

Vascular Plants of Williamson County
Desmazeria rigida – FERN GRASS [Poaceae]

Desmazeria rigida (L.) Tutin, FERN GRASS. Annual, fibrous-rooted, several–many-stemmed at base (sometimes several plants growing together), cespitose, ascending, in range ca. 15 cm tall; shoots fine-leaved, with basal leaves and cauline leaves; adventitious roots at basal nodes. **Stems (culms):** cylindric, < 1 mm diameter at nodes, where hidden white and smooth, where exposed internodes inconspicuously striped green and white, glabrous; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath open, margins touching at base, strongly ridged when dry, glabrous, with membranous margins ca. 0.5 mm wide, without lobes (auricles) at top; ligule membranous and continuous with membranous margins of sheath, irregularly cut at top, 2.5–3 mm long, often splitting to base; blade linear, typically in range 20–50+ × ca. 1.5 mm, the widest at base, flat becoming inrolled upward when water-stressed, entire, long-tapered to tip, parallel-veined with slightly raised veins, minutely scabrous along veins especially above midblade. **Inflorescence:** spikelets, in terminal panicles, panicle in range to 75 × 11–15 mm, of many spikelets, overall strongly flattened vertically and spikelets dense, with the lowest branches having to 8 spikelets decreasing to 1 spikelet per node at the tip, spikelet in range with (3–)5–10 florets (bisexual or terminal floret sterile with only lemma), bracteate, minutely scabrous, lacking awns; sheath of flag leaf at flowering often concealing the lowest portion of panicle, slender blade of flag leaf ascending and often > panicle; rachis conspicuously angled, often conspicuously 3-sided and scabrous along well-defined ridges and minutely puberulent on faces or low ridges, branches alternate distichous, generally 1 per node, stiff, divergent from rachis with green pulvinus in each axil; stalk beneath floret of lateral spikelets < 1 mm long, of terminal spikelet to 3 mm long, 3-ridged. **Spikelet:** narrowly lanceoloid compressed side-to-side, in range 3–7 mm long, breaking above glumes and between florets; **glumes** 2, subequal, conspicuously keeled and acute at tip, (1.3–)1.8–2 × 0.8 mm, green with membranous margins, 3-veined with keel minutely scabrous; rachilla strongly flattened, 0.6–0.7 mm long; **lemma** ovate, ca. 2–2.7 × 0.8 mm, rounded on back, membranous with 5 green veins not converging at tip, glabrous; **palea** appearing oblong but concave on back, 1.7–2.1 mm long, always < lemma, membranous and 2-veined and 2-keeled, keels green and scabrous above midpoint, acute at tip. **Flower:** bisexual; **perianth (lodicules)** 2, to midpoint of ovary, ovoid, ± 0.35 mm long, fleshy at anthesis, colorless, smooth and without hairs; **stamens** 3, free, becoming exerted within 1 mm from tip of lemma; filaments ca. 0.9 mm long, white; anthers dorsifixed, dithecal, 0.4–0.6 mm long, cream, longitudinally dehiscent; pollen whitish; **pistil** 1, 1.2–1.4 mm long; ovary superior, obovoid, 0.55–0.6 × 0.3 mm, cream, glabrous, 1-chambered with 1 ovule; styles 2, bases close, colorless, stigmatic above midpoint; stigmas exerted near tip of lemma, featherlike (plumose) with branches ca. 0.2 mm long. **Fruit:** achene (caryopsis), falling with palea, ellipsoid, 1.4–1.6 × 0.6–0.7 mm, flat on palea side, short-hairy at tip.

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