

Family 178. STERCULIACEAE

Literature:

Kochummen, KM. 1972. *Sterculiaceae*. Tree Flora of Malaya 2: 353-382.

Abroma Jacquin

Abroma augusta (L.) L.f., Suppl. (1781) 341 (Ambroma); --Merr., EPFP 3 (1923) 48.

India to S China and Malaya. BATANES and N LUZON to MINDANAO. Thickets, waste places, and open secondary forests at low and medium altitudes.

Buettneria Loeffling =Byttneria

Byttneria Loeffling

Byttneria echinata Wall., Cat. (1829) No. 1149, *nom. nud.*; --Gagnep. in Lecomte, Fl. Gén. Indo-Chine 1 (1911) 520; --Merr., EPFP 3 (1923) 48.

Nepal, Myanmar, Indochina, Philippines. MINDORO, *BS 21268 Escritor*. Thickets and second growth forests at low altitudes.

Commersonia JR & G Forster

Commersonia bartramia (L.) Merr., Interpret. Herb. Amb. (1917) 362; EPFP 3 (1923) 48.

Indochina, across Malesia to Polynesia. Throughout the Philippines in most islands and provinces. Common in thickets and second-growth forests at low and medium altitudes.

Firmiana Marsili

Revision:

Kostermans, AJGH. 1957. The genus *Firmiana* Marsili (Sterculiaceae). *Reinwardtia* 4: 281-310.

Firmiana philippinensis Kosterm., *Reinwardtia* 4 (1957) 298, fig. 7; --Type: BS 29858 Fenix (BO).

Firmiana simplex (*non* WF Wight) Merr., *PJS* 13 c (1918) Bot. 308; EPFP 3 (1923) 56.

LUZON: Pangasinan (Mt San Isidro).

Helicteres Linnaeus

Helicteres angustifolia L., Sp. Pl. (1753) 963; --Merr., EPFP 3 (1923) 51.

India to S China southward to Borneo, Peninsular Malaysia and Java. LUZON: Ilocos Norte, Abra, Mountain Province, Benguet, Cagayan, Isabel, Nueva Vizcaya, BUSUANGA, CULION, PANAY, NEGROS, MINDANAO: Bukidnon, Davao. Open grassy slopes, chiefly at medium altitudes, occasionally at sea-level.

Helicteres hirsuta Lour., Fl. Cochinch. (1790) 530; --Merr., Fl. Manila (1912) 329; EPFP 3 (1923) 51.

India to S China, southward to Java. LUZON: Ilocos Norte to Laguna, MINDORO, CALAMIAN ISLS GROUP, PALAWAN. Common in thickets, deserted clearings and secondary forests at low and medium altitudes.

Heritiera Aiton (corr. Kostermans, 1960)

Heritiera javanica (Blume) Kosterm., Reinwardtia 4 (1959) 521, fig. 21, 22.
Tarrietia javanica Blume, Bijdr. 5e (1825) 227; --Merr., EPFP 3 (1923) 57. --Type from Java. Indochina, Sulawesi, Philippines: MINDANAO: Zamboanga, Misamis, Lanao, Cotabato, Davao, BASILAN. Common in primary forests at low and medium altitudes.

Heritiera littoralis Dryand. in Aiton, Hort. Kew 3 (1789) 546; --Merr., Fl. Manila (1912) 328; EPFP 3 (1923) 58.
Tropical Africa to India through Malesia eastward to Polynesia. Throughout the Philippines. Common constituent of coastal forests and mangroves.

Heritiera sylvatica Vidal, Rev. Pl. Vasc. Filip. (1886) 66; --Kosterm., Reinwardtia 4 (1959) 509, fig. 16, 30a.
Tarrietia sylvatica (Vidal) Merr., Philipp. Bur. For. Bull. (1903) 38; --Merr., EPFP 3 (1923) 57. Philippines, Sulawesi.
LUZON (Cagayan to Albay), MINDORO, MASBATE, PANAY, SAMAR. In dry primary forests at low and medium altitudes.

Hildegardia Schott & Endlicher

Hildegardia merrittii (Merr.) Kosterm.
Firmiana merrittii Merr., PJS 9 c (1914) Bot. 314; EPFP 3 (1923) 56.
MINDORO. Forests at low altitudes.

Kleinhovia Linnaeus

Kleinhovia hospita L., Sp. Pl. ed. 2 (1763) 1365; --Merr., Fl. Manila (1912) 329; EPFP 3 (1923) 52.
var. hospita
Tropical Africa and Asia. Throughout the Philippines, at low and medium altitudes, a characteristic tree of thickets, second growth forests, and deserted clearings.

var. velutina Koord. & Valetton

Distribution and habitat?

Leptonychia Turczaninow

Revision:

Veldkamp, JF and Flipphi, xx. 1987. Blumea 32: 443-457.

Leptonychia banahaensis (Elmer) Merr., PJS 4 c (1909) Bot. 298; EPFP 3 (1923) 48; Veldkamp & Flipphi, Blumea 32 (1987) 448.
Grewia banahaensis Elmer, LPB 1 (1908) 319.

var. banahaensis

LUZON (Ilocos Norte, Apayao, Cagayan, Isabel, Nueva Vizcaya, Nueva Ecija, Bulacan, Rizal, Quezon, Laguna, Camarines), SAMAR. In forests, 180-800m altitudes.

Melochia Linnaeus

Melochia concatenata L., Sp. Pl. (1753) 675; --Merr., EPFP 3 (1923) 46.

Melochia corchorifolia L., Sp. Pl. (1753) 675; --Merr., Fl. Manila (1912) 330.

Pantropic. Throughout the Philippines at low and medium altitudes in the settled areas, occurring as a ruderal along waysides, waste places, open grasslands, rice paddies, etc.

Melochia umbellata (Houtt.) Stapf

Mauritius to India, Indochina (S Vietnam), Peninsular Malaysia, Philippines (distribution most likely more widespread, recheck). Throughout the Philippines. A common and characteristic shrub or treelet in old clearings, secondary forests, etc. at low and medium altitudes.

Pentapetes Linnaeus

Pentapetes phoenicea L., Sp. Pl. (1753) 698; --Merr., EPFP 3 (1923) 46.

Widespread in the Asian tropics. Probably an introduced plant in the Philippines, but now thoroughly naturalized. LUZON: La Union, Cagayan, Tayabas, Bataan, Pampanga, Laguna, NEGROS, SAMAR, MINDANAO. Open, rather damp grasslands and lakeshore vegetation.

Pterocymbium R Brown

Literature:

Kostermans, AJGH. 1950. Notes on *Pterocymbium* R Br. (Sterculiaceae). *Reinwardtia* 1: 41-49.

Pterocymbium tinctorium (Blanco) Merr., Bur. Govt. Lab., Manila, Publ. No 27 (1905) 24; EPFP 3 (1923) 57; -- Kosterm., *Reinwardtia* 1 (1950) 43.

Pterocymbium macrocrater Warb., in Perkins, *Fragm. Fl. Philipp.* (1904) 117; --Merr., EPFP 3 (1923) 57.

Myanmar, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo (Sabah), Sulawesi, Philippines: BABUYAN ISLS, LUZON (widespread from at least Cagayan to Camarines Sur), PALAWAN, CAMIGUIN, MINDANAO. In secondary or thin primary forests at low and medium altitudes.

Pterospermum Schreber

Pterospermum celebicum Miq., Ill. Fl. Arch. Ind. 1 (1871) 87; --Kosterm., *Reinwardtia* 7 (1959) 440.

Pterospermum niveum Vidal, *Rev. Pl. Vasc. Filip.* (1886) 67; --Merr., EPFP 3 (1923) 50.

(As *P. niveum*): Lanyu and Lutao (off Taiwan), Philippines: LUZON: Abra, Cagayan to Camarines, CATANDUANES, MINDORO, MINDANAO: Zamboanga, Misamis, Cotabato, Agusan. Open or secondary forests, stream gallery forests, primary forest gaps, also on limestone at low altitudes.

Pterospermum cumingii Merr. & Rolfe, *PJS* 3 c (1908) Bot. 113; --Merr., EPFP 3 (1923) 49.

LUZON: Pangasinan, Zambales. Dry slopes in secondary forests.

Pterospermum diversifolium Blume, *Bijdr.* (1825) 88; --Merr., Fl. Manila (1912) 330; EPFP 3 (1923) 49.

Indochina, Sumatra, Peninsular Malaysia, Borneo, Java, Philippines, Moluccas. LUZON: Cagayan to Camarines, MINDORO, PALAWAN, TICA0, MASBATE, GUIMARAS, NEGROS, MINDANAO, BASILAN. Forests at low and medium altitudes. Common.

Pterospermum elmeri Merr., PJS 7 c (1912) Bot. 304; --Merr., EPFP 3 (1923) 50.
MINDANAO: Davao (Mt Apo, Todaya). Light forests, c. 750m.

Pterospermum elongatum Korth., Nederl. Kruidk. Arch. 1 (1848) 312; --Kosterm., Reinwardtia 7 (1959) 441.

Pterospermum perrinii Elmer, LPB 5 (1913) 1840; --Merr., EPFP 3 (1923) 50. Type: Elmer 12841 (BO), PALAWAN.

Extra-Philippine distribution? PALAWAN. Densely forested stream depressions, c. 450m.

Pterospermum longipes Merr., PJS 7 c (1912) Bot. 304; --Merr., EPFP 3 (1923) 50.
CAMIGUIN DE MINDANAO. Forests at low and medium altitudes.

Pterospermum megalanthum Merr., PJS 14 (1919) 420; --Merr., EPFP 3 (1923) 50.
PANAY: Capiz (Jamindan). Forests at low altitudes.

Pterospermum obliquum Blanco, Fl. Filip. (1837) 529; --Merr., EPFP 3 (1923) 50.
LUZON: Ilocos Norte, Ilocos Sur, Mountain Province, Benguet, La Union, Cagayan, Nueva Ecija, Zambales. Pampanga, Bataan, Bulacan, Rizal, Laguna, Quezon, MINDORO, PALAWAN, BURIAS, GUIMARAS, SAMAR, MINDANAO: Zamboanga. Primary forests at low and medium altitudes. Often common.

Pterospermum subpeltatum Merr., PJS 3 c (1908) Bot. 204; --Merr., EPFP 3 (1923) 51.
SAMAR, MINDANAO: Zamboanga (Sax River), Lanao, BASILAN. Forested slopes, at low and medium altitudes.

Pterygota Schott & Endlicher

Pterygota horsfieldii (R Br.) Kosterm., Reinwardtia 2 (1953) 365.
Sterculia blancoi Rolfe, J. Linn. Soc. Bot. 21 (1884) 308; --Merr., EPFP 3 (1923) 52.
LUZON: Nueva Ecija, Bulacan, Rizal, MINDORO, TICA0, MASBATE. Forests at low altitudes. (as *S. blancoi*)

Sterculia Linnaeus

Revision:

Tantra, IGM. 1976. *A revision of the genus Sterculia L. in Malesia*. Pengumuman No. 102.
Lembaga Penelitian Hutan, 1-192, Bogor.

Sterculia ceramica R Br., in Benn., Pl. Jav. Rar. (1844) 233; --Merr., EPFP 3 (1923) 53; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 48.
Sterculia glabrifolia Merr., PJS 17 (1920) 283; EPFP 3 (1923) 54.
Sterculia luzonica Warb. in Perkins, Fragm. Fl. Philipp. (1904) 115; --Merr., Fl. Manila (1912) 327.
Lanyu; Philippines, Borneo (Sabah), Sulawesi, Moluccas. BATAN ISLS, LUZON (Widespread, esp. along W part), MINDORO, SIBUYAN, PALAWAN, GUIMARAS, MINDANAO (widespread), SULU. Coastal thickets and forests on sandy clay or coralline limestone, usually immediately back of the beach, 0-100m.

Sterculia comosa Wall., Pl. Asiat. Rar. 2 (1831) 2, t. 127; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 56.

Sterculia philippinensis Merr., Govt. Lab. Publ. 17 (1904) 29; -- EPFP 3 (1923) 55.

Sterculia ramosii Merr., PJS 11 c (1916) Bot. 195; EPFP 3 (1923) 56.

Philippines, Sulawesi, Moluccas. LUZON: Ilocos Sur, Isabel, Nueva Ecija, Laguna, Camarines Norte, Camarines Sur, Sorsogon, CATANDUANES, MINDORO, SIBUYAN, PALAWAN, GUIMARAS, SAMAR, Forests up to 700m.

Sterculia cordata Blume, Bijdr. (1825) 83; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 63.

var. montana (Merr.) Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 63.

Sterculia montana Merr., Govt. Lab. Publ. (Philipp.) 35 (1906) 40; -- EPFP 3 (1923) 55.

Borneo. CAMIGUIN DE BABUYANES, LUZON: Cagayan, Nueva Vizcaya, Bataan, Bulacan, Laguna. Primary forests up to 900m.

Sterculia cuspidata R Br., in Benn., Pl. Jav. Rar. (1844) 233; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 126

Sterculia graciliflora Perkins, Fragm. Fl. Philipp. (1904) 114; --Merr., EPFP 3 (1923) 54.

Sumatra, Peninsular Malaysia, Borneo (Sarawak, Sabah, Kalimantan), Philippines.

LUZON: Nueva Ecija, Laguna, Batangas, Camarines, MINDORO, PALAWAN, NEGROS, BILIRAN, BUCAS GRANDE, MINDANAO. Thickets and forests at low altitudes.

Sterculia foetida L., Sp. Pl. (1753) 1008; --Merr., Fl. Manila (1912) 327; EPFP 3 (1923) 53; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 44.

Tropical E Africa to India through Malesia to NE Australia. N LUZON (Cagayan) to PALAWAN and MINDANAO, in most or all islands and provinces. Deciduous tree in semi-open forests, especially in very seasonal areas, particularly common along the sea coast on coralline limestone and sandstone. Ascending to 1000m.

Sterculia macrophylla Vent., Jard. Malmaison 2 (1804) sub t. 91 in note; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 68.

Sterculia crassiramea Merr., Govt. Lab. Publ. (Philipp.) 29 (1905) 28; --Merr., EPFP 3 (1923) 53.

Sumatra, Peninsular Malaysia, Java, Borneo (Sabah, Sarawak), Philippines, Sulawesi, Moluccas, New Guinea, New Britain. LUZON: Ilocos Sur, La Union, Benguet, Bataan, Bulacan, Rizal, Laguna, Quezon, MINDORO. Deciduous tree in primary forests at low and medium altitudes.

Sterculia mindorensis Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 105. --Type: PNH 18812

Conklin (L, holotype). Mindoro: Mindoro Oriental prov., Mt Yagaw.

Mindoro: Mindoro Mindoro Oriental (Mansalay, Mt Yagaw, known only from the type collection). Dry forest, 400m. Flowering in September.

Sterculia oblongata R Br., in Benn., Pl. Jav. Rar. (1844) 232; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 150; --Merr., Fl. Manila (1912) 327; EPFP 3 (1923) 55.

Sumatra, Peninsular Malaysia, Java, Borneo, Philippines, Sulawesi, Lesser Sunda Isls (Bali, Sumbawa, Flores). BATAN, BABUYAN ISLS, LUZON (Cagayan to Sorsogon), MINDORO, BUSUANGA, CULION, NEGROS, LEYTE, SAMAR, MINDANAO: Lanao. Secondary and primary forests at low and medium altitudes.

Sterculia rubiginosa Vent., Jard. Malmaison 2 (1804) sub t. 91 *in nota*; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 79.

Sterculia brevipedunculata Merr., Govt. Lab. Publ. (Philipp.) 35 (1906) 40; EPFP 3 (1923) 53.

Sterculia cuneata R Br., in Benn., Pl. Jav. Rar. (1844) 232; --Merr., Fl. Manila (1912) 328; EPFP 3 (1923) 53.

Sterculia ferruginea R Br., in Benn., Pl. Jav. Rar. (1844) 232; --Merr., EPFP 3 (1923) 54.

Sterculia humilis Elmer, LPB 2 (1910) 681; --Merr., EPFP 3 (1923) 54.

Sterculia obovata Merr., Govt. Lab. Publ. 29 (1905) 28; EPFP 3 (1923) 55.

Sterculia stipularis R Br., in Benn., Pl. Jav. Rar. (1844) 232; --Merr., EPFP 3 (1923) 56.

var. rubiginosa

Myanmar, S Thailand, Sumatra and adjacent islands, Peninsular Malaysia, Singapore, Java, Borneo, Sulawesi, and the Philippines (practically throughout). LUZON: Ilocos Norte, Ilocos Sur, Mountain Province, Benguet, Cagayan, Isabela, Zambales, Bataan (Mt Mariveles), Rizal, Laguna, Quezon, Camarines, Albay, POLILLO, CATANDUANES, PALAWAN, PANAY, NEGROS, LEYTE, MINDANAO, BASILAN, TAWI-TAWI.

Occupying a wide spectrum of habitat ranging from thickets and open secondary forests to primary forests, from near sea-level to 1600m.

var. divaricata (Merr.) Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 85.

Sterculia divaricata Merr., PJS 8 c (1913) Bot. 384; EPFP 3 (1923) 54.

Borneo (Sarawak, Sabah), Philippines. LEYTE, SAMAR. Primary forests at low altitudes.

var. setistipula (Merr.) Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 86.

Sterculia setistipula Merr., Univ. Calif. Publ. Bot. 15 (1929) 192.

Sterculia multistipularis Elmer, LPB 2 (1908) 497; --Merr., EPFP 3 (1923) 55.

Sterculia longisepala Merr., PJS 30 (1926) 409. Type: BS 44070 Ramos & Edaño (NY*, US*, isotypes). Tawi-tawi.

Peninsular Malaysia, Borneo and the Philippines. LUZON: Benguet, Nueva Vizcaya. Forested ravines up to 1200m (habitat based on Merrill's record for *S multistipularis*), TAWI-TAWI, presumably much lower altitude.

Sterculia stipulata Korth., Ned. Kruidk. Arch. 1 (1848) 306; --Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 88.

var. jagori (Warb.) Tantra, Lemb. Pen. Hut. Comm. (1976) 102, t. 90.

Sterculia jagori Warb., in Perkins, Fragm. Fl. Philipp. (1904) 115; --Merr., EPFP 3 (1923) 55.

Sterculia membranifolia Kosterm., Reinwardtia 1 (1950) 49.

Pterocymbium gigantifolium Elmer, LPB 1 (1908) 320. Type: Elmer 9424 (L*, isotype). Leyte, near Palo, January 1906.

LUZON: Sorsogon, LEYTE, SAMAR, SIARGAO, MINDANAO: Davao, Agusan, BASILAN. Primary forests at low altitudes.

Verify status:

Sterculia spatulata Warb. in Perkins, Fragm. Fl. Philipp. (1904) 116; --Merr., EPFP 3 (1923) 56.

DUMARAN, JOLO. Forested dry slopes at low altitudes.

Tarrietia Blume =Heritiera

Theobroma Linnaeus

Theobroma cacao L., Sp. Pl. (1753) 782; --Merr., Fl. Manila (1912) 328; EPFP 3 (1923) 49.

Widely cultivated at low and medium elevations but nowhere spontaneous. Introduced in the Philippines from Mexico. Cacao.

Waltheria Linnaeus

Waltheria americana L., Sp. Pl. (1753) 673; --Merr., Fl. Manila (1912) 330; EPFP 3 (1923) 47.
Pantropical weed. Throughout the Philippines. In dry open places in the settled areas at low and medium altitudes.

Non-naturalized:

Dombeya wallichii (Lindl.) Benth. & Hook. ex Hook.f. & Jacks., Gen. 1 (1862) 221; --Backer & Bakh.f., Fl. Java 1 (1963) 405; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 427.
Native of Madagascar. Introduced in the Philippines as an ornamental tree.

Guazuma ulmifolia Lam., Encycl. 3 (1789) 52; --Pancho & Gruezo, Vasc. Fl. Mt Makiling 2 (2006) 427.
Native of tropical America Introduced recently in the Philippines. Occasionally cultivated.