VALIDATION OF THE NAME OROBANCHE LUDOVICIANA SUBSP. MULTIFLORA (OROBANCHACEAE)

Heather L. White and Walter C. Holmes

Department of Biology Baylor University Waco, TX 76798-7388, U.S.A.

The combination *Orobanche ludoviciana* Nutt. subsp. *multiflora* Collins first appeared in Collins (1973), a doctoral dissertation, and was never published. Nonetheless, the name has gained some measure of acceptance by botanists nationally (Kartesz & Meacham 1999) and in Texas (Jones et al. 1997; Diggs et al. 1999). Thus, because the combination has not been validly published, the following is proposed.

Orobanche Iudoviciana Nutt. subsp. multiflora (Nutt.) Collins ex H.L. White & W.C. Holmes, stat. nov. Basionym: Orobanche multiflora Nutt., Proc. Acad. Philadelphia 4:22. 1848. Orobanche ludoviciana Nutt. var. multiflora (Nutt.) Beck, Bibl. Bot. 4, 19:81. 1890. Myzorrhiza multiflora (Nutt.) Rydb., Bull. Torrey Bot. Club. 33:151. 1906. Type: U.S.A. New Mexico. Sandy ground along the Río Grande, 1845, Gambel s.n. (Not located at BM, GH, or PH). Since no duplicates of the type have been located, we select a neotype herewith. Type: U.S.A. Texas. Jim Wells Co.: 20.5 mi S of George West, off U.S. [Hwy] 281, near county boundary line, 19 Apr 1944, Lundell & Lundell 12809 (Neotype, here designated: LL).

Phelypaea erianthera Engelm. in A. Gray, Proc. Amer. Acad. Arts 7:372. 1867, as "Phelipaea." Type: COLORADO: Huerfano Valley, Parry 147 (GH, MO).

Orobanche multiflora Nutt. var. arenosa (Suksdf.) Munz, Bull Torrey Bot. Club 57:623. 1931. Type: WASHINGTON. Klickitat Co.: Bingin, Suksdorf 2781 (C, G).

Orobanche multiflora Nutt. var. pringlei Munz, Bull. Torrey Bot. Club 57:623. 1931. Type: MEXICO. Chihuahua: Chichuahua, 3 Jun 1885, Pringle 31 (G).

The description of *Orobanche multiflora* was published twice, originally in the Proceedings of the Academy of Natural Sciences of Philadelphia and later in the Journal of the Academy of Natural Sciences of Philadelphia, ser. 2, 1:179. 1848. Reveal and Spevak (1976) give the date of publication of the Proceedings as between 21 March and 4 April, 1848, while publication date of the Journal is given as between 1 August and 8 August 1848. *Orobanche multiflora* is best recognized as a subspecies of *O. ludoviciana* because of the excessive intergradation of the two taxa. The following brief discussion is largely taken from Collins (1973), which we have confirmed by examination of herbarium specimens from NY and TEX. They are distinguishable as subspecies except in the area of sympatry in Texas and Oklahoma where the two subspecies appear to interbreed. Corollas of subsp. *multiflora* are mostly 20–30 mm long, while those of subsp. *ludoviciana* vary from 15–20 mm long. The corolla lobes of subsp. *multiflora* processes appear to subsp. *multiflora* are mostly 20–30 mm long.

BRIT.ORG/SIDA 19(3)

are narrower and either obtuse or acute. Those of subsp. *ludoviciana* are narrower and either obtuse or acute. The anthers of subsp. *multiflora* are woolly and usually inserted and the style is persistent on the capsule while anthers of subsp. *ludoviciana* are glabrous and frequently exserted and the style is not persistent on the capsule. Hosts for the two subspecies are also variable; subsp. *multiflora* parasitizes local Compositae except for *Artemisia*, whereas subsp. *ludoviciana* parasitizes principally *Artemisia* and *Grindelia*.

We wish to thank the curator and staff at TEX for the loan of *Orobanche* specimens. The hospitality and information provided by NY during a visit by the senior author is much appreciated. John Pruski of US provided literature and also reviewed a preliminary version of the manuscript, while Dan Nicolson, also of US, gave advice on the citation of synonymy. Robert Baldridge of the Department of Biology, Baylor University, also reviewed and commented on portions of the manuscript.

REFERENCES

- Collins, T.S. 1973. Systematics of *Orobanche* section *Myzorrhiza* (Orobanchaceae) with emphasis on *Orobanche Iudoviciana*. Unpub. Dissertation, University of Wisconsin-Milwaukee.
- DIGGS, G.M., B.L. LIPSCOMB, and R.J. O'KENNON. 1999. Shinners & Mahler's illustrated flora of north central Texas. Botanical Research Institute of Texas, Fort Worth.
- Jones, S.D., J.K. Wipff, and P.M. Montgomery. 1997. Vascular plants of Texas: a comprehensive checklist including synonymy, bibliography, and index. University of Texas Press, Austin.
- Kartesz, J.T. and C.A. Меаснам. 1999. Synthesis of the North American flora (Ver. 1.0). North Carolina Botanical Garden, University of North Carolina, Chapel Hill.
- Reveal, J.L. and V.S. Spevak. 1967. Publication dates and current names of 144 names proposed in two 1848 Thomas Nuttall articles. Taxon 16:407–414.