

**NEW COMBINATIONS IN THE AMERICAN GENUS *ACMISPON*  
(FABACEAE: LOTEAE)**

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**ABSTRACT**

Five new combinations are provided in *Acmispon* for western Mexico and the southwestern United States: ***Acmispon watsonii*** (Vasey & Rose) Brouillet, ***Acmispon argophyllus*** var. ***ornithopus*** (Greene) Brouillet, ***Acmispon strigosus*** var. ***tomentellus*** (Greene) Brouillet, ***Acmispon plebeius*** (Brandeg.) Brouillet, and ***Acmispon neomexicanus*** (Greene) Brouillet.

While preparing the treatment of *Acmispon* for the Flora of North America north of Mexico project, I realized that some taxa from Mexico had not been transferred to this genus. New combinations are proposed here to fill this taxonomic gap. Meanwhile, Govaert (2018) corrected two species names published in the California flora (Brouillet 2010). Furthermore, two southwestern USA species not covered in this flora also require nomenclatural updating, as the epithets long used in *Lotus* (e.g., Isely 1981; Barneby 1989) do not have priority over those of synonyms included in the taxon concepts.

1. ***Acmispon watsonii*** (Vasey & Rose) Brouillet, **comb. nov.** Basionym: *Hosackia watsonii* Vasey & Rose, Proc. U.S. Natl. Mus. 11: 528. 1889 (as "Watsoni"). **TYPE: MEXICO. Baja California.** San Quintin Bay, Jan 1889, *E. Palmer 960* (holotype: US 48875 [barcode US00003563]). *Lotus watsonii* (Vasey & Rose) Greene, Pittonia 2: 149. 1890. *Syrmatium watsonii* (Vasey & Rose) Brand, Bot. Jahrb. Syst. 25: 232. 1898.
2. ***Acmispon argophyllus*** (A. Gray) Brouillet var. ***ornithopus*** (Greene) Brouillet, **comb. nov.** Basionym: *Hosackia ornithopus* Greene, Bull. Calif. Acad. Sci. 1: 185. 1886[1885]. **TYPE: MEXICO. Baja California.** Guadalupe Island, 19 Apr 1885, *E.L. Greene s.n.* (holotype: CAS; isotypes: GH, NY!, US!). *Lotus argophyllus* (A. Gray) Greene var. *ornithopus* (Greene) Ottley, Univ. Calif. Publ. Bot. 10: 238, pl. 82. 1923. *Lotus argophyllus* subsp. *ornithopus* (Greene) P.H. Raven, Aliso 5: 326. 1963. *Lotus ornithopus* (Greene) Greene, Pittonia 2: 149. 1890. *Syrmatium ornithopus* (Greene) Greene, Bull. Calif. Acad. Sci. 2: 148. 1886.
3. ***Acmispon strigosus*** (Nutt.) Brouillet var. ***tomentellus*** (Greene) Brouillet, **comb. nov.** Basionym: *Lotus tomentellus* Greene, Pittonia 2: 140. 1890. **TYPE: MEXICO. Baja California.** Gulf of California, Los Angeles Bay, 22 Nov–20 Dec 1887, *E. Palmer 602* (holotype: NDG; isotype: K! [K000478364]). *Hosackia tomentella* (Greene) Brand, Bot. Jahrb. Syst. 25: 231. 1898. *Hosackia tomentella* (Greene) Abrams, Ill. Fl. Pacific States 2: 543. 1944 (isonym). *Lotus strigosus* (Nutt.) Greene var. *tomentellus* (Greene) Isely, Brittonia 30: 469. 1978.

Two of the three varieties of *Acmispon strigosus* have already been transferred to *Acmispon*: var. *strigosus* and var. *hirtellus* (Greene) D.W. Taylor (Taylor 2010). The third variety also requires a new combination. While varieties were not recognized in Brouillet (2010), the inclusion of material from Arizona fully justifies recognition of the three varieties discussed by Isely (1981).

4. ***Acmispon plebeius*** (Brandeg.) Brouillet, **comb. nov.** Basionym: *Hosackia plebeia* Brandeg., Proc. Calif. Acad. Sci., ser. 2, 2: 144. 1889. **TYPE: MEXICO. Baja California Norte.** El Rancho Viejo, 30 Apr 1889, *T.S. Brandege* s.n. (holotype: UC [UC80720], photo!). *Lotus oroboides* var. *plebeius* (Brandeg.) Ottley Brittonia 5: 107. 1944. *Lotus plebeius* (Brandeg.) Barneby, Great Basin Naturalist 46: 257. 1986. *Ottleya plebeia* (Brandeg.) D.D. Sokoloff & Gandhi, Byull. Moskovsk. Obshch. Isp. Prir. Otd. Biol. 108: 41. 2003.

*Hosackia rigida* Benth. var. *nummularia* M.E. Jones, Proc. Calif. Acad. Sci., ser. 2, 5: 633. 1895. *Anisolotus nummularius* (M.E. Jones) Woot. & Standl., Contr. U.S. Natl. Herb. 16 (4): 135. 1913. *Lotus nummularius* (M.E. Jones) Tidestr., Contr. U.S. Natl. Herb. 25: 303. 1925. *Lotus oroboides* var. *nummularius* (M.E. Jones) Isely, Brittonia 30: 468. 1978. *Lotus nummulus* Dayton, Proc. Biol. Soc. Washington 40: 119. 1927 (nom. illeg. nom. superfl.).

*Lotus oroboides* var. *nanus* Isely, Brittonia 30: 468. 1978.

*Lotus ramulosus* M.E. Jones, Contr. W. Bot. 15: 138. 1929. *Lotus oroboides* var. *ramulosus* (M.E. Jones) Ottley, Brittonia 5: 107. 1944.

*Lotus longibracteatus* Rydb., Bull. Torrey Bot. Club 30: 254. 1903. *Anisolotus longibracteatus* (Rydb.) Rydb., Fl. Rocky Mts., 1063. 1917.

Barneby (1989) pointed out that the name *Lotus oroboides* (Kunth) Ottley (syn. of *Acmispon oroboides* (Kunth) Brouillet) only applies to plants present in the central Mexican highlands, though specimens extend north to the Sierra Madre Occidental in the states of Chihuahua and Sonora (pers. observ.). The distributions of *A. plebeius* and *A. oroboides* appear essentially disjunct, the former being present in Mexico only in Coahuila and Baja California.

5. ***Acmispon neomexicanus*** (Greene) Brouillet, **comb. nov.** Basionym: *Lotus neomexicanus* Greene, Pittonia 2: 144. 1890 (as "Neo-Mexicanus"). **TYPE: USA. [New Mexico].** Santa Rita del Cobre, 1877, *E. Greene 49719* (holotype: NDG photo!, Ottley 1944). *Anisolotus neomexicanus* (Greene) A. Heller, Muhlenbergia 8: 60. 1912. *Hosackia neomexicana* (Greene) Brand, Bot. Jahrb. Syst. 25: 229. 1898.

*Lotus greenei* (Woot. & Standl.) Ottley, J. Wash. Acad. Sci. 29: 483. 1939. *Hosackia greenei* (Woot. & Standl.) Wiggins, Contr. Dudley Herb. 4 (2): 19. 1950. *Acmispon greenei* (Woot. & Standl.) Brouillet, J. Bot. Res. Inst. Texas 2: 390. 2008 (nom. superfl.).

*Anisolotus mollis* A. Heller, Muhlenbergia 8: 60. 1912. *Hosackia mollis* Greene, Bull. Calif. Acad. Sci. 1: 185. 1886[1885] (nom. illeg.). *Lotus mollis* Greene Pittonia 2: 143. 1890 (nom. illeg.). *Ottleya mollis* (A. Heller) D.D. Sokoloff & Gandhi, Byull. Moskovsk. Obshch. Isp. Prir. Otd. Biol. 108: 41. 2003.

Although Barneby (1989) included the name *Lotus neomexicanus* in synonymy of *L. plebeius* (syn. of *Acmispon plebeius*), I concur with the interpretation provided by Ottley (1944) that it is part of the taxon concept of *L. greenei*, after examination of the type photo she provides. The specimen mentioned as probable type by Ottley is the only specimen she saw that corresponds with the description in the protologue, which mentions "near Silver City in the spring of 1877." Santa Rita del Cobre, a ghost village, is located 15 miles east of Silver City, which fits reasonably well with "near Silver City." This specimen is the holotype of *L. neomexicana* (although Barneby 1989 mentions lectotype).

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**LITERATURE CITED**

- Barneby, R.C. 1989. Fabales. In A. Cronquist, A.N. Holmgren, N.H. Holmgren, J.L. Reveal, and P.K. Holmgren (eds). Intermountain Flora, Vascular Plants of the Intermountain West, U.S.A. Vol. 3, Part B. New York Botanical Garden, Bronx.
- Brouillet, L. 2010. *Acmispon*. Pp. 723–729, in B.G. Baldwin et al. (eds.). The Jepson Manual. Vascular Plants of California, 2nd ed. Univ. of California Press, Berkeley.
- Govaert, R.H.A. 2018. 101 nomenclatural corrections in preparation for the Plants of the World Online (POWO). *Skvortsovia* 4: 74 –99.
- Isely, D. 1981. *Lotus*. Pp. 128–206, in Legumes of the United States. III. Subfamily Papilionoidae: Tribes Sophoreae, Podalyrieae, Loteae. *Mem. New York Bot. Garden* 25 (3).
- Ottley, A.M. 1944. The American Loti with special consideration of a proposed new section, *Simpeteria*. *Brittonia* 5: 81–123.
- Taylor, D.W. 2010. *Flora of the Yosemite Sierra*. Lulu.