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Oreocharis glandulosa, a new species of Gesneriaceae from southern Yunnan, China

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Abstract

Oreocharis glandulosa, a new species of Gesneriaceae from southern Yunnan, China, is here described and illustrated. It is similar to *O. bodinieri* in its corolla shape, but can be easily distinguished by its dense glandular pubescence on the outside of the corolla, the limb distinctly two-lipped, the adaxial lip bilobed to near base, the lobes ovate to triangular-ovate, the abaxial lip trilobed to the base, the included stamens, the glabrous anther connectives and the ring-like, glabrous, entire or subentire disc.

Introduction

Evolutionary relationships revealed by recent molecular phylogenetic analyses (Möller et al. 2009, 2011a) have led to considerable realignment of the taxonomy of Old World Gesneriaceae (Möller et al. 2011b, Puglisi et al. 2011, Wang et al. 2011, Weber et al. 2011a, 2011b, 2011c). One of the most drastic changes is the new delimitation and expansion of Oreocharis Benth. in Bentham & Hooker (1876: 1021) by Möller et al. (2011b). Previous to that study, Oreocharis was a genus of ca. 28 species distributed mainly in southern China (Wang et al. 1998, Weber 2004). Based on molecular data and a morphological evaluation, Möller et al. (2011b) demonstrated that the traditionally defined Oreocharis was phylogenetically intertwined with ten small and sometimes monospecific Chinese genera: Ancylostemon Craib (1919: 233), Bournea Oliver (1894: 2254), Briggsia Craib (1919: 236), Dayaoshania Wang (1983: 319), Deinocheilos Wang (1986: 1), Isometrum Craib (1919: 250), Opithandra Burtt (1956: 162), Paraisometrum Wang (1997: 431), Thamnocharis Wang (1981: 485) and Tremacron Craib (1918: 217). Phylogenetic analyses resulted in a strongly supported monophyletic group including all these genera, and the results suggested that floral characters are highly homoplasious and are thus unsuitable for generic delimitation in Gesneriaceae (as also found in other lineages of the family such as the Chirita-alliance (Wang et al. 2011) and the genus Streptocarpus (Christenhusz 2012)). Möller et al. (2011b) expanded the genus Oreocharis to include the genera mentioned above, raising the total number of species in this genus to ca. 80 and making the genus one of the most morphologically diverse among Old Word Gesneriaceae.

During our floristic surveys of southern Yunnan between 2011 and 2012 some new species were discovered and described (*Tan et al.* 2012), and we also collected a specimen of *Oreocharis* that morphologically did not match any of the known species. This specimen differed in having a corolla that is densely glandular puberulent outside, its limb distinctly two-lipped, stamens included, glabrous anthers connective glabrous and a ring-like entire to subentire disc. Based on a detailed examination of the morphological and anatomical characters of this plant and possible relatives (Li 1983, Pan 1987, Wang *et al.* 1990, 1998, Li & Wang 2004, Liu *et al.* 2012), we conclude that it is a new species which we hereby describe and illustrate.