

Vascular Plants of Williamson County

Cenchrus spinifex – COMMON SANDBUR, COASTAL SANDBUR [Poaceae]

Cenchrus spinifex Cavan., COMMON SANDBUR, COASTAL SANDBUR. Annual to short-lived perennial herb, spinescent (fruits), fibrous-rooted, not rosetted, many-stemmed at base, cespitose, shoots ascending to decumbent sometimes with rooted, procumbent shoots, in range < 50 cm tall; shoots with basal leaves and cauline leaves, stems bent at node (geniculate); adventitious roots on lower side of procumbent axes. **Stems:** ± cylindric (with flat side just above each node), to 2 mm diameter, internodes to 75 mm long, glabrous; internodes solid. **Leaves:** alternate distichous, simple and sheath; prophyll deeply 2-keeled, to 38 mm long, long-tapered to tip, keels minutely ciliate only at base; sheath open, with margins overlapped base nearly to tip, ± keeled, margins membranous, glabrous except on the uppermost portion of membranous margins, without lobes (auricles) at top; ligule with membranous base and stiffly ciliate, mostly 0.5–1 mm long; collar to 2 mm long, whitish, surfaces short-hairy; blade linear long-tapered to tip slightly folded upward, in range mostly 3.5–5 × to 160 mm, the widest at base, minutely toothed on margins, long-acuminate at tip, parallel-veined with midrib sunken and other veins raised on upper surface and midrib fold on lower surface, upper surface with scattered pilose hairs nearly base to tip and with or without puberulent hairs along veins, lower surface glabrous, not glaucous. **Inflorescence:** spikelets paired in sessile “burs” (fascicles = spinescent branchlets) on terminal, spikelike array, burs several–18 per inflorescence produced alternately on 3 sides, each bur covered by 2 spinescent halves, each spikelet with 2 florets, subequal, each floret subtended by spinescent cover, the lower floret sterile and the upper floret bisexual, bracteate; axes 3-sided and somewhat winged, 20–80 mm long, striped green and white, most internodes 2–4 mm long, minutely scabrous on edges; outer covers each with 10+ sharp-tipped spines fused into cuplike structure, persistent, with radiating spines 7–10 mm long, at base of cups with finer spines < 2 mm long, larger spines broad-based 3–4.5 mm long, the larger spines initially green with a pair of dark green lines, short-pilose. **Spikelet** acuminate-ovoid, in range mostly 4.5–5.5 mm long, essentially glabrous, persistent within bur; **glumes** 2, unequal, lower glume membranous, ovate, ca. 1.5 mm long, with raised green midvein; upper glume ovate, ca. 3.5 mm long, 5-veined with 3 central veins green and raised; **lower floret lemma** ovate with inrolled margins, 4–4.2 mm long, greenish and 3-veined, **palea** typically absent (vestigial); **upper floret** not spreading at anthesis, **lemma** ovate with inrolled margins, ca. 4.5 mm long, greenish and 5-veined, **palea** ovate with wide, inrolled, colorless margins, 2-veined with veins widely spaced, the veins reddish approaching acuminate, puberulent tip. **Flower:** bisexual; **perianth (lodicules)** 2, thin, triangular, ca. 0.4 mm long, colorless; **stamens** 3, with anthers fully exerted at top of spikelet; filaments linear and flattened but exerted portion threadlike, 4–4.5 mm long, colorless; anthers dorsifixed, dithecal, ca. 1 mm long, reddish, longitudinally dehiscent; pollen colorless; **pistil** 1, 6–7 mm long; ovary superior, obovoid, 0.8 × 0.45 mm, glossy translucent, glabrous, 1-chambered with 1 ovule; styles 2 fused at base, threadlike, colorless, exerted stigmas bottlebrushlike, 2–2.5 mm long, whitish. **Fruit:** spinescent bur containing 2 achenes (caryopses), ca. 7–10 mm long, with ca. 20 radiating spines, spikelet visible on side, straw-colored, achenes enclosed by bracts; achenes ellipsoid somewhat compressed front-to-back, 2.7–2.9 × 1.6–1.8 × 1 mm.

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