balong bulo, Jun-Dec 1915.

Mussaenda grandiflora Rolfe, J. Linn. Soc., Bot. 21 (1884) 311, nom. illeg.

Philippines, Solomon Isls, Carolines (Palau; Yap), Fiji Isls.

LUZON: Cagayan to PALAWAN and MINDANAO. Common in thickets and secondary forests at low and medium altitudes.

Mussaenda philippinensis Merr., PJS 3 c (1908) Bot. 264; EPFP 3 (1923) 520; --Jayaweera, J. Arn. Arb. 45 (1964) 132, Fig. 1n-p; 3 t-w. --Type: Merrill 4139 (NY*, lecto, designated by Jayaweera, 1964; islecto in L*, US*). Semirara Is., Jul 1905.

LUZON: Apayao (Mt Duraragan), ALABAT, MINDORO: Mindoro Oriental (Mt Yagaw, E slope; Oyon Creek), SEMIRARA, PANAY. Partial shade along creeks and ridges of second-growth forests, altitude 10-300m. Flowering in Apr-Jul, fruiting Jun, Nov and Dec.

Mussaenda pinatubensis Elmer, LPB 10 (1934) 3210; --Jayaweera, J. Arnold Arb. 45 (1964) 134. --Type: Elmer 21978 (PNH, holo; iso: A, GH, L*, NY*, US*). Luzon: Pampanga prov., Camp Stotsenburg (lower slopes of Mt Pinatubo), on hot and dry river embankments, altitude c. 1065m, May 1927.

LUZON: Pampanga (Mt Pinatubo). Known only from the type collection. Fl. May.

Mussaenda scandens Elmer, LPB 3 (1911) 992; --Merr., EPFP 3 (1923) 520; --Jayaweera, J. Arnold Arb. 45 (1964) 135, Fig. 1g; 2 l, m, n, o, p. --Type: Elmer 11291 (GH, lecto, designated by Jayaweera, 1964; islecto: A, L*, MO*, NA*, NY*, US*). Mindanao: Davao del Sur prov., Mt Apo, Todaya, 'densely wooded ravine of the Baracatan creek at 2750ft [=838m]', Aug 1909.

Mussaenda villosa Merr., PJS 5 c (1910) Bot. 243; --Elmer, LPB 3 (1911) 992, *non* Wall.

MINDANAO: Zamboanga del Sur (Malangas), Davao del Sur (Mt Apo), Surigao del Norte. Medium altitude forests along streams, altitude 600-800m. Fl. May, Jul, Aug; fr. Aug, Oct, Nov.

Mussaenda setosa Merr., PJS 10 c (1915) Bot. 104; EPFP 3 (1923) 520; --Jayaweera, J. Arnold Arb. 45 (1964) 137, Fig. 1m; 4 d-e. --Type: Merrill 9496 (US, lecto, chosen by Jayaweera, 1964; islecto in L*). Palawan: Malampaya Bay, Mt Capoas, Apr 1913.

PALAWAN: Mt Capoas. Forested ridge, c. 700m. Fl. Apr. Only known from the type collection.

Mussaenda vidalii Elmer, LPB 3 (1911) 993; --Merr., EPFP 3 (1923) 520; --Jayaweera, J. Arnold Arb. 45 (1964) 138, Fig. 2 q-x. --Type: Elmer 11309 (GH, lecto, designated by Jayaweera, 1964;

isolecto: A, L*, MO*, NY*, US*). Mindanao: Davao del Sur prov., Mt Apo, Todaya, 'humid woods at 3750ft [=1143m], Aug 1909.
 LEYTE: Leyte (Ormoc, Antilao River; Lake Danao), SAMAR: Province unknown (Catubig River; Mt Cansayao); Western Samar (Loquilocon; Bagacay), MINDANAO: Bukidnon (Pigtaoranan; Tangculan & vicinity, Davao del Sur (Mt Apo). Low to medium altitudes, 150-600m, along edges of humid forests as well as on second-growth forests of open rolling country. Fl. Mar-Aug; fr. Mar, Jun & Jul.

Mycetia Reinwardt

Revisions:

Deb, D. 1986. *Taxonomic revision of Mycetia Reinw. (Rubiaceae) in Indian subcontinent*. Bulletin of the Botanical Survey of India. 28: 114–132.

Gideon, OG. et al. 1988. *Notes on Mycetia (Rubiaceae)*. **Floribunda 1.**

Mycetia cauliflora Reinw., Syll. Ratisb. 2 (1828) 9; --Steen., Mountain Fl. Java (1972) pl. 47-10; --KM Wong in FS Ng (ed.) Tree Fl. Malaya 4 (1989) 379.

Mycetia lateriflora (Blume) Reinw. ex Korth., Nederl. Kruidk. Arch 2 (1850) 118; --Merr., EPFP 3 (1923) 521; --*Bertiera latiflora* Blume, Bijdr. (1826) 988.

Adenosacme apoensis Elmer, LPB 3 (1911) 1001. --Type: Elmer 10504 (BISH*, L*, MO*, NY*, US*, iso). Mindanao: Davao del Sur prov., Mt Apo, Todaya, humus-covered fertile soil in moist woods at 4000ft, May 1909.

S Thailand, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi, Lesser Sunda Isls (Flores).

MINDORO, MINDANAO (Lanao, Bukidnon, Davao del Sur). In damp rainforest undergrowth, altitude 600-1200m.

Mycetia javanica (Blume) Korth., Nederl. Kruidk. Arch. 2 (1850) ex Valetton in Icon. Bogor. 3 (1908) 183; --Merr., PJS 10 c (1915) Bot. 105; EPFP 3 (1923) 520; --*Bertiera javanica* Blume, Bijdr. (1826) 987. --Type from Java.

Adenosacme longifolia Rolfe, J. Bot. 23 (1885) 213; --Vidal, Rev. Pl. Vasc. Filip. (1886) 152, non ?Wall., non *Rondeletia longifolia* Wall.

Adenosacme mindanaensis Elmer, LPB 3 (1911) 1002. --Type: Elmer 10831 (BISH*, L*, MO*, NY*, US*, iso). Mindanao: Davao del Sur prov., Mt Apo, Todaya, on very wet, densely shaded ravines or on seepage

ledges along the Sibulan River at 3250ft, Jun 1909.

Nicobar Isls, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, New Guinea.

LUZON: Laguna (Los Baños; Mt Banahaw), Albay, Sorsogon, MINDORO: Mindoro Oriental, PANAY, LEYTE, SAMAR, MINDANAO: Zamboanga, Lanao del Sur (Camp Keithley), Bukidnon, Davao, Agusan del Norte, Surigao. In very damp forests along streams at low and medium altitudes.

Myrmecodia Jack

Revision:

Huxley, CR & MH Jebb. 1991. *The tuberous epiphytes of the Rubiaceae 1 : A new subtribe- The Hydnophytinae*. Blumea 36: 1–20.

Huxley, CR & MH Jebb. 1993. **xxxxxxx** Blumea 37 (1993) 271-334.

Myrmecodia tuberosa Jack, Trans. Linn. Soc. London 14 (1823) 123.

Mymecodia echinata Gaudich., Bot. Freycinet. Voy. (1826) 472, t. 96; --Merr., EPFP 3 (1923) 570.

Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, New Guinea, Bismarck Archipelago, Australia (Queensland), Solomon Isls.

LUZON, Merrill 3394, Whitford 1144, Copeland. Epiphytic in mangrove swamps,

apparently also occurring in primary forest at medium altitudes, ascending to 1000m.

‘apoensis’; --Huxley & Jebb, Blumea 37 (1993) 280.

Myrmecodia apoensis Elmer, LPB 3 (1911) 1040; --Merr., EPFP 3 (1923) 569.

Myrmecodia urdanetensis Elmer, LPB 5 (1913) 1876. Elmer 14083.

Myrmecodia tuberosa Jack ‘apoensis’

LUZON, MINDANAO: Davao del Sur (Mt Apo), Agusan del Norte (Mt Urdaneta, =Mt Hilong-hilong). Epiphytic on exposed ridges and mossy forests, c. 1200-1600m.

‘sibuyanensis’; --Huxley & Jebb, Blumea 37 (1993) 280.

Myrmecodia sibuyanensis Elmer, LPB 3 (1911) 1041.

Myrmecodia sorsogonensis Elmer, LPB 9 (1934) 3253.

LUZON, SIBUYAN, PANAY, MINDANAO. Epiphytic in primary forests, 225-1000m.

Myrmeconuclea Merrill

Revision:

Ridsdale, CE 1978. *A revision of the tribe Naucleae s. s. (Rubiaceae)*. Blumea 24: 307–366.

Myrmeconuclea strigosa (Korth.) Merr., PJS 17 (1920, publ. 1921) 375; EPFP 3 (1923) 517.

Neonuclea strigosa (Korth.) Merr., J. Wash. Acad. Sci. 5 (1915) 542.

Bancalus strigosus (Korth.) Kuntze, Revis. Gen. Pl. 1 (1891) 276.

Nuclea strigosa Korth., Verh. Nat. Gesch. Ned. Bezitt., Bot. (1842) 157.

Sarcocephalus fluviatilis Elmer, LPB 4 (1912) 1357.

Borneo, Philippines.

LUZON, PALAWAN.

Myrmephytum

Revisions:

Huxley, CR & MH Jebb. 1991. *The tuberous epiphytes of the Rubiaceae 1 : A new subtribe- The Hydnophytinae*. Blumea 36: 1–20.

Huxley, CR & MH Jebb. 1991. *The tuberous epiphytes of the Rubiaceae 3 : A revision of Myrmephytum to include Myrmedoma*. Blumea 36: 43–52.

Myrmephytum beccarii Elmer, LPB 3 (1911) 1037; --Merr. EPFP 3 (1923) 568; --Huxley & Jebb,

Blumea 36 (1991) 47, Fig. 2-b. --Type: Elmer 11467-a (Sibuyan: Mt Giting-giting, along Paulala

River, thicket on dry, gravelly stream bed, altitude 750 ft, May 1910.

SIBUYAN, BILIRAN. In thickets, alt. 225 m.

Myrmephytum selebicum (Becc.) Becc., Malesia 2 (1884) 93, t. 8 & 9.; --Huxley and Jebb,

Blumea 36 (1991) 46, Fig. 2-a.

Philippines, Sulawesi.

MINDANAO: Agusan del Norte.

Myrmephytum ‘sp. 3’ Huxley and Jebb, Blumea 36 (1991) 51.

Based on BS 925 Mangubat (K). Mindoro: Mindoro Mindoro Oriental prov., Calapan.

Nauclea Linnaeus

Revision:

Ridsdale, CE. 1978. *A revision of the tribe Naucleae s. s. (Rubiaceae)*. Blumea 24: 307–366.

Nauclea officinalis (Pierre ex Pit.) Merr. & Chun, Sunyatsenia 5 (1940) 188; --Sarcocephalus officinalis Pierre ex Pit. in H Lecomte, Fl. Indo-Chine 3 (1922) 26.

China (Guangdong), Hainan, Cambodia, Laos, Thailand, Sumatra, Peninsular Malaysia, Java, Borneo, ?Philippines.

Nauclea orientalis (L.) L., Sp. Pl. ed. 2 (1762) 243; --Merr., J. Wash. Acad. Sci. 5 (1915) 535; EPFP 3 (1923) 515; --

Sarcocephalus orientalis (L.) Merr., PJS 3 c (1909) Bot. 436; --Bancalus orientalis (L.) Kuntze, Revis. Gen. Pl. 1 (1891) 276; --Cephalanthus orientalis L., Sp. Pl. (1753) 95.

Sarcocephalus undulatus (Roxb.) Miq., Fl. Ned. Ind. 2 (1856) 133; --Nauclea undulata Roxb., Hort. Beng. (1814) 14, *nom. nud.*, Fl. Ind. 2 (1824) 117; --Merr., EPFP 3 (1923) 517.

Nauclea elmeri Merr., J. Wash. Acad. Sci. 5 (1915) 535; EPFP 3 (1923) 515.

Sarcocephalus ovatus Elmer, LPB 1 (1906) 33. --Type: FB 3150 Ahern's collector (NY*, US*, iso). Luzon: Rizal prov., Bosoboso, May-Jun 1905

Nauclea lutea Blanco, Fl. Filip.: 141 (1837).

Sri Lanka, Burma, Thailand, Cambodia, Sumatra, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, New Guinea, Bismarck Archipelago, Solomon Isls, Australia (Northern Territory, Queensland).

BATAN to MINDANAO, in most islands and provinces. Chiefly in secondary forests at low and medium altitudes.

Nauclea robinsonii Merr., J. Wash. Acad. Sci. 5 (1915) 537; EPFP 3 (1923) 517; --Sarcocephalus pubescens C Robinson, PJS 6 c (1911) Bot. 225, non Valetton. --Type: BS 6917 Robinson (NY*, US*, iso). Polillo:

POLILLO, LEYTE, SAMAR. Low altitude secondary forests.

Nauclea subdita (Korth.) Steud, Nom. Bot. ed. 2, 2 (1841) 186; --Ridsd., Blumea 24 (1978) 329.

Sarcocephalus subditus (Korth.) Miq., Fl. Ned. Ind. 2 (1856) 134; --Platanocarpum subditum Korth., Observ. Naocl. Indic. (1839) 19.

Nauclea junghuhnii (Miq.) Merr., J. Wash. Acad. Sci. 5 (1915) 536; EPFP 3 (1923) 516; --Sarcocephalus junghuhnii Miq., Fl. Ned. Ind. 2 (1856) 134.

Nauclea multicephala (Elmer) Merr., J. Wash. Acad. Sci. 5 (1915) 536; EPFP 3 (1923) 516; --Sarcocephalus multicephalus Elmer, Leaf. Philipp. Bot. 5 (1913) 1896.

Nauclea glaberrima Blanco, Fl. Filip., ed. 2 (1845) 100.

India (Assam), Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas.

LUZON: Isabel, Laguna, Quezon, Camarines, Albay, Sorsogon, MASBATE, NEGROS, LEYTE, SAMAR, MINDANAO: Zamboanga, Misamis, Lanao, Bukidnon, Davao, Surigao. In primary and secondary forests, ascending to 900 m.

Neolamarckia Bosser

Neolamarckia cadamba (Roxb.) Bosser, Bull. Mus. Natl. Hist. Nat., B, Adansonia 6 (1984) 247.

Anthocephalus cadamba (Roxb.) Miq., Fl. Ind. Bat. ii. 135;

Samama cadamba (Roxb.) Kuntze, Revis. Gen. Pl. 1 (1891) 296; --Sarcocephalus cadamba (Roxb.) Kurz, Prelim. Rep. Forest Pegu, App. A (1875) lxxviii; --Nauclea cadamba Roxb., Fl. Ind. 2 (1824) 121.

Sri Lanka, India, E Himalayas, Bangladesh, Nicobar Isls, Thailand, Laos, Cambodia, Vietnam, Sumatra, Java, Lesser Sunda Isls, Borneo, Philippines (introduced), Sulawesi, New Guinea.

Neonauclea Merrill

Revisions:

Ridsdale, CE. 1978. *A revision of the tribe Naucleae s. s. (Rubiaceae)*. Blumea 24: 307–366.

Ridsdale, CE. 1978. *A revision of Neonauclea (Rubiaceae)*. Blumea 34: 177–275

Neonauclea bartlingii (DC) Merr., J. Wash. Acad. Sci. 5 (1915) 539; --EPFP 3 (1923) 511; --Ridsd., Blumea 34 (1989) 218, Fig. 15c (map); --Sarcocephalus bartlingii (DC) Miq., Fl. Ind. Bat. 2 (1857) 133; --Fern.-Villar, Novis. App. (1880) 104; --Nauclea bartlingii DC, Prodr. 4 (1830) 344. --Type: Haenke *sn* (L, photo). Luzon: near Sorsogon.

Neonauclea ategii (Elmer) Merr., J. Wash. Acad. Sci. 5 (1915) 539; --EPFP 3 (1923) 511; --Nauclea ategii Elmer, LPB 5 (1913) 1877. --Type: Elmer 13910 (BISH*, BO, L*, NY*2 sheets, US*, iso). Mindanao: Agusan del Norte, Mt Urdaneta (=Hilong-hilong), 'stony soil among boulders along the wooded banks of Dalahion River at 1000ft', Sept 1912.

Neonauclea auriculata Quisumb. & Merr., PJS 37 (1928) 205. --Type: BS 49281 Ramos & Edaño (BO, L*, NY*, US*, iso). Mindanao: Davao Oriental prov., Mati, Mar-Apr 1927.

var. bartlingii

LUZON: Nueva Vizcaya, Bataan, Pampanga, Bulacan, Rizal, Laguna, Cavite, Batangas, Quezon, Camarines, Albay, MINDORO, MINDANAO: Davao Oriental, Agusan del Norte. Lowland to medium altitude secondary forests, along streams.

var. cumingiana (Vidal) Ridsd., Blumea 34 (1989) 219, pl. 9, Fig. 15b (map); --Nauclea cumingiana Vidal, Phan. Cuming. Philip. (1885) 176. --Lecto: Cuming 833 (L*, isolecto L*, NY*). Luzon: Laguna prov., 'mnts of St Cristoval and Majaijai' (=Mt San Cristobal and Banahaw); --Syntypes: Cuming 1522; Vidal 365, 367 (L).

Neonauclea vidalii (Elmer) Merr., J. Wash. Acad. Sci. 5 (1915) 542; --Nauclea vidalii Elmer, LPB 1 (1906) 16. --Type: Elmer 6138 (BO, L*, NY*, iso). Luzon: Benguet prov., Sablan, Apr 1904,

Neonauclea cordatula (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 539; --EPFP 3 (1923) 512; --Nauclea cordatula Merr., PJS 8 c (1913) Bot. 40. --Type: FB 22219 Cenabre (L*, iso). Cebu: Cebu prov., Pagulason, on ridges, altitude c. 1000m, Dec 1910.

LUZON: Ilocos Norte, Ilocos Sur, Pangasinan, Abra, Mountain Province, Benguet, Nueva Vizcaya, Pampanga, Rizal, CEBU. Medium altitudes, chiefly in disturbed forests, ascending to 2100m.

Neonauclea calycina (Bartl. ex DC) Merr., J. Wash. Acad. Sci. 5 (1915) 539; EPFP 3 (1923) 512; --Ridsdale, Blumea 34 (1989) 200, Fig. 7 (map). --Nauclea calycina Bartling ex DC, Prodr. 4 (1830) 346. --Type: Haenke *sn* (L, photo).

Nauclea blancoi Vidal, Phan. Cuming. Philip. (1885) 175. --Type Cuming 890 (not seen).

Neonauclea monocephala (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 541; EPFP 3 (1923) 514; --Nauclea monocephala Merr., PJS 8 c (1913) Bot. 44. --Type: Merrill 2980, leg. S Gracia (NY*, US*, iso; L*, photo). Luzon: Zambales prov., Botolan, Jun 1903.

Burma, Peninsular Thailand, Cambodia, Laos, Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, N Borneo, Philippines, Sulawesi.

LUZON: Cagayan to Sorsogon, most provinces, MINDORO, PALAWAN,

POLILLO, TICA, MASBATE, LEYTE, PANAY, NEGROS, BASILAN, MINDANAO:

Zamboanga, Agusan del Norte. In primary and secondary forests at low and medium altitudes.

Neonauclea circumscissa Ridsd., Blumea 34 (1989) 217, Fig. 15a (map); 16, pl. 8. --Type: PNH 18407 DR Mendoza (L*, holo). Luzon: Albay prov., Mt Mayon, May-Jun 1953.

LUZON: Batangas, Quezon, Camarines, Albay, Sorsogon.

Neonauclea formicaria (Elmer) Merr., EPFP 3 (1923) 512; --Ridsdale, Blumea 34 (1989) 214, Fig. 15a (map); --Nauclea formicaria Elmer, LPB 3 (1911) 989. --Type: Elmer 11034 (BISH*, L*, NY*, US*, WRSL, iso). Mindanao: Davao del Sur prov., Mt Apo, Todaya, 'in shrubberies of gulches in the cogon region at 1000ft', Jun 1909.

PANAY: Antique, Capiz, Iloilo, GUIMARAS, NEGROS, CEBU, BOHOL, BILIRAN, SAMAR, MINDANAO: Zamboanga del Sur, Misamis Occidental, Davao, Bukidnon, Agusan del Norte, Surigao del Sur. Low and medium altitude shrubberies, thickets

and open forests associated with cogonal grasslands.

Neonauclea glabra (Roxb.) Bakh.f. & Ridsd., *Blumea* 34 (1989) 240, pl. 13, Fig. 27 (map); --
Nauclea glabra Roxb., [Hort. Beng. (1814) 86, nom. nud.] Fl. Ind. ed. 1, 2 (1824) 121. --Type from --
Neonauclea nitida (Havil.) Merr., J. Wash. Acad. Sci. 5 (1915) 541; --Nauclea nitida Havil., J. Linn Soc. Bot.
33 (1897) 53; --EPFP 3 (1923) 514. --Type: Callery 55 (P). Photo of type in L*.
Neonauclea ovata (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 541; --EPFP 3 (1923) 514; --Nauclea ovata
Merr., PJS 8 c (1913) Bot. 42. --Type: BS 14597 Ramos (L*, photo; US*, iso). Camiguin: Camiguin
prov., in forests along streams near the old volcano, 27 Apr 1912.
Neonauclea venosa (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 542; --EPFP 3 (1923) 515; --Nauclea
venosa Merr., PJS 8 c (1913) Bot. 45. --Type: FB 9183 Whitford & Hutchinson (not seen).
Mindanao: Zamboanga del Sur prov., Port Banga, Jan 1908.
Neonauclea kobbei Elmer, LPB 8 (1919) 3100. --Type: Calicosa *sn*, Aug 1914
Philippines, Moluccas, New Guinea, Australia (Queensland).
LUZON: Laguna, Quezon, MASBATE, NEGROS, CAMIGUIN, BASILAN,
MINDANAO: Zamboanga del Sur. Lowland forests, ascending to 600m.

Neonauclea jagorii (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 540; EPFP 3 (1923) 513; --Ridsd.,
Blumea 34 (1989) 221, pl. 15c, Fig. 17; --Nauclea jagorii Merr., PJS 4 c (1909) Bot. 326. --Type:
Jagor 987 (B, lost). Samar; --neotype: FB 31136 Fontanoza (NY).
LUZON: Camarines Sur, SAMAR. Lowlands, along riverbanks.

Neonauclea kentii (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 540; EPFP 3 (1923) 513; --Ridsd.,
Blumea 34 (1989) 228, Fig. 21a; --Nauclea kentii Merr., PJS 8 c (1913) Bot. 43. --Type: BS 15440
Reillo (L*, 2 sheets, iso). Basilan: Basilan prov., in forests, Aug 1912.
Neonauclea mindanaensis (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 541; EPFP 3 (1923) 514; --Nauclea
mindanaensis Merr., PJS 8 c (1913) Bot. 43. --Type: Copeland 1630 (not seen). Mindanao:
Zamboanga, San Ramon, Feb 1905.
Neonauclea media auct. non (Havil.) Merr.; --Seeber, Weidelt & Banaag, *Dendr. Charact. Imp. For. Trees E*
Mindanao (1979) 360, Fig. 218.
BASILAN, MINDANAO: Zamboanga, Lanao del Sur, E Mindanao. Lowland forests,
chiefly along streams.

Neonauclea lanceolata (Blume) Merr., J. Wash. Acad. Sci. 5 (1915) 504; --Ridsd., *Blumea* 34
(1989) 225.
subsp. gracilis (Vidal) Ridsd., *Blumea* 34 (1989) 225, Fig. 19c (map); --Neonauclea gracilis (Vidal)
Merr., J. Wash. Acad. Sci. 5 (1915) 540; EPFP 3 (1923) 513; --Nauclea gracilis Vidal, Phan.
Cuming. Philip. (1885) 176; --Type: Cuming 835 (K, L*, 2 sheets).
Neonauclea oligophlebia Merr., PJS 12 c (1917) Bot. 159; EPFP 3 (1923) 514. --Type: Wenzel 1608 (A*,
BM, iso). Leyte: Leyte prov., Sept 1915.
Neonauclea philippinensis (Vidal) Merr., J. Wash. Acad. Sci. 5 (1915) 542; --Nauclea philippinensis (Vidal)
Havil., J. Linn. Soc., Bot. 33 (1897) 52; --Adina philippinensis Vidal, *Rev. Pl. Vasc. Filip.* (1886)
148.
Peninsular Malaysia, Borneo, Philippines, Sulawesi, Moluccas, New Guinea.
LUZON: Nueva Vizcaya, Bataan, Rizal, Laguna, Camarines, Albay,
Sorsogon, MINDORO, PALAWAN, LEYTE, SAMAR, MINDANAO: Bukidnon. Chiefly
in primary forests at low altitudes.

Neonauclea media (Havil.) Merr., J. Wash. Acad. Sci. 5 (1915) 541; EPFP 3 (1923) 513; --Ridsd.,
Blumea 34 (1989) 230, Fig. 21c (Map); --Nauclea media Havil., J. Linn. Soc. Bot. 33 (1897) 56.
--Type: Callery *sn* (P).
Nauclea latifolia Blanco, Fl. Filip. (1837) 144. --Type: not extant. "Illustrative specimen": Merrill Sp.
Blancoanae 542 (US*). Luzon: Batangas prov., Mt Batulao, forest slopes, altitude 49m, 12 Aug
1914.
LUZON: Ilocos Sur, Cagayan, Bataan, Rizal, Laguna, Quezon, Batangas, MINDORO,
PANAY, GUIMARAS, MINDANAO. Lowland forests.

Neonauclea pseudocalycina Ridsd., Blumea 34 (1989) 204, pl. 2, Fig 10 (map). --Type from Sabah.
Borneo (Sabah; Kalimantan), SW Philippines.
TAWI-TAWI.

Neonauclea puberula (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 542; EPFP 3 (1923) 514; --Ridsd., Blumea 34 (1989) 229, Fig. 21b; --Nauclea puberula Merr., PJS 8 c (1913) 41. --Type: Elmer 7319 (BO, iso). Luzon: Sorsogon prov., Sorsogon, Nov 1905.
Neonauclea forsteri Merr. EPFP 3 (1923) 512, *non* (Seem. ex Havil.) Merr. 1915.
LUZON: Sorsogon, MINDORO: Mindoro Oriental (near Calapan), PANAY, GUIMARAS, ?MINDANAO. Low altitude forests. The record from Mindanao is tentatively based on Ahern 3624 with no further locality.

Neonauclea reticulata (Havil.) Merr., J. Wash. Acad. Sci. 5 (1915) 542; EPFP 3 (1923) 514; --Ridsd., Blumea 34 (1989) 215, pl. 8, Fig. 15a (map); --Nauclea reticulata Havil., J. Linn. Soc. Bot. 33 (1897) 62. --Type: Vidal 2955 (K, holo).
Taiwan (S tip), Lanyu and the Philippines.
BATAN and BABUYAN ISLS, LUZON: Apayao, Abra, Benguet, Mountain Province, Ilocos Sur, Pangasinan, Cagayan, Nueva Vizcaya, Zambales, Nueva Ecija, Bulacan, Rizal. In forested ravines and on slopes at low and medium altitudes.

Neonauclea truncata (Hayata) Yamamoto, J. Soc. Trop. Agr. Taiwan 7 (1935) 149; --Ridsdale, Blumea 34 (1989) 213, pl. 8. --Type from Taiwan.
Taiwan and N Philippines.
BATAN.

Neonauclea wenzelii (Merr.) Merr., J. Wash. Acad. Sci. 5 (1915) 542; EPFP 3 (1923) 515; --Ridsd., Blumea 34 (1989) 228, Fig. 20, pl. 21a; --Nauclea wenzelii Merr., PJS 9 (1914, publ. 1915) 386. --Type: Wenzel 348 (A*, BM, US*, iso). Leyte: Leyte prov., 10 Jul 1913.
LEYTE, SAMAR. Lowland forests.

Nertera Banks & Solander ex Gaertner =Coprosma

Oldenlandia Linnaeus

Oldenlandia apoensis Elmer, LPB 1 (1906) 17. --Type: Copeland 1131 (NY*, US*, iso). Mindanao: Davao, Mt Apo, altitude c. 2000m, Apr 1904.
Hedyotis apoensis (Elmer) Elmer, LPB 3 (1911) 976; --Merr., EPFP 3 (1923) 495.
LEYTE, MINDANAO: Misamis Occidental, Bukidnon, Davao del Sur (Mt Apo). Forests, altitude 1200-2000m.

Oldenlandia auricularia (L.) K Schum. in HGA Engler & KAE Prantl, Nat. Pflanzenfam. 4(4) (1891) 25; --Exallage auricularia (L.) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 48(2) (1952) 142; --Metabolus auricularius (L.) Blume ex Bremek., Meded. Bot. Mus. Herb. Rijks Univ. Utrecht 56 (1939) 439; --Hedyotis auricularia L., Sp. Pl. (1753) 101; --Merr., EPFP 3 (1923) 495

subsp. venosa (Blume) ined.,
Hedyotis auricularia subsp. venosa (Blume) Deb, Fl. Tripura 2 (1983) 52; --Hedyotis venosa (Blume) Korth., Ned. Kruidk. Arch. 2(2) (1851) 160; --Metabolus venosus Blume, Bijdr. (1826) 991.
Trop. & Subtrop. Asia: Sri Lanka, India, E Himalayas, Bangladesh, C & S China, Hainan, Burma, Thailand, Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines.

LUZON: Ilocos Norte, Benguet, Bulacan, Rizal, Camarines, Albay, MINDANAO: Zamboanga, Lanao, Surigao. Low and medium altitude thickets and open sites.

Oldenlandia banksii Elmer, LPB 1 (8 Apr 1906) 19. –Type: CS Banks *sn* (not seen). Negros: Negros Occidental prov., Mt Kanlaon, Mar 1902.

Hedyotis banksii (Elmer) Elmer, LPB 3 (1911) 976; --Merr., EPFP 3 (1923) 495.

Hedyotis yoderi (Elmer) Elmer, LPB 3 (1911) 976; --Merr., EPFP 3 (1923) 501; -- Oldenlandia yoderi Elmer, LPB 1 (8 Apr 1906) 17. –Type: Yoder *sn* (not seen). Panay: Antique prov., Mt Madias, Apr 1905. Hedyotis elmeri Merr., PJS 1 (15 Apr 1906) suppl. 127; EPFP 3 (1923) 497. –Syntypes: Elmer 6834, 6979, 9198

LUZON: Zambales, Bataan, Rizal, Laguna, Quezon, Camarines, Albay, Sorsogon, PANAY, NEGROS, LEYTE. Mossy forests, altitude 1000-1800m.

Oldenlandia benguetensis Elmer, LPB 1 (1906) 18. –Type: Elmer 6243 (NY*, US*, iso). Luzon: Benguet prov., Mt Sto Tomas, May 1904.

Hedyotis benguetensis (Elmer) Elmer, LPB 3 (1911) 976; --Merr., EPFP 3 (1923) 496.

Philippines, Sulawesi.

LUZON: Ilocos Norte, Abra, Mountain Province, Benguet. Mossy forest, altitude 1400-2400m.

Oldenlandia biflora L., Sp. Pl. (1753) 119; --Merr., EPFP 3 (1923) 492.

Thecagonum biflorum (L.) Babu, Bull. Bot. Surv. India 11 (1969, publ. 1971) 214; --Gonotheca biflora (L.) Masam., Sci. Rep. Kanazawa Univ., Biol. 4 (1955) 78; --Hedyotis biflora (L.) Lam., Tabl. Encycl. 1 (1792) 272.

Tropical and subtropical Asia to W Pacific: Nicobar Isls, Burma, Vietnam, Peninsular Malaysia, Java, Philippines, Sulawesi, New Guinea, Solomon Isls, Australia (Queensland), Fiji, Gilbert Isls, New Caledonia, Samoa, Tonga, Vanuatu, Caroline Isls, Marianas, Marshall Isls.

Throughout the Philippines. Low and medium altitude weed in waste places, cultivated sites, settlements, etc. Common.

Oldenlandia ciliata Elmer, LPB 1 (1906) 20; --Merr., EPFP 3 (1923) 493. –Type: Elmer 6615 (not seen). Luzon: Benguet prov., Baguio, in loose soil amongst limestone boulders.

LUZON: Mountain Province, Benguet. Altitude 1200-1600m, on limestone boulders and ledges, recent slides, etc.

Oldenlandia corymbosa L., Sp. Pl. (1753) 119; --Merr., Fl. Manila (1912) 447; EPFP 3 (1923) 493; --Hedyotis biflora var. corymbosa (L.) Kurz, J. Asiat. Soc. Bengal 46(2) (1877) 133; --Gerontogea corymbosa (L.) Cham. & Schltdl., Linnaea 4 (1829) 154; --Hedyotis corymbosa (L.) Lam., Tab. Encyc. 1 (1791) 272

Africa, tropical and subtropical Asia, introduced elsewhere.

Throughout the Philippines. Often common in and near settlements, gardens, waste places, etc. Note: According to the Global Rubiaceae Checklist, identity of Philippine plants so-named uncertain.

Oldenlandia cristata (Willd. ex Roem. & Schult.) ined.

Spermacoce cristata Willd. ex Roem. & Schult., Syst. Veg. 3 (1818) 530.

Exallage costata (Roxb.) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 48(2) (1952) 142; --Oldenlandia costata (Roxb.) K. Schum., Bot. Tidsskr. 24 (1902) 330; --Hedyotis costata (Roxb.) Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 45(2) (1876) 135, nom. illeg.; --Spermacoce costata Roxb., Fl. Ind. 1 (1820) 376.

Exallage philippensis (Willd. ex Spreng.) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 48(2) (1952) 142; --Hedyotis philippensis (Willd. ex Spreng.) Merr. ex C Robinson, PJS 6 c (1911) Bot. 222; --Merr., PJS 8 c (1913) Bot. 37; EPFP 3 (1923) 499; --Spermacoce philippensis Willd. ex Spreng., Syst. Veg. (ed. 16) 1 (1824) 401. –Type: ‘Malaspina’ (B-Willd.*).

Luzon: without definite locality.
Hedyotis philippensis var. *meyeniana* (Walp.) Merr., PJS 8 c (1913) Bot. 38; --EPFP 3 (1923) 499; -- *sn* (B, cited by Merrill, 1913). Luzon: Laguna prov.
Hedyotis asperima (Merr.) Merr., EPFP 3 (1923) 495; --*Hedyotis philippensis* var. *asperima* Merr., PJS 8 c (1913) Bot. 38. --Type: Merrill 7252 (L*, iso). Palawan: Malampaya Bay.
Hedyotis prostrata (Blume) Korth., Nederl. Kruidk. Arch. 2 (1851) 160; --Merr., PJS 8 c (1913) Bot. 36, pl. 1; --*Metabolus prostratus* Blume, Bijdr. (1826) 991. --Type from Java.
Exallage rigida (Blume) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 48(2) (1952) 142; --*Oldenlandia rigida* (Blume) Kuntze, Revis. Gen. Pl. 1 (1891) 292, nom. illeg.; --*Scleromitron rigidum* (Blume) Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 46(2) (1877) 136; --*Hedyotis rigida* (Blume) Walp., Ann. Bot. Syst. 2 (1852) 772; --*Hedyotis rigida* (Blume) Miq., Fl. Ned. Ind. 2 (1857) 181, nom. illeg.; --Merr., EPFP 3 (1923) 500; Backer & Bakhuizen f., Fl. Java 2 (1963) 287; --*Metabolus rigidus* Blume, Bijdr. (1826) 992. --Type from Java.
Hedyotis gitingensis Elmer, LPB 3 (1911) 979; --Merr., EPFP 3 (1923) 497, **syn. nov.**; --Type: Elmer 12434.
Hedyotis leucocarpa Elmer, LPB 2 (1908) 524; --Merr., EPFP 3 (1923) 500. --Type: Elmer 9434 (L*, MO*, NY*, US*, iso). Negros: Negros Oriental prov., Cuernos Mtns, in damp soil of shaded woods, altitude 4000ft, Mar 1908.
Oldenlandia vestita (R.Br. ex G.Don) Drake, J. Bot. (Morot) 9 (1895) 211; --*Hedyotis vestita* R.Br. in Wall. Cat. n. 847, *nom. nud.*; ex G Don, Gen. Syst. (1834) 526.
Hedyotis costata (Roxb.) Kurz, J. As. Soc. Beng. 45² (1876) 135; --Merr., EPFP 3 (1923) 497.
Hedyotis pulgarensis Elmer, LPB 4 (1912) 1333; --Merr., EPFP 3 (1923) 499, **syn. nov.** --Type: Elmer 13212 (L*, MO*, NY*, US*, iso). Palawan: Puerto Princesa, Mt Pulgar (=Thumb Peak), May 1911.
E Himalayas, Assam, Bangladesh, Burma, Nicobar Isls, Thailand, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Moluccas, New Guinea, Australia (Queensland).
Throughout the Philippines in most islands and provinces: LUZON: Pangasinan, Benguet, Isabela, Nueva Vizcaya, Zambales, Bataan (Mt Mariveles), Pampanga (Mt Arayat), Bulacan, Rizal, Laguna, Camarines, Sorsogon, POLILLO, MINDORO, BUSUANGA, CULION, PALAWAN, SIBUYAN, PANAY, NEGROS: Negros Occidental (Mt Kanlaon), Negros Oriental (Cuernos Mtns), CAMIGUIN, BASILAN, MINDANAO: Lanao, Bukidnon, Surigao. Chiefly in low and medium altitude forests, thickets and grasslands, to 1000m altitude, often common.

Oldenlandia diffusa (Willd.) Roxb., Hort. Beng. (1814) 11; --Merr., Fl. Manila (1912) 447; EPFP 3 (1923) 493; --*Hedyotis diffusa* Willd., Sp. Pl. 1 (1797) 566
Sri Lanka, India, E Himalayas, Bangladesh, China, Taiwan, Korea, Japan, Nicobar Isls, Burma, Thailand, Sumatra(?), Peninsular Malaysia, Borneo, Philippines.
Throughout the Philippines. Habitat and occurrence of the preceding.

Oldenlandia filifolia Elmer, LPB 1 (1906) 64; --Merr., PJS 1 (1906) Suppl. 126. --Type: Merrill 3295.
Hedyotis filifolia (Elmer) Merr., EPFP 3 (1923) 497.
LUZON: Bataan. On coastal bluffs.

Oldenlandia herbacea (L.) Roxb., Fl. Ind. 1 (1820) 445; --Merr., Fl. Manila (1912) 448; EPFP 3 (1923) 493; --*Hedyotis herbacea* L., Sp. Pl. (1753) 102.
Tropical Africa and Asia. LUZON: Cagayan, Nueva Vizcaya, Zambales, Bulacan, Rizal, GUIMARAS.

Oldenlandia horneriana Miq., Fl. Ind. Bat. 2 (1857) 190; --Merr., EPFP 3 (1923) 494.
Hedyotis horneriana (Miq.) Fukuoka, South East Asian Stud. 8 (1870) 335, *non* Miq. (1857).
Sumatra, ?Philippines.
LUZON: Pangasinan, based on Cuming 974. According to Merrill (1923), known only from the original description.

Oldenlandia laevigata (Miq.) Kuntze, Revis. Gen. Pl. 1 (1891) 292; --*Hedyotis laevigata* Miq., Fl. Ned. Ind. 2 (1857) 178.

Philippines.

Where?

Oldenlandia ovatifolia (Cav.) DC, Prodr. 4 (1830) 427; --Merr., PJS 8 c (1913) Bot. 46; EPFP 3 (1923) 494; --Hedyotis ovatifolia Cav., Icon. 6 (1801) 52, t. 573, Fig. 1.

Oldenlandia nudicaulis Roth, Nov. Pl. Sp. (1821) 95; --Fern.-Villar, Novis. App. (1880) 107; --Elmer, LPB 1 (1906) 20; --Merr., PJS 1 (1906) Suppl. 127.

Sri Lanka, India, W & E Himalayas, Nepal, Peninsular Malaysia, Java, Philippines.

LUZON: Bataan, Bulacan, Laguna, MINDANAO: Davao. Lowland grasslands and clearings.

Oldenlandia pterita (Blume) Miq., Fl. Ind. Bat. 2 (1857) 193; --Merr., EPFP 3 (1923) 494.

Thecagonum pteritum (Blume) Babu, Bull. Bot. Surv. India 11 (1969 publ. 1971) 214; --Hedyotis pterita

Blume, Bijdr. (1826) 972.

India, Burma, Thailand, Vietnam, Java, Lesser Sunda Isls, Philippines, Sulawesi.

LUZON: Cagayan, PALAWAN, NEGROS, MINDANAO: Zamboanga, Davao. Lowland clearings, plantations, etc., seen in limestone areas.

Oldenlandia radicans (Bartl. ex DC.) Kuntze, Revis. Gen. Pl. 1 (1891) 292.

Exallage radicans (Bartl. ex DC.) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect.

48(2) (1952) 142; --Metabolos radicans Bartl. ex DC., Prodr. 4 (1830) 435.

Hedyotis ramosii Merr., PJS 8 c (1913) Bot. 35; EPFP 3 (1923) 500. --Type: BS 15337 Ramos (L*, US*, iso).

Leyte: Leyte prov., mtns back of Dagami, in forests, Aug 1912.

Hedyotis irosinensis Elmer, LPB 9 (1934) 3248. --Type: Elmer 17394 (NY*, US*, iso). Luzon: Sorsogon

prov., Mt Bulusan, Sep

Borneo(?), Philippines, New Guinea, Australia (Queensland). LUZON: Pangasinan, Bulacan, Rizal, Quezon, Sorsogon (Mt Bulusan), CATANDUANES, LEYTE, SAMAR, MINDANAO: Surigao del Norte. Low altitude forests.

Oldenlandia strigulosa Bartl. ex DC., Prodr. 4 (1830) 427.

Hedyotis strigulosa (Bartl. ex DC.) Fosberg, Smithsonian Contr. Bot. 45 (1980) 28.

Tropical & subtropical Asia to W Pacific: India, S China, Taiwan, Korea, Japan, Ryukyu Isls, Philippines, New Guinea, Solomon Isls, Caroline Isls, Marianas.

Philippine distribution:

Ophiorrhiza Linnaeus

Literature:

Darwin, SP. 1976. *The Pacific species of Ophiorrhiza L. (Rubiaceae)*. Lyonia 1.

Ophiorrhiza argostemmoides Elmer, LPB 9 (1934) 3254. --Type: Elmer 16345 (PNH, holo, lost; MO*, NY*, US*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Jun 1916.

LUZON.

Ophiorrhiza biflora Elmer, LPB 1 (1906) 21; --Merr., EPFP 3 (1923) 501. --Type: Copeland *sn* (not seen). Mindanao: Davao, Mt Apo, on mossy logs, altitude c. 2000m, Oct 1904.

NEGROS, MINDANAO: Davao del Sur (Mt Apo). Mossy forests, altitude c. 1800m.

Ophiorrhiza caespitulosa Elmer, LPB 2 (1908) 523; --Merr., EPFP 3 (1923) 502. --Type: Elmer 10332 (not seen).

Ophiorrhiza caespitulosa var. *fulva* Elmer, LPB 5 (1913) 1880. --Type:

PANAY, NEGROS, MINDANAO (Agusan del Norte). Damp primary forests, altitude c.

1050m.

Ophiorrhiza camiguinensis Elmer, Leaflet. Philipp. Bot. 5: 1881 (1913).
Philippines (Mindanao). 42 PHI.

Ophiorrhiza ciliata Elmer, LPB 9 (1934) 3256. --Type: Elmer 17544 (NY*, US*, iso). Luzon: Laguna prov., Mt Makiling, Jun-Jul 1917.
LUZON.

Ophiorrhiza curtiflora Elmer, LPB 5 (1913) 1882; --Merr., EPFP 3 (1923) 502. --Type: Elmer 14208 (BISH*, MO*, NY*, US*, iso). Mindanao: Agusan del Norte prov., Mt Urdaneta (=Hilong-hilong), Cabadbaran, in wet, deeply humus-covered soil of an alluvial nature in a dense forested depression at 3500ft N of Duros.
MINDANAO: Agusan del Norte (Mt Hilong-hilong). Primary forest, altitude c. 1050m.

Ophiorrhiza davaensis Quisumb., PJS 41 (1930) 363, t. 26. --Type: BS 49307 Ramos & Edaño (PNH, holo, possibly lost; iso in A*). Mindanao: Davao Oriental prov., Mati. Mar-Apr 1927.
MINDANAO: Davao Oriental (Mati). Along stream banks and open places at low alt.
Known only from the type collection.

Ophiorrhiza dolichophylla Merr., PJS 20 (1922) 470; --EPFP 3 (1923) 502. --Type: BS 36565 Ramos & Edaño (US*, iso). Luzon: Zamboanga District, Mt Tubuan, Oct 1919.
MINDANAO: Zamboanga. Boulders along small streams.

Ophiorrhiza inaequifolia Elmer, LPB 9 (1934) 3257. --Type:
Philippines (Luzon). 42 PHI.

Ophiorrhiza involucrata Elmer, LPB 1 (1908) 351; --Merr., EPFP 3 (1923) 501. --Type: Elmer 7603 (not seen).
LUZON: Apayao, Quezon, POLILLO. Low and medium altitude forests along streams, ascending to 750m.

Ophiorrhiza lancilimba Merr., PJS 29 (1926) 491.
BOHOL.

Ophiorrhiza linearifolia Merr., PJS 10 c (1915) Bot. 99; --EPFP 3 (1923) 502. --Type: BS 16109 Reillo (US*, iso). Basilan: Basilan prov., Comalarang, in forests, 29 Aug 1912.
BASILAN. Lowland forests, apparently along streams.

Ophiorrhiza liukuensis Hayata, Icon. Pl. Formosan. 2 (1912) 89.
Ophiorrhiza japonica var. *kuroiwai* (Makino) Ohwi, Acta Phytotax. Geobot. 7 (1938) 195; --*Ophiorrhiza kuroiwae* Makino, Bot. Mag. Tokyo 20 (1906) 5, nom. nud.; --HJ Li & HY Liu, Fl. Taiwan ed. 2, 4 (1998) 311, pl. 141, photo 187.
Ophiorrhiza mungos Merr., EPFP 3 (1923) 502, non L., Sp. Pl. (1753) 150
Ryukyus, Taiwan (Lanyu and Lutaos), Philippines
BATAN. The plant is characteristically purplish when dry.

Ophiorrhiza macgregorii Merr., PJS 17 (1920, publ. 1921) 437; --EPFP 3 (1923) 502. --Type: BS 23024 McGregor (US*, iso). Luzon: Laguna prov., Jun-Aug 1915
LUZON: Laguna, Quezon. Primary forests, altitude 200-300m.

Ophiorrhiza maquilingense Elmer, LPB 9 (1934) 3258. --Type: Elmer 17536 (PNH, holo, lost;

MO*, NY*, US*, iso). Luzon: Laguna prov., Mt Makiling
LUZON

Ophiorrhiza mungos L., Sp. Pl. (1753) 150; --Merr., EPFP 3 (1923) 502, excl. Batan plants.
Sri Lanka, India, Nicobar Isls, Burma, Sumatra, Peninsular Malaysia, Java, ?Philippines.
N LUZON to PALAWAN and MINDANAO. According to Merrill (1923), not certainly
distinct from the Linnean species. Plant is said to be characteristically purplish when
dry.

Ophiorrhiza oblongifolia DC, Prodr. 4 (1830) 415; --Merr., EPFP 3 (1923) 502. --Type:
Ophiorrhiza triandra Blanco, Fl. Filip., ed. 2 (1845) 65.
LUZON: Isabel to Sorsogon, MINDORO, PALAWAN, POLILLO, BILIRAN, PANAY,
NEGROS, MINDANAO. In forests, chiefly along streams at low and medium altitudes.

Ophiorrhiza oblongilimba Merr., PJS 12 c (1917) Bot. 164; --EPFP 3 (1923) 503. --Type: BS 27139
Ramos
LUZON: Ilocos Norte. Lowland forests along streams.

Ophiorrhiza ovata Merr., PJS 17 (1920, publ. 1921) 438; --EPFP 3 (1923) 503. --Type: BS 23163
McGregor
LUZON: Laguna, Quezon. Low and medium altitude forests, along rocky stream
embankments.

Ophiorrhiza pubescens Elmer, LPB 1 (1906) 68; --Merr., EPFP 3 (1923) 503. --Type: Elmer 14971
LUZON: Laguna, Sorsogon, SAMAR, MINDANAO: Agusan del Norte. Open grasslands
along streams at low and medium altitudes.

Ophiorrhiza pubiflora Merr., PJS 17 (1920, publ. 1921) 438; --EPFP 3 (1923) 503. --Type: BS 29253
Ramos & Edaño
LUZON: Rizal. Forests, apparently at c. 1000m.

Ophiorrhiza pumila Champ. ex Benth. in Hook. J. Bot. Kew Gard. Misc. 4 (1852) 169; --Chao, Fl.
Taiwan 4 (1978) 319 --HJ Li & HY Liu, Fl. Taiwan ed.2, 4 (1998) 311, pl. 142.
Japan, S China, Taiwan, Ryukyu Isls, Japan (Yakushima), Vietnam, ?Philippines.

Ophiorrhiza pulgarensis Elmer, LPB 4 (1912) 1342; --Merr., EPFP 3 (1923) 503. --Type: Elmer
12949
PALAWAN. Forests, up to 450m.

Ophiorrhiza sorsogonensis Elmer, LPB 9 (1934) 3260.
LUZON.

Ophiorrhiza stenophylla Merr., PJS 17 (1920, publ. 1921) 436; --EPFP 3 (1923) 494, erroneously
as 'Oldenlandia stenophylla'; non Ophiorrhiza stenophylla Valetton (1912). --Type: BS 22591 Ramos &
Deroy.
LUZON: Cavite. On rocks along streams, altitude c. 600m.

Ophiorrhiza tenuis Merr., PJS 17 (1920, publ. 1921) 440; --EPFP 3 (1923) 503, nom. illeg., non Ridl.
(1912). --Type: BS 29785 Ramos & Edaño
LUZON: Rizal. Forests, apparently at c. 1000m.

Ophiorrhiza undulata Merr., PJS 8 c (1913) Bot. 46; --EPFP 3 (1923) 503. --Type: Weber 1445 (US*, iso). Mindanao: Davao, Mt Binutun, on banks of small streams in bamboo forests, 26 Oct 1911.

MINDANAO: Zamboanga, Davao. Along small streams in bamboo forests, altitude c. 550m.

Ophiorrhiza venosa Merr., PJS 2 c (1907) Bot. 304; --EPFP 3 (1923) 503. --Type: Merrill 5628 MINDORO, SIBUYAN, PANAY, SIARGAO. Lowland primary forests.

Ophiorrhiza zambalensis Elmer, LPB 9 (1934) 3212. --Type: LUZON:

Unplaced taxa:

Ophiorrhiza bicolor Elmer, LPB 9 (1934) 3211, 3212, *nom. illeg., non* Craig (1932). --Type: Elmer 21958 (PNH, holo, lost; iso MO*, NY*, US*). Luzon: Pampanga prov., Mt Pinatubo, Camp Stotsenburg, May 1927.

Dubious taxa:

Ophiorrhiza acuminata DC, Prodr. 4 (1830) 416; --Merr., EPFP 3 (1923) 501.

"The type is a specimen collected at Sorsogon, LUZON, by Haenke. I know the species only by description. Endemic." --Merrill, l.c.

Oxyceros Loureiro

Oxyceros bispinosa (Griff.) Tirveng., Nordic J. Bot. 3 (1983) 466; --*Randia bispinosa* (Griff.) Craib, Fl. Siam. 2 (1932) 99; --*Stylocoryna bispinosa* Griff., Not. Pl. Asiat. 4 (1854) 260.

Randia uncarya Elmer, LPB 1 (1906) 30; --Merr., EPFP 3 (1923) 529. --Type: Elmer 7001 (NY*, iso). Luzon: Bataan prov., Mt Mariveles, Nov 1904.

Randia williamsii Elmer, LPB 3 (1911) 1004; --Merr., EPFP 3 (1923) 529. --Type: Elmer 12474 (not seen). Burma, Thailand, Vietnam, Borneo, Philippines.

LUZON: Zambales, Bataan, Laguna, Camarines, Sorsogon, MINDORO, PALAWAN, SIBUYAN, PANAY, LEYTE, SAMAR, BASILAN, MINDANAO: Zamboanga. Low and medium primary forests.

Paederia Linnaeus

Literature:

Deb, DB. & K Roy. 1983. *Taxonomic revision of Paederia L. (Rubiaceae) in India and adjoining regions*. J. Econ. Taxon. Bot. 4.

Puff, C., E Robbrecht & L Andersson. 1991. *Relationships and evolution in Paederia L. (Rubiaceae-Paederieae). A comparison classical approach, numerical evaluation and cladistic analysis*. Opera Bot. Belg. 3: 337–358.

Puff, C. 1991. *Revision of the genus Paederia L. (Rubiaceae-Paederieae) in Africa and Madagascar*. Opera Bot. Belg. 3: 293–322.

Paederia foetida L., Mant. Pl. (1767) 52; --Blanco, Fl. Filip. (1837) 159; *ibid.* ed. 2 (1845) 112; *ibid.* ed. 3, 1 (1877) 201, t. 54; --Fern.-Villar, Novis. App. (1880) 112; --Vidal, Sinopsis Atlas (1883) 29, t. 57, Fig. K; --Elmer, LPB 1 (1906) 28; --Merr., Interp. Herb. Amboin. (1917) 489; EPFP 3 (1923) 570.

Paederia scandens (Lour.) Merr., Contrib. Arn. Arb. 8 (1934) 163.

Paederia tomentosa Blume, Bijdr. (1826) 968; --Merr., Fl. Manila (1912) 455.

Sri Lanka, India, E Himalayas, Nepal, Bangladesh, Burma, Tibet, China, Thailand, Laos, Cambodia, Vietnam, Hainan, Taiwan, Ryukyu Isls, Korea, N & C Japan, Sumatra,

Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, Christmas Is. Introduced in Mauritius, Reunion, Bismarck Archipelago, Hawaii and Florida.

Throughout the Philippines. Low and medium altitude thickets.

Paederia verticillata Blume, Bijdr. (1826) 968; --Merr., EPFP 3 (1923) 570.

Paederia verticillata Blume var. *tomentella* Elmer, LPB 5 (1913) 1885; --Merr., EPFP 3 (1923) 570.

Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi.

Pavetta Linnaeus

Revisions:

Bremekamp, CEB. 1935. *A monograph of the genus Pavetta L.* Repert. Sp. Nov. Reg. Veg. 37: 1–208.

Bremekamp, CEB. 1939. *A monograph of the genus Pavetta L.: additions and emendations.* Repert. Sp. Nov. Reg. Veg. 47: 12–28; part 2, 81–98.

Pavetta basilanensis Bremek., Fedde, Repert. 37 (1934) 87. –Type: BASILAN

Pavetta batanensis Bremek., Fedde, Repert. 47 (1939) 24. –Type: BS 3748 Fenix (GH*, iso).
Batanes. May-Jun 1907.
BATAN

Pavetta brachyantha Merr., PJS 8 c (1913) Bot. 47; EPFP 3 (1923) 544. –Type: RS Williams 1077 (US*, iso). Luzon: Benguet prov., Baguio, Jun 1904.
LUZON: Mountain Province, Benguet. In ravines, altitude 1300-2000m.

Pavetta cumingii Bremek., Fedde, Repert. 37 (1935) 109. –Type: Cuming 1322 (L*, NY*, iso). Luzon: Albay prov.
LUZON:

Pavetta dolichostyla Merr., PJS 1 (1906) Suppl. 239; EPFP 3 (1923) 544. –Type: FB 3714 Merritt
MINDORO. Lowland forests.

Pavetta elmeri Merr., PJS 17 (1920, publ. 1921) 475; EPFP 3 (1923) 544. –Type: Elmer 6394
LUZON: Benguet. Thickets or forests, altitude c. 1400m.

Pavetta indica L., Sp. Pl. (1753) 110; --Merr., EPFP 3 (1923) 544.

var. glabrescens (Kurz) Deb & Rout, J. Bombay Nat. Hist. Soc. 89 (1992, publ. 1993) 351.

Pavetta indica var. *glabra* Bremek., Repert. Spec. Nov. Regni Veg. 37 (1934) 119, nom. inval.

Pavetta barnesii Elmer, LPB 1 (1906) 2. –Type: Elmer 6788 (NY*, iso). Luzon: Bataan prov., Mt Mariveles, Nov 1904.

India, E Himalayas, Bangladesh, Nepal, S China, Hainan, Peninsular Malaysia, Borneo, Philippines.

Throughout the Philippines in most islands and provinces. Lowland primary forests, often common.

Pavetta leytensis Bremek., Fedde, Repert. 47 (1939) 26. –Type: Wenzel 1731 (GH, holo?). 10 Apr 1906.
LEYTE:

Pavetta luzonica Bremek., Fedde, Repert. 37 (1934) 109. –Type: BS 94 Adduru (A*, holo?). Luzon:

Cagayan prov., Peñablanca, Littoc, 28-31 May 1917.
LUZON:

Pavetta membranacea Blanco, Fl. Filip. (1837) 59; --Merr., EPFP 3 (1923) 545. --Type: BS 7634
Ramos

Pavetta sambucina Blanco, Fl. Filip., ed. 2 (1845) 41, nom. illeg.

LUZON: Ilocos Norte, Bataan, Rizal. Low or medium altitude thickets or forests.

Pavetta mindanaensis Bremek., Fedde, Repert. 37 (1934) 88. --Type: Elmer 11233 (NY*, iso).
Mindanao: Davao del Sur prov., Mt Apo, Todaya, dry fertile soil of wooded flat lands at 1500ft, Jul 1909

Pavetta parvifolia Vidal, Phan. Cuming. Philipp. (1885) 183; --Merr., EPFP 3 (1923) 545. --Type:
Cuming 1394

LUZON: Nueva Ecija, Zambales, MINDORO. Lowland thickets.

Pavetta phanerophlebia Merr., PJS 17 (1920, publ. 1921) 478; EPFP 3 (1923) 545. --Type: BS 326
Bermejos

PALAWAN. Low and medium altitude forests.

Pavetta subferruginea Merr., PJS 17 (1920, publ. 1921) 477; EPFP 3 (1923) 545. --Type: Merrill 831
PALAWAN. Lowland forests.

Pavetta williamsii Merr., PJS 17 (1920, publ. 1921) 475; EPFP 3 (1923) 545. --Type: RS Williams
2631

MINDANAO: Davao, DINAGAT. Forests, altitude up to 900m.

Pertusadina Ridsdale

Revision:

Ridsdale, C.E. 1978. *A revision of the tribe Naucleaeae s. s. (Rubiaceae)*. Blumea 24: 307–366.

Pertusadina multifolia (Havil.) Ridsd., Blumea 24 (1978) 356; --*Metadina multifolia* (Havil.) Ridsd.,
Gard. Bull. Sing. 25 (1970) 250; --*Adina multifolia* Havil., J. Linn. Soc. Bot. 33 (1897) 45; --Merr.,
EPFP 3 (1923) 507.

Philippines, Moluccas, New Guinea.

LUZON, MINDORO, SIBUYAN, TICAO, SAMAR, MINDANAO. In forests at low and medium altitudes.

Petunga de Candolle =Philippine spp. now in *Hypobathrum* and *Aidia*, q.v.

Plectronia Linnaeus =*Canthium*

Pleiocarpidia Schumann

Revisions:

Bremekamp, CEB. 1940. *A monograph of the genus Pleiocarpidia K. Sch. (Rubiaceae)*, Recueil
Trav. Bot. Neerl. 37: 198–236.

Bremekamp, CEB. 1940. *A preliminary account of the Philippine species of Urophyllum Wall.,
Pleiocarpidia K Schum., & Praravinia Korth. (Rubiaceae)*. Journal of the Arnold
Arboretum 21: 40–41.

Pleiocarpidia lanaensis Merr., PJS 20 (1922) 462; EPFP 3 (1923) 524; --Bremek., J. Arnold Arb. 21 (1940) 40. --Type: Clemens 882 (not seen). Mindanao: Lanao del Sur prov., Jan 1907.
MINDANAO: Lanao del Sur, Bukidnon (Mt Candoon). In forests along streams at low and medium altitudes, ascending to 800m.

Praravinia Korthals

Revision:

Bremekamp, CEB. 1940. *A preliminary account of the Philippine species of Urophyllum Wall., Pleiocarpidia K Schum., & Praravinia Korth. (Rubiaceae)*. Journal of the Arnold Arboretum 21: 41–47.

Praravinia acuminata (Merr.) Bremek., J. Arnold Arb. 21 (1940) 43; --Urophyllum acuminatum Merr., PJS 1 (1906) Suppl. 129; EPFP 3 (1923) 521. --Type: Whitford 236 (NY*, US*, syntypes).
Luzon: Bataan prov., Mt Mariveles, Lamao River, May 1904. The US sheet annotated by R. Buchner as holo.
Praravinia streptopodium Elmer, LPB 1 (1906) 40, non Wall. ex Hook. (1880).
LUZON: Mountain Province (Mt Masapilid), Isabela (Mt Moises), Nueva Ecija (Mt Umingan), Rizal (Montalban; Mt Lumutan; Mt Irig (=Irid); Mt Canumay). In primary forest, 500-1300m.

Praravinia affinis (Merr.) Bremek., J. Arnold Arb. 21 (1940) 46; --Urophyllum affine Merr., PJS 17 (1920) 481; EPFP 3 (1923) 521. --Type: BS 28716 Ramos & Edaño (A*, iso). Luzon: Quezon prov., Mt Binuang, on forested slopes, apparently at low altitudes, May 1917. Iso sheet in A sterile; a syntype cited in the original protologue is BS 28482 Ramos & Edaño (A*, staminate), also collected on Mt Binuang in May 1917.
LUZON: Quezon (Mt Binuang; Mt Tulaog). According to Bremekamp, *BS 10211 McGregor* (L) from POLILLO might belong here, but is much less hairy. In damp primary forest, at low altitudes.

Praravinia everettii Merr., PJS 10 c (1915) Bot. 107; --Bremek., J. Arnold Arb. 21 (1940) 44; --Williamsia everettii (Merr.) Merr., EPFP 3 (1923) 524. --Type: FB 7294 Everett (not seen), Negros:
Negros Occidental prov., Mt Silay, on ridges in forests, altitude 700m, 9 May 1907.
NEGROS: Negros Occidental (Mt Silay), Negros Oriental (Cuernos Mtns). Primary forests, altitude c. 700m.
Very near *P. lucbanensis* (Elmer) Bremek.

Praravinia glabra (Merr.) Bremek., J. Arnold Arb. 21 (1940) 44; --Williamsia glabra Merr., PJS 10 c (1915) Bot. 108; EPFP 3 (1923) 524. --Type: BS 9484 Robinson (L). Luzon: Quezon prov., Siniloan trail, in forests, altitude c. 200m, Aug 1909.
LUZON: Nueva Ecija (Mt Umingan), Quezon (Siniloan trail), Laguna (San Antonio; unspecified locality for BS 23047 McGregor). Low and medium altitude primary forests.
Bremekamp also cites here a collection from ALABAT, BS 48249 Ramos & Edaño, with oblong leaves, probably representing an undescribed species.

Praravinia loheri (Merr.) Bremek., J. Arnold Arb. 21 (1940) 45; --Williamsia loheri Merr., PJS 27 (1925) 58; EPFP 4 (1925) 254. --Type: Loher 12309 (not seen). Luzon: Rizal prov., Montalban, Oct 1909.

LUZON: Kalinga (Mt Masingit, Lubuagan), Quirino (Mt Alzapan), Quezon (Mt Binuang), Rizal (Montalban).

According to Bremekamp, closely related to *P. sablanensis* (Elmer) Bremek.

Praravinia longistipula (Merr.) Bremek., J. Arnold Arb. 21 (1940) 46; --*Williamsia longistipula* Merr., PJS 17 (1920, publ. 1921) 485; EPFP 3 (1923) 524. --Type: Merrill 7287 (K, US*, iso). Mindanao: Agusan del Norte prov., Agusan River at Waloe, in damp forest, altitude c. 50m, 2 Oct 1910.

MINDANAO: Agusan del Norte. Low altitude primary forest. Apparently known only from the type collection.

Praravinia lucbanensis (Elmer) Bremek., J. Arnold Arb. 21 (1940) 43; --*Urophyllum lucbanense* Elmer, LPB 1 (1906) 71; --Merr., EPFP 3 (1923) 521, pro parte. --Type: Elmer 7945 (A, L*, NY*, US*, iso). Luzon: Quezon prov., Lucban, overhanging stream banks of wooded ravines, altitude 850m, May 1906.

LUZON: Nueva Ecija (Mt Umingan), Rizal (Montalban; Mt Angilog), Laguna (San Antonio), Quezon (Lucban), POLILLO, CATANDUANES. Low and medium altitude primary forests, usually along water courses.

Praravinia microphylla (Merr.) Bremek., J. Arnold Arb. 21 (1940) 43; --*Urophyllum microphyllum* Merr., PJS 12 c (1917) Bot. 161; EPFP 3 (1923) 523. --Type: BS 26389 Ramos (US*, holo). Luzon: Nueva Ecija prov., Mt Umingan, in forest near the mountain summit, altitude 1000m, 20 Aug. 1916.

LUZON: Nueva Ecija (Mt Umingan). In primary forest, c.1000m. Known with certainty only from this locality. The altitude given for the type is way below that of the mountain's summit which is c. 1900m.

A collection from Quirino prov., Mt Alzapan (BS 45581 Ramos & Edaño, A, staminate) is doubtfully referred here by Bremekamp, who also notes that it could perhaps be a stunted *P. acuminata* (Merr.) Bremek.

Praravinia mimica (Merr.) Bremek., J. Arnold Arb. 21 (1940) 44; --*Williamsia mimica* Merr., PJS 26 (1925) 495; EPFP 4 (1925) 251. --Type: BS 38790 Ramos & Edaño (US*, holo; iso: A*). Mindanao: Bukidnon prov., Mt Candoon, damp forested slopes, altitude c. 1000m, Jun-Jul 1920.

MINDANAO: Bukidnon (Mt Candoon). Forested slopes, altitude c. 1000m.

Praravinia mindanaensis (Elmer) Bremek., J. Arnold Arb. 21 (1940) 44; --*Williamsia mindanaensis* Elmer, LPB 5 (1913) 1904; --Merr., EPFP 3 (1923) 524. --Type: Elmer 13561 (US*,

holo; iso: L*, MO*, NY*). Mindanao: Agusan del Norte prov., Mt Urdaneta (=Hilong-hilong), Cabadbaran, Aug. 1912.

?*Williamsia caudata* Merr., PJS 9 c (1914) Bot. 389. --Type: Wenzel 686 (A*, US*, iso). Leyte: Leyte prov., Buenavista near Jaro, 18 May 1914.

PANAY, BILIRAN, LEYTE: Leyte (Buenavista; Abuyog), Southern Leyte (Cabalian), SAMAR: Northern Samar (Catubig River), MINDANAO: Zamboanga, Lanao del Sur (Lake Lanao, Camp Keithley), Davao (Mt Apo, Todaya), Davao Oriental (Mt Galintan), Agusan del Norte (Mt Urdaneta, =Mt Hilong-hilong, Cabadbaran), Surigao del Norte. Low and medium altitude primary forests, ascending to 900m.

According to Bremekamp, specimens from outside Mindanao may necessitate the reinstatement of Merrill's epithet *caudata*.

Praravinia multinervia (Merr.) Bremek., J. Arnold Arb. 21 (1940) 46; --*Williamsia multinervia* Merr., PJS 10 c (1915) Bot. 107; EPFP 3 (1923) 524. --Type: Merrill 8085 (L*, iso). Mindanao: Zamboanga, Sax River Mtns back of San Ramon, in damp forests, altitude 600-900m, 28 Nov

1911.

BASILAN, MINDANAO: Zamboanga (Sax River Mtns), Zamboanga del Sur (Malangas).
Primary forests, altitude 400-900m.

Praravinia negrosensis (Merr.) Bremek., J. Arnold Arb. 21 (1940) 46; --*Urophyllum negrosense* Merr., PJS 5 c (1910) Bot. 247; EPFP 3 (1923) 524. --Type: FB 5550 Everett (not seen).

Negros:

Negros Occidental prov., Himugaan River, in ravines, altitude c. 50m, 25 Oct 1906.

NEGROS: Negros Occidental (Himugaan River). In primary forests at low altitudes. In addition, Bremekamp cites Herre 1140 from Negros Oriental (Cuernos Mtns, altitude 1200-1800m), which comes very near to *P. multinervia* (Merr.) Bremek.

Praravinia panayensis (Merr.) Bremek., J. Arnold Arb. 21 (1940) 46; --*Williamsia panayensis* Merr., PJS 17 (1920, publ. 1921) 484; EPFP 3 (1923) 524, *non* *Urophyllum panayense* Merr.,

ibid.

482. --Type: BS 31043 Ramos & Edaña (US*, holo; iso: A*, K). Panay: Capiz prov., Jamindan.

In

damp forests along small streams, Apr-May 1918.

PANAY: Capiz (Jamindan). Low altitude forests along streams. Three collections cited by Bremekamp, all from Jamindan.

Praravinia pubescens (Quisumb. & Merr.) Bremek., J. Arnold Arb. 21 (1940) 47; --*Williamsia pubescens* Quisumb. & Merr., PJS 37 (1928) 208. --Type: BS 47275 Ramos & Edaña (A*, 2 sheets,

US*, iso). Luzon: Isabela prov., Mt Moises, altitude 1200m, Mar 1926. Note: Buchner annotates the

US sheet as holo, contrary to statement in the original publication, i.e. in PNH).

LUZON: Isabela (Mt Moises). Altitude 1200m. Aside from the type, two other collections from this locality: Clemens 16852 (not seen), and 17000 (K, NY*).

Praravinia quadribacteolata (Merr.) Bremek., J. Arnold Arb. 21 (1940) 43; --*Urophyllum quadribacteolatum* Merr. PJS 17 (1920, publ. 1921) 483; EPFP 3 (1923) 523. --Type: BS

28161

Fenix (A*, holo). Luzon: Apayao prov., Ngagan, in damp forest, 8 May 1917.

LUZON: Apayao (Ngagan), Quezon (Infanta-Siniloan Trail). In damp forest at low or medium altitudes.

Praravinia sablanensis (Elmer) Bremek., J. Arnold Arb. 21 (1940) 45; --*Williamsia sablanensis* (Elmer) Merr., PJS 3 c (1908) Bot. 165; --Elmer, LPB 3 (1911) 1000, excluding Mindanao specimens cited; --Merr., EPFP 3 (1923) 524, as to specimens cited from Luzon only; --

Urophyllum

sablanense Elmer, LPB 1 (1906) 39. --Type: Elmer 6131 (US*, holo, fide Buchner in annot.; iso: NY*). Luzon: Benguet prov., Sablan, Apr 1904.

LUZON: Abra (Mt Posuey, =Posooy), Benguet (Sablan), La Union (Tonglon, =Mt Sto. Tomas), Cagayan, Isabela (Palanan), Nueva Vizcaya, Rizal (Mt Angilog), Laguna, Quezon. Low and medium altitude forests.

Praravinia stenophylla (Merr.) Bremek., J. Arnold Arb. 21 (1940) 44; --*Williamsia stenophylla* Merr., PJS 27 (1925) 59; EPFP 4 (1925) 254. --Type: Loher *sn*, (not seen). Luzon: Nueva Vizcaya prov., Caraballo Mtns, Mar 1915.

LUZON: Nueva Vizcaya (Caraballo Mtns). Habitat not known.

Difference with *P. glabra* (Merr.) Bremek. is apparently slight. *P. stenophylla* has narrower and not so completely glabrous leaves.

Praravinia triflora (Quisumb. & Merr.) Bremek., J. Arnold Arb. 21 (1940) 47; --*Williamsia triflora*

Quisumb. & Merr., PJS 37 (1928) 210. --Type: BS 45458 Ramos & Edaño (NY*, US*, iso).

Luzon: Aurora prov., Casiguran, forested streams at low altitudes, 5 May 1925. Note: Buchner annotates the US sheet as holo, contrary to statement in the original publication, i.e. in PNH).

LUZON: Aurora (Casiguran). Low altitude forest. Apparently known only from the type collection.

Praravinia viridescens (Elmer) Bremek., J. Arnold Arb. 21 (1940) 43; --*Williamsia viridescens*

Elmer, LPB 9 (1934) 3215. --Type: Elmer 22078 (L*, K, MO*, NY*, US*, iso). Luzon:

Pampanga prov., Mt Pinatubo, Camp Stotsenburg, altitude 1000m, pistillate, May 1927.

LUZON: Pampanga (Mt Pinatubo), Bataan (Mt Mariveles).

Prismatomeris Thwaites

Revisions:

Johansson, JT. 1987. *The revision of the genus Prismatomeris Thw. (Rubiaceae, Morindeae)*.

Opera Botanica 94.

Igersheim, A & E Robbrecht. 1993. The character states and relationships of the

Prismatomerideae (Rubiaceae-Rubioideae). Opera Bot. Belg. 6: 61–79.

Prismatomeris brachypus Ridl., Kew Bull. (1940) 602.

E. Philippines.

Prismatomeris obtusifolia Merr., PJS 26 (1925) 492; EPFP 4 (1925) 251. --Type: BS 41193 (A).

Busuanga.

BUSUANGA, PALAWAN. In thickets near the sea.

Prismatomeris tetrandra (Roxb.) K Schum. in Engl. & Prantl, Nat. Pflanzenfam. 4 (1891) 138; --

Merr., EPFP 3 (1923) 572.

Prismatomeris tetrandra (Roxb.) K Schum. var. *philippinensis* Ridl., Bull. Misc. Inform. Kew 1939 (1940) 603.

subsp. tetrandra

India (Assam), E Himalayas, Bangladesh, S China, Hainan, Burma, Thailand, Vietnam, Philippines.

LUZON (Sierra Madre Range from Cagayan to Quezon, Camarines), SAMAR, LEYTE, MINDANAO: Surigao. In primary forests at low and medium altitudes.

Psilanthus Hooker filius

Psilanthus mabesae (Elmer) J-F Leroy, Bull. Mus. Natl. Hist. Nat., B, Adansonia 3 (1981, publ.

1982) 256; --*Canthium mabesae* (Elmer) Merr., PJS 35 (1928) 8; --*Coffea mabesae* (Elmer) J-F

Leroy, J. Agric. Trop. Bot. Appl. 9 (1962) 419; --*Plectronia mabesae* Elmer, LPB 8 (1919) 3099;

--Merr., EPFP 3 (1923) 537. --Type: Elmer 17427 (NY*, US*, iso). Luzon: Rizal prov., Montalban, Mar 1917.

Canthium lycioides A.Rich. ex DC., Prodr. 4 (1830) 475; --*Plectronia lycioides* (A.Rich. ex DC.) Elmer, LPB 1 (1906) 28.

Philippines, Lesser Sunda Isls, New Guinea, Queensland (Torres Strait Isls). LUZON: Ilocos Norte, Bataan, Rizal, Laguna, Batangas, PANAY. Lowland secondary forests and thickets.

Psychotria Linnaeus

Revision:

Sohmer, SH & AP Davis. 2007. *The Genus Psychotria (Rubiaceae) in the Philippine Archipelago*.

Sida, Botanical Miscellany No. 27: i-viii + 1-247.

Psychotria acuminatissima Elmer, LPB 1 (1908) 353; --Merr., EPFP 3 (1923) 552; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 228, Fig. 124. --Type: Elmer 8752 (US*, lecto; isolecoto: A, K, MO, NY*, W). Luzon: Benguet prov., Baguio, limestone shrubbery below Antop barrio, altitude c.

1000m,

Mar 1907.

Grumilea acuminatissima (Elmer) Merr., PJS 10 c (1915) Bot. 132.

LUZON: Benguet (Baguio; Road to Asin, Mountain Trail =Halsema Road), Aurora (Mt Alzapan), Nueva Vizcaya (Caraballo Mtns), Rizal (Montalban). Shrubby forests, including those on limestone outcrops, altitude c. 1000m. Flowering: unknown; Fruiting: Jan, Mar, Dec.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1925.

Psychotria alabatensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 142, Fig. 74. --Type: BS 48006 Ramos & Edaño (K, holo; iso: A, BM, K, NY*, UC). Alabat: without further locality data, Sept.-Oct. 1926.

LUZON: Quezon (Umiray), ALABAT (Villa Norte to Barangay Bacung, Sitio Canumay), CATANDUANES (Mt Nagpakdit). Low elevation (including sea-level) moist forest.

Flowering: Mar; Fruiting: May, Jun, Sept to Oct.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in Alabat in 1996.

Psychotria alzapaniensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 123, Fig. 64. --Type: BS 45688 Ramos & Edaño (BM, holo; iso in K, NY, UC). Luzon: Aurora prov., Mt Alzapan, on mossy forest slopes at c. 1600-1700m ('5000 ft'), 20 May 1925.

LUZON: Aurora (Mt Alzapan). Forest, including 'mossy forest', c. 1600-1700m.

Flowering: Apr to Jun.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)], or possibly Extinct [EX]. Only collected once in 1925.

Psychotria amaracarpoides (Merr.) Merr., EPFP 3 (1923) 552; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 71, Fig. 34; --*Grumilea amaracarpoides* Merr., PJS 10 c (1915) Bot. 134. --Type: FB 8120 Curran & Merritt (US, lecto; isolecoto: NY). Luzon: Zambales prov., Mt Tapulao (=High Peak), Nov-Dec 1907.

LUZON: Abra (Mt Posooy), Mountain Province (Mt Masapilid), Nueva Vizcaya (Caraballo Mtns), Zambales (Mt Tapulao), Bataan (Mt Mariveles; Lamao River), Rizal (Mt Tocduanbanoy), MINDORO: Mindoro Occidental (Paluan), Unspecified locality for FB 8638 Merritt. Primary forests, 1000-1600m. Flowering unknown; Fruiting: Jan-Mar., Jun, Oct.-Dec.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1926.

Psychotria amplissima Merr., PJS 17 (1920, publ. 1921) 444; EPFP 3 (1923) 552; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 125, Fig. 65. --Type: BS 15198 Ramos (US*, lecto). Leyte: Leyte prov., Dagami, along streams in forests, 9 Aug. 1912.

LEYTE (Dagami; unspecified locality for Wenzel 1628 & 1751), SAMAR: Northern Samar (Catubig River), Western Samar (Mahagna, Tarabucan; Mt Sohoton, Babasian Na Daku River), MINDANAO: Agusan del Norte (Diwata Mtns), Surigao (Sukailung). Moist forests, sometimes near streams, low elevations (eg. 150m). Flowering: Aug; Fruiting: February to Apr.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1970.

Psychotria arborescens Elmer, LPB 3 (1911) 1030; --Merr., EPFP 3 (1923) 552; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 94, Fig. 48; --Grumilea arborescens (Elmer) Merr., PJS 10 c (1915) Bot. 130. --Type: Elmer 11263 (US, lecto; islecto: A*, BISH, BM, GH*, K, L*, MO, NY*, W). Mindanao: Davao del Sur prov., Mt Apo, Todaya, altitude 4000 ft, Aug 1909.

BILIRAN (Mt Suiro), LEYTE: Southern Leyte (Cabalian), prov. unknown (Mt Abucayan), MINDANAO: Davao (Mt Apo, Todaya). Primary forests, altitude c. 1000-1200m. Possibly lower in Leyte. Flowering: unknown; Fruiting: Aug.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1954.

Psychotria balabacensis Merr., PJS 10 c (1915) Bot. 127; EPFP 3 (1923) 553; --Quisumb., PJS 41 (1930) 365, t. 27; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 115, Fig. 60. --Type: BS 21605 Escritor (PNH, holo, lost; lecto in UC, islecto: BM, P, US*). Balabac. Jan 1913.

CAMIGUIN DE BABUYANES (Balatubat), MINDORO: Mindoro Oriental (Pinamalayan), PALAWAN (Bonabona), URSULA, BALABAC (Mt Caunayan), LUMBUCAN. Forests at low altitude. Moist forest, low altitudes. Flowering: May, Sept; Fruiting: Sept.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1957.

Psychotria banahaensis Elmer, LPB 1 (1906) 26; --Merr., EPFP 3 (1923) 553; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 115, Fig. 60. --Type: Elmer 11263 (US, lecto; islecto: A*, BISH, BM, GH*, K, L*, MO, NY*, W). Mindanao: Davao del Sur prov., Mt Apo, Todaya, altitude 4000 ft, Aug 1909.

Davis, Sida Bot. Misc.

Grumilea banahaensis (Elmer) Merr., PJS 10 c (1915) Bot. 132.

var. banahaensis

LUZON: Cagayan (N of Bagio Cove; Isabela (San Mariano, Bgy. San Jose, Sitio Kapuntian; Palanan, Dicotcotan (=San Isidro), Diago; Mt Yalobo region), Aurora (Casiguran; San Luis, Bgy. Diteki), Nueva Ecija (Mt Umingan =Mingan), Rizal (Mt Angilo; Balacbac), Quezon (Mt Binuang; Lucban; Atimonan, Quezon National Park; Unisan; Guinayangan, Hinabaan; Tagkawayan, Bgy. Bagong Silang II; Mt Cadig), Camarines Sur (Sarapan; Botol River), Albay (Mt Masaraga), POLILLO, ALABAT, MINDORO: Mindoro Oriental (Mt Halcon), PALAWAN (Quezon, Tabon), MANGSEE, SIBUYAN (Mt Punong, near trail to Barrio Jaosan; Magdiwang, Hawasan, Ating River; Mt Giting-giting, Camp 1 above Magdiwang on ridge leading to Mayos Peak), MASBATE (Milagros, Bgy. Matipuron, Sitio Kalunakan, 7-R Ranch), NEGROS: Negros Oriental (Calo), SAMAR: Western Samar (Mt Sohoton; Paranas, Bgy. Tinane, Sitio Campo Uno), MINDANAO: Surigao del Norte (Mt Kabatuan). In forests, including lowland dipterocarp forest, primary or secondary (logged-over) forest, sometimes by streamsides, altitude (35-) 140-650m. Flowering: Feb, Mar; Fruiting: Feb to May, Aug to Nov.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1993.

var. montalbanensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 188, Fig. 100. --Type: Jacobs 7846 (L*, holo; iso: PNH). Luzon: Aurora prov., Sierra Madre Mtns NNE of Dingalan, altitude 1000-1100m, 18 Mar 1968.

LUZON: Aurora (Sierra Madre Mtns NNE of Dingalan), Rizal (Montalban). Forest, altitude 1000-1100m. Flowering: Unknown; Fruiting: Mar.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1968.

Psychotria barkleyi Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 26, Fig. 8; --Grumilea longipedunculata (Elmer) Merr., PJS 10 c (1915) Bot. 133; EPFP 3 (1923) 562; --Psychotria longipedunculata Elmer, LPB 3 (1911) 1027; non (Gardener) Muell.-Arg. (1881). --Type: Elmer 12532-a (US*, lecto; islecto: A*, BISH, BM, GH*, K, L*, MO, NY*, W). Sibuyan: Mt

Giting-giting, along Patos River in very humid, alluvial forest at 250m, May 1910.

LUZON: Camarines Norte (Bicol National Park, NE), SIBUYAN (Mt Giting-giting)
Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1994.

Psychotria bataanensis Elmer, LPB 1 (1906) 23; --Merr., PJS 1 Suppl. 1 (1906) 134; EPFP 3 (1923) 553; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 89, Fig. 45. --Type: Elmer 6980 (K, lecto; isolecto: NY*). Luzon: Bataan prov., Mt Mariveles, Nov 1904.
Grumilea bataanensis (Elmer) Merr., PJS 10 c (1915) Bot. 132.
Grumilea alvarezii (Merr.) Merr., PJS 10 c (1915) Bot. 132; --Psychotria alvarezii Merr., PJS 8 c (1913) Bot. 56. --Type: FB 22189 Alvarez (not seen, presumably lost or destroyed). Luzon: Nueva Ecija prov., Dec 1910.
Grumilea rizalensis (Merr.) Merr., PJS 10 c (1915) Bot. 130; --Psychotria rizalensis Merr., PJS 8 c (1913) Bot. 57; EPFP 3 (1923) 562. --Type: Loher 6345 (K, lecto). Luzon: Rizal prov., Montalban, Jul 1905.
LUZON: Nueva Ecija ((Mt Umingan; unspecified locality for FB 22189 Alvarez), Bataan (Mt Mariveles; Lamao River; Mt Kuyapo), Rizal (Mt Lumutan; Montalban). Montane forest on ridges, 700-1600m. Flowering: Jan, Oct; Fruiting: Jan, May, Jul to Dec.
Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1947.

Psychotria bayombongensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 203, Fig. 109.
--Type: Vidal 3068 (K, holo; iso: A). Luzon: Nueva Vizcaya prov., Bayombong, Mar 1886.
LUZON: Kalinga (Balbalan), Cagayan (Claveria), Nueva Vizcaya (Bayombong). Primary forest, altitude unknown. Flowering: May; Fruiting: unknown.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [EN B1ab(iii)] or possibly Extinct [EX]. Last collected in 1948.

Psychotria boholensis Merr. ex Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 131, Fig. 69.
--Type: BS 43201 Ramos (PNH, holo; iso: BM, UC, W). Bohol: Bohol prov., Kalingohan (?), rocky forest, 29 Jan 1923.
BOHOL: Bohol (Kalingohan; Bilar). Relatively dry or well-drained forest, including secondary forest; recorded on limestone, altitude 600-700m. Flowering: unknown; Fruiting: Jan, Mar, Aug, Oct.
Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1993.

Psychotria bontocensis Merr., PJS 9 c (1914, publ. 1915) Bot. 456; EPFP 3 (1923) 553; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 166. --Type: Vanoverbergh 2610 (not seen). Luzon: Mountain Province, Bauco, along streams, altitude c. 1500m, 9 Mar 1913.
LUZON: Kalinga (Mt Masingit, Lubuagan), Mountain Province (Bauco; Bontoc; Mt Masapilid), Ifugao (Banawe, Batad), Benguet (Pauai), Rizal (Balacbac), ROMBLON (based on Elmer 12165, I suspect this was actually from Mt Giting-giting in Sibuyan), MINDANAO: Agusan (without further locality data, FB 24524 Miras & Oliveros). Montane forests, in ravines and by streams, altitude 1300-1800m. Note: Pauai in Benguet is at least 2200m. Flowering: Mar to Jun, Fruiting: unknown.
Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1967.

Psychotria cadigensis Merr., PJS 12 c (1917) Bot. 175; EPFP 3 (1923) 553; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 23, fig. 5. --Type: BS 25484 Yates (US*, lecto, [here designated](#)). Luzon: Quezon prov., Mt Cadig, in forests, altitude 350-500m, Dec. 1916.
LUZON: Quezon (Mt Cadig). Forest, altitude 350-500m. Flowering: Dec; Fruiting: Dec.
The type number cited by Merrill in the original protologue was not seen by Sohmer & Davis, hence their designation of the syntype, BS 25533 Yates, as lecto (BM, lecto;

isolecto at K,P). A duplicate of the type number has been located at US.
Conservation status (Sohmer & AP Davis, 2007): Extinct (EX). Known only from two collections from Mt Cadig collected in 1916.

Psychotria capizensis Merr., PJS 17 (1920, publ. 1921) 445; EPFP 3 (1923) 553; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 170, Fig. 90. --Type: BS 30657 Ramos & Edaño (A*, lecto; isolecto: K, US*). Panay: Capiz prov., Mt Madia-as, in forests, altitude not indicated, 13 May 1918.

PANAY: Capiz-Antique (Mt Madiaas). A recent collection, Busemeyer et al. 350 (PNH, CMNH, PUH, MU), is from a primary forest near the peak, altitude 1430m. probably at medium altitudes, otherwise unknown. Flowering: unknown; Fruiting: Apr-May.

Conservation status: Critically Endangered [CR B1ab(iii)] or possibly Extinct [EX]. Known from two collections, one of which was last collected in 1992.

Psychotria cardiophylla Merr., PJS 17 (1920, publ. 1921) 446; EPFP 3 (1923) 553; --Sohmer & AP Davis, Sida

Bot. Misc. 27 (2007) 164, Fig. 86. --Type: BS 29166 Ramos & Edaño (A*, lecto; isolecto: K, P). Luzon: Quezon prov., Infanta-Siniloan Trail, along small streams in forests, 12 Jun 1917.

LUZON: Quezon (road between Infanta-Siniloan). Forests along streams, low altitudes. Flowering: unknown; Fruiting: Jun.

Conservation status (Sohmer & AP Davis, 2007): Extinct [EX]. Known only from the type specimen collected in 1917.

Psychotria casiguraensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 208, Fig. 112. --Type: BS 45291 Ramos & Edaño (BM, holo; iso: K, NY*, P, US). Luzon: Aurora prov., Casiguran, along stream in forest, 4 May 1925.

LUZON: Aurora (Casiguran), Quezon (Infanta-Siniloan Trail). Low elevation moist forest, including streamside forests. Flowering: unknown; Fruiting: May, Jun.

Conservation status (Sohmer & AP Davis, 2007): Extinct [EX]. Last collected in 1925.

Psychotria castroi Merr. & Quisumb. ex Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 98, Fig. 50. --Type: PNH 5855 Castro & Añonuevo (L*, holo; iso: K). Samar: Eastern Samar prov., Borongan, Pinangasan. Primary forest, altitude 150m, 23 Jun 1948.

SAMAR: Eastern Samar (Borongan, Pinangasan; Mt Apoi). Low altitude primary forest, 150m. Flowering: unknown; Fruiting: Jun.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Last collected in 1969.

Psychotria catanduanensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 184, Fig. 98.

--Type: BS 75589 Ramos & Edaño (NY*, holo). Catanduanes: Masanganbahi, forested streams, altitude 520 ft, 21 Aug 1928.

LUZON: Camarines Sur (Lagonoy), CATANDUANES (Masanganbahi), PANAY: Capiz (Hamanay?), Aklan (Libacao). Forests, including streamside forest, sea level to c. 160m. Flowering: unknown; Fruiting: Apr, May, Aug.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Last collected in 1928.

Psychotria cephalophora Merr., PJS 3 c (1908) Bot. 438; EPFP 3 (1923) 554; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 60, Fig. 27; --Type: BS 4048 Fénix (US*, lecto, designated by Sohmer, 2007). Camiguin de Babuyan: in forests, 27 Jun 1907.

Grumilea cephalophora (Merr.) Merr., PJS 10 c (1915) Bot. 133.

CAMIGUIN DE BABUYANES, CATANDUANES, PANAY: Aklan (Libacao). Forest at low

and medium altitude. Flowering unknown; fruiting: Jun.
Specimens identified as this species from Taiwan (eg. Chang 8721, K) are similar to the Philippine species but are not conspecific.
Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)].

Psychotria christarusselliae Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 39, Fig. 15, --
Type: BS 43230 Ramos (P, holo; iso: A, BM, K). Bohol: without precise locality.
BOHOL. Ecology not known. Flowering: unknown; Fruiting: Aug-Oct.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly extinct [EX]. Known only from the type specimen collected in 1948.

Psychotria conglomeratiflora Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 120, Fig. 62. --Type: PNH 6306 Sulista of Kansulaban Creek, in dipterocarp forest, altitude c. 200m, 26 Apr 1948.
SAMAR: Western Samar (Bagacay, bank of Kansulaban Creek), Eastern Samar (Borongan, Tagaslian). Primary dipterocarp forest, altitude 150-200m. Flowering: unknown; Fruiting: Apr to Jun.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly extinct [EX]. Last collected in 1948.

Psychotria cordatula Merr., PJS 17 (1920, publ. 1921) 447; EPFP 3 (1923) 554; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 166, Fig. 87. --Type: BS 37854 Ramos & Edaño (A*, lecto; isolecto: K, US*).
Luzon: Mountain Province, Mt Masapilid, mossy forest, altitude c. 1250m, 15 Mar 1920.
LUZON: Mountain Province (Mt Masapilid), Ifugao (Banawe, Bayninan; Mt Hagada, Bgy. Pula). Mid-montane forest, including secondary forest, altitude 1250-1600m. Flowering: unknown; Fruiting: Mar, Jul, Aug.
Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1992.

Psychotria crassifolia Miq., Ann. Mus. Bot. Lugd.-Bat. 4 (1869) 205; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 155, Fig. 82. --Type from Borneo.
Psychotria malayana auctt., non Jack

var. crassifolia

Borneo, Philippines. PALAWAN [Puerto Princesa (road bet. Puerto Princesa and Roxas, Km post 36; Mt Beaufort; Mt Pulgar; Bacungan; Malinao Mtn; Irawan, Tatanarum & Venture Area; Iwahig, Lapu-lapu; Iwahig River), Aborlan (Mt Iraan; Victoria Mtns), Quezon (Tabon), Mt Gantung; Mt Mantalingahan], MINDANAO: Bukidnon (vicinity of Tanculan), Davao Oriental (Mt Galintan). Forests, sometimes in secondary forest; often recorded on rocks and on steep slopes; altitude (10-)250-650m. Flowering: Feb to Jun; Fruiting: Jan, Mar, May to Aug.
Conservation status (Sohmer & AP Davis, 2007): Least Concern [LC]. Last collected in 1996.

Psychotria culionensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 157, Fig. 83. --Type: BS 41319 Ramos (L*, holo; iso: K, PNH). Culion, no further data, Oct 1922.
CULION. Ecology unknown. Flowering: Oct; Fruiting: unknown.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)], or possibly Extinct [EX]. Only known from the type specimen collected in 1922.

Psychotria crispipila Merr., PJS 1 (1906) suppl. 240; EPFP 3 (1923) 554; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 158, Fig. 84. --Type: BS 41319 Ramos (L*, holo; iso: K, PNH). Mountain Province, Mt Data, in mossy forest, altitude 2200m, Nov 1905.
Grumilea crispipila (Merr.) Merr., PJS 10 c (1915) 133.
Psychotria fusca (Merr.) Merr., EPFP 3 (1923) 556; --*Grumilea fusca* Merr., PJS 12 c (1917) 171. --Type: BS

26232 Ramos & Edaño (not seen). Luzon: Nueva Ecija prov., Mt Umingan (=Mingan), 14 Aug 1916.
 LUZON: Abra (Mt Posuey), Mountain Province (Mt Data; Mt Pukis), Ifugao (Mt Polis), Benguet (Mt Tabayoc (=Tabeyo); Mt Pulag; Mt Libung; Bontoc Trail (=Halsema Road), between km post 88 to 59; Pauai; Baguio; Mt Tonglon (=Mt Sto. Tomas); Libo-libo (Loher 1514); without further locality data (BS 5581 Ramos), Aurora (Sierra Madre WSW of Baler), Nueva Ecija (Mt Umingan =Mingan), Rizal (Bosoboso), Camarines Sur (Mt Potianay), PANAY: Antique (Mt Madia-as, Culasi, Hangod Tubig). Montane forests, including drier types, chiefly between 1695-2500m, much lower elevation in Rizal prov. Flowering: Mar, Jul, Nov; Fruiting: Jan to Mar, Jun, Sept, Oct.
 Conservation status (Sohmer & AP Davis, 2007): Near Threatened (NT). Last collected in 1992.

Psychotria cuernosensis Elmer, LPB 2 (1908) 521; --Merr., EPFP 3 (1923) 554; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 45, fig. 18. --Type: Elmer 10076 (L, lecto; islecto: A, BISH, BM, GH, K, MO, NY, P, US, W). Negros: Negros Oriental prov., Cuernos Mtns, mossy forests at c. 1500m, May 1908.

Psychotria mearnsii Merr., PJS 10 c (1915) 126. --Type: FB 4770 Mearns & Hutchinson (US*, lecto). Mindanao: Misamis Occ.
 MINDORO: Mindoro Oriental (north coast, Subaan River headwaters, inland from San Teodoro; Mt Halcon; Mt Ilong), PANAY: Antique (Mt Madiaas; Mt Baloy; unspecified localities), Capiz (Mt Bulilao), NEGROS: Negros Occidental (Mt Canlaon; Mt Malbug), Negros Oriental (Matangwa River; Cuernos Mtns), LEYTE (unspecified locality), MINDANAO: Misamis Occidental (Mt Malindang), Bukidnon (Mt Candoon; Mt Kitanglad), Davao del Sur (Mt Apo), South Cotabato (Mt Apo, Kidapawan side), Agusan (Mt Malaampayan), Surigao del Norte (Kabatuan). Primary and secondary forest, including high altitude 'moss forest', altitude 500-2000m.
 Conservation status (Sohmer & AP Davis, 2007): Least concern (LC). Last collected in 1992.

Psychotria cuneata Elmer, LPB 9 (1934) 3261; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 63, Fig. 29. --Type: Elmer 17170 (UC, lecto; islecto in A, BISH, BM, GH, K, L*, NA*, NY*, MO, P, PNH, US). Luzon: Sorsogon, 1916.

LUZON: Sorsogon (Mt Bulusan), TABLAS (San Andres, Mt Pan-ayong). Forests, including disturbed, ravines and ridges, recorded on limestone at 450m altitude in Tablas.
 Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1996.

Psychotria diffusa Merr., PJS 1 (1906) suppl. 134; EPFP 3 (1923) 554; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 52, Fig. 22. --Type: Elmer 6811 (NY*, lecto; islecto in K). Luzon: Bataan prov., Mt Mariveles, Nov. 1904.

Grumilea microphylla (Elmer) Merr., PJS 10 c (1915) 130; --*Psychotria microphylla* Elmer, LPB 2 (1908) 522; --Merr., EPFP 3 (1923) 559. --Type: Elmer 9505 (L*, lecto; islecto: A, BISH, BM, K, MO, NY*, US*, W). Negros: Negros Oriental prov., Cuernos Mtns. Moss-covered forests at 4500ft, Mar 1908.

var. diffusa

Widely distributed throughout the Philippines. LUZON: Mountain Province (Mt Data; Mt Polis), Ifugao (Banawe), Benguet (Lepanto; Mt Lusung; Sablan; Baguio; Mt Sto Tomas), Cagayan (Baguio Cove), Isabela (Mt Moises; Sierra Madre at Sangcad near Palanan), Quirino (Mt Alzapan), Bataan (Mt Mariveles), Rizal (Mt Irid; Mt Lumutan; Montalban; Rolay; Oriud; Angilog), Laguna (Paete), Quezon (Infanta; Real, National Botanic Garden; Mt Banahaw; Lucban; Tagkawayan), Camarines Sur (Mt Potianay; Mt Isarog), Sorsogon (Castilla; Mt Bulusan), POLILLO, CATANDUANES, MINDORO: Mindoro Occidental (Mt Calavite), Mindoro Oriental (Mt Halcon), PALAWAN, PANAY: Antique-Capiz (Mt Madia-as), NEGROS: Negros Occidental (Mt Kanlaon National Park), Negros

Oriental (Cuernos Mtns), BILIRAN, LEYTE: Leyte (Mt Mamban), SAMAR: Western Samar (Mt Sohoton), MINDANAO: Davao Oriental (Mt Galintan). Humid forest, including secondary forest, altitude 500-2500m.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened (NT). Last collected in 1996.

var. agusanensis (Elmer) Merr., PJS 10 c (1915) Bot. 123; EPFP 3 (1923) 555; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 55, Fig. 24. --Type: Elmer 9800 (A, lecto; isolecto: BM, K, L, MO, NY, US, W). Mindanao: Agusan del Norte prov., Mt Urdaneta (= Mt Hilong-hilong), Cawilanan Peak, wind-swept forested ridge at c. 1300m, Sept 1912. *Psychotria ovalis* Elmer, LPB 3 (1911) 1023; --Merr., EPFP 3 (1923) 560. --Type: Elmer 10567 (L, lecto; isolecto: A, BISH, BM, GH, K, MO, NY, US, W). Mindanao: Davao del Sur prov., Mt Apo, Todaya, dense ridge forests S of Mt Calelan, altitude c. 1400m, May 1909.

LUZON: Camarines Norte (Sipocot National Park), Albay (Mt Malinao, Tiwi side), MINDANAO: Bukidnon (Mt Kitanglad; Tangcunan), Agusan del Norte (San Mateo, sitio Tungao), Davao Oriental (Mt Kampalili). Forests, altitude 350-1800m.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened (NT). Last collected in 1995.

var. cervina Elmer, LPB 2 (1908) 592; --Merr., EPFP 3 (1923) 555; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 55, Fig. 24. --Type: Elmer 9800 (A, lecto; isolecto: BM, K, L, MO, NY, US, W). Negros: Negros Oriental prov., Cuernos Mtns, in forest of wind-swept ridge at c. 1300m, Apr 1908.

NEGROS: Negros Oriental (Cuernos Mtns). Only known from the type collection.

Conservation status (Sohmer & AP Davis, 2007): Extinct (Ex). Only collected once in 1908.

Psychotria dingalanensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 171, Fig. 91. --Type: Jacobs 7654 (K, holo; iso L*). Luzon: Aurora prov., Sierra Madre Mtns NNE of Dingalan, primary dipterocarp forest, altitude 300-400m, 12 Mar 1968.

LUZON: Aurora (Sierra Madre Mtns of Dingalan), primary dipterocarp forest, altitude 300-400m. Flowering: Mar; Fruiting: Mar.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)], or possibly Extinct [EX].

Psychotria elliptifolia Elmer, LPB 1 (1906) 66; --Merr., EPFP 3 (1923) 555; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 47, Fig. 19. --Type: Elmer 7943 (A, lecto; isolecto: K, L, NY, US, W). Luzon: Quezon prov., Mt Banahaw, wet mossy region at 1600m, Apr. 1906.

Distribution?

Conservation status (Sohmer & AP Davis, 2007): Vulnerable (VU B1ab(iii)). Last collected in 1994.

Psychotria elliptilimba Merr., PJS 17 (1920, publ. 1921) 448; EPFP 3 (1923) 555; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 92, Fig. 46. --Type: BS 30534 Ramos (US, lecto; isolecto: A*, K, P). Catanduanes: Sto. Domingo River on low elevation forested slopes, 3 Dec. 1917.

CATANDUANES. Only known from the type collection.

Conservation status (Sohmer & AP Davis, 2007): Extinct (Ex). Only collected once in 1917.

Psychotria elmeriana Hochr., Candollea 5 (1934) 270; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 41, Fig. 17; --P. non Krause (1909). --Type: Elmer 14199 (A, lecto; isolecto: BISH, BM, GH, K, L, MO, NY, P, UC, US, W). Mindanao: Agusan del Norte prov., Mt Urdaneta (= Mt Hilong-hilong). Wet, stony forested slopes at c. 1800m, Oct. 1912.

MINDORO: Mindoro Oriental (Laylay, 10 km from San Teodoro), MINDANAO: Agusan

del Norte (Mt Urdaneta, =Mt Hilong-hilong). Forest, c. 1800m.
Conservation status (Sohmer & AP Davis, 2007): Vulnerable (VU B1ab(iii)). Last collected in 1985.

Psychotria fenicis Merr., PJS 17 (1920, publ. 1921) 449; EPFP 3 (1923) 555; --Sohmer & AP Davis, Sida Bot.

Misc. 27 (2007) 176, Fig. 94. --Type: BS 29914 Fenix (US*, lecto; Isolecto: L*). Luzon: Pangasinan prov., Labrador, Mt San Isidro Nov. 1917.

LUZON: Pangasinan (Labrador, Mt San Isidro), Zambales (Mt Tapulao =High Peak; Masinloc, Coto Mines; San Marcelino, Mt Aglao; Mt Pinatubo; Subig =Subic), Bataan (Mt Natib: slopes at Tawawa; Bagac side of Mt Natib, Bgy. Banawang, Sitio Ulingan; without further locality data for FB 23223 Alhambra & Canlas). Dry forest or well drained ridge forest, including secondary forest; recorded on rocky soils, altitude 200-400m. Flowering: May, Nov; Fruiting: Apr, Nov-Jan

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1992.

Psychotria foxworthyi Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 145, Fig. 76. --Type: BS 657 (NY*, holo; iso GH, K). Palawan: without further data, Mar-Apr 1906.

PALAWAN. Ecology unknown. Flowering: Mar, Apr; Fruiting: Mar, Apr.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct [EX]. Known only from type specimen collected in 1906.

Psychotria frakei Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 147, Fig. 78. --Type: PNH 38038 Frake (A, holo; iso L*). Mindanao: Zamboanga del Norte prov., locality not legible, 2 Jan 1958.

MINDANAO: Zamboanga del Norte (Tulaln; Dikus). Primary or secondary forests, altitude 300-600m. Flowering Jan; fruiting: Nov-Jan

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1958. Three collections cited by Sohmer & Davis.

Psychotria galintanensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 188, Fig. 101. --Type: BS 48899 Ramos & Edaña (UC, holo; iso NY*). Mindanao: Davao Oriental prov., Mt Galintan, on forest slopes at 1000m, 13 Jun 1927.

MINDANAO: Davao Oriental (Mt Galintan). Forest, low to medium elevation, eg. c. 1000m. Flowering: unknown; Fruiting: Jun.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct [EX]. Only known from the type specimen collected in 1927.

Psychotria gitingensis Elmer, LPB 3 (1911) 1024; --Merr., EPFP 3 (1923) 556; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 157, Figs. 84, 85. --Type: Elmer 12431 (BM, lecto; isolecto: A, BISH, GH, K, L*, MO, NY*, P, US*, W). Sibuyan: Mt Giting-giting, Magallanes (=Magdiwang), on forested ridge, altitude 2750 ft, May 1910.

Grumilea similis (Elmer) Merr., PJS 10 c (1915) Bot. 134; --*Psychotria similis* Elmer, LPB 3 (1911) 1025; --Merr., EPFP 3 (1923) 563; --Type: Elmer 12439 (GH*, lecto; isolecto: BISH*, L*, NY*, US*). Sibuyan: Magallanes (=Magdiwang), Mt Giting-giting, 'in red soil compressed in between rocks of a wind-swept forested ridge at 3000ft, May 1910.

Grumilea versicolor (Elmer) Merr., PJS 10 c (1915) Bot. 130; --*Psychotria versicolor* Elmer, LPB 4 (1912) 1352; --Merr., EPFP 3 (1923) 564. --Type: Elmer 12763 (A*, lecto; isolecto: BISH, BM, GH, K, L*, MO, NY*, P, US*, W). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), banks of Iwahig River, Mar 1911.

Psychotria lucida Merr., PJS 17 (1920, publ. 1921) 452. --Type: BS 29716 Ramos & Edaña (US*, lecto; isolecto: A*, K, NY, P). Luzon: Rizal prov., Mt Lumutan, Jul 1917.

Psychotria malayana auctt., non Jack

Philippines and possibly Borneo. CALAYAN, LUZON: Ilocos Norte (Bangui to Claveria), Mountain Province (as former Lepanto District for Vidal 1488), Cagayan (Baguio

Cove), Pangasinan (Bolinao, Luciente I), Nueva Ecija (Caraballo Mtns), Aurora (Baler, Cemento, on road c. 8 km from Baler), Rizal (Mt Angilog; Mt Irid; Mt Batay; Mt Lumutan; Montalban), Batangas (no further locality data for Cuming 1526), Quezon (Quezon National Park, Pinagbanderaan Trail), Camarines Norte (Paracale), Albay (no further locality data for Vidal 3054), POLILLO, MINDORO: Mindoro Occidental (Mt Iglit-Baco National Park, Calintaan, Barangay Poypoy, Sitio Sapaton), Mindoro Oriental (Puerto Galera; Mt Halcon; Pinamalayan; Bongabon and Pinamalayan; Mt Yagaw, E slopes), PALAWAN [Puerto Princesa (Irawan River valley; base of Mt Beaufort, Tatanarom), Aborlan (Victoria Mtns; Trident Mining area), Brookes Point, Pulot), Mt Gantung; Mt Mantalingahan], SEMIRARA, TABLAS (San Andres, Bgy. Marigondon Sur, Sitio Barkwang); SIBUYAN (Mt Giting-giting; Mt Punong; Jaosan-Punong River trail; Magdiwang, SE of Binalabag), MASBATE (Masbate, Milagros, Bgy. Matipuron, Sitio Kalunakan, 7-R Ranch), PANAY: Antique (Mt Madia-as; San Remigio; unprecise locality for BS 32511 McGregor), Magosolon Aklan (Libacao; Mt Timbaban; Mt Macosolon =Magosolon), Capiz (Mt Bulilao), Iloilo (Mt Salibongbong; Miag-ao), GUIMARAS (Buenavista, Bgy. Tubod), DANJUGAN (off Cauayan, Negros Occidental prov.), CEBU (Alcoy, Manguera Forest; Mantalongon; Carmen, Corte, Malac), LEYTE: Leyte (Palo; Mt Abucayan; unprecise locality for Wenzel 1297, 1361, 1376 & 1416), SAMAR: province unknown (Quinay, for Vidal 1481c), Western Samar (Basey, Bgy. Hinamok, Pinabacdao, near Lakes, vicinity of km 56 and Bgy. Cambayan; Paranas, Bgy. Lokilokon, Sitio Kapinyahan; San Juanico), Eastern Samar (Balangiga, Bgy. I, Sitio Cantinoc), TAWI-TAWI (Birad-dali; Languyan), JOLO (Mt Dajo), BASILAN, MINDANAO: Zamboanga (without further locality data, Merrill 11621), Misamis (without further locality data, FB 17986 Miranda), Agusan del Norte (without further data, FB 20734 Rafael & Ponce), Surigao del Sur (Adlay), Surigao (unprecise localities for BS 34616 & 36416 Ramos & Pascasio), DINAGAT (Loreto; Cambinliw, Santiago), PONEAS ISLET (near SIARGAO), BUCAS GRANDE (N end, Bgy. Salug, Sitio Lawigan). Moist forest, including beach and mangrove forest, and secondary forest, sometimes on cultivated lands, on well-drained soils and limestone, altitude 0-1000m. Flowering: Jan to Sept; fruiting all year round. Conservation status (Sohmer & AP Davis, 2007): Least Concern (LC). Last collected in 1996.

***Psychotria gracilipes* Merr.**, PJS 8 c (1913) 52; EPFP 3 (1923) 556; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 226, Fig. 123;--

Type: Weber 1572 (A*, lecto; isolecto: GH*, K, P, US*). Luzon: Cagayan prov., Abulug River, rocky, forested hillside on limestone, altitude unknown, 5 Feb 1912.

Grumilea gracilipes (Merr.) Merr., PJS 10 c (1915) Bot. 132.

Psychotria isarogensis (Merr.) Merr., EPFP 3 (1923) 556; --*Grumilea isarogensis* Merr., PJS 10 c (1915) Bot. 136. --Type: BS 1500 prov., Mt Isarog, mossy forest, altitude unknown, 29 Nov 1913.

LUZON: Cagayan (unspecified locality for FB 14776 Darling), Quirino (Mt Alzapan), Camarines Sur (Mt Isarog), Sorsogon (unspecified locality for BS 23700 Ramos), BILIRAN (Mt Suiro), CAMIGUIN, MINDANAO: Davao Oriental (Mt Mayo; Mt Kampalili), Agusan del Norte (Mt Urdaneta (=Mt Hilong-hilong), Cabadbaran). Moist to wet forest, altitude c. 700-1800m. Flowering: Mar, Apr; Fruiting: Jan, Apr to Aug, Oct.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1988.

***Psychotria hilonghilongensis* Sohmer & AP Davis**, Sida Bot. Misc. 27 (2007) 220, Fig. 119;

--Type: PNH 10760 Mendoza & Convocar (A, holo; iso L*). Mindanao: Agusan del Norte prov., Mt Hilong-hilong, Cabadbaran, mossy forest ridge, altitude 1050m, 29 Apr 1949.

MINDANAO: Agusan del Norte (Mt Hilong-hilong), in mossy forest, altitude 1050m.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)].

Only known from the type specimen collected in 1949.

Psychotria ilocana (Merr.) Merr., EPFP 3 (1923) 556; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 220, Fig. 120; --(K, lecto; islecto: A*, NY*, US*). Luzon: Ilocos Norte prov., Bangui, low altitude forest, Feb 1917. LUZON: Ilocos Norte (Bangui; Burgos), Zambales (without further locality data, for BS 4704 Ramos). Dry forest, low elevation. Flowering: unknown; Fruiting: Feb, Mar. Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct [EX]. Last collected in 1918.

Psychotria iridensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 134, Fig. 70. --Type: BS 48443 Ramos & Edaño (A, holo; iso: BM, K, NY*, UC). Luzon: Rizal prov., Mt Irid, on damp forest slopes, 13 Nov. 1926. LUZON: Ifugao (Mt Bobor, Barangay Batad), Rizal (Mt Angilo; Mt Irid; unspecified locality for Loher 6402). Forests, including disturbed and possibly secondary forest, 1000-1700m. Flowering: Apr; Fruiting: Feb, Apr, Nov. Conservation status (Sohmer & AP Davis, 2007): Vulnerable (VU B1ab(iii)). Last collected in 1994.

Psychotria iwahigensis Elmer, LPB 4 (1912) 1351; --Merr., EPFP 3 (1923) 556; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 31, Fig. 11; --Type: Elmer 13052 (NY, lecto; islecto: BM, L). Palawan: Mt Pulgar, in forests at c. 100m, Apr 1911. PALAWAN (Cleopatra Ranges, Barangay Tanabag, Sitio Calabayog; Mt Pulgar; Rizal, Barangay Ransang, Balen-balen). Low altitude humid forests c. 100m. Flowering unknown; fruiting Apr, Jun. Conservation status (Sohmer & AP Davis, 2007): Vulnerable (VU B1ab(iii)). Last collected in 1996.

Psychotria ixoroides Bartl. ex DC, Prodr. 4 (1830) 522; --Merr., EPFP (1923) 556; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 41, Fig. 17. --Type: Haenke, sn. (PR, holo). Luzon: without precise locality. LUZON: Ilocos Norte (Burgos), Isabela (Palanan Bay), Pangasinan (Mt San Isidro Labrador), Nueva Ecija (Mt Umingan), Bataan (Mt Mariveles; unspecified locality), Bulacan (Angat; Norzagaray), Rizal (Mt Susong Dalaga; Mt Irid; Tanay, San Isidro; unspecified locality), Quezon (Atimonan, Quezon National Park; Malikboy; Pagbilao; Tagkawayan; Mt Cadig), Camarines Sur (vicinity of Bicol National Park; Mt Asog), Albay (unspecified locality), Sorsogon (Mt Bulusan and Bulusan Lake; Casiguran; Castilla), POLILLO, ALABAT, CATANDUANES (Simamla), MINDORO: Mindoro Occidental (Paluan), Mindoro Oriental (Inland from San Teodoro, at and above Subaan Reserve; Puerto Galera), PALAWAN (Taytay, Lake Manguao; Puerto Princesa; Mt Victoria, Aborlan, Mt Iraan; Quezon, Bundog near Sumindap River; San Antonio Bay, Brookes Point, lower slopes of Mt Mantalingahan; Rizal, Ransang, Madubis; BALABAC (Pasig Bay; Panaan), PANAY: Antique (Valderrama, lower slopes of Mt Baloi), Aklan (Libacao), CEBU: Cebu (Alcoy, Manguera Forest), BILIRAN (Mt Suiro; Naval, Libtong), LEYTE: Leyte (Palo; Dagami, Mt Top), SAMAR: Eastern Samar (Balangiga), Western Samar (Paranas, Campo Uno), MINDANAO: Davao Oriental (Mt Galintan), Surigao (unspecified locality; Sukailang); Surigao del Sur (Hinatuan), DINAGAT (Mabini, Tubajon; unspecified locality), SIARGAO and adjacent PONIAS Islet. Disturbed vegetation generally liked logged-over and secondary forest and coconut plantation, reported on limestone and lateritic soils, from sea-level to 700m. Flowering Jan-Jun; fruiting: Feb, Aug., Sept. Conservation status (Sohmer & AP Davis, 2007): Least Concern (LC). Last collected in 1997.

Psychotria lagunensis (Merr.) Merr., EPFP 3 (1923) 556; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 174, Fig. 92; --Grumilea lagunensis Merr., PJS 12 c (1917) Bot. 169. --Type: BS 23826 Ramos (K, lecto; Isolecto: US*). Luzon: Laguna prov., San Antonio, in damp forest, 19 Oct 1915. LUZON: Quirino (Mt Alzapan), Rizal (Montalban; Mt Susong Dalaga; Mt Lumutan; Mt Irid), Laguna (Majayjay; San Antonio), Quezon (Mt Binuang; Tagkawayan), Camarines Norte (Paracale), Camarines Sur (Sarapan), POLILLO (Anibawan), ALABAT, CATANDUANES (no further locality data, 3 collections). Moist forest and forested slopes, altitude 70-1532m. Flowering: Mar; Fruiting: Jun to Dec. Conservation status (Sohmer & AP Davis, 2007): Vulnerable [BU B1ab(iii)]. Last collected in 1928.

Psychotria lanaensis (Merr.) Merr., EPFP 3 (1923) 557; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 52; --Grumilea lanaensis Merr., PJS 10 c (1915) Bot. 136. --Type: Clemens 924 (not seen). Mindanao: Lanao del Sur prov., Camp Keithley. Swamps at c. 750m, Jun 1907. LUZON: Ifugao (Banawe: Bayninan), MINDORO: Mindoro Occidental (Mt Calavite), SIBUYAN: Mt Giting-giting, DINAGAT: Krominco, Mt Redondo, open pit mine. Primary and disturbed forests, including swamp forest, altitude 650-700m. Conservation status (Sohmer & AP Davis, 2007): Near Threatened. Last collected in 1991.

Psychotria lancilimba Merr., PJS 17 (1920, publ. 1921) 451; EPFP 3 (1923) 557; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 103. --Type: BS 29713 Ramos & Edaño (US, lecto). Luzon: Rizal prov., Mt Lumutan, Jul 1917. LUZON: Benguet (Baguio), Nueva Vizcaya (Caraballo Mtns), Zambales (without further locality data, for BS 5018 Ramos), Rizal (Mt Irid; Mt Batay; Mt Lumutan; Mt Mapatag). Lower montane forest, altitude 600-1000m. Flowering: Jul; fruiting: Jul. Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1926.

Psychotria leptothyrsa Miq., Ann. Mus. Bot. Lugtd.-Bat. 4 (1868) 208; --Merr., EPFP 3 (1923) 557.

Coelospermum ahernianum Elmer, LPB 1 (1906) 3. --Type: Ahern 196 (US*, iso). Luzon: Camarines Sur prov., Pasacao (Dalupaon), Jan 1902.

Distribution

Psychotria lianoides Elmer, LPB 3 (1911) 1029; --Merr., EPFP 3 (1923) 557; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 47, Fig. 20. --Type: Elmer 11645 (P, lecto; isolecto: A, BISH*, BM, GH, K, L*, MO, NA*, NY* 2 sheets, US, W). Mindanao: Davao del Sur prov., Mt Apo, Todaya. Humid forest along Baruring River on trail to Talon at c. 1300m, Sept 1909. MINDANAO: Davao del Sur (Mt Apo). Humid forest, altitude 1200-1300m. Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Only known from the type specimen collected in 1909.

Psychotria linearis Bartl. ex DC, Prodr. 4 (1830) 522; --Merr., EPFP (1923) 557; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 58, Fig. 25. --Type: Haenke *sn* (PR, holo). Luzon: "in ins. Manila prope Sorzogon". *Psychotria depauperata* Merr., PJS 12 c (1917) Bot. 174; EPFP 3 (1923) 554. --Type: Merrill 10487 (US, lecto; isolecto: A, BM, K, L, NY, P, PNH). Alabat: back of Sangirin on dry ridges in virgin forest area at c. 100m, 23 Dec. 1916. *Amaracarpus longifolius* Elmer, LPB 1 (1906) 1. --Type: Merrill 4000 (PNH?, holo; iso US*). Luzon: Quezon prov., Atimonan, Mar 1905. LUZON: Nueva Ecija, Rizal (Mt Susong Dalaga; Mt Irid; Tanay, San Isidro), Quezon (Mt Pular; Mauban; Atimoman), Camarines (no further locality data), ALABAT, SAMAR:

Western Samar (Mt Sohoton; Basey). Relatively dry ridge forest, altitude 100-500m. Some of the cited localities are in predominantly limestone areas. Fl. Aug, Nov; fr. Jan, Mar, Aug-Oct, Dec.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1970.

Psychotria loheri Elmer, LPB 1 (1908) 356; --Merr., EPFP 3 (1923) 557; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 234, Fig. 128; --Type: Elmer 8584 (K, lecto; isolecto: A, L*, NY*, US*, W). Luzon: Benguet prov., Mt Sto Tomas, 'dense oak woods at 7500 ft', Mar 1907.

Grumilea loheri (Elmer) Merr., PJS 10 c (1915) Bot. 132.

Psychotria vanoverberghii Merr., PJS 9 c (1914, publ. 1915) Bot. 457; EPFP 3 (1923) 563. --Type: Vanoverbergh 2818 (US*, lecto; isolecto: K). Mountain Province, Bauco, in forests from 1300-1600m, Apr 1913.

LUZON: Ilocos Norte (Mt Darna), Abra (unspecified locality for BS 7062 Ramos), Mountain Province (Bauco; Mt Data; unspecified locality for Vanoverbergh 2861), Benguet (Baguio; Mt Sto Tomas), Zambales (Sta Cruz, Acoje Mine concession area. Sta Cruz), LEYTE: Leyte (Buena Vista near Jaro). Mostly in the higher montane sites, including mossy forests, altitude 1300-2200m. Presumably at considerably much lower elevations in Zambales province and Leyte.

Psychotria longipedicellata Elmer, LPB 1 (1906) 22; --Merr., EPFP 3 (1923) 557; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 63, Fig. 28. --Type: HN Whitford 907 (K, lecto; isolecto: NY*, P, US*). Luzon: Quezon prov., Lagumanoc, Sept 1904. --Syntype: FB 1727 WW Clark (NY*, US*). Burias, Jun 1904.

Grumilea longipedicellata (Elmer) Merr., PJS 10 c (1915) Bot. 133.

LUZON: Aurora (Mt Dingalan), Quezon (Lagumanoc), BURIAS (no further locality data). Low altitude forests. Flowering: Jun; Fruiting: Sept, Nov.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [(CR B1ab(iii))] or Extinct [Ex]. Last collected in 1910.

Psychotria longissima Quisumb. & Merr., PJS 37 (1928) 206; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 179, Fig. 95. --Type: BS 45681 Ramos & Edaño (UC, lecto; isolecto: A, K, NY*, US*). Luzon: Aurora prov., Mt Alzapan, forested slopes, altitude c. 1300m, 7 Jun 1925.

LUZON: Aurora (Mt Alzapan). Forests, altitude c. 1300m. Flowering: May, Jun; Fruiting: unknown.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [(CR B1ab(iii))] or Extinct [Ex]. Known only from the type specimen collected in 1925.

Psychotria luzoniensis (Cham. & Schltdl.) Fern.-Villar, Novis. App. (1880) 157; --Merr., EPFP 3 (1923) 558; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 201; --*Coffea luzoniensis* Cham. & Schltdl., Linnaea 4 (1829) 32. --Type: Chamisso *sn*, (LE, holo; iso: K). 'Luçonina'.

Grumilea luzoniensis (Cham. & Schltdl.) Merr., PJS 10 c (1915) Bot. 131, as 'luçonensis'.

Psychotria tacpo (Blanco) Rolfe, J. Linn. Soc. (Bot.) 21 (1884) 312; --*Paederia tacpo* Blanco, Fl. Filip. (1837) 160. --Type: Unknown.

Widely distributed throughout the Philippines. LUZON: Ilocos Norte (Pagudpud, Bgy Dampig, Sitio Nalanus; Bangui; Mt Palimlim; Mt Pico de Loro; Nueva Era to Mt Semenublan; Mt Burnay; Mt Bubungkayo en-route from Sto. Niño to Miner's camp; unspecified locality for FB 13972 Merritt & Darling), Abra (Sallapadan, Poblacion Cangal; Masissiat), Ilocos Sur, Kalinga (Lubuagan, Mabuntat), Mountain Province (Bontoc), Benguet (Sablang = Sablan; Trinidad to Kapangan; Baguio; between Baguio & Sablan; Tonglon = Mt Sto Tomas; La Union (Sta. Rita; Bauang), Cagayan (Mt Bawa; Mt Caboloan; Peñablanca), Isabela (Ilagan to Echague), Nueva Vizcaya (Carasacas; vicinity of Dupax; unspecified locality), Pangasinan, Zambales (unspecified locality for BS 34666 Edaño; HERMANA MAYOR IS; Mt Pinatubo), Bataan (Limay; Mt Mariveles),

Pampanga (Arayat; Mt Pinatubo, Camp Stotsenburg), Rizal (Manila; Quezon City: Balara, Novaliches, & San Francisco del Monte; Pasig; Antipolo; Bosoboso; San Mateo (*Comision Flora Forestal 1455*), Montalban; Mt Mapatag; Mt Angilog; Mt Irid; Mt Pinagbayanan & San Andales = San Andres; Mt Susong Dalaga; Teresa, Kay Ungulan), Laguna (Los Baños; Mt Makiling; Calauan; Sta. Maria; Pagsanjan), Quezon (Infanta; Pagbilao; Guinayangan, Salakan), Cavite (Mt Palay-palay National Park; Palicpican River; Pico de Loro), Batangas (Mt Maculot; Mataas na Kahoy; inland from Malabrigo Point), Camarines Sur (Pili), Albay (Daraga), Sorsogon (Castilla; Mt Bulusan, Irosin), POLILLO, ALABAT (Bgy. Bacung, Sitio Canumay), MINDORO: unspecified prov. & locality for FB 19932 Amarillas; Mindoro Occidental (Abra de Ilog, S (?) Alatin; Iriron), Mindoro Oriental (Subaan River, inland from San Teodoro; Puerto Galera, Mt Minolo & Mahabang Parang Cove; Mt Halcon; Pinamalayan), PALAWAN (Quezon, Lipuun Peak; unspecified locality for BS 561 Foxworthy), MALAPACKUN, MARINDUQUE (Torrijos, Bgy. Dampulan, Sitio Maulawin, Hawilian), MASBATE (Bgy. Tugbo; also unspecified localities for Merrill 3395, FB 12563 Rosenbluth), SEMIRARA (Caluya, Pungtod), PANAY: Antique (unspecified locality for BS 32459 McGregor), Iloilo (Miag-ao; unspecified locality for BS 18068 Robinson), GUIMARAS (Buenavista), NEGROS: Negros Occidental (Luzuriaga), Negros Oriental (San Jose, Calo; Cuernos Mtns). Forest, including primary, disturbed, and secondary forest; recorded from limestone and well-drained substrates, altitude 0- c. 2000m but mostly below 700m. Conservation status (Sohmer & AP Davis, 2007): Least Concern [LC]. Last collected in 1996.

***Psychotria macgregorii* Merr.**, PJS 5 c (1910) Bot. 389; EPFP 3 (1923) 558; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 223, Fig. 121; --Type: Merrill 6495 (published as 8495) (US*, lecto; isoleccto: NY*). Luzon: Benguet prov., Mt Pulog (=Pulag), mossy forest above 2400m, May 1909. *Grumilea macgregorii* (Merr.) Merr., PJS 10 c (1915) Bot. 133. LUZON: Ifugao (Mt Polis; Sumigar, Mt Pimmage), Mountain Province (Mt Data; Mt Amuyao, Barlig), Benguet (Mt Tabayoc = Tabayo; Mt Pulag; Bokod, Lusod; Mt Pauai; Mt Tonglon = Sto. Tomas), Benguet-Nueva Vizcaya prov. borders (for FB 15841 Curran & Merritt), Nueva Ecija (Mt Umingan = Mingan); Rizal (Montalban, for Loher 1515), PALAWAN (Mt Manalsal; Mt Mantalingahan), DINAGAT (Mt Redondo, KROMINCO). Montane forest, including mossy forest, with one record from grassland; on ultramafics on Dinagat, altitude (?700-)1500-2800m. Flowering: Jan, Mar to Jun; Fruiting: Jan to Jun, Sept. Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1996.

***Psychotria madulidii* Sohmer & AP Davis**, Sida Bot. Misc. 27 (2007) 60, Fig. 26. --Type: BS 78408 Edaño (A, holo). Luzon: Cagayan prov., Mt Cagua, Oct-Nov 1929. LUZON: Cagayan (Mt Cagua), PALAWAN (Mt Mantalingahan). Ecology unknown. Flowering unknown; Fruiting: Oct, Nov. Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1929.

***Psychotria magnifolia* Merr.**, PJS 17 (1920, publ. 1921) 453; EPFP 3 (1923) 558; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 120, Fig. 63. --Type: BS 28828 Ramos & Edaño (US, lecto; isoleccto: A*, K, P). Luzon: Quezon prov., Mt Binuang, along small streams in damp forests, 11 May 1917. LUZON: Quezon (Mt Binuang), Rizal (precise locality not known, based on Loher 15011 (UC). Moist forest, reported along streams, elevation unknown. Flowering: unknown; Fruiting: May.

Conservation status (Sohmer & AP Davis, 2007): Extinct [EX]. Last collected in 1917.

Psychotria manillensis Bartl. ex DC. Prodr. 4 (1830) 522; --Merr., EPFP 3 (1923) 559; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 138, Figs. 73a, 73b. --Type: Haenke *sn* (PR, holo). Luzon: Sorsogon prov., without precise locality.

Psychotria propinqua (Merr.) Merr., EPFP 3 (1923) 561; --*Grumilea propinqua* Merr., PJS 12 c (1917) Bot. 170. --Type: BS 26570 Ramos & Edaño (K, lecto; isolecto: NY*). Luzon: Aurora prov., Mt Dingalan, 27 Jan 1916.

Psychotria ridsdalei Sohmer & AP Davis, ined., --Type: SMHI 1648 Ridsdale (L, holo; iso L)

Ryukyus, Taiwan (Lutao and Lanyu), and the Philippines.

BATAN (Mt Iraya; Mt Matarem; along road from Itbud to Mahatao, DALUPIRI, CALAYAN (Balatubat, Salpad), CAMIGUIN DE BABUYANES (Mt Malabsing; Camiguin Volcano), LUZON: Ilocos Norte (Bangui; Pagudpud, Dampig, Nalamus; Mt Pico de Loro; Mt Bubungkayo, from Sto Niño to Miner's Camp, Mt Darna; Mangoratao; Dumalneg, Cabel, Simuba Mtns, Apayao (Mt Magnas), Ilocos Sur (Burgos), Cagayan (Sta. Praxedes, San Juan; Claveria, Kilkiling, Mt Taggat), Nueva Ecija (Mt Umingan, =Mingan), Bataan (Mt Mariveles, Lamao River), Bulacan (Angat Watershed area, Norzagaray, Barangay San Lorenzo); Rizal (Mt Irid; Montalban; Mt Mapatad, San Andres; Mt Tokduanbanoy), Laguna (Mt Makiling), Cavite (Ternate, Mt Palay-palay/Mataas na Gulod National Park, Ternate, Tala), Quezon (Mt Banahaw, Dolores, Kinabuhayan), POLILLO (Karlagaan), ALABAT, CATANDUANES (Kasalugan), MINDORO: Mindoro Oriental (Puerto Galera; Pinamalayan; Mansalay, Mt Naapug; Mt Yagaw, SE slopes), MASBATE (Milagros, Barangay Matipuron, Sitio Kalunakan, 7-R Ranch), PALAWAN (Puerto Princesa, Cabayugan; Mt Cleopatra Ranges; Quezon; Mt Balagbag), BALABAC, PANAY: Iloilo (Miag-ao), MINDANAO: South Cotabato. Primary forests (including remnant dipterocarp forest), disturbed forest, regrowth and regenerating forest, at the margins of forest (eg. near meadows and fields), and secondary forest; recorded on limestone, altitude 50-900m. Flowering: Mar to Sept; Fruiting Jan, Aug, Nov.

Conservation status (Sohmer & AP Davis, 2007): Least Concern [LC]. Last collected in 1996.

Psychotria mariguidonensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 208, Fig. 113; --*Psychotria longipetiolata* Merr., PJS 17 (1920, publ. 1921) 451, non Thwaites (1849). --Type: BS 30418 Ramos (K, lecto). Catanduanes: Sto. Domingo River and Mt Mariguidon, on forested slopes, Dec 1917.

LUZON: Ifugao (Banawe, Mt Taggutu), Isabela (Palanan, Dibungko), CATANDUANES (Mt Mariguidon). Lowland forest near sea level at Palanan, Isabela, possibly 1000-1200m in Ifugao, reported at c. 180m by Sohmer & Davis. Flowering unknown; Fruiting: Apr, Aug-Dec.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1991.

Psychotria membranifolia Bartl. ex DC, Prodr. 4 (1830) 522; --Merr., PJS 10 c (1915) Bot. 124; EPFP 3 (1923) 559; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 115, Fig. 61; --*Chasalia membranifolia* (Bartl. ex DC) Elmer, LPB 3 (1911) 1032. --Type: Haenke *sn* (PR, holo). Luzon: without further locality data.

Psychotria membranifolia var. *elmeri* Merr., PJS 10 c (1915) Bot. 124; EPFP 3 (1923) 559. --Type: Merrill 4083 (K, lecto; isolecto: NY). Luzon: Quezon prov., Atimonan.

Psychotria chasalioides Merr., PJS 10 c (1915) Bot. 125; EPFP 3 (1923) 554. --Type: Elmer 12314 (MO, lecto; isolecto: A, BISH, L*, NY*, US*). Sibuyan: Mt Giting-giting, Apr 1910.

New Guinea and probably many other places in Malesia. Found on nearly all the islands and island groups of the Philippines, although extirpated in many lowland areas. PALAUI, LUZON: Ilocos Norte (Mt Palimlim; Bangui to Claveria; unspecified locality for BS 7640 Ramos), Apayao (Mt Magnas), Cagayan (Gonzaga; Pinagteponan River),

Isabela (Malunu; Palanan), Aurora (Casiguran), Nueva Ecija (Mt Umingan=Mingan), Pampanga (Mt Pinatubo, Camp Stotsenburg), Rizal (Mt Irid; Montalban; Mt Mapatag, San Andres), Laguna (Los Baños; Mt Makiling; Majayjay; Mt Banahaw), Quezon (Umiray; Mt Tulaog; Mt Binuang; Lucban; Mt San Cristobal, Dolores, Sta. Lucia; Kinabuhayan; Atimonan, Quezon National Park; Camarines Norte (Paracale), Camarines Sur (Buhi; Agosahis), Albay (Mayon Volcano), Sorsogon (Mt Bulusan), MINDORO: Mindoro Occidental (Mt Sablayan), Mindoro Oriental (San Teodoro, Sibuang; Mt Halcon; Mt Ilong), SIBUYAN (Mt Giting-giting and vicinity), MASBATE (Masbate, Tugbo), CATANDUANES (Viga-Gigmoto area), MARINDUQUE (Dampulan, Matalim), PALAWAN: Palawan (Aborlan, Malasgao and Panalingajan River; Quezon, Sumindap River, Barangay Bundog; Mt Gantung), PANAY: Aklan (Libacao), Capiz (Jamindan; Mt Kinablan), CEBU (Argao, Poblacion Alcoy), BOHOL (Bilar, Logarita; Valencia; Dimyao), BILIRAN, LEYTE: Leyte (Ormoc, Tongonan; Ormoc, Mt Janagdan; Ormoc, Mt Mamban; SAMAR: Northern Samar (Catubig River), Western Samar (Mt Malingon, Paranas; Loquilocon; Mt Concord; Sohoton, Rawis, Eastern Samar (Mt Apoi; Oras; Borongan, Tagaslian; Balangiga), MINDANAO: Zamboanga del Norte (Siuya), Zamboanga del Sur (Malangas), Zamboanga (San Ramon), Agusan del Norte (Mt Urdaneta (=Mt Hilong-hilong), Cabadbaran; Butuan), Surigao del Norte (Placer; Mt Kabatuan), BALUT, DINAGAT (Cambinliw, Santiago, Loreto), PONEAS ISLET off SIARGAO (Sunkoi Hill), SIARGAO. Mostly in primary forests (including mixed dipterocarp forest, and swamp forest) but also found in secondary forest (e.g. emerging from logged-over forest), quite often found near rivers; coral limestone, clay, and ultramafic rocks, altitude 50-1300 (-1500)m. Flowering: Feb to May; Fruiting: Mar to Aug; Oct to Dec. Conservation status (Sohmer & AP Davis, 2007): Least Concern [LC]. Last collected in 1996.

Psychotria mendozii Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 214, Fig. 116. --Type: PNH 10789 Mendoza & Convocar (A, holo; iso: K, L*). Mindanao: Agusan del Norte prov., Mt Hilong-hilong, mossy forest slopes, altitude 1333m, 21 Apr 1949. BILIRAN (Mt Suiro, N slopes), MINDANAO: Agusan del Norte (Mt Hilong-hilong). Forests, including mossy forest, and forested slopes; mid to higher elevations (eg. c. 1333m). Flowering: Apr and May; Fruiting: unknown. Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected collected in 1954.

Psychotria merriittii Merr., PJS 26 (1925) 493; EPFP 4 (1925) 251; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 168, Fig. 88. --Type: BS 40599 Ramos & Edaño (P, lecto; isolecto: A*, K, US*). Mindoro: Mindoro Oriental prov., Mt Halcon, on forested slopes at c. 1400m, 16 Mar 1922. MINDORO: Mindoro Oriental (Mt Halcon: N face, Lantuyan; Subaan River, inland from San Teodoro). Usually at relatively high altitude (1350-1450m) mossy and stunted ridge forests, also at low elevation (eg. 150-200m). Flowering: Mar to May; Fruiting: Apr. Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected collected in 1991.

Psychotria merriittioides Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 142, Fig. 75. --Type: PNH 19774 Edaño (PNH, holo; iso: K, L*, PNH). Luzon: Apayao prov., Mt Magnas, summit of mountain at '2900m' (altitude very excessive, most probably in feet). LUZON: Apayao (Mt Magnas). In forest. Flowering unknown; Fruiting: Jun. Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Only collected once in 1953.

Psychotria mindanaensis Merr., PJS 8 c (1913) Bot. 54; EPFP 3 (1923) 559; --Sohmer & AP Davis, Sida Bot. Misc. Zamboanga, Sax River Mtns back of San Ramon, between 800-900m, Nov 1911. Merrill 8084 (A, BM, K, L*, P, US, syntypes). Zamboanga, without further locality data, Nov-Dec. 1911.

Grumilea mindanaensis (Merr.) Merr., PJS 10 c (1915) Bot. 130.

Psychotria malayana sensu auctt., non Jack

LUZON: Rizal (Mt Lumutan), PALAWAN (Mt Victoria, Trident Mine), MINDANAO:

Zamboanga, Davao Oriental (Mati), DINAGAT. Primary forest, altitude 400-900m.

Flowering: Nov; Fruiting: Nov, Dec.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1984.

Psychotria mindoroensis Elmer, LPB 3 (1911) 1031; --Merr., EPFP 3 (1923) 559; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 36, Fig. 14. --Type: Elmer 12532b (PNH, destroyed). Sibuyan: Mt Giting-giting, along Patos River in very humid, alluvial forest at 250m, May 1910; --Neotype, designated by Sohmer & Davis, 2007: McGregor 312 (NY; isoneo: K, US). Mindoro: Mindoro Oriental prov., Baco River, Apr-May 1905.

LUZON: Aurora (Baler, Dasalit River), Laguna, Quezon (Umiray; Malbog; Atimonan: Quezon National Forest Park; Guinayangan), Camarines Sur (Caramoan, Barangay Caputatan), Albay (SE slopes of Mt Malinao), Sorsogon, POLILLO (Lukutan), CATANDUANES (Mt Nagpakdit), MINDORO: Mindoro Occidental (Mt Iglit-Baco National Park), Mindoro Oriental (San Teodoro, Sibuang River Camp; Mt Halcon), PALAWAN (Iwahig River), PANAY: Capiz (Jamindan), BOHOL (Batuan River), LEYTE, BASILAN (Ayala, Udiongan), MINDANAO: Zamboanga del Norte (Fulalh; Muiyar; Dipelawon), Lanao (Davis Falls), Misamis, Surigao del Norte (Maub Placer), Agusan del Norte (Butuan: Guinabasan). Wet forests, including disturbed dipterocarp and secondary forests, some collections reported on limestone, sea-level to 850m. Fl. Jan, May-Jun, Aug; fr.: Feb, Jun, Jul, Oct.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened (NT). Last collected in 1995.

Psychotria nagapatensis Merr., PJS 17 (1920, publ. 1921) 454; EPFP 3 (1923) 559; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 74, Fig. 36. --Type: BS 33193 Ramos (A, lecto; isolecto: BM, K, P, US). Luzon: Ilocos Norte prov., Mt Nagapatan, in forest on dry slopes, altitude 700m, 8 Aug 1918.

LUZON: Ilocos Norte (Mt Nagapatan), PANAY: Antique (Valderama, Iki, Mt Baloi, W side), Capiz (Mt Salibongbong), BOHOL (Bilar, Logarita). Forest, including forest on dry slopes, altitude 700-1600m. Flowering: unknown; Fruiting: Mar, Apr, Aug.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened (NT). Last collected in 1995.

Psychotria negrosensis Elmer, LPB 2 (1908) 520; --Merr., EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 204, Fig. 110. --Type: Elmer 9686 (L*, lecto; isolecto: A, BM, K, MO, US*, W). Negros: Negros Oriental prov., Cuernos Mtns, steep wooded slope at 1060m, Mar 1908.

Grumilea negrosensis (Elmer) Merr., PJS 10 c (1915) Bot. 131.

NEGROS: Negros Occidental (Mt Silay), Negros Oriental (Cuernos Mtns, in the following sites: Lake Balinsasayao and Lake Danao). Midmontane forests, including forest with *Agathis*, altitude 976-1060m. Flowering: Mar; Fruiting: May, Sept.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1991.

Psychotria nitens (Merr.) Merr., EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 211; --*Grumilea* Luzon: Isabela prov., Palanan Bay, 25 Jun 1913.

LUZON: Benguet (Mt Nangaoto), Cagayan (ridge N of Baguio Cove; Peñablanca; Mt

Babatngin), Isabela (Mt Moises; Palanan; 20km S of Palanan), Quezon (Mt Binuang), SAMAR: Western Samar (Mt Concord). Mossy forests and on forested slopes, altitude 730-1100m, in Benguet up to 2400m. Flowering: Mar; Fruiting: May, Jun.
Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1981.

Psychotria obscurinervia Merr., PJS 17 (1920, publ. 1921) 455; --Sohmer & AP Davis, Sida Bot Misc. 27 (2007) 34, Fig. 13. --Type: BS 33077 Ramos (A, lecto; isolecto: BM, K, P, US). Luzon: Ilocos Norte prov., between Bangui and Claveria in low altitude forest, 30 Aug 1918.
Psychotria vulcanica Elmer, LPB 9 (1934) 3264. --Type: Elmer 14431 (A, lecto; isolecto: BISH, GH, K, L, MO, NY, P, UC, US). Luzon: Sorsogon prov., Mt Bulusan. Forest, altitude c. 200m, Oct 1915.

Distribution

Conservation status (Sohmer & AP Davis, 2007):

Psychotria oconnori Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) ; --Soejarto et al. (1995)
Prelim. Checklist Fl. Pl. Palawan.

PALAWAN: Mt Mantalingahan. Based on BS 77556 Edaño.

Conservation status (Sohmer & AP Davis, 2007):

Psychotria olsenii Sohmer & AP Davis, Sida, Bot. Misc. 27 (2007) 20, Fig. 3, --Type: S Olsen 758 (L*, holo). Tawi-tawi: Tarawakan, rainforest, altitude 50m, 14 Nov 1961, fr.

TAWI-TAWI (Tarawakan). Lowland rainforest, altitude 50m. Flowering: unknown; Fruiting: Nov.

Conservation status (Sohmer & Davis): Critically Endangered [CR B1ab(iii)], or possibly extinct (EX). Only known from the type specimen collected in 1961.

Psychotria palawanensis Elmer, LPB 4 (1912) 1348; --Merr., EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 136, Fig. 71; --Type: Elmer 12737 (A, lecto; isolecto: BISH, BM, GH, K, L*, MO, NY*, US*, W). Palawan: Mt Pulgar, in a slightly wooded flat at 76m, Mar 1911.
Grumilea palawanensis (Elmer) Merr., PJS 10 c (1915) Bot. 134.

PALAWAN (Mt Pulgar, =Thumb Peak; Tagimbong). Low and medium altitude forest, including those on well-drained soil. Flowering: Mar; fruiting: Mar.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Last collected in 1961.

Psychotria palimlimensis Sohmer & AP Davis, Sida, Bot. Misc. 27 (2007) 223, Fig. 122, --Type: BS 33364 Ramos (A, holo; iso: K, P). Luzon: Ilocos Norte prov., Mt Palimlim, Aug 1918.

LUZON: Ilocos Norte (Mt Palimlim; Mt Nagapatan; Mt Pico de Loro; Mt Darna). Forests, altitude 1000m or less. Flowering: unknown; Fruiting: Feb, Mar, Aug.

Conservation status (Sohmer & Davis): Critically Endangered [CR B1ab(iii)]. Last collected in 1953.

Psychotria pallidifolia Merr., PJS 17 (1920, publ. 1921) 456; EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 191, Fig. 102. --Type: BS 30510 Ramos (US*, lecto; isolecto: K). Catanduanes: Mt Mariguison and vicinity of Cololbong, on forested slopes, Nov-Dec 1917.

LUZON: Cagayan (Kilingkiling River), Isabela (Palanan, Diguyo), Zambales (Subic), Rizal (Mt Lumutan), Camarines Norte (Paracale), Camarines Sur (Kamugong River; Mt Potianay; Mt Bagacay); CATANDUANES (Mt Abucay; Mt Mariguison; unspecified localities for BS 30320, 30567 & 30446 Ramos, BS 75440 Ramos & Edaño). Forest, including dipterocarp forest, altitude 50-400m. Flowering: Apr, Sept-Dec; Fruiting: Sept-Nov.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1992

Psychotria paloensis Elmer, LPB 1 (1906) 65, as 'paloense'; --Merr., EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 194, Fig. 104. --Type: Elmer 7056 (A, lecto; isolecto: K, NY*). Leyte: Leyte prov., Palo, gently sloping wooden ravine, Jan 1906.

Grumilea paloensis (Elmer) Merr., PJS 10 c (1915) Bot. 131.

var. paloensis

LUZON: Sorsogon (Mt Bulusan, Irosin), PALAWAN (Mt Mantalingahan; Tigaplan River), NEGROS: Negros Occidental (Mt Canlaon), LEYTE: Leyte (Buenavista near Jaro; Palo), CAMIGUIN (Mambajao), MINDANAO: Misamis (without further locality data for FB 30446 Ponce & Abejero), Lanao del Sur (near Lumbatan & Sawir), Davao (Mt Apo, Todaya), Agusan del Norte (Cabadbaran, between Duros & Cawilanan; unspecified locality for Weber 1007). Forests, altitude 200-1212m. Flowering: Apr, Aug to Nov; Fruiting: Jan, Apr, May, Sept, Oct.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1992.

var. bukidnonensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 196, Fig. 105. --Type: PNH 9977 Sulit (A, holo; iso PNH). Mindanao: Bukidnon prov., Mt Katanglad (=Kitanglad), S slope of south peak in dense forest above Bgy Kibangay, altitude 1900m, 7 Mar 1949.

MINDANAO: Bukidnon (Mahilucot River; Mt Candoon; Mt Kitanglad), Davao (Katigan, probably Katingan, Davao del Sur prov. for Kanehira 2553 & 2564, NY), Agusan del Norte (San Mateo, Butvun, Berdee Line). Montane forests, altitude c. 1900m.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1961.

var. ovatifolia Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 197, Fig. 107. --Type: BS 39564 Ramos (US*, holo; iso A, K, L, P). Mindoro: Mindoro Occidental prov., Paluan, Apr 1921.

MINDORO: Mindoro Occidental (Paluan), Mindoro Oriental (San Teodoro, Subaan River and Sibuang River). Forest, often on steep slopes, altitude 300-630m.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1986.

var. subelliptifolia Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 199, Fig. 108. --Type: PNH 11913 Edaño (A, holo; iso: L*, PNH). Leyte: Leyte prov., Ormoc, Lake Danao, along forested ridge, altitude 666m, 21 Mar 1950.

LEYTE: Leyte (Ormoc, Lake Danao), forested slopes, altitude 666m. Flowering: unknown; Fruiting: Mar.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Known only from type specimen collected in 1950.

var. wenzeliana Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 201, Fig. 106. --Type: Wenzel 3261 (MO, holo; iso: A, GH, K, NY, UC). Mindanao: Surigao del Norte prov., possibly Placer municipality, "Turugaun Turbid Placer?", in forest, altitude 150m, 19 Apr 1928.

MINDANAO: Surigao del Norte (Placer; unspecified localities for Wenzel 3120). Low altitude forests (eg. c. 150m). Flowering: Apr, Aug; Fruiting: Apr, Aug.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Last collected in 1928.

Psychotria panayensis Merr., PJS 17 (1920, publ. 1921) 456; EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 147, Fig. 77. --Type: BS 31198 Ramos & Edaño (K, lecto; isolecto: US). Panay: Capiz prov., Jamindan, moist forests along small streams, Apr-May 1918.

LUZON: Camarines Sur (Botol River), MINDORO: Mindoro Oriental (Mt Ilong), PANAY: Capiz (Jamindan). Moist forest; recorded along small streams; elevation unknown.

Flowering: Feb to May; Fruiting: unknown. Known only with certainty from Panay.
Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1948.

Psychotria papillata (Merr.) Merr., EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 68, Fig. 31; --Grumilea papillata Merr., PJS 10 c (1915) 138. --Type: BS 1701 Ramos (MO, lecto; isolecto: A, BM, GH, L*, NY*, P, SING, US*). Samar: prov. Unknown, Cauayan Valley, in forests, along small streams, Apr 1914.

CATANDUANES (Mt Abucay; also unspecified locality for BS 30517 Ramos), SAMAR: prov. not known (Cauayan River); Western Samar (Loquilocon. Forests, below 1000m. Flowering: unknown; Fruiting: Apr-Jun, Nov, Dec.
Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1948.

Psychotria paracalensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 20, fig. 4, --Type: BS 33697 Ramos & Edaño (A, holo; iso in BM, P). Luzon: Camarines Norte prov., Paracale, Nov-Dec 1918.

LUZON: Camarines Norte (Paracale). Habitat not known. Flowering: unknown; Fruiting: Nov, Dec.

Conservation status (Sohmer & Davis): Extinct (EX). Known only from the type specimen collected in 1918.

Psychotria patulinervia Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 206, Fig. 111, --Type: PNH 1420 Edaño (L*, holo). Mindanao: Davao, Mt Apo, Miran River, in forest along stream at 1916m, 9 Nov. 1946.

MINDANAO: Bukidnon (Tangcunan), Davao del Sur (Mt Apo). Forest, and streamside forest, in high montane forest on Mt Apo (1916-2123m). Flowering: Aug to Nov; Fruiting: May to Jul, Oct.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Last collected in 1946.

Psychotria pauciflora Bartl. ex DC, Prodr. 4 (1830) 522; --Merr., PJS 10 c (1915) Bot. 129; EPFP 3 (1923) 560; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 232, Fig. 127. --Type: Haenke *sn*, (PR, holo). Luzon: with

LUZON: Kalinga (Mt Masingit, Lubuagan), Benguet (unspecified locality for Lohr 1511), Cagayan (Bauan, Mt Tabuan), Bulacan (Mt Biak na Bato, San Miguel; Angat Watershed Area, Norzagaray), Rizal (Tanay, Bgy. Sampaloc, Sitio Bayucan), Quezon (Mtns W of Philippine National Botanic Garden), MINDORO: Mindoro Oriental (Mt Halcon).
Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1996.

Psychotria paucinervia Merr., PJS 12 c (1917) Bot. 176; EPFP 3 (1923) 561; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 34, Fig. 12. --Type: BS 27055 Ramos (US, Lecto; isolecto: K). Luzon: Abra prov., Mt Posooy, near summit of mountain in forests, 4 Feb 1917.

Conservation status (Sohmer & AP Davis, 2007):

Psychotria phanerophlebia Merr., PJS 5 c (1910) Bot. 243; EPFP 3 (1923) 561; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 131, Fig. 68. --Type: BS 7404 (US, lecto*; isolecto: K). Luzon: Cagayan prov., near Pamplona, 17 Mar 1909.

Grumilea phanerophlebia (Merr.) Merr., PJS 10 c (1915) 131.

LUZON: Apayao (BS 28060 Fenix, cited by Merrill, 1923), Cagayan (near Pamplona; unspecified locality for BS 14506, cited by Merrill, 1923). Low altitude forests.

Conservation status (Sohmer & AP Davis, 2007): Extinct [EX]. Now apparently known only from the type collected in 1909. Two collections other than the type not accounted

for by Sohmer & Davis.

Psychotria pilosella Elmer, LPB 1 (1908) 353; --Merr., EPFP 3 (1923) 561; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 106, Fig. 53. --Type: Elmer 9213 (US*, lecto; islecto: A, K, L*, MO, NY*, W). Luzon: Quezon prov., Mt Banahaw, in forested ravine at 850m, May 1907.

Grumilea pilosella (Elmer) Merr., PJS 10 c (1915) 131.

Psychotria heteromera Merr., PJS 17 (1920, publ. 1921) 449; EPFP 3 (1923) 556. --Type: BS 28773 Ramos & Edaño (K, lecto; islecto: BM, P, US). Luzon: Quezon prov., Mt Binuang, in forest, c. 1000m, May 1917.

ssp. pilosella var. pilosella

LUZON: Cagayan (Claveria, Kilkiling, Mt Taggat), Quirino (Mt Alzapan), Rizal (Laguna de Bay), Laguna (Majayjay), Quezon (Mt Binuang; Mt Pular; Infanta; Real, Philippine National Botanic Garden; Infanta-Siniloan trail), Camarines Norte (Paracale; Minasag River), Camarines Sur (Mt Potianay; Kamugong River; Mt Bagacay), CATANDUANES (Viga-Gigmoto area), SAMAR: Eastern Samar (Borongan, Pinangasan; Balangiga, Barangay 1, Sitio Cantinoc). Moist forest, including dipterocarp forest, altitude 150-1000m. Flowering: Jan, Feb, May, Jun, Dec; Fruiting: May-Dec.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1996.

ssp. pilosella var. samarensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 108, Fig. 56.

--Type: PNH 14346 Sulit (A, holo; iso: K, L*). Samar: Northern Samar prov., Mt Cansayao, Catarman. Primary dipterocarp forest, altitude 200m, 3 Apr 1951.

SAMAR: Northern Samar (Mt Cansayao), Western Samar (Mt Mahagna, Turabucan, Oquendo; Sohoton, Rawis). Moist forest, altitude 50-250m. Flowering: Apr; fruiting: unknown.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1971.

ssp. erythrotricha (Elmer) Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 109, Fig. 57; --

Psychotria erythrotricha Elmer, LPB 5 (1913) 1891. --Type: Elmer 13486 (K, lecto; islecto: A, BISH*, BM, GH, L*, MO, NY* 2 sheets, P, UC, US*, W). Mindanao: Agusan del Norte prov., Mt Urdaneta (= Mt Hilong-hilong), altitude c. 1200m, Aug 1912.

Grumilea erythrotricha (Elmer) Merr., PJS 10 c (1915) Bot. 133.

var. erythrotricha

LUZON: Isabela (Mt Moises; Palanan), Aurora (without further locality data, based on FB 30972 Oro), Camarines Norte (Bicol National Park), PANAY: Antique (Sibalom, Imparayan, Mt Poras), LEYTE (no further locality data, based on Wenzel 530), SAMAR: Province unknown (Mt Comoral), Western Samar (Loquilocon; Mt Sohoton, Babasian na Daku River; Mt Concord), MINDANAO: Agusan del Norte (Mt Hilong-hilong, Cabadbaran), Surigao del Norte (without further locality data, based on BS 34702 Ramos & Pascasio), DINAGAT (BS 83791 Ramos & Convocar), BUCAS GRANDE (BS 35049 Ramos & Pascasio). Moist forest, including disturbed forest, 300-1200m. Flowering: Apr-May, Aug; fruiting: Jun-Aug, Nov.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1969.

var. camarinensis (Merr.) Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 111, Fig. 58; --

Psychotria camarinensis (Merr.) Merr., EPFP 3 (1923) 553; --*Grumilea camarinensis* Merr., PJS 10 c (1915) Bot. 135. --Type: BS 1552 Ramos (BM, lecto; islecto: A, L*, MO, NY*, P). Luzon: Camarines Sur prov., Mt Iriga, 29 Nov 1913.

LUZON: Laguna (Mt Banahaw), Quezon (Mt Binuang), Camarines Sur (Mt Isarog; Mt Iriga; Mt Potianay), BILIRAN (Mt Suiro; Mt Mamban), LEYTE: Leyte (Mt Dagami; central

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1927.

Psychotria pygmaea Merr., PJS 17 (1920, publ. 1921) 458; EPFP 3 (1923) 561; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 94, Fig. 47. --Type: BS 29271 Ramos & Edaño (US*, lecto). Luzon: Rizal prov., Mt Susong Dalaga. In forests, 14 Aug 1917.

LUZON: Rizal (Mt Susong Dalaga). Forest, altitude not known. Flowering: unknown; fruiting: Aug.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct [EX]. Only known from the type specimen collected in 1917.

Psychotria pyramidata Elmer, LPB 4 (1912) 1350; --Merr., EPFP 3 (1923) 562; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 150, Fig. 80; --Grumilea pyramidata (Elmer) Merr., PJS 10 c (1915) Bot. 134. --Type: (=Thumb Peak), shaded forest near watercourses from c. 200-800m, May 1911.

BUSUANGA, PALAWAN (Mt Capoas; Mt Pulgar; Irawan River Valley; Quezon, Bundog, Sumindap River; Ransang, Aga; Mt Mantalingahan). Undisturbed or disturbed moist forests, including dipterocarp forest and dipterocarp-swamp forest, altitude 150-1200m. Flowering: Jan, Apr, May; Fruiting: Apr-Jun, Aug.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1996.

Psychotria pyramidata x gitingensis

PALAWAN: Mt Beaufort. SMHI 265 (L, PNH).

Conservation status (Sohmer & AP Davis, 2007):

Psychotria quisumbingiana Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 136, Fig. 72. --Type: BS 43188 Ramos (UC, holo; iso: BM, K). Bohol: Bohol prov., Sevilla, along stream in the forest, 15 Sept 1923.

BOHOL: Bohol (Sevilla; Valencia). Humid forest, recorded near stream, altitude 300-700m. Flowering: unknown; Fruiting: Aug-Oct.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)], or possibly Extinct [EX]. Last collected in 1923.

Psychotria radicans (Merr.) Merr., EPFP 3 (1923) 562; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 29, Fig. 9; --Grumilea radicans Merr., PJS 10 c (1915) Bot. 139. --Type: Wenzel 1193 (BM, lecto; isolecto MO). Leyte: Buenavista, near Jaro, in forests, c. 500m, 10 Oct 1914.

LEYTE (Buenavista, near Jaro; unspecified locality), SAMAR: Western Samar (Basey). Forests, altitude 500-1000m. Flowering unknown; fruiting Oct.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable (VU B1ab(iii)). Last collected in 1929.

Psychotria ramosii Merr., PJS 5 c (1910) Bot. 244; EPFP 3 (1923) 562; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 170, Fig. 89. --Type: BS 7499 Ramos (US*, lecto; isolecto K). Luzon: Cagayan prov., near Pamplona, 17 Mar 1909.

LUZON: Cagayan. Low altitude forest. Flowering: Mar; fruiting: unknown.

Conservation status (Sohmer & AP Davis, 2007): Extinct [EX]. Known only from the type specimen collected in 1909.

Psychotria ramosissima Elmer, LPB 1 (1908) 355; --Merr., EPFP 3 (1923) 562; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 50, Fig. 21. --Type: Elmer 9178 (US*, lecto; isolecto A, K, L*, MO, NY*, W). Luzon: Quezon prov., Lucban. Dense shrubby forest of gulches at c. 200m, May 1907.

LUZON: Sorsogon (Lake Bulusan), BOHOL: Bohol (unspecified locality), LEYTE: Leyte (unspecified locality), SAMAR: Northern Samar (Catubig River); Western Samar

(Wright). Forests, altitude 100-600m. Flowering: Feb-May, Jul, Aug., Fruiting: unknown. Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1947.

Psychotria reynosoi Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 191, Figs. 2e, 103, --Type:

BS 44808 Ramos & Edaño (UC, holo; iso: A, K, L*, NY*, P, US*). Luzon: Zambales prov., Mt Marayep. On forested
LUZON: Cagayan (Mt Balatongan; Mt Cagua; unspecified locality), Isabela (Mt Moises; San Mariano: San Jose, Kapuntian and Agal; Palanan Forest Dynamics Plot); Quirino (Mt Alzapan), Aurora (Aurora National Park, San Luis, Bgy. Diteki, Sitio Dikong); Quezon (Mt Binuang), Zambales (Mt Marayep), Camarines Sur (Bagacay), NEGROS: Unspecified locality, but possibly Negros Occidental by Everett (FB 7258). Forested slopes, including good condition secondary forests, 400-1300m. Flowering: Mar, May; fruiting: Jun, Jul, Dec, Jan

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1995.

Psychotria rigidaefolia (Elmer) Merr., PJS 10 c (1915) Bot. 128; EPFP 3 (1923) 562; --Sohmer &

AP Davis, Sida Bot. Misc. 27 (2007) 29; --*Randia rigidaefolia* Elmer, LPB 1 (1908) 352. --Type: Elmer 9118 (A*, iso). L
LUZON: Quezon, Camarines Sur (Mt Potianay), CATANDUANES (Mt Abucay; unspecified locality), BILIRAN (Mt Suiro), LEYTE (Dagami), SAMAR: Western Samar (Mt Calbiga). Humid low altitude forests. Flowering unknown; fruiting Aug.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1954.

Psychotria rubiginosa Elmer, LPB 1 (1906) 25; --Merr., PJS 1 (1906) Suppl. 135; EPFP 3 (1923) 562; --Sohmer & AP D

isolecto: NY*). Luzon: Bataan prov., Mt Mariveles, Nov 1904.
Grumilea rubiginosa (Elmer) Merr., PJS 10 c (1915) Bot. 131.

var. rubiginosa

LUZON: Ilocos Norte (Mt Palimlim), Zambales (Sta. Cruz, Acoje Mine concession area), Bataan (Mt Mariveles; Lamao River), Rizal (Mt Pinagbayanan; Mt Irid; Montalban; Mt Canumay; Mt Tokduanbaboy; Mt Lumutan; unspecified locality for Loher 14301 & 6389; also for Vidal 3070, viz. 'district of Morong'), CEBU: Cebu (Talamban, Tebunan). Forest; ridges and ravines, altitude 600-900m. Flowering: Jan, Mar to May; Fruiting: Mar, May, Aug.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1993.

var. jacobsii Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 129, Fig. 67, --Type: Jacobs 7847 (L*,

holo; iso A, CANB, K). Luzon: Aurora prov., mtns NNE of Dingalan, low mixed mossy primary forest at 1000-1100m, 18 Mar 1968.

LUZON: Ilocos Norte (Mt Tigbi, Nueva Era), Aurora (Sierra Madre Mtns NNE of Dingalan), NEGROS: Negros Occidental (Mt Dumalablab, Talisay municipality). Humid mixed forest, altitude 1000-1100m. Flowering: Feb, Mar; fruiting: unknown.

Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1992.

Psychotria sarcocarpa Merr., PJS 8 c (1913) Bot. 53; EPFP 3 (1923) 563; --Sohmer & AP Davis,

Sida Bot. Misc. 27 (2007) 31, Fig. 10. --Type: Merrill 8077 (US*, lecto; isolecto A, BM, K, L*, P).
Mindanao: Zamboanga del Sur prov., Sax River Mtns, in wet, dense forest along small streams at 650-1000m, 27 Nov 1911.

BASILAN (Udiong, Ayala), MINDANAO: Zamboanga del Sur (Sax River Mtns).

Forests, including disturbed dipterocarp forest; recorded from wet streamside forests,

altitude 600-1000m. Flowering unknown; fruiting Jun, Nov, Dec.
Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU B1ab(iii)]. Last collected in 1996.

Psychotria scaberula Merr., PJS 17 (1920, publ. 1921) 459; EPFP 3 (1923) 563; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 89, Fig. 44. --Type: BS 35159 Ramos & Pascasio (US, lecto; isolecoto K). Dinagat, precise locality not known. Forest at low altitudes, 11 May 1919.
DINAGAT (without further locality data). Two collections cited by Sohmer & Davis (2007). Low altitude forests. Flowering: unknown; Fruiting: May.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct (EX). Last collected in 1931.

Psychotria sibuyanensis Elmer, LPB 3 (1911) 1028; --Merr., EPFP 3 (1923) 563; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 23, Fig. 6. --Type: Elmer 12355 (BM, lecto; isolecoto BISH, GH, K, L*, MO, NY*, P, US*, W). Sibuyan: Mt Giting-giting, forested ridge at c. 700m, Apr 1910.
LUZON: Cagayan (Claveria; Sta. Praxedes), SIBUYAN (Mt Giting-giting), PANAY: Antique (Mt Balingaso, 10km NE of Libertad), Capiz (Jamindan), MINDANAO: Surigao del Norte (Tubud Placer: Twagaau & Mawpayang), DINAGAT (Cambinliw, Santiago, Loreto; Anahaw, Kaantojan). Primary forests, including forest with dipterocarps and dipterocarp forests, also in open and exposed places such as ridges, 150-700m.
Flowering Jan-May; fruiting Apr to Sept.
Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1995.

Psychotria sohotonensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 228, Fig. 125. --Type: PNH 117798 Madulid et al. (L*, holo). Samar: Western Samar prov., Mt Sohoton, Babasian Na Gatti, 12km, Apr 1970.
SAMAR: Western Samar (Mt Sohoton). Moist forest, altitude not known but probably at low to mid elevations. Flowering: Apr; Fruiting: unknown.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)], or possibly Extinct [EX]. Last collected in 1970.

Psychotria sorsogonensis Elmer, LPB 9 (1934) 3264; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 153, Fig. 81. --Type: Elmer 16772 (A, lecto; isolecoto BISH, BM, GH, K, L*, MO, NY*, P, UC, US*). Luzon: Sorsogon prov., Mt Bulusan, Irosin. Deeply shaded forest at 606m, Jul 1916.
LUZON: Sorsogon (Mt Bulusan). Humid forest, altitude c. 600m. Flowering: unknown; Fruiting: Jul.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)], or possibly Extinct [EX]. Only known from the type specimen collected in 1916.

Psychotria subalpina Elmer, LPB 1 (1906) 64; --Merr., EPFP 3 (1923) 563; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 231, Fig. 126; --Type: Elmer 7942 (K, lecto; isolecoto A, L*, NY*, US*).
Luzon: Quezon prov., Mt Banahaw, Lucban, mossy forest, altitude 1500m, May 1906.
Grumilea subalpina (Elmer) Merr., PJS 10 c (1915) Bot. 131.
LUZON: Ilocos Norte (Mt Palimlim; Bangui to Claveria), Ifugao and Mountain Province (Mt Polis), Aurora (Mt Alzapan), Nueva Vizcaya (Caraballo Mtns), Laguna (Mt Banahaw), Quezon (Mt Banahaw; Banahaw de Lucban; Kinatakutan), Camarines Sur (Mt Isarog, W slope, Naga, Bgy. Panicuason), MINDORO: Mindoro Oriental (Mt Halcon), SIBUYAN (Mayos Peak), PANAY: Aklan (Mt Baloi, Libacao, Bgy. Dalagasaan, Sitio Tibulong), Capiz (Mt Madaas, E slopes), NEGROS: Negros Occidental (Mt Canlaon), CAMIGUIN, MINDANAO: Misamis Occidental (Mt Malindang, Bgy. Lake Duminagat to Liboron), Bukidnon (Mt Lipa; Mt Kitanglad, Impasug-ong, Intavas), Davao (Mt McKinley). Humid forests, primary and disturbed, including 'mossy' and 'elfin' forest, altitude 1200-

2100m. Flowering: Mar to Jul; Fruiting: Jan to Oct.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1995.

Psychotria subcucullata Merr., PJS 29 (1926) 492; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 71, Fig. 33. --Type: BS 43144 Ramos (UC, lecto; iso A*, K, P, US*). Bohol: Kalingohan, rocky slopes in forest, altitude 300-700m, 20 Aug. 1923.

BOHOL (Kalingohan; Bilar). Forest, on rocky slopes, 300-700m. Flowering unknown; Fruiting: Aug-Oct.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)], or possibly Extinct [EX]. Last collected in 1923.

Psychotria subsessiliflora Elmer, LPB 1 (1906) 24; --Merr., EPFP 3 (1923) 563; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 77, Fig. 37; --Type: HN Whitford 722 (P, lecto; isolecto US*). Luzon: Quezon prov., Atimonan, Aug-Sept 1904.

Grumilea subsessiliflora (Elmer) Merr., PJS 10 c (1915) Bot. 131. *Psychotria edanoi* Merr., EPFP 3 (1923) 555 as 'edanoi'; --*Grumilea brachybotrys* Merr., PJS 12 c (1917) Bot. 172, *non* *Psychotria brachybotrya* Ridl. (1909). --Type: BS 26256 Ramos & Edaño (PNH, holo; iso K). Luzon: Nueva Ecija prov., Mt Umingan (=Mingan), Aug 1916.

var. subsessiliflora

LUZON: Ilocos Norte (unspecified locality for BS 32960 Ramos), Apayao (unspecified locality for BS 28058 Fenix), Cagayan (Tamdagan River; Baguio Cove; Mt Caboloan; Mt Babatngin; Pagikpik), Isabela (Mt Moises; Palanan), Bataan, Laguna (San Antonio), Quezon (Real, Philippine National Botanic Garden, Lalawinan River; Lucban; Atimonan, Quezon National Park, Pinaglabanan Trail; Mt Cadig), Camarines Norte (Paracale; Bicol National Park; Basud, Tuaca, Mt Nilisan), Camarines Sur (Mt Potianay), Albay (Mayon Volcano), Sorsogon (Mt Bulusan: Irosin and Casiguran), POLILLO (Anibawan), ALABAT, CATANDUANES (San Miguel, Barangay Sulung, Mt Saan), MINDORO: Mindoro Oriental (Mt Halcon; Naujan, Busay; Laylay, 10km from Swedish Match Hilleshog Tree Farm), NEGROS: Negros Occidental (Victoria Mtns), BILIRAN (Mt Suiro), SAMAR: Western Samar (Mt Sarawag), CAMIGUIN (Guinsiliban, Barangay Botay, Sitio Sinablayan), MINDANAO: Zamboanga del Norte (Tulalu). Forests, including submossy secondary forest, and plantations, altitude 35-900m. Flowering Feb to May, Sept; Fruiting all year round.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1996.

var. carinata (Quisumb. & Merr.) Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 79, Fig. 38; --*Psychotria carinata* Quisumb. & Merr., PJS 37 (1928) 205. --Type: BS 45278 Ramos & Edaño (US, lecto; isolecto A, BM, NY*, US*). Luzon: Aurora prov., Casiguran, in damp forest, 28 May 1925.

LUZON: Cagayan (Gonzaga; Mt Cagua; Mt Balatongan), Isabela (San Mariano), Aurora (Casiguran; Mt Dingalan), Camarines Norte (Mt Kadig), Camarines Sur (Sarapan), CATANDUANES (Dakulangpatag; unspecified locality for BS 75439 Ramos & Edaño). Low altitude forests. Flowering: unknown; Fruiting: May to Sept.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1961.

Psychotria sulitii Merr. & Quisumb. ex Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 100, --Type: PNH 6408 Sulit (A, holo; iso: K, L). Samar: Western Samar prov., Mt Calbiga, Wright. Midmontane forest, altitude c. 300m, 23 May 1948.

SAMAR: Western Samar (Mt Calbiga). Forest, c. 300m. Flowering: May; Fruiting: May.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Only collected once in 1948.

Psychotria surigaoensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 100, Fig. 51. --Type: BS 34581 Ramos & Pascasio (BM, holo; iso K, PNH). Mindanao: Surigao del Norte prov., Apr 1919.

MINDANAO: Surigao del Norte (unspecified locality of type), DINAGAT (Loreto, Santiago, Canbilio). Forest, including dipterocarp forest, often near rivers, altitude c. 50m. Flowering: Apr; Fruiting: Aug to Sept.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1991.

Psychotria tayabensis Elmer, LPB 1 (1908) 354; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 79, Fig. 39 --Type: Elmer 7581 (US*, lecto; isolecto A, K, L*, MO, NY*, W). Luzon: Quezon prov., Lucban, May 1907.

Grumilea tayabensis (Elmer) Merr., PJS 10 c (1915) Bot. 133.

var. tayabensis

LUZON: Ilocos Norte (Mt Quebrada), Apayao (Mt Magnas), Ifugao (Sumigar, Mt Nabito), Cagayan (Claveria; Baguio Cove), Rizal (Montalban; Mt Lumutan; Tanay, San Isidro), Laguna (Mt Banahaw; Majayjay; unspecified locality for BS 6070 Robinson), Quezon (Real, Lalawinan River; Lucban; Tagkawayan), Camarines Sur (Botol River), Sorsogon (Lake Agangay; Mt Bulusan: Irosin and Talatala Ridge, vicinity of Aguingai Valley), MINDORO (unspecified locality for FB 6883 Merritt), CATANDUANES (unspecified locality for BS 75193 Ramos & Edaño), PANAY: Aklan (Libacao), NEGROS: Negros Occidental (Mt Canlaon, Wasay trail), Negros Oriental (Tanjay, Lake Balinsasayao), BOHOL (Demyao=Dimyao; Kalingohan), LEYTE (unspecified locality for Wenzel 1620). Drier forests, sea-level to 1300m. Flowering: Feb, May, Sept; Fruiting: Mar to Aug, Oct, Nov.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1996.

var. castanea (Merr.) Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 82, Fig. 40; --*Psychotria castanea* Merr., PJS 17 (1920, publ. 1921) 446; EPFP 3 (1923) 554. --Type: BS 33212 Ramos (A, lecto; isolecto: BM, K, P, US). Luzon: Ilocos Norte prov., Mt Nagapatan, Aug 1918.

LUZON: Ilocos Norte (Mt Nagapatan; Bangui to Claveria; Mt Semenublan, E of Nueva Era; Mt Quebrada). Drier forests, on slopes, altitude c. 700m.

Conservation status (Sohmer & AP Davis, 2007): Endangered [EN]. Last collected in 1975.

var. euphlebia (Merr.) Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 84, Fig. 43; --*Grumilea euphlebia* (Merr.) Merr., PJS 10 c (1915) Bot. 133. --*Psychotria euphlebia* Merr., PJS 8 c (1913) Bot. 55; EPFP 3 (1923) 555; --Type: BS 14582 Ramos (not seen). Luzon: Cagayan prov., Abulug River, Jan 1912.

Psychotria tricarpa Merr., PJS 17 (1920, publ. 1921) 460; EPFP 3 (1923) 563. --Type: BS 31224 Ramos & Edaño (A*,

lecto; isolecto K, US*). Panay: Capiz prov., Jamindan, Apr-May 1918.

LUZON: Apayao (Mt Magnas), Cagayan (Claveria, Taggat Watershed; Abulug River; Mt Caboloan; unspecified locality for FB 26976 Velasco), Isabela (Mt Moises; Palanan, Sangcad), Quezon (Mt Cadig), Camarines Sur (Sarapan; Mt Bagacay), ALABAT (unspecified locality for BS 48228 Ramos & Edaño), PANAY: Capiz (Jamindan). Forests, including mixed forests with dipterocarps, altitude 400-1000m. Flowering: Dec; Fruiting: Apr to Jul.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected

in 1995.

var. fasciculiflora (Merr.) Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 84, Fig. 41; --*Psychotria fasciculiflora* (Merr.) Merr., EPFP 3 (1923) 555; --*Grumilea fasciculiflora* Merr., PJS 10 c (1915) 135; --Type: BS 17519 Ramos (BM, lecto; Isolecto: K, US*). Samar: Yabong, on forested slopes, 15 Mar 1914.

SAMAR: Northern Samar (Catubig River), Western Samar (Mt Sarawag), prov. unknown (Mt Pulog). Forests, altitude 100-200m. Flowering: unknown; Fruiting: Mar.
Conservation status (Sohmer & AP Davis, 2007): Endangered [EN]. Last collected in 1951.

var. pinagteponanensis (Merr.) Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 88, Fig. 42; --Type: BS 78343 Edaño (A, holo). Luzon: Cagayan prov., Pinagteponan River, Oct 1929.

LUZON: Cagayan (Pinagteponan River; Sta. Praxedes, Barangay San Juan), Camarines Sur (Agosahis). Forests, including mixed forest with dipterocarps, altitude c. 500m. Flowering: unknown; Fruiting: Oct.
Conservation status (Sohmer & AP Davis, 2007): Vulnerable [VU]. Last collected in 1995.

Psychotria urdanetensis Elmer, LPB 5 (1913) 1893; --Merr., EPFP 3 (1923) 563; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 74, Fig. 35. --Type: Elmer 13703 (UC, lecto; isolecto A, BISH, BM,

GH, K, L, MO, NY, P, US, W). Mindanao: Agusan del Norte prov., Mt Urdaneta (= Mt Hilong-hilong), Cabadbaran, humid forest near Lake Danao, altitude c. 1600m, Sept. 1912; *Grumilea urdanetensis* (Elmer) Merr., PJS 10 c (1915) 130.

MINDANAO: Agusan del Norte (Mt Urdaneta, = Mt Hilong-hilong). Humid forest, including mossy forest, altitude 1500-1600m. Flowering: unknown; Fruiting: Sept.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct [Ex]. Known only from the type collected in 1912.

Psychotria velutina Elmer, LPB 5 (1913) 1894; --Merr., EPFP 3 (1923) 564; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 176, Fig. 93. --Type: Elmer 13615 (UC, lecto; isolecto A, BISH, BM, GH, K, L*, MO*, NY*, P, US*, W). Mindanao: Agusan del Norte prov., Mt Urdaneta (= Mt Hilong-hilong), Cabadbaran, in moist fertile soil of dense forest at 3500 ft, Aug 1912.
Grumilea velutina (Elmer) Merr., PJS 10 c (1915) Bot. 33.

LUZON: Quezon (Malbog), MINDANAO: Agusan del Norte (Mt Urdaneta, = Mt Hilong-hilong). Humid forest, c. 1060m. Flowering: unknown; Fruiting: Aug.
Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Last collected in 1923.

Psychotria weberi Merr., PJS 8 c (1913) Bot. 54; EPFP 3 (1923) 564; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 217, Fig. 118. --Type: Weber 1573 (US*, lecto; isolecto A*, GH*, K, P, UC). Luzon: Cagayan prov., Abulug River, rocky hillsides, altitude c. 30m, Jan 1912.
Grumilea weberi (Merr.) Merr., PJS 10 c (1915) Bot. 133.

LUZON: Cagayan (Abulug River; Peñablanca, near Lagum), Isabela (Mt Cresta; Mt Moises), Aurora (Casiguran, Mamator River), Quezon (Real, vicinity of Philippine National Botanic Garden), Camarines Norte (Mt Labo; Basud, Tuaca, Mt Nilisan), Camarines Sur (Kinaclan River; Ponawa River). Humid forest, including dipterocarp forest and secondary forest; along stream or on slopes, altitude 30-610m. Flowering: Apr to Jun; Fruiting: May, Jun, Sept.
Conservation status (Sohmer & AP Davis, 2007): Endangered [EN B1ab(iii)]. Last collected in 1991.

Psychotria wenzelii (Merr.) Merr., EPFP 3 (1923) 564; --Sohmer & AP Davis, Sida Bot. Misc. 27

(2007) 94, Fig. 49; --*Grumilea wenzelii* Merr., PJS 10 c (1915) Bot. 140. --Type: Wenzel 1142 (MO*, lecto; islecto A*, BM). Leyte: Leyte prov., Buenavista near Jaro, in forests, altitude c. 500m, 1 Oct 1914.

LEYTE. Forest, 500-700m. Flowering: unknown; Fruiting: Oct.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct [Ex]. Known only from the type collected in 1914.

Psychotria yagawensis Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 66, Fig. 30. --Type: PNH 18687 Conklin (A, holo; iso L*, PNH). Mindoro: Mindoro Oriental prov., Mt Yagaw, SE slope, altitude 330m, 17 Jul 1953.

MINDORO: Mindoro Oriental (Mt Yagaw). Forests, altitude c. 330m. Flowering: unknown; Fruiting: Jul.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)] or possibly Extinct [Ex]. Known only from the type collected in 1953.

Psychotria yatesii (Merr.) Merr., EPFP 3 (1923) 564; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 217, Fig. 117; --*Grumilea yatesii* Merr., PJS 12 c (1917) 172. --Type: BS 25518 Yates (K, lecto; islecto: A*, P, US*). Luzon: Quezon prov., Mt Cadig, low altitude forests, Dec 1916.

LUZON: Isabela (Palanan, Digallorin = Digollorin, Divinisa camp site), Quezon (Mt Binuang; Mt Cadig), Laguna (San Antonio), Camarines Sur (imprecise locality for FB 23787 Alvarez; Sarapan; Mt Bagacay), Sorsogon (Mt Bulusan), POLILLO (Sta. Maria), SAMAR: Western Samar (Bagacay), Eastern Samar (Oras). Forest, once recorded on steep sea cliff; also on ultramafics, altitude 50-200m. Flowering: Mar to May; Fruiting: Apr, Dec.

Conservation status (Sohmer & AP Davis, 2007): Near Threatened [NT]. Last collected in 1992.

Psychotria yenii Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 68, Fig. 32. --Type: Yen 173 (BISH, holo). Mindanao: South Cotabato prov., Tasaday Forest, dipterocarp forest at 1220m, Aug or Dec 1972.

MINDANAO: South Cotabato (Tasaday Forest). Known only from the type collection.

Conservation status (Sohmer & AP Davis, 2007): Critically Endangered [CR B1ab(iii)]. Only collected once in 1972.

Potential New Species:

***Psychotria* sp. A**, Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 236. --Vouchers: PPI 13205 Gaerlan, Romero & Sagcal (BRIT). Palawan: Rizal municip., Ransang, Kumaraka; --PPI 38209 Pipoly & Romero et al. (BRIT), Quezon municip., Bgy. Bundog.

***Psychotria* sp. B**, Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 236. --Vouchers: SMHI 2160 Podzorski (K, L). Palawan: Brookes point municip., Pulot, c. 50km N of town; --SMHI 1000 Ridsdale (K, L), Brookes Point municip., Pulot, Massin River, 12km N of Brookes Point.

***Psychotria* sp. C**, Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 237. --Vouchers: PPI 18318 Garcia, Fuentes & Romero (BRIT, K). Luzon: Cagayan prov., Claveria municip., Bgy. Kilkiling, Taggat Watershed Area,

UNKNOWN SPECIES—SPECIES INCOGNITAE:

Psychotria cagayanensis Merr., PJS 8 c (1913) Bot. 51; EPFP 3 (1923) 553; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 237; --Type: FB 15491 Bernardo (not seen). Luzon: Cagayan prov., Casambalangan, in forest, altitude c. 10m, Apr 1910

Grumilea cagayanensis (Merr.) Merr., PJS 10 c (1915) Bot. 133.

LUZON: Cagayan. Lowland primary forests. According to Merrill's original description,

this taxon resembles *P. pinnatinervia* and *P. luzoniensis*, and that the pyrenes are not ridged or grooved. Probably belonging to Sohmer and Davis' *Luzoniensis*

Psychotria irosinensis Elmer, LPB 9 (1934) 3262; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 238. --Type: Elmer 17356 (not seen). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Sept 1916.

According to Elmer's description, this taxon has unbranched inflorescences but is otherwise similar to *P. manillensis* and *P. pallidiflora*. Species group unknown.

Psychotria samarensis Merr., PJS 12 c (1917) Bot. 174; EPFP 3 (1923) 562; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 238. --Type: FB 23576 Lasquety (not seen). Samar: Eastern Samar prov., Salcedo, on ridges, altitude c. 200m, 11 Mar 1915.

SAMAR. Now known only from description.

Psychotria voluta Elmer, LPB 4 (1912) 1347; --Merr., EPFP 3 (1923) 564; --Sohmer & AP Davis, Sida Bot. Misc. 27 (2007) 238. --Type: Elmer 13253 (not seen). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), Apr 1911.

PALAWAN: Now only known from description. A member of the *Ixoroides* Species Group, but identity and relationship with other climbing species of this group not certain.

Psydraz Gaertner

Randia Linnaeus

= Philippine species previously referred here are
now assigned to the following genera, viz.

Aidia, *Andria*, *Fagerlindia*, *Oxyceros*, and *Tarennoidea*

Don't know where the ff. were transferred--

Randia lanceolata Merr., PJS 8 c (1913) Bot. 57; EPFP 3 (1923) 527. --Type: FB 11626 Fischer (not seen). Luzon: Cagayan prov., Abulug River, near Taut, on sandstone cliff along the river, apparently in situations subject to overflow during times of high water, altitude c. 30m, Feb 1912.

LUZON: Apayao, Cagayan. On rocky river banks subjected to periodic flashfloods. Low altitudes. Similar to *R. stenophylla* Merr., but nearly glabrous, with shining leaves, and with very different fruits.

Randia mindorensis Elmer, LPB 1 (1906) 28; --Merr., EPFP 3 (1923) 527. --Type: Merrill 3326 (NY*, US*, iso). Mindoro: Mindoro Oriental prov., Puerto Galera, Oct 1903.

MINDORO: Mindoro Oriental (Puerto Galera). Lowland forests.

Randia rostrata Merr., PJS 17 (1920, publ. 1921) 460; --Merr., EPFP 3 (1923) 528. --Type: BS 35102 Ramos & Pascasio (A*, US*, iso). Bucas Grande, dry forests, 11 Jun 1919.

BUCAS GRANDE. Lowland forests.

Randia samalensis Elmer, LPB 1 (1906) 29; --Merr., EPFP 3 (1923) 528. --Type: Copeland 847 (not seen). Samal, Apr 1904.

SAMAL (near Davao). Lowland forests.

Randia stenophylla Merr., PJS 5 c (1910) Bot. 245, *nom. illeg.*, *non* *R. stenophylla* Krause, 1909; --Merr., EPFP 3 (1923) 528. --Type: FB 7170 Curran (not seen). Luzon: Bulacan prov., Norzagaray, on rocky river banks, 16 Jun 1907.

LUZON: Bulacan. On rocky river banks subjected to periodic flashfloods. Low altitudes.

Rothmannia Thunberg

Rothmannia graciliflora (Merr.) Ridsdale, ined.

Randia graciliflora Merr., PJS 10 c (1915) Bot. 109; EPFP 3 (1923) 527. –Type: FB 17988 Miranda (L*, NY*, US*, iso). Mindanao: Misamis Occidental prov., Mt Malindang, in forests along streams, altitude 120m, 26 Feb 1913.

MINDANAO: Misamis Occidental (Mt Malindang). Lowland forests along streams, altitude c. 120m.

Rothmannia lagunensis (Merr.) Ridsd., ined.

Gardenia lagunensis Merr., PJS 10 c (1915) Bot. 110; EPFP 3 (1923) 530. –Type: Baker 3176 (not seen). Luzon: Laguna prov., hills back of Paete, 10 Apr 1914.

LUZON: Cagayan, Isabela, Bulacan, Rizal, Laguna, Quezon, BUSUANGA. Lowland primary forests.

Rothmannia leytensis Ridsd., ined. Based on: Wenzel 641 (A*). Leyte: Leyte prov., 8 Mar 1907. LEYTE.

Rothmannia merrillii (Elmer) Ridsd., ined.; --*Gardenia merrillii* Elmer, LPB 1 (1906) 5; --Merr., EPFP 3 (1923) 530. –Type: Merrill 669, flowering type (not seen). Culion: Halsey, Feb 1903; FB 1226, fruiting type (not seen). Mindoro: Lugin, Jan 1903.

Gardenia negrosensis Merr., PJS 10 c (1915) Bot. 111; EPFP 3 (1923) 530. –Type: FB 7255 Everett (not seen). Negros: Negros Occidental prov., vicinity of Cadiz and Gimagaan River.

LUZON, GOLO, MINDORO, CULION, BUSUANGA, PALAWAN, ROMBLON, PANAY, NEGROS, LEYTE, MINDANAO. In thickets, secondary and primary forest at low altitudes.

Rubia Linnaeus

Literature-

Puff, C. 1984. *Journal of South African Botany* 50: 347.

Rubia cordifolia L., Syst. ed. 12 (1767) 229; --Merr., EPFP 3 (1923) 575.

Greece, subtropical and tropical Africa (except Sahara and sub-Saharan regions), temperate/subtropical Asia from Afghanistan, China, Mongolia to the Russian Far East, tropical Asia from Sri Lanka, India, Himalayan region, SE Asia and Malesia.

LUZON: Mountain Province, Ifugao, Benguet, Rizal, Laguna, Quezon, MINDANAO: Lanao, Davao. In thickets and forests, chiefly above 1000m, extending to 2400m, and often common in the mossy forest.

Philippine plants so-named not certainly corresponding to the Linnaean species.

Rubia philippinensis Elmer, LPB 9 (1934) 3214. –Type: LUZON.

Saprosma Blume

Saprosma philippinensis Elmer, LPB 3 (1911) 1035; --Merr. EPFP 3 (1923) 568. –Type: Elmer

9222 (PNH, holo, lost; iso MO*, NY*, US*). Luzon: Quezon prov., Lucban, “well-drained soil of light woods at 800m”, May 1907.

LUZON: Quezon Sorsogon. In forests, c. 750m.

Saprosma ternatum (Wall.) Hook.f. in G Bentham & JD Hooker, Gen. Pl. 2 (1873) 131; --Serissa ternata (Wall.) Kurz, Rep. Veg. Andaman Is. (1870) 40; --Paederia ternata Wall. in W Roxburgh, Fl. Ind. 2 (1824) 520.
India (Assam), Bhutan, Bangladesh, W and S-C China, Hainan, Burma, Thailand, Laos, ?Philippines.

Schradera Vahl

Revisions:

Puff, C, L Andersson, U Rohrhofer & A. Igersheim. 1993. *The tribe Schradereae (Rubiaceae) reexamined*. Bot. Jahrb. Syst. 114: 449–479.

Puff, C, J Greimler & R Buchner. 1998. *Revision of Schradera (Rubiaceae-Schradereae) in Malesia*. Blumea 43: 287–335.

Schradera elmeri Puff, Buchner & Greimler, Blumea 43 (1998) 315; --Lucinaea involucrata Elmer, LPB 3 (1911) 997; --Merr., EPFP 3 (1923) 520. --Type:

MINDANAO: Davao (Mt Apo:Todaya, Lake Linao and Gumate District, E slopes of Mt Apo), Davao Oriental (Mt Kampalili), Bukidnon (Mt Kitanglad; Mahilucot River). Exposed ridges, mossy forests, 750-1900m. Flowers in Mar, Jun, Jul and Oct; fruits in Mar, Jun and Jul.

Schradera monocephala (Merr.) Puff, Buchner & Greimler, Blumea 43 (1998) 299; --Lucinaea monocephala Merr., PJS 5 c (1910) Bot. 241; EPFP 3 (1923) 520. --Type: BS 10034 Ramos (?PNH, holo, presumed lost by Puff et al., loc. cit.; an isotype however, is extant in US*

[barcode 00137914], and is here designated as lectotype. BS 1111 Ramos (BM, K), was earlier designated by Puff et al as neotype. The above collections from Luzon: Laguna prov., Paete, near Dahican River.

Lucinaea epiphytica Elmer, LPB 5 (1913) 1873; --Merr., EPFP 3 (1923) 520. --Type: Elmer 14147 (?PNH, holo, probably lost). Mindanao: Agusan del Norte prov., Mt Urdaneta (=Mt Hilong-hilong), Cabadbaran.

LUZON: Laguna (Paete), Sorsogon (Mt Bulusan), MINDORO: Mindoro Oriental (Mt Yagaw), PALAWAN (Mt Beaufort); CATANDUANES, BILIRAN (Mt Suiro), LEYTE, NEGROS, MINDANAO: Lanao, Agusan del Norte (Mt Urdaneta (= Mt Hilong-hilong), Cabadbaran). In primary montane forests with *Agathis*, 620 to 850m. Flowering: Mar to Sept, Fruiting: Nov.

Scleromitron (Wight & Arnott) Meissner

Scleromitron angustifolium (Cham. & Schltdl.) Benth., Hooker's J. Bot. Kew Gard. Misc. 4 (1852) 172; --Oldenlandia angustifolia (Cham. & Schltdl.) Kuntze, Revis. Gen. Pl. 1 (1891) 292; --Sclerococcus angustifolius (Cham. & Schltdl.) Bartl. ex DC., Prodr. 4 (1830) 436; --Hedyotis angustifolia Cham. & Schltdl., Linnaea 4 (1829) 153.

E Himalayas, Burma, Nicobar Isls, Sumatra, Peninsular Malaysia, Java, Philippines, Moluccas.

Scleromitron pauciflorum (Bartl. ex DC.) Miq., Fl. Ned. Ind. 2 (1857) 187; --Hedyotis pauciflora Bartl. ex DC, Prodr. 4 (1830) 419.

Philippines. 42 PHI. Provisionally accepted.

Scleromitron strictum (L.f.) ined.

Tardavel stricta (L.f.) Hiern, Cat. Afr. Pl. 1 (1898) 503; --Borreria stricta (L.f.) K.Schum. in HGA Engler &

KAE Prantl, Nat. Pflanzenfam. 4(4) (1891) 143; --*Bigelovia stricta* (L.f.) Blume, Bijdr. (1826) 945; --*Spermacoce stricta* L.f., Suppl. Pl. (1782) 120.
Oldenlandia tenelliflora (Blume) Kuntze, Revis. Gen. Pl. 1 (1891) 292; --*Scleromitron tenelliflorum* (Blume) Korth., Ned. Kruidk. Arch. 2 (1851) 155; --*Hedyotis tenelliflora* Blume, Bijdr. (1826) 971; --Merr., EPFP 3 (1923) 500.
 S-C China, Hainan, Japan, Ryukyu isls, Taiwan, Nicobar Isls, Thailand, Peninsular Malaysia, Java, Borneo, Philippines, New Guinea, ?Queensland.
 LUZON: Ilocos Norte, Benguet, Sorsogon, MINDORO, PANAY, LEYTE, MINDANAO. Low and médium altitudes, ascending to 1500m, along streams, clearings, etc.

***Scleromitron verticillatum* (L.) ined.**

Hedyotis verticillata (L.) Lam., Tabl. Encycl. (1791) 271; --Merr., EPFP 3 (1923) 501; --*Oldenlandia verticillata* L., Mant. (1767) 40.
Scleromitron hispidum (Retz.) Korth., Ned. Kruidk. Arch. 2 (1851) 155; --*Hedyotis hispida* Roth, Nov. Pl. Sp. (1821) 95; --*Oldenlandia hispida* (Retz.) Lam., Encycl. 4 (1798) 536; --*Hedyotis hispida* Retz., Observ. Bot. 4 (1786) 23.
Hedyotis verticillata var. *scaberrima* Hatus., Trans. Nat. Hist. Soc. Taiwan 26 (1936) 224.
 Trop. & Subtrop. Asia to NW. Pacific. Assam, Bangladesh, E Himalayas, India, Nepal, Burma, Thailand, Vietnam, S China, Hainan, Taiwan, Bonin Isls, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi, Moluccas, Caroline Isls.
 N LUZON to MINDANAO, in most islands and provinces. Lowlands in thickets, old clearings and other open sites.

***Scyphiphora* CF Gaertner**

***Scyphiphora hydrophyllacea* Gaertn.f., Fruct. 3 (1805) 91, t. 196; --Merr., EPFP 3 (1923) 533.**
 India, Sri Lanka, Andaman Isls, Peninsular Malaysia, Philippines, N Australia, New Caledonia.

N LUZON to PALAWAN and MINDANAO, in mangrove swamps and along most tidal streams subject to the influence of salt or brackish water.

***Spermacoce* Linnaeus**

Revision:

Cabral, EL & NM Bacigalupo. 1996. *Revision of Borreria section Pseudodiodia (Rubiaceae Spermacoceae)*. Opera Botanica Belgica 7: 309–327.

***Spermacoce articularis* L.f., Suppl. (1872) 118;**

Borreria articularis (L.f.) FN Williams, Bull. Herb. Boiss. sér. 5, 2 (1905) 956.
 India, Burma, Indochina, S China, Taiwán, Ryukyu Isls, Malesia.

Tropical & subtropical Asia: Sri Lanka, India, E Himalayas, Nepal, S China, Hainan, Taiwan, Ryukyu Isls, Burma, Vietnam, Peninsular Malaysia, Borneo, Philippines, Sulawesi. Introduced in Tanzania, Mauritius, Madagascar and Australia (Northern Territory, Queensland).

***Spermacoce buruensis* Miq., Ann. Mus. Bot. Lugd.-Bat. 4 (1869) 261.**

Exallage buruensis (Miq.) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 48(2) (1952) 142; --*Hedyotis buruensis* (Miq.) Valetton ex Merr., EPFP 3 (1923) 496.

Hedyotis magallanensis Elmer, LPB 3 (1911) 976; --Merr., EPFP 3 (1923) 498. --Type: Elmer 12205.

Hedyotis parva Merr., PJS 3 c (1908) Bot. 162; --Elmer, LPB 3 (1911) 975. --Type:

Philippines, Sulawesi, Moluccas (Ambon, Buru).

SIBUYAN, PANAY. Low altitude forests, ascending to 400m.

Spermacoce gracilis Ruiz & Pav., Fl. Peruv. 1 (1798) 61.

Borreria gracilis LO Williams, Phytologia 26 (1973) 487 (1973), homonym.

Spermacoce exilis (LO Williams) CD Adams ex WC Burger & CM Taylor, Fieldiana, Bot., n.s., 33 (1993) 316; --*Borreria exilis* LO Williams, Phytologia 28 (1974) 227.

Pantropic.

Spermacoce hispida L. Sp. Pl. (1753) 102; DC. Prodr. 4 (1830) 555. --Merr., Fl. Manila (1912) 455. --

Type:

Borreria articularis var. *hispida* (L.) Sivar. & Manilal, Int. Quart. J. Pl. Sci. Res. 2 (1975) 89, nom. inval.; --

Borreria hispida (L.) K Schum. in HGA Engler & KAE Prantl, Nat. Pflanzenfam. 4(4) (1891) 144, nom. illeg.; --Merr., EPFP 3 (1923) 574.

Spermacoce mutilata Blanco, Fl. Filip., ed. 2: 43 (1845).

W Himalayas, India, Bangladesh, E Himalayas, Nepal, Thailand, Vietnam, S China, Hainan, Taiwan, Ryukyus, Taiwan, Peninsular Malaysia, Java, Philippines, Solomon Isls.

BATAN to BASILAN. Open dry places at low and medium altitudes.

Spermacoce manillensis Kuntze, Revis. Gen. Pl. 3(2) (1898) 123.

Spermacoce discolor (DC.) Fern.-Villar in FM Blanco, Fl. Filip., ed. 3, 4(13A) (1880) 113, nom. illeg.; --

Borreria discolor DC., Prodr. 4 (1830) 545; --*Bigelovia discolor* Bartl. ex DC., Prodr. 4 (1830) 545.

Philippines. 42 PHI.

Spermacoce ocymoides Burm.f., Fl. Ind. (1768) 34, t. 13, Fig. 1; --Merr., Fl. Manila (1912) 455.

Borreria ocymoides (Burm.f.) DC., Prodr. 4 (1830) 544; --Merr., EPFP 3 (1923) 574.

Spermacoce laevis Spreng., Syst. Veg. 1 (1824) 401, *nom. illeg., non* Lam. (1791).

Tropical Asia to SW Pacific: Sri Lanka, India, Burma, Peninsular Malaysia, Java, Philippines, New Guinea, Solomon Isls, Fiji, Samoa, Vanuatu. Introduced in the neotropics and tropical Africa.

LUZON: Bataan, Bulacan, Rizal, BASILAN. Lowland thickets.

Spermacoce pusilla Wall. in W Roxburgh, Fl. Ind. 1 (1820) 379.

Borreria pusilla (Wall.) DC., Prodr. 4 (1830) 543; --*Bigelovia pusilla* (Wall.) Spreng., Syst. Veg. 1 (1824) 405.

Trop. Asia: Sri Lanka, India, Nepal, W & E Himalayas, Burma, ?Sumatra, Peninsular Malaysia, ?Borneo, Philippines. Introduced in tropical Africa.

Spermacoce ramanii Sivar. & RV Nair, Taxon 35 (1986) 367.

Borreria ramanii (Sivar. & RV Nair) MR Almeida, Fl. Maharashtra 3A (2001) 6.

Spermacoce lasiocarpa R Br. ex Wall., Numer. List (1829) 832, *nom. nud.*

Trop. Africa, Madagascar, Sri Lanka, India, Nepal, Himalayas, S China, Taiwan, Japan, Burma, Thailand, Vietnam, Peninsular Malaysia, Philippines.

Spermacoce remota Lam., Tabl. Encycl. 1 (1792) 273.

Borreria remota (Lam.) Bacigalupo & EL Cabral, Darwiniana 37 (1999) 334.

Indigenous to tropical and subtropical America, introduced in the Philippines.

Spermacoce scaberrima Blume, Bijdr. (1826) 946.

Borreria scaberrima (Blume) Koord., Exkurs.-Fl. Java 3 (1912) 282.

Spermacoce muriculata Blanco, Fl. Filip., ed. 2 (1845) 44.

Sumatra, Peninsular Malaysia, Java, Philippines.

Streblosa Korthals

Revision:

Bremekamp, CEB. 1947. *A monograph of the genus Streblosa Korth. [Rubiaceae]*. Journal of the Arnold Arboretum 28: 145-185.

Streblosa axilliflora Merr., PJS 10 c (1915) Bot. 141. –Type: BS 22018 Ramos (US*, iso). Luzon: Camarines Sur prov., Mt Isarog, Nov 1913.

Streblosa glabra Valetton ex Winkler in Engl., Bot. Jahrb. 44 (1910) 567; --Elmer, LPB 4 (1912) 1356; --Merr., EPFP 3 (1923) 564.

Streblosa axilliflora Merr. var. *angustifolia* Bremek., J. Arnold Arb. 28 (1947) 184.

Streblosa axilliflora Merr. var. *latifolia* Bremek., J. Arnold Arb. 28 (1947) 184.

Streblosa axilliflora Merr. var. *laxiflora* Bremek., J. Arnold Arb. 28 (1947) 184.

LUZON, CATANDUANES, SAMAR, PALAWAN. In primary forest at low altitudes. (S. *glabra*, fide Merr. 1923).

Streblosa palawanensis Bremek., J. Arnold Arb. 28 (1947) 182.

Streblosa palawanensis var. *elmeri* Bremek., J. Arnold Arb. 28 (1947) 183.

Streblosa palawanensis var. *merrillii* Bremek., J. Arnold Arb. 28 (1947) 183.

PALAWAN.

Sulitia Merrill =Atractocarpus

Tarenna Gaertner

Literature-

Bridson. 1979. *Kew Bull.* 34: 377.

Tarenna acuminata Merr., PJS 17 (1920, publ. 1921) 462; EPFP 3 (1923) 525. –Type: BS 13904 Ramos

LUZON: Apayao. Lowland forests.

Tarenna arborea (Elmer) Elmer, LPB 4 (1912) 1359; --Merr., EPFP 3 (1923) 525; --*Randia arborea* Elmer, LPB 3 (1911) 1005. –Type: Elmer 10978

LUZON: Laguna, Camarines, MINDANAO: Davao. Forests, up to 500m altitude.

Tarenna bakeri (Merr.) Bremek., Fedde, Repert. 37 (1934) 187; --*Pavetta bakeri* Merr., PJS 10 c (1915) Bot. 117; EPFP 3 (1923) 544. –Type: Baker 3214 (not seen). Luzon: Laguna prov., hills back of Paete, 10 Apr 1914.

LUZON: Laguna, Quezon. Low or medium altitude primary forests.

Tarenna bartlingii Bremek., Repert. Spec. Nov. Regni Veg. 47 (1939) 97.

Tarenna pubescens (Bartl. ex DC.) Bremek., Repert. Spec. Nov. Regni Veg. 37: 203 (1934), *nom. illeg., non* Craib (1932); --*Pavetta pubescens* (Bartl. ex DC.) Merr., PJS 17 (1920 publ. 1921) 479; EPFP 3 (1923) 545; --*Webera pubescens* Fern.-Villar, Novis. App. (1880) 108; --*Stylocoryna pubescens* Bartl. ex DC., Prodr. 4 (1830) 377; --Miq., Fl. Ind. Bat. 2 (1857) 206; --Elmer, LPB 1 (1906) 33. –Type: Cuming 1236

LUZON: Ilocos Norte. Lowland thickets or secondary forests.

Tarenna catanduanensis Merr., PJS 17 (1920, publ. 1921) 463; EPFP 3 (1923) 525. –Type: BS 30387

LUZON: Camarines, CATANDUANES. Lowland forests.

Tarenna cumingiana (Vidal) Elmer, LPB 5 (1913) 1898; --Merr., EPFP 3 (1923) 525; --*Webera*

cumingiana Vidal, Phan. Cuming. Philip. (1885) 178; Rev. Pl. Vasc. Filip. (1886) 152; --Elmer, LPB 1 (1906) 40. --Type: Cuming 685

Borneo, Philippines.

LUZON: Quezon, Camarines, Albay, Sorsogon, MINDORO, BILIRAN, LEYTE,
MINDANAO: Agusan del Norte, Surigao del Norte. Lowland primary forests.

Tarenna elongata Merr., PJS 17 (1920, Publ. 1921) 464; EPFP 3 (1923) 525. --Type: BS 35218
Ramos & Pascasio.

DINAGAT, BUCAS GRANDE. Lowland forests.

Tarenna fragrans (Blume) Koord. & Valetton, Bijdr. Boom. Java 8 (1902) 77; --Merr., EPFP 3 (1923) 525; --KM Wong in FS Ng (ed.) Tree Fl. Malaya 4 (1989) 411; --Webera fragrans Hook.f., Fl. Brit. Ind. 3 (1880) 103; --Fern.-Villar, Novis. App. (1880) 108; --Stylocoryna fragrans Blume, Bijdr. (1826) 982.

Sumatra, Peninsular Malaysia, Java, Borneo, Philippines. PALAWAN. Lowland forests.
According to Merrill (1923), identification of Palawan material is not certainly correct.

Tarenna littoralis Merr., PJS 17 (1920, publ. 1921) 465; EPFP 3 (1923) 526. --Type: Merrill 9418
LUZON: Pangasinan, Zambales, APO (off the W coast of Mindoro), CORON,
PALAWAN, DUMARAN, BURIAS, SULU ARCHIPELAGO (UBIAN). Lowland forests,
often on or near the seashore.

Tarenna loheri (Merr.) Bremek., Repert. Spec. Nov. Regni Veg. 37 (1934) 197; --Pavetta loheri
Merr., PJS 27 (1925) 55; EPFP 4 (1925) 254. --Type: Loher 13151 (not seen). Luzon: Rizal prov.,
Montalban, Paningtingan, Mar 1913.

LUZON: Rizal.

Tarenna luzoniensis (Vidal) Bremek., Fedde, Repert. 37 (1934) 198; --Pavetta luzoniensis (Vidal)
Merr., PJS 17 (1920, publ. 1921) 479; EPFP 3 (1923) 544; --Webera luzoniensis Vidal, Phan.
Cuming. Philip. (1885) 179; Rev. Pl. Vasc. Filip. (1886) 152; --Elmer, LPB 1 (1906) 40; --Merr., PJS
1 (1906) Suppl. 133. --Type: Cuming 1323.

Tarenna eucrantha (Elmer) Merr., PJS 17 (1920, publ. 1921) 471; EPFP 3 (1923) 525; --Pavetta eucrantha
Elmer, LPB 3 (1911) 1015; *ibid.* 5 (1913) 1886. --Type: Elmer 12492

LUZON: Ilocos Norte, La Union, Pangasinan, Apayao, Cagayan, Nueva Vizcaya,
Bataan, Rizal, Laguna, Batangas, PALAWAN, SIBUYAN, LEYTE, SAMAR,
MINDANAO: Zamboanga, Lanao del Sur, Agusan del Norte, DINAGAT, SIARGAO.
Low and médium altitude forests.

Tarenna meyeri Elmer, LPB 5 (1913) 1898; --Bremek., Fedde, Repert. 37 (1934) 199; --Pavetta
meyeri (Elmer) Elmer, LPB 3 (1911) 1015; --Merr., PJS 17 (1920, publ. 1921) 479; EPFP 3 (1923)
545; --Webera meyeri (Elmer) Merr., PJS 1 (1906) Suppl. 133; --*Ixora meyeri* Elmer, LPB 1 (1906)
68. --Type: FB 2764 Meyer (not seen). Luzon: Bataan prov., Lamao Forest Reserve, Feb 1905
LUZON: Bataan (Mt Mariveles, Lamao Forest Reserve). Primary forest, altitude c. 650m.
Note: The type material cited for the basionym *Ixora meyeri* Elmer is Elmer 7958 from
Quezon province (Mt Banahaw), collected in Apr 1906. **Why this disparity?**

Tarenna multinervia (Merr.) Bremek., Fedde, Repert. 37 (1934) 200; --Pavetta multinervia Merr.,
PJS 17 (1920, publ. 1921) 475; EPFP 3 (1923) 545. --Type: FB 9013 Whitford & Hutchinson
MINDANAO: Zamboanga. Lowland primary forests.

Tarenna nitida Merr., PJS 17 (1920, publ. 1921) 466; EPFP 3 (1923) 526. --Type: FB 23388 Contreras
NEGROS. Lowland forests.

Tarenna obtusifolia Merr., PJS 17 (1920, publ. 1921) 467; EPFP 3 (1923) 526. --Type: BS 1257

McGregor

BOHOL, BUCAS GRANDE. Thickets and forests near the seashore.

Tarenna palawanensis (Elmer) Merr., PJS 17 (1920, publ. 1921) 471; EPFP 3 (1923) 526; -- Pavetta palawanensis Elmer, LPB 4 (1912) 1344; --Merr., PJS 10 c (1915) Bot. 117. --Type: Elmer 12940 (L*, NY*, US*, iso). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), in humus-covered compact soil of a densely wooded flat at 250ft, Apr 1911.

PALAWAN. Lowland primary forests, to 300m altitude.

Tarenna pangasinensis Merr., PJS 20 (1922) 458; EPFP 3 (1923) 526. --Type: FB 28419 Zamuco
LUZON: Pangasinan. Near streams at low altitude.

Tarenna scaberula (Merr.) Merr., PJS 17 (1920, publ. 1921) 471; EPFP 3 (1923) 526; --Pavetta scaberula Merr., PJS 10 c (1915) Bot. 118. --Type: BS 13114 Ramos & Foxworthy (not seen).
Luzon: Quezon prov., Dayap, in forests, altitude c. 30m, 9 Mar 1911.

LUZON: Cagayan, Laguna, Quezon, Camarines. Low and medium altitude forests.

Tarenna stenantha Merr., PJS 17 (1920, publ. 1921) 468; EPFP 3 (1923) 526. --Type: BS 29003
Ramos & Edaño

LUZON: Ilocos Norte, Bataan, Batangas, Quezon, MINDORO. Low and medium altitude forests.

Tarenna

Randia pubifolia Elmer, LPB 5 (1913) 1895; --Merr., EPFP 3 (1923) 528. --Type: Elmer 14060

MINDANAO: Agusan del Norte. Humid forests, altitude c. 1000m.

"May be the fruiting specimen of Tricalysia negrosensis Elmer", fide Elmer, LPB 5 (1913) 1895.

Tarennoidea Tirvengadum & Sastre

Literature:

Tirvengadum, DD & C Sastre. 1979. *La signification taxonomique des modes des ramification de Randia et genres affines*. Mauritius Inst. Bull. 8: 77–98.

Tarennoidea wallichii (Hook.f.) Tirveng. & Sastre, Mauritius Inst. Bull. 8 (1979) 90; --Tarenna wallichii (Hook.f.) Ridl., Fl. Mal. Pen. 2 (1923) 106; --KM Wong in FS Ng (ed.) Tree Fl. Malaya 4 (1989) 413, 415; --Randia wallichii Hook.f., Fl. Brit. Ind. 3 (1860) 113.

Stylocoryna incerta (Koord. & Valeton) Elmer, LPB 1 (1906) 33; --Tarenna incerta Koord. & Valeton, Bijdr. Boom. Java 8 (1902) 269; --Merr., EPFP 3 (1923) 526.

Tarenna ebracteata (Elmer) Elmer, LPB 5 (1913) 1898; --Randia ebracteata Elmer, LPB 4 (1912) 1354.

Tarenna kotoensis (Hayata) Masamune, Trans. Nat. Hist. Soc. Formos. 20 (1932) 462; --Hatusima, Mem.

Fac. Agr. Kagoshima Univ. 5 (1966) 52; --Chomelia kotoensis Hayata, Icon. Pl. Formosan. 9 (1920) 58.

Tropical and subtropical Asia: India, Sri Lanka, Bangladesh, Laos, Vietnam, Taiwan, Ryukyu Isls, Japan, Thailand, Peninsular Malaysia, Java, Borneo, Philippines.

BATANES, LUZON (widespread), MINDORO, CORON, PALAWAN, JOLO,
MINDANAO: Bukidnon. Chiefly in low and medium altitude secondary forests.

Tetralopha Hooker *filius* =Gynochthodes

Timonius de Candolle

Timonius appendiculatus Merr., PJS 4 c (1909) Bot. 327; EPFP 3 (1923) 541. --Syntypes: BS 2164

Ramos (NY*, US*). Luzon: Rizal prov., Bosoboso, Jan 1904; --BS 2651 Ramos (NY*, US*). Luzon: Rizal prov., May 1907.

LUZON: Rizal, Batangas, Camarines, Sorsogon, MINDORO (Mt Agong). Medium altitude primary forests.

Timonius arboreus Elmer, LPB 1 (1906) 72; --Merr., EPFP 3 (1923) 541. --Type: Elmer 7960 (not seen). Luzon: Quezon prov., Mt Banahaw, forests, altitude 500m, Apr 1906.

Timonius gamillii Elmer, LPB 4 (1912) 1359; *ibid.* 3 (1911) 1013 (staminate fl.). --Type: Elmer 12469 (A*, GH*, L*, NY*, US*). Sibuyan: Mt Giting-giting, Magallanes (=Magdiwang), "in moist gravelly soil of wooded banks of the Pauala River at 1000ft", May 1910.

Taiwan (Lanyu and Lutao), Philippines.

LUZON: Isabela, Nueva Ecija, Zambales, Bataan, Rizal, Laguna, Camarines, Sorsogon, MINDORO, PALAWAN, SIBUYAN, TICAIO, PANAY, GUIMARAS, NEGROS, LEYTE, MINDANAO: Agusan del Norte, Surigao. Low and medium altitude primary forests.

Timonius auriculatus Merr., PJS 17 (1920, publ. 1921) 480; EPFP 3 (1923) 541. --Type: BS 35190 Ramos

DINAGAT. Lowland forests.

Timonius caudatifolius Elmer, LPB 5 (1913) 1898; --Merr., EPFP 3 (1923) 541. --Type: Elmer 14190 (BISH*, L*, MO*, NA*, NY*, US*, iso). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta (=Hilong-hilong), 'lax epiphytic shrub upon moss covered ascending tree trunks 15ft above the very humus wet stony soil in humid forests at 5250ft or some distance above the lagoon', Oct 1912.

S Philippines, N Sulawesi.

MINDANAO: Agusan del Norte (Mt Hilong-hilong). Exposed ridges in the mossy forest, altitude c. 1550m.

Timonius confertiflorus Merr., PJS 10 c (1915) Bot. 114; EPFP 3 (1923) 541. --Type: Merrill Phil. Pl. 1698, leg. M. Ramos (L*, NY*, US*, iso). Samar: Yabong, in dry thickets, 16 Mar 1914.

SAMAR, MINDANAO: Surigao. Lowland dry thickets.

Timonius epiphyticus Elmer, LPB 3 (1911) 1011; --Merr., EPFP 3 (1923) 541. --Type: Elmer 10706 BASILAN, MINDANAO: Lanao del Sur, Bukidnon, Davao. Primary forests, altitude 800-1050m.

Timonius ferrugineus Merr., PJS 10 c (1915) Bot. 115; EPFP 3 (1923) 541. --Type: Merrill 9210 (L*, NY*, US*, iso). Palawan: Palawan prov., Taytay, in forests immediately back of mangroves, 30 Apr 1913.

PALAWAN. Primary forests behind mangroves.

Timonius finlaysonianus (Wall. ex G Don) Hook.f., Fl. Brit. India 3 (1880) 127; --Guettarda finlaysoniana Wall. ex G. Don, Gen. Hist. 3 (1834) 552.

Sumatra, Peninsular Malaysia, Java, Borneo, Philippines.

Timonius gracilipes Merr., PJS 8 c (1913) Bot. 60; EPFP 3 (1923) 541. --Type: BS 11110 Ramos (US*, iso). Cebu: Cebu prov., Buacao, dry hill thickets, Mar 1912.

CEBU. Low and medium altitude thickets.

Timonius hirsutus (Elmer) Merr., PJS 17 (1920, publ. 1921) 480; EPFP 3 (1923) 542; --Greenea hirsuta Elmer, LPB 5 (1913) 1857. --Type: Elmer 13476

Timonius trichophorus Merr., PJS 9 c (1914, publ. 1915) Bot. 388. --Type:

LEYTE, SAMAR, MINDANAO: Agusan del Norte, BUCAS GRANDE. Primary forests up to 900m altitude.

Timonius lanceolatus Merr., PJS 17 (1920, publ. 1921) 318; EPFP 3 (1923) 542. –Type: BS 35211 Ramos & Pascasio
MINDANAO: Surigao del Norte, DINAGAT. Lowland forests.

Timonius longiflorus (Merr.) Merr., EPFP 3 (1923) 542; --Greenea longiflora Merr., PJS 4 c (1909) Bot. 323. –Type: FB 9430 Whitford & Hutchinson (US*, iso). Mindanao: Zamboanga, Tibucuy, in forest, altitude c. 20m, Feb 1908.
MINDANAO: Zamboanga. Lowland primary forests.

Timonius longistipulus Merr., PJS 8 c (1913) Bot. 59; EPFP 3 (1923) 542. –Type: BS 15371 Ramos (L*, US*, iso). Leyte: Leyte prov., Mtns back of Dagami, on trees in the mossy forests, 13 Aug 1912.
LEYTE. Mossy forests, altitude at or above 1000m.

Timonius obovatus Elmer, LPB 1 (1906) 36; --Merr., EPFP 3 (1923) 542. –Type: Merrill 1048, leg. S Gracia (not seen). Luzon: Aurora prov., Aug 1902
LUZON: Aurora, SIBUYAN. Low and medium altitude forests.

Timonius oligophlebius Merr., PJS 11 c (1916) Bot. 34; EPFP 3 (1923) 542. –Type: BS 23367 Ramos (BISH, 3 sheets*, L*, NY*, US*, iso). Luzon: Sorsogon prov., Mt Kililibong, in forests near the summit, apparently at altitude c. 1000m, 17 Aug 1915.
LUZON: Sorsogon. Forests, altitude c. 1000m.

Timonius pachyphyllus Merr., PJS 26 (1925) 494; EPFP 4 (1925) 251. –Type: BS 40794 Ramos (not seen). Luzon: Rizal prov., Mt Angilog (=?Angelo or Angilo), 20 Apr 1922.
LUZON: Rizal. Forested slopes, c. 1200m.

Timonius palawanensis Elmer, LPB 4 (1912) 1360; --Merr., EPFP 3 (1923) 542. –Type: Elmer 12705 (A*, BISH*, L*, NY*, US*, iso). Palawan: Palawan prov., Brookes Point, 'on earthen banks of well-shaded woods at 100ft altitude along a rivulet', Feb 1911.
PALAWAN. Lowland primary forests.

Timonius panayensis Merr., PJS 17 (1920, publ. 1921) 317; EPFP 3 (1923) 542. –Type: BS 35445 Martelino & Edaño (L*, US*, iso). Panay: Aklan prov., Libacao, May-Jun 1919.
PANAY: Aklan (Libacao), Iloilo (Mt Bulilao), Mt Salibongbong. Forests along streams, ascending to 600m.

Timonius philippinensis Merr., Philipp. Bur. Forestry Bull. 1 (1903) 54; --EPFP 3 (1923) 542. –Syntypes: Ahern 463 (NY*, US*), 456 (not seen). Dinagat, 1902.
MINDORO, SAMAR, MINDANAO: Surigao del Norte, DINAGAT, BUCAS GRANDE.
Lowland forests.

Timonius pulgarensis Elmer, LPB 4 (1912) 1360; --Merr., EPFP 3 (1923) 542, erroneously as 'palawanensis'. –Type: Elmer 13201 (L*, iso). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), May 1911
PALAWAN. Dense thickets near the summit of Mt Pulgar, altitude c. 1300m.

Timonius quadrasii Elmer, LPB 1 (1906) 36; --Merr., EPFP 3 (1923) 542. –Type: Ahern 545, leg. JF Quadras (US*, iso). Mindanao: Zamboanga del Sur prov., Tetuan, Mar-Jun 1901.
MINDANAO: Zamboanga del Sur (Tetuan). Probably from lowland forests.

Timonius quinqueflorus Merr., PJS 10 c (1915) Bot. 116; EPFP 3 (1923) 543. –Type: BS 20885
Escritor (L*, US*, iso). Luzon: Quezon prov., Guinayangan, 8 Mar 1913.
LUZON: Quezon (Guinayangan). Low or medium altitude forests.

Timonius rotundus Merr., PJS 17 (1920, publ. 1921) 317; EPFP 3 (1923) 543. –Type: BS 35176
Ramos & Pascasio
DINAGAT. Lowland forests.

Timonius samarensis Merr., PJS 12 c (1917) Bot. 165; EPFP 3 (1923) 543; --Timonius
macrophyllus Merr., PJS 5 c (1910) Bot. 246; --Elmer, LPB 3 (1911) 1010, *non* Valetton. –Type: FB
12856 (US*, iso). Samar: Western Samar prov., near Catbalogan, hillsides along streams, altitude c.
200m, 7 Feb 1909.
SAMAR, BUCAS GRANDE. Lowland forests.

Timonius ternifolius (Bartl.) Fern.-Villar, Novis. App. (1880) 109; --Elmer, LPB 1 (1906) 36;
--Merr., EPFP 3 (1923) 543; --Petesia ternifolia Bartl. ex DC, Prodr. 4 (1830) 395. –Type: Haenke *sn* (not
seen).
BUBUYAN ISLS (CAMIGUIN), LUZON: Ilocos Norte, BUSUANGA, CULION,
PALAWAN, PANAY. Lowland forests and thickets

Timonius urdanetensis Elmer, LPB 5 (1913) 1899; --Merr., EPFP 3 (1923) 543. –Type: Elmer
14197
MINDANAO: Agusan del Norte (Mt Hilong-hilong). Exposed ridges in the mossy forest,
altitude c. 1650m

Timonius valettonii Elmer, LPB 3 (1911) 1012; --Merr., EPFP 3 (1923) 543. –Type: Elmer 12342
SIBUYAN, MINDANAO: Surigao

Possible ined. names:

Timonius stenophyllus Merr. & Quisumb. Based on: PNH 6417 Sulit & Conese (L*). Samar:
Western Samar prov., Wright, Mt Calbiga, near Km 62, forest on flat ridge, altitude c. 300m, 25 May
1948.

SAMAR: Western Samar (Wright, Mt Calbiga).

Timonius sulitii Merr. & Quisumb. Based on PNH 6429 Sulit & Conese (L*). Samar: Eastern Samar
prov., Taft, Mt Calbiga, dipterocarp forest along road, Km 64, altitude c. 250m, 18 May 1948.

SAMAR: Eastern Samar (Taft, Mt Calbiga).

Tricalysia A. Richard ex de Candolle
=Philippine spp. now in Diplospora, Discospermum

Tricalysia sorsogonensis Elmer, LPB 9 (1934) 3269, not validly published, no Latin descr. --
Voucher: Elmer 17164 (iso in NY*).

In Hypobathreae. Generic position yet to be determined. Although in habit very similar
to Tricalysia and Diplospora, fruit characters (pendulous seeds with superior embryo
radicle, folded exotesta with elongated cells thickened along radial walls) leave no doubt
about the placement in Hypobathreae. –Ali & Robbrecht, op. cit.

Uncaria Schreber

Revision:

Ridsdale, CE. 1978. *A revision of Mitragyna & Uncaria*. Blumea 24: 43–100.

Uncaria acida (Hunter) Roxb., Hort. Beng. (1814) 86; Fl. Ind. ed. 1, 2 (1824) 129; --Merr., EPFP 3 (1923) 508; --Ridsdale, Blumea 24 (1978) 80. --Type from Penang, Malaysia.

var. acida

Burma (Mergui), ?Thailand, S Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi.

Uncaria attenuata Korth., Verh. Nat. Gesch. Ned. Bot. (1840) 170; --Ridsdale, Blumea 24 (1978) 79. *Uncaria canescens* Elmer, LPB 1 (1906) 37; --Merr., EPFP 3 (1923) 509, *non* Korth. (1840).

Uncaria attenuata ssp. *bulusanensis* Ridsd. ex Phillip. & Heming., Phytochem. 14 (1975) 1855, *nom. nud.*; --*Uncaria bulusanensis* Elmer, LPB 9 (1934) 3270. --Type: Elmer 14917 (L*, MO*, NY*, U*, US*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Nov. 1915.

Andaman Isls, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi.

Uncaria callophylla Blume ex Korth., Verh. Nat. Gesch. Ned. Bot. (1840) 170; --Ridsdale, Blumea 24 (1978) 85.

Uncaria luzoniensis Merr., PJS 27 (1925) 57; EPFP 4 (1925) 254. --Type: Loher 14457 (UC; holotype fragment: L*). Luzon: Rizal prov., Mabiluang, Oct 1913.

Sumatra, Peninsular Malaysia, Borneo, Philippines, Moluccas, New Guinea.

Uncaria cordata (Lour.) Merr., Interp. Herb. Amb. (1917) 479; EPFP 3 (1923) 509; --Ridsdale, Blumea 24 (1978) 75; --Restiaria *cordata* Lour., Fl. Cochinch. (1790) 639.

var. cordata

forma cordata

S Burma, Peninsular Thailand, Cambodia, Laos, S Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, New Guinea.

forma sundaica Ridsd., Blumea 24 (1978) 76.

Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi.

var. ferruginea (Blume) Ridsd., Blumea 24 (1978) 76

forma insignis (Bartl.) Ridsd., Blumea 24 (1978) 77.

Uncaria insignis DC, Prodr. 4 (1830) 348; --Merr., EPFP 3 (1923) 509.

Nauclea luzonensis D Dietr., Syn. Pl. 1 (1839) 791.

Sumatra, Borneo, Philippines, Sulawesi, ?Moluccas.

Uncaria lanosa Wall. in W Roxburgh, Fl. Ind. 2 (1824) 131.

var. lanosa

forma philippinensis (Elmer) Ridsd., Blumea 24 (1978) 89; --*Uncaria philippinensis* Elmer, LPB 1 (1906) 38; --Merr., EPFP 3 (1923) 510. --Syntypes: RC McGregor 322 (NY*, US*). Mindoro:

Mindoro Oriental prov., Baco River, Apr-May 1905; --HN Whitford 762 (US*). Luzon: Quezon prov.,

Infanta, Sept 1904.

S Taiwan, Philippines, N Sulawesi.

forma setiloba (Benth.) Ridsd., Blumea 24 (1978) 89, Fig. 9.6; --*Uncaria setiloba* Benth. in Hooker's J. Bot. Kew Gard. Misc. 2 (1843) 223. --Type from Ambon.

Uncaria glabrata Fern.-Villar in FM Blanco, Fl. Filip., ed. 3, 4 (13A) (1880): 105.

Uncaria florida Vidal, Phan. Cuming. Philip. (1885) 176. . --Type: Cuming 1504 (L*, lecto; isoelecto: K, L*, NY, 2 sheets*). Philippines. No further locality data.

Philippines, Moluccas.

var. ferrea (Blume) Ridsd., Blumea 24 (1978) 87, Fig. 10:6; --*Uncaria ferrea* (Blume) DC., Prodr. 4 (1830) 348; --*Nauclea ferrea* Blume, Bijdr. (1826) 1014.

Uncaria lanosa forma *ferrea* (Blume) Ridsd., Blumea 24 (1978) 87.

Nicobar Isls, Andaman Isls, Burma, Thailand, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, New Guinea.

PALAWAN

Uncaria longiflora (Poir.) Merr., Interp. Herb. Amb. (1917) 480; EPFP 3 (1923) 509; --Ridsdale, Blumea 24 (1978) 82.

Uncaria pachyphylla Merr., PJS 10 c (1915) Bot. 102. --Type: BS 16652 Ramos (US*, iso). Luzon: Laguna prov., San Antonio, Sept 1912.

var. longiflora

Peninsular Thailand, Sumatra, Peninsular Malaysia, Borneo, Sulawesi, Moluccas, New Guinea, ?Solomon Isls. No material seen from Java or Lesser Sunda Isls.

var. pteropoda (Miq.) Ridsd., Blumea 24 (1978) 82; --*Uncaria pteropoda* Miq., Fl. Ind. Bat. 2 (1857) 143. --Type from Sumatra.

Uncaria laevifolia Elmer, LPB 5 (1913) 1902; --Merr., EPFP 3 (1923) 509. --Type: Elmer 14178 (BO, L*, NY*, 2 sheets). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta [=Mt Hilong-hilong], Oct 1912.

Sumatra, Peninsular Malaysia, Borneo, ?Philippines.

Uncaria nervosa Elmer, LPB 3 (1911) 985; --Merr., EPFP 3 (1923) 510; --Ridsd., Blumea 24 (1978) 79. --Type: Elmer 11794 (K, L*, MO*, NY*, US*, iso). Mindanao: Davao del Sur prov., Mt Apo,

Todaya, 'in dense

humid forested flats at 4000ft [=1219 m], south of the Baruring River', Sept 1909.

Java, Borneo, Philippines, Moluccas, New Guinea, Solomon Isls.

Uncaria perrottetii (A Rich.) Merr., PJS 8 c (1913) Bot. 60; EPFP 3 (1923) 510; --Ridsd., Blumea 24 (1978) 85, Fig. 9:8; --*Sabicea perrottetii* A Rich., Mém. Soc. Hist. Nat. Paris 5 (1834) 228. --

Type: Perrottet *sn* (P, holo; iso: L*). Philippines: "Manille".

Uncaria hookeri Vidal, Phan. Cuming. Philip. (1885) 177; Rev. Pl. Vasc. Filip. (1886) 149; --Havil., J. Linn. Soc. Bot. 33 (1897) 86, t. 4, Fig. 13-18; --Elmer, LPB 1 (1906) 37. --Syntypes: Cuming 619; 1128 (K). Luzon: without definite locality; --Vidal 1469 (L*). Luzon: Bulacan prov., Angat.

Philippines. LUZON: Ilocos Norte (Mt Piao), Ilocos Sur, La Union, Pangasinan, Mountain Province, Cagayan, Bataan (Dinalupihan), Pampanga (Mt Abu), Bulacan (Norzagaray), Rizal (Montalban; Bosoboso), Laguna (Los Baños; Calauan), MINDANAO: Lanao, Davao. Lowland and medium altitude forests.

Uncaria roxburghiana Korth., Verh. Nat. Gesch. Ned. Bot. (1840) 172; --Ridsdale, Blumea 24 (1978) 89.

Uncaria brevicarpa Elmer, LPB 9 (1934) 3271. --Type: Elmer 16842 (BO, K, L, MO*, NY*, U*, US*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Aug 1916.

Sumatra, Peninsular Malaysia, Borneo, Philippines.

Uncaria velutina Havil., J. Linn. Soc. Bot. 33 (1897) 84; --Merr., EPFP 3 (1923) 509; --Ridsdale, Blumea 24 (1978) 80. --Type: Cuming 1503 (K, L*, syntype). Mindoro.

Uncaria canescens var. *velutina* Ridsd. ex Phillip. & Heming., Phytochem 14 (1975) 1855, *nom. nud.*

Uncaria clavisepala Elmer, LPB 1 (1908) 350; --*Nauclea clavisepala* Merr., PJS 3 c (1908) Bot. 266. --Type: Elmer 8262 (BO, K, NY*, iso). Luzon: Laguna prov., Los Baños, Apr 1906.

Philippines.

Urophyllum Jack ex Wallich

Revisions:

Bremekamp, CEB. 1940. *On Urophyllum Wall. (Rubiaceae) and its nearest allies*. Recueil Trav. Bot. Neerl. 37: 171–197.

Bremekamp, CEB. 1940. *A preliminary account of the Philippine species of Urophyllum Wall., Pleiocarpidia K Schum., & Praravinia Korth. (Rubiaceae)*. Journal of the Arnold Arboretum 21: 32–40.

Urophyllum acuminatissimum Merr., PJS 10 c (1915) Bot. 106; EPFP 3 (1923) 521; --Bremek., J. Arnold Arb. 21 (1940) 39. --Type: BS 20423 Ramos (not seen). Luzon: Laguna prov., San Antonio, in forest, Feb 1913.

LUZON: Laguna (San Antonio), Quezon, Camarines Norte (Paracale), Sorsogon. In primary forests, at low altitudes. An easily recognizable species, of which the flowers are still unknown.

Urophyllum bataanense Elmer, LPB 1 (1906) 40; --Merr., EPFP 3 (1923) 522; --Bremek., J. Arnold Arb. 21 (1940) 40. --Type: Elmer 6810 (NY*, iso). Luzon: Bataan prov., Mt Mariveles, Nov 1904.

LUZON, MINDORO, SIBUYAN, LEYTE, PANAY, NEGROS. In primary forests chiefly at medium altitudes, ascending to 1200m in the mossy forests.

Notes: Bremekamp (1940) is of the opinion that specimens collected in parts of Luzon other than Bataan, as well as from Mindoro, Bohol, and Jolo belong in the neighborhood of *U. mindorense* Merr.

Urophyllum caudatum Merr., PJS 17 (1920, publ. 1921) 481; EPFP 3 (1923) 522; --Bremek., J. Arnold Arb. 21 (1940) 38; --Type: BS 33348 Ramos (A*, US*, iso). Luzon: Ilocos Norte prov., Mt Palimlim, on forested slopes, altitude 900m, 20 Aug. 1918.

LUZON: Ilocos Norte (Mt Palimlim), PANAY: 32302 *McGregor*. In primary forests, extending into the mossy forests, 900-1100m.

Urophyllum elliptifolium Merr., PJS 5 c (1910) Bot. 247; EPFP 3 (1923) 522; --Elmer, LPB 3 (1911) 998; --Bremek., J. Arnold Arb. 21 (1940) . --Type: FB 3871 Curran. Palawan: Mt Pulgar, on forested

slopes, altitude 700-1300m, Feb 1906.

PALAWAN: Mt Pulgar. In forests, altitude 700-1300m. Merrill compares this with the Bornean *U. subanurum* Stapf.

Urophyllum leytense Merr., PJS 8 c (1913) Bot. 62; EPFP 3 (1923) 522; --Bremek., J. Arnold Arb. 21 (1940) 40. --Type: BS 15289 Ramos (not seen). Leyte: Leyte prov., Mountains back of Dagami, in forests, 13 Aug 1912.

NEGROS: Negros Oriental (Cuernos Mtns), LEYTE: Leyte (Mtns back of Dagami), Southern Leyte (Cabalian). In forests, probably at or above 900m.

Urophyllum memecylroides (C Presl) Rolfe, J. Bot. 23 (1885) 119; --Bremek., J. Arnold Arb. 21 (1940) 38; --*Cymelonema memecylroides* C Presl, Epim. (1851) 210. --Type: Cuming 1678. Samar. *Urophyllum arboreum* C Robinson, PJS 6 c (1911) Bot. 227; --Merr., EPFP 3 (1923) 521, non (Reinw. ex Blume) Korth., Nederl. Kruidk. Arch. 2 (1851) 194.

LUZON: Rizal (Mt Irig =Irid), Laguna (Infanta-Siniloan trail; Paete; San Antonio; Cavinti), Quezon (Mt Binuang; Lucban), Camarines Sur (Maagnas), POLILLO, CATANDUANES, MINDORO: Mindoro Oriental (Mt Halcon), SAMAR: Without further locality data (Cuming 1678); Northern Samar (Catubig River), LEYTE (Mt Abucayan; without precise locality (Wenzel 85)), PANAY: Capiz side of Mt Madaas, NEGROS: Negros Oriental (Cuernos Mtns), CAMIGUIN, MINDANAO: Zamboanga del Sur (Malangas), Bukidnon (Mt Dumalucpican), Agusan del Norte (Mt Urdaneta (=Hilong-hilong), Cabadbaran), Surigao del Norte. Forests at low and medium altitudes.

Urophyllum mindorense Merr., PJS 20 (1922) 464; EPFP 3 (1923) 523; --Bremek., J. Arnold Arb. 21 (1940) 39. --Type: BS 39379 (A*, iso). Mindoro: Mindoro Occidental prov., Mt Calavite, forested slopes, altitude 600-700m, Apr 1921.

MINDORO: Mindoro Occidental (Mt Calavite, also *BS 39398 Ramos* in addition to the type collection). Known only from the type locality.

Urophyllum panayense Merr., PJS 17 (1920, publ. 1921) 482; EPFP 3 (1923) 523; --Bremek., J. Arnold Arb. 21

(1940) 39. --Type: BS 31421 Ramos & Edaño (A*, US*, iso). Panay: Capiz prov., Jamindan, in forests along small streams, 22 May 1918.

PANAY: Capiz (Jamindan, *BS 31318 Ramos & Edaño*), Aklan (Mt Macosolen, =Magosolon *BS 30819 Ramos & Edaño*). In primary forests along streams at low or medium altitudes.

Urophyllum platyphyllum Elmer, LPB 3 (1911) 999; --Merr., EPFP 3 (1923) 523; --Bremek., J. Arnold Arb. 21 (1940) 39; --Type: Elmer 12363 (A*, GH*, L, MO*, NY*, US*, iso). Sibuyan: Mt Giting-giting, Magallanes (=Magdiwang), moist gravelly soil of humid forested gulleys at 1750 ft on the España side of the trail leading over the ridge, Apr 1910.

SIBUYAN (Mt Giting-giting), CATANDUANES (*BS 30548 Ramos*). In forest at low and medium altitudes. Apparently related to *U. macrophyllum* (Blume) Korth., but still imperfectly known.

Urophyllum reticulatum Elmer, LPB 3 (1911) 999; --Merr., EPFP 3 (1923) 523--Bremek., J. Arnold Arb. 21 (1940) 39; --Type: Elmer 12506 (A*, GH*, L, MO*, NY*, US*). Sibuyan: Mt Giting-giting, Magallanes (=Magdiwang), stony moist soil on a forested ridge, altitude 4000 ft, May 1910.

SIBUYAN: Mt Giting-giting. On ridges in the mossy forest, c. 1200m. Known only from the type collection.

Urophyllum subglabrum Merr., PJS 12 c (1917) Bot. 162; EPFP 3 (1923) 523; --Bremek., J. Arnold Arb. 21 (1940) 38. --Type: BS 26507 Ramos & Edaño (US*, holo; iso: A, NY*). Luzon: Nueva Ecija prov., Mt Umingan (=Mingan), dry slopes, altitude c. 100m, 6 Sept. 1916.

LUZON: Nueva Ecija (Mt Umingan, *BS 29196*), Rizal (Mt Irid =Irid, *BS 41960 Ramos*). In primary forests at low medium altitudes.

Urophyllum urdanetense Elmer, LPB 5 (1913) 1900; --Merr., EPFP 3 (1923) 524; --Bremek., J. Arnold Arb. 21 (1940) 38. --Type: Elmer 13788 (US*, holo, fide Buchner; iso A, L*, NY*, 2 sheets, U*. Mindanao: Agusan del Norte prov., Mt Urdaneta (=Hilong-hilong), Cabadbaran, Oct. 1912.

MINDANAO: Agusan del Norte (Mt Urdaneta, =Mt Hilong-hilong). Mossy forest, altitude 1500-1650m.

Known from two collections in the type locality. Very near *U. memecyloides* (C Presl) Rolfe but imperfectly described. Nearly related, but apparently distinct from the two preceding species is a plant collected from JOLO: Mt Dajo, *BS 4391* (L), staminate.

Ined.names & possible novelties:

Urophyllum sp. aff. **reticulatum**, Bremek., J. Arnold Arb. 21 (1940) 39.

PANAY: Capiz (Jamindan). Based on *BS 31165 Ramos & Edaño* (A, c.fr.) and *BS 31000* (L, fl. buds). According to Bremekamp, 'doubtless a good species...' but inavailability of flowers prevents him from formally naming it.

Urophyllum sp. aff. **leytense**, cited in Bremek., J. Arnold Arb. 21 (1940) 40. Based on *BS 40963* Ramos (A), female, Mindoro: Mindoro Oriental prov., Pinamalayan; and *BS 40595* (A), young buds, Mindoro: Mindoro Oriental prov., Mt Halcon.

Urophyllum halconense Merr., in sched., cited in Bremek., J. Arnold. Arb. 21 (1940) 40. Based on BS 40707 Ramos & Edaño (A), fr.; also BS 40603 (A), sterile. Mindoro: Mindoro Oriental prov., Mt Halcon.

Urophyllum sp., cited in Bremek., J. Arnold. Arb. 21 (1940) 40. Based on BS 40885 & 41022 Ramos (A, L), male. Mindoro: Mindoro Oriental prov., Pinamalayan..

A very curious plant with solitary subsessile flowers, provided with a 6-merous calyx and corolla and surrounded by a fairly large involucre; the buds are too young for a good description.

Vidalasia Tirvengadum

Vidalasia morindifolia (Elmer) Tirveng., Biogeographica (The Hague) 74 (1998) 166; --*Gardenia morindaefolia* Elmer, LPB 1 (1906) 67; --Merr., EPFP 3 (1923) 530. --Type: BS 32706 Ramos (not seen).

Gardenia pubifolia Merr., PJS 10 c (1915) Bot. 112; --Merr., EPFP 3 (1923) 531. --Type: BS 19343 Wester (US*, iso). Mindanao: Davao Oriental prov., Mati, 19 Aug 1912.

LUZON: Ilocos Norte, La Union, Bataan, Quezon, Laguna; PALAWAN, TICA, MINDANAO: Davao Oriental. In thickets and low altitudes forest, often along seashore on cliffs.

Villaria Rolfe

Villaria acutifolia (Elmer) Merr., PJS 5 c (1910) Bot. 248; EPFP 3 (1923) 532; --*Gardenia acutifolia* Elmer, LPB 1 (1906) 6. --Syntypes: Copeland 437 (NY*, US*, type specimen for flower). Mindanao: Davao, Mar 1904; --FB 457 JF Quadras (not seen, type specimen for fruit). Dinagat, Feb 1901.

DINAGAT, MINDANAO: Davao. Forest at low altitudes.

Villaria fasciculiflora Quisumb. & Merr., PJS 37 (1928) 207. --Type: BS 46775 Ramos & Edaño (NY*, US*, iso). Luzon: Isabela prov., San Mariano.

LUZON: Isabela (San Mariano and Palanan).

Villaria glomerata (Bartl. ex DC) Mulyan. & Ridsd., Reinwardtia 12 (2004) 195; --*Hypobathrum glomeratum* (Bartl. ex DC) K Schum. in Engl. & Prantl, Nat. Pflanzenfam. 4⁴ (1891) 156; --Merr. Fl. Manila (1912) 450; EPFP 3 (1923) 533;

LUZON, MINDANAO, In thickets, hedges, and secondary forests at low altitudes.

Villaria odorata (Blanco) Merr., Sp. Blancoanae (1918) 363; EPFP 3 (1923) 532.

Gardenia rolfei (Vidal) Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 50; --*Villaria rolfei* Vidal, Phan. Cuming. Philip. (1885) 180; --Merr., EPFP 3 (1923) 532. --Type: Cuming 1271 (iso L*, 2 sheets).

Gardenia elliptica Elmer, LPB 1 (1906) 6. --Type: HN Whitford 705 (US*, iso). Luzon: Quezon prov., Atimonan, Aug-Sept 1900; Lanyu and the Philippines. BATAN, BABUYAN ISLS, LUZON: Cagayan, Isabela, Aurora, Quezon, Laguna, Camarines, Albay, Sorsogon, SAMAR, MINDANAO: Surigao. In thickets along the seashore, occasionally also inland thickets.

Villaria philippinensis Rolfe, J. Linn. Soc. Bot. 21 (1884) 311, t. 10, Fig. 1-8; --Merr., EPFP 3 (1923) 532.

LUZON: Cagayan, Aurora, Quezon, Camarines, CATANDUANES, LEYTE, SIARGAO, DINAGAT. Secondary forests at low altitudes.

Wendlandia Bartling ex de Candolle

Revisions:

Cowan, JM. 1932. *The genus Wendlandia*. Notes from the Royal Botanic Garden Edinburgh 16: 233–314.

Cowan, JM. 1936. *The Malaysian species of Wendlandia (Rubiaceae)*. Bulletin du Jardin Botanique du Buitenzorg 3, 14: 8–46.

Wendlandia brachyantha Merr., PJS 1 (1906) Suppl. 128; EPFP 3 (1923) 505. –Type: Whitford 449 (US*, iso). Luzon: Bataan prov., Mt Mariveles. On ridges on the mossy forest, altitude c. 1050m, Jul 1904.

LUZON: Bataan. Known only from the type collection.

Wendlandia glabrata DC, Prodr. 4 (1830) 411; -- Merr., EPFP 3 (1923) 505.

India to Taiwan, Peninsular Malaysia, Philippines. BABUYAN ISLS, LUZON: Ilocos Norte, Abra Ilocos Sur, Mountain Province, Benguet, Nueva Vizcaya, Zambales, Pampanga, Rizal, Camarines, Sorsogon, MINDORO. Medium altitude forests, ascending to 2100m.

Wendlandia luzoniensis DC, Prodr. 4 (1830) 412; Merr., EPFP 3 (1923) 506.

var. luzoniensis

BATANES, LUZON: La Union, Pangasinan, Zambales, Bataan, Rizal, Laguna, Camarines, CULION, PALAWAN, CAMIGUIN, MINDANAO: Davao. Low and medium altitude forests. According to Merrill, very close to *W. paniculata* DC.

var. membranifolia (Elmer) Cowan, xxxxx

Wendlandia membranifolia Elmer, LPB 1 (1908) 357; --Merr., EPFP 3 (1923) 506.

LUZON: Abra, Pangasinan, Mountain Province, Benguet, Cagayan, Nueva Vizcaya, Nueva Ecija, Bulacan, Rizal, MINDANAO: Bukidnon. Low and medium altitude forests. Possibly a mere pubescent form of the preceding.

var. syringoides (Cowan)

Wendlandia syringoides (Cowan) Cowan, Notes Bot. Gard. Edinburgh 18 (1934) 187.

var. williamsii (Merr.) Cowan

Wendlandia williamsii Merr., PJS 10 c (1915) Bot. 101; EPFP 3 (1923) 506. –Type: Williams 2084 (NY*, 2 sheets; US*, iso). Mindanao: Zamboanga, Sax River, altitude c. 130m, 1 Feb 1905.

MINDANAO: Zamboanga. Low altitude forests.

Wendlandia nervosa Merr., PJS 3 c (1908) Bot. 263; EPFP 3 (1923) 506. –Type: BS 5007 Ramos (NY*, US*, IT). Luzon: Zambales prov., Nov. –Dec. 1907.

LUZON: Zambales. Forests, probably above 1000m.

Wendlandia philippinensis Cowan, Notes Roy. Bot. Gard. Edinburgh 16 (1932) 274. –Type: Merrill 4409 (NY*, iso). Luzon: Benguet prov., Daklan to Kabayan, Oct.-Nov. 1905.

Wendlandia sibuyanensis Cowan, Notes Roy. Bot. Gard. Edinburgh 16 (1932) 299. –Type: Elmer 12345 (A*, NY*). Sibuyan: Mt Giting-giting, Magallanes (=present day Magdiwang), moist gravelly soil of wooded banks along Pauala River, alt. 1000ft, Apr 1910.

Wendlandia uvariifolia Hance, J. Bot. 8 (1870) 73; --Merr., EPFP 3 (1923) 506.

S China, Taiwan, Indochina, Philippines. LUZON: Ilocos Sur, Cagayan. Low altitude thickets and second growth forests.

Wendlandia warburgii Merr., PJS 26 (1925) 495; EPFP 4 (1925) 251. --Type: Warburg 12016. Luzon: Isabela prov. Apr 1888.

LUZON: Isabela.

Williamsia Merrill =Praravinia

Xanthophytum Blume

Revision:

Axelius, B. 1990. *The genus Xanthophytum (Rubiaceae). Taxonomy, phylogeny and biogeography*. Blumea 34: 425–497

Xanthophytum ferrugineum (DC) Merr., in Mitt. Inst. Allg. Bot. Hamb. 7 (1937) 270; --Axelius, Blumea 34 (1990) 462, t. 23; --Metabolus ferrugineus DC, Prodr. 4 (1830) 436. --Type: Haenke sn (**Herb Prague**, cited by Merrill, 1909). Luzon: without definite locality.

Xanthophytum fruticosum Reinw. ex Blume Bijdr. (1826) 989; --Merr., EPFP 3 (1923) 492.

Java, Borneo, Philippines. LUZON: Ilocos Norte, Laguna, Quezon, Camarines, Sorsogon, POLILLO, PANAY, MINDANAO: Agusan del Norte, Surigao del Norte. Low and medium altitude damp primary forests. (Distribution based on Merr., 1923).

Cultivated:

Carphalea Jusseau

Carphalea kironдон Baill., Bull. Mens. Soc. Linn. Paris 1 (1878) 188.

Cinchona Linnaeus

Cinchona calisaya Wedd., Ann. Sci. Nat., Bot., III, 10 (1848) 6.

Cinchona officinalis L., Sp. Pl. (1753) 172.

Cinchona pubescens Vahl, Skr. Naturhist.-Selsk. 1 (1790) 19.

Coffea Linnaeus

Coffea arabica L., Sp. Pl. 1 (1753) 172.

Coffea excelsa Cheval, Rev. Cult. Colon. xii. 258; et in Compt. Rend. Acad. Sci. Par. cxi. 517.

Coffea liberica Hiern, Trans. Linn. Soc. London, Bot. 1(4) 1876 [1880, publ. Dec 1876] 171, t. 24.

Coffea robusta L Linden, Cat. Pl. Econ. (1900) 64.

Hamelia Jacquin

Hamelia patens Jacq., Enum. Syst. Pl. (1760) 16.

Pentas Benth

Pentas lanceolata (Forssk.) Deflers, Voy. Yemen (1889) 142.

Posoqueria Aublet

Posoqueria longiflora Aubl., Hist. Pl. Guiane 1 (1775) 134.

Pseudomussaenda flava Verdc., Kew Bull. 6 (1951, publ. 1952) 378.

Mussaenda flava (Verdc.) Bakh.f. in Backer, *Beknopte Fl. Java* 15 (Fam. 173) (1956) 72.
Native of tropical Africa. Sometimes planted here as an ornamental.