

Family 94. MENISPERMACEAE

Revision:

Forman, LL. 1986. *Menispermaceae*. Flora Malesiana series 1, 10: 157-253.

Anamirta Colebrooke

Anamirta cocculus (L.) Wight & Arn., Prodr. 1 (1834) 446; --Merr., EPFP 2 (1923) 145; --Forman, Kew Bull. 32 (1978) 329; Fl. Males., ser. 1, 10 (1986) 213, Fig. 10h-j, 11.

Sri Lanka, India, Thailand, Indochina, N Sumatra, E Java, Lesser Sunda Isls (Sumba, Flores, Alor, Timor, Wetar, Damar, Babar), Philippines, Moluccas (Tanimbar, Kai Isls, Seram, Sula Isls, Halmahera), New Guinea (incl. Aru Isls).

LUZON, MINDORO, BASILAN, MINDANAO. Low and medium altitude thickets, apparently with preference to seasonal conditions.

Arcangelisia Beccari

Arcangelisia flava (L.) Merr., Interp. Herb. Amb. (1917) 222; EPFP 2 (1923) 145; --Forman, Kew Bull. 32 (1978) 334; Fl. Males., ser. 1, 10 (1986) 213, Fig. 10h-j, 11.

Bull. 32 (1978) 334; Fl.

Hainan, Indochina, S Peninsular Thailand, N & C Sumatra, Peninsular Malaysia, Langkawi Is, C Java, Borneo, Philippines, C & N Sulawesi, N Moluccas (Talaud Isls, Halmahera), New Guinea.

BATANES to PALAWAN and MINDANAO. Low and medium altitude thickets and forests.

Batania Hatusima =Pycnarrhena

Cissampelos Linnaeus

Cissampelos pareira L., Sp. Pl. (1753) 1031; --Merr., Fl. Manila (1912) 204; EPFP 2 (1923) 150.

var. hirsuta (Buch. ex DC) Forman, Kew Bull. 22 (1968) 356; Fl. Males. ser. 1, 10 (1986) 236, Fig. 17.

Cissampelos discolor DC var. *cardiophylla* A Gray, Bot. Wilkes US Explor. Exped. (1854) 38; --Merr., PJS 3 c (1908) Bot. 77. --Type: US Explor. Exped. (US*, holo). "Small island in the Sooloo (=Sulu) Sea".

Pantropical, through continental SE Asia, Australia (Queensland). In Malesia: Borneo (Sabah), Philippines, Sulawesi (incl. Kabaena Is.), Lesser Sunda Isls (Lombok, Sumbawa, Flores, Wetar, Timor), Moluccas (Halmahera, Seram, Tanimbar Isls), New Guinea (incl. Aru Isls). Not known from Sumatra, Peninsular Malaysia, and Java.

Common throughout the Philippines in lowland and medium altitude thickets.

Cocculus de Candolle

Cocculus laurifolius DC, Syst. 1 (1818) 530; --Merr., PJS 7 c (1912) Bot. 81; EPFP 2 (1923) 149; --Forman, Kew Bull. 29 (1974) 479, Fig. 15A-G; Fl. Males., ser. 1, 10 (1986) 233, Fig. 16k-p.

S China, Japan, Taiwan, India to Nepal, Myanmar, Thailand, Indochina, Sumatra, Java, Philippines.

LUZON: Mountain Province, MINDORO, PALAWAN. Open forests and thickets, altitude

700-1200m.

Cocculus orbiculatus (L.) DC, Syst. 1 (1817) 522; --Forman, Kew Bull. 22 (1968) 374; *ibid.* 29 (1974) 479, t. 15A-G; Fl. Males. ser. 1, 10 (1986) 233, Fig. 16a-j; --Menispermum orbiculatum L., p. Pl. (1753) 341.

Cocculus sarmentosus (Lour.) Diels *in* Engl. Pflanzenreich 46 (1910) 233; --Merr., EPFP 2 (1923) 149; --*Nephroia sarmentosa* Lour., Fl. Cochinch. (1790) 692.

Cocculus sarmentosus var. *stenophyllus* Merr., PJS 13 c (1918) Bot. 10; EPFP 2 (1923) 149. --Type: BS 7231 Ramos (NY*, iso). Luzon: Ilocos Norte prov., Burgos, Feb.-March 1917.

Cocculus trilobus (Thunb.) DC, Syst. 1 (1818) 232; --Merr., EPFP 2 (1923) 149; --Menispermum trilobum Thunb., Fl. Jap. (1784) 194.

Cocculus cynanchoides C Presl, Rel. Haenk. 2 (1835) 79. --Type: Haenke s.n. (MO*, iso). Luzon.

E Himalayas, east to China, Japan, Taiwan and Hawaii. NE Sumatra, Peninsular Malaysia (also Penang and Singapore), W-C Java, Philippines. Possibly introduced in Mauritius and Réunion.

BATAN, BABUYAN ISLS, N LUZON, MINDANAO: Lanao del Sur. Coastal and lowland thickets.

Cyclea Arnott ex Wight

Cyclea cauliflora Merr., PJS 26 (1925) 452; EPFP 4 (1924) 248; --Forman, Kew Bull. 14 (1960) 74; Fl. Males. ser. 1, 10 (1986) 241. --Type: BS 41512 Ramos (K*, US*, iso). Leyte: Leyte prov., Cabalian, in damp ravines and deserted clearings, altitude c. 300m. 7 Dec. 1922.

LUZON: MINDORO, CATANDUANES, NEGROS, LEYTE. Damp ravines and deserted clearings, also recorded from a forested ridge, altitude 300-460m.

Cyclea insularis (Makino) Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 29; --Forman, Fl. Males. ser. 1, 10 (1986) 240; --Cissampelos insularis Makino, Bot. Mag. Tokyo 24 (1910) 227.

Cyclea insularis var. *luxurians* Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 29. --Type:

Japan, Philippines.

BATAN (Mt Iraya). Thickets and forest slopes, altitude 100-300m. Fl. and fr. in May.

Cyclea merrillii Diels *in* Engl. Pflanzenreich 46 (1910) 312; --Elmer, LPB 4 (1911) 1167; --Merr., EPFP 2 (1923) 151; --Forman, Kew Bull. 14 (1960) 72; --Pancho, Vasc. Fl. Mt Makiling (1986) 286; Fl. Males., ser. 1, 10 (1986) 240. --Type: Merrill 2527 (K*, US*, iso). Luzon: Bataan prov., Mt Mariveles, Lamao River, 11-14 June 1903.

LUZON: Pangasinan, Nueva Vizcaya, Nueva Ecija, Bulacan, Rizal, Laguna, Quezon, PANAY. Lowland and medium altitude thickets.

Diploclisia Miers

Diploclisia glaucescens (Blume) Diels *in* Engl. Pflanzenreich 46 (1910) 225, Fig. 77, A-L; --Merr., EPFP 2 (1923) 148; --Forman, Kew Bull. 22 (1968) 363, pro parte (excl. D. kunstleri); Fl. Males., ser. 1, 10 (1986) 230.

Sri Lanka, India, S China, Myanmar, Thailand, Indochina, Sumatra, Java, Philippines, Sulawesi, ?Moluccas (Halmahera, Sula Isls, Seram), ?W New Guinea.

TAWI-TAWI (Bongao), MINDANAO: Zamboanga, Lanao del Sur. Lowland and medium altitude open forests.

Fibraurea Loureiro

Fibraurea tinctoria Lour., Fl. Coch. (1790) 626; --Forman, Kew Bull. 40 (1985) 544; Fl. Males. ser. 1, 10 (1986) 207, Fig. 9a-h.

Fibraurea chloroleuca Miers, Ann. Nat. Hist. 3, 13 (1864) 489; --Merr., PJS 17 (1920) 249; EPFP 2 (1923) 146.

NE India, Myanmar, Thailand, Indochina, Sumatra (incl. Enggano Is), Peninsular Malaysia, Java, Borneo, Philippines, NE Sulawesi.

DINAGAT. Along streams in lowland forest.

Haematocarpus Miers

Haematocarpus subpeltatus Merr., PJS 14 (1919) 383; EPFP 2 (1923) 145. --Forman, Kew Bull. 26 (1972) 421; Fl. Males., ser. 1, 10 (1986) 184, Fig. 3j-o. --Type: BS 33750 Ramos & Edaño (US*, iso). Luzon: Camarines Norte prov., Paracale. Forest along stream at low altitude, 22 Dec 1918.

Borneo (Sarawak, E Borneo) and the Philippines.

LUZON: Camarines Norte (Paracale). Lowland forest to 100m altitude.

Hypserpa Miers

Hypserpa nitida Miers in Hook., Kew J. Bot. 3 (1851) 258; --Forman, Kew Bull. 12 (1958) 453; *ibid.* 22 (1968) 361; Fl. Males., ser. 1, 10 (1986) 219, Fig. 12a-f.

Hypserpa cuspidata (Wall.) Miers, Ann. Nat. Hist. 2, 7 (1851) 40; --Merr., EPFP 2 (1923) 147.

Hypserpa jagorii Diels in Engl. Pflanzenreich 46 (1910) 211; --Merr., EPFP 2 (1923) 148.

Phytocrene loheri Merr., PJS 7 c (1912) Bot. 293; EPFP 2 (1923) 492, pro parte, leaves only.

Sri Lanka, India, S Myanmar, Thailand, Indochina, S Sumatra (incl. Banka and Riouw), Peninsular Malaysia (incl. Langkawi, Penang and Singapore), Borneo, Philippines, Sulawesi.

LUZON: Ilocos Norte, Nueva Vizcaya, Bataan, Rizal, PALAWAN, SIBUYAN, NEGROS, MINDANAO. Low and medium altitude thickets and forests.

Legnephora Miers

Legnephora philippinensis Forman, Kew Bull. 27 (1972) 278, Fig. 1c; Fl. Males., ser. 1, 10 (1986) 226, Fig. 14c. --Type: PNH 10020 Sulit (L*, 2 sheets). Mindanao: Bukidnon prov., Mt Kitanglad, S slope of S peak, Barrio Kibangay, Sitio Katiwayan, semi-open forest, altitude 1800m, 10 Mar 1949.

MINDANAO: Bukidnon (Mt Kitanglad). Known only from the type collection.

Limacia Loureiro

Limacia blumei (Boerl.) Diels in Engl. Pflanzenreich 46 (1910) 215; --Merr., PJS 7 c (1912) Bot. 266; EPFP 2 (1923) 148; --Forman, Kew Bull. 12 (1958) 448; *ibid.* 22 (1968) 362; Fl. Males., ser. 1, 10 (1986) 223, Fig. 13; --Cocculus *blumei* Boerl., Cat. Hort. Bog. 1 (1899) 40.

Peninsular Thailand, Java, Borneo (Sabah), Philippines, SE Sulawesi, Lesser Sunda Isls (Sumba, Timor).

BANCALAN, MINDANAO: Davao. Lowland thickets and forests.

Limacia scandens Lour., Fl. Coch. (1790) 620; --Forman, Kew Bull. 12 (1958) 449; Fl. Males., ser. 1, 10 (1986) 223, Fig. 12j-r.

Limacia velutina (Wall.) Miers, Ann. Nat. Hist. 2, 7 (1851) 43; --Merr., EPFP 2 (1923) 148.
Lower Myanmar, Peninsular Thailand, C Vietnam, S Indochina, C & S Sumatra, Lingga,
W Peninsular Malaysia, Singapore, Borneo (SW Sarawak, Brunei), ?Java, Philippines.
BASILAN, MINDANAO: Zamboanga, Lanao. Low altitude second-growth forests and
open habitats.

Parabaena Miers

Parabaena denudata Diels in Engl. Pflanzenreich 46 (1910) 147; --Merr., EPFP 2 (1923) 147; --
Forman, Kew Bull. 39 (1984) 108, Fig. 1H; Fl. Males., ser. 1, 10 (1986) 203, Fig. 5h. --Type: RS
Williams 2137 (US*, iso). Mindanao: Zamboanga, Sax River, 13 Feb. 1905.

LUZON, NEGROS, BOHOL, BILIRAN, SAMAR, BASILAN, MINDANAO: Zamboanga.
Low and medium altitude thickets and forests. In Negros along rivers and in thickets in
damp ravines at 700-750m altitude. Fl. Feb-May, fr. Aug.

Parabaena echinocarpa Diels, PJS 8 c (1913) Bot. 157; --Merr., EPFP 2 (1923) 147; --Forman, Kew
Bull. 39 (1984) 110, Fig. 1I; Fl. Males., ser. 1, 10 (1986) 204, Fig. 5l. --Type: BS 14722 Ramos (US*, iso). Camiguin d

LUZON: Sorsogon, POLILLO, LEYTE, SAMAR, CAMIGUIN, MINDANAO. Low and
medium altitude thickets and forests, up to c. 500m. Fl. Apr-Jun, Nov; fr. Apr, Nov-Dec.

Parabaena elmeri Diels in Engl., Pflanzenreich 46 (1910) 147; --Merr., EPFP 2 (1923) 147; --Forman,
Kew Bull. 36 (1981) 389, Fig. 1G; Fl. Males., ser. 1, 10 (1986) 202, Fig. 5g. --Type: Elmer 5633.
Luzon: La Union prov.

Parabaena philippinensis Merr. ex Diels in Engl. Pflanzenreich 46 (1910) 148; --Merr., EPFP 2 (1923) 147.
--Type: BS 1024 Ramos.

LUZON: La Union, Cagayan, Batangas, MINDORO. Low to medium altitude thickets and
forests. Fl. Feb, May-Jul; fr. Feb, Jul-Oct.

Pericampylus Miers

Pericampylus glaucus (Lam.) Merr., Interpret. Herb. Amb. (1917) 219; EPFP 2 (1923) 148; --
Forman, Kew Bull. 22 (1968) 366; Fl. Males., ser. 1, 10 (1986) 229, Fig. 15a-f; --*Menispermum*
glaucum Lam., Encycl. 4 (1797) 100.

Tropical and subtropical Asia.

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

Pycnarrhena Miers

Pycnarrhena insignis (Hatusima) Forman, Kew Bull. 33 (1979) 568; Fl. Males., ser. 1, 10 (1986)
174; --*Batania insignis* Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 29, 70, Fig. 1.

BATAN: Mahatao. In thickets, altitude 100m.

Pycnarrhena manillensis Vidal, Rev. Pl. Vasc. Filip. (1886) 45; --Merr., EPFP 2 (1923) 144; --
Forman, Kew Bull. 26 (1972) 411; Fl. Males., ser. 1, 10 (1986) 175.

Pycnarrhena elliptica Diels in Engl. Pflanzenreich 46 (1910) 54; --Merr., EPFP 2 (1923) 144.

LUZON, ALABAT, PANAY, NEGROS, LEYTE, CAMOTES, SAMAR, BASILAN,
MINDANAO. Thickets and forests, up to 1600m. Fl. May-Nov; fr. Jul-Mar.

Pycnarrhena tumefacta Miers [Ann. Mag. Nat. Hist. ser. 3, 20 (1867) 12, *nomen.*], Contr. Bot. 3 (1871) 353; --Forman, Kew Bull. 26 (1972) 414; Fl. Males., ser. 1, 10 (1986) 175, Fig. 1a-k.
Pycnarrhena membranifolia Merr., PJS 20 (1922) 382; EPFP 2 (1923) 144. --Type: BS 37356 Ramos & Edaño (US*, iso). Mindanao: Zamboanga del Sur prov., Malangas. Low altitude forest, 26 Oct. 1919.
Pycnarrhena celebica (Boerl.) Diels in Engl. Pflanzenreich 46 (1910) 53; --Merr., EPFP 2 (1923) 144.
Pycnarrhena merrillii Diels in Engl., Pflanzenreich 46 (1910) 52; --Merr., EPFP 2 (1923) 144. --Type: Merrill 1201 (not seen). Mindoro.
Pycnarrhena balabacensis Yamamoto, Trans. Nat. Hist. Soc. Formosa 34 (1944) 224, t. 1. --Type:
Pycnarrhena batanensis Yamamoto, *loc. cit.* 226, t. 3. --Type:
Kangean Isls, Java, Borneo, Banguay, Philippines, Sangihe, Moluccas (Obi, Kai Isls, Halmahera), New Guinea (W and ?E), Solomon Isls.
LUZON: Ilocos Norte, Apayao, Cagayan, Nueva Ecija, Bataan, Laguna, Quezon, POLILLO, MINDORO, PALAWAN, BALABAC, MINDANAO: Zamboanga. Low and medium altitude forests up to 400m altitudes.

Stephania Loureiro

Note: verify Philippine localities from Forman's KB revision.

Stephania corymbosa (Blume) Walp., Rep. 1 (1842) 96; --Forman, Kew Bull. 11 (1956) 63, Fig. 4; Fl. Males., ser. 1, 10 (1986) 249, Fig. 19k-n.
Stephania catosepala Diels in Engl. Pflanzenreich 46 (1910) 268; --Merr., EPFP 2 (1923) 149.
Stephania merrillii Diels in Engl. Pflanzenreich 46 (1910) 268; --Merr., EPFP 2 (1923) 150. --Type: Merrill 5701 (US*, iso). Mindoro: Mindoro Oriental prov., Mt Halcon. Nov 1906.
Stephania ramosii Diels ex Merr., PJS 7 c (1912) Bot. 265; EPFP 2 (1923) 150. --Type: BS 13487 Ramos (not seen). Luzon: Benguet prov., near Baguio, May 1911.
Sumatra, Simalur, Peninsular Malaysia, W Java, Borneo, Philippines, S, C and E Sulawesi.
LUZON: Mountain Province, Benguet, MINDORO: Mindoro Oriental (Mt Halcon).
Thickets, forests, limestone ledges and boulders, altitude 1300-2000m.

Stephania japonica (Thunb.) Miers, Ann. Nat. Hist. 3, 18 (1866) 14; --Merr., PJS 3 c (1908) Bot. 406; EPFP 2 (1923) 149; --Elmer, LPB 3 (1911) 1166; --Forman, Kew Bull. 11 (1956) 49; Fl. Males., ser. 1, 10 (1986) 249, Fig. 19j; --Merr., EPFP 2 (1923) 149.
Stephania forsteri (DC) A Gray, Bot. Wilkes US Explor. Exped. (1854) 36; --Elmer, LPB 3 (1911) 1167; --Merr., EPFP 2 (1923) 149.

Males., ser. 1, 10 (1986) 249, Fig. 19j; --Merr., EPFP 2 (1923) 149.

var. japonica

Sri Lanka, SW Deccan, E China, Korea, Japan, Taiwan, Tonga and Society Isls. In Malesia: Philippines, Lesser Sunda Isls (Timor), Moluccas (Seram).
BATANES, LUZON: Ilocos Norte, Pampanga, Rizal, Laguna, Batangas, MINDORO, PALAWAN, MARINDUQUE, NEGROS, CAMIGUIN, MINDANAO. Low and medium altitude thickets and forests.

Stephania psilophylla (C Presl) Forman, Kew Bull. 11 (1956) 63; Fl. Males., ser. 1, 10 (1986) 251; --Cissampelos psilophylla C Presl, Rel. Haenk. 2 (1835) 80.
Stephania japonica (*non* Thunb.) Merr. (1923) 149, *pro parte*.
Stephania catosepala (*non* Diels) Merr. (1923) 149, *pro parte*.
LUZON: **specific localities**. Primary forests and forest edges, altitude 100-1300m.

Stephania venosa (Blume) Sprengel, Syst. Veg. 4 (1827) 316; --Forman, Kew Bull. 11 (1956) 58; *ibid.* 22 (1968) 352; Fl. Males., ser. 1, 10 (1986) 248, Fig. 19j; --Clypea venosa Blume, Bijdr. (1825) 27. --Type from Java.
Andaman Isls, Thailand, Vietnam, SW China (Yunnan), N Sumatra, N Malaya (incl. Langkawi Isls), Java, Borneo (Sabah: Mt Kinabalu), Philippines, SW Sulawesi.

Doubtful occurrence in the Philippines:

Stephania montana Diels, Bot. Jahrb. 52 (1915) 189; --Forman, Kew Bull. 11 (1956) 69; Fl. Males. ser. 1, 10 (1986) 250.

?Philippines, E New Guinea.

LUZON (based on BS 23820, in fruit).

Tinomiscium Miers

Tinomiscium petiolare Hook.f. & Thoms., Fl. Ind. (1855) 205; --Forman, Kew Bull. 40 (1985) 542; Fl. Males., ser. 1, 10 (1986) 205, Fig. 8.

Tinomiscium molle Diels, PJS 8 c (1913) Bot. 157; --Merr., EPFP 2 (1923) 146. --Type: BS 11359 McGregor (US*, iso). Luzon: Nueva Vizcaya prov., vicinity of Dupax, male flowers, Mar-Apr 1912.

Tinomiscium philippinense Diels in Engl., Pflanzenreich 46 (1910) 116; --Merr., EPFP 2 (1923) 146. --Type: Elmer 9090.

India, Nicobar Isls, Myanmar, Thailand, SW China (Yunnan), Vietnam, Sumatra, Peninsular Malaysia, W Java, Natuna Isls, Borneo, Philippines, New Guinea.

LUZON: Nueva Vizcaya, Pangasinan, Laguna, Quezon, BILIRAN, MINDANAO: Lanao del Sur, Davao. Low and médium altitude forests.

Tinospora Miers

Tinospora crispa (L.) Hook.f. & Thoms., Fl. Ind. 1 (1855) 183; --Forman, Kew Bull. 36 (1981) 394, Fig. 3A-C; Fl. Males., s. 1, 10 (1986) 205, Fig. 8. *Tinospora rumphii* Boerl., Cat. Hort. Bogor (1901) 116, *nom. illeg.*; --Merr., EPFP 2 (1923) 146.

Bangladesh, Assam, Myanmar, Cambodia, SW China (Yunnan), Peninsular Malaysia, Singapore, W Java, Christmas Is, (possibly introduced by immigrants in the past), Lesser Sunda Isls (Sumbawa), Philippines.

LUZON, MINDORO, CULION, BASILAN, MINDANAO. Usually found in thickets near human settlements, probably in most islands and provinces on account of being commonly planted for medicinal purposes. Also reported in primary forest in Mindanao and in dry forest in Mindoro Oriental prov. (Mt Yagaw, altitude 1000m). According to Forman (1986) female flowers and fruits are as yet unknown from Malesia. Merrill (1923) hints at the possibility of this species as being an introduced plant in the Philippines.

Tinospora glabra (Burm.f.) Merr., J. Arn. Arb. 19 (1938) 340; --Forman, Kew Bull. 36 (1981) 414, Fig. 5J-M; Fl. Males., ser. 1, 10 (1986) 199, Fig. 4f-l, 6j-m.

Tinospora reticulata Miers, Ann. Nat. Hist. 3, 13 (1864) 322; --Merr., Fl. Manila (1912) 204; EPFP 2 (1923) 146.

S Andamans and Hainan to the Solomon Isls. Widespread across Malesia.

Throughout the Philippines from BATANES to MINDANAO. Lowland dry thickets, shrubberies and re-growth forests.

Tinospora merrilliana Diels in Engl. Pflanzenreich 46 (1910) 137; --Merr., EPFP 2 (1923) 146; --Forman, Kew Bull. 36 (1981) 389, Fig. 11l-k; Fl. Males., ser. 1, 10 (1986) 191. --Type: Clemens 525.

Tinospora negrotica Diels in Engl., Pflanzenreich 46 (1910) 137; --Merr., EPFP 2 (1923) 146. --Type: Elmer 9468 (US*, iso). Negros: Negros Oriental prov., Cuernos Mtms. Mar 1908.

Tinospora hastata Elmer, LPB 10 (1939) 3760, not validly published, no Latin diagnosis. --Type: Elmer 16960 (NY*, iso). Luzon: Sorsogon prov., Mt Bulusan, Irosin, Aug 1916.

Borneo, Philippines, NE Sulawesi (Minahassa).

LUZON: Sorsogon, CATANDUANES, PALAWAN, PANAY, NEGROS: Negros Oriental (Cuernos Mtms), MINDANAO: Misamis Occidental, Lanao del Sur, Bukidnon, Davao.

Medium altitude thickets and forests, ascending to 1800m; in Luzon and Palawan on limestone.