Vascular Plants of Williamson County Muhlenbergia reverchonii – SEEP MUHLY [Poaceae]

Muhlenbergia reverchonii G. Vasey & Scribn., SEEP MUHLY. Perennial herb, bunchgrass, inconspicuously rhizomatous, fibrous-rooted, many-stemmed at base, cespitose, densely branched belowground close to rhizome, upright with airy inflorescence in range to 40 cm tall; shoots with strongly distichous, mostly basal leaves, the leaves below ground lacking blades, and at least 1 lower cauline leaf, foliage not glaucous; rhizome, shallow and horizontal, condensed and repeatedly branched, horizontal, 2 mm diameter; adventitious roots from rhizome and at the base of each aboveground shoot. Stems (culms): cylindric, to 0.6 mm diameter, light green, where exposed low-ridged; internodes hollow. Leaves: alternate distichous, simple with sheath; prophyll 2-keeled, to 5 mm long, the keels to 0.4 mm wide and short-ciliate; sheath open and overlapping, fibrous, stiff, and tough (supporting weaker stem), ridged to somewhat keeled approaching top, glabrous, having narrow margins base to lobelike at top continuous with truncate membranous ligule; ligule < 1-1.5 mm long minutely ciliate on margin, often splitting to base; blade slender (filiform) base-to-tip, in range mostly $35-160 + \times 0.6 - < 2$ mm, flat but often inrolled upward or during stress or aging fully inrolled, minutely toothed on margins, parallelveined with veins raised on both surfaces, upper surface densely short-hairy, lower surface glabrous. Inflorescence: spikelets, in open, wispy, terminal, paniclelike array, panicle mostly 100–170+ mm long, with 12+ alternate to subopposite principal lateral branches along central axis, branches spreading to ascending repeatedly forked having divergent axes, with a single stalked spikelet at each tip, spikelet with 1 bisexual floret, awned; rachis slightly wavy especially above midpoint, light green, lacking hairs and teeth; principal branches with or without small pulvinus at base, pulvinus to 0.5 mm long, often purple-red and glabrous; axes of branches and branchlets fine, wiry, and flexible, angled with minute teeth along edges, purple-red, having a small pulvinus at the base of each new branch; stalk of spikelet straight to wavy and fine, $4-15 \times 0.05$ mm, purple-red, lacking teeth except puberulent approaching spikelet. Spikelet: narrowly lanceolate, in range 2.5–3.5 mm long + awn, generally closed (not spreading), breaking above glumes; glumes 2, subequal, membranous, ovate, ca. $1.3-2.1 \times 0.4$ mm, lower glume < upper glume, 1-veined, colorless or later tinged purplish, often shallowly notched with short point (mucron) from notch, midvein sometimes minutely scabrous, upper glume colorless with minute hairs approaching tip; callus greenish with a tuft of short hairs; lemma awned, membranous, lanceolate (flattened) 0.6-0.7 mm wide, with margins inrolled over palea, initially colorless with 3 green veins at anthesis tissue mostly purplish red, = length of spikelet, with midvein slightly raised and scabrous to awn, the awn terminal or in shallow notch at tip, persistent, fine, and straight, in range < 2-4 mm long, purple-red or tannish; palea membranous, ovate (concealing flower), = lemma, faintly 2-veined with a pair of purplered, short, awnlike tips, back with minute hairs. Flower: perianth (lodicules) obscure; stamens 3, free; filaments slender, < 0.5 mm long, colorless; anthers dorsifixed, dithecal, included within palea, in range 1.1–1.4 mm long, light green aging yellowish, longitudinally dehiscent; pollen colorless; **pistil** $1, \pm 1$ mm long; ovary superior, subspheroid, ca. 0.25 mm, pale green, 1-chambered with 1 ovule; styles 2, included, colorless, lower portion slender, stigmatic upper portion from midpoint. Fruit: achene (caryopsis), within floret with awn, ellipsoid, 2–2.4 mm long, brownish. A. C. Gibson