

## Vascular Plants of Williamson County

*Digitaria ciliaris* var. *ciliaris* – SOUTHERN CRABGRASS [Poaceae]

*Digitaria ciliaris* (Retz.) Koeler var. *ciliaris*, SOUTHERN CRABGRASS. Annual (short-lived perennial herb), fibrous-rooted, to 12-stemmed at base, branched at lower nodes, spreading and decumbent, in range to 50 cm tall; shoots with basal leaves, cauline leaves, and prophylls; adventitious roots at nodes of stolonlike procumbent stems. **Stems (culms):** cylindrical but D-shaped to elliptic in  $\times$ -section at base of lateral branch (superficially appearing flattened with sheath enveloping both branches), < 2.5 mm diameter, light green becoming tannish or rose, internodes 25–85 mm long, often bent at nodes (geniculate), nodes glabrous or minutely puberulent (in range base of sheath short-hairy); internode hollow. **Leaves:** alternate distichous, simple with sheath; prophyll open, 2-keeled, 25–55 mm long, scabrous on keels and margins on lower surface, short-ciliate at base of margins; sheath open, 20–70 mm long (of flag leaf 60–120 mm long), < internode, not purplish above node or below blade, membranous on both margins, with veins raised on outer surface, glabrous (sparsely and finely puberulent above node or occasionally with papillate-based long hairs below collar), without lobes (auricles) at top; ligule membranous and broadly convex, 1–3(–4) mm long, semi-translucent and whitish to pale green, continuous with sheath margins, irregularly jagged on curved margin, glabrous or pilose above node; collar to 1.3 mm long, with wavy margin or margins,  $\pm$  puberulent on back; blade narrowly linear-lanceolate, 45–105  $\times$  5–9 mm, entire and minutely toothed on margins, narrowly acuminate at tip, parallel-veined with midrib on lower surface, in range with papillate-based hairs ca. 3 mm long at base. **Inflorescence:** spikelets, in terminal,  $\pm$  umbel-like (subdigitate) panicles with 3–7 branches along rachis or appearing whorled, the branches (12–)25–120  $\times$  0.5–1 mm, 1-sided with 2 stalked spikelets per node on lower side, spikelet of 2 florets but only upper one fertile, bracteate; peduncle 100–450 mm long, with pulvinus at top; rachis 1 mm long (1-branched) or 4.5–25 mm long (with 3–7 lateral branches), with densely pubescent nodes, having a pulvinus in axil of each lateral branch, the pulvinus bulbous, yellowish green or becoming purplish red; branches with raised whitish midvein and 3 green winged margins, wavy on margins; stalks at each node unequal, 0.4–0.6 mm and 1.1–4.5 mm long, free from midrib, 3-angled, scabrous. **Spikelet:** narrowly ovate, compressed top-to-bottom, breaking below glumes; **glumes** 2, lower glume appressed, ovate to triangular and semi-encircling, 0.3–0.4 mm long, opaque or translucent centrally, membranous on margins, veinless or sometimes appearing 2-veined or 3-veined with light green streaks; upper glume oblong to lanceolate, 1.7–2  $\times$  0.7–0.8 mm, 3-veined, pale green with dark green veins, appearing windowlike (fenestrate), marginally with long and finely pilose-ciliate hairs spreading and separate at base and ascending and in contact with ends of neighboring hairs, pilose-ciliate between veins; **lemmas** 2, of sterile lower floret lanceolate to narrowly ovate, 2.3–2.7  $\times$  1 mm, (5–)7-veined, light green with dark green veins, ciliate like upper glume, glabrous on back or pilose-ciliate between submarginal veins; of fertile upper floret lanceolate, 2.6–3.2  $\times$  0.75–0.9 mm, light grayish green, glabrous, with colorless margins wrapped around palea and fruit, central vein glabrous with several minute scabrous teeth approaching tip, becoming very hard, finely striped; **palea** of upper floret lanceolate, 2  $\times$  0.9 mm, light grayish green, not keeled, partially enveloping fruit, faintly 2-veined, finely striped. **Flower:** bisexual;

**perianth (lodicules)** 2, trapezoid to rectangular, 0.2–0.3 × 0.2–0.25 mm, truncate with 2 or 3 rounded teeth; **stamens** 3, free; filaments 2–3 mm long, white; anther exerted at tip of lemma, versatile, dithecal, 0.8–1.25 mm long, brownish yellow, yellowish, or whitish with purplish edges or red spots, arrow-shaped at base, longitudinally dehiscent; pollen light yellowish to colorless; **pistil** 1; ovary superior, lanceoloid, 0.5–0.8 × 0.25 mm, translucent yellowish green, 2-forked at top, 1-chambered with 1 ovule; styles 2, exerted at tip of lemma, 2–2.8 mm long, colorless, from thick base threadlike on basal 2/3, bottlebrushlike, arching, and pinkish purple aging purplish red from 0.6–0.9 mm to tip. **Fruit:** achene (caryopsis), enclosed within spikelet bracts, oblanceoloid somewhat compressed, 1.3–2.2 × 0.5–0.9 mm, creamy white to pale grayish green, opaque, flat on palea side and low convex on lemma side, with groove on 1 face; upper glume conspicuously ciliate, lemma and palea grayish green.

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