

**MYRISTICA LANCIFOLIA POIRET (MYRISTICACEAE)
NEW TO AUSTRALIA**

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SUMMARY

Material of a *Myristica* recently collected in the Northern Territory of Australia appeared to belong to *M. lancifolia* Poiret, a species known from the Moluccas, not previously recorded for Australia. It is described as a new subspecies, *M. lancifolia* Poiret subsp. *australiana* Jessup & de Wilde, and keyed out against the other subspecies of that species and against the other species occurring in Australia.

While revising Australian *Myristica* a number of recent collections, made from 1982 onwards in the Northern Territory and provisionally named *M. insipida* R. Br., appeared to be distinct and to belong to the East Malesian species *M. lancifolia* Poiret. This latter species was accepted by De Wilde (Blumea 35, 1990, 246) with two subspecies, subsp. *lancifolia* and subsp. *montana*, each with a different distributional area; see Figure 2.

The Australian material differs in a few characters from that of East Malesia, and can best be recognized as a third subspecies, subsp. *australiana*, as follows:

KEY TO THE SUBSPECIES OF MYRISTICA LANCIFOLIA

- 1a. Leaves elliptic-oblong to lanceolate. Male perianth narrow, 4–4.5 × 1.5–1.8 mm, pedicel 1–3.5 mm long. Fruit small, 1.3–1.6(–2) cm long, with persistent tomentum; fruiting pedicel 1–3 mm long. N Moluccas, NW and N New Guinea
subsp. *lancifolia*
- b. Leaves various, not lanceolate. Male flowers somewhat larger, mature perianth in bud (4–)4.5–6 × 1.8–2.5 mm, pedicel longer, 3–5(–7) mm long. Fruit 2.2–2.6(–3) cm long, fruiting pedicel (fruit stalk) 2–5 mm 2
- 2a. Papillation on lower leaf surface (lens!) distinct, regular, the papillae ± equal in size. Fruit ellipsoid-oblong, 2.2–2.6(–3) × 1–1.3 cm, pericarp with persistent minute tomentum. Moluccas, Tanimbar Islands subsp. *montana*
- b. Papillation irregular, faint, the papillae of unequal size. Fruit (broadly) ellipsoid, 2.2–2.5(–3) × 1.5–1.7 cm, largely glabrescent. Australia: Northern Territory
subsp. *australiana*

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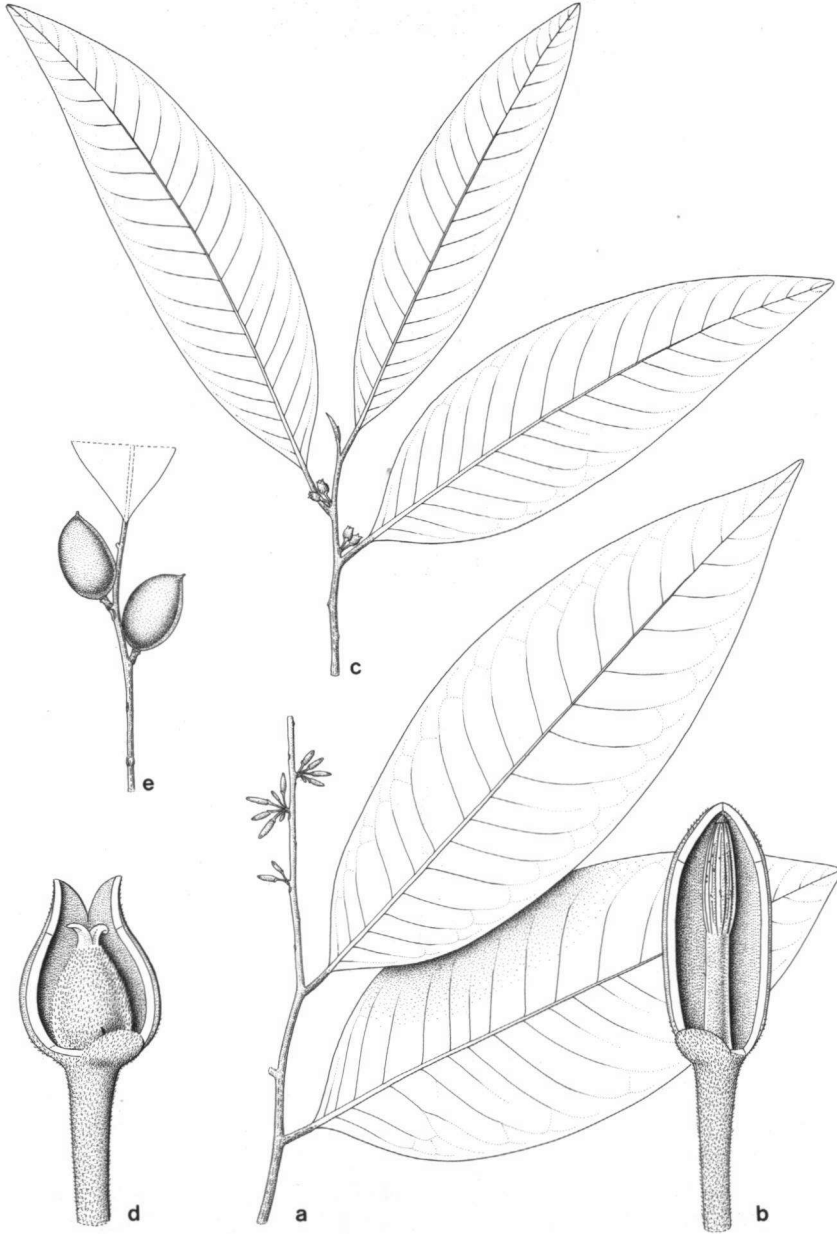


Fig. 1. *Myristica lancifolia* Poir. subsp. *australiana* Jessup & de Wilde. a. Leafy twig with male inflorescences, $\times 0.5$; b. male flower just before anthesis, perianth lengthwise opened to show androecium; note persistent bracteole, glabrescent perianth, and glabrous androphore, $\times 5$; c. female flowering twig, $\times 0.5$; d. female flower, lengthwise opened to show pistil, $\times 5$; e. portion of fruiting twig, note glabrous (glabrescent) fruit, $\times 0.5$ (a: from Russell-Smith (& Lucas) 2117; b: Leach (& Dunlop) 2589 (type); c, d: Lucas (& Wilson) 10; e: Wightman (& Dunlop) 948; (all in herb. DNA).

***Myristica lancifolia* Poir.**

Myristica lancifolia Poirlet in Lamarck, Encycl. Méth. Bot. Suppl. 4, 1 (= 12) (1816) 35; de Wilde, Blumea 35 (1990) 246. — Type: *Labillardière s.n.* (B, lost; iso FI, P), Pulau Waigeo.

subsp. ***australiana*** Jessup & de Wilde, *subsp. nov.* — Figs. 1, 2

Folia membranacea, ovato-elliptica usque oblongo-lanceolata, 7–21 cm longa, subtus vix papillosa; nervis lateralibus 13–20 paribus, venis tertiariis subtus indistinctis vel invisibilibus. Flores masculini: pedicelli 3–5 mm longi; perianthium in gemma submaturum 5–6 mm longum, 2–2,5 mm diam., tomento pilis 0,1 mm longis indutum, diutius glabrescens; anthera 6 vel 7. Fructus ellipsoideus, 2,2–2,5(–3) cm longus, 1,5–1,7 cm diam., initio minute tomentellus, demum glabrescens. — Typus: *Leach (& Dunlop)* 2589 (DNA).

Tree 6–15 m. Twigs towards the apex slender, (sub)terete, 1–2 mm diam., finely striate, brown or yellowish brown, early glabrescent from minute scattered hairs less than 0.1 mm, bark of twigs lower down with small scattered lenticels, not much contrasting, bark of old twigs striate, not flaking. *Leaves* in two rows; blades membranous or thinly chartaceous, ovate-elliptic to (elliptic-)oblong or oblong-lanceolate, broadest at or usually below the middle, 7–21 × 2–6(–8) cm, base cuneate, tip acute or acute-acuminate; upper surface dull olivaceous, lower surface pale grey-brown, glabrous (i.e., very early glabrescent from very minute scattered greyish appressed hairs less than 0.1 mm), papillae present but often ± irregular in size and rather obscure; midrib narrow, almost flat or raised above, nerves 13–16(–20) pairs, often with much fainter intersecondaries, and nerves then appearing rather closely set, at an angle of 50–70° with the midrib, nerves above faint, flat or sunken, only slightly raised beneath, tertiary venation and marginal arches faint or invisible; petiole 7–12 × 1–2 mm, dark brown, glabrous; terminal leaf bud slender, acute, 6–10 × 1–1.5 mm, appressed pale brown pubescent with hairs c. 0.1 mm. *Inflorescences* situated in between or shortly below the leaves, of the *Knema*-type, i.e. consisting of a single scar-covered tubercle-like brachyblast up to 5 mm long, glabrescent; in male terminally with a subumbel of (2–)5–10 flowers and flower buds, of different size according to age, bracts minute, caducous; female inflorescences as in male, (1- or) 2- or 3-flowered; flowers sparsely minutely pubescent, largely glabrescent with minute dense or sparse hairs c. 0.1 mm remaining towards the top of the perianth and on the pedicel; bracteole small, persistent, at the base of the perianth, minutely pubescent. *Male flowers*: pedicel slender, 3–5 mm long, 0.6(–0.8) mm thick, bracteole rounded, 0.5–1 mm long, mature perianth in bud oblong, 5–6 × 2–2.5 mm, top narrowly rounded, faintly 3-angular in transverse section, base rounded, lobes 3, (1–)1.5 mm long, at sutures c. 0.2 mm thick, splitting the perianth at anthesis for c. 1/4; androecium slender, cylindrical, c. 5–5.5(–6) × 1 mm, synandrium cylindrical, c. 2.5 × 1 mm, anthers 6 or 7, not closely contiguous, sterile apex blunt, glabrous, (0.1–)0.2–0.5 mm long, androphore cylindrical, glabrous, c. 2–3 × 1 mm. *Female flowers*: pedicel 3–4.5 × 0.8(–1) mm, i.e. nearly as long as the perianth, bracteole broadly rounded, 0.5(–1) mm long, perianth ovoid(-ellipsoid), narrowed towards the top, c. 4.5 × 3 mm, lobes c. 1.5 mm, out-curved at anthesis, splitting the perianth for c. 1/3, ovary c. 3 × 2 mm, densely minutely appressed pubescent with pale hairs less than 0.1 mm, stigma lobes c. 0.5 mm, out-curved. Fruit solitary or 2–4

together, (broadly) ellipsoid, base rounded, top narrowly rounded or acute, or 1–1.5 mm beaked by stigma remnant, 2.2–2.5(–3) × 1.5–1.7 cm, dry pericarp 1–2 mm thick, largely glabrescent from minute tomentum of rusty scurfy scales less than 0.1 mm, some tomentum with longer hairs up to 0.3 mm persisting at apex; fruit stalk (fruiting pedicel) rather slender, (2–)3–5 mm long; seed ellipsoid, 1.7–2 cm long.

Distribution – In a restricted area of Northern Australia: NW Northern Territory, incl. Melville Island; possibly Tanimbar Islands, see notes.

Collections – AUSTRALIA. Melville Is.: *Russell-Smith (& Lucas)* 2117, 2485, 5821; *Wightman* 193, *Wightman (& Dunlop)* 948. — Northern Territory: *Dunlop (& Leach)* 8347; *Leach (& Dunlop)* 2589; *Lucas (& Wilson)* 10; *Russell-Smith (& Lucas)* 5906; *Wightman (& Dunlop)* 305.

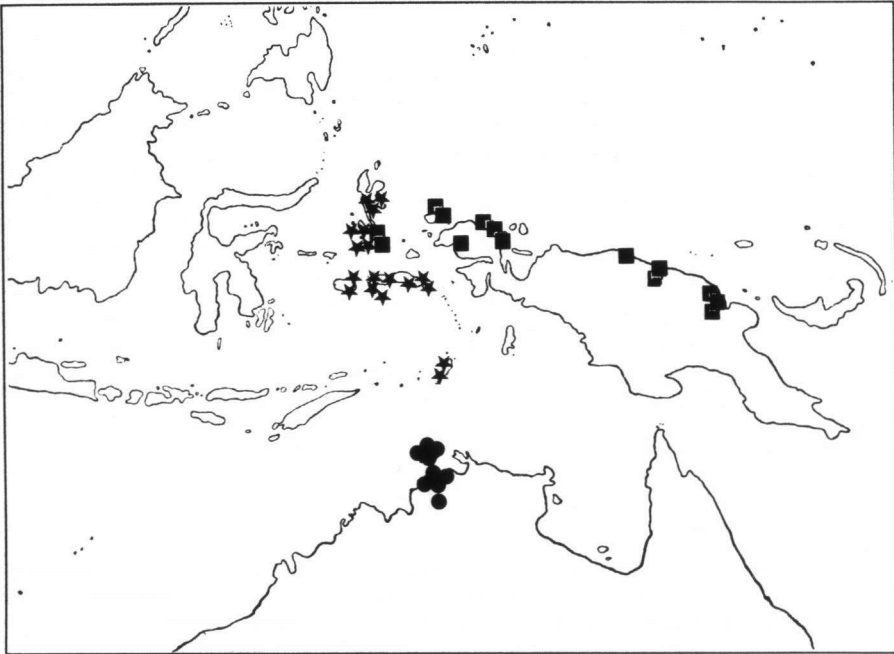


Fig. 2. Distribution of three subspecies of *Myristica lancifolia* Poiret: ■ = subsp. *lancifolia*, ★ = subsp. *montana* (Roxb.) de Wilde, ● = subsp. *australiana* Jessup & de Wilde.

Habitat & Ecology – Rain forest and jungle, along perennial springs and creeks, monsoon forest, riparian evergreen vine forest; at low altitudes; sandstone or silty soils, dark loamy soil, gravelly sandstone. Locally common. Flowers March–June; fruit June–Nov.

Notes – 1. Fieldnotes. Bark of trunk red-brown, brown, dark blackish-brown, rough or smooth, yet mottled or pustular, or finely fissured. Fruit globose, yellow; flowers common on low branches hanging beneath foliage, cream.

2. Differs from the type subspecies and from subsp. *montana* by largely glabrescent fruit and some other minor characters, as stated in the key to the subspecies.

3. Specimens of this subspecies of *M. lancifolia*, new for Australia, have been collected only recently, from 1982 onwards.

4. Specimens from the Tanimbar Islands, in flower, may belong to the present new subsp. *australiana*, rather than to subsp. *montana*, because they have a similarly rather indistinct, irregular papillation on the lower leaf surface, but a final decision can be made only when fruiting material from the Tanimbar Islands becomes available for study.

5. *Wightman* (& *Dunlop*) 305 somewhat deviates by larger fruit, c. 3×1.5 cm, with comparatively thick pericarp, c. 2 mm thick.

6. *Myristica lancifolia* subsp. *australiana* can be distinguished from the other species of *Myristica* in Australia by adding one lead before lead 1a of the key to the species as given by de Wilde (*Blumea* 36, 1991, 183) as follows:

- a. Perianth with sparse hairs 0.1 mm long or less, or usually largely glabrescent; pedicel about as long as the perianth, bracteole persistent; androphore glabrous. Fruit largely glabrescent, with minute tomentum, hairs 0.1 mm long or less; fruiting pedicel 3–5 mm long. Leaves membranous; reticulate tertiary venation on lower leaf surface faint or invisible. Northern Territory, incl. Melville Island
M. lancifolia* subsp. *australiana
- b. Perianth with persistent tomentum; (male) pedicel long or short, bracteole persistent or caducous, androphore glabrous or partly pubescent. Fruit with persistent tomentum, hairs 0.1–1 mm long; fruiting pedicel generally shorter. Leaves various 1a, b

ACKNOWLEDGEMENTS

We thank the curator of the Darwin herbarium (DNA) for providing herbarium material for study, Dr. H.O. Sleumer (Oegstgeest, The Netherlands) for rendering the diagnosis of the new subspecies into Latin, and J.H. van Os (L) for preparing the drawing.