

Family 236-B. MAESACEAE

Maesa Forsskål

Revision:

Utteridge, TMA & RMK Saunders. 2004. *The genus Maesa (Maesaceae) in the Philippines*. Botanical Journal of the Linnean Society 145: 17–43.

Maesa cumingii Mez in Engl., Pflanzenreich 9 (1902) 49; --Merr., EPFP 3 (1923) 253; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 20. --Type: Cuming 1474 (K, lecto; iso BM, K, W). Luzon: Camarines Sur prov., 1836–1839.

Maesa pachyphylla Merr., PJS 7 c (1912) 328; EPFP 3 (1923) 255. --Type: BS 11030 Ramos (PNH, holo; lost; ecto: BM; isolecto: A (fragment)). Cebu: [Hills behind the City of Cebu *fide* Merrill, 1912: 328], March 1912.

Maesa undulata Merr., PJS 20 (1922) 422; EPFP 3 (1923) 255. Type: BS 26872 Edaño (PNH, holo, lost; lecto: K). Luzon: Quezon Prov., near Pagbilao, March 1917.

Endemic to the Philippines, but widespread throughout the archipelago. Along clearings and streams, secondary growth; 50–900m. Flowering between October and May; fruiting throughout the year.

IUCN conservation status: NT.

Maesa davaensis Quisumb., PJS 41 (1930) 341, t. 14; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 22. --Type: BS 49123 Ramos & Edaño (PNH, holo, lost; lecto: UC; iso: A, NY, P).

Mindanao:

Davao Oriental prov., Mati, Davau Streams, 9 April 1927.

MINDANAO: Davao Oriental. Low altitude forests. Flowering and fruiting in April.

IUCN conservation status: CR B1a+b(iii). This species is only known from a single locality, from a single collection made in 1927.

Maesa denticulata Mez in Engl., Pflanzenreich 9 (1902) 48; --Merr., EPFP 3 (1953) 253; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 23. --Type: Warburg 15025. Sulu Archipelago, 1888, (E, lecto, iso: B, lost *fide* Hiepko, 1978: 392). Luzon: Bataan prov., (Mt Mariveles), Rizal prov. (Montalban); Jolo; Mariveles [?Marivales], Mt Alban' (*fide* Mez, 1902: 49); Warburg 13528, 13529 (lectoparatypes: both B, lost *fide* Hiepko, 1978: 392).

Maesa vulcanica Elmer *in* Merr., EPFP 3 (1923) 253 (1923), *nom. nud.* --Voucher: Elmer 14966 (GH, L, PNH, UC). Luzon: Sorsogon prov., Irosin (Mt Bulusan), Nov. 1915,

Borneo (Sabah), Sulawesi and the Philippines: BATAN and N LUZON to PALAWAN and MINDANAO. Forest edges, disturbed forests, secondary forests, lowland, submontane and mossy forests; 100–1550m. Flowering between December and August; fruiting throughout the year.

IUCN conservation status: LC.

Maesa ferruginea Merr., PJS 7 c (1912) 327; EPFP 3 (1923) 254; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 24. --Type: BS 7109 Ramos (holo: PNH, lost; lecto: NY, designated by Utteridge & Saunders). Luzon: Abra prov., Mt Paraga, 7 Feb. 1909,

LUZON (Abra). In forest, c. 3000m. Only known from two collections. Flowering in Feb. and May; fruiting in May.

IUCN conservation status: EN B1a+b(iii). *Maesa ferruginea* is only known from Abra Province (c. 4000km²). The narrow distribution range of the species, combined with the forest habitat degradation in the Philippines, suggests that *M. ferruginea* faces a very high risk of extinction in the wild.

Maesa gaudichaudii A. DC, Ann. Sci. Nat. Bot. Sér. II, 16: 80 (1841); --Merr., EPFP 3 (1923) 254; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 25. --Type: Gaudichaud s.n. (holo: G- DEL). Luzon: Manila, Dec. 1836,

Maesa piscatorum Mez, Repert. Spec. Nov. Regni Veg. 16: 309 (1920). --Type: BS 19 Foxworthy (holo: PNH, lost; lecto: K, designated by Utteridge & Saunders; isolecto: BO, GH, NSW, NY, PNH, lost); Luzon: Rizal prov., Jan. 1906; BS 955 Ramos (lectoparatype: NY, PNH, lost). Luzon: Rizal prov., Boso-boso, without date.

LUZON, MINDORO, MINDANAO, NEGROS and PALAWAN. Forest edges, secondary growth; 100–300m. Flowering and fruiting throughout the year.

IUCN conservation status: NT.

Maesa haenkeana Mez in Engl., Pflanzenreich 9 (IV, 236): (1902) 32; --Merr., EPFP 3 (1923) 254; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 26. --Type: Haenke 471 (PR, lecto, designated

by Utteridge & Saunders; isolecto: NY). Luzon: Sorsogon prov., 1792.

Maesa longipetiolata Merr., PJS 11 c (1916) 28; EPFP 3 (1923) 254. --Type: BS 23358 Ramos (PNH, holo, lost; Lecto: L, designated by Utteridge & Saunders; isolecto: A, BO, K, NY, P). Luzon: Sorsogon prov., Mt Pacdal, 5 Aug. 1915.

Maesa brunnea Merr., PJS 13 c (1918) Bot. 321; Merr., EPFP 3 (1923) 253. --Type: BS 30500 Ramos (PNH, holo, lost; Lecto: K, designated by Utteridge & Saunders; isolecto: A, P). Catanduanes: Mt Mariguidon, 14 Nov.-11 Dec. 1917.

Maesa cuprifolia Elmer in Merr., EPFP 3 (1923) 254, *nom. nud.*, --Voucher: Elmer 16521 (A, K, L, PNH, US). Luzon: Sorsogon prov., Irosin (Mt Bulusan), July 1916.

Maesa platyphylla var. *minor* Elmer in Merr., EPFP 3 (1923) 254, *nom. nud.* --Voucher: Elmer 15558 (A, BO, GH, L). Luzon: Sorsogon prov., Irosin (Mt Bulusan), Nov. 1915.

Maesa irosinensis Elmer, LPB 10 (1939) 3765, not validly published, no Latin descr.; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 37. --Type: Elmer 15558 (PNH, holo, lost; Lecto: US, designated by Utteridge & Saunders; isolecto: A [x2], BO, C, GH, L, MO, NY [x2]). Luzon: Sorsogon prov., Mt Bulusan, Nov. 1915

LUZON: Quezon, Camarines, Albay, Sorsogon, CATANDUANES, SAMAR. Lowland forests; 150–760m. Flowering between March and July; fruiting throughout the year.

IUCN conservation status: NT.

Maesa indica (Roxb.) A. DC, Trans. Linn. Soc. 17 (1834) 133; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 29.

Maesa laxa Mez in Engler, Pflanzenreich 9 (IV, 236): 32 (1902); --Merr., EPFP 3 (1923) 254. --Type: Cuming 983 (Lecto: P, designated by Utteridge & Saunders; isolecto: BM, E, K [x2: Herb. Benth. & Herb. Hook.], LE, MO, W [x2]). Luzon: Pangasinan prov., 1836–39.

Maesa grossedentata Mez, Repert. Spec. Nov. Regni Veg. 16: 309 (1920); --Merr., EPFP 3 (1923) 255. --Type: BS 1769 Ramos (holo: PNH, lost; Lecto: NY, designated by Utteridge & Saunders). Luzon: Rizal prov., Jan. 1907.

Maesa ramosii Quisumb. & Merr., PJS 37 (1928) 186. --Type: BS 47272 Ramos & Edaña (holo: PNH, lost; Lecto: A, designated by Utteridge & Saunders; isolecto: K, NY). Luzon: Isabela prov., Mt Moises, 4 March 1926.

Widespread in SE Asia, occurring throughout the Philippines. Secondary forests, mossy forests, and upper pine forests; 100–2000 m. Flowering and fruiting throughout the year.

IUCN conservation status: LC.

Maesa manillensis Mez in Engl., Pflanzenreich 9 (IV, 236) (1902) 34; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 31. --Type: Calléry 2 (P, holo). Luzon: Mountain Province (?), Mt Igorrotes, May 1840.

N LUZON: Ilocos Norte, Mountain Province. Forests; 150–1500m. Flowering specimens only known from February, March and November; fruiting specimens only known from August, October and November.

IUCN conservation status: NT.

Maesa megalobotrya Merr., PJS 20 (1922) 422; Merr., EPFP 3 (1923) 255. --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 32. --Type: Merrill 9176 (PNH, holo, lost; lecto: L, designated by Utteridge & Saunders; isolecto: BO, K, NSW, NY, P). Palawan: Taytay, April 1913.

PALAWAN. Closed broad-leaved forests over ultrabasic rock; 490–590m. Flowering

specimens only known from April; fruiting specimens only known from April and May.
IUCN conservation status: VU B1ab(iii). This species has only been collected twice.

Maesa megaphylla Merr., PJS 12 c (1917) Bot. 158; Merr., EPFP 3 (1923) 255; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 33. --Type: Wenzel 1510 (PNH, holo, lost; lecto: A [x2], designated by Utteridge & Saunders; isolecto: BM, GH [x2], NSW, PNH). Leyte: Tigbao near Tacloban, 3 Aug. 1915.

BOHOL, LEYTE and MINDANAO. Dry forests; sea level to 600m. Flowering specimens only known from June and August; fruiting specimens only known from February, April, August and October.

IUCN conservation status: VU B1ab(iii). This species is only known from seven collections, the last of which was made in 1923. It is endemic to BOHOL, LEYTE and the N area of MINDANAO (collectively c. 13 000 km²).

Maesa platyphylla Elmer, LPB 2 (1910) 667; --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 34. --Type: Elmer 10570 (PNH, holo, lost; lecto: NY, designated by Utteridge & Saunders; isolecto: E, GH [x2], K, L, LE, MO). Mindanao: Davao, Mt Apo, Todaya, May 1909,

MINDANAO: Davao (Mt Apo). Primary forests; 910–1200m. Only known from two collections. Fl. May; fr. May, July and August.

IUCN conservation status: NT. This species is only known from two localities (approximately 150km apart) in southern MINDANAO. One of these localities is Mt Apo, which was designated a National Park in 1936; the other locality was discovered relatively recently, in 1972. Utteridge & Saunders recommend a rating of Near Threatened until more collections are made in the area.

Maesa reflexa Utteridge & RMK. Saunders, Kew Bull. 55 (2000) 981, Fig. 1; Bot. J. Linn. Soc. 145 (2004) 34, Fig. 4. --Type: BS 38973 Ramos & Edaño (A, holo; iso K). Mindanao: Bukidnon prov., Mt

Dumalucpihan, June-July 1920 (fr.).

MINDANAO: Bukidnon. Habitat information not available but presumably from montane forests; c. 2350m. Flowering specimens only known from June and July; fruiting specimens only known from April, June and July.

IUCN conservation status: VU B1ab(iii). *Maesa reflexa* is known from only two localities (three collections made in 1920 and 1949) from Bukidnon province (c. 9000 km²). The lack of collections from other areas on MINDANAO (especially Mt Apo, which has been relatively well collected) implies that this species has a very restricted distribution in specific mountain ranges.

Maesa stonei Utteridge & RMK Saunders, Bot. J. Linn. Soc. 145 (2004) 37, Fig. 5. --Type: PNH 109009 Gutierrez, Yen & Reynoso (PNH, holo; iso: BISH). Mindanao: South Cotabato prov., Tasaday forest, 6°18'N, 124°33'E, July-Aug. 1972.

MINDANAO: South Cotabato. Dipterocarp forests, c. 1220m. Flowering and fruiting between July and August.

IUCN conservation status: DD. *Maesa stonei* is only known from a single locality, in an area which has not been extensively collected; the species is furthermore only known from one collection (dating from 1972).

These species are unaccounted for in Utteridge & Saunders' revision.

Maesa tenera Mez in Engl. Pflanzenreich 9 (1902) 28; --S. Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 43.

S Japan, Ryukyus, Taiwan, S China to Indochina, Philippines: BATAN (Mt Iraya). In thickets on the ridge of Mt Iraya, alt. 400m. Locally rare. *Hatusima* 29109.

Maesa elmeri Mez, PJS 1 (1906) Suppl. 271; --Merr., EPFP 3 (1923) 253. --Type: Elmer 5925 (US*, iso). Luzon: Benguet prov., Baguio. March 1904.
LUZON: Mountain Province, Benguet. Thickets, altitude 1000-2200m.

DOUBTFUL AND EXCLUDED NAMES

Maesa lobuligera Mez, Repert. Spec. Nov. Regni Veg. 16: 310 (1920); Merr., PJS 20 (1922) 421. -- Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 39. --Type: Palawan: without date, BS 727 Foxworthy (holo: PNH, lost); Philippines; Mindanao: Lanao del Sur prov., Camp Keithley, Lake Lanao, Clemens A (paratype: PNH, lost).

No duplicates of the type specimens have been traced, although there are three sheets of *M. gaudichaudii* that were collected by MS Clemens from Camp Keithley, Lake Lanao: two of them lack any collection number (BO, M), and the third is numbered 770 (US). As there is no indication of the 'A' (as cited in the protologue) nor any annotation by Mez, these sheets cannot be regarded as 'original material' (*sensu* Greuter *et al.*, 2000: art. 9, note 2).

An understanding of Mez's (1920) delimitation of *M. lobuligera* can consequently only be achieved by reference to the description. Mez states that *M. lobuligera* is 'moderately close to *M. piscatorum* [= *M. gaudichaudii*] and *M. cumingiana* [= *M. cumingii*']; these species, together with *M. megalobotrya*, are scrambling species with a hairy indument throughout. Although this is congruent with the somewhat ambiguous protologue of *M. lobuligera*, the name cannot be unequivocally associated with any particular species without examining original material. Merrill (1922) regarded the name *M. lobuligera* as a synonym of the name *M. megaphylla*; this is clearly erroneous, however, as *M. megaphylla* entirely lacks hairs, whereas Mez (1920) describes *M. lobuligera* as possessing a hairy indument.

Maesa membranacea A DC, Ann. Sci. Nat. Bot. Sér. II, 16: 80 (1841). --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 39. --Type from Vietnam, 1836-1837, *Gaudichaud*, number not cited (syntypes: G-DEL [x2]).

In the protologue, de Candolle (1841: 80) stated that one of the collections by Gaudichaud was from the Philippines; a loan of the types of *M. membranacea* from G-DEL, however, revealed that both sheets were collected from Cochinchina (Vietnam). Subsequent authors (e.g. Merrill, 1923: 253) erroneously interpreted the later citation of *Cuming 1474* by de Candolle (1844: 78) as a type of the name *M. membranacea*; this collection was not cited in the protologue, however, and is not a type.

Maesa membranacea is a scrambling species with distinct serrate leaf margins, found in Indochina and Hainan.

Maesa philippinensis Gaudich., Bull. Soc. Bot. France 60: 24 (1913). --Utteridge & Saunders, Bot. J. Linn. Soc. 145 (2004) 39. --Type from Peninsular Malaysia. Malacca, 1839-1840, *Cuming 2286* (iso: L). [= *M. ramentacea* (Roxb.) A.DC.]

Although the specific epithet implies that the species occurs in the Philippines, the type of the name is from Malacca, Peninsular Malaysia. The specimen was one of several incorrectly labelled when Cuming was distributing his specimens (see Merrill, 1915: 192; van Steenis-Kruseman, 1950: 121).