

Vascular Plants of Williamson County

Setaria viridis var. *viridis* – GREEN BRISTLEGRASS [Poaceae]

Setaria viridis (L.) P. Beauv. var. *viridis*, GREEN BRISTLEGRASS. Annual, fibrous-rooted, not rosetted, tufted, several–many-stemmed at base, often with ascending lateral branch from each cauline node, in range 22–70 cm tall; shoot with 1 basal leaf and to 6 cauline leaves, foliage scabrous, on straight stems lacking large, knotlike nodes, pilose; adventitious roots at basal nodes. **Stems (culms):** cylindric, to 3.3 mm diameter, conspicuously ridged above foliage, mostly glabrous (nodes always glabrous) or a lower internode having pilose hairs adjacent to node. **Leaves:** alternate distichous, simple with sheath; prophyll open, membranous, 2-keeled and deeply sunken between keels, to 23 mm long, margins to 1.8 mm wide, short-ciliate along keels, not scabrous, to 10-veined with 4 parallel veins on margin side of each keel; sheath open, sheath \geq internode, membranous with green veins, ciliate on margin especially dense approaching to, short-pilose but densely hairy subtending whitish collar, without lobes (auricles) at top; collar $<$ 1 mm long; ligule densely ciliate, 1–1.5 mm long; blade linear narrowly-lanceolate, $<$ 35–230 \times 5–17.5 mm, the widest above the base, flat, minutely toothed on margins, long-tapered to tip, parallel-veined with veins finely raised on upper surface and midrib raised on lower surface, glabrous. **Inflorescence:** spikelets, in terminal spikelike panicle, panicle densely flowered, with conspicuous bristles (= reduced branchlets) $>$ spikelets, panicle slightly arching, cylindric, (20–)55–110 \times 13–17 mm (including ascending bristles) and 8–9 mm (without bristles), lateral branches densely packed, alternate to pseudowhorled spaced $<$ 3 mm apart, spikelet with 2 florets, lower one sterile and vestigial and upper one bisexual, bracteate, lacking awns; peduncle and principal rachis conspicuously finely ridged, scabrous along ridges, rachis and axes of lateral branches scabrous and villous, with a pulvinus axillary to each lateral branch, lateral branch with several bristles at base and 1–2 bristles subtending each spikelet, bristles 4.5–6.5(–10) mm long, green or purplish red above midpoint, with upward-ascending barbs (antrorse); stalk subtending spikelet to 0.7 mm long, scabrous cylindric portion with ringlike swelling at top. **Spikelet:** ellipsoid with 1 flattish side, 1.8–2.2 \times 0.4–0.7 mm long, glabrous, breaking below glumes and leaving a whitish disc; **glumes** 2, unequal, dimorphic, lower glume sheathing, membranous, 0.7–0.9 mm long, 3-veined, veins green, midvein to tip and lateral veins approaching but not fused with midvein, broadly acute to obtuse at tip; upper glume membranous, elliptic, 1.5–1.8 mm long, 5(–6)-veined, veins green, rounded on back; **lower lemma** (sterile floret) similar to upper glume, 1.7–2.1 mm long, with 5 complete veins + 2 shorter veins; **lower palea** membranous and \pm elliptic, 0.6–0.9 \times 0.25–0.4 mm, 2-veined; **upper lemma** (fertile floret) 1.5–1.7 mm long, finely veined and with fine transverse ridges on back, greenish at tip; **upper palea** similar to upper lemma, broadly elliptic, \pm 1.4 mm long, faintly 2-veined and inrolled interior to green veins. **Flower:** bisexual; **perianth (lodicules)** 2, flattened wedge-shaped, \pm 0.35 \times 0.35 mm, colorless; **stamens** 3, free; filaments threadlike, 0.5–0.7 mm long, colorless; anthers dorsifixed, dithecal, 0.5–0.7 mm long, white aging reddish, longitudinally dehiscent; pollen white; **pistil** 1, 1.2–2 mm long; ovary superior, ovoid, 0.5 \times 0.3 mm, translucent, glabrous, 1-chambered with 1 ovule; styles 2, exerted from top of spikelet, colorless, if exerted aging reddish with spreading stigmatic tips. **Fruit:** achene

(caryopsis) tightly enclosed by hardened lemma and membranous palea, spikelet with fruit ellipsoid, ca. 2×1.3 mm, achene compressed top-to-bottom, ca. 1.7×1 mm, brownish.
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