

NEOBOUTELOUA, A NEW GRASS GENUS *

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The New World grass genus *Bouteloua*, comprising about 30 species, has its center of distribution and variability in northern Mexico and southwestern United States. As presently interpreted, the genus is represented in South America by six species, *B. curtipendula* (Michx.) Torr., *B. disticha* (Kunth) Benth., *B. filiformis* (Fourn.) Griffiths, *B. simplex* Lag., *B. megapotamica* (Spreng.) Kuntze and *B. lophostachya* Griseb. Only *B. megapotamica* and *B. lophostachya* are restricted to South America, the former ranging from northern Brazil to central Argentina and the latter present in central and western Argentina and Chile.

Examination of herbarium specimens of *B. lophostachya* has convinced the writer that this taxon cannot properly be placed in either of the recognized subgenera of *Bouteloua*, and, indeed, represents a distinct and well defined genus.

NEOBOUTELOUA Gould, gen. nov.

Herba perennis, surculis e basi gangliiforme ramosissimo erectis 10 - 35 cm. altis. Folia crassa, rigida, disticha, basi culmi conferta. Inflorescentia plerumque ramulis 12 - 35 persistentibus axis quadrangularis paginis 4 irregulariter dispersis, binatis, vel verticillatis. Ramuli plerumque 1 - 4 cm. longi, spiculis 12 - 25 adpressis. Spiculae

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flosculo uno perfecto et rudimentis 2 - 4 setosis insuper eo, glumas fatiscentes. Glumae acutae, 1 - nervatae, glabrae. Lemma flosculi perfecti 3 - nervata 3 - aristataque, aristis lateralibus brevibus.

Plants perennial, with erect shoots 10 - 35 cm. tall from a knotty, much-branched rhizomatous base. Leaves thick, stiff, distichous and closely aggregated at the culm base. Ligule minute, membranous, fringed. Inflorescence well exerted above the leaves, with usually 12 - 35 persistent, slender branches irregularly scattered, paired or verticillate on all sides of a strongly ribbed and four angled (above) axis. Branches mostly 1 - 4 cm. long, with 12 - 25 appressed spikelets. Spikelets with one perfect floret and 2 - 4 bristly rudiments above. Disarticulation at the base of the perfect floret. Glumes thin, glabrous, acute, one-nerved, the first slightly shorter than the second. Lemma of the perfect floret 3 - nerved and 3 - awned, the membranous body about 1,8 mm. long, the middle awn about 2 mm. long and the lateral

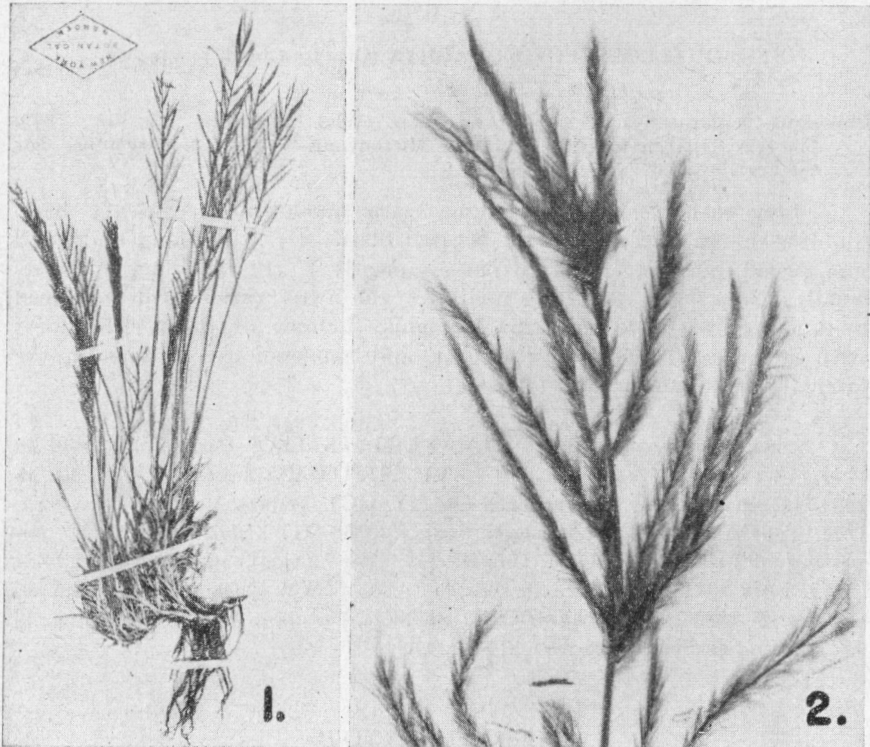


Fig. 1. *Neobouteloua lophostachya*, plant x ½.

Fig. 2. *Neobouteloua lophostachya*, portion of inflorescence x 2.

awns much shorter. Caryopsis about 1 mm. long, narrowly oblong, with an embryo 1/3 the length of the endosperm. Rudiments short-awned, the first about 1/2 as long as the perfect floret, the upper rudiment successively more reduced.

Type species: *Neobouteloua lophostachya* (Griseb.) Gould.

A monotypic genus that differs strikingly from *Bouteloua* in the arrangement of the inflorescence branches. In *Bouteloua* the branches are alternate and uniformly spaced in two rows, whereas in *Neobouteloua* the branches are irregularly disposed, paired, or verticillate on the four sides of the main axis. The inflorescence actually bears a striking general resemblance to that of *Leptochloa* (Fig. 1, 2). Closest relationships probably are with *Bouteloua* or *Chloris* whose spikelet characteristics are similar. The single species of *Neobouteloua* occupies semi-arid to arid sites in central western Argentina. Griffiths (1912) reported one collection from Chile (*Benivati* 12687).

NEOBOUTELOUA LOPHOSTACHYA (Griseb.) Gould, comb. nov.

Bouteloua lophostachya Griseb., Abh. Ges. Wiss. Gottingen 19: 302. 1879.
The type, cited by Griffiths (1912) as "*Hieronimus* N° 971 from Argentina" has not been examined.

Low rather coarse perennial, with much-branched, leafy base, glabrous herbage, firm, bristle pointed blades 1 - 3 cm. long and 1 - 2 mm. broad, and long exserted panicle mostly 4 - 12 cm. long. Spikelets small, mostly 3 - 4 mm. long including the awns, rather widely spaced on and appressed to the branch rachis. Lemma of the fertile floret with a few stiff hairs on the back and conspicuously ciliate on the lateral nerves above the middle.

SPECIMENS EXAMINED: SANTIAGO DEL ESTERO: Guasayan, *Pierotti* in 1944 (G, NY, UC); *Venturi* 10118 (NY). TUCUMÁN: Burruyacu, *González* in 1903 (G), in 1910 (G), *Venturi* 7663 (K, NY, UC). Trancas, *Venturi* 1187 (NY), 1188 (P). CATAMARCA: Andalgalá, *Barilett* 20238 (G), *Cabrera* 1173 (NY), *Jorgensen* 1148 (UC). CÓRDOBA: Cruz del Eje, *Tsler* 7 (G); Gran Salina, *Kurtz* 6754 (NY). SAN LUIS: Alto Pencoso, *Branch-Carette* (NY); Quebrada de los Bueyes, *Galandier* in 1882 (G, K). MENDOZA: Mendoza, *Carette* in 1916 (NY), *Spigazini* 15700 (K); San Martín, *Stuckert* 694 (K, UC).

LITERATURE CITED

- GRIFFITHS, D. 1912. *The grama grasses, Bouteloua and related genera*. Contr. U. S. Nat. Herb. 14: 343-428.