

Vascular Plants of Williamson County
Carex microdonta – LITTELTOOTH SEDGE [Cyperaceae]

Carex microdonta Torrey & Hooker, LITTELTOOTH SEDGE. Perennial herb, clonal, rhizomatous spreading forming wide patches by creeping rhizomes, fibrous-rooted, rosetted with ascending basal leaves, with 1 shoot per plantlet (ramet) or 2 or 3 shoots (tufted with separate plants from rhizome nodes), ± erect, in range to 40 cm tall; monoecious; shoots with basal leaves and cauline leaves, foliage narrowly strap-shaped, glabrous; rhizome with aerial shoot to 3.5 mm diameter, creeping portion (lacking buds) internodes mostly 7–9 × 1.2–1.5 mm, white, with persistent fibers of decomposed scales, scales obliquely attached and overlapping, closed but splitting downward, mostly 10–12(–16) mm long ≥ internode, translucent aging brownish; adventitious roots nodal. **Stems (culms):** 3-sided, ca. 1.5 mm diameter but at cauline nodes slightly constricted; internodes solid. **Leaves:** alternate tristichous, simple with sheath; sheath closed, sheathing 360°, folded upward from midvein, of basal leaves lower portion white, upper portion with membranous panel (sheath front) ± truncate at top, membranous tissue continuous with inverted V-shaped membranous ligule at base of blade projecting ca. 0.5 mm, aging torn from sheath; blade linear, < 90–270 × mostly 5–7.5 mm, 3-folded M-shaped in x-section, lateral folds along veins thinner than midrib, entire with upward-pointing teeth approaching tip, gradually tapered to acuminate at tip, parallel-veined with midrib raised on lower surface and 2 principal veins raised on upper surface, lower surface only with stomata. **Inflorescence:** spikes of unisexual flowers in terminal panicle, 3–6 and short-stalked, lower portion of panicle leafy with 1 or 2 solitary axillary spikes having only pistillate flowers, upper portion lacking leaves with spikes having only staminate flowers, between sometimes a spike with staminate flowers at top and many pistillate flowers below (androgynous), terminal spike often with 1–3 shorter staminate spikes at its base, pistillate spikes at anthesis often ± concealed by sheath of leaflike bract, staminate spikes at anthesis showy with conspicuous exerted anthers (10 mm wide), spike body linear- narrowly fusiform, many-flowered, bractlets helically alternate, overlapping and shinglelike, bracteate, glabrous. Lower bracts leaflike, at the lower node blade to 200 mm long and the other node blade slender and to 60 mm long, lacking prophyll; upper bracts with closed sheath < 10 mm long; axis of panicle stemlike, 3-sided and constricted at nodes. **Staminate inflorescence:** terminal spike 20–25 × 2–3 mm, ascending to suberect, smaller basal spikes to 14 mm long; bractlet subtending flower broadly lanceolate, 4–4.5 × 1.2–1.5 mm, membranous with green midstripe having only a midvein, ± rounded on back, vein and green stripe not reaching acute tip, glabrous; subtending base spike with stalk concealed by barrel-shaped prophyll ca. 1.2 × 1.2 mm, whitish. **Staminate flower:** **perianth** absent; **stamens** 3, free, arranged side-by-side, anthers fully exerted; filaments linear, exerted from below midpoint, 6–8.5 mm long, whitish; anthers basifixed, dithecal, (2.4–)3–4.2(–4.6) mm long, pale light-yellow, sacs with colorless tips (aging reddish) and minute tails, longitudinally dehiscent; polle pale yellow to yellowish; **pistil** absent. **Pistillate inflorescence:** solitary spike somewhat 3-angled, 20–30 × 2 mm and at anthesis narrower than staminate spike; bractlet subtending flower obovate somewhat keeled, ca. 4 × 2.5 mm, having green axis and membranous margins, tapered to somewhat shallowly 2-lobed with awned, pointlike tip aging stiff, 1-veined to tip. **Pistillate flower:** **perianth**

absent; **stamens** absent; **pistil** 1, enclosed in sac (perigynium = palea); ovary superior, 3-sided, 0.8×0.4 mm, \pm translucent, 1-chambered with 1 ovule; style 3-branched, at anthesis lower portion enclosed in perigynium 0.3–0.5 mm long, the stigmatic branches exerted from perigynium, 1–1.5 mm long, translucent, conspicuously papillate. **Fruit:** achene in perigynium; perigynium oblong-ovoid to slightly obovoid, $2.8\text{--}4.2 \times 1.4\text{--}1.8$ mm, olive green, with a narrow pore at tip with an opposite pair of minute blunt teeth at pore, sometimes with dry stigmatic lobes exerted; achene with persistent beak (persistent style), body conspicuously 3-sided (trigonous) wide at or slightly above midpoint, $1.9\text{--}2.7 \times 1.2\text{--}1.6$ mm, brown, beak cylindric ca. 0.9 mm long.

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