



Two new species of *Ceropegia* (Apocynaceae, Asclepiadoideae) from eastern Thailand

MANIT KIDYOO

Department of Botany, Faculty of Science, Chulalongkorn University, Pathumwan, Bangkok 10330, Thailand.
E-mail: kidyoo_m@yahoo.co.th

Abstract

Two new species from Pha Taem National Park, eastern Thailand, *Ceropegia acicularis* Kidyoo and *C. tenuicaulis* Kidyoo (Apocynaceae, Asclepiadoideae), are described, illustrated and compared with the related *C. thailandica* Meve, from which they differ in growth form, stem branching pattern, type of flower, shape of corolla tube and lobe, and type of hair present on corolla lobe.

Key words: grass-like habit, single flower, open sandy area, Pha Taem National Park

Introduction

Ceropegia Linnaeus (1753: 211) (Apocynaceae; Asclepiadoideae), the largest genus in the tribe Ceropegieae, encompasses around 200 species of herbs characterized by flowers with a cage-like structure formed by the usually apically connivent corolla lobes. The genus is widely distributed from Southeast Asia, India, Madagascar, Tropical Arabia, Canary Islands, Africa, New Guinea to Northern Australia (Hooker 1883, Huber 1957, Ansari 1984, Li *et al.* 1995, Meve 2002). Although various regional treatments of *Ceropegia* have been published and about 6 species have been reported from Thailand (Kerr 1951, Boonjaras & Thaithong 2003, Meve 2009), there is no comprehensive revision of the whole genus. For this reason, a revision of *Ceropegia* in Thailand is currently underway. In the course of this revision, two new species, *C. acicularis* Kidyoo and *C. tenuicaulis* Kidyoo, were discovered in Pha Taem National Park, Ubon Ratchathani Province. The vegetative and reproductive morphological characters of these species and the similar *C. thailandica* Meve (2009: 23) are compared and discussed. A key to the species is provided.

Taxonomic Treatment

Ceropegia acicularis Kidyoo, sp. nov. (Fig.1)

Ceropegia acicularis is distinguished from *C. thailandica* by its branched stem, small solitary flower and spatulate corolla lobes.

Type:—THAILAND. Ubon Ratchathani: Pha Taem National Park, 227 m, 12 September 2010, M. Kidyoo 1507 (holotype, BCU!, isotype, BKF!).

Herbs, perennial, erect, not twining, with clear latex in all parts. Rootstock tuberous, tubers subglobose or irregular, light brown, 1.5–3 cm in diam., usually with a cluster of fusiform roots. Stem solitary or several arising from tuber, terete to slightly rectangular, glabrous, usually branched, 10–20 cm tall, 1.2–2.5 mm in diam., green when young, turning brown with age; internodes 1.3–5.7 cm long. Leaves opposite, sessile; blade straight, filiform, succulent, 2–6.5 × 0.08–0.12 cm, slightly semi-circular in cross section, coriaceous, base attenuate, margins entire, apex acuminate; abaxial surface pale green, glabrous, adaxial surface green, glabrous; veins obscure. Flower solitary, axillary or extra-axillary; pedicel stout, erect, green, pinkish white or reddish brown, 3–5 mm long, 0.7–0.8 mm in

References

- Ansari, M.Y. (1984) Asclepiadaceae: Genus-*Ceropegia*. *Fascicles of Flora of India* 16. Botanical Survey of India, Howrah, 35 p.
- Boonjaras, T. and Thaithong, O. (2003) *Ceropegia hirsuta* (Asclepiadaceae), a new record for Thailand. *Thai Forest Bulletin (Botany)* 31: 1–6.
- Hooker, J.D. (1852) *Ceropegia attenuata* Hook. Asclepiadaceae. *Hooker's Icones Plantarum* 9: t. 867.
- Hooker, J.D. (1883) *The Flora of British India* 4. Reeve & Co., London, 780 pp.
- Huber, H. (1957) Revision der Gattung *Ceropegia*. *Memórias da Sociedade Broteriana* 12: 1–203.
- Kerr, A.F.G. (1951) Asclepiadaceae. In: Pendleton, R.L. (ed.) *Florae Siamensis Enumeratio* 3(1). Siam Society, Bangkok, pp. 1–51.
- Li, P.T., Gilbert, M.G. & Stevens, W.D. (1995) Asclepiadaceae. In: Wu, Z.Y. & Raven, P.H. (eds.) *Flora of China* 16. Science Press, Beijing & Missouri Botanical Garden, St. Louis, pp. 189–270.
- Linnaeus, C. (1753) *Species Plantarum* 1. Laurentii Salvii, Stockholm, 560 pp.
- Meve, U. (2002) *Ceropegia* L. In: Albers, F. and Meve, U. (eds.) *Illustrated Handbook of Succulent Plants: Asclepiadaceae*. Springer-Verlag, Berlin, Heidelberg, New York, pp. 63–108.
- Meve, U. (2009) *Ceropegia thailandica* (Asclepiadoideae-Ceropegieae), a spectacular new Thai species. *Bradleya* 27: 161–164.
- Wight R. (1850) *Ceropegia spiralis* Wight. Asclepiadaceae. *Icones Plantarum Indiae Orientalis* 4. t. 1267.
<http://dx.doi.org/10.5962/bhl.title.92>
- Schlechter, R. (1895) *Ceropegia antennifera* Schltr. Beiträge zur Kenntnis südafrikanischer Asclepiaden. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 20 (Beibl. 51): 46.