





Paraboea angustifolia (Gesneriaceae): a new species from limestone areas in northern Guangxi, China

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Abstract

Paraboea angustifolia is a new species of Gesneriaceae from Guangxi, China, which is here described and illustrated. It is similar to *Paraboea dictyoneura* in its corolla shape, but *P. angustifolia* can be distinguished by its linear-oblanceolate leaf blade measuring $8-30 \times 1.5-3.0$ cm (vs. oblanceolate to narrowly obovate-elliptic, $7-15 \times 2.0-4.5$ cm), 4-10 times (vs. 2.0–3.5 times) as long as wide, and a peduncle of 3-7 cm (vs. 8-21 cm), normally shorter than the leaves. Its capsules are nearly straight.

Introduction

Paraboea is a genus of rosulate or caulescent herbs found mainly on limestone substrates in southern China, northeastern India, the eastern Himalayas, Burma, Thailand, Cambodia, Laos, Vietnam, Malaysia, the Philippines and Indonesia (Middleton *et al.* 2010). The genus *Paraboea* has recently been revised by Xu *et al.* (2008) who recognised 89 species and five varieties. Since the publication of this revision three additional species have been described (Chen *et al.* 2008, Kiew 2010). The phylogenetic relationships between *Paraboea*, *Trisepalum* and *Phylloboea* were investigated using nuclear and chloroplast data (Puglisi *et al.* 2011). As *Paraboea* has been conserved against *Phylloboea* and *Trisepalum* (Middleton *et al.* 2010), the genera *Phylloboea* and *Trisepalum* were merged with *Paraboea*, and fifteen species were transferred to *Paraboea*. The enlarged genus *Paraboea* now comprises around 120 species (Puglisi *et al.* 2011).

In recent years many botanical novelties have been reported from limestone areas in China. Especially there are quite a few of new species reported from this region in a variety of families. For example in Asparagaceae ((Liu *et al.* 2011), Balsaminaceae (Yu *et al.* 2009), Begoniaceae (Peng *et al.* 2012), Berberidaceae (Wu *et al.* 2009), Gesneriaceae (Wen *et al.* 2011, 2012a, 2012b, Hong *et al.* 2012, Wu *et al.* 2012a, 2012b, Xu *et al.* 2012), Rubiaceae (Mou & Zhang 2010) and Urticaceae (Wei *et al.* 2011).

In the course of floristic surveys in Mulun National Nature Reserve of northern Guangxi between 2009 and 2012, we collected a rare specimen of *Paraboea* with narrow leaves, which morphologically did not match any of the known species. Based on detailed examination of salient morphological and anatomical features (Wang *et al.* 1990, 1998, Li & Wang 2004, Chen *et al.* 2008, Xu *et al.* 2008, Kiew 2010), we conclude that it is a new species to science and thus it is described and illustrated here.