

A NEW COMBINATION IN DITHRIX (ORCHIDACEAE)

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ABSTRACT

The orchid genus name *Dithrix*, which was validated by R.K. Brummitt in 1993 and typified with *Habenaria griffithii* Hook. f., renders superfluity and illegitimacy to the recently published genus name *Nujiangia* X.H. Jin & D.Z. Li, which is also typified with *H. griffithii*. The new combination *Dithrix griffithii* (Hook. f.) Ormerod & Gandhi is made.

KEY WORDS: *Dithrix*, “*Habenaria decipens*,” *Habenaria griffithii*, *Habenaria sect. Dithrix*, *Nujiangia*, *Nujiangia griffithii*

Hooker (1890: 133, 165) validly published the name *Habenaria sect. Dithrix* Hook.f. and included a single species “*H. decipiens*” Hook.f.” He referred to “Hook.f., Ic. Plant. ined. — *Herminium*, Griff. Notul. iii. 270; Ic. Plant. Asiat. t. 285 f. 1” and cited the following type information: North-West India; Edgeworth s.n., alt. 3000 ft; Lahul (India), alt. 4-5000 ft., Thomson s.n. — Distrb. Afghanistan, *Griffith*, (Kew Distrib., 5326) Kurrum Valley (Pakistan), *Aitchinson* No. 322.

Had Hooker (1890: 165) published his new species name “*H. decipiens*,” it would be a later homonym and illegitimate (non Wight 1851). He (p. 197), however, realized his mistake and renamed his “*H. decipiens*” as *H. griffithii* Hook. f. Since both “*H. decipiens* Hook. f.” and *H. griffithii* were proposed within the same publication and since “*H. decipiens* Hook. f.” was rejected, “*H. decipiens* Hook. f.” was not validly published and does not have any nomenclatural standing. The International Plant Name Index (2012), however, had indexed *H. decipiens* Hook. f. but had not indexed *H. griffithii*.

In his orchid treatment, Renz (in Rechinger 1978: 64) cited “*Griffith 5326*” from Afghanistan as the type. Since Hooker (1890: 165) cited syntypes, Renz’s citation “*Griffith 5326*” as the type amounts to an inadvertent lectotypification. As Hooker mentioned, “5326” is not Griffith’s collection number but is Kew’s distribution number. Although Renz did not cite the herbarium housing the type, it is reasonable to assume that the type is at K. In a personal communication, Andre Schuiteman (K) informed us that Griffith’s collection number is 424 and that there are 2 specimen sheets of this number. Upon our request, Schuiteman provided digitized images of the 2 sheets for our study.

Since there are 2 sheets of Griffith’s collection at K and since Renz did not cite the name of the herbarium housing the lectotype, his (1978: 64) inadvertent lectotypification is treated here as the first-step of the lectotypification process. Of the 2 sheets, one (barcode K000796944) bears a label showing the no. “5326,” 6 specimens, and Hooker’s penciled floral drawings, and the other (barcode K000796945) bears 2 specimens. We here select the sheet (barcode K000796944) as the lectotype.
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(seecond-step).

Kraenzlin (1899), within his orchid treatment, placed Diphylax Hook. f. (a genus (including Tsaiorchis Tang & F.T. Wang) of 3 or 4 species with a distribution range Himalaya to South China; Mabberley, 2008: 278)) and Platanthera Rich. (a genus of 200 species (including Piperia Rydb.), predominantly Northern Hemispheric; Mabberley, 2008: 676) next each other; he transferred Habenaria griffithii to Diphylax and made the new combination D. griffithii (Hook. f.) Kraenzl.

Jin & al. (2012), based on molecular data and morphological evidence, found that Habenaria griffithii is also close to Gennaria Parl. (a monospecific genus restricted to the western Mediterranean and Macaronesia; Mabberley 2008: 354) and Peristylus Blume (a genus of 70 species distributed in China to the Pacific (Mabberley 2008: 648) and that H. griffithii is closest to Gennaria. Their finding supports placing H. griffithii in its own genus.

Schlechter (1926: 583) listed "Dithrix Schltr." He neither provided a description/diagnosis nor referred to Hooker (l.c.) even indirectly. Therefore, "Dithrix Schltr." was not validly published.

Soó von Bere (1929: 369) used "Dithrix Schlecht." and “D. decipiens Hook.f. Fl. Brit. Ind. VI. 1890. 165.” and referred to “(Habenaria decipiens Hook. f. l.c. – Hermium decipiens Griff. Notul. III. 370.) – non Wight, H. Grifithii Hook. f. l.c. 197” (sic). He did not provide a description/diagnosis for "Dithrix Schlecht." or refer to H. sect. Dithrix. Therefore, he did not validate "Dithrix Schlecht." Because of the invalidity of "Dithrix Schlecht.,” “D. decipiens” was also not validly published. Furthermore, "Herminium decipiens Griff." does not exist. Griffith (posthumously) published "Herminii sp." (Griffith, 1851a: 270; 1851b: t. 285).

In spite of their invalid status, both "Dithrix Schltr." and “Habenaria decipiens Hook. f.” were indexed by the Index Nominum Genericorum (Plantarum) (2012), and the Names in Current Use for Extant Plant Genera (2012) indexed both as follows:

TYPE: Habenaria decipiens J.D. Hooker 1890, non R. Wight 1851

The above data are included in the printed version of the Names in Current Use for Extant Plant Genera (Greuter & al. 1993: 366). The inclusion of Dithrix as an accepted generic name and the citation of a full reference to the basionym validate the generic name. On preface page XIII, R.K. Brummitt is credited for the data on vascular plant generic names. Therefore, Brummitt is author of the orchid genus Dithrix. The citation of “Habenaria decipiens J.D. Hooker” as the type species is treated as a correctable error for H. griffithii Hook. f. [In contrast, the International Plant Names Index (2012), had not indexed “Dithrix Schltr.”]

Unaware of the inadvertent validation of Dithrix in 1993, Jin and Li (in Jin & al. 2012: 68-69) published the genus name Nuijiangia X.H. Jin & D.Z. Li and typified it with Habenaria griffithii. They also made the new combination N. griffithii (Hook. f.) X.H. Jin & D.Z. Li. Besides the localities cited by Hooker, they added Yunnan, China to the range of this species. Since Dithrix and Nuijiangia are typified by the same species, Nuijiangia is superfluous and illegitimate.

We hereby transfer Habenaria griffithii to Dithrix and make the new combination Dithrix griffithii. A summary is provided below.


Distribution: Afghanistan, China, India, and Pakistan.

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**LITERATURE CITED**


