

## Vascular Plants of Williamson County

### *Paspalum distichum* – KNOT GRASS, THOMPSON GRASS [Poaceae]

*Paspalum distichum* L., KNOT GRASS, THOMPSON GRASS. Perennial herb, rhizomatous, stolon-bearing, fibrous-rooted and freely forming adventitious roots at nodes on horizontal stems, several-stemmed at rooted node, prostrate to decumbent, 25–60 cm tall, spreading to 100 cm; shoots with basal leaves and cauline leaves concealing stem by somewhat compressed sheaths. **Stems (culms):** compressed to compressed-cylindric at upper internodes but nearly cylindric at lower internodes, slender, tough, glabrous where not covered by leaf sheath; internodes solid. **Leaves:** alternate distichous, simple with sheath; sheath open, somewhat keeled approaching blade, pilose but becoming glabrescent, conspicuously pilose at and just above node, without lobes (auricles) at top; ligule membranous, truncate becoming jagged, 0.5–1 mm long; blade linear, 30–120 × 2.5–8 mm, the widest at the base, generally flat, minutely toothed on margins but with fewer teeth approaching tip, parallel-veined with midrib conspicuous only near base, surfaces not scabrous, commonly pilose on upper surface near base and on back edge of collar.

**Inflorescence:** spikelets, in terminal panicles with (1–)2(–3) spikelike branches, branches ± paired at end of culm or more commonly staggered and separated to 9 mm, ascending to spreading or arching, (10–)13–65(–70) mm long, with spikelets restricted to lower side forming 2 rows of fertile spikelets separated by edge of rachis (rudimentary spikelets paired with fertile spikelets) or sometimes forming 4 rows of spikelets in the midportion where rudimentary spikelets fertile, with a single terminal spikelet, minutely scabrous along edge of midvein, spikelet with 2 florets with lower one sterile and upper one fertile, bracteate, pilose at nodes subtending branches, lacking awns and bristle tips; branch axis (rachis) with a 3-sided midrib with a wing from each angle on the upper (adaxial) side thus forming a flat surface 1.3–1.5 mm wide, green with narrow, semi-translucent pale yellow to whitish margins, ± wavy and minutely toothed on margins from base to tip, ribbed with 10–15 fiber bundles; stalk of spikelet < 0.5 mm long. **Spikelet:** narrowly ovate to elliptic compressed top-to-bottom, 2.5–3.3 × 1.3–1.8 mm, breaking below the glumes; **glumes** (1–)2, unequal, lower glume reduced (absent), short-deltate to narrowly long-acuminate, 0.5–2.5 mm long, upper glume (hidden side) = spikelet size and shape, papery, pale to light green, with 3 green veins converging just below acute to acuminate tip, having slightly inrolled margins narrowly overlapping lower lemma below midpoint, short-pilose. **Lower floret lemma** (sterile floret) = upper glume, flat but slightly hooded at acute tip and covering upper (distal) portion of fertile floret, 3-veined, generally glabrous; **palea** absent. **Upper floret lemma** (fertile floret) stiff (chartaceous), inrolled on margins from base to tip and narrowly clasping palea, glossy ± pale green becoming ivory-colored, faintly 3-veined (veins greenish), glabrous; **palea** similar to upper lemma but slightly smaller and 2-veined. **Flower:** bisexual; **perianth (lodicules)** 2, ± thickly fan-shaped, ca. 0.3 × 0.3 mm, fleshy; **stamens** 3, free; filaments threadlike, 2–3 mm long, white; anthers exerted, versatile, dithecal, 1.3–1.8 mm long, burgundy, longitudinally dehiscent; pollen pale yellow; **pistil** 1; ovary superior, compressed-ovoid to compressed-obovoid, 0.4–0.5 × 0.25 mm, yellowish green but burgundy at top between styles, glabrous, 1-chambered with 1 ovule; styles 2, at anthesis ca. 1.5 mm long, whitish or translucent; stigmas exerted between lemma and palea ca. 1/4 from tip and touching anthers, bottlebrushlike, ca. 0.8 × 0.5 mm, dark

burgundy. **Fruit:** achene (caryopsis), tightly enclosed in spikelet, ellipsoid to slightly obovoid,  $2-2.2 \times 1.1-1.4$  mm, convex on 1 side (dorsally) and broadly grooved on side facing palea, yellow ochre with a small burgundy mark at top.

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