

## Vascular Plants of Williamson County

*Urochloa texana* – TEXAS SIGNALGRASS, TEXAS MILLET [Poaceae]

*Urochloa texana* (Buckl.) R. D. Webst., TEXAS SIGNALGRASS, TEXAS MILLET. Annual, fibrous-rooted at plant base and along trailing branches, not rosetted, several-stemmed at base, with ascending principal branches, in range to 65 cm long; andromoeious; shoots with some basal leaves and mostly cauline leaves, foliage velveteen but blade margins conspicuously scabrous; adventitious roots nodal at base of plant. **Stems:** cylindrical, to 3 mm diameter, internodes to 70 mm long and glabrous but with dense short hairs approaching and at node; internodes hollow. **Leaves:** alternate distichous, simple with sheath; prophyll membranous, 2-keeled, to 20 mm long, with 2 green veins, short-notched at tip; sheath open, with many narrow ridges, short-pilose base-to-top, narrow membranous densely ciliate on margins, without lobes (auricles) at top; ligule membranous fused at base and ciliate with straight hairs, truncate, 1–1.8 mm long; collar 1.5–2 mm long, white, densely hairy especially with longer hairs next to ligule on upper side; blade narrowly linear-lanceolate, in range (< 35–)90–160 × 4–16.5 mm, minutely scabrous and wavy on margins, long-tapered at tip, parallel-veined with many fine veins raised on lower surface, uniformly short-pilose, lower surface also with some widely scattered longer pilose hairs. **Inflorescence:** spikelets, in terminal panicle 80–160+ mm long, with 4+ ascending to appressed principal branches, principal branches alternate distichous 1 branch per node, in range 15–80 mm long and shorter approaching top, the longest branches often with appressed, short branchlets having only a few spikelets, spikelets 1 or 2 at each node but solitary spikelets sometimes having an aborted spikelet at base (developmentally with only 1 spikelet), spikelet with 2 florets, lower floret staminate and upper floret bisexual, bracteate; peduncle finely ridged, scabrous along ridges and short-pilose in furrows, at top with several longer hairs to 1.5 mm long, sheath of flag leaf sometimes hiding peduncle; bract sometimes visible subtending the first node, deltate, ca. 1 mm long, pubescent but with glabrous margins and tip; rachis finely ridged and flattened on 1 side, nodes densely short-hairy and with some long hairs, internodes scabrous and short-pilose like peduncle; branch axes 3-sided, scabrous along edges and ridges; branchlet axes and stalks ± cylindrical, stalks in pair unequal, < 2 mm long, scabrous and short-hairy, stalk with stiff, hirsute hairs especially at base of spikelet < 1 mm long, breaking below spikelet. **Spikelet:** ovoid, 4.5–5.9 × ca. 2.3 mm (sterile spikelets ca. 1.3 mm wide); **glumes** 2, unequal and dimorphic, internode short or in the longest spikelets to 0.5 mm long, lower glume membranous, acute-ovate, 2.4–3.2 mm long, to midpoint of spikelet, (3)5- or 7-veined (3-veined on sterile spikelets), colorless tissue and raised green veins, the veins serially connected toward the center below the tip and 1-veined at tip, not scabrous, with several minor cross veins; upper glume ovate, 4.5–5.6 mm long, tissue greenish with 5 or 7 green veins, nearly glabrous or puberulent near margins. **Lower floret lemma** elliptic, ca. 5 mm long, similar to upper glume, greenish with 5 green veins and conspicuously cross-veined above midpoint, glabrous; **palea** membranous, ovate with margins inrolled, ca. 4 mm long, colorless with 2 green veins, not strongly folded. **Upper floret lemma** elliptic, ca. 3.5 × 2.2 mm, with 3 widely separated veins, back tough aging hard (indurate) textured, aging whitish with minute transverse ridges (verrucose); **palea** ovate, ca. 3.2 mm long, 2 mm across, 2 veins inconspicuous, back tough and textured with partial transverse ridges, margins membranous, strongly inrolled having wide, overlapped margins (not folded along

veins). **Staminate flower:** **perianth (lodicules)** 2, inversely pyramidal and thick, 0.5 mm long, translucent; **stamens** 3, free, anthers exerted at top of spikelet; filaments ca. 3 mm long, colorless; anthers dorsifixed, dithecal, 2.2–2.4 mm long, pale yellow, longitudinally dehiscent; pollen whitish; **pistil** absent. **Bisexual flower:** **perianth (lodicules)** 2, inversely pyramidal and thick, 0.5 × 0.7 mm, translucent, depressed on top; **stamens** 3, free, included; filaments ca. 2.5 mm long, colorless; anthers dorsifixed, dithecal, 1.6–1.9 mm long, pale yellow, longitudinally dehiscent; pollen whitish; **pistil** 1, ca. 3.5 mm long; ovary superior, ovoid, ca. 0.7 × 0.35 mm, pale green, glabrous, 1-chambered with 1 ovule; styles 2, diverging, stigmatic tips exerted near top of spikelet, lower portion ca. 1.5 mm long, colorless, stigmatic portion purple-red and bottlebrushlike. **Fruit:** achene (caryopsis), of upper floret dispersed as unit within hardened lemma and palea, rugulose and verrucose on outer surface.

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