



Viola nujiangensis (Violaceae), a new species of from northwestern Yunnan, China

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Abstract

A new species of *Viola* (Violaceae) from northwestern Yunnan, China, namely *V. nujiangensis* is described and illustrated. It is most similar to *V. perpusilla*, but differs by its rhizome and root stout, spur ca. 4 mm long, stipules and petiole purplish, and leaf blade glabrous on both surfaces.

Keywords: new species, *Viola* sect. *Adnatae*, Nujiang River

Viola Linnaeus (1753: 933) is a genus of about 550 species (Chen *et al.* 2007). This genus is richly represented in China, which constitutes a most important part of one of the primary centers of morphological and taxonomic diversity of this genus, i.e. the center of the Himalayas and mountainous Asia (Ballard *et al.* 1999). In *Flora of China*, 96 species were recorded as native in China (Chen *et al.* 2007). However, new species are still found in China in recent years (Zhou & Xing 2007; Zhou *et al.* 2008; Chen & Yang 2008, 2009; Dong *et al.* 2009; Ning *et al.* 2012).

During an expedition in April 2014 at Gongshan County, northwestern Yunnan, Dr. Xiao-Hua Jin collected a strange violet growing on sandy or rocky slopes of fluctuating zone of Nujiang River (Salween River). After morphological comparison, it is determined as an undescribed species and hereafter is described and illustrated.

Taxonomy

Viola nujiangensis Y.S. Chen & X.H. Jin, *sp. nov.* (Figs. 1–2)

Type:—CHINA. Yunnan: Gongshan, Cikai, on sandy or rocky slopes of fluctuating zone of Nujiang river, ca. 1450 m, 4 April 2014, X.H. Jin 14120 (holotype PE!; isotype PE!).

Diagnosis: *V. perpusilla* Boissieu similis, sed rhizomatibus et radicibus crassore, calcaribus circa 4 mm longis, stipulis et petiolis purpureis, laminis utrinque glaberis differt.

Herbs perennial, acaulescent, 2–5 cm tall. Rhizome stout, erect, branched or unbranched, 1–3 cm long, 1.5–2.5 mm in diameter, often surrounded by remains of leaf petioles of previous year in upper part; root usually stout, grayish-white, 10–18 cm long, straight descending. Leaves several, all basal; stipules purplish, glabrous, linear-lanceolate, 7–9 mm long, ca. 2/3 adnate to petioles, the free part 3–4 mm long, apex acuminate, margin entire or remotely denticulate; petioles purplish, 1–2.5 cm long, 0.1–0.2 mm wide, narrowly winged in upper part, glabrous; leaf blade ovate to elliptic-ovate, 1–2.5 cm long, 0.4–1 cm wide, both surfaces glabrous, base attenuate, apex obtuse, margin crenate. Flowers purple-violet, 1–1.5 cm in diameter; pedicels exceeding leaves, slender, 0.1–0.2 mm in diameter, 2-bracteolate above middle; bracteoles subulate-linear, ca. 2 mm long. Sepals triangular, ca. 3 mm long, ca. 1 mm wide, base rounded or truncate, apex acute, margin entire; basal auricles very shorts, 0.1–0.2 mm long. Upper petals obovate, 7–8 mm long, ca. 2.2 mm wide, apex rounded; lateral petals oblong 8–9 mm long, ca. 2.3 mm wide, apex rounded, glabrous; anterior petal ca. 1.2 cm long including spur, ca. 2 mm wide, apex rounded; spur ca. 4 mm long, 1.3–1.6 mm in diameter. Stamens 5, anthers ca. 2 mm long. Ovary ovoid-globose, glabrous; style clavate, base conspicuously geniculate; stigma flat at top, conspicuously margined on lateral sides, shortly broken in front. Capsule ovoid, 5–6 mm long, glabrous.