

***Memecylon acuminatissimum*, a new record for Singapore**

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ABSTRACT. The tree species *Memecylon acuminatissimum* Blume is recorded as new to Singapore, with the only known locations being the Singapore Botanic Gardens' Rain Forest and Chestnut Nature Park.

Keywords. Chestnut Nature Park, Flora of Singapore, Melastomataceae, Singapore Botanic Gardens

Introduction

During a review of the genus *Memecylon* (Melastomataceae, subfamily Olisbeoideae) for the *Flora of Singapore: Checklist and bibliography* (Lindsay et al., 2022), a new record was noted from herbarium material collected from the 'Gardens' Jungle' of the Singapore Botanic Gardens, now known as the Gardens' Rain Forest, and from Chestnut Nature Park. The five specimens, now determined as *Memecylon acuminatissimum* Blume, most likely come from one or two trees in each location but which have not been relocated since the last collection in 2010. *Memecylon acuminatissimum* Blume was considered a synonym of *M. oleifolium* Blume by Maxwell (1980), but was later considered to be an accepted species by Hughes (2013a). The record of this species from Singapore for the first time highlights the importance of vouchering living collections and also the conservation value of small patches of primary forest within an urban matrix.

New species record for Singapore

Memecylon acuminatissimum Blume, Mus. Bot. Lugd.-Bat. 1: 360 (1851); Bakhuizen van den Brink, Meded. Bot. Mus. Herb. Rijks Univ. Utrecht 91: 350 (1943); Furtado, Gard. Bull. Singapore 20: 119 (1963). – TYPE: Sumatra, *Korthals s.n.* (lectotype L [L0009010], designated by Hughes (2013); isolectotypes K [K000859251, K000859252], L [L.2553741]).

Shrub or small slender tree to 5 m tall, more rarely to 10–12(–25) m high; bole to 30 cm diam. **Twigs** pale brown or brown, terete, internodes 3.5–10 cm apart. **Leaves:** petioles 6–10 mm long, 1.5–4 mm wide, blackish when dry; lamina somewhat coriaceous, drying brown or dark brown above, rusty brown below, lanceolate to

ovate-lanceolate, 8.5–27 × 3.5–11 cm, base decurrent to (more rarely) truncate in larger leaves, apex distinctly acuminate to slightly acuminate, acumen extending for 12–20 mm; midrib flat or slightly raised above, prominent below, drying darker than or concolorous with the lamina; venation visible to indistinct (rarely obscure) above, prominent to indistinct below, lateral veins c. 12 pairs; marginal vein visible or indistinct, running more-or-less parallel 1–3 mm from the margin or looping slightly between the main veins. **Inflorescences** on leafy branches, compound dichasia with 30–100 flowers, total length 5–8 cm, glabrous; primary peduncles 1 or 2, 17–32 mm long, secondary axes c. 5, 10–17 mm long, tertiary much reduced. **Flowers:** pedicel 2–4 mm long, slender, conspicuous bracteoles absent; calyx pink or grey-blue, 3–4 mm diam., initially globose and completely enclosing the petals, dehiscing somewhat irregularly, becoming truncate, ovary somewhat distinct; petals white or pale blue; anther connective blue, J-shaped, with a distinct gland; style caducous. **Fruits:** stalk 4–5 mm long; berry ellipsoid, 11–13 × 6–8 mm, green when immature, cream flushing violet when ripe, blackish when dry, slightly striate or smooth; calyx remnant raised; areolus 3–4 mm wide.

Distribution. Peninsular Malaysia, Singapore and Sumatra.

Provisional IUCN conservation assessment. Globally Least Concern (LC) (Hughes, 2013a; IUCN Standards and Petitions Committee, 2022). Assessed in Singapore as Critically Endangered (CR/D) although further work is needed to confirm the continued presence of the species in the Gardens' Rain Forest and Chestnut Nature Park.

Specimens examined. SINGAPORE: **Chestnut Nature Park:** Chestnut Avenue, 31 Mar 2010, *Gwee SING2010-688* (SING [SING0145709, SING0145753]). **Singapore Botanic Gardens:** Gardens' Jungle [Garden's Rain Forest], 1992, *Chua et al. D68* (SING [SING0009882]); *ibidem*, 1992, *Chua et al. D69* (SING [SING0009883]); *ibidem*, 1992, *Chua et al. E18* (SING [SING0009885]).

Notes. The collections from Singapore in 1992 by *Chua et al.* were previously misidentified as *Memecylon megacarpum* Furtado, a species now considered to be endemic to Borneo. Most material from the Malay Peninsula previously included in *Memecylon megacarpum* has now been assigned to *M. pseudomegacarpum* M. Hughes (Hughes, 2013b), a species distributed in Peninsular Thailand, Peninsular Malaysia and Singapore, but some material from Singapore has been found to belong to *M. acuminatissimum*. *Memecylon pseudomegacarpum* has a more elliptic leaf lamina with much more prominent venation above than in *Memecylon acuminatissimum*. When fruiting, the species are very simple to distinguish. The fruits of *Memecylon acuminatissimum* are ellipsoid and borne in loose clusters, instantly distinct from the larger, globose berries of *M. pseudomegacarpum* which are sessile and few in number.

References

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