Vascular Plants of Williamson County

Dichanthelium acuminatum – HAIRY ROSETTE PANICGRASS, TAPERED ROSETTE GRASS

Dichanthelium acuminatum (Swartz) Gould & G. A. Clark (incl. subspecies), HAIRY ROSETTE PANICGRASS, TAPERED ROSETTE GRASS. Perennial herb, rhizomatous ("caudices"), fibrous-rooted, rosetted, densely cespitose, many-stemmed at base (sometimes 50+), principal shoots spreading to ascending, in range < 30 cm tall; shoots with basal leaves and later several, larger cauline leaves, pilose and short-pilose with the longer hairs often with enlarged bases (pustulate) to 5 mm long; rhizomes shallow, knotty with no continuous axis having many developed buds forming ovate cataphylls; adventitious roots from caudices. **Stems:** cylindric, to 4 mm diameter distinctively swollen at nodes, nodes pilose; internodes hollow. Leaves: alternate distichous, simple with sheath; sheath ridged, stiffhairy with hairs having enlarged bases (pustulate) to 3.5 mm long and with conspicuous hairs at base of sheath but short-hairy (not pustulate) along sheath ridge, without lobes at top (auricles), above midpoint exposed inner surface also with hairs; ligule truncate, stiffciliate, to 3 mm long; blade lanceolate-triangular and $20-30 \times 2.5-5$ mm (basal cells) to lanceolate and to $40-80 \times 5-14$ (cauline leaves), broadly tapered at base, ciliate with pustulate hairs near the base and minutely toothed on margins, acute at tip, parallel-veined with many fine veins, upper surface glabrous or with several long pustulate hairs near the base, the hairs to 5 mm long, lower surface short-pilose, surfaces dull. Inflorescence: spikelets, many in terminal, open panicle, panicle 30–70 mm long, with 1–2 blades overlapping inflorescence; rachis with 10+ alternate nodes, glossy green with ridge descending from each pulvinus, finely pilose with radiating hairs; primary branches to 4 from each node ascending to spreading and to 30 mm long, many branches, branchlets, and especially ultimate stalks of spikelets having an axillary pulvinus, spikelet 2-flowered, bracteate; axes of branchlets widely spreading, flexible, wiry, and crooked (never straight), to 20 mm long, glossy, with conspicuous axillary pulvinus, spikelet pulvinus whitish and short-pilose. Spikelet: lower floret neuter, upper floret bisexual, obovoid, $\pm 1.3 \times 0.75$ mm, often red-purple, short-pilose, breaking below glumes; glumes 2, unequal, dimorphic, lower glume broadly acute at tip and fused on the back, 0.5 mm long, veins inconspicuous; upper glume cupped-obovate, 1.2 mm long, green blushed purple-red, finely 9-veined, with short-pilose hairs in rows between veins; lower lemma (sterile floret) cupped hemispheroid, 1.2 mm, mostly red-purple with colorless, incolled membranous margins, finely 7-veined; lower palea absent; upper lemma 2/3-cupped, 1.2 mm long, colorless with nipple at top tinged purple, outer surface smooth with obvious veins lacking (1-2 faint)veins); upper palea cupped-elliptic, glossy. Fertile flower: bisexual; perianth (lodicules) 2, wedge-shaped, ca. 0.3×0.4 mm, translucent; stamens 3, free; filaments threadlike, ± 1.5 mm long, white; anthers dorsifixed, dithecal, exserted, ± 0.9 mm long, purple-red, longitudinally dehiscent; pollen colorless; **pistil** 1, ca. 1.1 mm long; ovary superior, obovoid, 0.3 mm long, translucent, glabrous, 1-chambered with 1 ovule; styles 2, spaced at top of ovary, lower portion 0.3 mm long, colorless, upper portion with stigmatic branches partially exserted, 0.4 mm long, dark red-purple. Fruit: achene (caryopsis), dispersed as a spikelet within a whitish spheroid, chamber of the glossy upper lemma and upper palea, ca. 1.2 mm long. A. C. Gibson