

# **Article**



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# Ceropegia tribounii (Apocynaceae, Asclepiadoideae), a new species from western Thailand

#### MANIT KIDYOO

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

#### **Abstract**

Ceropegia tribounii Kidyoo (Apocynaceae, Asclepiadoideae), a recently discovered, endangered species from western Thailand, is described as new. Comprehensive descriptions, illustrations, photographs, and diagnostic comparisons with morphologically similar species, such as *C. anjanerica*, are provided here. *Ceropegia tribounii* can be easily recognized by its sessile, linear leaves and its broadly obovate corolla lobes that are shorter than the corolla tube, as well as by its interstaminal corona with a pilose inner surface.

Key words: Ceropegia tribounii, limestone endemic, western Thailand

#### Introduction

Ceropegia Linnaeus (1753: 211) (Apocynaceae; Asclepiadoideae) is a genus of erect or twining herbs, easily recognized by the cage-like apex formed by the convergence of the five corolla lobe tips. The genus comprises at least 200 species, occurring from the Canary Islands and Africa (except Mediterranean region), through Madagascar and tropical Arabia, to India, Southeast Asia, New Guinea, and northern Australia (Hooker 1883, Huber 1957, Ansari 1984, Li et al. 1995, Meve 2002). In Thailand, fewer than 10 species have been reported (Kerr 1951, Boonjaras & Thaithong 2003, Meve 2009, Kidyoo 2014a, Kidyoo 2014b), some of which need to be revised. An additional, unknown species has also been discovered during field trips to the Tha Song Yang district (Tak Province). This discovery is found to represent a new species, which is here described as Ceropegia tribounii Kidyoo. Its essential morphological characters agree with those found in section Tiloris, series Attenuatae (Huber, 1957), in particular the linear to linear—lanceolate leaves, globose root tuber, a sessile, 1-flowered inflorescence, and apically connate corolla lobes. According to Kullayiswamy et al. (2013), series Attenuatae is represented by 10 species, most of which are found in Peninsular India, e.g. C. attenuata Hooker (1852: t. 867), C. spiralis Wight (1850: t. 1267), C. fimbriifera Beddome (1864:53), C. anjanerica Malpure et al. (2006:1140), C. bhatii Yadav et Shendage (2010:107) and C. pullaiahii Kullayiswamy et al. (2013:166). Ceropegia tribounii seems to be most closely related to C. anjanerica Malpure et al. (2006:1140). The vegetative and reproductive morphological characters of C. tribounii were compared with other species and are discussed here.

## Ceropegia tribounii Kidyoo, sp. nov. (Fig. 1&2)

*Ceropegia tribounii* differs from *C. anjanerica* by having sessile, linear-lanceolate leaves, broadly obovate corolla with lobes shorter than the corolla tube and trichomes on the inner faces of the interstaminal corona.

**Type**:—THAILAND. Tak: Tha Song Yang district, in the mountains near Thi Mo Bo waterfall, 700 m elevation, 4 August 2013, *M. Kidyoo* 1608 (holotype, BCU!, isotype, BKF!).

Herbs, erect, perennial, with usually a single stem only, not twining, with clear latex in all parts. Rootstock tuberous; tubers subglobose, smooth, light brown, 1.1–2 cm in diam.; roots fibrous. Stem usually unbranched, terete, pubescent, 20–30 cm tall, 1.5–2.2 mm in diam., green when young, turning brown with age; internodes 1–3.5 cm long. Leaves

**IUCN Red List category:**—*Ceropegia tribounii* is endemic to Thailand. The species is apparently rare and known from only one population of less than 20 mature individuals growing in degraded habitat. Following the IUCN Red List Categories and Criteria (2001), it is strongly suggested that *C. tribounii* should be treated as a critically endangered species (CR).

**Additional specimens examined (paratypes):** *Ceropegia tribounii*:—THAILAND. Tak: Tha Song Yang district, the mountains near Thi Mo Bo waterfall, 700 m elevation, 23 October 2012, *M. Kidyoo 1574* (BCU!).

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