

Vascular Plants of Williamson County

Tridens flavus var. *chapmannii* – GREASEGRASS, FALL REDTOP, PURPLETOP TRIDENS
[Poaceae]

Tridens flavus (L.) Hitchc. var. *chapmannii* (Small) Shinn., GREASEGRASS, FALL REDTOP, PURPLETOP TRIDENS. Perennial herb, rhizomatous, fibrous-rooted, 1–several-stemmed at base, ascending with ascending to spreading inflorescences, in range < 100–165 cm tall; shoots with to 7 leaves above prophyll; rhizomes shallow, compact with short internodes. **Stems:** cylindric, to 5 mm diameter, internodes long with the longest 200+ mm long, nodes conspicuously purple; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath open, tightly sheathing > 360°, finely ridged above midpoint, < internode, glossy purple at node, outer margin purplish membranous, of the lowest leaf often ± glaucous and sometimes purple; ligule densely membranous short-ciliate, 0.3–0.45 mm long; collar white with purplish margin, villous on outer surface; blade strap-shaped, mostly < 90–500 × 4.5–15 mm (of flag leaf < 50 mm long), the widest near base, minutely toothed on margins, long-tapered to tip, parallel-veined with veins raised as fine ridges on both surfaces. **Inflorescence:** spikelets, in terminal, open, paniclelike array, array ovate in outline, to 250 × 250 mm, overall appearing red-purple with spikelets aging purplish, lateral branches 2-compound with pulvinus in axil of each branch and branchlet, having widely spreading to ascending lateral branches in subopposite pairs or 1 per node spaced 15–25 mm along axis, principal branches to 130 mm long, spikelets not close to central axis, branchlets often descending with to 5 stalked spikelets, spikelets mostly with 6–8 florets often having a sterile floret at top, bracteate, conspicuously pilose on pulvinus; peduncle cylindric, < 100–300 mm long, smooth, fine-veined, glossy purple around node; bract subtending the lowest node appressed, tonguelike, ca. 1 mm long, with decurrent base; rachis somewhat irregularly low-ridged, axes slender, flexible, wiry, glossy green or blotched purple, pulvinus red-purple, pilose hairs to 1.5 mm long, white; stalk of spikelet 1–6 mm long. **Spikelet:** narrowly oblong in outline, (5–)7.8–9.5 mm long, breaking above glumes and between florets; **glumes** 2, unequal, 1-veined, lower glume ovate, ca. 2.5 mm long, keeled, purplish with green midvein, upper glume ovate, ca. 3.2 mm long, green; rachilla ca. 1 mm long, glabrous but with tuft of hairs at base of floret lemma; **lemma** angular, 2.7–4.8 mm long, green aging purplish, 3-veined with veins extended at tip (not convergent) as points along margin, points purple with upward-pointing barbs (awnlike but < 0.25 mm long, hairs sometimes purple; **palea** 2-keeled, = to slightly < lemma, somewhat stiff, folded along keels and concave between keels, with 2 awnlike points to 0.35 mm long, purplish, glabrous. **Flower:** bisexual, bilateral; **perianth (lodicules)** 2, free, short fan-shaped, ca. 0.3 mm long, white; **stamens** 3, free, exerted from floret; filaments slender, < 3 mm long, white; anthers dorsifixed, dithecal, 1–1.5 mm long, pale yellow; pollen whitish; **pistil** 1; ovary superior, oblong, ± 0.9 × 0.35–0.4 mm, pale green, glabrous, 1-chambered with 1 ovule; styles 2, from 2 spreading, conic bases at top of ovary, ca. 2 mm long above bases, white, feathery (plumose) and exerted at midfloret. **Fruit:** achene (caryopsis), enclosed in floret, ellipsoid slightly compressed front-to-back, 1.6–1.9 × 0.8–0.95 mm, dark brown, with 2 conic beaks.

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