

Vascular Plants of Williamson County
Sporobolus cryptandrus – SAND DROPSEED [Poaceae]

Sporobolus cryptandrus (Torrey) A. Gray, SAND DROPSEED. Perennial herb, concealed rhizomatous (not rhizomatous according to other authors), fibrous-rooted, primary shoot after flowering sometimes with lateral branches from 1–3 cauline nodes, spreading to ascending, in range < 50 cm tall; shoot with a basal leaf and several cauline leaves + belowground, diminutive, scalelike sheaths, not glaucous; “rhizome” short-lived = successional segments becoming detached with tufted subunits (ramets), concealed by sheaths of basal leaves, mostly ascending, 2–2.5 mm diameter with internodes mostly \pm 1 mm long, solid, and brownish to yellow-brownish, having a vigorous emerging shoot from each axillary bud, with persistent prophylls, rhizome scales (diminutive sheaths); adventitious roots formed from nodes on lower side of rhizome. **Stems:** cylindric, to 2 mm diameter at ground level, lower internodes aging dull redglabrous, not glaucous; internodes solid. **Leaves:** alternate distichous, simple with sheath; prophyll closely appressed to base of culm, open, strongly 2-folded and flat, to 10×0.8 –1 mm (folded), at cauline nodes to 6 mm long, white minutely ciliate along folds base-to-tip with several longer hairs at base, folded margins overlapping, 2-veined between folds, \geq obtuse at narrow tip; sheath open, rounded on back, especially of cauline leaves having a conspicuous tuft of hirsute hairs ringing top of sheath in range to 4 mm long (shorter on flag leaf) and white, margins of several cauline sheaths commonly long-ciliate base-to-tip, inner surface rarely with some hairs approaching ligule; ligule truncate and thick, 0.5–1 mm long, white; collar to 1 mm long, whitish or aging purple-red, mostly lacking hairs; blade linear, mostly 50 – 100×2 –6 mm (of flag leaf smaller), dull green, flat under stress inrolling upward, scabrous on margins, long-tapered to tip, parallel-veined with veins raised, lacking nonglandular hairs; at cauline node with an ascending lateral branch sheath often widely divergent from culm. **Inflorescence:** spikelets, in terminal paniclelike array, crudely cylindric with radiating primary branches widely spreading and spreading often 150 mm long with 10+ nodes + several of the lower primary branches trapped within sheath of flag leaf, long peduncle (culm internode) completely hidden by sheath of flag leaf and nearly as long as inflorescence, primary branches alternate 1 per node mostly with internodes < 10 mm, primary branches mostly 15–30 mm long with slender, flexible axes each spreading from primary axis via axillary pulvinus, secondary branchlets and short ultimate branchlets somewhat appressed and overlapping, secondary branchlets to 6 mm long with several spikelets, spikelet with 1 bisexual floret, spikelet either chasmogamous (exposed) and cleistogamous (many hidden within flag leaf sheath, bracteate, lacking awns, glabrous with weakly scabrous axes; central axis (rachis) straight, to 0.4 mm diameter, pale green with fine green stripes, finely scabrous along veins; blade of flag leaf often vertical, to 40×1 mm; axillary pulvinus to 0.5 mm long, greenish (exposed) to nongreen (concealed nodes), glabrous; lateral axes tinted reddish with fine darker stripes and remotely scabrous, on exposed branches forked several mm above pulvinus (longer on hidden branches); stalk of spikelet (“pedicel”) mostly < 1 mm long. **Spikelet:** of 4 bracts of different lengths, before open ellipsoid and ca. 2 mm long, glabrous, breaking above glumes; **glumes** 2, unequal, membranous, 1-veined, keeled, weakly scabrous along upper portion of keel, lower glume \pm 0.8 mm long, tinged purplish red with darker vein, upper glume \pm 1.5 mm long; **lemma** folded, acute-ovate (flattened), membranous, in range

(1.3–)1.5–2 mm long, lemma > upper glume, on exposed spikelets blushed purplish red especially above midpoint, silica cells conspicuous; **palea** in range not folded, in range 1.2–1.6 mm long, palea < lemma (spikelet), only 1-veined, vein green and tissue tinged purplish red. **Chasmogamous flower:** **perianth (lodicules)** 2, short club-shaped, ca. 0.15 mm long, translucent; **stamens** 3, free; filaments threadlike, to 2 mm long, whitish; anthers dorsifixed, dithecal, commonly exerted, 0.5–0.6 mm long, crimson or with white, longitudinally dehiscent (pollen often released in bud); pollen whitish; **pistil** 1, 0.7–0.9 mm long; ovary superior, subspheroid, ca. 0.2 mm long, light green, 1-chambered with 1 ovule; styles 2, upper stigmatic portion shrublike, often exposed when floret open.

Cleistogamous flower: **perianth (lodicule)** not observed; **stamens** 2–3, free; filaments ca. 0.5 mm long, colorless; anthers dorsifixed, dithecal, 0.45–0.5 mm long, whitish and crimson, longitudinally dehiscent; pollen whitish; **pistil** 1, ca. 0.7 mm long; ovary superior, subspheroid, ca. 0.2 mm long, greenish, 1-chambered with 1 ovule; styles 2, colorless, upper stigmatic portion shrublike and at level of anthers. **Fruit:** achene (caryopsis), dispersed hidden within lemma and palea, ellipsoid, mostly 0.7–0.9 × 0.3–0.35 mm, brownish, with a darker, oblique embryo, not gelatinous when wetted.

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