

Maesa Forssk.

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Maesa Forssk.

- Forsskål, P. (1775), Flora Aegyptiaco-Arabica : 66

Betsy R. Jackes

Scandent shrubs or small trees, with schizogenous canals, lenticellate. Leaves simple, alternate, exstipulate, petiole bundles all annular; lamina elliptic to ovate to obovate, margin entire or irregularly toothed; glandular lineate. Inflorescence racemose or paniculate, axillary or rarely terminal, bracteate. Flowers regular, 5-merous (in Australian species), unisexual or bisexual, subtended by a bract and two bracteoles; calyx adnate to ovary, lobes variously united; corolla campanulate to urceolate, fused at least at base, glandular lineate; stamens antepetalous, adnate to corolla tube, anthers dorsifixed, introrse opening by longitudinal slits, often notched at apex; ovary perigynous, unilocular, placentation free central, ovules numerous, immersed in placenta, 1—several rows; style short; stigma obtuse to discoid to slightly notched. Fruit dry to thinly fleshy, mesocarp somewhat woody, indehiscent, calyx persistent. Seeds numerous, angular, dark brown to black; embryo oblique and transverse, endosperm present.

Distribution: About 150 species found throughout the tropics and subtropical regions except for the Americas. In Australia there are 2 species occurring in northern Queensland, the endemic scrambler *Maesa dependens* and a tree *M. haplobotrys*.



Etymology: From an Arabic name maass which was the local name for Maesa lanceolata.

Uses: Some species have traditional medicinal uses.

Nomenclature and Typification: **Maesa Forssk.**, Flora Aegyptiaco–Arabica 66 (1775). Type: Maesa lanceolata Forssk.

Baeobotrys J.R.Forst. & G.Forst., Characteres Generum Plantarum Edn 1: 21, t. 11(1775)

Taxonomic Notes: Maesa was placed in the Myrsinaceae by most workers until 2000, when Anderberg *et al.* (2000) established that the genus was distinct from the Myrsinaceae based on molecular sequence data and morphological evidence (on the well-developed and conspicuous schizogenous canals present in leaves, sepals and petals, the bracteate flowers and perigynous ovary). They placed it in its own monotypic family Maesaceae. In 2009, APG III (APG 2009) recognised *Maesa* in the subfamily Maesoideae in the Primulaceae.

Maesa is a large and taxonomically difficult genus. Numerous species have been described, many incompletely. The glandular streaks present in the leaves are often difficult to see as translucent when fresh. Floral measurements such as pedicel length are variable as they depend on the stage of development. Individual racemes may continue to grow and flower over a period of several months.

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Cooper, W. & Cooper, W.T. (2004). *Fruits of the Australian Tropical Rainforest.* (Nokomis Editions: Melbourne). Mez, C. (1902). Myrsinaceae, in A. Engler, *Das Pflanzenreich* 9(IV 236).

Sleumer, H. (1987). A revision of the genus *Maesa*, Forssk., (Myrsinaceae) in New Guinea, the Moluccas, and the Solomon Islands. *Blumea* 32(1): 39–65.

Ståhl, A. & Anderberg, A.A. (2004). Mysinaceae, in Kubitzki, K. (ed.), *The Families and Genera of Vascular Plants* 6: 266–281. (Springer: Berlin).

Source: Published 25 March 2021.

Nomenclature

CHAH (2007), Australian Plant Census

taxonomic synonym: Baeobotrys J.R.Forst. & G.Forst.

Images



Fig. 1: 'Maesa dependens var. dependens' by Wilson, G.W. (© Wilson, G.W.)



Fig. 2: 'Maesa dependens var. pubescens' by Unknown (© Australian National Botanic Gardens)



Fig. 3: 'Maesa dependens var. pubescens' by Unknown (© Australian National Botanic Gardens)



Fig. 4: 'Maesa dependens var. dependens' by Jago, B. (© Jago, B.)



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Fig. 6: Maesa haplobotrys' by Unknown (© Centre for National Biodiversity Research)



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Fig. 12: 'Maesa dependens var. pubescens' by Unknown (© Australian National Botanic Gardens)



Fig. 13: 'Maesa haplobotrys' by Unknown (© Australian National Botanic Gardens)



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Fig. 17: 'Maesa haplobotrys' by Unknown (© Centre for National Biodiversity Research)



Fig. 14: 'Maesa dependens var. pubescens' by Jago, B. (© Australian National Botanic Gardens)



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Fig. 20: 'Maesa dependens var. pubescens' by Unknown (© Centre for National Biodiversity Research)

Acknowledgements

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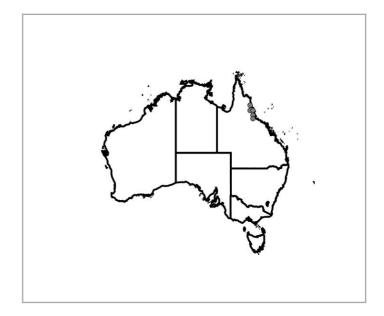
Maesa dependens F.Muell.

- Mueller, F.J.H. von (1866), Fragmenta Phytographiae Australiae 5(36): 107

Betsy R. Jackes

Scrambling shrub usually 1–2 m high, lenticels prominent; plants dioecious or gynodioecious. Leaves: petiole 2–20 mm long; lamina broadly ovate to obovate, 6.5–14.6 cm long, 3.6–9.7 cm wide, somewhat fleshy, glabrous or variously pubescent, base cordate to rounded, margin usually irregularly toothed, apex rounded to acute, glands as pellucid streaks, small pellucid and red dots also present. Inflorescence: single or branched racemes 9–28 cm long. Flowers 5-merous, 2–3 mm long; pedicel 1–3 (–7) mm long; calyx lobes longer than tube; corolla white, lobes as long as or longer than tube, reflexed after anthesis, glands lineate pellucid; staminal filaments c. 0.5 mm long, anthers c. 0.5 mm long; pistil c. 1.5 mm long; ovary semi-inferior, stigma lobed in bisexual and functional female; ovules c. 15 in bisexual, c. 18 in functional female (Paluma populations). Fruit globose, 3–6 mm long, 2.5–5 mm wide, yellowish, sparsely pubescent.

Distribution: Occurs from the McIlwraith Range on Cape York S to the Mount Elliot area S of Townsville, Queensland.



Phenology: Flowers and fruits chiefly July-February.

Biostatus: Native.

Habitat: Grows on the margins of rainforest and associated disturbed areas; more common in montane areas than on the lowlands.

Representative Herbarium Specimens: Qld: Mount Cleveland, Bowling Green Bay National Park, S of Townsville, A.R. Bean 3692 (BRI); W of Ingham, near Wallaman Falls, S.T. Blake 18821 (BRI, CANB, K, MO); Westcott Rd, Topaz, W. Cooper 521 & W. Cooper (CNS); State Forest Reserve 194, Hugh Nelson Ra., B. Gray 2291 (CNS); Lankelly Creek on western falls of McIlwraith Ra., L.J. Webb & J.G. Tracey 9642 (BRI).

Nomenclature and Typification: **Maesa dependens F.Muell.**, Fragmenta Phytographiae Australiae 5(36): 107 (1866). Type: Rockingham Bay, Qld, *J. Dallachy s.n.;* holo: MEL 1612610.

Maesa dependens var. pubescens F.Muell., Additamenta, index. Fragmenta Phytographiae Australiae 5: 215 (1867) ?Maesa dependens var. pubescens Benth., Flora Australiensis 4: 273 (1868), nom. illeg., fide APC (CHAH 2007) Maesa muelleri Mez, in Engler, H.G.A., Myrsinaceae, Das Pflanzenreich 9(IV.236): 38 (1902). Type: "Tropisches Australien: Queensland, an der Rockingham-Bay (Dallachy; Herb. Kew, Petersb.)"

Notes: A highly variable species with respect to leaf size, presence or absence of hairs and degree of branching of the racemes. Although two taxa are often recognised (*viz.* var. *dependens* and var. *pubescens* F.Muell.) on the basis of hairs present or absent, it is difficult to determine if a specimen is completely glabrous. Thus, *Maesa dependens* should be regarded as a very variable taxon with respect to the degree of pubescence, ranging from plants which are densely pubescent to those which at maturity only have hairs present on the pedicels or calyx to those lacking any obvious hairs. Similar variation occurs with respect to sexuality. Within a population west of

Paluma, N Queensland (19°00′ S, 146°06′ E), in a rainforest–sclerophyll forest ecotone, there were plants with functionally bisexual flowers, plants appearing normal but pollen absent from the anthers to flowers with obviously aborted anthers. Although fruit set on all plants, more fruit set on functionally female plants.

Illustrations: W.E. Cooper & W.T. Cooper, Fruits of the Rain Forest 182–183, fig. 372 (1994). F.A. Zich et al., Maesa dependens, in Australian Tropical Rainforest Plants Edn 8 (2020): https://apps.lucidcentral.org/rainforest/text/entities/maesa_dependens.htm [accessed 16 March 2021]

Bibliography: Bailey, F.M. (1900). Myrsineae, *The Queensland Flora* 3: 947–959. (Published under authority of the Queensland Government; printed by H.J. Diddams: Brisbane).

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Source: Published 25 March 2021.

Nomenclature

CHAH (2007), Australian Plant Census

nomenclatural synonym: Maesa dependens F.Muell. var. dependens taxonomic synonym: Maesa dependens var. pubescens F.Muell.

taxonomic synonym: Maesa muelleri Mez

Images



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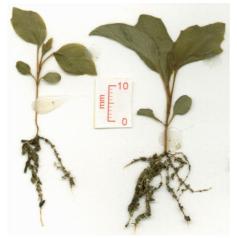


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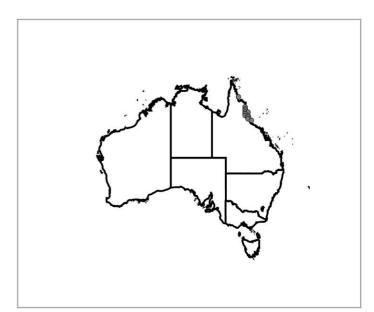
Maesa haplobotrys F.Muell.

- Mueller, F.J.H. von (1866), Fragmenta Phytographiae Australiae 5(38): 161

Betsy R. Jackes

Small tree or scrambler, lenticels prominent; plants dioecious. Leaves: petiole 9–12 mm long, papillose, scales present; lamina broadly lanceolate to elliptic to obovate, 6.2–19.5 cm long, 3–8.4 cm wide, glabrous, base cuneate, margin wavy to shallowly toothed, apex obtuse to acute, glands as pale streaks. Inflorescence: racemes usually unbranched, 2–8 cm long, usually papillose. Flowers 5-merous, 1.5–2 mm long; pedicel 1–2 mm long, papillae and peltate scales present on pedicels, bracts, bracteoles and hypanthium; corolla white to cream, lobes with long pellucid streaks, pellucid dots sparse; stamens in male flower c. 0.5 mm long, staminodes c. 0.3 mm long; pistil c. 0.8 mm long; ovary yellow to reddish, short style; stigma obscurely lobed; ovules numerous. Fruit globose, 2–2.5 cm long, 2–3 mm wide, green, orange to brown, glandular-dotted. Seeds numerous.

Distribution: Occurs from the McIlwraith Range, near Coen, S to the Palm Island group N of Townsville, Queensland. Also widespread in New Guinea and neighbouring islands.



Diagnostic Features: Distinguished from similar species by the presence of papillae and scales, particularly on the bracts, bracteoles and hypanthium.

Phenology: Flowers and fruits March–December.

Biostatus: Native.

Habitat: Grows in vine forests, gallery forests and in regrowth forests.

Representative Herbarium Specimens: Qld: Palm Island, T.L. Bancroft 92 (BRI); Cape Horn, H. Flecker 7633, (CNS, NSW); Mount Earl, Springvale Holding, B. Hyland 14029 (CNS); Mossman Beach, L.S. Smith 4645 (BRI); Garradunga, C.T. White 11732 (BRI).

Nomenclature and Typification: **Maesa haplobotrys F.Muell.**, Fragmenta Phytographiae Australiae 5(38):161 (1866). Type: Mackay River, Rockingham Bay, Qld, *J. Dallachy s.n.*; holo: MEL 1612599; iso: L, P, fide Sleumer *n.v.*, *Blumea* 32(1): 61 (1987).

Illustrations: F.A. Zich *et al.*, *Maesa haplobotrys*, in *Australian Tropical Rainforest Plants* Edn 8 (2020): https://apps.lucidcentral.org/rainforest/text/entities/maesa haplobotrys.htm [accessed 16 March 2021]

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