

中国毛茛科翠雀属的分类学研究(十): 须弥翠雀花 二新异名

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摘要: 标本室和野外观察表明匙苞翠雀花(*Delphinium subspathulatum* W. T. Wang)和吉隆翠雀花(*D. tabatae* Tamura)与须弥翠雀花(*D. himalayae* Munz)属于同一种植物, 故将前二者均处理为须弥翠雀花的异名。

关键词: 毛茛科; 翠雀属; 分类学

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Taxonomic Studies on the Genus *Delphinium* (Ranunculaceae) from China (X): Two New Synonyms of *D. himalayae*

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Abstract: Examination of both herbarium specimens and living plants have shown that *Delphinium subspathulatum* W. T. Wang and *D. tabatae* Tamura (Ranunculaceae) are identical with *D. himalayae* Munz. Therefore, *D. subspathulatum* and *D. tabatae* were placed in synonymy with *D. himalayae*.

Key words: *Delphinium*; Ranunculaceae; Taxonomy

In 1979, Wang^[1] described *Delphinium subspathulatum* W. T. Wang on the basis of a single collection, Xizang Med. Pl. Exped. 1652 (HNWP, PE; Fig. 1: A–C), from Nyalam, southern Xizang (Tibet), China. In the protologue, he stated that it was related to *D. stapeliosum* Brühl, but differed by the simple, sparsely hirtellate stems, more deeply divided leaves, oblong-ob lanceolate bracteoles, and the shorter spur of the upper sepal.

In 1986, Tamura^[2] described *D. tabatae* Tamura on the basis of a single collection, H. Tabata et al. 3782 (KYO; Fig. 2: A, B), from Pelma, Rukum District, Nepal. In the protologue, he stated that it

resembled *D. burmaense* Munz and *D. uniflorum* Tamura, but differed from the former by the leaves more deeply divided and the petals minutely pubescent, and from the latter by the flowers nearly perfectly open and the inflorescence rather loose with longer pedicels. In 1996, Wang^[3] reported the first record of *D. tabatae* in China, referring to it a collection, B. S. Li et al. 13676 (PE; Fig. 3: A, B), from Gyirong, southern Xizang. In the remarks, he pointed out that *D. tabatae* was related to *D. korshinskyanum* Nevski, a species distributed in northeast China (Heilongjiang) and Russia (Far East, central Siberia), in the stems spreading white pubescent with longer hairs,

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and the bracteoles apical on the pedicels and near the flower, but differed by the bracteoles larger, lanceolate-oblong, ca. 15 mm long, ca. 3 mm broad (vs. smaller,

4–5 mm long, 0.8–1 mm broad), the staminodes deeply 2-fid (vs. shallowly 2-lobed), and the carpels pubescent (vs. glabrous).



Fig. 1 Specimens of *Delphinium himalayae*. A: Xizang Med. Pl. Exped. 1652 (holotype of *D. subspathulatum*, PE), Nyalam, Xizang, China; B: Xizang Med. Pl. Exped. 1652 (isotype of *D. subspathulatum*, PE); C: Xizang Med. Pl. Exped. 1652 (isotype of *D. subspathulatum*, HNWP); D: M. Tang & C. Ren 503 (IBSC), Nyalam, Xizang, China.



Fig. 2 Specimens of *Delphinium himalayae*. A: Tabata et al. 3782 (holotype of *D. tabatae*, KYO), Rukum, Nepal; B: Tabata et al. 3782 (isotype of *D. tabatae*, KYO); C: Clive Wigram 118 (holotype, E); D: Lall Dhwoj 122 (E), Pongsing, Nepal.



Fig. 3 Specimens of *Delphinium himalayae*. A, B: B. S. Li et al. 13676 (PE; previously misidentified as *D. tabatae*), Gyrong, Xizang, China; C, D: M. Tang & C. Ren 566 (IBSC), same locality.



Fig. 4 *Delphinium himalayae* in the wild. A: Habitat and habit; B: Median portion of stem; C: Inflorescence; D: Flower (frontal view). Photos by M. Tang (IBSC) from Nyalam, Xizang, China.

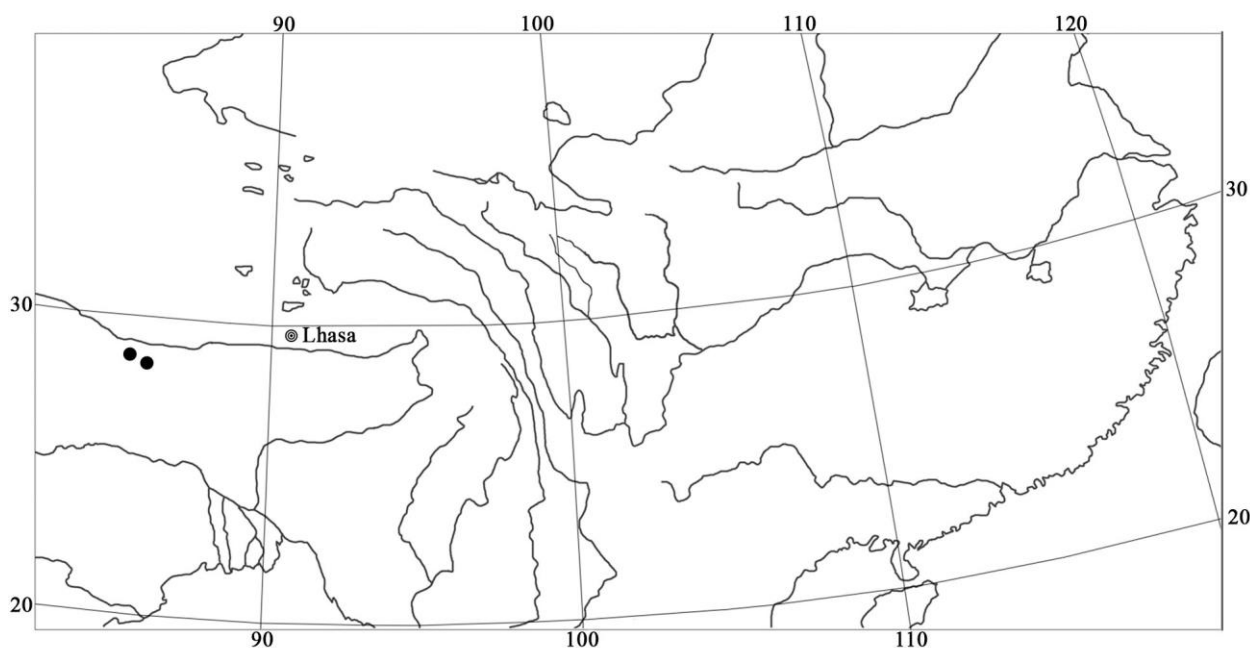


Fig. 5 Distribution in China of *Delphinium himalayae* (●).

Careful comparison of the type material of *Delphinium subspathulatum* and *D. tabatae* with that of the earlier published *D. himalayae* Munz (Fig. 2: C, D) from Nepal, however, has convinced us that the three names encompass only one species, i.e. *D. himalayae*. The plant is a perennial 30–50 cm tall. Stems are erect, more or less hispidulous. Basal leaf usually numbers only 1, long petiolate, deeply 5–7-fid; cauline leaves number 2–4, 3-lobed. Inflorescence is racemose, simple, rarely with 1–2 short branches in the lower part. Bracts are linear or lanceolate. Pedicels are densely hispidulous. Bracteoles are oblong, subtending or slightly (ca. 5 mm) distant from the flower. Spur of the upper sepal is subulate, straight or more or less upcurved. Petals are black, minutely pubescent on both surfaces. Stamines are black, subglabrous or barbate on ventral surface. Carpels number 3, densely pubescent.

Yonekura^[4] has previously noticed the striking resemblance of *Delphinium tabatae* with *D. himalayae*, pointing out that the former is different from the latter only by the sparsely pubescent stamens and probably conspecific, and that all the specimens of *D. himalayae* from Nepal checked by him have glabrous stamens. During our botanical expedition to southern

Xizang in 2013, we discovered two populations of *D. himalayae*, one from Gyirong (Fig. 3: C, D), the locality where *D. tabatae* was reported to occur by Wang^[3], and the other from Nyalam (Fig. 1: D; Fig. 4), the type locality of *D. subspathulatum*. All the specimens we collected have glabrous stamens. However, we found that the staminode hairiness in *D. himalayae* from Xizang is highly variable. The Nyalam population has subglabrous staminodes, whereas the Gyirong population has staminodes whitish barbate on ventral surface. On the holotype sheet of *D. subspathulatum* (Fig. 1: A), Wang annotates that the holotype itself has glabrous staminodes, but the isotypes kept in HNWP have barbate staminodes. We deem that the variations in the degree of hairiness of stamens and of staminodes are insufficient to warrant species recognition.

Based on the above analyses we place both *Delphinium subspathulatum* and *D. tabatae* in synonymy with *D. himalayae*.

Delphinium himalayae Munz in J. Arn. Arb. 49: 145. 1968; Yonekura in Fl. Mustang, Nepal: 67. 2001. Type: Nepal. Without precise locality, 1927, Clive Wigram 118 (holotype, E!).

D. subspathulatum W. T. Wang in Fl. Reipubl. Popularis Sin. **27**: 612 et 362. 1979; et in Fl. Xizang. **2**: 48. 1985; W. T. Wang & Warnock in Fl. China **6**: 241. 2001. **syn. nov.** Type: China. Xizang: Nyalam, Quxiang, forest margin, 3800 m, Aug. 30, 1972, Xizang Med. Pl. Exped. 1652 (holotype, PE!; isotypes, HNWP!, PE!).

D. tabatae Tamura in Acta Phytotax. Geobot. **37**: 156. 1986; W. T. Wang in Bull. Bot. Res., Harbin **16**: 155. 1996; W. T. Wang & Warnock in Fl. China **6**: 246. 2001. **syn. nov.** Type: Nepal. Rukum District: Pelma, Sept. 19, 1976, open grazed grassy place, 2757 m, H. Tabata et al. 3782 (holotype, KYO!; isotype, KATH).

Notes. Under *Delphinium incisum* Wall., a species from northern India and Nepal, Munz^[5] remarked that it was near *D. himalayae*, but differed by the more branched inflorescence, smaller flowers, and glabrous and entire petals. From the specimens currently available for our examination we basically agree with Munz's observation, but a further study is needed to determine the true relationship of the two species because the branching and the flower size in *D. himalayae* are somewhat variable.

Additional specimens examined. **China. Xizang:** Gyirong, B. S. Li et al. 13676 (PE), 13742 (PE), M. Tang & C. Ren 566 (IBSC); Nyalam, M. Tang & C.

Ren 503 (IBSC). **Nepal. Langdeng:** K. N. Sharma 117 (E); **Pongsing:** Lall Dhwoj 122 (E).

Distribution and habitat. *Delphinium himalayae* is distributed in Xizang (Gyirong, Nyalam), China (Fig. 5) and Nepal. In China, it grows in grassy places or at forest margins at altitudes of 3100–3800 m.

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