



Primulina jiangyongensis (Gesneriaceae), a new species from Southern Hunan, China

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Abstract

A new species, *Primulina jiangyongensis* (Gesneriaceae) from limestone areas in southern Hunan, China, is described and illustrated. The new species differs from other species of *Primulina* mainly by its yellow corolla, with the lower lip having several dark purple stripes, peduncle and bracts densely spreading villous, pedicel densely glandular-villous, and filaments dark purple. According to the IUCN Red List Criteria, *P. jiangyongensis* is assessed as Critically Endangered (CR B2a; C2b) because of its limited populations and vulnerable habitat.

Key words: Gesneriaceae, IUCN, limestone area, *Primulina jiangyongensis*, new species

Introduction

Primulina Hance (1883: 169), based on the re-circumscription of recent molecular phylogenetic studies, is one of the largest genera in the family Gesneriaceae, consisting of more than 140 species distributed in S & SW China and N. Vietnam (Li & Wang 2007, Wang *et al.* 2011, Webber *et al.* 2011). It has high diversity in limestone regions of northern Vietnam and southern China with most species being narrow endemics with small population size at each locality (Wen & Zhong 1998, Li & Wang 2004, Wei *et al.* 2004, Chung *et al.* 2013, Kang *et al.* 2014).

In recent years, the authors have been focused on plants of Gesneriaceae in Hunan, especially on the Danxia landform, limestone mountain areas, and limestone caves. In 2011 and 2012, during field investigations in Jiangyong Xian, southern Hunan, we found some unusual plants of *Primulina* having yellow flowers. Upon further studies we concluded that these plants represented a new species. Reviewing all features, we have concluded that this newly recognized species belongs to *Primulina* subgenus *Chirita* Sect. *Gibbosaccus* Clarke (1883:130). In *Primulina*, there are only six species with yellow flowers, including the new species just published recently, i.e., *P. lutea* (Yan Liu & Y. G. Wei in Liu *et al.* 2004: 391) Mich. Möller & A. Weber in Webber *et al.* (2011: 767), the only species belongs to the same section with the new species, and obvious difference existing between them. Therefore the new species can be readily distinguished from other species in *Primulina*. The new species is described and illustrated below.

Taxonomy

Primulina jiangyongensis X. L. Yu & Ming Li, *sp. nov.* (See Figure 1 and Figure 2).

Diagnosis:—The new species is similar to *P. lutea* (Yan Liu & Y. G. Wei) Mich. Möller & A. Weber in having yellow flowers, but differs in both surfaces of leaves densely with appressed bristles (not with appressed pubescence), peduncle and bracts densely spreading villous (not only densely appressed pubescent), pedicel densely glandular-villous and pubescent (not densely glandular-pubescent), corolla lower lip with several dark purple stripes (not unmarked), filaments dark purple (not light yellow), and staminodes 3 (not 2).

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