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

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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 ludoviciana 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 $20-30 \mathrm{~mm}$ long, while those of subsp. ludoviciana vary from $15-20 \mathrm{~mm}$ long. The corolla lobes of subsp. mul-
tiflora tend to be broader and either obtuse or acute. Those of subsp. Iudoviciana 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.

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