Vascular Plants of Williamson County

Festuca sciurea – SQUIRREL SIXWEEKSGRASS, SQUIRRELTAIL FESCUE [Poaceae]

Festuca sciurea Nutt. (syn. Vulpia elliottii), SQUIRREL SIXWEEKSGRASS, SQUIRRELTAIL FESCUE. Annual, fibrous-rooted, several(-many)-stemmed and when young or diminutive having 1 principal flowering shoot sometimes aging tufted, erect to ascending, with inflorescence in range < 25 cm tall; shoots with ca. 2 basal leaves and 4+ cauline leaves, glabrous. **Stems** (culms): cylindric, slender, < 0.8 mm diameter at swollen nodes, mostly nongreen or internode aging with some purplish pigment approaching higher node, smooth, occasionally faintly glaucous near node. Leaves: alternate distichous, simple with sheath; sheath open, overlapping nearly to top, green minutely striped with membranous margins, prominently veined (often 7-veined), glabrous, generally without lobes (auricles) at top but continuous with ligule and appearing lobelike; ligule membranous, truncate, in range 0.5–< 1 mm long, inconspicuously and minutely ciliate; blade slender and short-lived (withered), linear and cupped upward or inrolled, in range < 50×0.5 mm (flattened) the widest at base, pale light green, parallel-veined with to 7 veins, minutely toothed on margins, acute at tip, upper surface strongly ribbed with furrows and having puberulent hairs, lower surface smooth and glabrous. **Inflorescence:** spikelets, in terminal, contracted panicles in range 50–110 mm long, of alternate distichous, appressed unequal lateral branches 1–2 per node, at lower nodes having 1 branch with 2+ ascending, stalked spikelets or additionally 1 branch with a single terminal spikelet, at upper nodes often lateral branch with only a single terminal spikelet, at anthesis soft and to 3 mm across excluding ascending to suberect awns and in more spreading, spikelet with (2–)3–5 bisexual florets and often 1 sterile floret (lemma) at tip, flowers cleistogamous (not observed) or chasmogamous on a plant, awned; rachis triangular to 2-sided in ×-section and very narrowly winged, smooth to sparsely minutely scabrous along winged green edges, with internodes 3–20 mm long and generally < spikelets, lacking pulvinus in axil with lateral branch or spikelet stalk; branch stalk below first spikelet < 6 mm long, spikelet stalk expanded ca. 1 mm and green approaching base of spikelet. Spikelet: ellipsoid to lanceoloid compressed side-to-side, in range < 4.5 mm long (excluding awns), conspicuously short-hairy, breaking above glumes and between florets; glumes 2, unequal, rounded on back, green with membranous margins and glabrous, sometimes scabrous on margins only close to tip, lower glume narrowly lanceolate, in range 1.5–2(–2.5) mm long and 1-veined, upper glume lanceolate, 2.5–3(–4) mm long and 3-veined with lateral veins not convergent at tip, lower > 1/2 upper, pointed at tip but lacking awn; rachilla internodes 0.8–1.2 mm long, whitish and sparsely short-strigose, with light green to pale green axillary pulvinus at base of each floret (chasmogamous florets); lemma awned, narrowly lanceolate, in range 2.5–3.5 mm long, rounded on back, 3-veined, not scabrous or sometimes scabrous approaching awn, of the lowermost floret mostly glabrous with conspicuous short hairs only approaching tip, of the other fertile florets with scattered short hairs from near base to base of awn, of the terminal sterile floret lemma diminutive, inrolled, and short-hairy with hairs to 0.25 mm long, the awn terminal, straight, in range mostly 6–9 mm long, at anthesis whitish aging tannish, scabrous; palea firmly attached, elliptic, $2-2.5 \times 0.3-0.35$ mm, lemma > palea, membranous with 2 green veins, not folded or keeled along veins, appearing minutely textured = silica bodies within colorless cells,

often pointed without veins at tip or with 2 teeth at tip and sometimes minutely ciliate (scabrous) on tip only or also along veins close to tip. Flower: bisexual; perianth (lodicules) 2, somewhat ovoid bulbous to midpoint and 2-lobed above, ca. 0.3 mm long, colorless (functional only in chasmogamous florets); **stamens** 1–2(–3, not observed) and exserted in chasmogamous florets and 1 and enclosed in cleistogamous floret, free; filament threadlike, 0.5–1 mm long, whitish-translucent; anther dithecal, 1.3–1.85 mm long, whitish or yellowish streaked purple-rose at top and edges (chasmogamous floret) and ca. 0.5 mm long (cleistogamous floret, not observed), longitudinally dehiscent; pollen white or yellowish (oil within pollen grains); **pistil** 1, ca. 1.3 mm long (chasmogamous floret); ovary superior, \pm compressed-obovate, ca. 0.5×0.25 mm, lower portion pale green, upper portion somewhat swollen 2-lobed to truncate and translucent (beneath styles); styles 2, arising spaced widely on "lobes" of ovary, equal to subequal, bottlebrushlike, colorless. Fruit: not observed; achene (caryopsis), dispersed tightly enclosed in awned floret (lemma + palea) with persistent rachilla segment; achene narrowly lanceoloid, 1.5–2.5 mm long, with groove on palea side, glabrous. A. C. Gibson