

**Vascular Plants of Williamson County**  
*Eriochloa contracta* – PRAIRIE CUPGRASS [Poaceae]

*Eriochloa contracta* A. S. Hitchc., PRAIRIE CUPGRASS. Annual (short-lived herbaceous perennial?), rhizome apparently lacking, fibrous-rooted, cespitose, many-stemmed at base, in range to 70 cm tall; shoots with several blade-bearing basal leaves and to 7 cauline leaves, in range conspicuously short-pilose on exposed surfaces, foliage velveteen. **Stems:** ± cylindric, to 4 mm diameter (nodes), soft-hairy on nodes and exposed internodes; internodes hollow. **Leaves:** alternate distichous, simple with sheath; prophyll concealed by leaf sheath, open, 2-keeled, flattened and narrowly long-tapered to tip, to 14 mm long, membranous with light golden veins, depressed to concave between keels, ciliate and short-ciliate along keels base-to-tip, margins overlapping, often with a pair of purple blotched just above base; sheath open, somewhat folded from midvein, narrow membranous margins sometimes reddish, low-ridged with short-pilose hairs along ridges, lacking lobes (auricles) at top; ligule truncate, ciliate, 0.4–1 mm long, the hairs in 2+ rows; collar to 1 mm long, white, densely short-pilose on both surfaces; blade linear to narrowly acuminate-lanceolate, in range 50–120(–180) × (2–)4–8.5 mm, the widest near base, dull green, minutely scabrous on margins, long-acuminate at tip, parallel-veined with midrib somewhat raised on lower surface. **Inflorescence:** spikelets, on panicle of appressed, steeply ascending to suberect, racemelike primary branches, in range panicle mostly to 130 × 10 mm, with overlapping spikelets, primary branches with many spikelets to 30 mm long, spikelet 2-flowered, lower floret neuter and upper floret bisexual, bracteate, axes short-pilose to pilose with hairs to 1.5 mm long (lacking longer tufted hairs); peduncle (culm) and principal low-ridged with short-pilose hairs along ridges, green; primary branches with wavy axis, mostly unbranched but on a long branch sometimes with a dwarf branchlet near the base having a few spikelets, often with several longer hairs approaching forks (below base for stalk of spikelet); stalk 0.3–1 mm long, green, puberulent with several long hair, at the top having an enlarged, white, glabrous callus fused with a cuplike structure surrounding base of spikelet (“cupgrass”), the glabrous cup (vestigial lower glume) 0.4–0.5 mm across and when young white at base to red-purple especially above midpoint (later color disappearing). **Spikelet:** narrowly ovate in outline and short-awned, in range mostly 4–5.2 mm long, convex on outer surface and flattish on hidden surface, greenish appearing densely strigose with strongly appressed soft hairs ca. 1 mm long, breaking below spikelet; **glume** 1, upper glume with short awn = spikelet, ovate, rounded on back and folded around lower floret on margins, mostly 7-veined, the veins fine and green, the awn straight, 0.4–1.2 mm long, white, tip of glume and awn scabrous, appressed hairs attached to ca. midpoint so appearing less dense approaching top; **lemma** of lower floret acuminate-ovate nearly as long as upper glume with shorter, awnlike tip, mostly 7-veined, appressed straight hairs attached to 2/3 of lemma; **palea** of lower floret absent; upper floret hemi-ellipsoid to somewhat hemi-obovoid, ca. 2.5 × 1 mm, lemma of upper floret in outline with inrolled margins tightly holding palea, finely 5-veined (obscure on outer surface, visible on inner surface only), at anthesis color aging leathery, opaque whitish, and finely textured (cell contours), inconspicuously sparsely puberulent approaching top, the awn erect, 0.5–1 mm long, persistent and easily observed in fruit; palea of upper floret < lemma with inrolled membranous margins not overlapping, aging textured on outer surface. **Flower:** **perianth (lodicules)** 2 (difficult to observe), acute, <

0.3 mm long, thin, colorless; **stamens** 3, free; filaments threadlike, ca. 1 mm long, colorless; anthers dorsifixed, dithecal, 0.7–0.9 mm long, whitish or pinkish; **pistil** 1; ovary superior, top-shaped or obovate to ellipsoid, ca.  $0.5 \times 0.35$  mm, translucent, 1-chambered with 1 ovule; styles 2, separated at base, 2–3 mm long, lower portion colorless, upper portion bottlebrushlike and purplish. **Fruit:** achene (caryopsis), dispersed tightly enclosed within bracts, ellipsoid flattened front-to-back, ca.  $1 \times 1$  mm.

A. C. Gibson