

## A NEW SPECIES OF HOYA (ASCLEPIADACEAE) FROM SOUTHERN THAILAND

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### SUMMARY

In addition to the knowledge of the genus *Hoya* in Thailand a new species from Peninsular Thailand is recorded. This new species, *Hoya balaensis*, is described and illustrated.

**Key words:** Asclepiadaceae, *Hoya*, Thailand, new species.

### INTRODUCTION

*Hoya* R.Br. is a genus of the Milkweed family, Asclepiadaceae. Hoyas are found in Asian and Australian regions. The genus consists of at least 100 species occurring from China, Southeast Asia to Oceania (Ping-tao et al., 1995). It is easily recognized from other climbing epiphytes with opposite leaves by having milky sap in all parts, rather thick and fleshy leaves, flowers in umbelliform, and a star-shaped corona. Presently, the genus *Hoya* is being studied for the Flora of Thailand Project; there are probably 40 species (Thaithong, 2001). A new species of *Hoya* is found in southern Thailand. After intensive studies of herbarium specimens deposited at AAU, BM, K, L, P and SING, we decided to describe a new species.

***Hoya balaensis*** Kidyoo & Thaithong, *spec. nov.* — Fig. 1

Species *H. verticillatae* (Vahl) G. Don var. *citrinae* (Ridl.) Veldk. similis, folia late ovata, margine anguste revoluta, 7.5–16.7 cm longa, 5.6–13.2 cm lata, basi 3–5 plinervia, nervis prominentiis. Corpusculum minus, anguste oblongum, 0.2–0.22 mm longum, 0.07–0.08 mm latum. — Typus: *M. Kidyoo 303* (holo BCU; iso L), Thailand, Narathiwat Province, Bala forest, evergreen forest, alt. 200 m, 21 July 2004.

A twining epiphyte. *Stem* rounded in cross section, slender, glabrous, reddish brown when old. *Leaves* broadly ovate, coriaceous, 7.5–16.7 by 5.6–13.2 cm, base subcordate to cordate, margins narrowly revolute, apex shortly acuminate, abaxial surface with scattered papillose, nerves 3–5, prominent, extending from base to apex, veins conspicuous; petiole 1.8–2.2 cm long, 0.4–0.6 cm diameter. *Inflorescence* 10–49 flowered, peduncle 2.5–4.3 cm long. *Pedicel* 1.7–2 cm long, glabrous. *Calyx* yellowish green, sepals ovate, 1.8–2 by 1.5–1.8 mm, apex acute, glands 5, alternating with sepals. *Corolla* creamy to yellowish white, 1.4–1.5 cm diam., inner surface papillose, outer surface glabrous; corolla tube, 2.8–3 mm long; corolla lobes ovate, 4.4–4.7 by

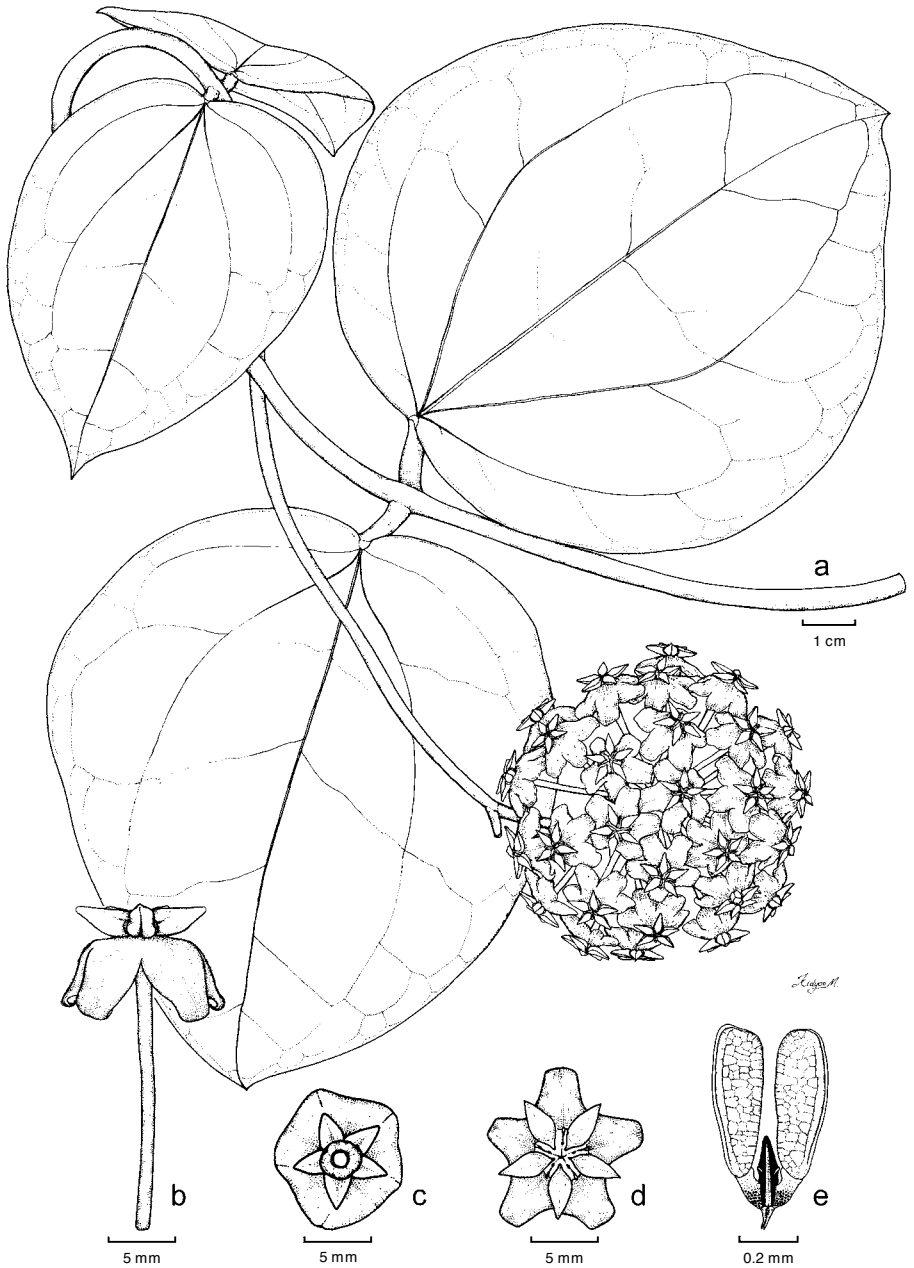


Fig. 1. *Hoya balaensis* Kidyoo & Thaihong. a. Branch; b–d. flower; e. pollinarium (all: *M. Kidyoo* 303). — Drawn by M. Kidyoo.

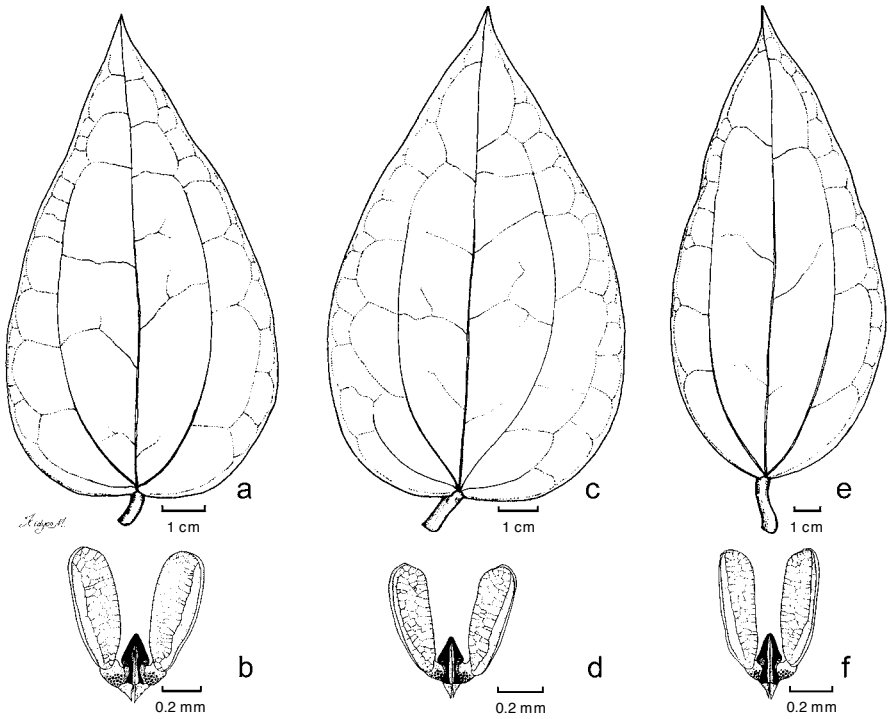


Fig. 2. Leaves (a, c, e) and pollinaria (b, d, f) of three syntype specimens of *Hoya verticillata* (Vahl) G. Don var. *citrina* (Ridl.) Veldk. (a, b: *Ridley s.n.*; c, d: *Kunstler 10316*; e, f: *Scortechini 1626*). — Drawn by M. Kidyoo.

4.8–5.2 mm, apex acute, reflexed when in full bloom; coronal scales ovate-lanceolate, 3.5–4 by 1.5–1.7 mm, the outer angle sharply acute and pinkish white, apiculus of the inner angle raised and pink. *Anther* appendages yellow, covering the stigma; pollinia obliquely oblong, 0.45–0.46 by 0.15–0.16 mm; translator short; corpusculum narrowly oblong, 0.2–0.22 by 0.07–0.08 mm. *Fruit* not seen.

*Distribution* — Peninsular Thailand (Narathiwat).

*Habitat & Ecology* — A long climbing epiphyte in moist evergreen forest, usually on trees along stream banks at about 200 m elevation.

*Note* — This plant is somewhat similar to *H. verticillata* (Vahl) G. Don var. *citrina* (Ridl.) Veldkamp (or *H. citrina* Ridl.), but differs in having broadly ovate leaves and narrowly oblong corpuscula (width/length ratio 1 : 3), while *H. verticillata* var. *citrina* has narrowly ovate (syntype: *Scortechini 1626*, K (Fig. 2e)) to ovate leaves (syntypes: *Ridley s.n.*, K, *Kunstler 10316*, K (Fig. 2a, c)) and ovate corpuscula (width/length ratio 1 : 2 in all 3 type specimens (Fig. 2b, d, f)). Furthermore, the PCR-RFLP study, the cpDNA variations supported the different haplotypes between *H. balaensis* and *H. verticillata* var. *citrina* (Kidyoo, 2005). Moreover, the floral fragrance of the new species smell like Bread Flower plant, *Vallaris glabra* Kuntze (Kidyoo, pers. obs.), whereas *H. verticillata* var. *citrina* produce a strong gardenia-like scent (Kiew, 1995).

Additional specimens examined:

*Hoya balaensis* Kidyoo & Thaithong; THAILAND: *Kai Larsen & Supee S. Larsen 32739* (AAU), Narathiwat, Sungei Kolok, Nikom Waeng, Feb. 1974.

*Hoya verticillata* (Vahl) G. Don var. *citrina* (Ridl.) Veldk.; MALAYSIA: *Scortechini 1626* (K), Batu Kurau, Dec. 1884; *Kunstler 10316* (K), Perak, June 1886; *Ridley s.n.* (K), Selangor, Batu Caves, Dec. 1920; *Rintz RER 111* (L), Selangor, Batu Caves, Sept. 1976.

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