

Vascular Plants of Williamson County

Carex muhlenbergii var. *enervis* – MUHLENBERG SEDGE [Cyperaceae]

Carex muhlenbergii Schkuhr var. *enervis* Boott (also spelled *muehlenbergii*), MUHLENBERG SEDGE. Perennial herb, rhizomatous, fibrous-rooted, many-stemmed at base in dense clump, cespitose, in range to 27 cm tall; monoecious; shoots with only basal leaves (leaves appearing cauline arise at plant base), glabrous; rhizome cylindrical, to 3 mm diameter, with short internodes hidden by persistent fibrous leaf bases; cortex in \times -section tinted reddish; adventitious roots at rhizome nodes. **Stems (culms):** 3-sided, 1 mm diameter, aboveground not fibrous, where covered with sheaths white and smooth, exposed upper portion green sharply angled with raised veins, inconspicuously papillate. **Leaves:** alternate tristichous, simple with sheath; sheath closed, truncate at top, colorless, \pm smooth; ligule membranous, truncate, in range \pm 0.25 mm long; blade \pm flat not inrolling, linear, $< 50\text{--}120 \times 2\text{--}3.8$ mm, green with colorless veins, entire, long-tapered at tip, parallel veined having to 19 veins, upper surface minutely papillate along veins. **Inflorescence:** spikelets, in a dense, spikelike panicle of alternate unisexual flowers in spikelets, spikelet branches spaced to 2 mm apart, spikelet having at base several–15 pistillate flowers and above several, alternate staminate flowers in an erect, cylindrical cluster (androgynous), pistillate flower enclosed by the saclike perigynium (modified prophyll), bracteate, glabrous. **Spikelet:** to 8 mm long; bract subtending spikelet $2/3$ -sheathing (2 faces), to 10 mm long, body (basal portion) triangular and keeled, to 2.5 mm long, with membranous margins, upper portion awnlike, initially green aging brown, minutely scabrous along midvein and margins; pistillate “bractlet” (floral bract), to 3.5 mm long, body roundish to broadly ovate and membranous with green midstripe (1.5 mm wide), ca. 1.7 mm, weakly 3-veined, at anthesis wider than perigynium but in fruit to $2/3$ as wide as perigynium; staminate bractlet, ovate-lanceolate and membranous, ca. 2×0.65 mm, without awn; perigynium flattened front-to-back, ovate in outline, $\pm 2 \times 1$ mm including tapered, deeply cleft upper portion ca. 0.8 mm long “beak”), at anthesis with minute teeth along 2 edges tip-to-nearly base, green. **Staminate flower:** perianth absent; stamens 3, free; filament threadlike, to 1.3 mm long, white; anthers dorsifixed, dithecal, sometimes exserted, linear, ± 1.5 mm long, pinkish, longitudinally dehiscent; pollen pale yellow to yellowish; pistil absent. **Pistillate flower:** perianth absent; stamens absent; pistil 1, ca. 2.5 mm long, enclosed by the saclike perigynium; ovary superior, ellipsoid compressed front-to-back, 0.4×0.3 mm, greenish, 1-chambered with 1 ovule; style ca. 1.5 mm long, 2-branched, base bulbous and green, above base greenish, the stigmatic branches exserted ca. 1 mm through orifice of perigynium, 1.5 mm long, aging reddish. **Fruit:** achene enclosed in perigynium; achene sessile on short stalk, ovoid and biconvex compressed front-to-back, $1.4\text{--}1.6 \times 1.2\text{--}1.4$ mm; perigynium strongly compressed-half ovoid, $3\text{--}3.5 \times 1.8\text{--}2$ mm, green before drying, minutely toothed from tip to above midpoint of fruit-bearing lower portion, lower portion lower side (abaxial) bowl-shaped, veins inconspicuous (not raised), upper side flat, 2-toothed “beak” < 1 mm long, green and colorless.

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