

Vascular Plants of Williamson County

Cyperus erythrorhizos – RED-ROOTED FLATSEGE [Cyperaceae]

Cyperus erythrorhizos Muhlenb., RED-ROOTED FLATSEGE. Annual, fibrous-rooted, many-stemmed at base, rosetted, cespitose and initially matlike, branches nearly prostrate to decumbent, with ascending inflorescence, 2.5–30 cm tall; shoots with basal leaves and having inflorescence with several leaflike inflorescence bracts, glabrous; roots often reddish. **Stems (culms):** 3-sided, to 3 mm diameter, with rounded edges (when fresh), yellow-green, inconspicuously striped, slightly swollen at base; solid and lacking air canals. **Leaves:** alternate (not obviously tristichous), simple with sheath or only a sheath and lacking blade (cataphyll); sheath closed and V-shaped at base, membranous, several mm long; blade linear to lanceolate (when short), 4–60 × 2–2.5 mm, the widest at base, open keeled, flat but folded basally or inversely W-shaped, folds conspicuous on lower surface, entire or with widely spaced, inconspicuous teeth on margins, parallel-veined, smooth, somewhat lustrous, near base green alternating with colorless strips.

Inflorescence: leafy paniclelike and umbel-like arrays, terminal, array mostly with 4–5 principal branches having clusters of to 20 spikelets at end of each axis, bracteate, glabrous; inflorescence bract subtending primary ray + sheathing prophyll at base of branch axis, of lower 3 axes leaflike, spreading, < 100 × 2.5–4.5 mm, >> inflorescence, reduced upward, often more conspicuous than basal leaves, minutely toothed on margins; prophyll at base of primary ray = closed sheath without blade, < axis, greenish, 2-keeled, with each keel terminating in a deltate to long-acuminate lobe; axis white with pulvinus at base, deeply ridged above pulvinus. **Spikelet:** 7–9-flowered; glumes 2, lower glume long-acuminate, < 1.5 mm long, with green midstripe and membranous margins, upper glume hidden, rectangular with truncate to notched tip, < 1.3 mm long, membranous with 2 green stripes; rachilla winged from decurrent margins of bractlets; bractlets (floral scales) appressed, closely overlapping, lanceolate to oblong-lanceolate in outline, 1.1–1.4 × 0.8–1 mm, compressed side-to-side, ± keeled at base, broadly membranous on margins, with 3 green stripes (veins) along keel and a tiny point at tip, deciduous; flowers sessile. **Flower:** bisexual; **perianth** absent; **stamens** 3, free, included; filaments 0.2–0.3 mm long, colorless; anthers basifixed, dithecal, 0.3–0.4 mm long, pale yellow (visible through flower bract), acute and colorless at tip, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 1–1.25 mm long; ovary superior, 3-sided, 0.2–0.3 mm long, translucent-green, 1-chambered with 1 ovule; style translucent turning light reddish brown, 3-branched above midpoint, the branches exerted, threadlike, papillate stigmatic. **Fruit:** achene, unequally 3-sided ovoid, (0.4–)0.7–1 × 0.4–0.6 mm, light grayish to brown, glossy, rounded with point at tip (mucronulate), smooth.

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