

Family 253. VERBENACEAE

Revisions:

Lam, HJ & RC Bakhuizen van den Brink. 1921. *Bulletin du Jardin Botanique du Buitenzorg ser. 3, 3: 1-116.*

Kochummen, KM. 1978. *Verbenaceae*. Tree Flora of Malaya 3: 297-313.

Callicarpa Linnaeus

Callicarpa albido-tomentella Merr., *PJS* 12 c (1917) Bot. 300; EPFP 3 (1923) 382; --Type: BS 26976 Ramos (US*, iso). Luzon: Abra prov., Mt. Posuey, along small streams in forests, altitude c. 120m, 5 Feb 1917.

LUZON: Abra. Lowland forests along streams.

Callicarpa angusta Schauer in DC, *Prodr.* 11 (1847) 642; --Merr., EPFP 3 (1923) 382. --Cuming 1425 (K*, holo?, iso NY*). Luzon: Nueva Ecija prov.

LUZON: Zambales (Subic), Nueva Ecija, Bulacan, Rizal (Bosoboso), MINDORO: Mindoro Occidental (Tubili). Lowland thickets and secondary forests.

Callicarpa apoensis Elmer, *LPB* 3 (1910) 861; --Merr., EPFP 3 (1923) 382; --Type: Elmer 11491 (iso: A*, GH*, L*, NY*, US*). Mindanao: Davao, Mt Apo, Todaya, Aug 1909.

MINDANAO: Davao. Forests, altitude c. 1700m.

Callicarpa arborea Roxb., *Hort. Bengal.* 10 (1814), *nomen*; *Fl. Ind.*, ed. Carey & Wall., I (1820) 405; *Fl. Ind.*, ed. Carey, 1 (1832) 390.

var. *psilocalyx* (HJ Lam) Moldenke, *Phytologia* 4 (1952) 125; --**basionym**:

Callicarpa magna Schauer in DC, *Prodr.* 11 (1847) 641; --Merr., EPFP 3 (1923) 386.

LUZON: Benguet, Cagayan, Laguna, Quezon, PALAWAN, MINDANAO. Chiefly in lowland and medium altitude secondary forests. **(as *C. magna*)**

Callicarpa basilanensis Merr., *PJS* 3 c (1908) Bot. 262; EPFP 3 (1923) 382. --Syntypes (all from Basilan): Hallier 4425 (L*). Basilan, Jan 1904; --FB 3974 WI Hutchinson (not seen), Jan 1906; --FB 6124 Hutchinson (NY*, US*), Jul 1906.

BASILAN, MINDANAO: Zamboanga, Misamis Occidental. Chiefly in lowland secondary forests.

Callicarpa bicolor Juss., *Ann. Mus. Paris* 7 (1806) 77.

var. *bermejosi* Moldenke, *Phytologia* 14 (1967) 398. --Type: BS 1534 J Bermejosi (US*, holo; iso in NY*). Mindoro: Mindoro Oriental prov., Bulalacao.

MINDORO: Mindoro Oriental

var. *subintegrifolia* Moldenke, *Phytologia xxx* --Type: PNH 39880 J Ramos (US*, holo). Luzon: Laguna prov., Pangil, 27 May 1959.

LUZON: Laguna (Pangil).

Callicarpa candicans (Burm.f.) Hochr., *Candollea* 5 (1934) 190.

Callicarpa cana L., *Mant.* 2 (1771) 198; --Merr., *Fl. Manila* (1912) 401; EPFP 3 (1923) 382.

Malesia to the Bismarck Archipelago, Marianas, Carolines, Palau Isls, Australia. N LUZON (Cagayan) to PALAWAN and MINDANAO, in most or all islands and provinces. Lowland thickets and secondary forests. **(as *C. cana*)**.

Callicarpa caudata Maxim., Bull. Acad. St. Petersb. 31 (1887) 76; --Merr., PJS 2 c (1907) Bot. 299; idem. 5 c (1910) Bot. 380; EPFP 3 (1923) 383; --Elmer, LPB 3 (1910) 862. --Type: Cuming 1095 (K*, type status not certain). Luzon: Albay prov.

LUZON: Abra, Kalinga, Mountain Province, Benguet, Nueva Vizcaya, Laguna, Quezon, MINDORO: Mindoro Oriental (Mt Halcon), MINDANAO: Misamis, Davao. Steep open slopes, in thickets, stream depressions, pine and montane forests, altitude 1200-2200m.

Callicarpa cauliflora Merr., PJS 7 c (1912) Bot. 338; EPFP 3 (1923) 383. --Type: FB 9321 Whitford & Hutchinson (US*, iso). Mindanao: Zamboanga del Sur prov., Port Banga, canyons in forest, altitude c. 20m, 13 Jan 1908.

MINDANAO: Zamboanga del Sur. Low altitude forested ravines.

Callicarpa cumingiana Schauer in DC, Prodr. 11 (1847) 644; --Fern.-Villar, Novis. App. (1880) 158; --Merr., EPFP 3 (1923) 383. --Type: Cuming 1707 (K*, type status uncertain). Samar.

Geunsia cumingiana (Schauer) Rolfe, J. Linn. Soc. Bot. 21 (1884) 315; --Vidal, Phan. Cuming. Philip. (1885) 133; Rev. Pl. Vasc. Filip. (1886) 207; --Merr., PJS 7 c (1912) Bot. 343; --Callicarpa pentandra Roxb. var. cumingiana (Schauer) Bakh., Bull. Jard. Bot. Buitenz. 3, 3 (1921) 16.

Callicarpa affinis Elmer, LPB 3 (1910) 864. --Syntypes: Elmer 10856 (A*, BISH*, GH*, K*, NY*, US*). Mindanao: Davao, Mt Apo, Todaya, 'lightly wooded ridges at 3500ft south of the Baruring River', Jun 1909; --Elmer 11102 (A*, BISH*, GH*, K*, L* 2 sheets, NY*, US*). Mindanao: Davao, Mt Apo, Todaya, shrubberies near the sea coast, Jul 1909.

Philippines, Sulawesi, Moluccas. LUZON: Albay, POLILLO, PANAY (Capiz), NEGROS: Negros Occidental (Cadiz), LEYTE: Leyte (Palo), SAMAR, MINDANAO: Zamboanga del Sur (Tetuan), Misamis Occidental (Mt Malindang), Davao (Mt Apo), SIARGAO, BUCAS GRANDE. Lowland and medium altitude secondary forests.

Callicarpa denticulata Merr., PJS 3 c (1908) Bot. 430; EPFP 3 (1923) 383. --Type: BS 3622 E Fenix (US*, iso). Batan: Basco, 30 May 1907.

BATAN (Basco), CAMIGUIN DE BABUYANES. Low altitude thickets, open slopes.

Callicarpa dolichophylla Merr., PJS 7 c (1912) Bot. 339; EPFP 3 (1923) 384. --Type: Cuming 1330 (A*, iso). Luzon: Cagayan.

LUZON: Cagayan, Nueva Vizcaya (Mt Umugum), Bulacan, Rizal (Bosoboso). Lowland or medium altitude thickets and secondary forests.

Callicarpa elegans Hayek in Just's Bot. Jahresber. 33 (1905) 88; --Merr., EPFP 3 (1923) 384. --Type: Cuming 1460 (K*, type status not verified, iso NY*). Luzon: Camarines Sur prov.

Philippines, Palau. LUZON: Ilocos Norte (Mt Piau), Pangasinan, Abra (Mt Paraga), Cagayan, Zambales (Subic; Candelaria; Cabiluagan), Bataan (Lamao River), Bulacan, Quezon, Camarines Sur, MINDORO: Mindoro Oriental (SW of Lake Naujan), SIBUYAN, PANAY. Chiefly in lowland forests along streams.

Callicarpa erioclona Schauer in DC, Prodr. 11 (1847) 643; --Fern.-Villar, Novis. App. (1880) 158; --Vidal, Phan. Cuming. Philip. (1885) 134; Rev. Pl. Vasc. Filip. (1886) 208; --Merr., PJS 1 (1906) Suppl. 121; EPFP 3 (1923) 384; --Elmer, LPB 3 (1910) 866. --Type: Cuming 911 (K*, type status not verified; iso NY*). Luzon: Albay prov.

Borneo, Philippines, Sulawesi, New Guinea, New Britain, New Ireland. LUZON (Cagayan to Sorsogon), MINDORO, NEGROS, LEYTE, MINDANAO. Lowland primary and secondary forests, often rather common.

forma rivularis (Merr.) Bakh., Bull. Jard. Bot. Buitenz. 3, 3 (1921) 19; --Callicarpa rivularis Merr., PJS 7 c (1912) Bot. 340; EPFP 3 (1923) 387. --Type: BS 660 Foxworthy (US*, iso). Palawan: Palawan prov., Mt Victoria, on rocky riverbanks at an altitude of c. 1150m, 23 Mar 1906.

PALAWAN: Mt Victoria. Riverbanks and stream-bed boulders, altitude 60-1000m.

Callicarpa fasciculiflora Merr., PJS 17 (1920) 313; EPFP 3 (1923) 384. --Type: BS 35123 Ramos & Pascasio (US*, iso). Bucas Grande, Jun 1919.
BUCAS GRANDE. Low altitude open forests.

Callicarpa flavida Elmer, LPB 3 (1910) 863; --Merr., EPFP 3 (1923) 384. --Type: Elmer 13822
MINDANAO: Davao, Agusan del Norte, DINAGAT. Lowland forests on Dinagat, in Mindanao on mountains 1200-1500m.

Callicarpa formosana Rolfe, J. Bot. 20 (1882) 358; --Merr., EPFP 3 (1923) 385; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 406, pl. 176.
Callicarpa blancoi Rolfe, J. Linn. Soc. Bot. 21 (1884) 315; --Merr., Fl. Manila (1912) 401.
S & SE China, Taiwan, Okinawa, Philippines. Throughout the archipelago. Low and medium altitude thickets and secondary forests.

Callicarpa lancifolia Merr., PJS 10 c (1915) Bot. 70; EPFP 3 (1923) 385. --Type: BS 11078 Ramos
LUZON: **Tayabas**, MINDORO, TICAQ, CEBU, BASILAN, MINDANAO: Zamboanga, Lanao, Surigao del Norte. Lowland and medium altitude forests, ascending to 1000m.

Callicarpa longifolia Lam., Encycl. 1 (1785) 563; --Merr., EPFP 3 (1923) 385. --Type: Merrill 1214
Callicarpa attenuatifolia Elmer, LPB 8 (1915) 2870. --Type: Elmer 13536 (BISH*, GH*, K*, NA*, NY*, US*, iso). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta (=Hilong-hilong), 'in rich humid soil of an open grassy place on Mt Giwantawan at 3000ft altitude', Aug 1912.
India, across Malesia to New Guinea and New Ireland. LUZON: La Union, Apayao, Quezon, POLILLO, MINDORO, CATANDUANES, MINDANAO: Zamboanga, Davao, Surigao. Lowland and medium altitude thickets and forests.

Callicarpa longipetiolata Merr., Govt. Lab. Publ. (Philip.) 29 (1905) 47; EPFP 3 (1923) 386.
--Type: Elmer 6266 (NY*, US*, iso). Luzon: Benguet prov., Mt. Sto Tomas, May 1904.
Callicarpa longipetiolata Merr. var glabrescens Moldenke, Phytologia, **xxxx** (not in IPNI), --Type: Vanoverbergh 1376 (U*, holo; iso NY*). Luzon: Mountain Province, 30 Jun 1914.
LUZON: Mountain Province, Benguet. Thickets bordering pine forests, altitude 1600-2000m.

Callicarpa magnifolia Merr., PJS 20 (1922) 437; EPFP 3 (1923) 386. --Type: BS 37563 Ramos & Edaño (K*, iso). Luzon: Kalinga prov., Lubuagan, Mt Masingit, Feb 1920.
LUZON: Kalinga. Forests, altitude c. 1200m.

Callicarpa megalantha Merr., PJS 10 c (1915) Bot. 71; EPFP 3 (1923) 386. --Type: BS 49387
McGregor (US*, iso). Luzon: Ifugao prov., Mt. Polis, Feb 1913.
LUZON: Mountain Province, Ifugao. Mossy forests at or above 1500m.

Callicarpa micrantha Vidal, Phan. Cuming. Philipp. (1885) 187; --Merr., EPFP 3 (1923) 386. --Type: Cuming 1165 (K*, type status as to holo or iso not certain). Luzon: Albay prov.
LUZON: Ilocos Norte, Ilocos Sur, Albay. Lowland thickets.

Callicarpa nigrescens Merr., PJS 30 (1926) 425. --Type: BS 44297 Ramos & Edaño (NY*, US*, iso).
Tawi-tawi, in secondary forests at low altitudes, Jul-Aug 1924.
TAWI-TAWI. Low altitude secondary forest. Merrill cites 2 collections.

Callicarpa obtusifolia Merr., PJS 14 (1919) 451; EPFP 3 (1923) 387. --Type: BS 32921 Ramos (US*, iso). Luzon: Ilocos Norte prov., Burgos.

LUZON: Ilocos Norte. Lowland thickets.

Callicarpa pachyclada Quisumb. & Merr., PJS 37 (1928) 195. --Type: BS 45640 Ramos & Edaño (PNH, holo, possibly lost; iso A*, B*, NY*, UC, US*). Luzon: Quirino prov., Mt Alzapan, on forested slopes, altitude c. 1600m, 24 May 1925.

LUZON: Quirino (Mt Alzapan). Montane forests, altitude c. 1600m.

Callicarpa paloensis Elmer, LPB 1 (1908) 336; --Merr., EPFP 3 (1923) 387. --Type: Elmer 7370 (A*, NY*, iso). Leyte: Palo, Jan 1906.

Callicarpa sorsogonensis Elmer ex Bakh., Bull. Jard. Bot. Buitenz. 3, 3 (1921) 22, in syn. --Type: Elmer 16939 (NA*, K*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Aug 1916.

LUZON: Sorsogon, LEYTE. Forests, altitude c. 300m. Very close to *C. flavida* Elmer ex Bakh.

Callicarpa pentandra Roxb., Fl. Ind. ed. 2, 1 (1832) 395; --Merr., EPFP 3 (1923) 387. --Type from xxx

Geunsia pentandra (Roxb.) Merr., PJS 11 c (1916) Bot. 309; --Kochummen, Tree Fl. Malaya 3 (1978) 305. *Geunsia hookeri* Merr., PJS 7 c (1912) Bot. 342. --Type: Cuming 1773 (L*, iso). Cebu: no further locality data.

Java, Philippines, Sulawesi, Ambon, New Guinea. NEGROS, CEBU, MINDANAO: Davao. Low and medium altitude forests, ascending to 1700m.

Callicarpa phanerophlebia Merr., PJS 12 c (1917) Bot. 301; EPFP 3 (1923) 387. --Type: BS 26233 Ramos & Edaño (NY*, US*, iso). Luzon: Nueva Ecija prov., Mt Umingan (=Mingan), in open places along streams, altitude c. 50m, 8 Aug 1916.

LUZON: Nueva Ecija (Mt Mingan), Laguna. Lowland open places along streams.

Callicarpa platyphylla Merr., PJS 13 c (1918) Bot. 57; EPFP 3 (1923) 387. --Type: FB 26967 Velasco (A*, US*, iso). Luzon: Cagayan prov., Jul-Aug 1917.

LUZON: Cagayan, Isabela. Lowland forests.

Callicarpa plumosa Quisumb. & Merr., PJS 37 (1928) 196. --Type: BS 46928 Ramos & Edaño (PNH, holo, possibly lost; iso A*, 2 sheets, B*, NY*, UC, US*). Luzon: Isabela prov., San Mariano, along forested streams, altitude c. 400m, 15 Mar 1926.

LUZON: Isabela (San Mariano). Forested streams, altitude c. 400m.

Callicarpa ramiflora Merr., PJS 3 c (1908) Bot. 262; EPFP 3 (1923) 387. --Syntypes: MS Clemens 1167 (US*). Mindanao: Lanao del Sur prov., Lake Lanao, Camp Keithley, Sept 1907; --MS Clemens s.n. (not seen), same locality, Jul 1907.

CATANDUANES, LEYTE, MINDANAO: Lanao del Sur. Low and medium altitude forests, ascending to xxx m.

Callicarpa ramosii (Moldenke) Govaerts, World Checkl. Seed Pl. 3 (1999) 12; --*Geunsia ramosii* Moldenke, Phytologia 5 (1954) 10. --Type: BS 33838 Ramos & Edaño (NY*, holo). Luzon: Camarines Sur prov., Mt Bagacay, Nov-Dec 1918.

LUZON: Camarines Sur (Mt Bagacay).

Callicarpa stenophylla Merr., PJS 5 c (1910) Bot. 380; EPFP 3 (1923) 388. --Type: BS 5739 Ramos (K*, iso). Luzon: Benguet prov., Sablan River near Baguio, Dec 1908.

LUZON: Ilocos Norte, Ilocos Sur (Mt Malaya), Benguet (Mt Pulag; Sablan River), Nueva Ecija. Lowland and medium altitude thickets, ascending to 1500m.

Callicarpa subalbida Elmer, LPB 1 (1908) 337; --Merr., EPFP 3 (1923) 388. --Type: Elmer 9184 (A*, K*, NY*, US*, iso). Luzon: Quezon prov., Lucban, May 1907.

LUZON: Laguna, Quezon, POLILLO, MINDORO. Low and medium altitude forests along streams.

Callicarpa subintegra Merr., PJS 12 c (1917) Bot. 299; EPFP 3 (1923) 388. --Type: BS 26619 Ramos & Edaño (A*, K*, NY*, US*, iso). Luzon: Aurora prov., Mt. Dingalan, on dry slopes, altitude c. 200m, 25 Aug 1916.

var. subintegra

LUZON: Aurora, Rizal. Low altitude forest, altitude c. 200m.

var. parva Merr., PJS 12 c (1917) 300; EPFP 3 (1923) 388. --Type: BS 26465 Ramos & Edaño (A*, K*, NY*, US*, iso). Luzon: Nueva Ecija prov., Mt Umingan, on forested slopes, altitude c. 350m, 13 Aug 1916.

LUZON: Nueva Ecija, Camarines. Forests, altitude 300-600m.

Callicarpa surigaensis Merr., PJS 3 c (1908) Bot. 262; EPFP 3 (1923) 388. --Syntypes (both from Mindanao: Surigao del Norte prov.): WB Allen 168 (not seen), Jul 1907; --Ahern 318 (not seen), May 1901.

Callicarpa longivillosa Merr., PJS 17 (1920) 313; EPFP 3 (1923) 386. --Type: BS 34538 Ramos & Pascasio (L*, iso). Mindanao: Surigao del Norte prov., Apr 1919.

MINDANAO: Cotabato, Surigao del Norte. Lowland primary forests, also along streams.

Callicarpa weberi Merr., PJS 12 c (1917) Bot. 298; EPFP 3 (1923) 388. --Type: Weber s.n. (A*, iso). Bancalan Island (between Palawan and Balabac), altitude 6m, 26 Sept 1916.

BANCALAN. Lowland thickets or forests.

Ined.

Callicarpa caudatifolia Merr., ined. --Voucher: BS 22919 RC McGregor (K*). Luzon: Laguna prov., Jun-Aug 1915.

Clerodendron =Clerodendrum

Clerodendrum Linnaeus

Clerodendrum apayaoense Quisumb., PJS 41 (1930) 343, t. 15; --Type: Vanoverbergh 17592 (NY*, iso). Luzon: Apayao prov., Allokapan.

LUZON: Apayao (Allokapan). In forest, c. 50m alt. Known only from the type.

Clerodendrum bethuneanum Low, Sarawak (1848) 378; --Merr., EPFP 3 (1923) 400. Borneo, Philippines, Sulawesi. LUZON: Bataan, Quezon, Laguna, Camarines, POLILLO, PALAWAN, BALABAC, CATANDUANES, MASBATE, PANAY, NEGROS, CEBU, LEYTE, BASILAN, MINDANAO. Lowland thickets, clearings and secondary forests. Very similar to *C. intermedium* Cham.

Clerodendrum brachyanthum Schauer in DC, Prodr. 11 (1847) 668; --Merr., EPFP 3 (1923) 400. LUZON: Ilocos Norte, Abra, Kalinga, Mountain Province, Benguet, Nueva Vizcaya, Rizal, Laguna, Quezon, Camarines, Sorsogon, POLILLO, MINDORO, CATANDUANES, LEYTE, MINDANAO: Agusan. Chiefly in lowland to medium altitude secondary forests. Often common.

Clerodendrum calamatosum L., Mant. 1 (1767) 90; --Merr., Fl. Manila (1912) 403; EPFP 3 (1923) 400.

Sumatra, Peninsular Malaysia, Java. Introduced to the Philippines. LUZON: La Union, Pangasinan, Mountain Province, Nueva Ecija, **Tayabas**, Bataan, Rizal, Camarines, BASILAN, MINDANAO: Zamboanga. Chiefly in cultivation for ornamental purposes, occasional in waste places about towns.

Clerodendrum chinense (Osbeck) Mabb., Pl. Book (1989) repr. ed. 707; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 416.

Clerodendrum philippinum Schauer in DC, Prodr. 11 (1847) 667; --Merr., EPFP 3 (1923) 401, under synonymy of *C. fragrans* Vent. --Type: Cuming 1096 (GH*, iso). Philippines. No definite locality cited.

Clerodendrum fragrans Vent., Jard. Malm. 2 (1804) t. 70; --Merr., Fl. Manila (1912) 402; EPFP 3 (1923) 401. China to C Malesia, now widely cultivated in tropical and subtropical Asia. Naturalized in S US and pantropically.

According to Howard & Powel, Taxon 17 (1968) 53, *C. fragrans* is an illegitimate name.

Clerodendrum cumingianum Schauer in DC, Prodr. 11 (1847) 666; --Merr., EPFP 3 (1923) 401. --Type: Cuming 1760.

PANAY, NEGROS, CEBU, MINDANAO: Zamboanga. Lowland secondary forests along streams.

Clerodendrum elliptifolium Merr., PJS 7 c (1912) Bot. 341; --Merr., EPFP 3 (1923) 401. --Type: BS 14463 Ramos (PNH, holo, possibly lost). Camiguin: Panatayum, in thickets, 20 Mar 1912.

CAMIGUIN. Lowland clearings and thickets.

Clerodendrum flavum Merr., PJS 30 (1926) 424. --Type: BS 43899 Ramos & Edaño (PNH, holo, possibly lost; iso UC, not seen, cited by Merrill, 1926). Jolo: Mt Daho (=Bud Dajo), in forests along small streams near the summit, altitude c. 700m, Sept 1924.

JOLO (Mt Dajo). Forest along small streams near the summit, c. 700m.

Clerodendrum inerme (L.) Gaertn., Fruct. 1 (1788) 271; --Merr., EPFP 3 (1923) 401; --Kochummen, Tree Fl. Malaya 3 (1978) 304; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 417, pl. 179, Photo 248; --*Volkameria inermis* L., Sp. Pl. (1753) **xxx**.

Clerodendron commersonii Spreng., Syst. 2 (1825) 758; --Merr., Fl. Manila (1912) 403.

India, China, Taiwan, Ryukyu Isls, across Malesia to Australia and Polynesia.

Throughout the Philippines. Along seashore and tidal streams.

Clerodendrum intermedium Cham., Linnaea 7 (1832) 105; --Merr., Fl. Manila (1912) 402; EPFP 3 (1923) 402. --Type: Cuming 401 (L*, type).

Taiwan, ?Sumatra, Borneo, Philippines, Sulawesi. Throughout the Philippines. Lowland and medium altitude thickets, secondary forests, and open damp places. Often common.

Clerodendrum klemmei Elmer, LPB 2 (1908) 514; --Merr., EPFP 3 (1923) 402. --Type: Elmer 8679 (A*, NY*, US*, iso). Luzon: Benguet prov., Baguio, Mar 1907.

LUZON: Ilocos Norte, Abra, Mountain Province, Benguet, Cagayan, Nueva Vizcaya, Laguna. Medium altitude thickets and forests, ascending to 1600m.

Clerodendrum lanuginosum Blume, Bijdr. (1826) 810; --Merr., EPFP 3 (1923) 402.

Philippines, Moluccas (Banda; Ternate; Seram). CAMIGUIN, BASILAN, MINDANAO: Zamboanga, Lanao, Bukidnon, Agusan del Norte. Lowland thickets and secondary forests.

Clerodendrum luzoniense Merr., PJS 20 (1922) 436; EPFP 3 (1923) 403. --Type: BS 33784 Ramos & Edaño (US*, iso). Luzon: Camarines Norte prov., Paracale, Nov-Dec 1918.

LUZON: Camarines Norte. Damp lowland forest.

Clerodendrum mabesae Merr., PJS 12 c (1917) Bot. 302; EPFP 3 (1923) 403. --Type: FB 26796 Mabesa (US*, iso). Luzon: Laguna prov., forests back of Paete, on moist shaded slopes, altitude c. 370m, 27 Mar 1917.

LUZON: Laguna. Lowland forests, altitude c. 300m.

Clerodendrum macrocalyx HJ Lam, Verb. Malay. Archipel. (1919) 293; --Merr., EPFP 3 (1923) 403. --Type: Elmer 11338 (A*, NY*, U* US*, iso). Mindanao: Davao, Mt. Apo, Aug 1909

MINDANAO: Lanao del Sur, Davao (Mt Apo), Surigao del Norte. Low and medium altitude thickets and secondary forests.

Clerodendrum macrostegium Schauer in DC, Prodr. 11 (1847) 666; --Merr., EPFP 3 (1923) 403. --Type: Cuming 1541 (NY*, iso).

Philippines, Moluccas (Seram; Ambon; Saparua).

LUZON: Nueva Vizcaya, Rizal, Quezon, MINDORO, SIBUYAN, PANAY. Lowland secondary forests and thickets.

Clerodendrum minahassae Teijsm. & Binn., Nat. Tijdschr. Nederl. Ind. 25 (1863) 409; --Merr., Fl. Manila (1912) 402; EPFP 3 (1923) 403.

Philippines, Sulawesi, Sula Isls. Widespread throughout the archipelago, in most islands and provinces. Low to medium altitude thickets and secondary forests. Often common.

Clerodendrum mindoreense Merr., PJS 7 c (1912) Bot. 342; EPFP 3 (1923) 404; --Clerodendrum simile Merr., Govt. Lab Publ. (Philip.) 35 (1906) 64, *non* Pearson, 1901. --Type: Merrill 1192 (US*, iso) Mindoro: Mindoro Oriental prov., Baco. Jan 1903.

LUZON: Isabela (Palanan), Sorsogon, MINDORO, SEMIRARA, NEGROS, MINDANAO: Misamis. Lowland primary and secondary forests.

Clerodendrum multibracteatum Merr., PJS 7 c (1912) Bot. 98; EPFP 3 (1923) 404. --Type: BS 777 Vanoverbergh (A*, US*, iso). Luzon: Mountain Province, Jul-Aug 1911.

LUZON: Mountain Province, MINDORO: Mindoro Oriental (Mt Halcon). Mossy forests, altitude 1600-2000m.

Clerodendrum philippinense Elmer, LPB 9 (1934) 3223. --Type: Elmer 22379 (B*, GH*, NY*, US*, iso). Luzon: Pampanga prov., Mt Pinatubo, Camp Stotsenburg. May 1927.

LUZON: Pampanga (Mt Pinatubo).

Clerodendrum preslii Elmer, LPB 2 (1908) 515; --Merr., EPFP 3 (1923) 404. --Type: Elmer 10223 (A*, BISH*, NY*, US*, iso). Negros: Negros Oriental prov., Cuernos Mtns, Mar 1908.

NEGROS: Negros Oriental (Cuernos Mtns). Mossy forests, altitude c. 1400m.

Clerodendrum puberulum Merr., PJS 10 c (1915) Bot. 72; EPFP 3 (1923) 404. --Type: EB Copeland 414 (NY*, US*, iso). Mindanao: Davao, Mar 1904.

MINDANAO: Cotabato, Davao. Lowland thickets and open sites. Allied to *C. intermedium* Cham.

Clerodendrum pubifolium Quisumb. & Merr., PJS 37 (1928) 197. --Type: BS 49416 Ramos & Edaño (PNH, holo, possibly lost; iso UC, NY*). Mindanao: Davao Oriental prov., Mt Mayo, along streams in secondary forests, altitude c. 700m, 21 Apr 1927.

MINDANAO: Davao Oriental (Mt Mayo). Along streams in secondary forests, altitude c. 700m.

Clerodendrum quadriloculare (Blanco) Merr., Govt. Lab. Publ. (Philipp.) 35 (1906) 63; EPFP 3 (1923) 404. --Type: Merrill Species Blancoanae 434 (US*, illustrative specimen). Luzon: Rizal prov., Antipolo, Jan 1914.

Philippines, New Guinea (fide Bakhuizen, 1921). LUZON: Pangasinan, Benguet, Nueva Vizcaya, Zambales, Pampanga, Bataan, Rizal, Laguna, Batangas, MINDORO, TICA0, PANAY, NEGROS, SIARGAO, BUCAS GRANDE. Lowland and medium altitude primary forests.

Clerodendrum trichotomum Thunb., Nov. Acta Reg. Soc. Sci. Upsal. 3 (1780) 201; --Merr., EPFP 3 (1923) 405; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 419, Photo 250, 251.

var. trichotomum

China, Taiwan, Korea, Japan, India, SE Asia. LUZON: Cagayan & Isabela E coasts. Lowland thickets.

var. esculentum Makino, J. Jap. Bot. 1 (1917) 29; --Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 47.

Clerodendrum trichotomum Merr. EPFP 3 (1923) 405, *non* Thunb. ex Murray (1784). (as to Batan plants). Japan to the Ryukyus and the Philippines: BATAN. Lowland thicket. *Hatusima 29190, 29030*.

Clerodendrum vanoverberghii Merr., PJS 7 c (1912) Bot. 98; EPFP 3 (1923) 405. --Type: BS 838 Vanoverbergh (A*, US*, iso). Luzon: Mountain Province, Nov-Dec 1910.

LUZON: Mountain Province. In forests, altitude c. 1650m.

Clerodendrum villosum Blume, Bijdr. (1826) 811; --Merr., EPFP 3 (1923) 405; --Kochummen, Tree Fl. Malaya 3 (1978) 304.

Clerodendrum curranii Elmer, LPB 5 (1913) 1846. --Type: Elmer 12860 (A*, GH*, NY*, US*, iso). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), 'in good well-drained soil at 500ft, among light woods of the cogon formation', Mar 1911.

Myanmar, Sumatra, Peninsular Malaysia, Java, Borneo, Philippines. CULION, PALAWAN, BALABAC, BANCALAN. Lowland thickets and old clearings.

Clerodendrum wenzelii Merr., PJS 9 c (1914) Bot. 385; EPFP 3 (1923) 405. --Type: Wenzel 627 (A*, US*, iso). Leyte, Mar 1914.

LEYTE. Forests, altitude c. 500m.

Clerodendrum williamsii Elmer, LPB 2 (1908) 684; --Merr., EPFP 3 (1923) 406. --Type: Elmer 11149 (NY*, US*, iso). Mindanao: Davao, Mt. Apo, Jun 1909.

CAMIGUIN, JOLO, MINDANAO: Zamboanga, Lanao, Davao (Mt Apo). Medium altitude forests.

Cultivated:

Clerodendrum indicum (L.) Kuntze, Revis. Gen. Pl. (1891) 586, as *Clerodendron*.

Clerodendrum thomsonae Balf., Edinburgh New Philos. J. 2, 15 (1862) 233; --Merr., Fl. Manila (1912) 402; EPFP 3 (1923) 405.

Native of tropical Africa. Widely cultivated in the Philippines for ornamental purposes but apparently not escaping.

Congea Roxburgh

Congea velutina Wight, Icon. Pl. Ind. Orient. 4 (1850) t. 1479-3.

India, Myanmar, Peninsular Malaysia to Java. An introduced ornamental in the

Philippines.

Duranta Linnaeus

Duranta erecta L., Sp. Pl. (1753) 637.

Duranta repens L., Sp. Pl. (1753) 637; --Merr., Fl. Manila (1912) 399; EPFP 3 (1923) 381.

Native of tropical America. Widely grown in the Philippines for ornamental purposes. Apparently not spontaneous.

Gmelina Linnaeus

de Kok, R.P.J. & Mabberley, D. J. (1999). The genus *Faradaya* Muell. F. (*Labiatae*). *Blumea* 44: 321-342.

Gmelina arborea Roxb., Hort. Bengal. (1814) 46; Fl. Ind. ed. 3 (1832) 84.

Pakistan, India, Sri Lanka, Myanmar. Extensively planted throughout tropical SE Asia including the Philippines.

Gmelina elliptica JE Sm. in Rees, Cyclop. 16 (1810-11) No. 2; --Merr., EPFP 3 (1923) 399; --Kochummen, Tree Fl. Malaya 3 (1978) 306.

Myanmar through Malaya to the Moluccas, Palau Isls. LUZON: Quezon, MINDORO, MASBATE, PANAY, GUIMARAS, NEGROS, CEBU, BOHOL, TAWI-TAWI, BASILAN, MINDANAO. Lowland thickets and secondary forests, common.

Gmelina palawensis HJ Lam, Verbenac. Mal. Arch. (1919) 224.

var. dinagatensis Moldenke, xxxx --Type: Ahern 461 (NY*, US*, iso). Dinagat, 1902.

DINAGAT.

Perhaps better placed under *Faradaya*.

Gmelina philippensis Cham., Linnaea 7 (1832) 109; --Merr., Fl. Manila (1912) 406; EPFP 3 (1923) 399; --Kochummen, Tree Fl. Malaya 3 (1978) 306, as 'philippensis'.

forma philippensis

Malesia. LUZON: Pangasinan, Benguet, Cagayan, Zambales, Bataan, Pampanga, Bulacan, Rizal, Laguna, PANAY. Lowland and medium altitude thickets and secondary forests.

forma transitoria Moldenke, Phytologia 18 (1969) 210. --Type: PNH 11741 MD Sulit (US*, holo). Guimaras, Feb-Mar 1950.

GUIMARAS.

Lantana Linnaeus

Lantana camara L., Sp. Pl. (1753) 627; --Merr., Fl. Manila (1912) 398; EPFP 3 (1923) 380; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 420.

Probably native to the West Indies, now widely distributed in the world's tropics and subtropics.

Lippia Linnaeus =Phyla

Petraeovitex Oliver

Petraeovitex trifoliata Merr., PJS 2 c (1907) Bot. 425; EPFP 3 (1923) 406. --Type: BS 708
Foxworthy (US*, iso). Palawan, Mar-Apr 1906.
Borneo, SW Philippines. PALAWAN, BASILAN, MINDANAO: Zamboanga. Lowland forests, ascending to 900m.

Petrea Linnaeus

Petrea volubilis L., Sp. Pl. (1753) 626; --Merr., Fl. Manila (1912) 400; EPFP 3 (1923) 381.
Native of tropical America. Cultivated in the Philippines for ornamental purposes but nowhere spontaneous.

Phyla Linnaeus

Phyla nodiflora (L.) Greene, Pittonia 4 (1899) 46; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 421, Photo 252; --Lippia nodiflora (L.) Rich. in Michx. Fl. Bor. Am. 2 (1803) 15; --Merr., Fl. Manila (1912) 398; EPFP 3 (1923) 381; --Verbena nodiflora L., Sp. Pl. (1753) 20.
Widely distributed in the warmer regions of the World. Throughout the Philippines. Low and medium altitudes, common weed in open waste places.

Premna Linnaeus

Premna adenosticta Schauer in DC, Prodr. 11 (1847) 630; --Merr., EPFP 3 (1923) 389. --Type: Cuming 1230
LUZON: Ilocos Sur, La Union, Pangasinan, Nueva Ecija, Zambales, Bataan, Rizal, Camarines, MINDANAO: Cotabato, Davao. Low and medium altitudes, on forested slopes.

Premna areolata Merr., PJS 10 c (1915) Bot. 73; EPFP 3 (1923) 389. --Type: BS 16179 Reillo (US*, iso). Basilan, Aug-Sept 1912.
BASILAN, MINDANAO: Lanao del Sur. Low and medium altitude forests.

Premna atra Merr., Phytologia 2 (1941) 5. --Type: BS 41873 (A*, holo; iso: US*). Luzon: Rizal prov., Mt Irid (=Irid), Feb 1923.
LUZON: Rizal (Mt Irid).

Premna benguetensis C Robinson, PJS 3 c (1908) Bot. 215; --Merr., EPFP 3 (1923) 390. --Type: RS Williams 1086 (NY*, holo). Luzon: Benguet prov., Baguio, 10 Jun 1904.
LUZON: Benguet, Nueva Ecija. Forested ravines, altitude c. 1400m.

Premna congesta Merr., PJS 1 (1906) Suppl. 232; EPFP 3 (1923) 390. --Type: FB 3281 Ahern's collector (US*, iso). Luzon: Rizal prov., Aug 1905.
LUZON: Ilocos Norte, Pangasinan, Nueva Ecija, Rizal, PALAWAN. Lowland thickets and secondary forests.

Premna cumingiana Schauer in DC, Prodr. 11 (1847) 634; --Merr., EPFP 3 (1923) 390. --Syntypes: Cuming 778 (MO*, 2 sheets). Luzon; --Cuming 1280 (A*, MO*). Luzon: Cagayan prov. Philippines, Sulawesi. Throughout the Philippines. Lowland and medium altitude secondary forests, ascending to 1000m.

forma cordata Moldenke, *Phytologia* xxx. --Type: BS 15630 MS Clemens (NY*, holo). Mindanao: Davao, Mt Apo, Jun 1924.
MINDANAO: Davao (Mt Apo).

forma dentata Moldenke, *Phytologia* 5 (1954) 14. --Type: Merrill Species Blancoanae 681 (BO, holo; iso US*, NY*). Luzon: Bulacan prov., Angat, Dec 1914.
LUZON: Bulacan.

Premna dallachyana Benth., *Fl. Austral.* 5 (1870) 59; --Munir, *J. Adelaide Bot. Gard.* 7 (1984) 24. *Premna nauseosa* Blanco, *Fl. Filip.* (1837) 489; --Merr., *Fl. Manila* (1912) 405; EPFP 3 (1923) 391. --Type: *Geunsia mollis* Elmer, LPB 10 (1939) 3808, not validly published, no Latin diagnosis. --Voucher: Elmer 8071 (NY*). Luzon: Laguna prov., Los Baños, Apr 1908

Extra-Philippine range?

LUZON: Ilocos Sur, La Union, Pangasinan, Cagayan, Isabela, Nueva Ecija, Tarlac, Zambales, Bataan, Bulacan, Rizal, Laguna, Batangas, Quezon, Camarines. Lowland secondary forests. Common.

Status of Blanco's name uncertain (see Munir, loc.cit.). If ever conspecific with Bentham's name, *P. nauseosa* has priority.

Premna depauperata Merr., *PJS* 1 (1906) Suppl. 231; EPFP 3 (1923) 390. --Type: Merrill 603 (NY*, US*, iso). Culion, 30 Dec 1902.
CULION. Low altitudes, dry open hillsides.

var. serrulata Moldenke, *Phytologia* xxxxx --Type: BS 41360 Lopez (NY*, type fragment). Culion, Oct 1922.
CULION

Premna herbacea Roxb., *Hort. Beng.* (1814) 46, *nom. nud.*; *Fl. Ind. ed.* 2, 3 (1832) 485; --Merr., EPFP 3 (1923) 390. *Pygmaepremna humilis* Merr., *PJS* 5 c (1910) Bot. 225. --Syntypes: BS 7841 Ramos (US*). Luzon: Cagayan prov., Apr 1909; --BS 8124 Ramos (NY*). Luzon: Isabela prov., Apr 1909. India, Thailand, Hainan, Philippines. LUZON: Mountain Province, Cagayan, Isabela, Nueva Vizcaya, MINDANAO: Bukidnon. Low and medium altitude open grasslands.

Premna leytenis Merr., *PJS* 12 c (1917) Bot. 302; EPFP 3 (1923) 391. --Type: Wenzel 1364 (A*, GH*, iso). Leyte: Leyte prov. Tigbao, near Tacloban, 27 Jun 1915.
LEYTE. Lowland or medium altitude thickets or forests.

Premna membranacea Merr., *Govt. Lab. Publ. (Philip.)* 35 (1906) 65; EPFP 3 (1923) 391. -- Syntypes: FB 1165 Ahern's collector (NY*, US*). Luzon: Rizal prov., Bosoboso, Jun 1904; --FB 3102 Ahern's collector (NY*). same locality, May-Jun 1905. *Premna subrotundifolia* Elmer ex HJ Lam, *Bull. Jard. Bot. Buitenz.* 3, 3 (1921) 36, *in syn. sub P. sterculifolia* King & Gamble. --Type: Elmer 16717 (NY*, U*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Jul 1916.

var. membranacea

LUZON: Rizal, Laguna, Quezon, Sorsogon, PANAY, LEYTE, SAMAR, CAMIGUIN, MINDANAO: Davao, Surigao. Low and medium altitude forests.

var. cordata Merr., EPFP 3 (1923) 391. --Type: BS 34861 Ramos & Pascasio (US*, iso). Siargao, Jun 1919.
SIARGAO. Lowland forests.

Premna membranifolia Merr., *PJS* 8 c (1913) Bot. 388; EPFP 3 (1923) 391. --Type: Wenzel 114 (GH*, US*, iso). Leyte, 8 Jun 1913.

LEYTE. Lowland forests.

Premna oblongifolia Merr., Govt. Lab. Publ. (Philipp.) 29 (1905) 48; EPFP 3 (1923) 392. --Type: Elmer 5990 (US*, NY*, iso). Luzon: Benguet prov., Baguio, Mar 1904.

Borneo, N Philippines. LUZON: Benguet, Quezon (Infanta). In thickets on rocky slopes and in ravines among boulders, altitude 1200-1600m in Benguet.

Premna odorata Blanco, Fl. Filip. (1837) 488; --Merr., Fl. Manila (1912) 405; EPFP 3 (1923) 392.

--Type:
Taiwan (S part), Philippines. According to Merrill (1923), possibly conspecific with *P. pubescens* Blume of Peninsular Malaysia and Sulawesi (also Java?). Throughout the archipelago in most islands and provinces. Common in lowland thickets and secondary forests.

Premna serratifolia L., Mant. 2 (1771) 253; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 423, Photo 254.

Premna obtusifolia R Br., Prodr. (1810) 512; --Merr., EPFP 3 (1923) 392.

Premna integrifolia CB Clarke in Hook.f, Fl. Brit. Ind. 4 (1885) 574; --Merr., PJS 1 (1906) Suppl. 121, 233; idem. 3 c (1908) Bot. 431; Fl. Manila (1912) 405.

Tropical Asia to Australia. Throughout the Philippines. Coastal thickets, scarcely occurring inland.

Premna stellata Merr., PJS 11 c (1916) Bot. 203; EPFP 3 (1923) 393. --Type: BS 24262 Ramos (US*, iso). Samar: Catubig River, Feb-Mar 1916.

SAMAR. Lowland forests.

Premna subglabra Merr., PJS 1 (1906) Suppl. 234; EPFP 3 (1923) 393. --Type:

BATAN and BABUYAN ISLS, LUZON (Cagayan to Sorsogon), MINDORO, MASBATE, CEBU, BILIRAN, LEYTE, CAMIGUIN, MINDANAO. Lowland and medium altitude thickets and secondary forests.

Premna subscandens Merr., PJS 1 (1906) Suppl. 230; Fl. Manila (1912) 405; EPFP 3 (1923) 393.

--Syntypes: FB 449 Ahern's collector (NY*, US*). Luzon: Rizal prov., Antipolo, Apr 1904; --FB 1095 WW Clarke (NY*, US*). Ticao, May 1904; --Merrill 1874 (NY*, US*). Luzon: Rizal prov., Bosoboso, Apr 1903

LUZON: La Union, Pangasinan, Nueva Vizcaya, Rizal, Laguna, Quezon, TICA0.
Lowland thickets and secondary forests.

var. glabrescens Moldenke, Phytologia 8 (1962) 163. --Type: UC 310092 Ramos & Edaño s.n. (UC*, holo, unicate). Luzon: Isabela prov., San Mariano, Feb-Mar 1926.

LUZON: Isabela (San Mariano).

var. minutiflora Moldenke, Phytologia 5 (1954) 20. --Type: FB 443 Ahern's collector (NY*, holo).

Luzon: Rizal prov., Antipolo, Apr 1904.

LUZON: Rizal.

Premna williamsii Merr., PJS 10 c (1915) Bot. 74; EPFP 3 (1923) 393. --Type: RS Williams 2330 (NY*, US*, iso). Mindanao: Zamboanga prov., Sax River, Feb 1905.

MINDANAO: Zamboanga. Low and medium altitude forests.

Stachytarpheta Vahl

Stachytarpheta jamaicensis (L.) Vahl, Enum. 1 (1804) 206; --Merr., Fl. Manila (1912) 399; EPFP 3 (1923) 381; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 424.
Probably a native of tropical America. Widely distributed in the warmer regions of the world.

Symphorema Roxburgh

Symphorema luzonicum (Blanco) Fern.-Villar, Novis. App. (1880) 162; --Perkins, Fragm. Fl. Philip. (1904) 3; --Merr., PJS 1 (1906) Suppl. 122; Fl. Manila (1912) 400; Sp. Blancoanae (1918) 335; EPFP 3 (1923) 406; --Litsea luzonica Blanco, Fl. Filip. ed. 2 (1845) 284; idem. ed. 3, 2 (1878) 162. --Type: Non extant. Llanos 69 (L*, neotype, designated by Munir, 1965).
Symphorema involucratum Llanos ex Fern.-Villar in Blanco, Fl. Filip. ed. 3, 4¹ (1880) 105, *non* Kurz. --Type: Llanos 69 (L*, holo).
Symphorema glabrum Hassk., Flora 48 (1865) 402. --Type: Cuming s.n. (L*, holo). Philippines. No further locality data.
LUZON: Ilocos Norte, Nueva Ecija, Pampanga, Bataan, Rizal, Laguna, Quezon, MINDORO, BUSUANGA, PALAWAN. Lowland secondary and primary forests.

Tectona Linnaeus filius

Tectona grandis L.f., Suppl. (1781) 151; --Merr., EPFP 3 (1923) 389.

Tectona philippinensis Benth. & Hook.f., Gen. Pl. 2 (1876) 1152; --Merr., EPFP 3 (1923) 389; --Type: Cuming 1432 (L*, iso).
LUZON: Batangas, ILIN (off SW coast of Mindoro Occidental prov.). Lowland secondary forests and thickets.

Teijsmanniodendron Koorders

Revision:

Kostermans, AJGH. 1951. Reinwardtia 1: 75-106.

Teijsmanniodendron ahernianum (Merr.) Bakh., J. Arnold Arb. 16 (1935) 74; --*Vitex aherniana* Merr., Govt. Lab. Publ. (Philipp.) 6 (1904) 18; EPFP 3 (1923) 394. --Type: Merrill 1007 (GH*, NY*, US*, iso). Luzon: Aurora prov., Baler, Aug-Oct 1903.
Vitex curranii HJ Lam, Verb. Malay. Archipel. (1919) 207. --Type: FB 17463 Curran (PNH, holo, not seen). Negros, Oct. 1909.
BABUYAN ISLS, LUZON: Pangasinan, Cagayan, Isabela, Zambales, Laguna, Quezon, Camarines, Albay, Sorsogon, LUBANG, SIBUYAN, PANAY, NEGROS, LEYTE, SAMAR, MINDANAO: Zamboanga, Davao, Agusan, Surigao). Lowland and medium altitude forests.

Teijsmanniodendron bogoriense Koord., Ann. Jard. Buitenz. 19 (1904) 20.

Teijsmanniodendron longifolium (Merr.) Merr., EPFP 3 (1923) 398; --*Vitex longifolia* Merr., PJS 5 c (1910) Bot. 227. --Type: FB 7574 Hutchinson (US*, iso). Mindanao: Surigao prov., May-Jun 1907.
Vitex merrillii HJ Lam, Verb. Malay. Archipel. (1919) 212. --Type: BS 15906 Fenix (PNH, holo, not seen; iso: K, L). Luzon: Bataan prov., Aug. 1912.

Philippines, Sulawesi. **xxxxx**

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

Teijsmanniodendron pteropodum (Miq.) Bakh., Bull. Jard. Bot. Buitenz. 3, 3 (1921) 29; --Merr., EPFP 3 (1923) 398; --Kochummen, Tree Fl. Mal. 3 (1978) 309.

Teijsmanniodendron pteropodum (Miq.) Bakh. forma cristatum Moldenke, Phytologia 44(7) (1979) 473.
Vitex philippinensis Merr., Forest. Bur. Philip. Bull. 1 (1903) 52. –Type: Ahern 387 (BO, US*, 2 sheets, iso).
Mindanao: Zamboanga del Sur prov., Malangas, Oct-Nov 1919.
Sumatra, Peninsular Malaysia, Banka, Borneo, C & S Philippines. BILIRAN, LEYTE,
MINDANAO: Zamboanga, Davao.

Unplaced:

Teijsmanniodendron bulusanensis Elmer, LPB 10 (1939) 3798. –Type: Elmer 17004 (NY*, 2 sheets, iso). Luzon: Sorsogon prov., Mt Bulusan, Irosin, Aug 1916.
LUZON

Teijsmanniodendron unifoliatum (Merr.) Moldenke, Phytologia 4 (1952) 58; --Vitex unifoliolata Merr., PJS 20 (1922) 438; EPFP 3 (1923) 398. –Type: BS 37048 Ramos & Edaña (US*, iso). Mindanao: Zamboanga del Sur prov., Malangas, Oct-Nov 1919.
MINDANAO: Zamboanga del Sur. Forests along streams at low altitudes.

Verbena Linnaeus

Verbena officinalis L., Sp. Pl. (1753) 627; --Merr., EPFP 3 (1923) 380; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 425.

Widely distributed in the temperate and subtropical regions of the world. Introduced to the Philippines.

LUZON: Cagayan, Isabela, Nueva Vizcaya. Weedy in open waste places in and about towns to an altitude of c. 800m.

Vitex Linnaeus

Literature:

Bramley, GLC, F Forest, RPJ de Kok. 2009. *Troublesome tropical mints: reexamining generic limits of Vitex and relations (Lamiaceae) in South East Asia*. Taxon 58(2) 500-510.

De Kok, R. 2008. The genus Vitex (Labiatae) in the Flora Malesiana region, excluding New Guinea. Kew Bulletin 63: 17-40.

Vitex glabrata R Br., Prodr. (1810) 512; --Merr., EPFP 3 (1923) 394; --Kochummen, Tree Fl. Malaya 3 (1978) 310; --de Kok, Kew Bull. 63 (2008) 22. –Type from Australia.

Vitex pentaphylla Merr., PJS 4 c (1909) Bot. 320. –Syntypes: FB 9490 Whitford & Hutchinson (PNH, K, US*). Mindanao: Zamboanga del Norte prov., Siocon River, Mar 1908; --FB 11245 Hutchinson (PNH, US). Same locality, Mar 1908; --RS Williams 2949 (PNH, NY, US). Mindanao: Davao del Sur prov., Sta Cruz, 16 Jun 1905.

Vitex nitida Merr., PJS 7 c (1912) Bot. 343. –Type: FB 19546 Klemme (PNH, holo, possibly lost; K). Mindanao: Misamis Occidental prov., Tangob, growing near the mountains, 7 May 1911.

India, Cambodia, Peninsular Malaysia, Java, Philippines, N Australia. LUZON: Camarines, Sorsogon, MINDORO, CULION, PALAWAN, BALABAC, NEGROS, MINDANAO: Zamboanga del Norte, Cotabato, Agusan del Norte, Surigao del Norte. Lowland forests, seasonally flooded swamps, along rivers and streams, on sandy-clay, up to medium altitudes. Fl. Aug-May, fr. Aug-Mar.

Vitex negundo L., Sp. Pl. (1753) 638; --Merr., Fl. Manila (1912) 404; EPFP 3 (1923) 394; --Kochummen, Tree Fl. Malaya 3 (1978) 311; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 426, Pl. 180; --de Kok, Kew Bull. 63 (2008) 25. –Type from India.

Vitex negundo L. var. incisa (Lam.) CB Clarke in Hook.f., Fl. Brit. Ind. 4 (1885) 584; --Merr., EPFP 3 (1923) 395. –Type from China

Vitex negundo L. var. bicolor (Willd.) HJ Lam, Verb. Malay. Archipel. (1919) 191; --Merr., EPFP 3 (1923)

395.

Vitex elmeri Moldenke, *Phytologia* 38 (1978) 307. --Type: Elmer 5611 (NY*, holo). Luzon: La Union prov., Bauang, Feb 1904

E Africa, India, China, Taiwan, Japan, S & SE Asia, Australia, Polynesia. Throughout the Philippines. Low to médium altitudes, along roadsides, dry river flood plains, waste places, thickets and secondary forests. Fl. & fr. throughout the year.

Vitex parviflora Juss., *Ann. Mus. Hist. Nat. Paris* 7 (1806) 76; --Merr., *Fl. Manila* (1912) 404; EPFP 3 (1923) 395; --de Kok, *Kew Bull.* 63 (2008) 26. --Type in P-Herb. Jussieu (photo cited by de Kok). Philippines, no further locality data.

Vitex geniculata Blanco, *Fl. Filip.* (1837) 514; --Merr., *Sp. Blancoanae* (1918) 333. --Type: unknown.

Vitex latifolia Blanco, *Fl. Filip.* (1837) 514; --Merr., *Sp. Blancoanae* (1918) 333. --Type: unknown.

Vitex altissima Blanco, *Fl. Filip.* (1837) 516 [non *Vitex altissima* L.f.]; --Merr., *Sp. Blancoanae* (1918) 333. --Type: unknown.

Vitex glandulosa HJ Lam, *Verb. Malay Archipel.* (1919) 199. --Type: Mangubat 1361(BO, holo, photo K, seen by de Kok; iso: L, NY, US). Luzon: Cavite prov., Mendez Nuñez, Aug 1906,

Vitex parviflora Juss. forma *sterilis* HJ Lam ex Moldenke, *Phytologia* 6 (1957) 42 – 43). --Type: BS 1218 RC McGregor (BO, holo; iso NY*). Bohol, May 1906,

Vitex parviflora Juss. var. *puberulenta* Moldenke, *Phytologia* 3 (1951) 489. --Type: BS 1361 Mangubat (BO, holo; K photo cited by de Kok; iso: L, NY*, US*). Luzon: Cavite prov., Mendez Nuñez, Aug 1906.

Java, Saleyer, Philippines, Sulawesi, Timor, Ambon. Throughout the Philippines in most islands and provinces. Common in both secondary and primary forests, on clay loam or volcanic soils, over limestone or ultramafics at low altitudes. Fl. Apr-Dec, fr. all year round.

Vitex pinnata L., *Sp. Pl.* (1753) 638; --Kochummen, *Tree Fl. Malaya* 3 (1978) 311; --de Kok, *Kew Bull.* 63 (2008) 28, Map 5. --Type from Sri Lanka.

Vitex pubescens L. ex Vahl, *Symb.* 3 (1794) 85; --Merr., EPFP 3 (1923) 396.

India, Sri Lanka, Myanmar, Thailand, Laos, Cambodia, Vietnam, Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls, Borneo (Kalimantan, Sarawak, Brunei, Sabah), Philippines, Sulawesi.

MINDORO, CULION, PALAWAN, TAWI-TAWI. Primary and secondary forests, pyrogenous parang vegetation. Lowlands generally. Fruits eaten by birds. Seeds do not germinate in shade. Fl. Nov-May (Aug), fr. Nov-Aug.

Vitex quinata (Lour.) FN Will., *Bull. Herb. Boiss.* ii, 5 (1905) 431; --Merr., EPFP 3 (1923) 396; --YP Yang et al., *Fl. Taiwan ed. 2, 4* (1998) 426, photo 255; --de Kok, *Kew Bull.* 63 (2008) 30. --Type from S China.

India to S China and Taiwan, Japan, Sumatra, Peninsular Malaysia, Java, Philippines, Sulawesi, New Guinea.

LUZON: Ilocos Sur, Zambales, Bataan, Rizal, NEGROS, LEYTE, MINDANAO:

Zamboanga, Cotabato, Agusan del Norte, Surigao. Low altitude primary to secondary forests, sometimes on limestone. Fl. May-Dec, fr. Jul-Apr.

Vitex trifolia L., *Sp. Pl.* (1753) 638; --Merr., *Fl. Manila* (1912) 404; EPFP 3 (1923) 397; --Kochummen, *Tree Fl. Malaya* 3 (1978) 311; --YP Yang et al., *Fl. Taiwan ed. 2, 4* (1998) 428; --de Kok, *Kew Bull.* 63 (2008) 32. --Type from India.

Vitex negundo L. var. *philippinensis* Moldenke, *Phytologia* 38 (1978) 308. --Type: Elmer 8125 (NY*, holo). Luzon: Laguna prov., Los Baños, Apr 1906.

ssp. trifolia

S & SE Asia, China, Taiwan, Australia (E coast), Polynesia.

DISTRIBUTION. The species is widespread from Tahiti to Australia's East Coast, North to Hawaii and Japan & China, west to India, Sri Lanka and possibly east Africa. Because of its local use as an ornamental and a medicinal plant, it is also widely cultivated in and outside its natural area.

ECOLOGY. Beaches, inland edge of mangrove swamps, grasslands, (littoral) forest and in secondary vegetation, often near water. Soil: sands or more rarely in clay, often over limestone, coral, volcanic soils or shale, at 0 – 150 (– 1500) m altitude. In humid areas the species is usually common at low altitudes, becoming rarer higher up. In dryer areas the species can also be more common at high elevation. Often a solitary tree but sometimes occurring in thickets. Flowering and fruiting all year round.

ssp. litoralis Steen., Blumea 8 (1957) 516; --de Kok, Kew Bull. 63 (2008) 32. --Type from Lesser Sunda Isls, Kisar.

Vitex trifolia var. *simplicifolia* Cham., Linnaea 7 (1832) 107. --Type: Chamisso s.n. (LE, holo (not seen; photo in K). Luzon: Cavite prov., Dec 1817-Jan 1818.

Vitex trifolia var. *ovata* (Thunb.) Makino, Bot. Mag. Tokyo 17 (1903) 92; --Merr., EPFP 3 (1923) 397.

Vitex rotundifolia L.f., Pl. Syst. Veg. (1781) 294; --YP Yang et al., Fl. Taiwan ed. 2, 4 (1998) 428.

Vitex repens Blanco, Fl. Filip. (1837) 513; --Merr., Sp. Blancoanae (1918) 332. --Type: unknown.

Japan, Ryukyus, Taiwan, China, Thailand, across Malesia, Australia (E coast) and Polynesia. Throughout the Philippines. On littoral sandy beach, common.

Vitex turczaninowii Merr., Govt. Lab. Publ. (Philip.) 35 (1906) 77; EPFP 3 (1923) 397; --Bramley et al. Taxon 58(2) (2009) 508; --*Viticipremna philippinensis* (Turcz.) HJ Lam, Bull. Jard. Bot. Buitenz. 3, 3 (1921) 47, *non* *Vitex philippinensis* Merr., For. Bur. Bull. 1 (1903) 52, [=Teijsmanniodendron pteropodum (Miq.) Bakh.]. --Type: Cuming 1294 (MEL, lecto, designated by Munir, in J. Adelaide Bot. Gard. 7 (1985) 192; iso: BM, K, NY*, PNH). Philippines, no further locality data, 1841.

Vitex cumingiana Turcz., Bull. Soc. Imp. Nat. Moscou 31 (1858) 416. --Type: Cuming 1173 (MO*). Luzon.

Vitex luzonica HJ Lam in HJ Lam & Bakh., Bull. Jard. Bot. Buitenz. 3, 3 (1921) 61; --Merr., EPFP 3 (1923) 394. --Type: Ahern 706Q (BO, holo; iso: NY*). Luzon:

BATANES, LUZON: Ilocos Sur, Pangasinan, Cagayan, Isabela, Bataan, Rizal, Laguna, Quezon, Camarines, Sorsogon, MINDORO, TICAQ, LEYTE, MINDANAO: Agusan, Surigao. Lowland forests.

Viticipremna HJ Lam = *Vitex*