



Primulina qingyuanensis (Gesneriaceae), a new species from limestone areas in Guangdong, China

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Abstract

A new species, *Primulina qingyuanensis* from Guangdong, China, is described and illustrated. It is similar to *P. bicolor* (W.T. Wang) Mich. Möller & A. Weber, but differs from *P. bicolor* by several morphological characters, both vegetative and reproductive.

Key words: *Chirita*, *Chiritopsis*, taxonomy

Introduction

Recent molecular phylogenetic analyses have altered our concept of generic delimitations among Old World members of Gesneriaceae and have verified that the large genus, *Chirita* Buchanan-Hamilton ex Don (1882: 83), is paraphyletic (Möller et al. 2011, Wang et al. 2011, Weber et al. 2011). Based on the phylogenetic analysis of ITS and trnL-F sequences, all species of *Chirita* section *Gibbosaccus* Clarke (1883: 130), *Chiritopsis* Wang (1981: 21), and two *Wentsaiboea* Fang & Qin (2004: 533) species, were incorporated into *Primulina* Hance (1883: 169), which previously had only one species, *P. tabacum* Hance (1883: 169).

In the course of investigations of living collections of Gesneriaceae in north Guangdong, China, in December 2011, we discovered an unrecognized *Primulina* species in a limestone cave near the town of Shitan (Qingxin County, Qingyuan City). We pressed some plants for herbarium specimens and collected several living individuals for cultivation in the South China Botanical Garden, Guangzhou, China. After consulting relevant literature (Wang et al. 1990, 1998, Fang et al. 2004, Li et al. 2004, Wei et al. 2010, Liu et al. 2010, Wen et al. 2012) as well as herbarium specimens, we concluded that our specimens represent a new species of *Primulina*, which is described and illustrated here.

Primulina qingyuanensis Z. L. Ning & Ming Kang, *sp. nov.* (Fig.1–2)

Type:—CHINA. Guangdong: Qingyuan City, Qingxin county, Shitan Town, 24.15°N, 112.73°E, on limestone rock face in a Karst cave; 16 Dec. 2011, *Ming Kang et al. QY11001* (holotype: IBSC!).

Perennial herbs, acaulescent. Rhizome subterete, 1.5–2 cm long, ca.1 cm in diameter. Leaves 7–16, all basal. Petiole 1.5–3 cm long, ca. 5 mm wide, pubescent; Leaf blade ovate or broadly ovate, often falcate, 5–10 × 4–7 cm, herbaceous, apex acute to obtuse, base broadly cuneate, margin irregularly repand-crenate to serrate and revolute, both surfaces densely glandular manicate; lateral veins 4 or 5 on each side of the midrib, impressed adaxially and prominent abaxially. Cymes 4–7, 1–3-branched, 3–9-flowered; peduncle 9–14 cm long, pubescent;