Vascular Plants of Williamson County Setaria reverchonii – REVERCHON BRISTLEGRASS [Poaceae]

Setaria reverchonii (Vasey) Pilger (subsp. not recognized), REVERCHON BRISTLEGRASS. Perennial herb, bunchgrass, rhizomatous, fibrous-rooted, many-stemmed at base, unbranched aboveground, erect to ascending, in range to 50 cm tall; shoots with threadlike basal leaves and to 4 cauline leaves, long-hairy mostly at sheath-blade junction, the hairs often with enlarged base (pustulate); rhizomes shallow (< 40 mm deep), knotty highly branched with a high concentration of basal axillary buds, to 2 mm diameter, with dense, straight long hairs to 2 mm long, having cataphylls (bladeless leaves) acute at tip, 4–11 mm long, strongly ridged. Stems: cylindric, 1 mm diameter, glabrous. Leaves: alternate distichous, simple with sheath; prophyll open, membranous aging papery, triangular in outline with wide, 2-keeled, sharply folded margins, to 5 mm long, conspicuously longhairy on outer surface; sheath open, ridged, margins membranous and conspicuously ciliate from base-to-top, at top of sheath to 3.5(-5) mm long, of basal leaves often folded; ligule truncate, stiff-ciliate or ciliate from a membranous base, 1-1.5(-2) mm; collar to 0.7 mm long, white, sometimes with pustulate hairs on margins; blade linear but often inrolled upward (involute), of basal leaves to 60×1 mm, of cauline leaves $70-195 \times 2-4$ mm, the widest at midblade, long-tapered to tip, parallel-veined, to 15-veined at midblade, with veins raised and scabrous on both surfaces, margins also with minute, scabrous teeth but surfaces not noticeably rough. Inflorescence: spikelets, terminal and spikelike $50-150 \times$ to 5 mm, appearing interrupted, lower portion with appressed to ascending lateral branches, 1 per node (with short branchlets) and < 15 mm long, upper portion with alternate, stalked, solitary spikelets, spikelet with 2 florets, axes with scabrous teeth, nearly glabrous; blade of flag leaf ascending often to midpoint of spikelets; peduncle slender, ridged, tough, weakly scabrous, at the lowest node ligulelike with a row of hairs to 2 mm long; rachis like peduncle but upper portion (having solitary spikelets) wavy and angled; branches commonly with a short-stalked spikelet coupled with a spikelet with a longer, curved stalk, on branchlets with a bristle (reduced branch) near base of spikelet arising from a ringlike thickening, the bristle curved, to 2 mm long, white often aging purple-red, densely scabrous, persistent, on upper portion solitary spikelets lacking a bristle. Spikelet: lower floret sterile and vestigial, upper floret fertile and bisexual, obovoid with 1 flattish side, $3-3.6 \times 1.7-1.8$ mm, often mottled with purple-red blotches on outer surfaces, glabrous, breaking below glumes and leaving a whitish disc ca. 0.3 mm across; glumes 2, unequal, dimorphic, lower glume sheathing and open, widely overlapping on flattish side, in range mostly 1.6–1.8 mm long to near midpoint of spikelet, the longest face with acute to obtuse tip often purple-red framed with colorless tissue, veins 5(-7) with principal veins raised and not converging at tip, veins green on colorless tissue; upper glume membranous, \pm elliptic with margins wrapped around lower lemma, 3–3.5 mm long, 7–9-veined, veins green, purple-red blotch mostly above midpoint; lower lemma (sterile floret) similar to upper glume with inrolled margins (clasping upper floret), ovate, ca. 0.2 mm < upper glume, membranous with 5 green veins or also with dark blotch; lower palea absent; **upper lemma** (fertile floret) textured and bumpy, < lower lemma, weakly 3-veined above midpoint, aging hard (indurate); upper palea textured and bumply with wide, inrolled membranous margins enclosing flower, outer surface aging indurate. Fertile flower: bisexual; perianth (lodicules) 2, nearly squarish, ca. 0.4×0.3 mm, translucent; stamens 3,

free, included; filaments < 1 mm long, translucent; anthers dorsifixed, dithecal, 1 mm long, off-white, longitudinally dehiscent; pollen colorless; **pistil** 1, ca. 1.1 mm long, included; ovary superior, ellipsoid, $\pm 0.5 \times 0.2$ mm, colorless, 1-chambered with 1 ovule; styles 2, spaced at top of ovary, ca. 0.6 mm long, colorless, lacking stigmatic branches. **Fruit:** achene (caryopsis), enclosed within spikelet having papery, loose glumes and lower lemma and hidden by a sealed, hard (indurate) unit of upper lemma and upper palea, plump hemiovoid, ca. 3.5×2 mm, the upper lemma and palea textured with cells in vertical rows and especially on lemma the middle section having short bands and ridges; either abscised from bristle or shed with the stalk + bristle to 2 mm long; seed not observed (very difficult to remove hard cover).

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