Vascular Plants of Williamson County

Poa annua – ANNUAL BLUEGRASS [Poaceae]

Poa annua L., ANNUAL BLUEGRASS. Annual (with adequate water persisting into next growing season), fibrous-rooted, several-stemmed at base (appearing many-stemmed when plant growing in clump), cespitose and densely tufted, branches decumbent to spreading often rooting at base, to 25 cm tall; gynomonoecious; shoots glabrous; adventitious roots at basal nodes. Stems (culms): cylindric to slightly compressed, < 2 mm diameter. Leaves: alternate distichous, simple with sheath or lower leaves reduced to only sheath; prophyll = membranous closed sheath (no blade), linear in outline, membranous, to 11 mm long, 2keeled and concave between keels, minutely short-toothed along keel; sheath of foliage leaves closed at least to 1/3 increasing to 2/3 (upper leaves), 20–66 mm long, rounded, lacking lobes (auricles) at top; collar inconspicuous; ligule membranous, obtuse to truncate, 0.5–3 mm long, milky translucent, continuous with sheath margins, smooth, glabrous; blade linear, $40-100 \times (1-)2.5-5.5$ mm, the widest several mm from sheath, initially folded becoming flat, entire, prow-shaped at tip, parallel-veined with midrib somewhat keeled above midblade. **Inflorescence:** spikelets, in terminal, open, paniclelike arrays, array lanceoloid to narrowly ovoid in outline, $70-95 \times 28-65$ mm, with 2(3) lateral branches at lower nodes gradually reduced to 1 branchlet or spikelet at tip, with crowded to loosely arranged spikelets, spikelet stalked to sessile, with 2–6 florets, lacking awns; peduncle 43–85 mm long; rachis initially compressed aging cylindric, glabrous; branches ascending to spreading, to 60 mm long, decreasing upward, with yellowish pulvinus at base, smooth and glabrous (sparsely scabrous); stalks 0.2–5 mm long, with conspicuous swelling beneath spikelet. **Spikelet:** initially lanceoloid compressed side-to-side, 3–5 mm long, with spreading florets ovate to somewhat rectangular, lower florets and generally intermediate florets bisexual, other florets pistillate to vestigial, breaking above glumes and between florets; rachilla cylindric, 0.8–1.1 mm long to 0.2–0.8 mm long for terminal rachilla extending beyond upper floret, whitish, glabrous, smooth; glumes unequal, lower glume broadly lanceolate, 1.4–2 mm long and acute at tip, upper glume ovate to obovate, 2–2.5 mm long and rounded at tip, lower glume < upper glume and < lower lemma, green + membranous on margins and at tip, keeled to weakly keeled minutely scabrous above midpoint, lower glume 1-veined or weakly 3-veined, upper glume 3-veined, the veins not converging at tip; **lemma** lanceolate, 2.5–3.2 mm long (lowest floret) decreasing to 2–2.5 mm long (upper floret), distinctly keeled, membranous and entire on margins, 5-veined, obtuse or notched at tip, sometimes tinged red-purple in membranous tissue, short-villous woolly on veins and typically glabrous between veins; palea membranous, 0.1–0.5 mm < lemma, 2-keeled and 2-veined, veins green, keels densely short-villous, sometimes with hairs between veins at palea base. Flower: bisexual or pistillate; perianth (lodicules) 2, teardrop-shaped and bulbous to above midpoint, 0.4–0.5 mm long, colorless; stamens 3, free, or vestigial (pistillate florets); filaments threadlike, 2–2.5 mm long, white to colorless; anthers basifixed, dithecal, narrowly oblong, $0.7-1.2 \times 0.3$ mm, light yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary \pm spheric, ca. 0.35 mm, light transparent green; styles 2 or fused for ca. 0.1 mm at base, whitish to colorless; stigmas feathery (plumose). Fruit: achene (caryopsis), enclosed in lemma and palea, lanceoloid-ellipsoid, ca. 1.8×0.6 mm, grayish brown, short-tomentose at tip; dispersal unit including rachilla segment opposite palea.

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