

Vascular Plants of Williamson County

Cyperus retrorsus – PINE BARREN FLATSEdge [Cyperaceae]

Cyperus retrorsus Chapm., PINE BARREN FLATSEdge. Perennial herb, rhizomatous, fibrous-rooted, not rosetted, several-stemmed at base, cespitose, ascending to suberect, in range to 60 cm tall; shoots with only basal leaves including to 3 without blades and several with blades (appearing like cauline leaves) + several leaflike inflorescence bracts subtending reproductive canopy at tip of stem, glabrous; rhizome horizontal with enlarged, bulblike swelling for each green shoot, swelling ca. 7 mm across, with fibrous cataphylls; adventitious roots on rhizome. **Stems (culms):** 3-sided, to 2.5 mm diameter, lower portion white (hidden by leaf sheaths) and green (exposed upper portion); internodes solid. **Leaves:** alternate tristichous, simple with sheath; sheath closed at top with a truncate membranous margin at top of membranous panel; ligule absent; blade linear strongly folded upward from midrib and V-shaped to inversely W-shaped, in range to 250 × 6 mm, essentially entire and scabrous with minute, widely scattered ascending teeth above midblade on margins, long-tapered at tip, parallel-veined with midrib raised on lower surface, surfaces smooth, lower surface scabrous along midrib. Inflorescence: spikelets in panicle of dense spikes (heads), appearing umbel-like, terminal, in range to 60 mm long, primary raylike branches 4–8(–11) ascending to suberect each having a terminal head, head broadly ovoid to broadly oblong-ovoid, in range to 15 × 10 mm, mostly with 80+ helically alternate, tightly packed, sessile spikelets, the lowest spikelets downward-pointing grading to widely spreading in middle portion to ascending above and suberect at top of head, bracteate, glabrous; each primary branch subtended by an inflorescence bract (terminal spikelet clusters may be bractless) + a sheathing “bract” (prophyll), each inflorescence bract spreading to widely spreading, appearing helically alternate, lacking sheath, blades leaflike, in range to 225 × 5.5 mm decreasing upward, the 4 lowest bracts > inflorescence; branch axis pulvinus at base, bulbous, above pulvinus in range straight and slender, to 40 mm long, green with a spongy center, having a prophyll arising at top of pulvinus, closed, cylindrical to weakly 2-keeled, < 5 mm long decreasing upward, with several green veins, truncate to acute at top. **Spikelet:** 2–3(–4)-flowered, oriented edge-on, 2–4.5 × 0.8–1.6 mm, oblong compressed side-to-side, with alternate distichous bractlets (floral scales) subtending sessile flower; **glumes** 2, unequal, lower glume long-acuminate, 2 mm long, with a green midvein and scabrous above midpoint on margins, upper glume sheathing and broad, ca. 1.2 mm long, sometime notched at top; bractlet subtending flower boat-shaped cupping and compressed side-to-side, in range mostly 2–2.5 mm long, sheathing with wide membranous margins to above midpoint, with 2–4 lateral veins on each side and aging raised on both surfaces. **Flower:** bisexual; **perianth** absent; **stamens** 3, free; filaments threadlike, to 2 mm long, colorless; anthers basifixed, dithecal, 0.25–0.3 mm long, yellowish to offwhite, longitudinally dehiscent; pollen colorless; **pistil** 1, at anthesis ca. 1.2 mm long; ovary superior, 3-sided, 0.35 × 0.25 mm, light green, minutely textured on faces, glabrous, 1-chambered with 1 ovule; style ca. 2 mm long, 3-branched at midpoint, the branches stigmatic and threadlike exerted from bractlet. **Fruit:** achene, 3-lobed ellipsoid-obovoid, in range 1.5–1.8 × 0.6–0.8 mm, light brown, faces with domed cells.

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