

MALLOTUS KONGKANDAE (EUPHORBIACEAE), A NEW SPECIES FROM THAILAND

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SUMMARY

Mallotus kongkandae is a new species in section *Rottlera*. Typical are the ovate leaves, greenish glandular scales when dry, thick-walled fruits, and the seemingly caducous columella. The plant is endemic to northern Thailand.

Key words: Euphorbiaceae, *Mallotus kongkandae*, Thailand.

INTRODUCTION

Chayamarit et al. recently collected a specimen in one of the northern provinces of Thailand (Kamphaeng Phet Province). The plant is obviously a *Mallotus* Lour. (stellate hairs and glandular scales) of section *Rottlera* (Willd.) Airy Shaw (1968), because the leaves are alternate and the fruits are unarmed (Airy Shaw, 1972). Section *Rottlera* comprises several widespread species (*M. philippensis* (Lam.) Müll. Arg., *M. repandus* (Willd.) Müll. Arg.), but also several, often very locally endemic species (*M. leptostachyus* Hook. f., *M. montanus* (Müll. Arg.) Airy Shaw, *M. pallidus* (Airy Shaw) Airy Shaw). The new specimen is different in several characters. Typical are, when dry, the greenish (orange when fresh) glandular scales (red or whitish yellowish in the other species) and most of all, the larger, thicker walled fruits (2–3 mm thick) and the seemingly caducous fruit column. This character combination, together with the ovate leaves, merits the description of a new species, even though the staminate and pistillate flowers are (still) unknown. The new species, named after the collector, represents another, very locally endemic species in section *Rottlera*.

***Mallotus kongkandae* Welzen & Phattarahirankanok, *spec. nov.* — Fig. 1**

Arbor. Indumentum densum pilis stellatis simplicibusque et squamis glandulosis viridulis. Folia alternata sed distaliter aggregata ovata infra tomentosa trinervata. Infructescentiae terminales solitariae. Fructus subglobosus elobatus squamis glandulosis dense obtectus inermis, paries 2–3 mm crassus. — Typus: *K. Chayamarit et al. 1551* (holo L; iso AAU, BKF, K), Thailand, Northern District, Kamphaeng Phet Prov., Mae Wong National Park, Chong Yen, 12 July 1999, 1340 m.

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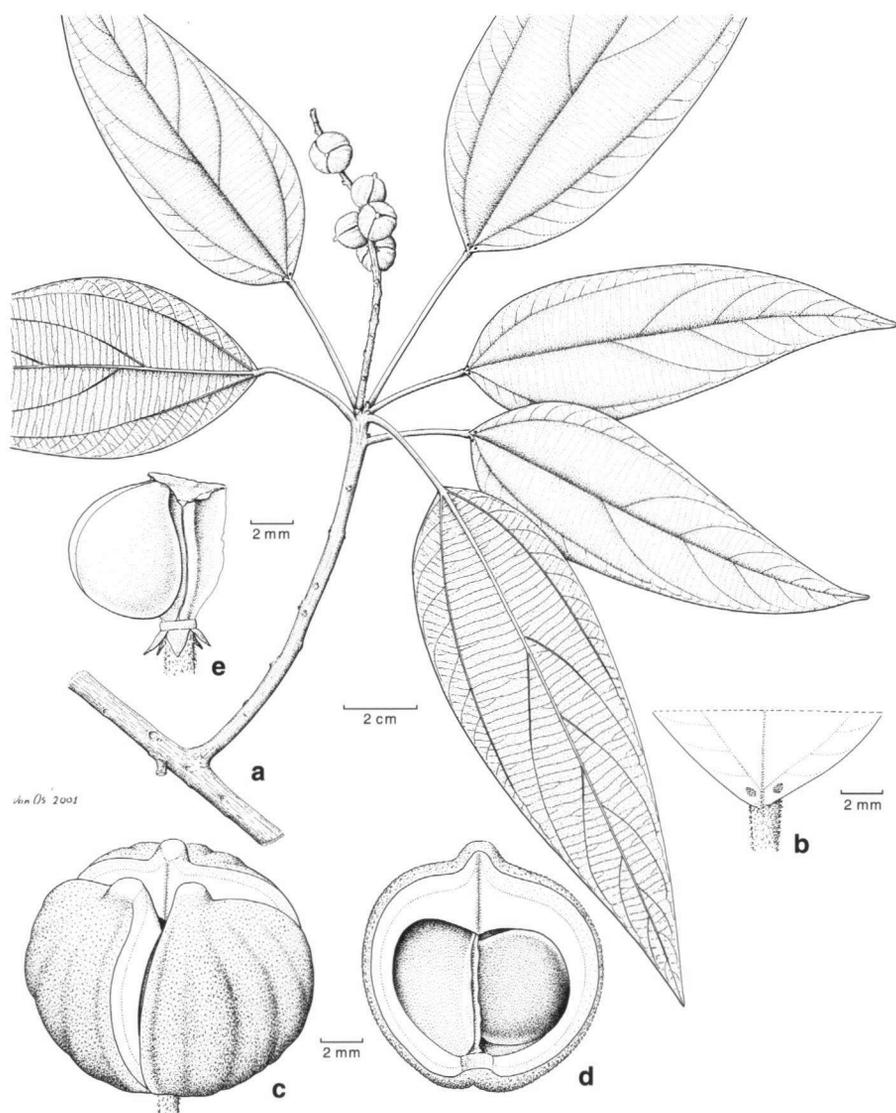


Fig. 1. *Mallotus kongkandae* Welzen & Phattarahirankanok. a. Habit; b. base of leaf with two glandular areas adaxially; c. fruit; d. section through fruit showing thick wall; e. columella with one attached seed (*K. Chayamarit et al.* 1551, L).

Tree, c. 8 m high; flowering twigs 2–3 mm thick, young parts tomentose. *Indumentum* tomentose on most parts when young, consisting of simple and stellate hairs and glandular scales. *Stipules* triangular, c. 1.5 by 0.6 mm, tomentose outside, glabrous inside. *Leaves* alternate with tendency to terminal groups on the branches, simple; petiole terete, 1.5–5 cm long, somewhat pulvinate at both ends, with longitudinal

ridges when dry, tomentose when young; blade ovate, 8–18 by 3.4–5.5 cm, length/width ratio 2.4–3.3, chartaceous, symmetric, drying greenish, base rounded, margin entire and seemingly glandless (only older leaves seen), apex gradually acute to acuminate, mucronulate, upper surface glabrous except for the basal part of the midrib, basally with 2, black, glandular areas near petiole attachment, c. 1 by 0.7 mm in size; lower surface tomentose, white, glandular scales many, domatia absent; venation penninerved, trinerved, slightly raised above, raised underneath, nerves 10–12 per side, marginally looped and closed, veins scalariform, veinlets densely reticulate. *Staminate inflorescences* and *flowers* unknown. *Infructescences* terminal, single, not branching, 3.5–8 cm long, tomentose; bracts and bracteoles triangular, tomentose outside, glabrous inside, bracts c. 1 by 0.8 mm, bracteoles c. 0.5 by 0.5 mm. *Pedicels* 2.5–3 mm long, terete, tomentose, subbasally with abscission zone. *Fruits* capsular, subglobose (slightly flattened dorsoventrally), not lobed, 12–14 by c. 11 mm, not armed, with dense covering of orange (green when dry) glandular scales, somewhat ribbed and pustular when dry, tardily dehiscent loculicidally, partly septically; wall thick, c. 2 mm in middle to 3 mm apically; column c. 6 mm long, apically broadened and T-shaped, caducous. *Seeds* ± ovoid but somewhat flattened and with central ridge on axillary side, c. 5 by 4.2 by 3.5 mm, single per locule, dark brown, naked.

Distribution — Endemic in Thailand, Northern Division, Kamphaeng Phet Province, Mae Wong National Park, Chong Yen. Only known from the type specimen.

Ecology — Fruiting in July. Altitude 1340 m.

Note — Named in honour of the main collector and initiator of the Thai Euphorbiaceae Project, Mrs. Dr. Kongkanda Chayamarit of the Forest Herbarium (BKF), Royal Forest Department, Bangkok.

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REFERENCES

- Airy Shaw, H.K. 1968. Notes on Malesian and other Asiatic Euphorbiaceae. *Kew Bull.* 21: 391, 392.
 Airy Shaw, H.K. 1972. The Euphorbiaceae of Siam. *Kew Bull.* 26: 292, 293, 299–301.