

Vascular Plants of Williamson County

Rhynchospora colorata – WHITETOP SEDGE, STARRUSH WHITETOP [Cyperaceae]

Rhynchospora colorata (L.) H. Pfeiff., WHITETOP SEDGE, STARRUSH WHITETOP. Perennial herb, clonal, rhizomatous, fibrous-rooted, 1-stemmed at base but loosely cespitose with a shoot arising from tip of each rhizome, erect, with terminal inflorescence in range to 50 cm tall; shoot with scalelike, greenish leaves along rhizome approaching shoot, to 6 basal leaves with aboveground green blade, and to 2 cauline leaves, foliage appearing glabrous; rhizomes arising from axillary buds of basal leaves, shallow, ± horizontal, cylindric, mostly to 50 mm long, in range to 2 mm diameter, white, internodes to 10 mm long, solid, with persistent, conspicuous scales, that axillary buds at stem base ovoid, to 2 mm long, colorless, the scales closed, < 7–17 mm long and > internode, closed with sheath to 6 mm long and appressed upper portion triangular and acute (obtuse) at tip, with ca. 15 parallel veins initially colorless aging brownish (scales at ground level green-striped with blade to 4 mm long; adventitious along rhizome 1 at node splitting closed scale sheath. **Stem (culm):** rounded 3-sided, to 2 mm diameter, tough, at stem base green (concealed by leaf sheaths) to dark green above sheath of the uppermost cauline leaf, faces with several shallow grooves (sunken veins), glabrous; internodes solid just above basal leaves and narrowly hollow above (thick wall). **Leaves:** of aerial stem alternate tristichous, simple with sheath; sheath closed, to 125 mm long, smooth, having a membranous (pale brown), V-shaped patch at top to 15 mm long, not truncate, of the lowest basal leaves splitting; blade linear, aboveground, in range 15–270(–410) × 3–6 mm, green, somewhat folded upward from base and keeled from midrib approaching tip, entire to minutely serrate (somewhat scabrous) approaching tip on colorless margins, long-tapered to acuminate tip, parallel-veined folded from midrib, upper surface lacking hairs, lower surface approaching tip having sparse, appressed, rodlike white hairs < 0.1 mm long. **Inflorescence:** spikelets in headlike, solitary, terminal panicle defined by an involucrelike set of bracts with a white, starlike center, panicle of many, helically alternate, sessile branchlets mostly having 2–3(–4) spikelets, panicle broadly ovoid to hemispheroid, to 12 × 16 mm, spikelets on branchlet side-by-side forming a broadly ovate array compressed front-to-back with the longest spikelet in center, radiating, spikelet narrowly ovoid and flamelike, to 9 × 3 mm, white with overlapped, helically arranged bractlets (floral scales), bractlets to 15, flowers present except at the lowermost bractlets, glabrous; peduncle = stem, at top forming a bract with diminutive sheath at each node of inflorescence, at the lowest nodes blades of bracts spreading and descending leaflike, to 130 × 7.2 mm, bracts at the lowest 4–8 nodes > panicle, white from base mostly to 20 mm and green above, flat, entire or sometimes somewhat wavy on margins, long-tapered to tip, decreasing upward from the longest bractlet, at most nodes bractlet triangular, < branchlet, to 4 × 2 mm, white; branchlet at the first node diminutive, increasing upward in size of spikelets and then fertile; prophyll subtending branchlet hidden on inner side, 2–3-toothed, to 4 mm long, colorless; branchlet of spikelets bracketed by a pair of bracts appressed on outer edges, glumelike bracts keeled and boat-shaped, 2.5–3 mm long, white. **Spikelet:** bractlets keeled and boat-shaped, the lowest (sterile) triangular (flattened), 2.8–3.5 mm long, of fertile flowers 3–4 mm long, the uppermost flower of a spikelet potentially staminate. **Flower:** bisexual, mostly concealed by bractlet; **sepals** absent; **petals** (bristles) absent; **stamens** 3, free; filaments in bud somewhat flattened or channeled and < 1 mm long, at anthesis elongating to length of

bractlet and slender, ca. 4 mm long, white; anthers basifixed, dithecal, fully exerted near top of bractlet, slender, 2–2.5 mm long, pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, on short stout stalk; ovary superior, \pm 2-sided compressed front-to-back, narrowly ovoid, ca. 1×0.3 mm, light green, 1-chambered with 1 ovule; style 3 mm long, translucent, 2-branched near midpoint, the stigmatic branches exerted and spreading from sides of bractlet. **Fruit:** achene, on short, broad stalk and with a cap of tissue at top (tubercle), dispersal unit obovoid compressed front-to-back, in range $1.5(-2) \times 1$ mm + persistent style, seed chamber lens-shaped biconvex, in range ca. 0.5 mm diameter, reddish to brown, faces with low, transverse, wavy, papillate ridges, the tubercle broadly crescent-shaped or drying broadly triangular, 0.5–0.6 mm long, grayish.

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