



Primulina chizhouensis sp. nov. (Gesneriaceae), a new species from a limestone cave in Anhui, China

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Abstract

A new species of *Primulina*, *P. chizhouensis*, from Anhui, China, is described and illustrated. It is similar to *P. nandanensis* and *P. juliae* in leaf and flower shape, but can be distinguished by extraordinary short rhizomes (5–7 mm long), cymes 1–3(–10), peduncles 1.3–5 cm long, ovate bracts acuminate at apex, corolla 4–5 cm long with cylindrical tube and the lower lip to ca. 1.2 cm long, scattered glandular-pubescent filaments, the backside of the anthers bearded, and the plants forming compact dormancy buds in winter.

Introduction

The genus *Chirita* Buch.-Ham. ex Don (1822: 83) of the Gesneriaceae was revised several times (Candolle 1845, Clarke 1883, Wood 1974, Wang 1984, Wang *et al.* 1990, 1998, Wang *et al.* 2011). However, the morphological differences between it and closely related genera are very difficult to define. China, the center of species diversity of the genus, has about 110 species distributed from S China eastward to Zhejiang and northward to Sichuan and Hubei (Wang *et al.* 2011), but with only one species recorded in Anhui province by Guo (1991), *C. fimbrisepala* Handel-Mazzetti (1925: 65). A molecular phylogenetic study recently re-shaped the polyphyletic genus *Chirita* and other associated genera, and as a result *Chirita* sect. *Gibbosaccus* Clarke (1883: 130), together with *Chiritopsis* Wang (1981: 21) is now included in the originally monotypic and now enormously expanded genus *Primulina* Hance (1883: 169) (Wang *et al.* 2011, Weber *et al.* 2011). Two species of this genus were found in Anhui province before 2008, in addition to *C. fimbrisepala* [now *P. fimbrisepala* (Hand.-Mazz.) Yin Z. Wang in Wang *et al.* 2011: 61], also one species endemic to this region, *P. xiuningensis* (Liu & Guo 1989: 51) Mich.Möller & A.Weber in Weber *et al.* (2011: 785).

In June 2008, the authors collected some *Primulina* specimens in the south of Anhui province, China. During the past three years, the living plants were monitored in the field and an ecological survey was carried out. After consulting the relevant literature (Wang 1984, Wang *et al.* 1990, Wang *et al.* 1998, Li & Wang 2004, Liu & Wei 2004, Li *et al.* 2006, Wei *et al.* 2007, Li & Wang 2008, Wen *et al.* 2009, Xu *et al.* 2009, Zhou *et al.* 2009, Wei *et al.* 2010, Liu *et al.* 2010, Huang *et al.* 2010, Xu *et al.* 2010, Liu *et al.* 2011, Tang & Wen 2011, Wu *et al.* 2011, Xu *et al.* 2011a, 2011b), we concluded that it is an hitherto undescribed species.