

## Vascular Plants of Williamson County

### *Paspalum urvillei* – VASEYGRASS, URVILLE'S GRASS [Poaceae]

*Paspalum urvillei* Steud., VASEYGRASS, URVILLE'S GRASS. Perennial herb, rhizomatous, fibrous-rooted, several-stemmed at base, cespitose, unbranched from base, having ascending axes with arching terminal inflorescence, flowering in range to 150 cm tall; shoots with several basal leaf and 2–3 cauline leaves, sheaths with conspicuously long, straight hairs having enlarged bases (pustulate) and upper surfaces of blades; rhizome core hidden by white, emerging shoots, with white, scalelike leaves belowground, emergent shoots belowground with bladeless leaves 3–15 mm long, pilose hairs to 3 mm long; adventitious roots nodal on rhizome. **Stems (culms):** elliptic in  $\times$ -section, to 6 mm diameter, tough, nodes purplish red, internodes to 210 mm long, smooth and glabrous; internodes hollow. **Leaves:** alternate distichous, simple with sheath; prophyll strongly 2-keeled, to  $17 \times 2$  mm with strongly folded, wide, membranous margins, short-ciliate along keels, outer surface with appressed hairs to midpoint and with several hairs at tip; sheath open, ridged, to 180 mm long, aboveground often purple-red, having long hairs with persistent hair bases between ridges, without lobes (auricles) at top; ligule membranous, truncate and somewhat jagged, in range to 7 mm long, splitting downward; collar with purple-red margins, typically lacking hairs; collar with purple-red margins, pilose on upper surface; blade linear, (95–)200–480  $\times$  (2–)6–17 mm, the widest near midblade, folded V-shaped below midblade and flat above midblade, minutely toothed on colorless margins base-to-tip (somewhat scabrous) and with several long hairs near base, long-tapered to tip, parallel-veined with midrib channeled on upper surface and raised on lower surface, upper surface often pilose, glaucous especially lower surface, lower surface typically glabrous with minute, blunt teeth along raised veins. **Inflorescence:** spikelets, in terminal, racemelike panicles, in range with 7–15 spikelike branches above foliage, branches 1 per node, 1-sided having 4 rows of overlapping spikelets on lower side, ascending to spreading, (35–)50–110  $\times$  3 mm, the lower branches at anthesis often partially concealed by flag leaf sheath (peduncle later elongating), spikelets in alternating pairs along central ridge, with many nodes, on each edge 2 mm apart, spikelet with 2 florets with lower floret sterile and upper floret fertile, bracteate, lacking awns; peduncle cylindrical, tough, smooth, hollow; bract subtending branch absent, at each fork and base of branch having several straight hairs to 7 mm long; principal panicle axis channeled and  $\pm$  hemi-cylindrical, glabrous; rachis of each branchlet 2-channeled on side with spikelets, upper surface (lacking spikelets) flat and strongly sinusoidal, ca. 1 mm wide, green-winged and striped, minutely scabrous on edges, glabrous but puberulent below the lowest spikelet, lower surface with paired stalks of spikelets arising alternately along central ridge; stalks of paired spikelets fused at point of attachment to rachis, flattened, of the older spikelet to 2 mm long and the shorter ca. 1 mm long, both scabrous on margins; on branchlets the lowest node with only 1 fertile spikelet and aborted spikelet per node, at most nodes with 2 fertile spikelets, having flat side of the first spikelet oriented upward and second spikelet twisted  $45^\circ$  thus 4 spikelets across but rows zigzagged. **Spikelet:** broadly ovate in outline, in range 2.1–3  $\times$  1.1–1.5 mm, rounded on 1 side (upper glume) and flattish on other side (lower lemma), conspicuously soft-hairy, breaking below glume; **glume** 1, lower glume absent, upper glume ovate, 2.5–3 mm long, greenish with 3 slightly raised green veins

converging at tip; **lower floret lemma** elliptic to slightly obovate, < upper glume, margins and tip inrolled over upper lemma, face flat with conspicuous 3 green veins slightly raised, **palea** absent; **upper floret lemma** inrolled over upper palea, in outline broadly elliptic and low convex, 1.5–1.8 × ca. 1.3 mm, tough and becoming ± hard (somewhat indurate), surface minutely textured with vertical cell rows (rugulose) faintly 3-veined, with inrolled margins, **palea** enclosed by margins of lemma, membranous, not keeled, elliptic in outline, 2-veined, between veins concave and minutely textured, margins glabrous, the incurved margins wide-membranous while extending to midpoint and enveloping flower, open at top. **Flower:** bisexual; **perianth (lodicules)** 2, fleshy, fan-shaped, 0.35–0.4 mm long, translucent; **stamens** 3, free; filaments threadlike, to 2 mm long, translucent; anthers exserted, dorsifixed, dithecal, ca. 1 mm long, pale yellow, longitudinally dehiscent; pollen white; **pistil** 1; ovary superior, ovate strongly flattened, 0.5 mm long, pale green, glabrous, 1-chambered with 1 ovule; styles 2, widely separately at base, 1.2–1.5 mm long, translucent to midpoint, stigmatic and bottlebrushlike above midpoint, exserted ca. 0.7 mm from top of lemma, burgundy. **Fruit:** achene (caryopsis), bracketed by hairy upper glume and lower lemma and tightly enclosed within upper lemma and palea; floret surfaces low-convex (lemma) and concave (palea), elliptic in outline, in range 1.5–1.7 × 1.2–1.4 mm, white, convex face with 3 veins somewhat visible, bracts minutely textured by cell lineages.

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