

128 c. LEGUMINOSAE subfamily PAPILIONOIDEAE

Revisions:

Meeuwen, MS van, HP Nootboom & CGGJ van Steenis. 1960. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae, I.* Reinwardtia 5: 419-456.

Abrus Adanson

Revision:

Breteler, F.J. 1960. *Revision of Abrus Adanson (Pap.) with special reference to Africa.* Blumea 10: 607-624.

Abrus fruticosus Wall. ex Wight & Arn., Prodr. 1 (1834) 236; --Breteler, Blumea 10 (1960) 612, Fig. 2: ii; 3-4; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 71, (as 'fruticulosus').

Abrus laevigatus E Meyer, Comm. 1 (1835-37) 126; --Merr., EPFP 2 (1923) 303.

Pantropical.

LUZON: Abra southward to Laguna. Lowland and medium altitude thickets.

Abrus precatorius L., Syst. ed. 12 (1767) 472; --Merr., EPFP 2 (1923) 303; --Breteler, Blumea 10 (1960) 617, Fig. 5; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 69, Fig. 17.

Pantropic, although probably a native of tropical Asia.

Throughout the Philippines. Lowland and medium altitude dry thickets.

Aeschynomene Linnaeus

Revision:

Rudd, VE. 1959. The genus *Aeschynomene* in Malaysia (Leguminosae-Papilionatae). Reinwardtia 5: 23-26.

Aeschynomene americana L., Sp. Pl. (1753) 713; --Rudd, Reinwardtia 5 (1959) 25. --Type from Jamaica.

var. americana

Native of the Caribbean region, introduced to Malesia in Java and the Philippines.

LUZON, BOHOL.

Aeschynomene indica L., Sp. Pl. (1753) 715; --Merr., Fl. Manila (1912) 237; EPFP 2 (1923) 282; --Rudd, Reinwardtia 5 (1959) 30; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 32, Fig. 1.

Presumably native to SE United States, now widely distributed in tropical and warm temperate part of the Old World.

Throughout the Philippines. Open water-logged grasslands and rice paddies.

Aganope Miquel

Aganope heptaphylla (L.) Polhill, Kew Bull. 25 (1971) 268; --Derris heptaphylla (L.) Merr., Interp. Rumph. Herb. Amb. (1917) 273; EPFP 2 (1923) 299.

India to Indochina, Peninsular Malaysia, Philippines.

LUZON: La Union, Pangasinan, Cagayan, Zambales, Bataan, Rizal, MINDORO, PALAWAN, NEGROS, LEYTE, BILIRAN, MINDANAO. In thickets, secondary forests, etc., at low and medium altitudes.

Aganope thyrsoflora (Benth.) Polhill, Kew Bull. 25 (1971) 268; --Derris thyrsoflora Benth., J. Linn. Soc. Bot. 4 (1860) Suppl. 249; --Merr., EPFP 2 (1923) 301.
Nicobar Isls., Peninsular Malaysia, Sumatra, Java, Philippines.
NEGROS, BASILAN. Lowland thickets.

Alysicarpus Necker ex Desvaux

Literature:

Meeuwen, MS van, CGGJ van Steenis & J Stemmerik. 1961. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae II*. Reinwardtia 6: 86-89.
Adema, F 2003. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae)*. 10. *The genus Alysicarpus*. Blumea 48: 145-152.

Alysicarpus monilifer DC, Prodr. 2 (1825) 353; --Adema, Blumea 48 (2003) 148, Fig. 2j.

Extra-Philippine Range?

Philippine record based on Clemens 17871 (SING) from LUZON.

Alysicarpus bupleurifolius (L.) DC, Prodr. 2 (1825) 352; --Merr., Fl. Manila (1912) 241; EPFP 2 (1923) 292; --Meeuwen et al., Reinwardtia 6 (1961) 88; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 47; --Hedysarum bupleurifolium L., Sp. Pl. (1753) 745.

Mauritius, Bourbon, Sri Lanka, India to S China, Taiwan, Java, Lesser Sunda Isls, Philippines, Sulawesi, Moluccas, N Australia, and Polynesia.
N LUZON to MINDANAO. Along roadsides, grasslands, cultivated lands, etc., in sunny places subject to a pronounced dry season, low to medium altitudes.

Alysicarpus vaginalis (L.) DC, Prodr. 2 (1825) 353; --Merr., Fl. Manila (1912) 242; EPFP 2 (1923) 292; --Steen., Reinwardtia 6 (1961) 87; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 47, Fig. 10; --Hedysarum vaginae L., Sp. Pl. (1753) 746.

Alysicarpus nummularifolius (*non* Hedysarum nummularifolium L.) DC, Prodr. 2 (1825) 353; --Merr., Fl. Manila (1912) 242; EPFP 2 (1923) 292; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 47, Fig. 11.

Old World Tropics, introduced in tropical America.

Widespread in the Philippines, especially in areas subjected to at least a short annual dry season. Low altitudes, along roadsides, grasslands, cultivated lands, etc.

Arachis Linnaeus

Arachis hypogaea L., Sp. Pl. (1753) 741; --Merr., Fl. Manila (1912) 237; EPFP 2 (1923) 283; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 34, Fig. 2.

Native of tropical America. Now widely cultivated in most tropical and subtropical countries. Peanut.

Arachis pintoii A. Krapovickas & WC Gregory, Bonplandia 8 (1994) 81.

Native of NE Brazil (Bahia).

Atylosia Wight & Arnott

Atylosia mollis Benth. in Miq., Pl. Jungh. (1852) 243; --Fern.-Villar, Novis. App. (1880) 66; --Vidal, Sinopsis Atlas (1883) 23, t. 41, Fig. E; Rev. Pl. Vasc. Filip. (1886) 110; Phan. Cuming. Philip. (1885) 109; --Perkins, Fragm. Fl. Philip. (1904) 88; --as '*Atylosia volubilis* (Blanco)' in Pancho &

Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 91, *nomen*.
Cantharospermum volubile (Blanco) Merr., PJS 5 c (1910) Bot. 127; Fl. Manila (1912) 127; Sp. Blancoanae (1918) 190; EPFP 2 (1923) 315; --Cajanus volubilis Blanco, Fl. Filip. ed. 2 (1845) 447; ed. 3, 2 (1879) 395; --Cytisus volubilis Blanco, Fl. Filip. (1837) 599. --Type:
India to Indochina, Malesia.
LUZON: La Union, Mountain Province, Nueva Vizcaya, Rizal, SULU ARCHIPELAGO.
Low and medium altitude thickets.

Atylosia scarabaeoides Benth., in Miq., Pl. Jungh. (1852) 245; --Fern.-Villar, Novis. App. (1880) 66; --Vidal, Phan. Cuming. Philip. (1885) 109; --Perkins, Fragm. Fl. Philip. (1904) 88; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 91, Fig. 28. --Type:
Cantharospermum scarabaeoides (L.) Baill., Bull. Soc. Linn. Paris 1 (1883) 384 'scarabeoideum'; --Merr., PJS 5 c (1910) Bot. 128; Fl. Manila (1912) 128; EPFP 2 (1923) 315.
Mascarene Isls to India, S China, Peninsular Malaysia, Philippines, Marianas Isls.
N LUZON to MINDANAO. Low and medium altitude grasslands and thickets.

Baphia Afzelius ex Loddiges

Baphia borneensis Oliver, Hook., Icon. Pl. (1896) t. 2456; --Merr., PJS 30 (1926) 396; --Soejarto et al. (1995) Prelim. Checklist Fl. Pl. Palawan.
Borneo, SW Philippines.
PALAWAN (Aborlan, Mt Iraan, S slope; based on *PNH 3993 Sulit, A*, PNH), TAWI-TAWI (Merrill 1926 cites 2 collections). Lowland forest.

Cajanus de Candolle

Cajanus cajan (L.) Millsp., Field Columb. Mus. Bot. 2 (1900) 53; -- Merr., Fl. Manila (1912) 255; Interpret. Herb. Amboin. (1917) 282; Sp. Blancoanae (1918) 190; Sp. Blancoanae (1918) 190; EPFP 2 (1923) 314; --Cytisus cajan L., Sp. Pl. (1753) 739; --Blanco, Fl. Filip. (1837) 597; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 93.
Cajanus bicolor DC, Hort. Monsp. (1813) 85; --Blanco, Fl. Filip. ed. 2 (1845) 416; ed. 3, 2 (1879) 396, t. 167.
Cajanus indicus Spreng., Syst. 3 (1826) 248; --Fern.-Villar, Novis. App. (1880) 66; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 110; --Merr., PJS 3 c (1908) Bot. 82; *ibid.* 5 c (1910) Bot. 126, 354.
Probably of prehistoric introduction from tropical Asia or Malaya, now pantropic.
Throughout the Philippines in the settled areas, cultivated, semi-cultivated or spontaneous, sea level to 2400m.

Callerya Endlicher

Revision:

Schot, A.M. 1994. *A revision of Callerya Endl. (including Pagbruggea and Whitfordiodendron) (Papilionaceae: Millettieae)*. Blumea 39: 1-40.

Callerya scandens (Elmer ex Dunn) Schot, Blumea 39 (1994) 31; --Whitfordiodendron scandens Elmer ex Dunn, Kew Bull. (1912) 364 *in syn.*; --Merr., EPFP 2 (1923) 280; --Whitfordia scandens Elmer, LPB 2 (1910) 689. --Type: Elmer 12259
PALAWAN, SIBUYAN, PANAY, MINDANAO: Bukidnon, Agusan del Norte. Low and medium altitude forests.

Cultivated:

Callerya atropurpurea (Wall.) Schot, Blumea 39 (1994) 15.
Millettia atropurpurea (Wall.) Benth., in Miq., Pl. Jungh. (1852) 249.

Calopogonium Desvaux

Calopogonium mucunoides Desv., Ann. Sci. Nat. ser. 1, 9 (1826) 423; --Backer & Bakh.f., Fl. Java 1 (1963) 631; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 94, Fig. 29.

Native of tropical America (Guianas). A very common weed throughout the lowland open areas of the Philippines. Thoroughly naturalized.

Canavalia de Candolle

Revision:

Quisumbing, E. 1965. *Canavalia in the Philippines*. Araneta Journal of Agriculture 12: 1-7.

Sauer, J. 1964. *Revision of Canavalia*. Brittonia 16: 106-181.

Canavalia cathartica Thouars, J. Bot. Desv. 1 (1813) 31; --Sauer, Brittonia 16 (1964) 158; --Quisumb., Araneta J. Agric. 12 (1965) 2.

Canavalia microcarpa (DC) Piper, Proc. Biol. Soc. Wash. 30 (Oct 23, 1917) 177; --Merr., Interpret. Herb. Amboin. (1917) 280; EPFP 2 (1923) 313; --Lablab microcarpus DC, Prodr. 2 (1825) 402. --Type:

Canavalia turgida Grah. in Wall. Cat. (1832) No. 5534, nomen nudum; ex A Gray, Bot. US Expl. Exped. 1 (1854) 440; --Merr., PJS 3 c (1908) Bot. 81, 450; *ibid.* 5 c (1910) Bot. 124; Fl. Manila (1912) 257.

Canavalia obtusifolia Prain, J. As. Soc. Beng. 66, 2 (1897) 68; --Perkins, Fragm. Fl. Philip. (1904) 88; --Merr., PJS 1 (1906) Suppl. 67, *non* DC

India to S China, Taiwan, Malesia. Cultivated in Hawaii for flowers used in leis.

BATANES ISLS, CAMIGUIN DE BABUYANES, LUZON: Ilocos Norte, Ilocos Sur, La Union, Cagayan, Zambales, Bataan, Pampanga, Bulacan, Rizal, Laguna, Batangas, Quezon, Camarines, POLILLO, MINDORO, PALAWAN, BALABAC, BANCALAN, CAGAYAN DE SULU, PANAY: Capiz, Iloilo, NEGROS: Negros Oriental, BILIRAN, LEYTE, SAMAR, TAWI-TAWI, JOLO, MINDANAO: Lanao del Sur, Cotabato, Davao, Agusan, Surigao. Coastal thickets especially immediately behind beach, lake margins to at least 600m.

Canavalia ensiformis (L.) DC, Prodr. 2 (1825) 404; --Fern.-Villar, Novis. App. (1880) 64; --Merr., PJS 5 c (1910) Bot. 125, *pro parte*; EPFP 2 (1923) 312; --Sauer, Brittonia 16 (1964) 142; --Quisumb., Araneta J. Agric. 12 (1965) 4; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 96, Fig. 30; --*Dolichos ensiformis* L., Sp. Pl. (1753) 725.

Native of tropical America, now pantropic in distribution.

Occasionally planted in the Philippines but nowhere spontaneous. LUZON: Zambales (Subic Bay), Laguna, Quezon, MINDORO: Mindoro Oriental (Mansalay), MINDANAO: Zamboanga (Tumarup).

Canavalia gladiata (Jacq.) DC, Prodr. 2 (1825) 404; --Blanco, Fl. Filip. ed. 2 (1845) 403; *ibid.* ed. 3, 2 (1870) 376, t. 449; --Merr., PJS 5 c (1910) Bot. 126; Fl. Manila (1912) 258; Sp. Blancoanae (1918) 189; EPFP 2 (1923) 312; --Sauer, Brittonia 16 (1964) 150; --Quisumb., Araneta J. Agric. 12 (1965) 4; --*Dolichos gladiatus* Jacq., Coll. 2 (1788) 276.

Dolichos ensiformis Blanco, Fl. Filip. (1837) 577, *non* DC.

var. *gladiata*

Native of tropical America, now pantropic in distribution.

LUZON. Occasionally planted, but nowhere spontaneous.

Canavalia lineata (Thunb.) DC, Prodr. 2 (1825) 404; --Sauer, Brittonia 16 (1964) 162; --Quisumb., Araneta J. Agric. 12 (1965) 5; --*Dolichos lineatus* Thunb., Fl. Jap. (1784) 280, *excl. syn.* --Type from

Japan.

S Thailand, Vietnam, China (Guizhou; Guangxi; Guangdong; Macau; Hongkong; Fujian;

Zhejiang), Hainan, Taiwan, Ryukyu Isls, Japan, Korea (Saishu To), Sumatra, Riau Archipelago, Singapore, Java, N Philippines, Bonin Isls.
BATANES, BABUYAN ISLS, LUZON: Pangasinan. Along seashore, occasionally inland.

Canavalia macrobotrys Merr., PJS 10 c (1915) Bot. 13; --Sauer, Brittonia 16 (1964) 158; --Quisumb., Araneta J. Agric. 12 (1965) 5. --Type: BS 17517 Ramos (US, lecto, designated by Sauer, 1964). Samar: Cauayan Valley, 14 Mar 1914.
Canavalia luzonica Piper, Proc. Biol. Soc. Wash. 30 (1917) 177; --Merr., EPFP 2 (1923) 313. --Type: Baker 2791 (PNH, holo, presumably lost. No isotypes known). Luzon: Laguna prov., Los Baños.
Canavalia ensiformis Perkins, Fragm. Fl. Philip. (1904) 88; --Merr., PJS 5 c (1910) Bot. 125, *pro majore parte*; Fl. Manila (1912) 258, *non* DC.
Philippines, Sulawesi, Muna, Kisar.
LUZON: Ilocos Norte, Ilocos Sur, Pangasinan, Mountain Province, Benguet, Cagayan, Isabela, Nueva Vizcaya, Nueva Ecija, Zambales, Bataan, Bulacan, Rizal, Laguna, MINDORO, SAMAR, MINDANAO: Davao. Lowland to medium altitude dry thickets and forests, ascending to 1400m.

Canavalia maritima (Aublet) Thouars in Desv., J. de Bot. 1 (1813) 80; --Merr., EPFP 4 (1925) 242; --Sauer, Brittonia 16 (1964) 163; --Quisumb., Araneta J. Agric. 12 (1965) 6; --Dolichos maritimus Aublet, Pl. Guian. France (1775) 765.
Canavalia rosea (Sw.) DC, Prodr. 2 (1825) 404; --Merr., EPFP 2 (1923) 313; --Dolichos roseus Sw., Prodr. Veg. Ind. Occ. (1788) 105.
Dolichos acinaciformis Blanco, Fl. Filip. (1837) 578, *non* Jacq.
Dolichos ensiformis Blanco, Fl. Filip. ed. 2 (1845) 404; *ibid.* ed. 3, 2 (1879) 377, *non* DC.
Canavalia lineata Merr., PJS 3 c (1908) Bot. 410; *ibid.* 5 c (1910) Bot. 125; Fl. Manila (1912) 257; Sp. Blancoanae (1918) 187, *non* DC.

Pantropic.

Widespread in the Philippines. FUGA, LUZON: Ilocos Sur, La Union, Cagayan, Zambales, Bataan, Bulacan, Rizal, Cavite, Batangas, Quezon, MINDORO, PALAWAN, PANAY: Iloilo, CALANGAMAN (in Leyte prov.), LEYTE, MINDANAO: Cotabato. Along sandy seashores, usually in association with beach morning glory, *Ipomoea pescaprae*.

Canavalia ramosii Sauer, Brittonia 16 (1964) 156; --Quisumb., Araneta J. Agric. 12 (1965) 7. --Type: BS 42637 Ramos (UC, holo; iso: SING, UC, US, W). Bohol: Bilar, open places along the forest, altitude 2000ft, 12 Sept 1923.
PANAY, BOHOL. Open sites in forests, altitude c. 600m. Known only from the type collection.

Cantharospermum Wight & Arnott =Atylosia

Centrosema (AP de Candolle) Bentham

Centrosema plumieri (Turp.) Benth., Ann. Wien. Mus. 2 (1838) 118; --Fern.-Villar, Novis. App. (1880) 65; --Merr., PJS 5 c (1910) Bot. 109; Fl. Manila (1912) 258; EPFP 2 (1923) 303; --Pancho & Obien, Manual Ricefield Weeds Philip. (1995) 130, Fig. 74B; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 104, Fig. 33B; --Clitorea plumieri Turp. in Pers., Syn. 2 (1807) 303.
Native of South America. Introduced and thoroughly naturalized throughout the Philippines. A common weed in cultivated fields and occasionally along ricefield dikes and canals.

Centrosema pubescens Benth., Comm. Leg. Gen. (1837) 55; Ann. Wien. Mus. 2 (1838) 119; --Pancho & Obien, Manual Ricefield Weeds Philip. (1995) 130, Fig. 74A; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 104, Fig. 33A.

Native of South America. Introduced and thoroughly naturalized in the Philippines. A common weed in cultivated fields and occasionally along ricefield dikes and canals.

Christia Moench

Revision:

Meeuwen, MS van, CGGJ van Steenis & J Stemmerik. 1961. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae II*. Reinwardtia 6: 89-93.

Christia obcordata (Poir.) Bakh.f., ex Meeuwen, Reinwardtia 6 (1961) 91; --Lourea obcordata Desv., J. de Bot. 1 (1813) 122; --DC, Prodr. 2 (1825) 324; --Merr., EPFP 2 (1923) 293; --Hedysarum obcordatum Poir. in Lam., Encycl. 6 (1804) 425.

India to S China, Taiwan, NE Sumatra, Java, Lesser Sunda Isls (Bali; Lombok; Timor; Leti), Philippines, SW Sulawesi, Moluccas (W Seram), E New Guinea.

N LUZON, MINDANAO. Dry grasslands usually subject to periodic burning, roadsides and other sunny sites, lowlands generally.

Christia vespertilionis (L.f.) Bakh.f., ex Meeuwen, Reinwardtia 6 (1961) 90; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 52. --Lourea vespertilionis (L.f.) Desv, J. de Bot. 1 (1813) 122, t. 5, Fig. 18; --Merr., Fl. Manila (1912) 243; EPFP 2 (1923) 293; --Hedysarum vespertilionis L.f., Suppl. (1781) 331.

Sometimes held as native of Thailand, but probably also of Burma, Indochina and even Malesia. Now pantropic. Occasionally cultivated for ornamental purposes.

Clianthus Banks & Solander

Clianthus binnendyckianus Kurz, J. As. Soc. Beng. 40, 2 (1871) 51; --Merr., EPFP 2 (1923) 282. Philippines, Sulawesi, Moluccas (Seram).

LUZON: Sorsogon, POLILLO, LEYTE, CAMIGUIN, MINDANAO. Low and medium altitude thickets and forests.

Clitoria Linnaeus

Clitoria fairchildiana Howard, Baileya 15 (1967) 16, Fig. 1; --Pancho & Gruezo, Vasc. Flora Mt Makiling 2 (2006) 54, Fig. 13.

Clitoria racemosa Benth., Ann. Mus. Vind. 2 (1832) 115.

Probably a native of Brazil. Recently introduced in LUZON: Laguna (Mt Makiling area and University of the Philippines Los Baños Campus.)

Why the choice of *C. fairchildiana* over the much older name *C. racemosa* is not clear.

Clitoria ternatea L., Sp. Pl. (1753) 753; --Merr., EPFP 2 (1923) 303; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 54.

Native of tropical America, now pantropic. Apparently naturalized in the Philippines at low and medium altitudes, occasionally cultivated and escaping, but not far from human settlements.

Codariocalyx Hasskarl

Revision:

Ohashi, H. 1973. *The Asiatic species of Desmodium and its allied genera*. Ginkgoana no. 1: 40-49.

Codariocalyx gyroides (Roxb. ex Link) Hassk., Fl. 25, Beibl. 2 (1842) 49, *pro minore parte*; -- Ohashi, Ginkgoana no. 1 (1973) 43, pl. 1a.
Desmodium gyroides (Roxb.) DC, Prodr. 2 (1825) 326; --Merr., EPFP 2 (1923) 285; --Meeuwen, Reinwardtia 6 (1962) 250;
Himalayas, India, Sri Lanka, Sri Lanka, Thailand, S China, Hainan, Indochina, Sumatra, Peninsular Malaysia, Java, Borneo (one coll.), Philippines, Sulawesi, Papua New Guinea.
PALAWAN, MINDANAO: Lanao del Sur. Low and medium altitude lakeshore thickets, forest edges, etc.

Codariocalyx motorius (Houtt.) Ohashi, J. Jap. Bot. 40 (1965) 367; Ginkgoana no. 1 (1973) 46, pl. 1b; --Desmodium motorium (Houtt.) Merr., J. Arnold Arb. 19 (1938) 345; --Meeuwen, Reinwardtia 6 (1962) 254; --Hedysarum motorium Houtt., Nat. Hist. 2, 10 (1779) 246.
Codariocalyx gyrans Hassk., Flora 25, Beibl. 2 (1842) 49; --Desmodium gyrans (L.f.) DC, Prodr. 2 (1825) 326; --Merr., EPFP 2 (1923) 285; --Hedysarum gyrans L.f., Suppl. (1781) 332.
India, Sri Lanka, Indochina, Thailand, Taiwan, Sumatra, Java (E half), Lesser Sunda Isls (Sumba; Timor; Wetar), Philippines, Sulawesi, N Australia. Introduced in America.
LUZON: Mountain Province, Benguet, Cagayan, Nueva Vizcaya, MINDANAO: Bukidnon, Davao. Lowland to medium altitude thickets, ravines, etc., showing distinct preference for areas subject to a moderate to strong dry season.

Crotalaria Linnaeus

Revision:

Munk, WJ de. 1962. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae III—a Census of the Genus Crotalaria*. Reinwardtia 6: 195-223.

Adema, F. 2006. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae)*. 12. *The genus Crotalaria*. Blumea 51: 309-332.

Crotalaria acicularis Buch.-Ham. in Wall., Cat. (1832) No. 5390, *nom. nud.*; --Benth. in Hook., London J. Bot. 2 (1843) 476; --Fern.-Villar, Novis. App. (1880) 57; --Merr., PJS 5 c (1910) Bot. 61; EPFP 2 (1923) 271; --de Munk, Reinwardtia 6 (1962) 199; --Adema, Blumea 51 (2006) 322 (in key).

India (Assam, Chittagong), Pegu, Vietnam, Philippines, SW Sulawesi, C & E Java, and Lesser Sunda Isls (Bali).

LUZON: Mountain Province, Benguet, Rizal, Batangas (Taal Volcano), **MINDORO**, MINDANAO: Lanao. Medium altitude grassy slopes, altitude 700-1400m. On Taal Volcano practically occurring at sea-level.

Crotalaria albida Heyne ex Roth, Nov. Pl. Sp. (1821) 333; --Merr., PJS 5 c (1910) Bot. 61; EPFP 2 (1923) 271; --de Munk, Reinwardtia 6 (1962) 200; --Adema, Blumea 51 (2006) 322 (in key).

India (Nilgiris, Concan, Kashmir, Assam), Thailand, S China (Guangdong), Sumatra (Aceh), Philippines, SW Sulawesi, Java, Lesser Sunda Isls (Lombok, Sumbawa, Sumba, Alor) and New Guinea (Moresby Distr.).

LUZON: Cagayan to Batangas, CULION. Low and medium altitude grasslands, ascending to 1400m.

Crotalaria assamica Benth. in Hook., London J. Bot. 2 (1843) 481; --Merr., PJS 5 c (1910) Bot. 62; EPFP 2 (1923) 271; --de Munk, Reinwardtia 6 (1962) 201.

var. philippinensis Adema, Blumea 51 (2006) 310, Fig. 1b-c. --Type: BS 7255 Ramos (L, holo). Luzon: Abra prov., Jan-Feb 1909.

LUZON: Ilocos Norte, Abra, Pangasinan, Zambales (Subic), Bataan (Mt Mariveles, Lamao River), BOHOL. Low altitude (to 300m) thickets, ravines, etc. Also reported on rocky, ultramafic soils. Most likely on limestone in Bohol. Fl. Aug, Sept; fr. Jan, Feb

Crotalaria calycina Schrank, Pl. Rar. Monac. (1819) t. 12; --Fern.-Villar, Novis. App. (1880) 57; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 105; --Merr., PJS 5 c (1910) Bot. 60; EPFP 2 (1923) 271; --de Munk, Reinwardtia 6 (1962) 202; --Adema, Blumea 51 (2006)

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(in key).

Africa, India (Concan), Bangladesh, N Vietnam, E Java (also Madura), Lesser Sunda Isls (Timor, Alor, Wetar), Philippines, Sulawesi (Minahassa, SW peninsula, Buton Is), New Guinea (Hollandia), Australia.

LUZON :Zambales; Rizal, MINDORO, E MINDANAO. Low and medium altitude grasslands.

Crotalaria chinensis L., Syst. ed. 10 (1759) 1158; --Fern.-Villar, Novis. App. (1880) 57; --Vidal, Phan. Cuming. Philip. (1885) 107; --Merr., EPFP 2 (1923) 272; --de Munk, Reinwardtia 6 (1962) 202; --Adema, Blumea 51 (2006) 321 (in key).

India (Concan, Malabar, Upper Ganges), Bangladesh, Pegu, Tenasserim, S China, Sumatra, SE Borneo, Philippines and New Guinea (Irian Jaya).

LUZON: Rizal, NEGROS, MINDANAO: Misamis. Low altitude grasslands. Very local.

Crotalaria humifusa Graham in Wall. Cat. (1832) 5421 ex Benth. in Hook., London J. Bot. 2 (1843) 476; --Merr., PJS 5 c (1910) Bot. 61; --de Munk, Reinwardtia 6 (1962) 205; --Adema, Blumea 51 (2006) 321 (in key).

SE Asia (Kumaon to Sikkim, Khasya, Nepal, Anamalay Hills), C Java, Lesser Sunda Isls (Lombok; Alor), N Philippines.

LUZON: Benguet.

Crotalaria incana L., Sp. Pl. (1753) 716; --Fern.-Villar, Novis. App. (1880) 57; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 104; --Merr., PJS 5 c (1910) Bot. 60; Fl. Manila (1912) 241; Sp. Blancoanae (1918) 178; EPFP 2 (1923) 272; --de Munk, Reinwardtia 6 (1962) 205; --Adema, Blumea 51 (2006) 320 (in key); --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 78, Fig. 22.

Crotalaria radiata Merr., PJS 5 c (1910) Bot. 63. --Type:

Presumably native in the Caribbean Isls, widely introduced and now almost pantropical. BABUYAN ISLS, LUZON: Cagayan to Sorsogon, MINDORO, PANAY. In waste places and cultivated areas in and about towns. Locally abundant. *C. radiata* Merr. is a form with abnormal flowers due to fungal or insect attack.

Crotalaria juncea L., Sp. Pl. (1753) 714; --Fern.-Villar, Novis. App. (1880) 58; --Merr., PJS 5 c (1910) Bot. 64; Fl. Manila (1912) 251; EPFP 2 (1923) 272; --de Munk, Reinwardtia 6 (1962) 206; --Adema, Blumea 51 (2006) 321 (in key); --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 74, Fig. 20.

Africa (Zomba Distr.; Congo, Katanga), Sri Lanka, India, Peninsular Malaysia, E Java, Madura, Lesser Sunda Isls (Bali; Alor; Wetar). An introduced plant in the Philippines where it is occasionally cultivated for Sunn hemp. Apparently naturalized.

Crotalaria lejoloba Bartl., Index Sem. Hort. Acad. Gotting. (1837) 2; --Adema, Blumea 51 (2006) 315. --Neotype from Java, designated by Adema, 2006.

Crotalaria ferruginea Graham ex Benth., [in Wall. Cat. (1832) No. 5398] ex Benth. in Hook., London J. Bot. 2 (1843) 476; --Fern.-Villar, Novis. App. (1880) 57; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 105; --Merr., PJS 5 c (1910) Bot. 61; EPFP 2 (1923) 272; --de Munk, Reinwardtia 6 (1962) 203; --Backer & Bakh.f., Fl. Java 1 (1964) 581.

Crotalaria ferruginea Graham ex Benth. var. *major* Benth., London J. Bot. 2 (1843) 477. --Type: Cuming 1628 (not seen). Philippines.

Sri Lanka, India, Nepal, S China, Taiwan, Sumatra, Borneo (Sarawak), Java, Lesser Sunda Isls (Bali; Lombok), Philippines, SW & C Sulawesi (also Saleyer), New Guinea. LUZON: Ilocos Norte, Mountain Province, Ifugao, Benguet, Cagayan, Zambales, Rizal, MINDANAO: Misamis, Lanao, Cotabato, Bukidnon, Davao. Low and medium altitude

grasslands. In Benguet ascending to 2000m.

Crotalaria linifolia L.f., Suppl. (1781) 322; --Fern.-Villar, Novis. App. (1880) 57; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 105; --Merr., PJS 5 c (1910) Bot. 60; Fl. Manila (1912) 241; Sp. Blancoanae (1918) 178; EPFP 2 (1923) 272; --de Munk, Reinwardtia 6 (1962) 207; --Adema, Blumea 51 (2006) 315; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 74, Fig. 19.

Crotalaria pumila (*non* Aiton) Blanco, Fl. Filip. (1837) 570.

Crotalaria pumila (*non* Schrank) Blanco, Fl. Filip. ed. 2 (1845) 397; ed. 3, 2 (1879) 366, t. 268.

Quirosia secunda Blanco, Fl. Filip. ed. 2 (1845) 398; ed. 3, 2 (1879) 365.

India, Thailand, Indochina, S China, Taiwan, Java, Madura, Lesser Sunda Isls (W Bali; Sumba; Timor; Alor; Wetar), Borneo (Sabah), Philippines, Sulawesi, Tanah Djampea, Buton Isls, Moluccas (Halmahera; Ambon; Tanimbar Isls), New Guinea.

LUZON: Cagayan to Quezon, MINDORO, NEGROS, MINDANAO. Lowland and medium altitude grasslands. In Benguet ascending to 1400m.

Crotalaria luzoniensis Adema, Blumea 51 (2006) 312, Fig. 2. --Type: BS 29236 Fenix (L, holo; iso BO, K, SING). Luzon: La Union prov., Bauang, 31 Dec 1916.

Crotalaria bracteata auct. *non* Roxb. ex DC, --Merr., PJS 5 c (1910) Bot. 63; Fl. Manila (1912) 252; EPFP 2 (1923) 271.

LUZON: Ilocos Norte (Piddig; Mt Pico de Loro), La Union (Bauang), Benguet (Bued River). Forested ridges, open banks, etc., altitude up to 400m. Fl. Oct, fr. Mar, Nov, Dec

Crotalaria medicaginea Lam., Encycl. Meth. 2 (1790) 201; --de Munk, Reinwardtia 6 (1962) 208; --Adema, Blumea 51 (2006) 320 (in key).

Crotalaria trifoliastrum (*non* Willd., 1802) Benth., Fl. Austral. 2 (1864) 183; --Merr., PJS 13 c (1918) Bot. 17; EPFP 2 (1923) 273.

Afghanistan, India, Burma, Thailand, Java, NW Philippines, SE New Guinea. LUZON: Ilocos Norte. Low altitudes, open places.

Crotalaria mucronata Desv., J. Bot. 3 (1814) 76; --de Munk, Reinwardtia 6 (1962) 209.

Crotalaria striata DC, Prodr. 2 (1825) 131; --Perkins, Fragm. Fl. Philip. (1904) 16.

Crotalaria saltiana (*non* Andr. 1811) Prain ex King, J. As. Soc. Beng. 66, ii (1897) 41, 353; --Merr., PJS 5 c (1910) Bot. 62; EPFP 2 (1923) 273

Native of tropical America, widely introduced in other tropical countries. Very common throughout Malesia.

Widespread in the Philippines. Waste places in and about towns. Common.

Crotalaria prostrata Rottl. ex Willd., En. Hort. Berol. 2 (1809) 747; --de Munk, Reinwardtia 6 (1962) 211; --Adema, Blumea 51 (2006) 322 (in key).

India (Concan; Himalayas), Bangladesh, C & E Java, Lesser Sunda Isls (Bali), Philippines, S Sulawesi (Muna Is).

MINDORO: Mindoro Occidental. Based on PNH 13759 Sulit.

Crotalaria quinquefolia L., Sp. Pl. (1753) 716; --Blanco, Fl. Filip. (1837) 569; *ibid.* ed. 2 (1845) 397; *ibid.* ed. 3, 2 (1879) 365, t. 159; --Fern.-Villar, Novis. App. (1880) 58; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 104; --Merr., PJS 5 c (1910) Bot. 64; Fl. Manila (1912) 252; Sp. Blancoanae (1918) 177; EPFP 2 (1923) 273; --de Munk, Reinwardtia 6 (1962) 212; --Adema, Blumea 51 (2006) 320 (in key); --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 78, Fig. 23.

Native country not precisely known. Now almost pantropic in distribution and throughout Malesia indifferent to presence or absence of dry season.

N LUZON to MINDANAO. Open wetlands, rice paddies and other waterlogged sites at low and medium altitudes.

Crotalaria retusa L., Sp. Pl. (1753) 715; --Fern.-Villar, Novis. App. (1880) 57; --Perkins, Fragm. Fl. Philip. (1904) 16; --Merr., PJS 5 c (1910) Bot. 62; --Merr., EPFP 2 (1923) 273; --de Munk,

Reinwardtia 6 (1962) 212; --Adema, Blumea 51 (2006) 321 (in key).

Probably a native of SE Asia, now pantropical in distribution, cultivated and introduced throughout Malesia.

N LUZON to MINDANAO. Lowlands and medium altitudes, in open, usually damp places in settled areas.

Crotalaria sessiliflora L., Sp. Pl. ed. 2 (1763) 1004; --Fern.-Villar, Novis. App. (1880) 57; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 105; --Merr., PJS 3 c (1908) Bot. 81; ibid. 5 c (1910) Bot. 105; EPFP 2 (1923) 273; --de Munk, Reinwardtia 6 (1962) 214; --Adema, Blumea 51 (2006) 322 (in key).

Indian Himalayas, Sikkim, Khasya, Thailand, Indochina, Japan (Nagasaki), Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls (Timor), Philippines, C & S Sulawesi, Moluccas (Buru; Aru Isls), New Guinea.

LUZON: Cagayan to Sorsogon, MINDANAO: Bukidnon. Occasional in pyrogenous grasslands and parang vegetation at low and medium altitudes. In Mountain Province ascending to 1300m. In areas subject to at least a feeble dry monsoon.

Crotalaria verrucosa L., Sp. Pl. (1753) 718; --Fern.-Villar, Novis. App. (1880) 57; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 104; --Merr., PJS 3 c (1908) Bot. 80; ibid. 5 c (1910) Bot. 62; --Merr., Fl. Manila (1912) 251; Sp. Blancoanae (1918) 177; EPFP 2 (1923) 274; --de Munk, Reinwardtia 6 (1962) 217; --Adema, Blumea 51 (2006) 321 (in key).

Phaseolus bulai Blanco, Fl. Filip. (1837) 572.

Quirosia anceps Blanco, ibid. ed. 2 (1845) 398; ibid. ed. 3, 2 (1879) 367.

Native country not known. Now of pantropic distribution.

LUZON: Bataan, Rizal, Laguna, Quezon, MINDORO, MASBATE, NEGROS, CEBU, MINDANAO. Low altitudes in open sites.

Non-naturalized:

Crotalaria anagyroides Kunth in Humb., Bonpl. & Kunth, Nov. Gen. et Sp. 6 (1823) 404; --de Munk, Reinwardtia 6 (1962) 200.

Introduced as a green manure from tropical America and commonly found throughout Malesia including the Philippines.

Crotalaria orixensis Willd., Ges. Naturf. Neue Schr. 4 (1803) 217; --Merr., PJS 10 c (1915) Bot. 18; --EPFP 2 (1923) 273; --de Munk, Reinwardtia 6 (1962) 211; --Adema, Blumea 51 (2006) 323.

Tropical Africa, Ethiopia, India. Ascribed by Merrill to the Philippines on the basis of one record from "Luzon, Manila. BS 19145 Guerrero". Perhaps a casual introduction which did not persist.

Crotalaria trichotoma Bojer, Hort. Maurit. (1837) 88; Polhill, Fl. Mascar. 80 (1990) 200; --Adema, Blumea 51 (2006) 320 (in key).

Crotalaria usaramoensis Baker f., J. Linn. Soc. 42 (1914) 346; --de Munk, Reinwardtia 6 (1962) 216.

Crotalaria zanzibarica Benth., London J. Bot. 2 (1843) 584; --Verdc., Manual New Guinea Legumes (1979) 548; --Polhill, Crotalaria in Africa & Madagascar (1982) 191.

Native in Africa (?), widely distributed throughout Malesia owing to usefulness as green manure.

Cullen Medikus

Literature:

Meeuwen, MS van, CGGJ van Steenis & J Stemmerik. 1961. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae II*. Reinwardtia 6: 102-104.

Cullen badocanum (Blanco) Verdc., Kew Bull. 43 (1988) 360; --Psoralea badocana (Blanco)

Blanco, Fl. Filip. ed. 2 (1845) 416; --Merr., EPFP 2 (1923) 277; Meeuwen et al., Reinwardtia 6 (1961) 103; --Liparia badocana Blanco, Fl. Filip. (1837) 597. --Type: Cuming 1149 (L*, NY* 2 sheets, isoneo)

N Philippines, Lesser Sunda Isls (E Timor; Wetar), S New Guinea, N Australia (Northern Territory and N Queensland).

LUZON: Ilocos Norte, Ilocos Sur, La Union, Pangasinan, Abra, Mountain Province. Low and medium altitude grasslands and waste places.

Dalbergia Linnaeus *filius*

Dalbergia candenatensis (Dennst.) Prain, J. As. Soc. Beng. 70, 2 (1901) 49; --Merr., PJS 5 c (1910) Bot. 97; EPFP 2 (1923) 294; --Cassia candenatensis Dennst., Schlüs. Hort. Malabar. (1818) 32.

Dalbergia monosperma Dalz in Hook., J. Bot. Kew Miscel. 2 (1850) 36; --Fern.-Villar, Novis. App. (1880) 67; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 112; --Perkins, Fragm. Fl. Philip. (1904) 82.

India to S China, across Malesia to New Guinea, Australia, Marianas and Caroline Isls.

C LUZON: Bataan, Quezon to MINDANAO. Tidal stream thickets subject to the influence of salt or brackish water.

Dalbergia canescens (Elmer) Merr., EPFP 2 (1923) 294; --Derris canescens Elmer, LPB 8 (1919) 3087. --Type: Elmer 17883 (MO*, NA*, NY*, US*, iso). Luzon: Laguna prov., Mt Makiling, Jun-Jul 1917.

LUZON: Laguna (Mt Makiling). Lowland forest edge.

Dalbergia cumingiana Benth. in Miq., Pl. Jungh. (1852) 255; --Fern.-Villar, Novis. App. (1880) 67; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 111; --Perkins, Fragm. Fl. Philip. (1904) 98; --Merr., PJS 5 c (1910) Bot. 98; EPFP 2 (1923) 294; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 63. --Type: Cuming 1244 (K* 2sheets, MO*, iso). Luzon: Albay prov.

N LUZON (Cagayan) to MINDANAO. Lowland and medium altitude thickets and secondary forests. Locally common.

Dalbergia densa Benth. in Hook., London J. Bot. 2 (1843) 217; --Merr., EPFP 2 (1923) 295.

Philippines, Moluccas, New Guinea. A variety in NE Australia.

CEBU, MINDANAO: Zamboanga. Lowland thickets.

Dalbergia ferruginea Roxb., Hort. Beng. (1814) 98, *nom. nud.*, Fl. Ind. ed. 2, 3 (1832) 228; --Perkins, Fragm. Fl. Philip. (1904) 81; --Merr., PJS 1 (1906) Suppl. 65; *ibid.* 3 c (1908) Bot. 410; *ibid.* 5 c (1910) Bot. 97; Fl. Manila (1912) 247; EPFP 2 (1923) 295.

Dalbergia luzonensis Vogel, Nov. Act. Nat. Cur. 19 (1843) Suppl. 1: 33.

Dalbergia stipulacea --Fern.-Villar, Novis. App. (1880) 67; --Vidal, Sinopsis Atlas (1883) t. 40, Fig. C; Rev. Pl. Vasc. Filip. (1886) 111, *non* Roxb.

Dalbergia ferruginea Roxb. var. *daronensis* Elmer, LPB 2 (1910) 699. --Type: Elmer 11030 (PNH, holo, lost; iso in BISH*, MO*, NY*, US*). Mindanao: Davao, Mt Apo, Todaya, along the upper limit of the cogon formation at 1250ft or higher, Jun 1909.

Borneo, Philippines to New Guinea and Caroline Isls.

N LUZON to PALAWAN and MINDANAO. Lowland and medium altitude thickets and secondary forests.

Dalbergia mimosella (Blanco) Prain, Ann. Bot. Gard. Calcutta 10 (1904) 42; --Merr., Sp. Blancoanae (1918) 184; EPFP 2 (1923) 295; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 63; --*Amerimnon mimosella* Blanco, Fl. Filip. (1837) 563; *ibid.* ed. 2 (1845) 393; *ibid.* ed. 3, 2 (1879) 358; --Merr., Govt. Lab. Publ. (Philip.) 27 (1905) 40.

Dalbergia minahassae Koord., Meded. Lands Plantent. 19 (1898) 430, 630; --Merr., PJS 5 c (1910) Bot. 98.

Dalbergia lanceolaria Llanos, Mem. Acad. Cienc. Madrid (1858); --Fern.-Villar & Naves in Blanco, Fl. Filip. ed. 3, 4¹ (1880) 103; --Fern.-Villar, Novis. App. (1880) 67, *non* L.

Dalbergia cassioides A Gray, Bot. Wilkes US Explor. Exped. (1854) 457; --Merr., PJS 3 c (1908) Bot. 82, *non* Wall.

Dalbergia davaoensis Elmer, LPB 2 (1910) 700. --Syntypes: Elmer 10551 (BISH*, MO*, NY*, US*).

Mindanao: Davao, Mt Apo, Todaya, May 1909; --Elmer 11925 (BISH*, MO*, NY*, US*). Mindanao: Davao, Mt Apo, Todaya, light wooded benches at 2250ft along the Baracatan Creek, Oct 1909.

Philippines, Sulawesi.

LUZON: Mountain Province, Bataan, Bulacan, Rizal, Laguna, Quezon, MINDANAO.

Lowland and medium altitude secondary forests.

Dalbergia pinatubensis Elmer, LPB 9 (1934) 3198. --Type: Elmer 22094 (iso in MO*, NY*, 2 sheets). Luzon: Pampanga prov., Mt Pinatubo, Camp Stotsenburg, May 1927, fl.

Dalbergia pinnata (Lour.) Prain, Ann. Bot. Gard. Calcutta 10 (1904) 48; --Merr., PJS 5 c (1910) Bot. 96; EPFP 2 (1923) 296; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 64. --Derris *pinnata* Lour., Fl. Cochinch. (1790) 432.

Dalbergia tamarindifolia Roxb., Hort. Beng. (1814) 53, *nomen nudum*, Fl. Ind. ed. 2, 3 (1832) 233, *pro parte*; Fern.-Villar, Novis. App. (1880) 67; --Vidal, Rev. Pl. Vasc. Filip. (1886) 111; --Perkins, Fragm. Fl. Philip. (1904) 82.

Dalbergia dubia Elmer, LPB 8 (1915) 2731. --Type: Elmer 13733 (BISH*, MO*, NA*, NY*, US*). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta (=Hilong-hilong), Sept 1912.

var. *pinnata*

India to S China, Sumatra, Java, Borneo, Philippines.

N LUZON to PALAWAN and MINDANAO. Lowland and medium altitude thickets and forests, ascending to 1400m.

var. *badia* Merr., PJS 5 c (1910) Bot. 96; EPFP 2 (1923) 296. --Type: FB 9649 Curran. (iso in US*). Luzon: Quezon prov., Pitogo, Mar 1908.

LUZON: Quezon (Bondoc Peninsula). Coastal thickets.

Dalbergia polyphylla Benth. *in* Miq., Pl. Jungh. (1852) 256; --Fern.-Villar, Novis. App. (1880) 67; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 112; --Merr., PJS 5 c (1910) Bot. 96; EPFP 2 (1923) 296. --Type: Cuming 1164.

LUZON: Ilocos Sur, Nueva Vizcaya, Bataan, Bulacan, Rizal. Lowland and medium altitude thickets and secondary forests.

Dalbergia reticulata Merr., PJS 10 c (1915) Bot. 14; --Merr., EPFP 2 (1923) 296; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 63. --Type: FB 21406 Villamil (US*, iso). Luzon: Laguna prov., Mt Makiling, Apr 1914.

LUZON: Laguna (Mt Makiling). Primary forests, altitude 400-500m. Only known from this locality.

Dalbergia rostrata Hassk., Flora 25 (1842) II. Beibl. 53

Dalbergia subalternifolia (Elmer) Merr., PJS 10 c (1915) 14; EPFP 2 (1923) 296; --Derris *subalternifolia* Elmer, LPB 5 (1913) 1801. --Type: Elmer 12965 (MO*, NY*, US*, iso). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), Apr 1911.

As *D. subalternifolia*:

Borneo, Philippines.

PALAWAN, MINDANAO: Zamboanga. Lowland and medium altitude primary forests.

Non-naturalized cultivated taxa:

Dalbergia cochinchinensis Lour.

Dalbergia latifolia Roxb.

Dalbergia sissoo Roxb. ex DC, Prodr. 2 (1825) 416.

Afghanistan, Pakistan (Baluchistan), N India, Java. A recent introduction in the Philippines.

Dendrolobium (Wight & Arnott) Bentham

Revision:

Ohashi, H. 1973. *The Asiatic species of Desmodium and its allied genera*. Ginkgoana no. 1: 50-87.

Dendrolobium geesinkii H. Ohashi, J. Jap. Bot. 73 (1998) 251. --Type: Ridsdale 1554 (L*, holo). Luzon: Zambales prov., Sta. Cruz, Acoje Mine Concession Area, regrowth on abandoned mine road rubble, low altitude, 25 May 1986.

LUZON: Zambales.

Dendrolobium quinquepetalum (Blanco) Schindl., Fedde, Repert. 20 (1924) 278; --Ohashi, Ginkgoana no. 1 (1973) 68, pl. 3b; --Desmodium quinquepetalum (Blanco) Merr., Govt. Lab. Publ. (Philip.) 35 (1906) 20; --Merr., Fl. Manila (1912) 239; EPFP 2 (1923) 288; --Meeuwen, Reinwardtia 6 (1962) 256; --Ohashi, Ginkgoana No. 1 (1973) 68, pl. 3b; --Cystisus quinquepetalus Blanco, Fl. Filip. (1837) 598.

Philippines, New Guinea, Australia (Queensland).

LUZON: Ilocos Norte, Abra, Rizal, Manila, Batangas. Common in low and medium altitude thickets.

Dendrolobium umbellatum (L.) Benth. in Miq., Pl. Jungh. (1852) 216 & 218; --Ohashi, Ginkgoana no. 1 (1973) 82, pl. 9b; --Desmodium umbellatum (L.) DC, Prodr. 2 (1825) 325; --Merr., EPFP 2 (1923) 290; --Meeuwen, Reinwardtia 6 (1962) 263; --Backer & Bakh.f., Fl. Java 1 (1963) 603; --Hedysarum umbellatum L., Sp. Pl. (1753) 747.

Desmodium cumingianum (Benth.) Benth. in Benth. & Hook.f., Gen. Pl. 1 (1865) 519; --Fern.-Villar, Novis. App. (1880) 61; --Vidal, Phan. Cuming. Philip. (1885) 108; Rev. Pl. Vasc. Filip. (1886) 107; --Merr., PJS 5c (1910) Bot. 80; EPFP 2 (1923) 284; --Dendrolobium cumingianum Benth. in Miq. Pl. Jungh. (1852) 216, 218.

forma umbellatum

Africa, Mascarenes, Sri Lanka, India, Burma, Thailand, Indochina, Taiwan, Lanyu, Ryukyus, throughout Malesia to Australia and the Pacific Islands.

BATAN, BABUYANES (CAMIGUIN), LUZON, CULION, PALAWAN, TABLAS, LEYTE, and MINDANAO: Davao.

Derris Loureiro

Revision:

Adema, F. 2003. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae)*. 11. *The genus Derris*. Blumea 48: 393-419.

Derris cumingii Benth., J. Linn. Soc. Bot. 4 (1860) suppl. 104; --Vidal, Phan. Cuming. Philip. (1885) 109; --Perkins, Fragm. Fl. Philip. (1904) 82; --Merr., PJS 5 c (1910) Bot. 104; EPFP 2 (1923) 299; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 66. --Type: Cuming 1208.

Derris cumingiana Vidal, Rev. Pl. Vasc. Filip. (1886) 113.

LUZON: Ilocos Norte, Benguet, Pampanga, Rizal, Laguna (Mt Makiling). Low and medium altitude thickets.

Derris elegans Graham ex Benth. in Miq., Pl. Jungh. (1852) 252; --Merr., EPFP 2 (1923) 299.
var. korthalsiana (Blume ex Miq.) Adema, Blumea 48 (2003) 400, Fig. 2g, h.

Derris philippinensis Merr., PJS 5 c (1910) Bot. 104; EPFP 2 (1923) 300; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 67. --Syntypes:

Derris multiflora Benth. var. ?*longifolia* Benth., J. Linn. Soc. Bot. 4 (1860) Suppl. 108; --Vidal, Phan. Cuming. Philip. (1885) 109, *non* *D. longifolia* Benth.

Derris multiflora Vidal, Rev. Pl. Vasc. Filip. (1886) 112; Perkins, Fragm. Fl. Philip. (1904) 83; --Merr., PJS 1 (1906) Suppl. 66, *non* Benth.

LUZON: Ilocos Norte, Benguet, Cagayan, Bataan, Rizal, Laguna, Quezon, Camarines.
Low and medium altitude thickets and forests, ascending to 1400m.

Derris polyantha Perkins, Frag. Fl. Philip. (1904) 83; --Merr., PJS 5 c (1910) Bot. 103; EPFP 2 (1923) 301; --Adema, Blumea 48 (2003) 402; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 69.
--Type: Merrill 1457

LUZON: Pangasinan, Pampanga, Rizal, Laguna, Batangas. Lowland thickets and secondary forests. (Merr. 1923)

Derris pubipetala Miq., Fl. Ned.-Ind. (1855) 115. --Adema, Blumea 48 (2003) 401.

Derris mindorensis Perkins, Fragm. Fl. Philipp. (1904) 82; --Merr., PJS 5 c (1910) Bot. 106; EPFP 2 (1923) 300. --Type:

Derris micans Perkins, Fragm. Fl. Philipp. (1904) 82; --Merr., PJS 5 c (1910) Bot. 106; EPFP 2 (1923) 300.
--Type:

Derris ferruginoides Quisumb. PJS 41 (1930) 324, pl. 3, Fig. 5. --Type: Clemens 7406a (UC, holo). Luzon: Isabela prov., Santiago, in thickets and secondary forests, Apr 1926.

Extra-Philippine distribution:

LUZON: Ilocos Norte, Isabela, Pangasinan, Bulacan, Rizal, ALABAT, MINDORO, PALAWAN, MINDANAO: Surigao del Norte. Low and medium altitude thickets and secondary forests.

Derris scandens (Roxb.) Benth., J. Linn. Soc. Bot. 4 (1860) Suppl. 103; --Fern.-Villar, Novis. App. (1880) 68; --Vidal, Sinopsis Atlas (1883) 23, t. 44, Fig. F; Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 112; --Perkins, Fragm. Fl. Philip. (1904) 84; --Merr., Govt. Lab. Publ. (Philip.) 27 (1905) 40; PJS 5 c (1910) Bot. 104; Fl. Manila (1912) 248; Sp. Blancoanae (1918) 186; EPFP 2 (1923) 301; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 65; --*Dalbergia scandens* Roxb., Pl. Coromandel. 2 (1798) t. 192.

Galedupa frutescens Blanco, Fl. Filip. (1837) 562; *ibid.* ed. 2 (1845) 391; *ibid.* ed. 3, 2 (1879) 354, t. 232.

India to S China through Malesia to tropical Australia.

N LUZON to PALAWAN and MINDANAO. Low and medium altitude thickets and secondary forests. (Merr. 1923)

Derris spanogheana Blume ex Miq. Fl. Ned.-Ind. (1855) 141; --Adema, Blumea 48 (2003) 403.

Derris cebuensis Merr., PJS 7 c (1912) Bot. 273; EPFP 2 (1923) 299. --Type: BS 11014 Ramos (US*, iso).
Cebu: Cebu prov., Bucacao, on dry hills, 19 Mar 1912.

Derris surigaoensis Elmer, LPB 8 (1915) 2733. --Type: Elmer 13463 (NY*, US*, iso). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta (=Mt Hilong-hilong), Aug 1912.

Extra-Philippine distribution:

LUZON: Sorsogon, CEBU, LEYTE, MINDANAO: Agusan del Norte.

Derris trifoliata Lour., Fl. Cochinch. (1790) 433; --Merr., PJS 5 c (1910) Bot. 105; *ibid.* 15 (1919) 241; Fl. Manila (1912) 248; Sp. Blancoanae (1918) 185; EPFP 2 (1923) 301; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 66.

Pterocarpus frutescens Blanco, Fl. Filip. (1837) 562; *ibid.* ed. 2 (1845) 392; *ibid.* ed. 3, 2 (1879) 356, *non* Vell.

Derris uliginosa Benth. in Miq. Pl. Jungh. (1852) 252; J. Linn. Soc. Bot. 4 (1860) Suppl. 107; --Fern.-Villar, Novis. App. (1880) 68; Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 112;

--Merr., PJS 3 c (1908) Bot. 410.

Derris diadelphus Naves in Blanco, Fl. Filip. ed. 3 (1877-83) t. 161, *non* Blanco.

Tropical E Africa and Asia through Malesia to Australia and Polynesia. Strictly a littoral species.

Throughout the Philippines on muddy seashores, tidal streams, etc. Abundant.

Unaccounted for in Adema's *Blumea* revision:

Derris zambalensis Elmer, LPB 9 (1934) 3199, not validly published. No Latin description. --Type: Elmer 22053 (NY*, US*, iso). Luzon: Pampanga prov., Mt Pinatubo, Camp Stotsenburg.

Desmodium Desvaux

Revision:

Meeuwen, MS van, CGGJ van Steenis & J Stemmerik. 1961. *Notes on Desmodium Desv.* Reinwardtia 6: 93-102.

Meeuwen, MS Knaap van. 1962. *Preliminary revisions of some genera of Malaysian Papilionaceae V – A census of the genus Desmodium.* Reinwardtia 6: 239-276.

Ohashi, H. 1973. The Asiatic species of *Desmodium* and its allied genera. *Ginkgoana* no. 1: 1-318 +76 pl.

Desmodium adscendens (Sw.) DC, Prodr. 2 (1825) 332; --Meeuwen, Reinwardtia 6 (1962) 245; --Ohashi, *Ginkgoana* No. 1 (1973) 199, pl. 25b; --Hedysarum *adscendens* Sw., Prodr. 1 (1788) 106. *Desmodium adscendens* var. *trifoliastrum* (Miq.) Schindl., Fedde, Repert. 21 (1925) 8; --*Desmodium trifoliastrum* Miq., Fl. Ind. Bat. 1, 1 (1855) 248; --Merr., EPFP 2 (1923) 290.

Pantropic. In Asia: India, Sri Lanka, Thailand, throughout Malesia and Melanesia.

PANAY, MINDANAO: Zamboanga, Surigao. Lowland thickets along streams.

Desmodium bolsteri Merr. & Rolfe, PJS 3 c (1908) Bot. 102; --Merr., *ibid.* 5 c (1910) Bot. 83; EPFP 2 (1923) 284; --Meeuwen, Reinwardtia 6 (1962) 250; --Ohashi, *Ginkgoana* No. 1 (1973) 250. --Type: BS 76896 Ramos (NY). Luzon: Cagayan prov., Peñablanca, bank of the river in forest.

LUZON: Cagayan, Nueva Ecija. Lowlands, on boulders along streams on slopes, etc. Apparently very local.

Desmodium gangeticum (L.) DC, Prodr. 2 (1825) 327; --Merr., Fl. Manila (1912) 241; EPFP 2 (1923) 285; --Meeuwen, Reinwardtia 6 (1962) 249; --Backer & Bakh.f., Fl. Java 1 (1963) 607; --Ohashi, *Ginkgoana* No. 1 (1973) 184, pl. 22b; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 36, Fig. 3; --Hedysarum *gangeticum* L., Sp. Pl. (1753) 746.

Tropical Africa, India, Sri Lanka, Nepal, Bhutan, Burma, Thailand, Laos, Vietnam, SW China (Yunnan; Guangdong), Hainan, Taiwan, Ryukyu Isls, Peninsular Malaysia, Philippines, New Guinea, Australia and Micronesia (Palau).

Throughout the Philippines. Low and medium altitude open wastelands, thickets and secondary forests.

Desmodium heterocarpon (L.) DC, Prodr. 2 (1825) 337; --Merr., EPFP 2 (1923) 285, as 'heterocarpon'; --Meeuwen et al. Reinwardtia 6 (1961) 95; --Meeuwen, Reinwardtia 6 (1962) 251; --Ohashi, *Ginkgoana* No. 1 (1973) 210, pl. 28, 29; --Hedysarum *heterocarpon* L., Sp. Pl. (1753) 747.

Desmodium polycarpum DC var. *ovalifolium* Prain ex King, J. As. Soc. Beng. 66, 2 (1897) 141; --*Desmodium ovalifolium* Wall., Cat. no. 5730, *nomen*; --Merr., EPFP 2 (1923) 287.

Desmodium buergeri Miq., Ann. Mus. Bot. Lugd.-Bat. 3 (1867) 45; --Merr., PJS 5 c (1910) Bot. 85; EPFP 2 (1923) 284.

var. heterocarpon

India to Indochina, China, Taiwan, Japan. Throughout Malesia, also in New Caledonia,

Polynesia (Tonga and possibly other islands).
N LUZON to MINDANAO. Low and medium altitude thickets and grasslands.

var. strigosum Meeuwen, Reinwardtia 6 (1961) 95; *ibid.* 6 (1962) 251; --Ohashi, Ginkgoana No. 1 (1973) 215, pl. 29b. --Type from New Guinea.
SE Asia and throughout Malesia, New Caledonia and possibly other Pacific islands.

Desmodium heterophyllum (Willd.) DC, Prodr. 2 (1825) 334; --Merr., Fl. Manila (1912) 240; EPFP 2 (1923) 286; --Meeuwen, Reinwardtia 6 (1962) 251; --Ohashi, Ginkgoana No. 1 (1973) 239, l. 35b; --Hedysarum heterophyllum Willd., Sp. Pl. 3, 2 (1803) 1201.
Mascarene Isls, India, Sri Lanka, Burma, China, Indochina, Thailand, throughout Malesia, Australia (Queensland), New Caledonia, Micronesia (Yap Is).

Desmodium laxiflorum DC in Ann. Sci. Nat. 1, 4 (1825) 100; Prodr. 2 (1825) 335; --Merr., EPFP 2 (1923) 286; --Meeuwen, Reinwardtia 6 (1962) 252; --Ohashi, Ginkgoana no. 1 (1973) 101, pl. 12; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 42.

ssp. laxiflorum

India, Himalayas, Burma, Thailand, Indochina, China, Taiwan, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls (Bali; Sumba), Philippines, Sulawesi, Moluccas, New Guinea.
BATAN, LUZON: Benguet, Rizal, Rizal, Laguna, JOLO. In dry wastelands.

Desmodium laxum DC, Ann. Sci. Nat. 1, 4 (1825) 102; --Merr., EPFP 2 (1923) 287.

ssp. leptopus (A Gray ex Benth.) Ohashi, Ginkgoana no. 1 (1973) 141, pl. 17b.
S China, Taiwan, Ryukyus, S Japan, ?Sri Lanka, ?S India, Thailand, Indochina, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls (Bali), Philippines, New Guinea.
MINDANAO: Agusan del Norte (Cabadbaran, Mt Hilong-hilong), Davao del Sur (Mt Apo).

Desmodium microphyllum (Thunb.) DC, Prodr. 2 (1825) 337; --Merr., EPFP 2 (1923) 287; --Meeuwen, Reinwardtia 6 (1962) 254; --Ohashi, Ginkgoana No. 1 (1973) 241, pl. 36a; --Hedysarum microphyllum Thunb., Fl. Jap. (1784) 284.

var. microphyllum

Sri Lanka, India, Himalayas, Burma, Thailand, Indochina, China, Taiwan, Japan, throughout Malesia, Australia (Arnhem Land and Queensland). Very common weed of lowland and hills, indifferent to distribution of rainfall.

Desmodium nemorosum F v. Muell. ex Benth., Fl. Austral. 2 (1864) 234.

var. whitfordii (Schindl.) Ohashi, Ginkgoana No. 1 (1973) 220, pl. 30b
Desmodium nemorosum var. *simplex* Schindl. subvar. *whitfordii* Schindl., Fedde Repert. 21 (1925) 10. --Type: HN Whitford 227 (CAL, K, syntype). Luzon: Bataan prov., Mt Mariveles, Lamao River
Desmodium ovalifolium Merr., PJS 5 c (1910) Bot. 85, *pro parte, excl. syn. cit.* *D. polycarpum* var. *ovalifolia* Prain, *non* Wall. 1831-32 (=D. heterocarpon var. heterocarpon); EPFP 2 (1923) 287.

N Philippines, Australia (Queensland; New South Wales).
LUZON: Bataan (Mt Mariveles, Lamao River). Primary forests, altitude 150-1100m.

Desmodium ormocarpoides DC, Prodr. 2 (1825) 337; --Merr., EPFP 2 (1923) 287; --Meeuwen et al., Reinwardtia 6 (1961) 98; --Meeuwen, Reinwardtia 6 (1962) 255; --Ohashi, Ginkgoana No. 1 (1973) 113, pl. 14a.

Lesser Sunda Isls (Timor), SW Philippines, Sulawesi, Moluccas (Bacan; Seram; Halmahera; Buru; Kai Isls; Banda; Ambon; Ternate), New Guinea, Bismarck Archipelago, Solomon Isls, Vanuatu.
JOLO. In teak plantation at low altitudes.

Desmodium procumbens (Mill.) AS Hitchc., Rept. Mo. Bot. Gard. 4 (1893) 76; --Merr., Fl. Manila (1912) 239; EPFP 2 (1923) 288; --Meeuwen, Reinwardtia 6 (1962) 255; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 42, Fig. 7.

Native of tropical America, now pantropical.

Throughout the Philippines. Thickets, open wastelands and settled areas.

Desmodium racemosum (Thunb.) DC, Prodr. 2 (1825) 337; --Meeuwen, Reinwardtia 6 (1962) 257; --Hedysarum racemosum Thunb., Fl. Jap. (1784) 285.

Desmodium podocarpum DC, Ann. Sci. Nat. 1, 4 (1825) 102; --Merr., PJS 5c (1910) Bot. 83; EPFP 2 (1923) 287; --Ohashi, Ginkgoana No. 1 (1973) 154, pl. 19a.

Himalayas, India, China, Taiwan, Ryukyus, Korea, Japan.

LUZON: Benguet. Montane thickets and ravines, altitude 1100-1400m.

Desmodium repandum (Vahl) DC, Prodr. 2 (1825) 334; --Meeuwen, Reinwardtia 6 (1962) 258; --Ohashi, Ginkgoana No. 1 (1973) 160; --Hedysarum repandum Vahl, Symb. 2 (1791) 82.

Desmodium scalpe (Comm.) DC, Prodr. 2 (1825) 334; --Merr., EPFP 2 (1923) 289.

Africa, Sri Lanka, India, Bhutan, Burma, Thailand, Laos, N Vietnam, China (Yunnan), Sumatra, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas (Seram), New Guinea, ?Australia.

LUZON: Mountain Province, Benguet. Montane thickets and ravines, altitude 1200-2200m.

Desmodium scorpiurus (Sw.) Desv., J. Bot. 1 (1813) 122; Prodr. 2 (1825) 337; --Merr., Fl. Manila (1912) 239; EPFP 2 (1923) 289; --Meeuwen et al., Reinwardtia 6 (1961) 98, 101; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 42, Fig. 8; --Hedysarum scorpius Sw., Prod. Veg. Ind. Occ. (1788) 107.

Native of tropical America, now pantropical. In Malesia: Philippines, Lesser Sunda Isls (Lombok), E New Guinea, N Queensland.

BATAN, LUZON, MINDORO, BALABAC, PANAY. Low and medium altitude dry thickets and grasslands.

Desmodium securiforme Benth. in Miq., Pl. Jungh. (1852) 226; --Fern.-Villar, Novis. App. (1880) 62; --Vidal, Phan. Cuming. Philip. (1885) 108; Rev. Pl. Vasc. Filip. (1886) 108; --Meeuwen et al., Reinwardtia 6 (1961) 258; --Ohashi, Ginkgoana No. 1 (1973) 128, pl. 15b. --Type:

Monarthrocarpus securiformis (Benth.) Merr., PJS 5 c (1910) Bot. 89; EPFP 2 (1923) 291; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 87.

Monarthrocarpus securiformis (Benth.) Merr. var. monophylla Merr., PJS 5 c (1910) Bot. 90; EPFP 2 (1923) 291.

Desmofischera monosperma Holthuis Blumea 5 (1942) 189.

Philippines, Moluccas (Morotai; Talaud; Buru; Misool), New Guinea (NW part).

LUZON: Cagayan, Isabel (San Mariano), Laguna, Sorsogon (Irosin, Mt Bulusan),

POLILLO, MINDORO, PANAY, BASILAN. Lowland and medium altitude forests.

Desmodium sequax Wall., Pl. As. Rar. 2 (1831) 46, t. 157; --Meeuwen et al., Reinwardtia 6 (1961) 98, 100; --Meeuwen, Reinwardtia 6 (1962) 259; --Ohashi, Ginkgoana no. 1 (1973) 112.

Desmodium dasylobum Miq., Fl. Ind. Bot. Suppl. (1860-61) 305; --Merr., EPFP 2 (1923) 284.

India, Himalayas, Burma, Indochina, China, Taiwan, Sumatra, Java, Philippines, Sulawesi and New Guinea.

LUZON: Kalinga, Mountain Province, Benguet, MINDANAO: Bukidnon, Davao. Montane thickets, ravines and forests, altitude 1200-2400m.

Desmodium styracifolium (Osbeck) Merr., Am. J. Bot. 3 (1916) 580; --Meeuwen, Reinwardtia 6 (1962) 259; --Ohashi, Ginkgoana No. 1 (1973) 224, pl. 32b; --Hedysarum styracifolium Osbeck, Dagbok Ostind. Resa (1757) 247.

Desmodium capitatum (Burm.f.) DC, Prodr. 2 (1825) 336; --Merr., Fl. Manila (1912) 240; EPFP 2 (1923)

284; --Pancho & Gruezo

Fl. Ind. (1768) 167.

India, Sri Lanka, Burma, Indochina, S China, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, W Carolines (Yap Is.). Throughout the Philippines. Common roadside and grassland weed at low and medium altitudes.

Desmodium triflorum (L.) DC, Prodr. 2 (1825) 334; --Merr., Fl. Manila (1912) 240; EPFP 2 (1923) 289; --Meeuwen, Reinwardtia 6 (1962) 261; --Ohashi, Ginkgoana No. 1 (1973) 245, pl. 36b; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 45, Fig. 9; --Hedysarum triflorum L., Sp. Pl. (1753) 749.

Desmodium parvifolium Blanco, Fl. Filip. ed. 2 (1845) 408, *non* DC.

Pantropic. Asia: India, Thailand, Indochina, China, Sumatra, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, New Guinea; Australia (Queensland), Carolines, Samoa, Tonga.

Throughout the Philippines. Lowlands, in open grassy places, dry thickets, cultivated lands, lawns, etc. Very common.

Desmodium unifoliolatum (Merr.) Steen., Reinwardtia 10 (1982) 23-24; --Trifidacanthus unifoliolatus Merr., PJS 12 c (1917) Bot. 269; EPFP 2 (1923) 292. --Type: BS 27196 Ramos (US*, iso). Luzon: Ilocos Norte prov., Burgos, Feb-Mar 1917.

Extra-Philippine range? (see Reinwardtia)

LUZON: Ilocos Norte, Batangas. Lowland dry thickets. (as *Trifidacanthus unifoliolatus*)

Desmodium velutinum (Willd.) DC, Prodr. 2 (1825) 328; --Meeuwen, Reinwardtia 6 (1962) 264; --Ohashi, Ginkgoana no. 1 (1973) 192, pl. 24; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 36, Fig. 4; --Hedysarum velutinum Willd., Sp. Pl. 3, 2 (1803) 117.

Desmodium lasiocarpum DC, Prodr. 2 (1825) 328; --Merr., Fl. Manila (1912) 241; PJS 14 (1919) 243; EPFP 2 (1923) 286.

Desmodium virgatum Zoll. & Mor., Nat. Geneesk. Arch. Ind. 3 (1846) 58, 76; --Merr., Fl. Manila (1912) 240; PJS 14 (1919) 243; EPFP 2 (1923) 290.

var. velutinum

Africa, India, Sri Lanka, Himalayas, Bangladesh, Burma, Thailand, Laos, Cambodia, N Vietnam, China, Hainan, Taiwan, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Philippines, Sulawesi, New Guinea.

Throughout the Philippines. Low and medium altitude thickets and grasslands.

Desmodium zonatum Miq., Fl. Ind. Bat. 11 (1855) 248; --Merr., EPFP 2 (1923) 290; --Meeuwen et al., Reinwardtia 6 (1961) 97; --Meeuwen, Reinwardtia 6 (1962) 265; --Ohashi, Ginkgoana no. 1 (1973) 107, pl. 13b.

India, Sri Lanka, Burma, Thailand, Laos, Vietnam, S China, Taiwan, widespread in Malesia: Sumatra, Enggano Is, Borneo, Java, Lesser Sunda Isls (Lombok), Borneo, Philippines, Sulawesi, Moluccas (Kai Isls; Tanimbar), Papua New Guinea, Solomon Isls (Florida Is).

LUZON: Laguna, Quezon, Camarines, Sorsogon, MINDORO, PALAWAN, PANAY, NEGROS, CEBU, LEYTE, SAMAR, MINDANAO. Lowland and medium altitude thickets.

Imperfectly known:

Desmodium malacophyllum (Link) DC, Prodr. 2 (1825) 338 ('malacophyllum'); --Merr., PJS 5 c (1910) Bot. 84; EPFP 2 (1923) 287; --Hedysarum malacophyllum Link, Enum. Hort. Berol. 2 (1822) 247.

Based on a Chamisso specimen (in B, cited by Merrill, 1923) supposedly from Cavite. "An imperfectly known endemic species known only from the original collection, perhaps not originating in the Philippines". --Merrill, 1923.

Desmofischera Holthuis =Desmodium section Monarthrocarpus (Merrill) Ohashi

Dioclea Kunth

Revision:

Adema, F. 1998. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae) 3. The genera Dioclea, Luzonia, and Macropsychnanthus*. Blumea 43: 233-239.

Dioclea decandra Amshoff ex Adema, Blumea 43 (1998) 234, *nom. nov.* for *Macropsychnanthus ferrugineus* Merr., PJS 5 c (1910) Bot. 121; EPFP 2 (1923) 311. --Type:

Dioclea hexandra (Ralph) Mabb., Taxon 29 (1980) 605; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 98.

Dioclea reflexa Hook.f., Niger Flora (1849) 306; --Merr., EPFP 2 (1923) 311.

Pantropic.

LUZON: Rizal, Laguna, MINDORO, BUSUANGA, PALAWAN, MINDANAO: Zamboanga, Lanao del Sur, Agusan del Norte. Lowland and medium altitude dry thickets and forests, chiefly along small streams.

Dioclea umbrina Elmer, LPB 1 (1907) 224; --Merr., PJS 5 c (1910) Bot. 119; EPFP 2 (1923) 311; --Adema, Blumea 43 (1998) 234; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 98. --Type:

LUZON: Benguet, Nueva Vizcaya, Rizal, Laguna, PANAY, LEYTE, SAMAR. Lowland and medium altitude forests.

Check Blumea

Dolichos Linnaeus

Dolichos trilobatus L., Sp. Pl. (1753) 726; --Verdc., Taxon 17 (1968) 170, *non auctt. al.*; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 117.

Dolichos falcatus Klein in Willd. Sp. Pl. 3 (1800) 1047; --Fern.-Villar, Novis. App. (1880) 66; --Merr., PJS 3 c (1908) Bot. 82; *ibid.* 5 c (1910) Bot. 135; Fl. Manila (1912) 264; Sp. Blancoanae (1918) 193; EPFP 2 (1923) 321.

India, Sri Lanka, Philippines.

LUZON: Ilocos Norte to Batangas, CEBU, LEYTE. Lowland thickets.

Dolichos uniflorus Lam., Encycl. 2 (1786) 299; --Merr., PJS 5 c (1910) Bot. 135; EPFP 2 (1923) 322. Tropical Asia.

LUZON: Rizal. Low altitude, in old rice fields.

Dumasia de Candolle

Dumasia villosa DC, Ann. Sci. Nat. 1, 4 (1825) 257, t. 44; --Merr., EPFP 2 (1923) 304.

S Africa (Natal), Madagascar, India to S China, Java, N Philippines.

LUZON: Abra, Kalinga, Mountain Province, Benguet. Montane thickets and ravines, altitude 1200-1600m.

Dunbaria Wight & Arnott

Dunbaria cumingiana Benth. in Miq., Pl. Jungh. (1852) 242; --Fern.-Villar, Novis. App. (1880) 66; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 110; --Merr., PJS 5 c (1910) Bot. 127; EPFP 2 (1923) 314. --Type:

LUZON: La Union, Benguet, Nueva Vizcaya, Bataan, Rizal, Laguna, LEYTE. Low and medium altitude thickets.

Dunbaria merrillii Elmer, LPB 1 (1907) 225; --Merr., PJS 5 c (1910) Bot. 127; EPFP 2 (1923) 315. – Type:

LUZON: Ilocos Norte, Mountain Province, Benguet, Cagayan, Pampanga. Medium altitude thickets.

Dunbaria rotundifolia (Lour.) Merr., PJS 15 (1919) 242; --Merr., EPFP 2 (1923) 315; --Indigofera rotundifolia Lour., Fl. Cochinch. (1790) 458.
Dunbaria punctata Benth. in Miq., Pl. Jungh. (1852) 242; --Merr., PJS 7 c (1912) Bot. 235; Fl. Manila (1912) 254.

India to China southward to tropical Australia.

LUZON: Ilocos Norte, La Union, Rizal. Low altitude grasslands, margins of thickets, etc.

Eriosema (A.P. de Candolle) Reichenbach

Eriosema chinense Vogel, Nov. Act. Acad. Nat. Cur. 19 (1843) Suppl. 1: 31; --Fern.-Villar, Novis. App. (1880) 66; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 111; --Merr., PJS 5 c (1910) Bot. 129; EPFP 2 (1923) 316.

India to China across Malesia to tropical Australia.

LUZON: Mountain Province, Benguet, Cagayan, Isabel, Nueva Vizcaya, SEMIRARA, CULION, MINDANAO: Bukidnon. Open grasslands chiefly at medium altitudes, ascending to 2000m, occasionally at sea-level (Semirara).

Erythrina Linnaeus

Literature:

Adema, F. 1996. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae). 1. The genus Erythrina L.* Blumea 41: 463-468.

Erythrina fusca Lour., Fl. Cochinch. (1790) 427; --Merr., PJS 5 c (1910) Bot. 113; Fl. Manila (1912) 256; Sp. Blancoanae (1918) 187; EPFP 2 (1923) 305; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 89.

Erythrina ovalifolia Roxb., Hort. Beng. (1814) 53, *nomen nudum*, Fl. Ind. ed. 2, 3 (1832) 254; --Fern.-Villar (1880) 63; Perkins, Fragm. Fl. Philip. (1904) 85; --Merr., PJS 3 c (1908) Bot. 81.

Erythrina picta Blanco, Fl. Filip. (1837) 565, *non* L.

Erythrina caffra Blanco, *ibid.* ed. 2 (1845) 394; *ibid.* ed. 3, 2 (1879) 360, t. 326, *non* Thunb.

India to S China southward to Malesia and Polynesia.

LUZON: Ilocos Norte, La Union, Pangasinan, Bataan, Rizal, MINDANAO: Lanao. Along streams and lakes, often in swampy places.

Erythrina variegata L. in Stickm. Herb. Amb. (1754) 10; Krukoff & Barneby Lloydia 37 (1974) 431; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 89, Fig. 27.

Erythrina variegata L. var. *orientalis* (L.) Merr., Interp. Herb. Amb. (1917) 276; EPFP 2 (1923) 306;

--*Erythrina orientalis* (L.) Murr., Comm. Gotting. 8 (1787) 35, t. 1; --*Erythrina corallodendrum* L. var. *orientalis* L., Sp. Pl. (1753) 706.

Erythrina indica Lam., Encycl. 2 (1788) 391.

As var. *orientalis*:

India to Polynesia. Throughout the Philippines along the seashore, frequently planted inland. The typical form with mottled leaves occurs occasionally in the Philippines in cultivation.

Old World tropics, extending from Madagascar and Zanzibar eastward through India,

Indochina, S China, Taiwan, Malesia and Polynesia. Introduced to the neotropics. Throughout the Philippines, commonly along the seashores. Also planted as an ornamental tree.

Erythrina stricta Roxb., [Hort. Beng. (1814) 53, *nom. nud.*] Fl. Ind. 3 (1832) 251; --Krukoff & Barneby, Lloydia 37 (1974) 352; --Adema, Blumea 41 (1996) 465. --Type from India
Erythrina stricta Roxb. var. *suberosa* (Roxb.) Niyomdham, Nord. J. Bot. 12 (1992) 342; --*Erythrina suberosa* Roxb., [Hort. Beng. (1814) 53, *nom. nud.*] Fl. Ind. 3 (1832) 253; --Whitmore, Tree Fl. Malaya 1 (1973) 292; --Krukoff & Barneby, Lloydia 37 (1974) 351. --Type: Icon. Roxb. 104 (K), India.
Erythrina stiptata Merr., PJS 5 c (1910) Bot. 112; --Merr., EPFP 2 (1923) 305. --Type: Merrill 958 (NY*, US*, iso). Lubang, Apr 1903.
India, Nepal, Bhutan, Burma, Thailand, Vietnam, Langkawi Isls, Java, WC Philippines, Lesser Sunda Isls (Bali; Flores; Timor).
LUBANG. Low altitudes, dry open sites.

Erythrina subumbrans (Hassk.) Merr., PJS 5 c (1910) Bot. 113; --Merr., EPFP 2 (1923) 305; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 88; --Hypaphorus *subumbrans* Hassk., Retzia (1855) 198.
Burma, Indochina, Malaya, Java, Philippines.
N LUZON to MINDANAO. Low and medium altitude thickets, secondary forests, etc. occasionally planted.

Cultivated:

Erythrina crista-gallii L., Mantissa (1767) 99; --Backer & Bakh.f., Fl. Java 1 (1963) 628; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 88.
Native of Argentina. A recent introduction as avenue trees in Baguio City and La Trinidad in Benguet. Occasionally seen elsewhere.

Euchresta Bennett

Euchresta horsfieldii (Lesch.) Benn., Pl. Jav. Rar. (1840) 148; --Fern.-Villar, Novis. App. (1880) 68; --Ceron Cat. Pl. Herb. Manila (1892) 67; --Merr., PJS 5 c (1910) Bot. 107; EPFP 2 (1923) 302; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 59; --Andira *horsfieldii* Lesch., Ann. Mus. Paris 16 (1810) 481, t. 12.
India to the Ryukyu Isls and Taiwan, southward to the Philippines, Java.
N LUZON to MINDANAO. Of local occurrence on the higher mountains.

Flemingia Roxb. ex Aiton *filius* = *Moghania*

Fordia Hemsley

Revision:

Buijsen, JRM. 1988. *Revision of the genus Fordia (Papilionaceae: Millettieae)*, Blumea 33: 239-261.

Fordia brachybotrys Merr., PJS 30 (1926) 397; --Buijsen, Blumea 33 (1988) 397. --Type: BS 44277 Ramos & Edaño (K, holo; iso in P, SING, US*, NY*). Tawi-tawi. Damp forest at low altitudes, Jul 1924.
Borneo, SW Philippines.
TAWI-TAWI. Lowland forest.

Galactia P Browne

Galactia kalahiensis Korth., xxxxx; --Soejarto et al. (1995) Checklist Fl. Pl. Palawan
Extra-Philippine distrib? PALAWAN (Quezon, Tamlangon). Based on *Mendoza & Espiritu 152*, (PNH). Coll. 26 Apr. 1964 (don't know if this is really the correct specimen citation; but certainly not PNH 152 as this is an Edano collection from Mt Mantalingahan in Mar. 1947).

Galactia tashiroi Maxim., Bull. Acad. Sci. St. Petersb. 31 (1886) 34; --Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 33.

Ryukyus, Taiwan, N Philippines.

BATAN, E side of Mt Iraya, on littoral cliff, Hatusima 28719.

Galactia tenuiflora (Klein ex Willd.) Wight & Arn., Prodr. (1834) 206; --Merr., PJS 5 c (1910) Bot. 119; Fl. Manila (1912) 259; Sp. Blancoanae (1918) 188; EPFP 2 (1923) 310. --Steen. et al., Reinwardtia 5 (1960) 431; --Glycine tenuiflora Klein ex Willd., Sp. Pl. 3 (1800) 1059.

Dolichos repens Blanco, Fl. Filip. (1837) 577; ibid. ed. 2 (1845) 402; ibid. ed. 3, 2 (1879) 378, *non* L. Tropical Africa and Asia through Malesia (Philippines, SW Sulawesi, Java, Lesser Sunda Isls and E New Guinea) to tropical Australia.

LUZON: Benguet, Bulacan, Rizal, Batangas. Grasslands and thickets often subjected to fires, more or less bound to seasonal climatic conditions, from sea-level to c. 2000m.

Gliricidia Kunth

Gliricidia sepium (Jacq.) Kunth ex Steud., Nomencl. Bot., ed. 2, 1 (1840) 688; --Perkins, Fragm. Fl. Philip. (1904) 17; --Merr., PJS 1 (1906) Suppl. 64; ibid. 5 c (1910) Bot. 73; Fl. Manila (1912) 245; Sp. Blancoanae (1918) 180; EPFP 2 (1923) 280; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 54; --Robinia sepium Jacq., Enum. (1760) 28.

Gliricidia maculata Humb., Bonpl. & Kunth, Nov. Gen. 6 (1824) 393; --Fern.-Villar, Novis. App. (1880) 59; --Merr., Philip. Bur. Forestry Bull. 1 (1903) 22; Govt. Lab. Publ. (Philip.) 6 (1904) 30.

Galedupa pungam Blanco, Fl. Filip. (1837) 558; ibid. ed. 2 (1845) 390; ibid. ed. 3, 2 (1879) 352, t. 250, *non* Gmel.

Millettia ?luzoniensis A Gray, Wilkes US Explor. Exped. (1854) 456; --Merr., PJS 3 c (1908) Bot. 82.

Millettia splendidissima Naves in Blanco, Fl. Filip. ed. 3 (1877-83) t. 250; --Vidal, Cat. Pl. Prov. Manila (1880) 25, *non* Blume.

Introduced from Mexico, thoroughly naturalized in the settled areas at low and medium altitudes throughout the Philippines.

Glycine Willdenow

Glycine tomentosa Benth., Fl. Austral. 2 (1864) 245; --Vidal, Phan. Cuming. Philip. (1885) 108; Rev. Pl. Vasc. Filip. (1886) 109; --Merr., PJS 5 c (1910) Bot. 110; EPFP 2 (1923) 304.

S China, N Philippines, Australia. LUZON: Ilocos Norte, based on Cuming 1238.

Apparently not again recollected in the Philippines since 1840.

Cultivated:

Glycine max (L.) Merr., Interpret. Herb. Amboin. (1917) 274; --Phaseolus max L., Sp. Pl. (1753) 725.

Indigofera Linnaeus

Revision:

De Kort, I & G Thijssse. 1984. *A revision of the genus Indigofera (Leguminosae-Papilionoideae) in Southeast Asia*. Blumea 30: 89-151.

Indigofera erectifruca Y Endo, H Ohashi & Madulid, J. Jap. Bot. 80(5) (2005) 261, Figs. 1-3. Philippines.

Indigofera galegoides DC, Prodr. 2 (1825) 225; --Merr., EPFP 2 (1923) 274; --de Kort & Thijssse, Blumea 30 (1984) 118, Map 1. --Type from Sri Lanka.
India, Sri Lanka, Burma, Thailand, Laos, Cambodia, Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls (Sumbawa; Wetar; Timor), Borneo (Kalimantan), Philippines, Sulawesi, Moluccas (Tanimbar Isls).
CALAMIANES.

Indigofera hirsuta L., Sp. Pl. (1753) 751; --Merr., EPFP 2 (1923) 275; --de Kort & Thijssse, Blumea 30 (1984) 120. --Type from Sri Lanka.
Indigofera angustifolia Blanco, Fl. Filip. (1837) 596; --Merr., Sp. Blancoanae (1918) 179; --*Indigofera tinctoria* Naves in Blanco, Fl. Filip. ed. 3 (1877-83) t. 163, non L. --Type: Merrill Sp. Blancoanae 403 (BM, K, L, US). Luzon: Pangasinan prov., Umingan.
Pantropical.
Grasslands, waste places, riverbanks, 0-1500m. (Check EPFP)

Indigofera linifolia Retz., Obs. 4 (1786) 29; --Merr., EPFP 2 (1923) 275; --de Kort & Thijssse, Blumea 30 (1984) 123, Fig. 4, Map 2.
Sudan, Eritrea, Ethiopia, Afghanistan, Pakistan, Kashmir, India, Bangladesh, Burma, Thailand, Cambodia, Vietnam, SW China (Yunnan; Sichuan), Taiwan, Ryukyu Isls, Java, Madura, Lesser Sunda Isls (Bali; Sumbawa; Sumba; Flores; Solor; Alor; Wetar; Timor), N Philippines, New Guinea, Australia (W Australia; Northern Territory; Queensland; New South Wales).
LUZON.

Indigofera luzonensis de Kort & Thijssse, Blumea 30 (1984) 126, Fig. 5. --Type: Merrill 5043 (L*, holo; iso: BO, K, P, US*). Luzon: Rizal prov., Montalban, Mar 1906.
LUZON: Rizal (Montalban).

Indigofera nigrescens Kurz ex King & Prain, J. As. Soc. Beng. 67, 2 (1898) 268; --Merr., EPFP 2 (1923) 275; --de Kort & Thijssse, Blumea 30 (1984) 127. --Type from Burma.
India (Assam), Burma, Thailand, Laos, Vietnam, China, Java, N Philippines.
LUZON.

Indigofera spicata Forssk., Fl. Aegypt. Arab. (1775) 138; --de Kort & Thijssse, Blumea 30 (1984) 132.
Indigofera hendecaphylla Jacq., Coll. 2 (1788) 259; --Merr., EPFP 2 (1923) 275, excl. l. pusilla Lam. --Type from Africa.

ssp. spicata

Tropical and S Africa to India, Sri Lanka, Burma, Thailand, Cambodia, Vietnam, Sumatra, Peninsular Malaysia, Java, Bali, Philippines, Sulawesi.
LUZON, MINDANAO. Roadsides, grassfields.

Indigofera suffruticosa Mill., Gard. Dict. ed. 8 (1768) No. 2; --Merr., EPFP 2 (1923) 275; --de Kort & Thijssse, Blumea 30 (1984) 134; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 57, Fig. 14.

ssp. suffruticosa

Pantropical, but excepting tropical E Africa.

Indigofera tinctoria L. Sp. Pl. (1753) 751; --Merr., EPFP 2 (1923) 276; --de Kort & Thijssse, Blumea 30 (1984) 136; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 56. --Type from Sri Lanka.
Pantropical. Roadsides, grassy fields, cultivated grounds, riverbanks, secondary forests, etc.

Indigofera trifoliata L., Amoen. Acad. 4 (1759) 327; Sp. Pl. ed. 2 (1763) 1062; --Merr., EPFP 2 (1923) 276; --de Kort & Thijssse, Blumea 30 (1984) 137, Map 3. --Type from India.

ssp. trifoliata

Pakistan, S Burma, Thailand, Laos, Vietnam, China to the Ryukyu Isls, Java, Madura, Kangean Archipelago, Lesser Sunda Isls (Bali; Lombok; Sumba; Flores; Alor; Timor), Philippines, Sulawesi, Moluccas Isls (Tanimbar Isls; Aru Isls), New Guinea, Australia (Northern Territory; Queensland).

LUZON, MINDANAO. Roadsides, grassy areas, fallow fields, open forests,

ssp. unifoliolata (Merr.) de Kort & Thijssse, Blumea 30 (1984) 138, Map 3; --Indigofera unifoliolata Merr., PJS 5 c (1910) Bot. 65; EPFP 2 (1923) 276. --Type: BS 1411 Ramos (US*, iso). Luzon: Rizal prov., Morong, along the borders of Laguna de Bay, Aug 1906.

Tetragonolobus simplicifolius Blanco, Fl. Filip. ed. 2 (1845) 397; ibid. ed. 3 (1879) 364; --Merr., Govt. Lab. Publ. (Philip.) 27 (1905) 38, non Indigofera simplicifolia Lam. --Voucher: Merrill Sp. Blancoanae 965 (US*). Luzon: Rizal prov., Pantay, Sept 1915.

LUZON: Bulacan, Rizal, Laguna. Lowland grasslands.

Indigofera zollingeriana Miq., Fl. Ind. Bat. 1, 1 (1855) 310; --Merr., EPFP 2 (1923) 276; --de Kort & Thijssse, Blumea 30 (1984) 142. --Type from Java.

China (Guangxi; Guangdong), Ryukyu Isls, Thailand, Laos, Vietnam, Peninsular Malaysia, Banka, Java, Kangean Archipelago, Lesser Sunda Isls (Bali; Flores; Babar), Borneo (Sarawak; Sabah), Batu Is, Philippines, Sulawesi, Moluccas, New Ireland.
BATANES, LUZON, PALAWAN, PANAY, LEYTE, SAMAR, MINDANAO. Low and medium altitude thickets, secondary thickets, etc., ascending to 1400m in Benguet.

Introduced:

Indigofera arrecta Hochst. ex A Rich., Tent. Fl. Abyss. 1 (1847) 184; --de Kort & Thijssse, Blumea 30 (1984) 109. --Type from Ethiopia.

Tropical, subtropical and S Africa, Arabia. Introduced in Laos, Vietnam, Sumatra, Java, Sumba, Flores, Luzon.

Indigofera decora Lindl., J. Hort. Soc. 1 (1846) 68; --de Kort & Thijssse, Blumea 30 (1984) 117; --Type from Hongkong.

Hongkong, N Philippines.

LUZON.

Inocarpus JR & G Forster

Inocarpus fagifer (Parkinson) Fosb., J. Wash. Acad. Sci. 31 (1941) 95.

Inocarpus edulis Forst., Char. Gen. (1776) 66, t. 33; -

-Merr., EPFP 2 (1923) 302.

Malesia and Polynesia, frequently planted. SAMAR, SULU ARCHIPELAGO, MINDANAO. Cultivated only.

Kunstleria Prain

Revision:

Ridder-Numan, JWA and DJ Kornet. 1994. *A revision of the genus Kunstleria (Leguminosae-Papilionoideae)*. Blumea 38: 465-485.

Kunstleria forbesii Prain, J. As. Soc. Beng. 66, 2 (1897) 111, 465; --Ridder-Numan & Kornet, Blumea 38 (1994) 471, Fig. 3
Kunstleria atroviolacea (Elmer) Merr., PJS 10 c (1915) Bot. 14; EPFP 2 (1923) 298. --Type: Elmer 12965
Extra-Philippine distribution?; PALAWAN. Lowland secondary forests.

Kunstleria philippinensis Merr., PJS 9 c (1914) Bot. 359; EPFP 2 (1923) 298; --Ridder-Numan & Kornet, Blumea 38 (1994) 478, Fig. 8. --Type: Wenzel 836 (US*, iso). Leyte: Leyte prov., LEYTE, BASILAN. Lowland forests to 500m. (Merr. 1923).

Lablab Adanson

Lablab purpureus (L.) Sweet, Hort. Brit. ed. 1 (1827) 481; --Verdc., Kew Bull. 24 (1970) 410; --Dolichos purpureus L., Sp. Pl. ed. 2 (1763) 1021.
Dolichos lablab L., Sp. Pl. (1753) 725; --Fern.-Villar, Novis. App. (1880) 65; --Perkins, Fragm. Fl. Philip. (1904) 90; --Merr., PJS 5 c (1910) Bot. 135; Fl. Manila (1912) 264; Sp. Blancoanae (1918) 193; --Merr., EPFP 2 (1923) 321; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 116.
Lablab cultratus DC, Prodr. 2 (1825) 402; --Blanco, Fl. Filip. ed. 2 (1845) 405; ed. 3, 2 (1879) 379, t. 292.
Old World native and now pantropic in cultivation. A naturalized introduced plant in the Philippines. Commonly cultivated in the settled areas, sometimes escaping. Bataw.

Lespedeza Michaux

Lespedeza sericea (Thunb.) Miq., Ann. Mus. Bot. Lugd.-Bat. 3 (1867) 49; -- Merr., EPFP 2 (1923) 294; --Hedysarum sericeum Thunb., Fl. Jap. (1784) 287.
Lespedeza juncea Pers., Syn. 2 (1807) 318, var. sericea Forbes & Hemsl., J. Linn. Soc. Bot. 23 (1887) 181; --Merr., PJS 3 c (1908) Bot. 104; ibid. 5 c (1910) Bot. 94.
India to Japan and Taiwan, N Philippines, Australia.
LUZON: Mountain Province, Benguet. Open montane grasslands, altitude 1200-2200m.

Lourea Necker =Christia**Luzonia Elmer****Revision:**

Adema, F 1998. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae) 3. The genera Dioclea, Luzonia, and Macropsychnanthus*. Blumea 43: 233-239.

Luzonia purpurea Elmer, LPB 1 (1907) 220; --Merr., PJS 5 c (1910) Bot. 120; ibid. 10 c (1915) Bot. 17; EPFP 2 (1923) 314; --Adema, Blumea 43 (1998) 235. --Type: Elmer 9013 (L*, NY*, US*, iso). Luzon: Quezon prov., Lucban, wooded ravines, altitude 775m, May 1907.
LUZON: Benguet, Bataan, Quezon, LEYTE. Low and medium altitude forests, ascending to 1400m in Benguet.

Macropsychnanthus Harms ex Schumann & Lauterbach

Revision:

Adema, F 1998. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae) 3. The genera Dioclea, Luzonia, and Macropsyчанthus*. Blumea 43: 233-239.

Dubious species:

Macropsyчанthus mindanaensis Merr., PJS 5 c (1910) Bot. 120; EPFP 2 (1923) 311.

MINDANAO: Agusan del Norte, Surigao del Norte. Low and medium altitude forests along streams.

Macroptilium (Bentham) Urban

Macroptilium atropurpureum (DC) Urban, Symb. Antill. (Urban) 9 (1928) 457; --Phaseolus atropurpureus DC, Prodr. 2 (1825) 395; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 110.

Native of SW United States. Widely distributed in North, Central and South America. Throughout the Philippines, in open grasslands and rice fields.

Macroptilium lathyroides (L.) Urban, Symb. Antill. (Urban) 9 (1928) 457; --Phaseolus lathyroides L., Sp. Pl. ed. 2 (1763) 1018; --Merr., Fl. Manila (1912) 260; EPFP 2 (1923) 318; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 110, Fig. 35.

Phaseolus semierectus L., Mantissa 1 (1767) 100; --Perkins, Fragm. Fl. Philip. (1904) 89; --Merr., PJS 5 c (1910) Bot. 132.

Native of tropical America, now pantropically distributed.

Widespread in the Philippines, low altitude grasslands, rice fields, roadsides, etc.

Medicago Linnaeus

Medicago denticulata Willd., Sp. Pl. 3 (1803) 1414; --Merr., PJS 5 c (1910) Bot. 64; EPFP 2 (1923) 274.

Europe to India, China and Japan, naturalized in North America.

LUZON: La Union, Benguet, Manila. Apparently well established in Benguet.

Medicago lupulina L., Sp. Pl. (1753) 779; --Merr., PJS 7 c (1912) Bot. 274; Fl. Manila (1912) 253; EPFP 2 (1923) 274.

Widely distributed in Europe and Asia, naturalized in North America.

An introduced plant in the Philippines. LUZON: Benguet. Open grassy sites, altitude 1500m.

Melilotus Miller

Melilotus indica (L.) All., Fl. Ped. 1 (1785) 308; --Merr., PJS 10 c (1915) Bot. 15; EPFP 2 (1923) 274; --Trifolium melilotus-indica L., Sp. Pl. (1753) 765.

Widely distributed in Asia, introduced in other areas including the Philippines.

LUZON: Benguet (Baguio). 'Disturbed soil along the railroad grade, also as a weed in the Forestry Nursery' (Merrill, 1915).

Millettia Wight & Arnott**Revision:**

Adema, F 2000. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae) 7. The genus*

Millettia. Blumea 45: 403-425.

Millettia ahernii Merr. & Rolfe, PJS 3 c (1908) Bot. 103; *ibid.* 5 c (1910) Bot. 71; --Merr., EPFP 2 (1923) 278; --Adema, Blumea 45 (2000) 411, Fig. 3d. --Type: BS 3373 Ahern's collector (K, MO*, NY*, US*, iso). Luzon: Rizal prov., Sept 1905.

Millettia canariifolia Merr., PJS 10 c (1915) Bot. 71; --Merr., EPFP 2 (1923) 279. --Syntypes: BS 4711 (not seen); --BS 4727 Ramos (K). Luzon: Zambales prov., Dec 1907

Millettia cavitensis Merr., PJS 5 c (1910) Bot. 72; --Merr., EPFP 2 (1923) 279. --Type: Merrill 4181 (L*, NY*, P, US*, iso). Luzon: Cavite prov., Maragondong, Jul 1905.

LUZON: Ilocos Norte, Ilocos Sur, Cagayan, Zambales, Rizal, Cavite, Quezon. Lowland thickets, ravines, and open forests. (Merrill, 1923).

Millettia brachycarpa Merr., PJS 10 c (1915) Bot. 17; --Merr., EPFP 2 (1923) 278; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 53; --Adema, Blumea 45 (2000) 410, Fig. 2c, d, 3b. --Type: Merrill 9578 (A, K, L*, MO*, NY*, US*). Palawan: Palawan prov., Silanga, May 1913.

LUZON: Laguna (Mt Makiling), Batangas, PALAWAN. Lowlands, in thin forests, abandoned clearings, etc.

Millettia merrillii Perkins, Frag. Fl. Philipp. (1904) 81; --Merr., EPFP 2 (1923) 279; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 53; --Adema, Blumea 45 (2000) 413, Fig. 3e. --Lectotype (designated by Adema, 2000): Merrill 1387 (A, K; isolecto: NY* 2 sheets, SING*, US*). Luzon: Pampanga prov., Arayat, Mar 1903.

Millettia foxworthii Merr., PJS 5 c (1910) Bot. 72; --Merr., EPFP 2 (1923) 279. --Type: BS 740 Foxworthy (A, K, L*, NY*, US*, iso). Palawan: Palawan prov., Mar-Apr 1906.

Millettia stipulata Dunn, PJS 6 c (1912) Bot. 316; --Merr., EPFP 2 (1923) 280. --Type: FB 11140 Aguilar (US*, iso). Luzon: Bulacan

Millettia capillipes Dunn, PJS 6 c (1912) Bot. 316. --Type: FB 18549 Alvarez (K, cited by Adema, 2000). Luzon: Isabela prov., Cabagan River, along stream bank, Apr 1909.

LUZON: Cagayan to Bataan, Bulacan, Rizal, Laguna (Mt Makiling), MINDORO, PALAWAN, NEGROS. Lowland and medium altitude thickets and secondary forests, also along riverbanks. Locally abundant

Millettia pinnata (L.) Panigrahi in Panigrahi & Murti, Fl. Bilaspur Distr. 1 (1989) 210; --Adema, Blumea 45 (2000) 411, Fig. 2e, 3c.; --Pongamia pinnata (L.) Pierre, Fl. For. Cochinch. 5 (1907) t. 384; --Merr., Interp. Herb. Amb. (1917) 271; EPFP 2 (1923) 298; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 65; --Cystisus pinnatus L., Sp. Pl. (1753) 741.

Pongamia pinnata var. *xerocarpa* (Hassk.) Merr., EPFP 2 (1923) 298; --Pongamia mitis (L.) Merr. var. *xerocarpa* (Hassk.) Merr., PJS 5 c (1910) Bot. 101; --Pongamia xerocarpa Hassk., Hort. Bogor. descr. ed. 2 (1858) 208. --Type unknown.

Pongamia mitis (L.) Kurz, Prelim. Rep. For. Veg. Pegu, App. A (1875) 49; --Merr., PJS 5 c (1910) Bot. 101; --Robinia mitis L., Sp. Pl. ed. 2 (1763) 1044, nom. illeg.. --Type: unknown.

Mascarene Isls, tropical Asia, across Malesia to Australia and Polynesia.

Throughout the Philippines along the seashore, common. Also extending inland (especially as var. *xerocarpa*).

Millettia platyphylla Merr. ex Dunn, J. Linn. Soc. Bot. 41 (1912) 140; --Merr., EPFP 2 (1923) 279; --Adema, Blumea 45 (2000) 414. --Lectotype (designated by Adema, 2000): CM Weber 1123 (A, K, US*, iso). Mindanao: Agusan del Norte prov., Mar-Jul 1911.

BILIRAN, LEYTE, SAMAR, MINDANAO: Misamis, Bukidnon, Agusan del Norte. Low and medium altitude thickets and secondary forests.

Millettia tenuipes Merr., PJS 30 (1926) 398; --Adema, Blumea 45 (2000) 414. --Type: BS 44803 Ramos & Edaño (A, K, streams at low altitudes, 12 Dec 1924.

LUZON: Zambales (Mt Marayep). Only known from the type collection.

Dubious species:

Millettia longipes Perkins, Frag. Fl. Philipp. (1904) 80; --Merr., EPFP 2 (1923) 279; --Adema, Blumea

45 (2000) 417.

Known only from uncorrelated fragmentary materials in K. See Adema (2000:417).

Excluded species:

Millettia litoralis Dunn, PJS 6 c (1911) Bot. 316; --Merr., EPFP 2 (1923) 279.

K duplicate of the type specimen has been identified as *Derris* cf. *scandens* Benth.

Not accounted for in Adema's (2000) revision:

Millettia racemosa (Roxb.) Benth. in Miq., Pl. Jungh. (1852) 249; --Merr., EPFP 2 (1923) 279.
India to Burma and Thailand.

LUZON: Rizal. Based on BS 1064 Ramos (cited by Merrill, 1923). 'The identity of the Luzon specimen to this species is not certain as it is with buds only (Merrill, 1923).

Moghania J Saint Hilaire

Revision:

Meeuwen, MS van, HP Nootboom & CGGJ van Steenis. 1960. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae, I.* Reinwardtia 5: 432-436.

Moghania involucrata (Wall. ex Benth.) Kuntze, Rev. Gen. Pl. 1 (1891) 199; --Meeuwen et al., Reinwardtia 5 (1960) 434; --Merr., EPFP 2 (1923) 316

E Himalayas, India (Assam, Sikkim) to Burma, Thailand and Indochina, Java (predominantly in the E), Lesser Sunda Isls (Bali, Sumba), WC Philippines, SW Sulawesi, SE New Guinea, to Queensland.

CULION, based on BS 41326 Ramos, cited by Merrill, 1923. Open places at low altitudes.

Moghania lineata (L.) Kuntze, Rev. Gen. Pl. 1 (1891) 199; --Meeuwen et al., Reinwardtia 5 (1960) 434; --*Flemingia lineata* (L.) Roxb., Hort. Beng. (1814) 56; --Merr., EPFP 2 (1923) 317; --*Hedysarum lineatum* L., Syst. ed. 10 (1759) 1170.

Flemingia blancoana Llanos, Fragm. (1851) 80; --Fern.-Villar & Naves in Blanco, Fl. Filip. ed. 3, 4¹ (1880) 62.

India, Burma, Thailand, Java,, Lesser Sunda Isls (Bali, Timor), N Philippines, SW Sulawesi, S New Guinea, W Australia.

LUZON: Bulacan, Rizal. Low altitude open grasslands.

Moghania macrophylla (Willd.) Kuntze, Rev. Gen. Pl. 1 (1891) 199; --Meeuwen et al., Reinwardtia 5 (1960) 434; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 81, Fig. 25; --*Flemingia macrophylla* (Willd.) Kuntze ex Prain, J. As. Soc. Beng. 66, 2 (1897) 440; --Merr., PJS 5 c (1910) Bot. 130; EPFP 2 (1923) 317; --*Crotalaria macrophylla* Willd., Sp. Pl. 3 (1800) 982.

Flemingia cumingiana Benth. in Miq., Pl. Jungh. (1852) 245; --Fern.-Villar, Novis. App. (1880) 67; --Merr., PJS 5 c (1910) Bot. 130, 354; Fl. Manila (1912) 253; EPFP 2 (1923) 316.

Flemingia philippinensis Merr. & Rolfe, PJS 3 c (1908) Bot. 103; --Merr., PJS 5 c (1910) Bot. 130; EPFP 2 (1923) 317. --Type: Merrill 4460 (L*, NY*, iso). Luzon: Lepanto District (vicinity of present-day

Ilocos

Sur and Mountain Province provincial borders), Cervantes to Mankayan, Nov 1905

Africa (Mozambique), C Himalayas to Sri Lanka and China, throughout Malesia, probably also in Australia.

Widespread throughout the Philippines. Lowland and medium altitude thickets.

Moghania strobilifera (L.) St. Hil. ex Jackson, Index Kew. 2 (1894) 252; --Meeuwen et al., Reinwardtia 5 (1960) 433; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 81, Fig. 24; --*Flemingia strobilifera* (L.) R Br. in Aiton, Hort. Kew. ed. 2, 4 (1812) 350; --Merr., EPFP 2 (1923) 317; --*Hedysarum strobiliferum* L., Sp. Pl. (1753) 764.

India to S China, throughout Malesia. Introduced in Mauritius and in the West Indies (e.g. Jamaica and Trinidad).
Throughout the Philippines. Low to medium altitudes in settled areas, open dry waste places. Often very abundant.

Monarthrocarpus Merrill =Desmodium section Monarthrocarpus (Merrill) Ohashi

Mucuna Adanson

Revision:

Wilmot-Dear, CM. 1990. *A Revision of Mucuna (Leguminosae-Phaseoleae) in the Philippines*.
Kew Bulletin 46: 213-251

Mucuna aurea C Robinson, PJS 3 c (1908) Bot. 183; --Merr., EPFP 2 (1923) 307; --Wilmot-Dear, Kew Bull. 46 (1990) 229, Fig. 6, Map 3. --Type: RS Williams 1292 (NY*, holo; iso: K, NY*, PNH, US*). Luzon: Benguet prov., Baguio, 13 Jul 1904.

LUZON: Ifugao (Bayninan), Benguet (Sablan; Baguio). Medium altitude forests and thickets, ascending to 1700m.

Mucuna curranii Elmer, LPB 1 (1907) 230; --Merr., PJS 5 c (1910) Bot. 116; EPFP 2 (1923) 308; --Wilmot-Dear, Kew Bull. 46 (1990) 231, Fig. 7, Map 3. --Type: Elmer 8442 (PNH, holo, lost; iso: A, BO, F, K, L*, NY*). Luzon: Benguet prov., Baguio, Mar 1907.

LUZON: Benguet (Pauai; Baguio; Mt Sto Tomas). Montane thickets, also limestone cliffs and ravines, altitude 1300-2200m.

Mucuna diplax Wilmot-Dear, Kew Bull. 46 (1991) 240, Fig. 11, Map 4. --Type: RS Williams 231 (NY*, holo, fr.; iso, fl.: A, K, NY*, US). Luzon: Bataan prov., Mt Mariveles, Lamao River, 23 Nov 1903. ?*Negretia urens* Blanco, Fl. Filip. (1837) 586; *ibid.* ed. 2 (1845) 409; *ibid.* ed. 3, 2 (1879) 387, ?*pro parte*, *non* Tussac.

Mucuna imbricata sensu Merr., Govt. Lab. Publ. (Philip.) 27 (1905) 38; PJS 1 (1906) Suppl. 67, *non* Baker, sensu stricto

Mucuna nigricans sensu Merr., PJS 5 c (1910) Bot. 116, *pro parte*; Sp. Blancoanae (1918) 187; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 107, *non* (Lour.) Steud.

LUZON: Bataan (Mt Mariveles, Lamao River; Pilar), Rizal (San Mateo), Laguna, Sorsogon (Mt Bulusan), POLILLO, ALABAT, MINDORO: Mindoro Occidental (Paluan), Mindoro Oriental (San Teodoro, Subaan River). Low altitudes, recorded among others along riverine habitats.

Mucuna gigantea (Willd.) DC, Prod. 2 (1825) 405; --Merr., EPFP 2 (1923) 308; --Wilmot-Dear, Kew Bull. 46 (1990) 217, Fig. 1-1.

ssp. gigantea

Africa (excluding W Africa); Japan; India; Burma; Indochina; Peninsular Malaysia to Papua New Guinea; Australia; Pacific islands.

CAMIGUIN DE BABUYANES: (Menabel River); LUZON: Ilocos Norte (Burgos), Cagayan (Baguio Cove; Gonzaga), Zambales (Anuling), Bataan, Albay, POLILLO (NE Karlagan); ALABAT; MINDORO: Mindoro Oriental (Mansalay); PALAWAN: St. Paul Bay), PANAY: Capiz; MINDANAO: Davao del Sur (Mt Apo; Sta. Cruz; Darong), Davao Oriental (Cateel); In forests, thickets, usually near or along the seashore.

ssp. **plurisemina** Verdc., Kew Bull. 33 (1979) 126; --Wilmot-Dear, Kew Bull. 46 (1990) 218. --Type from New Guinea.

Papua New Guinea, Australia.

TAWI-TAWI. Habitat as in ssp. *gigantea*.

Mucuna hainanensis Hayata, Icon. Pl. Formos. 3 (1913) 72.

ssp. multilamellata Wilmot-Dear, Kew Bull. 46 (1991) 207, Fig. 8, 9a, Map 4.

Mucuna nigricans sensu auctt., *non* (Lour.) Steud. (1841); --Merr., PJS 5 c (1910) Bot. 116, *pro parte*; Sp. Blancoanae (1918) 187, *pro parte*; EPFP 2 (1923) 309; --Wilmot-Dear, Kew Bull. 39 (1984) 43 & 45; *ibid.* 42 (1987) 30, *non* (Lour.) Steud.

?*Negretia urens* Blanco, Fl. Filip. (1837) 586; *ibid.* ed. 2 (1845) 409; *ibid.* ed. 3, 2 (1879) 387, ?*pro parte*, *non* Tussac.

N & NE India, Burma, Philippines.

LUZON: Zambales (Mt Tapulao), Pampanga (Mt Arayat), Quezon (Mt San Cristobal), GUIMARAS (Buenavista), LEYTE: Leyte (Palo), MINDANAO: Zamboanga del Norte, Davao del Sur (Mt Apo). Sea-level to medium altitudes, secondary forests, thickets or open country, often near water.

Mucuna longipedunculata Merr., Govt. Lab. Publ. (Philipp.) 29 (1905) 18; EPFP 2 (1923) 308;

--Wilmot-Dear, Kew Bull. 46 (1990) 223, Fig. 3 A-H, 4, Map 2; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 106, excl. syn. *Mucuna macmillanii* Elmer. --Type: Elmer 6233 (PNH, holo, lost; K, NY). Luzon: Benguet prov., Sablan, May 1904.

LUZON: Cagayan (Peñablanca), Isabela, Benguet (Sablan), Aurora (Casiguran), Rizal (Montalban: Malacassing, Mt Paningtingan), Quezon (Dibutanan; Mt Binuang; Guinayangan); Laguna (Los Baños; Calauan); POLILLO, CATANDUANES (Mt Nagpakdit), ?PANAY, ?BILIRAN. Ravines, forests, near streams, low and medium altitudes up to 500m.

Mucuna macmillanii Elmer, LPB 8 (1915) 2736, --Merr., EPFP 2 (1923) 308 (in syn. *M.*

longipedunculata Merr.); --Wilmot-Dear, Kew Bull. 46 (1990) 226, Fig. 3-j-k, Map 2. --Type: Elmer 13594 (PNH, holo, lost; iso in A, BISH, E, F, K, L, MO, NEB, NY, US, US). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta (=Hilong-hilong), Aug 1912.

MINDANAO: Misamis Occidental (Mt Malindang), Bukidnon (Mahulicot), Davao del Sur (Mt Apo), Agusan del Norte (Mt Hilong-hilong), Surigao del Norte. Low altitude humid forests near water.

Mucuna mindorensis Merr., PJS 3 c (1908) 231; --EPFP 2 (1923) 309; --Wilmot-Dear, Kew Bull.

46 (1990) 221, Fig. 1 a-k, Map 1. --Type: Merrill 4069 (PNH, holo; K, L, NY, US). Mindoro: Mindoro Oriental prov., Baco River.

MINDORO: Mindoro Oriental (Baco River; Mt Halcon); PANAY: Capiz (Agravay; Jamindan). Forest, along rivers at low altitudes.

Mucuna pachycarpa Parreno ex Wiriadinata, J. Jap. Bot. (**in press 1990**); --Wilmot-Dear, Kew

Bull. 46 (1990) 221, Fig. 2, Map 1. --Type: BS 84971 Ramos & Edaño (A, holo). Mindanao: South Cotabato prov., Nutol, 18 Apr 1932.

MINDANAO: South Cotabato. Known only from the type? Habitat not indicated.

Mucuna platyplekta Quisumb. & Merr., PJS 37 (1928) 152; --Wilmot-Dear, Kew Bull. 46 (1990)

244, Fig. 12, Map 3. --Type: BS 47232 Ramos & Edaño (NY*, UC, iso). Luzon: Isabela prov., San Mariano, 16 Feb 1926.

LUZON: Cagayan (Peñablanca), Isabela (San Mariano), ?Rizal (Mt Igarrotes, based on Callery *sn*, in P, collected in Feb 1840). Lowland dry open forests along streams.

Mucuna pruriens (L.) DC, Prodr. 2 (1825) 405; --Perkins, Fragm. Fl. Philip. (1904) 86; --Merr., PJS 1

(1906) Suppl. 67; *ibid.* 5 c (1910) Bot. 117; --Fl. Manila (1912) 259; Sp. Blancoanae (1918) 188; EPFP 2 (1923) 309; --Wilmot-Dear, Kew Bull. 39 (1984) 61; *ibid.* 42 (1987) 40; *ibid.* 46 (1990) 245, Fig. 13, Map 3; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 107, Fig. 34; --*Negretia pruriens*

Blanco, Fl. Filip. ed. 2 (1845) 411.

var. pruriens

Tropical Africa, Madagascar, Asia, tropical America; probably an introduction in some areas but certainly native to Africa and parts of Asia.

LUZON: Ilocos Norte, Ifugao (Banawe), Benguet (Itogon), Cagayan (Callao Caves), Isabela (San Mariano), Bulacan (Polo), Rizal (Montalban; Pasig; Ft McKinley; San Francisco), Manila, Laguna (Los Baños), Albay, JOLO, MINDANAO: Lanao del Sur (Lake Lanao). Low to medium altitude thickets and secondary forests, streamsides.

var. sericophylla Wilmot-Dear, Kew Bull. 46 (1991) 247, Map 5; --Mucuna sericophylla Perkins, Frag. Fl. Philip. (1904) 86; --Merr., PJS 5 c (1910) Bot. 117; EPFP 2 (1923) 310; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 109. --Type: Warburg 12438 (B, holo, lost). Luzon: Cagayan prov.

Mucuna luzoniensis Merr., PJS 1 (1906) Suppl. 196. --Type: Elmer 5599 (PNH, holo, lost; iso NY*, US). Luzon: La Union prov., Bauang, Feb 1904.

LUZON: La Union (Bauang; Damortis), Abra (Bucay), Mountain Province, Benguet, Nueva Vizcaya, Zambales (Mt Pinatubo), Bataan, Pampanga, Laguna, MINDORO: Mindoro Oriental (Mansalay, Mt Yagaw), LEYTE, JOLO, MINDANAO. Low to medium altitude dry thickets.

var. utilis (Wall. ex Wight) Baker ex Burck, Ann. Jard. Buitenzorg 11 (1893) 187; --Wilmot-Dear, Kew Bull. 39 (1984) 63; *ibid.* 42 (1987) 45; *ibid.* 46 (1990) 249,

Mucuna deeringiana (Bort) Merr., PJS 5 c (1910) Bot. 118; EPFP 2 (1923) 308.

Mucuna nivea xxxxxx, --Merr., Sp. Blancoanae (1918) 188

Mucuna cochinchinensis (Lour.) A. Chev., Bull. Agr. Inst. Sci. Saigon 1 (1919) 91; --Merr., EPFP 2 (1923) 307.

Mucuna lyonii Merr., PJS 1 (1906) Suppl. 197; Fl. Manila (1912) 259. --Type: WS Lyon *sn* (PNH, holo, lost; iso K, US*). Cult. in Manila from seeds from Luzon: Pampanga prov.

Negretia mitis Blanco, Fl. Filip. (1837) 588; *ibid.* ed. 2 (1845) 410; *ibid.* 3, 2 (1879) 388, t. 405 bis, *non* Ruiz & Pav.

Widely cultivated in the tropics.

LUZON: Bataan (Mt Mariveles), Manila, Rizal, NEGROS: Negros Occidental (La Carlota), MINDANAO: Zamboanga del Norte (Muyu). Grown in the Philippines for fodder and green manure.

Mucuna reticulata Burck, Ann. Jard. Buitenzg. 11 (1893) 184; --Wilmot-Dear, Kew Bull. 46 (1990) 226, Fig. 5, 9 d-e, Map 2. --Type from Sulawesi.

Mucuna foveolata Merr., PJS 20 (1922) 389; EPFP 2 (1923) 308. --Type: FB 28379 Mabesa (PNH, holo, lost; iso: K, US). Luzon: Quezon prov., Kabibihan

Philippines, Sulawesi.

LUZON: Quezon (Guinayangan; Kabibihan), SAMAR. Low altitudes, along streams, forest edges, and secondary forests.

Mucuna samarensis Merr., PJS 20 (1922) 390; EPFP 2 (1923) 309; --Wilmot-Dear, Kew Bull. 46 (1990) 237, Fig. 9 B-C, 10, Map 4. --Type BS 24341 Ramos (PNH, holo, lost; iso K, NY*, US*). Samar: Catubig River, Feb-Mar 1916.

SAMAR: Eastern Samar (Balangiga), MINDANAO: Surigao del Norte (Surigao).

Lowlands, damp forests along margins of old clearings.

Ormocarpum Palisot de Beauvois

Ormocarpum cochinchinense (Lour.) Merr., PJS 5 c (1910) Bot. 76; EPFP 2 (1923) 282; --Diphaca cochinchinensis Lour., Fl. Cochinch. (1790) 454.

Ormocarpum sennooides (Willd.) DC, Prodr. 2 (1825) 315; --Fern.-Villar, Novis. App. (1880) 60; --Vidal, Phan.

Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 106; --Perkins, Fragm. Fl. Philip. (1904) 17; --Hedysarum sennoides Willd., Sp. Pl. 3 (1803) 1207.

Tropical Africa, India to S China, across Malesia to tropical Australia.

LUZON: Ilocos Norte, Ilocos Sur, Batangas, Camarines, CAMIGUIN. Dry open slopes and thickets at low and medium altitudes.

Ormosia Jackson (*nom. cons.*)

Revision:

Knaap-van Meeuwen, MS. 1962. *Preliminary revision of some genera of Malaysian Papilionaceae IV. A revision of Ormosia*. Reinwardtia 6: 225-238.

Ormosia bancana (Miq.) Merr., Enum. Born. (1921) 301; --Whitmore, Tree Fl. Malaya 1 (1972) 300; --Cockburn, Trees of Sabah 1 (1976) 201, Fig. 36; --Soejarto et al. (1995) Checklist Fl. Pl. Palawan.

Sumatra, Peninsular Malaysia, Langkawi, Malacca, Singapore, Banka, Anambas, Natuna, Borneo (Sabah), SW Philippines.

PALAWAN (Taytay; Mt Victoria, Trident Mine area, 4 collections, L, PNH)

Note: Index Kewensis ascribes the authority for this species to Prain, J. As. Soc. Beng. 69 (1900) 184.

Ormosia calavensis Azaola *ex* Blanco, Fl. Filip. ed. 2 (1845) 230; *ibid.* 3, 2 (1878) 64; Fern.-Villar, Novis. App. (1880) 69; --Vidal, Sinopsis Atlas (1883) 23, t. 41, Fig. H; Rev. Pl. Vasc. Filip. (1886) 113; Phan. Cuming. Philip. (1885) 109; --Perkins, Fragm. Fl. Philip. (1904) 15; --Merr., PJS 1 (1906) Suppl. 64; PJS 5 c (1910) Bot. 58; Interpret. Herb. Amboin. (1917) 262; Sp. Blancoanae (1918) 177; EPFP 2 (1923) 269; --Cockburn, Trees of Sabah 1 (1976) 201, Fig. 36; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 32. --Type: Not extant. Neotype: Merrill Sp. Blancoanae 707 (K*, US*, iso). Luzon: Bulacan prov., Angat, Mt Anginan, dry hill summit, altitude c. 220m, 16 Dec 1914.

Java, Borneo (Sabah), Philippines, Sulawesi, Moluccas, New Guinea, Palau.

N LUZON to MINDANAO. Low and medium altitude forests.

Ormosia macrodisca Baker, in Hook.f., Fl. Brit. Ind. 2 (1878) 253; --Whitmore, Tree Fl. Malaya 1 (1972) 301.

Ormosia basilanensis Merr., PJS 14 (1919) 407; EPFP 2 (1923) 269. --Syntypes: FB 17893 Rafael (US*). Basilan: Basilan prov., Maluno, in forests, altitude c. 140m, 13 Nov 1912; --Hollier 508 (not seen, cited by Merrill, 1914). Probably same locality, Jan 1904.

?*Ormosia clementis* Merr., PJS 14 (1919) 406; EPFP 2 (1923) 270. --Type: MS Clemens 1139 (not seen). Mindanao: Lanao del Sur prov., Camp Keithley, altitude c. 900m, Jul 1907.

?*Ormosia grandifolia* Merr., PJS 14 (1919) 408; EPFP 2 (1923) 270. --Type: FB 21172 Alvarez (not seen). Luzon: Camarines prov., Magdoronganon River, in forests near the river, altitude c. 100m, 23 Mar 1914.

Peninsular Malaysia, Malacca, Singapore, Borneo (Sabah), Philippines.

LUZON: Camarines, BASILAN, MINDANAO: Lanao del Sur (Camp Keithley). Lowland forest to c. 900m.

Ormosia paniculata Merr., Govt. Lab. Publ. (Philipp.) 35 (1906) 21; EPFP 2 (1923) 270. --Type: FB 2028 Borden (NY*, SING*, US*, iso). Luzon: Bataan prov., Mt Mariveles, Lamao River, Sept-Dec 1904.

Ormosia orbiculata Merr., PJS 14 (1919) 405; EPFP 2 (1923) 270. --Type: BS 32775 Ramos (K*, L*, US*, iso). Luzon: Ilocos Norte prov., Burgos, 17 Jul 1918.

LUZON: Ilocos Norte (Burgos; Pasuquin), Bataan (Mt Mariveles). Lowland forest, up to 300m.

Ormosia surigaensis Merr., PJS 17 (1920) 405; EPFP 2 (1923) 263. --Type: BS 34494 Ramos & Pascasio (L*, US*, iso). Mindanao: Surigao del Norte prov., on ridges at low altitudes at the iron

deposit on the NE coast, 24 Apr 1919.
MINDANAO: Surigao del Norte. Forested ridge at low altitudes.

Pachyrhizus Richard ex de Candolle

Pachyrhizus erosus (L.) Urban, Symb. Antill. 4 (1905) 311; --Merr., PJS 5 c (1910) Bot. 135; Fl. Manila (1912) 263; Sp. Blancoanae (1918) 193; EPFP 2 (1923) 321; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 112; --Dolichos erosus L., Sp. Pl. (1753) 726.
Pachyrhizus angulatus Rich. ex DC, Prodr. 2 (1825) 402; --Blanco, Fl. Filip. ed. 2 (1845) 405; *ibid.* ed. 3, 2 (1879) 380, t. 249; --Fern.-Villar, Novis. App. (1880) 65; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 110.

Native of tropical America, now pantropic.

Throughout the Philippines in the settled areas at low and medium altitudes. Sometimes planted. Yam bean; singkamas.

Paraderris (Miquel) Geesink

Revision:

Adema, F 2003. *Notes on Malesian Fabaceae (Leguminosae-Papilionoideae). 9. The genus Parraderris*. Blumea 48: 129-144.

Paraderris elliptica (Wall.) Adema, Blumea 48 (2003) 137; --Derris elliptica (Roxb.) Benth., J. Linn. Soc. Bot. 4 (1860) suppl. 111; --Merr., EPFP 2 (1923) 299, *pro parte*, excl. syn. *Cylista piscatoria* Blanco & *Millettia piscatoria* Merr.; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 67, Fig. 16.
-- Type from Ambon.

Bangladesh (Chittagong) through Malesia to New Guinea and Bismarck Archipelago.
N LUZON to MINDANAO. Low and medium altitudes, along streamside thickets, secondary forests, etc. Often abundant. (Merr. 1923)

Paraderris lianoides (Elmer) Adema, Blumea 48 (2003) 138; --Derris lianoides Elmer, LPB 1 (1907) 228; --Merr., PJS 5 c (1910) Bot. 106; EPFP 2 (1923) 300; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 66. --Type: Elmer 7443 (holo PNH, lost?, iso in CAL, K, MO*, NY*, US*). Luzon, Quezon prov., Lucban, in forests, altitude c. 1000m, May 1906.

N LUZON to PALAWAN and MINDANAO. Lowland and medium altitude thickets and forests.

Paraderris luzoniensis Adema, Blumea 48 (2003) 134, Fig. 2d-f. --Type: ISU 564 Ridsdale et al. (L, holo; iso in K*). Luzon, Isabela prov., Palanan, Dimapnat, secondary forest on riverine gravel banks surrounded by ultramafics, altitude 50m, 15 Apr 1992.

LUZON: Isabela (Palanan). Known only from the type collection.

Paraderris oblongifolia (Merr.) Adema, Blumea 48 (2003) 139; --Derris oblongifolia Merr., PJS 7c (1912) Bot. 82; EPFP 2 (1923) 300. --Type: Vanoverbergh 280 (not traced by Adema in 2003). Luzon, Mountain Province, Bontoc.

LUZON: Mountain Province. Montane thickets and forests, altitude 1300-1600m

Paraderris piscatoria (Blanco) Adema, Blumea 48 (2003) 133.

Derris elliptica sensu Merr., EPFP 2 (1923) 299, *pro parte*, *excl. syn.* *Galedupa elliptica* Roxb. --Type: Merrill Species Blancoanae 469 (L, neotype, designated by Adema in 2003), isoneotypes in A, K, US*

Parosela Cavanilles =Dalea

Parosela glandulosa (Blanco) Merr., PJS 5 c (1910) Bot. 68; Fl. Manila (1912) 246; Sp.

Blancoanae (1918) 180; EPFP 2 (1923) 277; --Dalea glandulosa (Blanco) Merr., Govt. Lab. Publ. (Philip.) 27 (1905) 37; PJS 1 (1906) Suppl. 64; --Amorpha glandulosa Blanco, Fl. Filip. (1837) 555.
--Type:
Dalea alopecuroides Blanco, Fl. Filip. ed. 2 (1845) 389; *ibid.* ed. 3, 2 (1879) 351; --Fern.-Villar, Novis. App. (1880) 58, *non* Willd.
Dalea nigra Mart. & Gal., Bull. Acad. Brux. 10, 2 (1843) 43; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 105; --Perkins, Fragm. Fl. Philip. (1904) 16.
Introduced from Mexico.
LUZON: Ilocos Norte to Batangas. Lowlands and medium altitudes, ascending to 1300m, on open dry slopes.

Pericopsis Thwaites

Pericopsis mooniana Thwaites, Enum. Pl. Zeyl. (1864) 414.
Ormosia villamilii Merr., PJS 10 c (1915) Bot. 313; EPFP 2 (1923) 270. --Type: FB 13290 Foxworthy, Villamil & de Mesa (US*, iso). Mindanao: Zamboanga del Sur prov., opposite Olutanga Is, forested slopes near the sea, altitude c. 20m, 16 May 1912.
Sri Lanka, Sumatra, Peninsular Malaysia, Java, Borneo (Sabah, E Kalimantan), Philippines, Sulawesi, S Moluccas, New Guinea (Irian Jaya, Papua), Micronesia.
MINDANAO: Zamboanga del Sur. Lowland forests near the sea.

Phaseolus Linnaeus

Phaseolus adenanthus G Meyer, Prim. Fl. Esseq. (1818) 239; --Perkins, Fragm. Fl. Philip. (1904) 89; --Merr., PJS 5 c (1910) Bot. 132; Fl. Manila (1912) 261; EPFP 2 (1923) 318.
Pantropic.
N LUZON (Cagayan) to MINDANAO. Thickets bordering swamps, streams, etc., at low and medium altitudes.

Phaseolus lunatus L., Sp. Pl. (1753) 724; --Blanco, Fl. Filip. (1837) 573; *ibid.*, ed. 2 (1845) 400; *ibid.* 3, 2 (1879) 370, t. 352; Fern.-Villar, Novis. App. (1880) 64; --Perkins, Fragm. Fl. Philip. (1904) 89; --Merr., Govt. Lab. Publ. (Philip.) 6 (1904) 32; PJS 5 c (1910) Bot. 354; --Fl. Manila (1912) 261; Sp. Blancoanae (1918) 191; EPFP 2 (1923) 318; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 112, Fig. 36.
Phaseolus inamoenus Blanco, Fl. Filip. (1837) 571; *ibid.*, ed. 2 (1845) 399; *ibid.* 3, 2 (1879) 368, *non* ?L.
Phaseolus ilocanus Blanco, Fl. Filip. (1837) 572.
Phaseolus tunkinensis Lour., Fl. Cochinch. (1790) 435; --Blanco, Fl. Filip. ed. 2 (1845) 399; *ibid.* ed. 3, 2 (1879) 369, t. 369.
Phaseolus vexillatus Blanco, Fl. Filip. (1837) 574, *non* L.
Phaseolus vulgaris Blanco, Fl. Filip., ed. 2 (1845) 401; *ibid.* 3, 2 (1879) 371, *non* L.
Native of tropical America, now pantropic in distribution. In the Philippines now thoroughly naturalized and common in thickets at low and medium altitudes, ascending to 2000m; some forms cultivated. Lima bean.

Phaseolus minimus Roxb., Fl. Ind. ed. 2, 3 (1832) 290; --Merr., PJS 5 c (1910) Bot. 132; Fl. Manila (1912) 261; EPFP 2 (1923) 319.
S China, Philippines.
N LUZON (Cagayan) to MINDANAO. Lowland and medium altitude grasslands; widely scattered.

Phaseolus vulgaris L., Sp. Pl. (1753) 723; --Fern.-Villar, Novis. App. (1880) 64; --Merr., Fl. Manila (1912) 261; EPFP 2 (1923) 319;
Cultivated pantropically. Various forms grown in the Philippines. In the Mountain

Province, occasionally subsontaneous. Common bean.

Phylacium Bennett

Revision:

Bresser, M. 1978. *Blumea* 24: 485-493

Phylacium bracteosum Benn., *Pl. Jav. Rar.* (1840) 159, t. 33; --Vidal, *Rev. Pl. Vasc. Filip.* (1886) 108; --Perkins, *Fragm. Fl. Philip.* (1904) 20; --Merr., *PJS* 5 c (1910) *Bot.* 94, 354; *EPFP* 2 (1923) 294; --Bresser, *Blumea* 24 (1978) 490, Fig. 1, 3a-f.

Malesia (excluding Borneo) and Australia (N Queensland).

N LUZON to MINDANAO. Low and medium altitude dry thickets, ascending to 1400m; locally abundant.

Phyllodium Desvaux

Revision:

Ohashi, H. 1973. *The Asiatic species of Desmodium and its allied genera*. *Ginkgoana* no. 1: 1-318 +76 pl.

Phyllodium pulchellum (L.) Desv., *J. de Bot. ser. 2*, 1 (1813) 124, tab. 5, Fig. 24; --Ohashi, *Ginkgoana* 1 (1973) 276, Pl. 39b; --*Desmodium pulchellum* (L.) Benth., *Fl. Hongk.* (1861) 83; --Merr., *PJS* 5 c (1910) *Bot.* 79; *Fl. Manila* (1912) 239; *EPFP* 2 (1923) 288; --Meeuwen, *Reinwardtia* 6 (1962) 256; --Backer & Bakh.f., *Fl. Java* 1 (1963) 603; --Pancho & Gruezo, *Vasc. Fl. Mt Makiling* 2 (2006) 39, Fig. 6; --*Hedysarum pulchellum* L., *Sp. Pl.* (1753) 747.

Tropical Asia from India through S China, Taiwan, across Malesia to N Australia.

Throughout the Philippines. Low and medium altitude wastelands, open thickets, settled areas, etc.

Pisum Linnaeus

Pisum sativum L., *Sp. Pl.* (1753) 272; --Fern.-Villar, *Novis. App.* (1880) 62; --Merr., *PJS* 5 c (1910) *Bot.* 108; *Fl. Manila* (1912) 249; *EPFP* 2 (1923) 302.

Cultivated only, Philippine occurrence dependent on imported seeds. Common pea; Chicharo.

Pongamia Ventenat =Millettia

Pseudarthria Wight & Arnott

Literature:

Meeuwen, MS van, CGGJ van Steenis & J Stemmerik. 1961. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae II*. *Reinwardtia* 6: 104-105.

Pseudarthria viscida (L.) Wight & Arn., *Prodr.* (1834) 209; --Merr., *PJS* 5 c (1910) *Bot.* 90; *EPFP* 2 (1923) 291; --Meeuwen et al., *Reinwardtia* 6 (1961) 105; --*Hedysarum viscidum* L., *Sp. Pl.* (1753) 747.

Pakistan, India, Sri Lanka, Burma, E Java, Bawean Is, Lesser Sunda Is (Bali; Lombok; Flores; Timor; Wetar), Philippines, S-C Sulawesi, Moluccas (Halmahera; Sula; Buru; Seram; Ambon; Banda; Kai Is).

LUZON: Bulacan, PANAY, NEGROS. Waste places near towns, deserted clearings,

coconut groves, etc.

Psophocarpus Necker ex de Candolle

Psophocarpus tetragonolobus (L.) DC, Prodr. 2 (1825) 403; --Fern.-Villar, Novis. App. (1880) 66; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 110; --Merr., PJS 5 c (1910) Bot. 136; Fl. Manila (1912) 264; EPFP 2 (1923) 322; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 117; --Dolichos tetragonolobus L., Sp. Pl. ed. 2 (1763) 1020; --Blanco, Fl. Filip. (1837) 576; ibid., ed. 2 (1845) 402; ibid. 3, 2 (1879) 374, t. 293.

India to Malaya in cultivation. Cultivated, semi-cultivated, and occasionally spontaneous or subsponaneous in most parts of the Philippines at low and medium altitudes. Introduced. Asparagus bean; cigarillas.

Psoralea badocana (Blanco) Blanco =Cullen

Pterocarpus Jacquin

Revision:

Rojo, JP. 1972. *Pterocarpus (Leguminosae-Papilionaceae) revised for the world*. Phanerogamarum Monographiae 5: 1-119.

Pterocarpus indicus Willd., Sp. Pl. 3 (1800) 904; --Merr., Fl. Manila (1912) 246; EPFP 2 (1923) 297; --Rojo, Phanerog. Monog. 5 (1972) 41; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 60, Fig. 15.

Pterocarpus blancoi Merr., Govt. Lab. Publ. (Philipp.) 6 (1904) 7; --Merr., EPFP 2 (1923) 297.

Pterocarpus pubescens Merr., PJS 12 c (1917) Bot. 271; EPFP 2 (1923) 297.

forma indicus

S Burma, C & Peninsular Thailand, Cambodia, Ryukyus, across Malesia to Bismarck Archipelago, Vanuatu, Solomon Isls, to the Caroline Isls.

Throughout the Philippines. Lowland (usually evergreen) forests, ascending to 1300m.

forma echinatus (Pers.) Rojo, Phanerog. Monog. 5 (1972) 46, Fig. 7 g-h; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 60; --*Pterocarpus echinatus* Pers., Syn. Pl. 2 (1807) 277; --Merr., Fl. Manila (1912) 247.

Pterocarpus vidalianus Rolfe, J. Linn. Soc. Bot. 21 (1884) 309; --Merr., EPFP 2 (1923) 297.

Sulawesi, Ambon, Adonara, Wetar, Kisar, Philippines.

LUZON: Ilocos Norte, Ilocos Sur, Cagayan, Isabel, Bulacan, Laguna, Quezon,

Camarines, Sorsogon, MINDORO. Low and medium altitude forests.

Non-naturalized cultivated species:

Pterocarpus marsupium Roxb., Pl. Corom. 2 (1799) 9, t. 116; --Rojo, Phanerog. Monog. 5 (1972) 58

Pueraria de Candolle

Pueraria lobata (Willd.) Ohwi, Bull. Tokyo Sci. Mus. 18 (1947) 16; --Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 34; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 99.

Pueraria thunbergiana (Sieb. & Zucc.) Benth., J. Linn. Soc. 9 (1867) 122; --Merr., PJS 3 c (1908) Bot. 410; EPFP 2 (1923) 312.

Pueraria phaseoloides Fern.-Villar, Novis. App. (1880) 64; --Merr., Govt. Lab. Publ. (Philip.) 27 (1905) 39; PJS 5 c (1910) Bot. 123; Fl. Manila (1912) 254; Sp. Blancoanae (1918) 189; EPFP 2 (1923) 311, *non* (Roxb.) Benth.; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 100, Fig. 31.

Pachyrrhizus teres Blanco, Fl. Filip. (1837) 580.

Pachyrrhizus montanus Blanco, Fl. Filip. ed. 2 (1845) 406; *ibid.* ed. 3, 2 (1879) 381, *non* DC.
Dioscorea bolojonica Blanco, Fl. Filip. (1837) 800; *ibid.* ed. 2 (1845) 551; *ibid.* ed. 3, 2 (1879) 208.
India, S China, Japan, Taiwan, Malaya, Java, Philippines.
BATANES and N LUZON to MINDANAO. Low and medium altitude grasslands and thickets, in the Cordillera Highlands ascending to 2000m.

Pueraria pulcherrima (Koord.) Merr. ex Koord.-Schum., Syst. Verzeich. 2 (1914) 132; Merr., EPFP 2 (1923) 312; --*Mucuna pulcherrima* Koord., Meded. Lands Plant. 19 (1908) 440.

Glycine warburgii (Perkins) Merr., PJS 3 c (1908) Bot. 231; --*Pueraria warburgii* Perkins, Fragm. Fl. Philip. (1904) 87; --Merr., PJS 5 c (1910) Bot. 124. --Type: Warburg 14664 (B, cited by Merr., 1910).
Mindanao: Davao, Taumo.

Philippines, Sulawesi.

LUZON: Albay, Sorsogon, BILIRAN, LEYTE, MINDANAO: Bukidnon, Davao, Agusan del Norte, Surigao del Norte. Lowland thickets and forests.

Pueraria tetragona Merr., PJS 5 c (1910) Bot. 312; Merr., EPFP 2 (1923) 312. --Type: BS 295 Bermejos (NY*, US*, iso). Palawan: Palawan prov., near Puerto Princesa, Jan 1906.

PALAWAN. Lowland old clearings.

Pycnospora R Brown ex Wight & Arnott

Pycnospora lutescens (Poir.) Schindl., J. Bot. 64 (1926) 145; --Meeuwen et al., Reinwardtia 5 (1960) 437; --*Hedysarum lutescens* Poir. in Lam., Enc. Bot. 6 (1806) 417.

Pycnospora nervosa (Graham) Wight & Arn., Prodr. (1834) 197; --Merr., PJS 5 c (1910) Bot. 91; EPFP 2 (1923) 292; --*Crotalaria nervosa* Graham in Wall., Cat. (1832) no. 5428, *nomen*.

Tropical Africa, India through Burma, Thailand, Indochina to S China to Taiwan, Java, Lesser Sunda Isls, Philippines, S Sulawesi, Moluccas, Aru Isls, SE New Guinea to tropical E Australia.

LUZON (Benguet, Bulacan, Rizal), CULION, SEMIRARA, PANAY, MINDANAO (Lanao, Bukidnon, Davao). Open grasslands at low and medium altitudes.

Rhynchosia Loureiro

Revision:

Meeuwen, MS van, HP Nootboom & CGGJ van Steenis. 1960. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae, I.* Reinwardtia 5: 438-443.

Rhynchosia acuminatissima Miq., Fl. Ind. Bat. 1, 1 (1855) 171; --Meeuwen et al., Reinwardtia 5 (1960) 440.

Rhynchosia calosperma Warb. In Engl., Bot. Jahrb. 12 (1891) 314; --Merr., PJS 5c (1910) Bot. 128; EPFP 2 (1923) 316.

Hainan, across Malesia from Sumatra to New Guinea and Bismarck Archipelago, Micronesia (Tinian) and NE Australia (Queensland).

LUZON, GUIMARAS, MINDANAO. Lowland thickets. Apparently very rare or local in the Philippines.

Rhynchosia minima (L.) DC, Prodr. 2 (1852) 385; --Merr., EPFP 2 (1923) 316; --Meeuwen et al., Reinwardtia 5 (1960) 439; --*Dolichos minimus* L., Sp. Pl. (1753) 1020.

Pantropical, recorded from tropical America, tropical and S Africa, rather common in SE-E Asia (northward to Yunnan) and Australia; in Malesia: E Papua, Sumba, Kangean, Java (E and W) and NW tip of LUZON (Ilocos Norte). Grassland in region with a pronounced dry season, low altitude.

Rhynchosia volubilis Lour., Fl. Cochinch. (1790) 460; --Merr., EPFP 2 (1923) 316; --Meeuwen et al., Reinwardtia 5 (1960) 443.

Japan to S China and Taiwan. LUZON (Mountain Province and Benguet). In open grasslands, 1400-2000m. According to Meeuwen et al. (1960), this SE-E Asiatic species has never been found native in Malesia. It is said to be cultivated in Bogor during Blume's time but has since disappeared and not been naturalized.

Sesbania Scopoli

Sesbania cannabina (Retz.) Pers., Syn. 2 (1807) 316; --Merr., PJS 5 c (1910) Bot. 74; Fl. Manila (1912) 250; EPFP 2 (1923) 281; --Aeschynomene cannabina Retz., Obs. 5 (1789) 26.

Sesbania aegyptiaca Fern.-Villar, Novis. App. (1880) 59; --Naves in Blanco, Fl. Filip. ed. 3 (1877-83) t. 405, *non* Poir.

Sesbania aculeata Fern.-Villar, Novis. App. (1880) 59; --Vidal, Phan. Cuming. Philip. (1885) 107; Rev. Pl. Vasc. Filip. (1886) 106; --Perkins, Fragm. Fl. Philip. (1904) 17, *non* Pers.

India to Malaya.

N LUZON to MINDANAO. Lowlands to medium altitudes along streams, open wetlands, etc.

Sesbania grandiflora (L.) Pers., Syn. 2 (1807) 316; --Blanco, Fl. Filip (1837) 599; *ibid.* ed. 2 (1845) 418; *ibid.* ed. 3, 2 (1879) 399, t. 291; --Fern.-Villar, Novis. App. (1880) 60; --Vidal, Sinopsis Atlas (1883) 23, t. 40, Fig. F; --Perkins, Fragm. Fl. Philip. (1904) 17; --Merr., PJS 5 c (1910) Bot. 75; Fl. Manila (1912) 250; Sp. Blancoanae (1918) 181; EPFP 2 (1923) 281; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 71. --Robinia grandiflora L., Sp. Pl. (1753) 722.

Mascarene Isls, India, across Malesia to tropical Australia. Planted in other tropical countries.

Certainly an introduced plant in the Philippines. N LUZON to MINDANAO. Lowlands to medium altitudes in the settled areas. Often planted.

Sesbania roxburghii Merr., PJS 4 c (1909) Bot. 269; *ibid.* 5 c (1910) Bot. 74; Sp. Blancoanae (1918) 181; EPFP 2 (1923) 281.

Sesbania aculeata Poir. var. *paludosa* Baker in Hook.f., Fl. Brit. Ind. 2 (1876) 115; --Fern.-Villar, Novis. App. (1880) 59.

India to S China and Taiwan, southward to Java and Sulawesi.

LUZON: Rizal, Laguna. Along streams, in swamps, and in shallow water of lakes.

Sesbania sesban (L.) Merr., PJS 7 c (1912) Bot. 235; EPFP 2 (1923) 282; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 72, Fig. 18; --Aeschynomene sesban L., Sp. Pl. (1753) 714.

Pantropic.

Throughout the Philippines. In open poorly-drained fields in the lowlands. Naturalized.

Shuteria Wight & Arnott

Shuteria vestita (Graham) Wight & Arn., Prodr. (1834) 207; --Vidal, Rev. Pl. Vasc. Filip. (1886) 109; --Merr., PJS 5 c (1910) Bot. 110, 354; EPFP 2 (1923) 304; --Glycine vestita Graham in Wall. Cat. (1832) No. 5512, *nomen nudum*.

India to S China and N Philippines. LUZON: Mountain Province, Benguet. Open slopes and in thickets associated with pine forests, altitude 1300-2000m.

Smithia Aiton

Revision:

Meeuwen, MS van, HP Nootboom & CGGJ van Steenis. 1960. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae, I.* Reinwardtia 5: 443-446.

Smithia ciliata Royle, Illustr. Bot. Himal. (1839) 201, t. 35, Fig. 2; --C Robinson, PJS 3 c (1908) Bot. 184; --Merr., PJS 5 c (1910) Bot. 77; EPFP 2 (1923) 283; --Meeuwen et al., Reinwardtia 5 (1960) 444. Himalayas, N Thailand, N Vietnam, Taiwan, E Java, Lesser Sunda Isls (Bali; Timor), N Philippines, Sulawesi.
LUZON: Mountain Province, Benguet. Pine forest, 1100-2200m.

Smithia conferta JE Sm. in Rees, Cycl. 33, no. 2 (1816); --Meeuwen et al., Reinwardtia 5 (1960) 445. India, Indochina, Java, Lombok, N Borneo, WC Philippines, S Sulawesi to Queensland. MINDORO: Occidental Mindoro, based on PNH 22478 Sulit.

Smithia sensitiva Aiton, Hort. Kew. 3 (1789) 496; --Merr., EPFP 2 (1923) 283; --Meeuwen et al., Reinwardtia 5 (1960) 444.
Tropical Africa and Asia to Taiwan, throughout Malesia (not yet recorded for Borneo) and Australia.
LUZON: Mountain Province, Benguet, Pangasinan, Nueva Vizcaya, Nueva Ecija,
MINDANAO: Lanao. Open wet places, chiefly at medium altitudes, ascending to 2000m.

Sophora Linnaeus

Literature:

Steenis, CGGJ va. 1948. Bulletin du Jardin Botanique du Buitenzorg 3, 17: 421-428.

Meeuwen, MS van, CGGJ van Steenis & J Stemmerik. 1961. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae II.* Reinwardtia 6: 105-106.

Sophora longipes Merr., PJS 12 c (1917) Bot. 12; EPFP 2 (1923) 270; --Steen., Bull. Jard. Bot. Buitenz. 3, 17 (1948) 424; --Meeuwen et al., Reinwardtia 6 (1961) 105. --Type: BS 26765 Ramos (US*, iso). Luzon: Batangas prov., Oct 1916.
Philippines, E Timor.
LUZON: Batangas, GOLO. Low altitudes, on slopes in an old clearing; on Golo in open thickets on ultramafic bluffs.

Sophora philippinensis Merr., PJS 9 c (1914) Bot. 449; EPFP 2 (1923) 270. --Type: Vanoverbergh 2612 (US*, iso). Luzon: Mountain Province, Bauco, Jan-May 1913.
LUZON: Mountain Province, Benguet. Montane thickets, altitude 1200-1500m.

Sophora tomentosa L., Sp. Pl. (1753) 373; --Blanco, Fl. Filip (1837) 328; *ibid.* ed. 2 (1845) 229; *ibid.* ed. 3, 2 (1879) 63; --Fern.-Villar, Novis. App. (1880) 69; --Vidal, Sinopsis Atlas (1883) 23, t. 41, Fig. G; Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 113; --Merr., PJS 3 c (1908) Bot. 82, 409; *ibid.* 5 c (1910) Bot. 58; Sp. Blancoanae (1918) 177; EPFP 2 (1923) 270.
Sophora heptaphylla Blanco, Fl. Filip (1837) 329; *ibid.* ed. 2 (1845) 229; *ibid.* ed. 3, 2 (1879) 63; --Fern.-Villar, Novis. App. (1880) 69, *non* L.
Pantropic strand plant.
Widespread along the seashore throughout the Philippines. Locally abundant.

Spatholobus Hasskarl

Revision:

Ridder-Numan. 1992. Blumea 37: 63-71.

Spatholobus apoensis Elmer, LPB 2 (1910) 698; --Merr., EPFP 2 (1923) 310; --Ridder-Numan, Blumea 37 (1992) xxx; --Type: Elmer 11795

Borneo (Sarawak and Rejang, Sibuan, Kalong), S Philippines.
MINDANAO: Davao del Sur (Mt Apo), Agusan del Norte. Forests, altitude c. 1200m.

Spatholobus gyrocarpus (Wall.) Benth. in Miq., Pl. Jungh. (1852) 238; --Fern.-Villar, Novis. App. (1880) 63; --Vidal, Phan. Cuming. Philip. (1885) 109; Rev. Pl. Vasc. Filip. (1886) 110; --Perkins, Fragm. Fl. Philip. (1904) 87; --Merr., PJS 5 c (1910) Bot. 119; EPFP 2 (1923) 310; --Ridder-Numan, Blumea 37 (1992) xxx; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 86; --Butea gyrocarpa Wall., Cat. (1832) No. 5442, *nomen nudum*.

Extra-Philippine range

Lowland and medium altitude forests.

Spatholobus littoralis Hassk., Flora 25 (2, Beibl.) (1842) 52; --Ridder-Numan, Blumea 37 (1992) xxx;
Derris leytenis Merr., PJS 9 c (1914) Bot. 361. --Type:

Spatholobus macropterus Miq., Fl. Ind. Bat. 2 (1861) 303; --Ridder-Numan, Blumea 37 (1992) xxx;
Spatholobus palawanensis (Elmer) Merr., EPFP 2 (1923) 310; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 86. --Type:
Spatholobus philippinensis Merr., PJS 13 c (1918) Bot. 17. --Type:

Extra-Philippine range:

LUZON: Apayao, Rizal, Laguna, Camarines, PALAWAN, PANAY, LEYTE. Low and medium altitudes, along streams in primary forests.

Spatholobus sanguineus Elmer, LPB 8 (1919) 3087; --Merr., EPFP 2 (1923) 310; --Ridder-Numan, Blumea 37 (1992) xxx;. --Type:

Strongylodon Vogel

Revision:

Huang, SF. 1991. *Strongylodon (Leguminosae-Erythrinae). a revision of the genus*. Wagenigen Agr. Univ. Papers 90-8: i-vii+ 1-69.

Strongylodon caeruleus Merr., Govt. Lab. Publ. (Philipp.) 29 (1905) 20; EPFP 2 (1923) 306; --SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 28, Fig. 2-5, 7; Map 3. --Type: Elmer 6097 (Lectotype in A; iso in GH, K, NY*, US*). Luzon: Benguet prov., Sablan.

Strongylodon paucineris Merr., PJS 10 c (1915) Bot. 16; EPFP 2 (1923) 307. --Type: BS 18858 McGregor (Holo in NY?, not seen by SF Huang; iso in BM, BO, L*, US*). Biliran, Jun 1914.

LUZON: Benguet (Sablan; Baguio), Bataan, Rizal (Montalban; Mt Irig =Irid), BILIRAN, SAMAR. In forests, 300-1200m. Fl. Mar., Apr, Jun; fr. unknown.

Note: Huang also listed the locality "Uyungan" for Loher 5895 (K), without indicating what prov.; probably in the Sierra Madre near the tri-provincial borders of Rizal-Bulacan-Quezon. An entry "Oyongan R.(iver)" is cited in the Gazetteer of the Philippine Islands as 15-01.4'N, 121-21.2'E.

Strongylodon elmeri Merr., Govt. Lab. Publ. (Philipp.) 29 (1905) 20; EPFP 2 (1923) 306; --SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 38, Fig. 2-5, 7; Map 7. --Type: Elmer 6260 (K, lectotype; iso in GH, K, NY*, P, US*). Luzon: Benguet prov., Sablan.

LUZON: Ilocos Norte (Burgos), Benguet (Baguio; Sablan), Cagayan (Peñablanca), Isabela (San Mariano; Mt Moises; Palanan), Rizal. Thickets and forests, 0-1600m. Fl. Feb-Apr; fr. Apr-May.

Strongylodon loheri SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 40, Fig. 2-5, 10; Map 8. --Type: Loher 2304 (K, holo; iso in US*). Luzon: Benguet prov., no precise locality given but

possibly Mt Tonglon [=Mt Sto Tomas].

LUZON: Benguet (Mt Sto Tomas; Baguio), Camarines Sur (Botol River), altitude not known but possibly between 1300-1900m in Benguet and low altitude in Camarines Sur. Fl. Mar.

Strongylodon lucidus (Forst. f.) Seem., Fl. Vit. (1865) 61, as *lucidum*, *p.p.*, excl. specimens from Hawaii; --Merr., EPFP 2 (1923) 306; --SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 43, Fig. 2-4, 6; Map 9. --Type from Tahiti.

Reunion, Sri Lanka, Andaman Isls, Kangean Isls, Philippines, Sulawesi, Moluccas (Seram, Aru Isls, Kei), New Guinea, New Britain, New Ireland, Solomons, Christmas Is, Australia (Queensland), Carolines, Guam, Vanuatu, Fiji, Tahiti, Tonga.

BALABAC, PANAY: Capiz (Jamindan), PRALUS Is (BALUT). Forests and thickets along streams at low and medium altitude. Philippine plants belong to the 'typical' "*lucidus* populations', one of three informal groupings distinguished by Huang. The other two are distributed in the Pacific islands.

Strongylodon macrobotrys A Gray, Bot. Wilkes US Explor. Exped. (1854) 448, t. 49; --Merr., EPFP 2 (1923) 307; --SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 52, Fig. 1-4, 7, 12; Map 10; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 102, Fig. 32; --Type: Rich, s.n. (US*, holo). Luzon: Laguna prov., "mnts near Los Baños" (=Mt Makiling).

Strongylodon megaphyllus Merr., PJS 10 c (1915) Bot. 16; EPFP 2 (1923) 307. --Type: Loher 5935 (K, lecto; iso in M). Luzon: Rizal prov., Montalban. As pointed out by Merrill and Huang, this is a mixture of different and unrelated plants.

Strongylodon warburgii Perkins, Fragm. Fl. Philip. (1904) 85. --Type:

LUZON: Benguet (Baguio), Cagayan (Baguio Cove; Peñablanca), Aurora (Casiguran), Bataan (Lamao River), Rizal (Mt Irid), Laguna (Mt Makiling; Paete-Piapi), Cavite, Quezon (Mt Binuang; Lucban; Guinayangan; Sampaloc; Kabibihan), Sorsogon (Mt Bulusan), CATANDUANES, MINDORO: Mindoro Occidental (Mt Calavite), Mindoro Oriental (Baco River; Mansalay, Mt Yagaw). Damp forested ravines along streams, 110-1000m. Fl. Jan-Jun; fr. Nov, Dec. Cultivated elsewhere.

'Minsag River Norte prov.' For Edano 9615 (or 9615?)

Strongylodon pulcher C Robinson, PJS 3 c (1908) Bot. 184; --Merr., EPFP 2 (1923) 307; --SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 58, Fig. 2-5, 7; Map 12. --Type: RS Williams 2362 (NY*, holo; iso in GH, K, MO*, NY*, US*). Mindanao: Zamboanga prov., Sax River.

Strongylodon agusanensis Elmer, LPB 8 (1915) 2738; --Merr., EPFP 2 (1923) 306. --Type: Elmer 13461 (NY*, lecto; isolecto in A, BM, BO, E, GH, K, L, MO, US*). Mindanao: Agusan del Norte prov., Mt Urdaneta, Catangan Creek bed, altitude 750 feet, in wet stony soil, Aug. 1912.

Strongylodon mindanaensis Elmer, LPB 2 (1910) 696. --Type: Elmer 11818 (NY*, lecto; isolecto in BM, BO, E, GH, L, MO, US*). Mindanao: Davao, Mt Apo (Todaya), along Mainit Creek, scandent on lofty trees in humid forest, alt. 4000 ft.

LEYTE (Abucayan; Ormoc along Antilao River), SAMAR (Catubig River), MINDANAO: Zamboanga (Sax River), Lanao (Camp Keithley), Bukidnon (Mt Kitanglad), Davao, Agusan del Norte (Mt Urdaneta). Climbing in swampy forest near creeks, or forest edges along rivers, 90-1700m. Fl. Feb, Mar, Aug, Sept; fr. Mar.

Strongylodon zschokkei Elmer, LPB 1 (1907) 227; --Merr., EPFP 2 (1923) 307; --SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 60, Fig. 2-5, 7; Map 13. --Type: Elmer 8540 (K, lecto; isolecto in BO, E, GH, L, LE, NY*, US*). Luzon: Benguet prov., Baguio. Limestone sinks between Baguio and Irisan, alt. 4750ft, Mar. 1907.

LUZON: Abra (Mt Posuey), Benguet (Mt Pulag; Baguio; Mt Sto Tomas), Quezon (Mt Camatis; Umiray). Thickets about limestone boulders and cliffs and along creeks, recorded at c. 1400m in Benguet.

Insufficiently known:

Strongylodon crassifolius Perkins, Frag. Fl. Philipp. (1904) 85; EPFP 2 (1923) 306; --SF Huang, Wagenigen Agric. Univ. Papers 90-8 (1991) 63.

Stylosanthes Swartz

Stylosanthes humilis Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 6 (1823) 506, t. 594; -- Meeuwen et al., Reinwardtia 5 (1960) 449.

Native in C Mexico through Guatemala and Panama to Colombia, Venezuela and Brazil. Introduced in the Philippines as a cover crop.
LUZON: Zambales (San Marcelino).

Tadehagi Ohashi**Revision:**

Ohashi, H. 1973. *The Asiatic species of Desmodium and its allied genera*. Ginkgoana no. 1: 1-318 +76 pl.

Tadehagi triquetrum (L.) Ohashi, Ginkgoana no. 1 (1973) 290, pl. 41-42; --*Desmodium triquetrum* (L.) DC, Prodr. 2 (1825) 326; --Meeuwen, Reinwardtia 6 (1962) 262; --Merr., Fl. Manila (1912) 240; EPFP 2 (1923) 290; --*Hedysarum triquetrum* L., Sp. Pl. (1753) 746.

ssp. triquetrum

Sri Lanka, India, Burma, Indochina, S China (Yunnan; Guangxi; Guangdong; Hongkong, Fujian), Hainan, Taiwan, Ryukyu Isls (introduced?), throughout Malesia to N Australia, New Caledonia, and Polynesia.

CULION, MINDANAO: Bukidnon. Lowland and medium altitude thickets.

[*Tadehagi triquetrum* \(L.\) H.Ohashi var. *palawanensis* H.Ohashi](#) -- J. Jap. Bot. 78(5): 293 (Oct. 2003).

[*Tadehagi triquetrum* \(L.\) H.Ohashi nothosubsp. *philippinensis* H.Ohashi](#) -- J. Jap. Bot. 78(5): 291 (Oct. 2003).

ssp. auriculatum (DC) Ohashi, Ginkgoana no. 1 (1973) 293, pl. 41b; --*Desmodium auriculatum* DC, Prodr. 3 (1827) 326; --Merr., EPFP 2 (1923) 284.

Andaman Isls, Burma and Malesia.

LUZON: Rizal. Lowland and medium altitude grasslands.

ssp. pseudotriquetrum (DC) Ohashi, Ginkgoana no. 1 (1973) 295, pl. 42b; --*Desmodium triquetrum* (L.) DC ssp. *pseudotriquetrum* (DC) Prain, J. As. Soc. Beng. 66, 2 (1897) 390; -- Meeuwen, Reinwardtia 6 (1962) 263; --*Desmodium pseudotriquetrum* DC in Ann. Sci. Nat. 1, 4 (1825) 100; --Merr., PJS 5 c (1910) Bot. 87; EPFP 2 (1923) 288.

N India, China (Yunnan; Sichuan; Guangxi), Taiwan, Philippines.

LUZON: Mountain Province, Benguet, Rizal. Medium altitude dry, open grassy slopes.

Tephrosia Persoon**Revision:**

Bosman, MTM & AJP de Haas. 1983. *A revision of the genus Tephrosia (Leguminosae-Papilionoideae) in Malesia*. Blumea 28: 229-487.

Tephrosia candida (Roxb.) DC, Prodr. 2 (1825) 249; --Merr., EPFP 2 (1923) 278; --Bosman & de Haas, Blumea 28 (1983) 445, Fig. 2f, 3p; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 57; --Robinia candida Roxb. [Hort. Beng. (1814) 56; *nom. nud.*], Fl. Ind. 3 (1832) 327. --Type from India.

Native of India. Introduced, cultivated and naturalized in Malesia. India, Sri Lanka, Burma, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo, Philippines, Sulawesi, Moluccas, New Guinea, Solomon Isls, New Zealand, Hawaii, West Indies. LUZON: Laguna (Los Baños). Introduced as green manure crop.

Tephrosia luzoniensis Vogel, Nov. Act. Acad. Nat. Cur. 19 (1843) Suppl. 1: 15; --Fern.-Villar, Novis. App. (1880) 59; --Perkins, Fragm. Fl. Philip. 1 (1904) 17; --Merr., PJS 5 c (1910) Bot. 69; EPFP 2 (1923) 277, under synonymy of *T. dichotoma* Desv.; --Bosman & de Haas, Blumea 28 (1983) 452, Fig. 1e, 3c. Map 2. --Type: Meyen *sn* (B, lost). Neotype: Merrill Sp. Blancoanae 499 (L*, neo; isoneo: BM, BO, K, US*).

Tephrosia dichotoma sensu Merr., PJS 5 c (1910) Bot. 69; Fl. Manila (1912) 244; Sp. Blancoanae (1918) 180; EPFP 2 (1923) 277; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 59, *non* Desv.

Java, Madura, Lesser Sunda Isls, Philippines. Open dry grasslands, waste places, roadsides, etc. on various types of soils, lowlands to medium altitudes.

Tephrosia noctiflora Bojer ex Baker, in Oliver, Fl. Trop. Africa 2 (1871) 112; --Backer & Bakh.f., Fl. Java 1 (1963) 594; --Bosman & de Haas, Blumea 28 (1983) 458, Fig. 2c, d; 31, Map 6. --Type from Zanzibar.

Tephrosia hookeriana Wight & Arn., Prodr. (1834) 212; --Merr., EPFP 2 (1923) 278.

Pantropic. Native of Africa and possibly India, naturalized in many parts of Malesia including the Philippines.

JOLO. In waste places.

Tephrosia obovata Merr., PJS 5 c (1910) Bot. 69; EPFP 2 (1923) 278; --Bosman & de Haas, Blumea 28 (1983) 460, Fig. 1h, 3a, Map 4. --Type: FB 16939 Curran (K, lecto, designated by Bosman & de Haas, 1983; isolecto US*). Palaui Is. (off NE tip of Luzon, Cagayan prov.), Mar 1909.

Taiwan, N Philippines.

PALAU, LUZON. Low altitudes, dry open places.

Tephrosia pumila (Lam.) Pers., Syn. 2 (1807) 330; --Backer & Bakh.f., Fl. Java 1 (1963) 594; --Bosman & de Haas, Blumea 28 (1983) 463, Fig. 1g, 3k; --Galega *pumila* Lam., Enc. Meth. 2, 2 (1788) 599. --Type from Madagascar.

Tephrosia dichotoma Desv., Ann. Sc. Nat. 1, 9 (1826) 415; --Merr., EPFP 2 (1923) 277. --Type: Desvaux *sn*, undated (P, not seen; photo in K cited by Bosman & de Haas). Philippines, no further locality data, left hand specimen.

ssp. pumila

Pantropic. In Malesia not recorded from Sumatra, Malay Peninsula, Borneo and the Solomon Isls.

Tephrosia purpurea (L.) Pers., Syn. 2 (1807) 329; --Perkins, Fragm. Fl. Philip. 1 (1904) 17; --Merr., PJS 5 c (1910) Bot. 68; Interpet. Herb. Amboin. (1917) 264; EPFP 2 (1923) 278; --Backer & Bakh.f., Fl. Java 1 (1963) 594; --Bosman & de Haas, Blumea 28 (1983) 467. --Type from Sri Lanka.

ssp. purpurea

Sri Lanka, India, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Philippines, Sulawesi, Moluccas, New Guinea. Said to be native of India or Java. Now pantropic in distribution.

LUZON: Cavite, Batangas, MINDANAO: Misamis, Bukidnon. Lowland grasslands and open wastelands.

ssp. barbigera Bosman & de Haas, Blumea 28 (1983) 467. --Type: Cuming 601 (MEL). Philippines.
var. barbigera

Philippines, New Guinea, Queensland.

Tephrosia vestita Vogel, Nov. Act. Acad. Nat. Cur. 19 (1843) Suppl. 1: 15; --Merr., PJS 5 c (1910) Bot. 68; EPFP 2 (1923) 278; --Backer & Bakh.f., Fl. Java 1 (1963) 595; --Bosman & de Haas, Blumea 28 (1983) 473, Fig. 5. --Type: Meyen *sn*, no date (B, lost).

Thailand, Laos, Vietnam, S China, Malesia (except Borneo).

NEGROS, MINDANAO: Misamis, Lanao del Sur, Bukidnon. Low and medium altitude thickets.

Tephrosia vogelii Hook.f. ex Benth. in Hook., Niger Fl. (1849) 296; --Bosman & de Haas, Blumea 28 (1983) 478, Fig. 6. --Type from Niger.

Native in tropical Africa. Introduced in South America. In Asia recoded from India, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Philippines, Sulawesi, New Guinea.

Teramnus P. Browne

Teramnus angustifolius Merr., PJS 7 c (1912) Bot. 83; --Merr., EPFP 2 (1923) 305. --Type: Vanoverbergh 716.

LUZON: Mountain Province. Waste places, altitude c. 1300m.

Teramnus labialis (L.f.) Spreng., Syst. 3 (1826) 235; --Fern.-Villar, Novis. App. (1880) 63; --Vidal, Phan. Cuming. Philip. (1885) 108; Rev. Pl. Vasc. Filip. (1886) 109; Perkins, Fragm. Fl. Philip. (1904) 84; --Merr., PJS L.f., Suppl. (1781) 325.

Pantropical.

N LUZON to MINDANAO. Thickets, waste places, etc., at low and medium altitude in the settled areas.

Trifidacanthus Merrill =Desmodium

Trifolium Linnaeus

Trifolium repens L., Sp. Pl. (1753) 767.

Introduced purposely or casually in the mountains of LUZON and E Java. E New Guinea.

Uria Desvaux

Revision:

Meeuwen, MS van, HP Nootboom & CGGJ van Steenis. 1960. *Preliminary Revisions of Some Genera of Malaysian Papilionaceae, I.* Reinwardtia 5: 450-453.

Uria lagopodioides (L.) Desv. ex DC, Prodr. 2 (1825) 324 (as 'lagopoides'), in Mém. Soc. Linn. Paris 4 (1826) 309; --Merr., Fl. Manila (1912) 242; EPFP 2 (1923) 293; --Meeuwen et al., Reinwardtia 5 (1960) 451; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 50, Fig. 12; --Hedysarum lagopodioides L., Sp. Pl. (1753) 1198.

N India, SW China, Hainan, across Malesia, Bismarck Archipelago, Solomon Isls, New Hebrides, N Australia, New Caledonia, Fiji, Samoa.

N LUZON to MINDANAO. Open grasslands at low and medium altitudes, often abundant.

Uraria picta (Jacq.) Desv., J. Bot. 1 (1813) 123, t. 5, Fig. 19; --Merr., EPFP 2 (1923) 293; --Meeuwen et al., Reinwardtia 5 (1960) 452; --Hedysarum pictum Jacq., Coll. Bot. 2 (1788) 262.

Tropical Africa, introduced into the West Indies. India to S China, throughout Malesia, Australia (Queensland).

N LUZON to MINDANAO. Occasional in open grasslands and thickets at low and medium altitudes.

Vigna Savi

Vigna angularis (Willd.) Ohwi & Ohashi, J. Jap. Bot. 44 (1969) 29.

Vigna luteola (Jacq.) Benth. in Thwaites, Enum. Pl. Sri Lanka (1859) 90; --Merr., EPFP 2 (1923) 319. Pantropic.

MINDANAO: Lanao del Sur, Cotabato. Thickets or grasslands.

Vigna marina (Burm.) Merr., Interp. Herb. Amb. (1917) 285; --Merr., EPFP 2 (1923) 320.

Pantropic strand plant.

Throughout the Philippines along the seashore.

Vigna mungo (L.) Hepper, Kew Bull. 11 (1956) 128; --Phaseolus mungo L., Mant. Pl. 1 (1767) 101; --Merr., EPFP 2 (1923) 318, in syn. of *P. aureus*.

India to China and Malaya in cultivation.

Cultivated throughout the Philippines but not a native of the archipelago. Scarcely naturalized.

Vigna pilosa (Roxb.) Baker in Hook.f., Fl. Brit. Ind. 2 (1876) 207; --Merr., EPFP 2 (1923) 320; --Blumea 30 (1985) 381, Fig. 2.

India to Taiwan.

LUZON: Ifugao, Nueva Vizcaya, Rizal, Laguna, Batangas. Dry thickets at low altitudes. (Merr., 1923).

Vigna radiata (L.) Wilczek, Fl. Congo Belge & Ruanda-Urundi 6 (1954) 386; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 114, Fig. 37; --Phaseolus radiatus L., Sp. Pl. (1753) 725; Merr., PJS 5 c (1910) Bot. 132; EPFP 2 (1923) 318; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 114.

Phaseolus aureus Roxb., Hort. Beng. (1814) 55, *nom. nud.*; Fl. Ind. ed. 2, 3 (1832) 297; --Merr., EPFP 2 (1923) 318.

var. radiata

Native of the Old World tropics, now pantropic in cultivation. Extensively grown in the Philippines, scarcely spontaneous. Mung bean. Munggo.

var. sublobata (Roxb.) Verdc., Kew Bull. 24 (1970) xxx.

Phaseolus sublobatus Roxb., Hort. Beng. (1814) 54, *nom. nud.*; Fl. Ind. ed. 2, 3 (1832) 288; --Merr., PJS 5 c (1910) Bot. 133; EPFP 2 (1923) 319.

Phaseolus trinervius Heyne in Wall. Cat. (1832) No. 5603; --Fern.-Villar, Novis. App. (1880) 65.

India to Malaya.

LUZON: Mountain Province, Rizal, Laguna, MINDANAO. Grasslands, waste places, etc., occasional; sometimes planted.

Vigna sinensis (L.) Savi ex Hassk., Cat. Hort. Bogor. (1844) 279; --Merr., EPFP 2 (1923) 320.

Cultivated in all tropical and warm-temperate countries.

Widely grown in the Philippines. Cowpea.

Vigna umbellata (Thunb.) Ohwi & H Ohashi, J. Jap. Bot. 44 (1969) 31.
Phaseolus calcaratus Roxb., Hort. Beng. (1814) 54, *nom. nud.*; Fl. Ind. ed. 2, 3 (1832) 289; --Merr., EPFP 2 (1923) 318.

India to S China, Vietnam, Japan, Peninsular Malaysia, Philippines.
BABUYAN ISLS and N LUZON to PALAWAN and MINDANAO. Open grasslands and thickets. Some forms cultivated.

Vigna unguiculata (L.) Walp., Repert. Bot. Syst. (Walpers) 1 (1842) 779.

ssp. sesquipedalis (L.) Bertoni, Anales Ci. Parag. ser. 1, 9 (1911) 16; --Verdc. In Davies, Fl. Turkey 3 (1970) 266; Kew Bull. 24 (1970) 544; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 114; --
Dolichos sesquipedalis L., Sp. Pl. ed. 2, 2 (1763) 1019.

Probably a native of China. Cultivated pantropically.

Widely cultivated in the Philippines for its edible pods and beans. Yardlong bean; sitaw.

Whitfordiodendron Elmer =Callerya

Zornia J Gmelin

Zornia diphylla (L.) Pers., Syn. 2 (1807) 318; --Merr., Fl. Manila (1912) 238; EPFP 2 (1923) 283; --
Meeuwen et al., Reinwardtia 5 (1960) 453; --Hedysarum diphyllum L., Sp. Pl. (1753) 747.

Lupinus angustifolius Blanco, Fl. Filip. (1837) 566.

Smithia bigemminata Blanco, Fl. Filip. ed. 2 (1845) 395; *ibid.* ed. 3, 2 (1878) 362.

Pantropical. In Malesia found throughout (except Borneo). Distinctly rare in Sumatra, Peninsular Malaysia, W Java, S Philippines, Sulawesi and New Guinea. An example of a class of plants which, though not absent under everwet climatic conditions favors those areas which are subject to a dry period.

N to C LUZON (Cagayan to Rizal and Bataan). Open dry grasslands in the settled areas at low and medium altitudes, with all the appearance of an introduced species.

Cultivated:

Inga laurina Willd.

Inga spectabilis Willd.