

**Vascular Plants of Williamson County**  
*Bouteloua rigidiseta* – TEXAS GRAMA [Poaceae]

*Bouteloua rigidiseta* (Steud.) C. L. Hitchc., TEXAS GRAMA. Perennial herb, bunchgrass, rhizomatous, fibrous-rooted, not rosetted, many-stemmed at base, cespitose, in range < 30 cm tall; shoots with basal leaves and cauline leaves, blades with pilose hairs; rhizome ± creeping and shallow, with extremely short internodes. **Stems:** cylindrical, to 1 mm diameter at nodes, internodes to 50 mm long, mostly green but sometimes purple-red cell directly above and below swollen node, glabrous. **Leaves:** alternate distichous, simple with sheath; prophyll to 9.5 mm long, conspicuously 2-keeled deeply convex between keels, with wide margins from each keel, short 2-pointed at tip, keels short-ciliate from base changing to puberulent above midpoint, puberulent on sides of keels; sheath open, conspicuously ridged, to 50 mm long, colorless panels with raised green veins with wide membranous margins, ca. 12 veins, without lobes (auricles) at top; collar 1 mm long, pale green to whitish, long-ciliate on margins with hairs having enlarged bases; ligule membranous-ciliate with dense hairs, ± 0.3 mm; blade linear, 40–135 × to 2 mm, minutely toothed on margins, long-tapered to tip, finely parallel veined with to 13 veins raised on both surfaces. short-hairy and puberulent on upper surface close at base. **Inflorescence:** spikelets, in terminal, racemelike panicle with 5–9 condensed lateral branches, branches alternate distichous in 2 vertical rows on a hirsute, oblique axis, flaring to 15 × 8 mm with conspicuous awns, each branch having 2–6+ spikelets in 2 files, each spikelet with 1 fertile, bisexual floret and aging often with 1(–2) sterile florets (modified lemma, modified palea), at maturity often having 10+ suberect awns, sometimes also rudimentary spikelets next to branch apex, bracteate; sheath of flag leaf at anthesis often concealing several lower branches and culm; primary axis sinusoidal, with a broad channel on 2 opposing sides, each internode on a side with 1 ridge descending from a branch, glabrous, branches oriented secondarily to 1 side of primary rachis and widespreading to somewhat nodding; stalk of branch ascending but curved at top, 1 mm long, densely hairy with short, straight stiff hairs, aging sometimes tinged purplish; tip of branch minutely 2-forked. **Spikelet:** with a cluster of several awns at top, not breaking apart; **glumes** 2, unequal and dimorphic, 1-awned, pubescent; lower glume awned-lanceolate, 2.4–4.3 × 0.3–0.7 mm, with green midvein raised on back extended as awn ca. 1 mm long, membranous aging scarious with fringed margins, short-hirsute below midpoint along midveins, minutely scabrous from midpoint to awn tip, aging sometimes tinged purplish at base; upper glume 2-lobed with awn arising at sinus, 6–7 mm long (incl. awn), initially membranous with green midvein, body lanceolate and keeled, 4–5.5 × ca. 1.2 mm, strigose to short-strigose to above midpoint with upward-pointing hairs and minutely scabrous above midvein, aging mostly purple-red with colorless margins and the green midvein, the lobes narrowly triangular (acuminate), 1–1.3 mm long, minutely hairy aging purplish, the awn 2–3 mm long and > lobes. **Fertile floret:** **lemma** boat-shaped to midpoint and 2-lobed above midpoint, having a pair of lateral awns and a central awn arising between the lobes, lower portion to 2.5–3 × 1.4 mm, tough and ivory-colored, glabrous, the lobes narrowly triangular, ± 1.5 mm long, the awns subequal, ± flattened, 2–3 mm long, green, awns and lobes somewhat scabrous; **palea** narrowly ovate-elliptic with inrolled margins (not folded), not keeled, 4–5 mm long, 2-veined with the veins green above midpoint and ending in short awnlike points to 0.4 mm long at top from a shallow sinus. **Flower:** cleistogamous; **perianth (lodicules)**

1 (= 2 fused), curtainlike in a semicircular, 0.5–0.6 mm long, colorless, not bulbous at base; **stamens** 3, free; filaments to 0.5 mm long, colorless; anthers basifixed, dithecal, 1.7–2 mm long, pale yellow-green; **pistil** 1, 1.2–1.5 mm long, colorless; ovary superior, obovoid compressed slightly, 0.4 × 0.4 mm, 1-chambered with 1 ovule; styles 2 widely spaced at top of ovary, weakly papillate. **Rudimentary floret:** sterile and lacking flower; **lemma** 3-awned with awns 5–7+ mm long arising to 1 mm from base; **palea** reduced to a flat, papery, 2-lobed bract lacking awns. **Fruit:** achene (caryopsis), tightly enclosed in the whitish, tough bracts of the fertile floret in each spikelet, branch breaking from primary rachis; achene (caryopsis), rarely 1 per branchlet enclosed in bracts of 1 spikelet, oblong-obovoid compressed front-to-back, ca. 2.3 × 0.9 × 0.6 mm, before drying pale green at base (embryo) and white above (endosperm).

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