

Vascular Plants of Williamson County
Bothriochloa barbinodis – CANE BLUESTEM [Poaceae]

Bothriochloa barbinodis (Lag.) Herter, CANE BLUESTEM. Perennial herb, rhizomatous, fibrous-rooted, cespitose, many-stemmed at base, erect, in range 55–120 cm tall; shoots with basal leaves and cauline leaves, typically not branched above base; rhizomes short with condensed shoots. **Stems (culms):** subcylindric with a broad channel on 1 side, to 2 mm diameter, tough, nodes not swollen, with a conspicuous, dense ring of ascending soft hairs 1.5–5 mm long on nodal ledge; lower internodes solid with white center. **Leaves:** alternate distichous, simple with sheath; prophyll membranous, narrowly acuminate in outline, mostly 15–35 × 1–1.6 mm, strongly 2-keeled and depressed between keels, keels ciliate below midpoint and then short-ciliate to tip; sheath open with overlapping margins, smooth, glabrous, with lobes (auricles) at top; ligule membranous, arching to broadly triangular, 1.5–2(–3) mm long, ciliate on margins; blade long-tapered linear, 80–300 × 2.5–6.5 mm, the widest ca. 1/4 from the base, flat, minutely toothed on margins, parallel-veined with midrib raised on lower surface, veins translucent pale green becoming purplish red, upper surface pilose at base above ligule with a mixture of short hairs 0.5 mm long to long hairs 4.5–7 mm long. **Inflorescence:** spikelets, in terminal panicles, panicle exerted or initially partly enclosed in sheath of flag leaf, narrowly funnel-shaped but later spreading, in range 50–110 mm long, of several–10 lateral branches from a rachis and 2–4+ secondary branches (rames) from lower nodes of each branch, spikelets sessile and fertile with 2 florets as well as stalked and sterile, bracteate, awned; rachis glabrous at base to long-pilose above; secondary branchlets ascending, 20–80 mm long, breaking into segments (spikelet unit = rame internode + 1 sessile and 1 stalked spikelet), rame internode 3.4–4 mm long, breaking below sessile spikelet, channeled on 1 side and membranous within, conspicuously and densely pilose on green margins with hairs to 8 mm long; stalk of sterile spikelet 3.2–4 mm long, densely pilose like rame internode. **Sterile spikelet (stalked): glume** 1, narrowly elliptic, 3.3–3.8 mm long, 5-veined or 7-veined; **lemma** ± oblong to ovate 3–4 × 0.7 mm, translucent, glabrous, with margins partially clasping ovary of fertile flower; **palea** absent. **Fertile spikelet (sessile):** > sterile spikelet, lower floret sterile, upper floret fertile and bisexual; **glumes** 2, equal, 4.5–5(–6) mm long, > florets, lower glume with inrolled margins, 7-veined or 9-veined, with scattered ascending short hairs on outer surface, submarginal vein minutely scabrous above midpoint; upper glume keeled, 3-veined, glabrous; **lemma** awned, narrow, ca. 3 mm long + awn 17–22 mm long, the awn twisted, bent below midpoint; **palea** ovate to 2-toothed, ca. 1 mm long, flat, translucent, glabrous or ciliate. **Flower: perianth (lodicules)** 2, trapeziform, ± 0.7 mm long, ± 2-toothed and the widest at top; **stamens** 3, free; filaments threadlike, to 2 mm long, translucent-white; anthers only sometimes exerted, basifixed, dithecal, arrow-shaped, to 1 mm long, pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, to 5 mm long; ovary superior, narrowly ovoid to lanceoid, 1–1.6 mm long, yellowish to yellowish white, glabrous, 1-chambered with 1 ovule; styles 2, erect, to 2.5 mm long, translucent; stigmas fully exerted from above midpoint of glumes, feathery (plumose), 1.5–2 mm long, purple, persisting dry in maturing inflorescence. **Fruit:** achene (caryopsis) enclosed within straw-colored spikelet with long hairs and a long, twisted awn

on lemma, narrowly obovoid, ca. 2.2×0.8 mm, light brown but darker at tip, somewhat 3-sided, with a shallow longitudinal groove on side facing palea to midpoint.

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