

福贡银莲花(毛茛科)与光叶银莲花属于同一分类实体

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摘要: 通过标本检查,发现福贡银莲花(*Anemone yulongshanica* W. T. Wang var. *glabrescens* W. T. Wang)(毛茛科)与光叶银莲花(*A. obtusiloba* D. Don ssp. *leiophylla* W. T. Wang)没有本质区别,应属于同一分类实体,故将前者处理为后者的异名。

关键词: 银莲花属; 新异名; 毛茛科; 分类学

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Anemone yulongshanica var. *glabrescens* (Ranunculaceae) Is Identical with *A. obtusiloba* ssp. *leiophylla*

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Abstract: Examination of herbarium specimens has shown that *Anemone yulongshanica* W. T. Wang var. *glabrescens* W. T. Wang (Ranunculaceae) is identical with *A. obtusiloba* D. Don ssp. *leiophylla* W. T. Wang. We therefore reduce the former to the synonymy of the latter.

Key words: *Anemone*; New synonymy; Ranunculaceae; Taxonomy

In 2008, Wang^[1] described *Anemone yulongshanica* W. T. Wang var. *glabrescens* W. T. Wang (Ranunculaceae) on the basis of five collections from Fugong, northwestern Yunnan, China, i.e., Gaoligong Shan Biodiversity Survey (GSBS) 26397 (CAS, PE; Fig. 1: A, B), 26453 (CAS, PE; Fig. 1: C), 28024 (CAS, PE), 28042 (CAS, PE), and 20441 (CAS; Fig. 1: D), with GSBS 26397 (PE) being designated as the holotype. In the protologue, he stated that the variety was similar to *A. yulongshanica* var. *truncata* (H. F. Comber) W. T. Wang (Fig. 2) in the basal leaves smaller, 0.8–2.3 cm × 1–4 cm, and in the sepals 5, blue or white, but differed by the glabrous scape and petioles.

In describing *Anemone yulongshanica* var. *glabre-*

scens, it is evident that Wang^[1] overlooked the older taxon described by him^[2] in 1980 from Gaoligong Shan, *A. obtusiloba* D. Don ssp. *leiophylla* W. T. Wang (Figs. 3, 4). Comparison of their type material has shown that *A. yulongshanica* var. *glabrescens* is much more closely similar to *A. obtusiloba* ssp. *leiophylla* than to *A. yulongshanica* var. *truncata*. Unlike *A. yulongshanica* var. *truncata*, in which the scape, petioles and leaves are densely villous, both *A. yulongshanica* var. *glabrescens* and *A. obtusiloba* ssp. *leiophylla* are characterized by a much lesser degree of hairiness in these parts, as suggested by their epithets “*glabrescens*” and “*leiophylla*”. The scape and petioles in both *A. yulongshanica* var. *glabrescens* and *A. obtusiloba*

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Fig. 1 Specimens of *Anemone obtusiloba* ssp. *leiophylla*. A: Gaoligong Shan Biodiversity Survey (GSBS) 26397 (holotype of *A. yulongshanica* var. *glabrescens*, PE), Fugong, Yunnan, China; B: GSBS 26397 (isotype of *A. yulongshanica* var. *glabrescens*, CAS); C: GSBS 26453 (paratype of *A. yulongshanica* var. *glabrescens*, CAS), Fugong, Yunnan, China; D: GSBS 20441 (paratype of *A. yulongshanica* var. *glabrescens*, CAS), same locality.

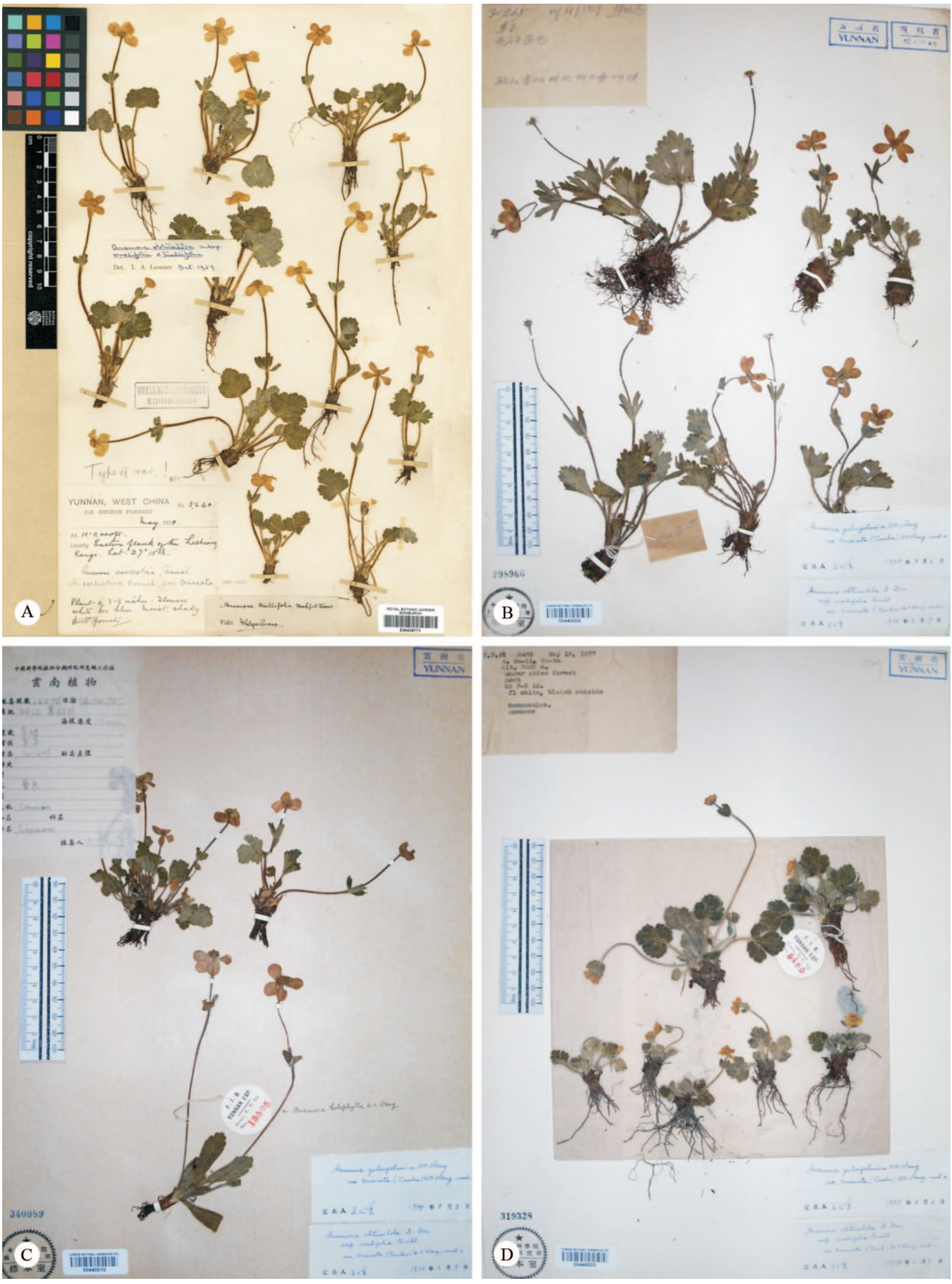


Fig. 2 Specimens of *Anemone yulongshanica* var. *truncata*. A: Forrest 5640 (holotype, E), Lijiang, Yunnan, China; B: Z. G. Zhao 30265 (PE), same locality; C: T. T. Yu 15595 (PE; the upper parts), same locality; D: T. T. Yu 5485 (PE), Muli, Sichuan, China.



Fig. 3 Specimens of *Anemone obtusiloba* ssp. *leiophylla*. A: T. T. Yu 22076 (isotype, PE), Gongshan, Yunnan, China; B–D: T. T. Yu 22076 (isotypes, KUN).



Fig. 4 Specimens of *Anemone obtusiloba* ssp. *leiophylla*. A, B: T. T. Yu 19268 (paratypes, PE), Gongshan, Yunnan, China; C, D: T. T. Yu 19268 (paratypes, KUN).

ssp. *leiophylla* are glabrescent or sparsely pubescent distally, and the leaves are more or less puberulent on upper surface, glabrous or subglabrous on lower surface. In the shape and dissection of the leaves *A. yulongshanica* var. *glabrescens* is not essentially different from *A. obtusiloba* ssp. *leiophylla* but markedly different from *A. yulongshanica* var. *truncata*. As shown in Figures 1–4, the leaves in *A. yulongshanica* var. *glabrescens* and *A. obtusiloba* ssp. *leiophylla* are cordate at base, 3-sect or nearly so, whilst those in *A. yulongshanica* var. *truncata* are cordate, truncate, or broadly cuneate at base, and 3-lobed.

It is to be noted that the holotype of *Anemone yulongshanica* var. *yulongshanica* should be Lijiang Bot. Gard. Exped. 10333 (KUN)^[3], not T. T. Yu 15595 (PE; Fig. 2: C) as cited by Ziman et al.^[4] The latter specimen, a mixture including two plants of *A. yulongshanica* var. *truncata* and one of *A. trullifolia* Hook. f. & Thoms. var. *holophylla* Diels, was cited under *A. yulongshanica* var. *truncata* by Wang^[3]. A duplicate in the Edinburgh Herbarium (E) must also be a mixture, for Lauener^[5] cited it, pro parte, under *A. obtusiloba* ssp. *ovalifolia* Brühl \times *A. trullifolia* (= *A. yulongshanica* var. *truncata*; see Wang^[3]). In fact, *A. yulongshanica* var. *yulongshanica* is currently known only from its type collection, and its identity needs to be verified with more material.

Anemone obtusiloba D. Don and its allies, as Lauener^[5] pointed out, comprise a taxonomically most difficult complex in the genus *Anemone* L. because of almost continuous variation in morphological characters such as the sepals, carpels and degree of villosity. He considered the shape, cutting and tothing of the leaves to be sufficiently stable to be used as useful criteria for distinguishing the taxa one from another in this complex group. The taxonomic treatment of this complex is still far from satisfactory although five serious attempts have been made to revise the group by Brühl^[6], Lauener^[5], Wang^[3], Wang et al.^[7] and Ziman et al.^[4] Various authors have adopted very diverse concepts of species, subspecies and variety, resulting in much confusion in the nomenclature and great difficulty in naming herbarium specimens;

further studies are badly needed. Here, for the infra-specific treatment of *A. obtusiloba* we provisionally follow Wang^[2] and Wang et al.^[7], recognizing *A. obtusiloba* ssp. *leiophylla* but not *A. obtusiloba* ssp. *obtusiloba* var. *leiophylla* (W. T. Wang) Ziman et al.^[4].

On the basis of the above analyses, we make the following taxonomic treatment.

Anemone obtusiloba* D. Don ssp. *leiophylla
W. T. Wang in Fl. Reipubl. Popularis Sin. **28**: 350 et 36. 1980; L. Q. Li in Vas. Pl. Hengduan Mount. **1**: 512. 1993; W. T. Wang in Fl. Yunnan. **11**: 194. 2000; W. T. Wang et al. in Fl. China **6**: 326. 2001. — *A. obtusiloba* ssp. *obtusiloba* var. *leiophylla* (W. T. Wang) Ziman et al. in Edinburgh J. Bot. **64**: 64. 2007. **syn. nov.** Type: China. Yunnan: Gongshan, Chiming, alt. 3000 m, grassy slope, T. T. Yu 22076 (holotype, PE; isotypes, KUN!, PE!).

A. yulongshanica W. T. Wang var. *glabrescens* W. T. Wang in Acta Bot. Yunnan. **30**: 519. 2008. **syn. nov.** Type: China. Yunnan: Fugong, Lumadeng, alt. 3600 m, bamboo-*Rhododendron* thickets with wet meadows in open areas, Gaoligong Shan Biodiversity Survey 26397 (holotype, PE!; isotype, CAS!).

Notes. Ziman et al.^[4] described the sepals (referred to as ‘petaloids’ by them) of *Anemone obtusiloba* ssp. *leiophylla*, under the name *A. obtusiloba* ssp. *obtusiloba* var. *leiophylla*, as being white. Of the type material of this taxon, the sepals of T. T. Yu 22076 (Fig. 3) were recorded to be white on the field labels, but those of T. T. Yu 19268 (Fig. 4) were recorded to be white, purple-violet outside. The sepals of *A. yulongshanica* var. *glabrescens* (Fig. 1) were recorded to be white or blue, or blue to white. The color of the sepals in this taxon, therefore, is variable, a common phenomenon in *Anemone*, and thus not a reliable taxonomic character.

Additional specimens examined. China. Yunnan: Fugong, Gaoligong Shan Biodiversity Survey 26453 (CAS, PE), 28024 (CAS, PE), 28042 (CAS, PE), 20441 (CAS); Gongshan, T. T. Yu 10025 (KUN, PE), 19268 (KUN, PE).

Distribution and habitat. *Anemone obtusiloba*

ssp. leiophylla is distributed in the eastern side of Gaoligong Shan in northwestern Yunnan (Fugong, Gongshan), China (Fig. 5). It grows in wet meadows

at forest or thicket margins or on grassy slopes at altitudes of 2900–3600 m above sea level.

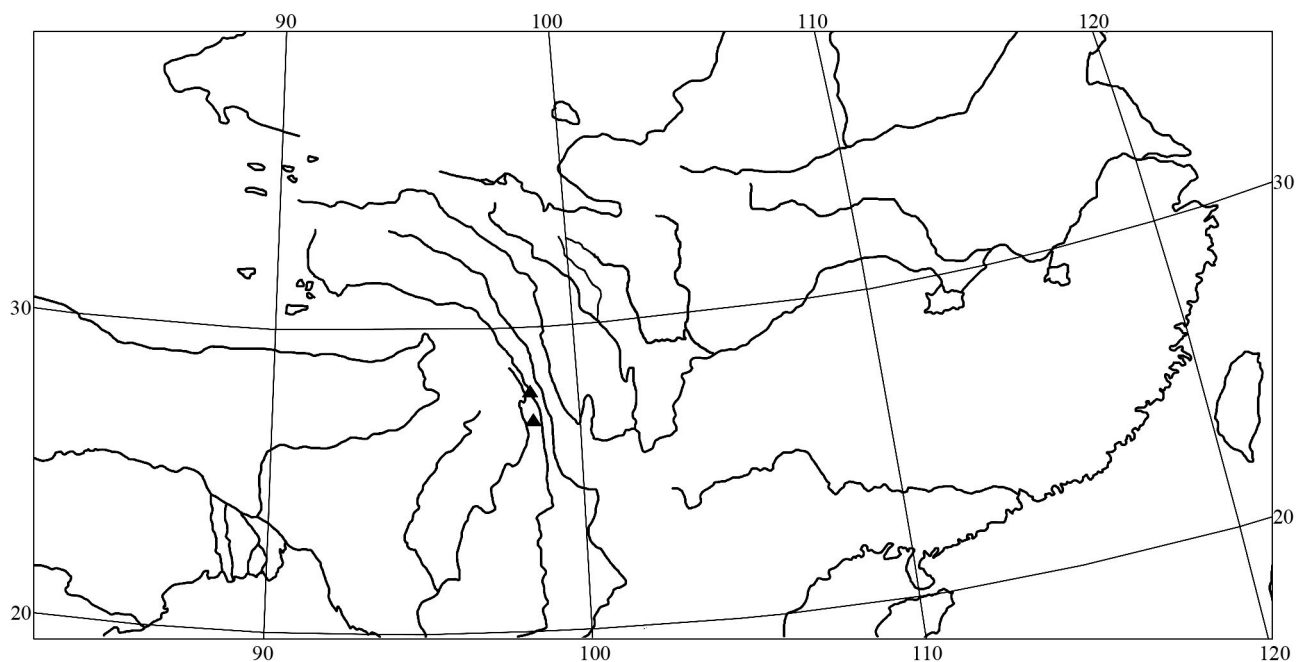


Fig. 5 Distribution of *Anemone obtusiloba* *ssp. leiophylla* (▲).

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