148. BOUTELOUA Lagasca, Varied. Ci. 2: 134. 1805 ["Botelua"], nom. et orth. cons.

格兰马草属 ge lan ma cao shu

Sun Bixing (孙必兴 Sun Bi-sin); Sylvia M. Phillips

Annuals or perennials. Culms mostly tufted. Leaf blades narrow; ligule a line of hairs. Inflorescence of racemes inserted singly along an axis; racemes unilateral, 1–80, short, deciduous or persistent; spikelets sessile, few to numerous, biseriate, sometimes pectinate; rachis narrow, flat, ending in a straight or forked point. Spikelets subterete or laterally compressed, fertile floret 1, usually 2nd sterile floret present, rarely this reduced to a rachilla extension; glumes unequal, narrow, membranous, 1-veined, keeled, acuminate to awn-pointed; lemma of fertile floret \pm as long as upper glume, rounded or keeled on back, thinly leathery, 3-veined, veins excurrent into 3 short awns, central awn sometimes flanked by 2 teeth, less often apex simply acute; palea veins sometimes excurrent; sterile floret variable within a species or even an individual specimen, usually lemma body reduced and prominently awned. Caryopsis ellipsoid. x = 7, 10.

About 40 species: Canada to Argentina, centered on Mexico; two species (both introduced) in China.

1a. Racemes 10–50, falling entire at maturity 1. B	3. curtipendula
1b. Racemes 1–3(–4); racemes persistent, spikelets disarticulating above glumes	2. B. gracilis

1. Bouteloua curtipendula (Michaux) Torrey, Explor. Red River Louisiana, 300. 1853.

垂穗草 chui sui cao

Chloris curtipendula Michaux, Fl. Bor.-Amer. 1: 59. 1803; *Atheropogon curtipendulus* (Michaux) E. Fournier; *Cynodon curtipendulus* (Michaux) Raspail; *Dinebra curtipendula* (Michaux) P. Beauvois; *Eutriana curtipendula* (Michaux) Trinius.

Perennial with short, slender, scaly rhizomes. Culms tufted, erect, 30–100 cm tall. Leaf sheaths glabrous or nearly so; leaf blades flat or slightly involute, 20–30 cm, 1–5 mm wide, both surfaces and margins scabrous, base pubescent; ligule ca. 1 mm. Inflorescence axis 15–25 cm; racemes 10–50, 1–2 cm, purplish, secund along axis, usually nodding, with 3–6 (–10) appressed or ascending spikelets, falling entire. Spikelets 4.5–10 mm; lower glume linear-lanceolate, 2.5–4 mm; upper glume lanceolate, 4(–7) mm; lemma of fertile floret usually somewhat exceeding glumes, acuminate, lateral veins extended into ca. 1 mm mucros; palea slightly longer than lemma; 2nd floret rudimentary, with long central awn and 2 shorter laterals, or greatly reduced, or lacking. Fl. and fr. summer to autumn. 2n = 28, 35, 40, 42, 56, 70.

Cultivated in China [native to America].

This is an American pasture grass (Side-oats Grama) reported to be excellent in China for grazing and also for hay.

2. Bouteloua gracilis (Kunth) Lagasca ex Griffiths, Contr. U. S. Natl. Herb. 14: 375. 1912, nom. cons., not Vasey (1878).

格兰马草 ge lan ma cao

Chondrosum gracile Kunth, Nov. Gen. Sp. 1: 176. 1815 ["1816"]; *Actinochloa gracilis* (Kunth) Willdenow ex Roemer & Schultes; *Atheropogon gracilis* (Kunth) Sprengel; *Eutriana gracilis* (Kunth) Trinius.

Perennial. Culms densely tufted, erect, 15–60 cm tall. Leaf sheaths glabrous, in tight bundles at culm base; leaf blades flat

or involute, 3–10 cm, 1–2 mm wide, usually glabrous. Inflorescence of (1 or)2(–4) distant racemes; racemes 2.5–5 cm, falcate at maturity, persistent, spikelets numerous, densely crowded,

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pectinate; rachis not extended beyond uppermost spikelet. Spikelets 5–6 mm; glumes lanceolate, persistent; lower glume linearlanceolate, ca. 3.5 mm; upper glume lanceolate, 3.5–6 mm, sparsely villous on keel; lemma of fertile floret 5–5.5 mm, dorsally villous, lateral veins extended into 3 short awns at apex, intermediate lobes acute; 2nd floret ca. 2 mm, densely longvillous at rachilla apex, cleft to the base, lobes rounded, awns 3, scabrous, ca. 5 mm; 1 or 2 additional broad awnless rudiments sometimes present. Fl. and fr. summer to autumn. 2n = 28, 35, 42, 61, 77.

Cultivated in China [native to North America (including Mexi-co)].

This is a valuable forage grass native to the North American prairie (Blue Grama). Flora of China 22: 494-495. 2006.