

## Vascular Plants of Williamson County

*Tridens muticus* var. *elongatus* – ROUGH TRIDENS, SLIM TRIDENS [Poaceae]

*Tridens muticus* (Torrey) Nash var. *elongatus* (Buckley) Shinn., ROUGH TRIDENS, SLIM TRIDENS. Perennial herb, bunchgrass, rhizomatous, fibrous-rooted, cespitose, many-stemmed at base, principal shoots unbranched aboveground, ascending to suberect, in range to 75 cm tall; shoots with basal leaves and several cauline leaves, below leaves at base of having to 3 leaves lacking blades below foliage of several basal leaves with blades and to 4 cauline leaves having spreading blades, exposed surfaces scabrous and lower sheaths often sparsely pilose, belowground each shoot with dense hairs at nodes at top of rhizome; rhizome short and condensed with close emerging shoots, to 3 mm across, hidden by scales and sheaths of basal leaves; adventitious roots arising from lower side of rhizome. **Stems (culm):** slender, broadly elliptic in  $\times$ -section, to 1.5 mm diameter, with tuft of pilose hairs to 4 mm long at node and base of sheath at lower nodes; internodes solid to somewhat split (not fully hollow). **Leaves:** alternate distichous, simple with sheath; prophyll persistent belowground, closed, appearing 3-winged including 2 keels, to 14 mm long, initially white, along third wing shoot hairy at base decreasing upward; sheath open, low-ridged on outer surface, to 150 mm long, scabrous along ridges, having narrow membranous margins, of lower leaves often sparsely pilose; ligule ciliate-membranous densely ciliate nearly to base, truncate, 0.5–1 mm long; collar short; blade linear long-tapered to tip, to 250  $\times$  2–4 mm, the widest at base, dull green, parallel-veined, scabrous on margins and fine, low-ridged veins base-to-tip on both surfaces, sometimes with several pilose hairs on lower surface near base. **Inflorescence:** spikelets, in terminal, suberect, closed, spikelike panicle array with short, appressed primary branches, slender (“slim”), to 250  $\times$  5–8 mm but the longest sometimes with a diverging minor branch at the top of flag leaf sheath, primary branches 1–2 per node along principal axis, if 2 per node unequal with 1 having several stalked spikelets and the shorter with 1 terminal spikelet, spikelets in range with 5–7 florets (including a sterile floret at top), bracteate, lacking awns; peduncle stemlike hidden by sheath of flag leaf; axes lacking pulvinus, slender, tough, ridged and densely scabrous, on longer primary branches to 10 mm long below the lowest spikelet, stalk of spikelet  $\pm$  2 mm long, persistent. **Spikelet:** lanceoloid not compressed, in range 5.5–9 mm long, breaking above glumes and between florets; **glumes** 2, subequal, lower glume  $\pm$  keeled and tapered to narrow tip, 5.5–9 mm long, 1-veined, upper lemma often not keeled and acute at tip, 5.5–7 mm long and  $\leq$  lower glume, 3-veined or 5-veined (7-veined) with only midvein to tip, glabrous and minutely scabrous on outer (lower) surface especially above midpoint or lower glume with several short hairs at base; rachilla 0.6–1 mm long, short-hairy; lemma convex on back, in range 4–6.5 mm long, 3-veined with midvein raised to tip, mostly shallowly notched at tip or also with short point (mucron) from sinus (blunt), conspicuously, densely pilose to midpoint of lemma along midvein and submargins touching lateral veins; **palea** strongly folded and 2-keeled close to margins, mostly 2.5–3 mm long and 0.7–2 mm  $<$  lemma, somewhat stiff, folded along keels and flat between keels, mostly shallowly notched at tip, with pilose hairs to midpoint outside green veins. **Flower:** bisexual, bilateral, in range cleistogamous; **perianth (lodicules)** apparently absent (not visible); **stamens** 3, free, included; filaments threadlike, ca. mm long, colorless; anthers dorsifixed, dithecal,  $<$  0.5 mm long, rose; pollen whitish; **pistil** 1;

ovary superior, hemi-ovoid, ca.  $1 \times 0.4$  mm, flattish on lemma side, translucent to greenish below midpoint, glabrous, 1-chambered with 1 ovule; styles 2, wide spaced at top of ovary, ca. 1 mm long above bases, white, feathery (plumose). **Fruit:** achene (caryopsis), enclosed in floret,  $\pm$  ovoid to ellipsoid indented on palea side,  $1.8\text{--}2.3 \times 0.7\text{--}1$  mm, light brown, textured with longitudinal rows of minute pits (collapsed cells).

A. C. Gibson