

Heterostemma succosum (Apocynaceae), a new record for Laos

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ABSTRACT

Heterostemma succosum is reported as a new record for Laos. A description and an illustration are provided.

KEYWORDS: *Heterostemma*, Asclepiads.

Accepted for publication: 10 October 2019. Published online: 18 October 2019

INTRODUCTION

The genus *Heterostemma* Wight, with 30–40 species worldwide (Rodda, 2016), belongs to the family Apocynaceae. This genus is mainly distributed from Nepal, China, India, Sri Lanka, Bangladesh, Myanmar, Thailand, Laos, Vietnam, throughout the Malesian region, and Australia (Swarupananand *et al.*, 1989; Forster, 1992; Li *et al.*, 1995). Morphologically, they are terrestrial twining plants with milky latex, opposite leaves, axillary pseudo-umbelliform or raceme-like inflorescences, staminal corona with five lobes, with or without horned appendages, anther appendages, pentagonal stigma, pollinia with pellucid inner margins, single or paired follicles and winged seeds (Li *et al.*, 1995; Jagtap & Singh, 1999, Thaithong *et al.*, 2018).

We found a *Heterostemma* specimen in the QBG herbarium from Phongsali province, northern Laos. After a careful examination of the specimen and consultation of the relevant literature (Lehmann *et al.*, 2003; Callaghan, 2004; Newman *et al.*, 2007a & 2007b; Inthakoun & Delang, 2008; Middleton, 2014; Prosperi *et al.*, 2017; Park *et al.*, 2018; Tagane *et al.*, 2018), it was identified as *Heterostemma succosum* Kerr. This taxon is a new record for Laos.

DESCRIPTION

***Heterostemma succosum* Kerr**, Bull. Misc. Inform. Kew 1939: 458. 1939; Thaithong *et al.*, Handb.

Asclepiads Thailand 170. 2018. Type: Thailand, Chiang Mai, Ban Tam Ta-Kaw, Mae Lao-Mae Kok, 28 Aug. 1924, *Garrett 191* (lectotype **K** [K000894698!], designated by Rodda, 2016; isotypes **K** [K000894699!], **L** [L0004311!], **P** [P03899002!]). Fig. 1.

Climber, twining. *Stem* and branches puberulous; internodes 11–18 cm long; nodes rather thick. *Leaves*: blade rather fleshy, elliptic, 10–23 × 4.5–10 cm, apex acute, base rounded, margin entire, upper surface dark green, lustrous, lower surface whitish green; lateral veins 4–5 pairs, lateral veins and midrib prominent on lower surface; petiole 2.5–7 cm long. *Inflorescence* usually 1-flowered; peduncle 4–6 mm long; bract deciduous; pedicel 1.5–3 cm long, puberulous. *Calyx lobes* ovate, ca 2 × 1 mm, apex obtuse, yellowish green. *Corolla* yellowish orange, with reddish brown specks towards the center, glabrous on upper surface, puberulous on lower surface; expanded connate part 4–8 mm long; lobes ovate-triangular, 0.5–1 × 0.5–1 cm, apex acute. *Corona* 5–6 mm in diam., corona scale brownish red, subquadrangular or ovate, ca 2.2 × 2 mm; apical part thinner, apex truncate or rounded; middle part thicker with a short curved horn-like projection; basal part thick and raised up. *Staminal column* ca 1.5 mm in diam. *Follicles* subcylindric, 10–12.5 × 1.7–2.3 cm, pericarp ca 5 mm thick. *Seeds* flat, oblong-ovate, 1.5–1.8 × ca 1 cm; coma pale brown, ca 4.5 cm long.

Distribution.— Laos, Thailand.

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Specimens examined.— Laos: Phongsali province [by roadside between Phongsali city and Boun Nua district, 7 July 2018 (fl. & fr.), *Maknoi et al.* L13-306 (QBG!)].

Vernacular.— No vernacular name has been recorded.

Ecology and Phenology.— Evergreen forest, between 400 and 1,500 m altitude. Flowering from June to August.

Note.— *Heterostemma succosum* was originally described from northern Thailand in Chiang Mai Province by Kerr (1939) and formerly believed to be endemic to Thailand, being found only in Chiang Mai and Chiang Rai Provinces. It grows along riverbanks in evergreen forest at 400–1,200 m altitude (Thaithong *et al.*, 2018). In Laos, it is known only from Phongsali Province at 1,400–1,500 m altitude.

ACKNOWLEDGEMENTS

This work was supported by the Queen Sirikit Botanic Garden, Chiang Mai. The author would like to sincerely thank Dr Michele Rodda for species confirmation and Phetlasy Souladeth for some references. We also wish to thank Warintorn Khattiyot, Nattee Muangyen and our collaboration with the staff of Pha Tad Ke Botanic Garden for their help during the fieldtrip.

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Figure 1. *Heterostemma succosum* Kerr: A. habit; B. flower; C. leaf lower surfaces; D. bottom view of flowers; E. fruit. Photos by P. Panyadee.

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