

**THE ERRONEOUS PLACEMENT OF *BOUTELOUA STOLONIFERA*  
(POACEAE: CHLORIDOIDEAE: CYNODONTEAE: BOUTELOUINAE),  
REVISITED**

**YOLANDA HERRERA ARRIETA**  
Instituto Politécnico Nacional  
CIIDIR Unidad Durango-COFAA  
Durango, 34220, México  
yherrera@ipn.mx

**PAUL M. PETERSON**  
Department of Botany  
National Museum of Natural History  
Smithsonian Institution  
Washington, D.C. 20013-7012  
peterson@si.edu

**ABSTRACT**

*Bouteloua stolonifera* was mistakenly placed as a synonym of *Bouteloua reederorum* in six publications by the authors. Here we present the correct synonymy and cite the types of these two Mexican endemic species.

**RESUMEN**

*Bouteloua stolonifera* se colocó erróneamente como sinónimo de *Bouteloua reederorum* en seis publicaciones de los autores. A continuación presentamos la sinonimia correcta y citamos los tipos de estas dos especies endémicas de México.

*Bouteloua* Lag. is an important genus of forage grasses containing 60 species found primarily in the Americas with a center of diversity in northern Mexico (Peterson et al. 2010, 2015; Soreng et al. 2017). The genus is characterized by an inflorescence of 1–many spicate primary branches distributed along the main axis, branch axes persistent or falling entire, spikelets bisexual, unisexual (plants monoecious or dioecious), or sterile, solitary, paired, or in triplets, sometimes secund, biseriate, glumes awned or awnless, lemmas 3-veined, awned or unawned, a base chromosome number of  $x = 10$ , and a preference for xeric habitats (Herrera Arrieta et al. 2004, 2008; Peterson et al. 2015). A molecular DNA-derived phylogeny and subgeneric classification dividing the genus into 10 sections appeared in Peterson et al. (2015).

We erroneously placed *Bouteloua stolonifera* Scribn. as a synonym of *Bouteloua reederorum* Columbus in six publications (Peterson & Herrera Arrieta 2001; Herrera Arrieta & Cortés Ortiz 2009a, 2009b, 2010; Herrera Arrieta et al. 2010; Herrera Arrieta 2014). *Bouteloua stolonifera* [a monotypic member of *B.* sect. *Cyclostachya*] is an accepted taxon endemic to Mexico and for many years was placed in *Cyclostachya* Reeder & Reeder (Reeder & Reeder 1963) before being reevaluated based on a molecular DNA-derived phylogeny (Columbus et al. 1998; Columbus 1999). *Bouteloua reederorum*, also an endemic to Mexico and probably only found in Oaxaca and Puebla, is a member of *B.* sect. *Triplanthera* and is found on a long branch (genetically isolated) sister to *B. megapotamica* (Spreng.) Kuntze and *B. rigidiseta* (Steud.) Hitchc. (Espejo Serna et al. 2000; Rodríguez et al. 2014; Peterson et al. 2015; Dávila et al. 2018). *Bouteloua stolonifera* and *B. reederorum* are low-growing or mat-forming, stoloniferous perennials. *Bouteloua stolonifera* can be separated from *B. reederorum* in having female plants with a long (2–2.5 cm) solitary raceme that curls up at maturity forming a circle [female or monocious plants with short (0.5–0.8 cm) racemes (3–5) inserted along a central axis that does not curl or form circles at maturity in *B. reederorum*], hyaline ligules (versus a ciliate membrane), and glumes 0.75–1 times as long as the spikelet (versus glumes 0.3–0.66 times as long as the spikelet) (Clayton et al. 2006).

Below we list the two accepted names with appropriate synonyms and types.

**Bouteloua reederorum** Columbus, Aliso 18: 64. 1999 (replacement name, non *Bouteloua stolonifera* Scribn.). *Atheropogon stolonifer* E. Fourn., Mexic. Pl. 2: 140. 1886. *Pringleochloa stolonifera* (E. Fourn.) Scribn., Bot. Gaz. 21: 138, t. 13. 1896. *Cathesticum stoloniferum* (E. Fourn.) Griffiths, Contr. U.S. Natl. Herb. 14: 362, f. 26. 1912 [although this was a misapplication by Griffiths (1912) since he did not see the type (see explanation in Sandoval-Ortega et al. 2019)]. **TYPE: MEXICO.** La Parada, Sierra de Oaxaca, 8500 ft, Apr 1842, *F.M. Liebmann* 588 (holotype: C-10022902 [image!], confirmed in Sandoval-Ortega et al. 2019); isotype: US-00156937!, fragm.).

**Bouteloua stolonifera** Scribn., Proc. Acad. Nat. Sci. Philadelphia 43: 302. 1891. *Cyclostachya stolonifera* (Scribn.) Reeder & Reeder, Bull. Torrey Bot. Club 90: 196. 1963. **TYPE: MEXICO. Zacatecas.** La Honda Station, 19 Aug 1890, *C.G. Pringle* 3174 (holotype: US-72212!; isotypes: BM-000938670 [image!]; BR-686541 [image!]; BR-686597 [image!]; CM-0194 [image!]; CR-11469 [image!]; E-00373712 [image!]; F-0046623 [image!]; GH-00023223 [image!]; GOET-006079 [image!]; K-000309065 [image!]; KFTA-0002054 [image!]; MEXU-00005889 [image!]; MO-102569 [image!]; MICH-1115873 [image!]; MIN-61744 [image!]; NY-00346146 [image!]; NY-00346147 [image!]; NY-00346148 [image!]; P-00740175 [image!]; P-00740176 [image!]; US-747802!; US-820985!; US-883933!; UVMVT-15716 [image!]; W-19160025757 [image!]; W-0026337 [image!]).

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