

## Vascular Plants of Williamson County

### *Tradescantia ohioensis* – OHIO SPIDERWORT [Commelinaceae]

*Tradescantia ohioensis* Raf., OHIO SPIDERWORT. Perennial herb, rhizomatous, fibrous-rooted, not rosetted, several-stemmed at base, typically with 1–2 flowering axillary shoots in canopy, branches ascending to widely spreading at base, in range 22–75 cm tall, plants 25–80 cm long; shoots with 1–several basal leaves absented at flowering and to 7 cauline leaves, axis essentially straight, glabrous (totally lacking nonglandular and glandular hairs) or in range weakly glaucous; rhizome segments vertical, cylindric, to ca. 11 cm diameter, off-white but concealed by dried, persistent, papery brown leaf sheaths, of vertical segment internodes spaced 2–3 mm apart, with deltate alternate distichous axillary buds, solid; adventitious roots from nodes on rhizome, not fleshy, to 2.5 mm diameter, initially orangish aging reddish brown, not tomentose. **Stems:** cylindric slightly compressed in canopy, to 11 mm diameter, white (lower stem) and green in range weakly glaucous on exposed stem, internodes to 120 mm long, smooth; internodes solid. **Leaves:** alternate distichous and helically alternate, simple with sheath; sheath closed generally not splitting downward, closed < 16–25 mm long, sinus U-shaped; blade strap-shaped and arcuate folded upward from midrib, in range mostly < 120–370 × 12–20 mm (flattened; the longest a cauline leaf), entire but narrowly membranous above sheath and then a portion of blade with minute teeth on margin, acute at tip (flattened), parallel-veined with veins slightly sunken except midrib on lower surface, lightly glaucous on lower surface, stomates on both surfaces. **Inflorescence:** condensed cyme, terminal and later smaller axillary inflorescences, typically 1 axillary inflorescence at base of peduncle of the terminal inflorescence, on other shoots or plants forming downward (basipetally) axillary shoots inflorescence to 3 nodes, subtended by 2 conspicuous, similar, leaflike bracts concealing flower buds and bases of pedicels, consisting of 2 cymes at top, together many-flowered with only 1 flower each day from each cyme, terminal inflorescence to 45+-flowered but axillary inflorescence < 25-flowered, having 2 parallel rows of flowers with the oldest flower of each cyme in the center and progressively younger flowers and buds toward both flanks, each flower at pollination on an erect pedicel and horizontally positioned, corolla ephemeral and lasting to 6 hours before shriveling around ovary, pedicel soon becoming curved downward for fruit development, bracteate, essentially glabrous on green tissue and lacking any glandular hairs; peduncle stemlike and green, of terminal inflorescence erect, low-ridged, to 110 × 4.5 mm, of axillary inflorescences to 150 × 3 mm, the uppermost axillary inflorescence sometimes > and other times < terminal inflorescence, in range weakly glaucous, peduncle of lower axillary inflorescence sometimes with a diminutive leaf with a closed sheath (bract); bracts subtending condensed cymes 2, alternate distichous with tightly overlapping sheaths and closed around top of peduncle (amplexicaulous) with base cupping cyme base with bractlets, of terminal inflorescence to 120 mm (lower bract) and to 65 mm long (upper bract), of axillary inflorescence shorter to 65 mm (lower bract) and < 40 mm long (upper bract), with widely spreading blades, sheaths somewhat saclike or not, to 6 mm deep and rounded on back, blade leaflike but diminutive, long-tapered to tip and folded upward from midrib (sometimes lacking tapered tip), folded portion appearing to 3.5 mm wide, green to weakly glaucous on exposed tissue; bractlet subtending pedicel included, sheathing and totally membranous, to 7 mm long, of the first flowers wide and later bractlets often acute-ovate to acuminate-ovate; pedicel initially erect after

wilting arching downward, cylindric, in range 8–19.5 × to 1.1 mm, white at base above light green or striped green and light rose, often with several shallow furrows descending from flower, glabrous. **Flower:** bisexual, radial, in range 11–25(–34) mm across, parts larger on terminal inflorescence; **sepals** 3, widely spreading (observed between petals), cupped-ovate (boat-shaped), in range 5.5–12.5 × 2.8–6 mm (flattened), light green with colorless or faintly purplish margins, for 1 flower glabrous on all surfaces or 2 of 3 sepals having a patch at top forming a tiny subterminal tuft of to 8 hairs, the hairs crooked often with enlarged bases and obtuse membranous tip somewhat overhanging, 15–21-veined but on small sepals only midvein conspicuous, outer green surface in range not glaucous or glaucous, inner (upper) surfaces while flower open glossy and yellowish; **petals** 3, broadly ovate to broadly rhombic or roundish (the largest petals), in range 6–15(–18) × 6.3–13.5(–17) mm, light blue to blue aging violet-blue to pale violet-blue but white at base (< 1 mm long), wavy and somewhat irregular on margins, obtuse at tip, having an elaborate venation pattern with a network and many bridges, lacking hairs; **stamens** in range 6, outer 3 free and inner free weakly fused to bases of petals; filaments ascending, cylindric, 4–11 mm long, colorless at base mostly violet but pale on slender top approaching anther, with a brush of ascending beadlike hairs in range < 2–4 mm long arising from all filaments, hairs violet formed to 2/3 length of filament; anthers dorsifixed, conspicuously dithecal, ± butterfly-shaped, 1–1.3 × 1.3–2.5 mm (connective extended), bright yellow, longitudinally dehiscent; pollen bright yellow; **pistil** 1; ovary superior, elliptic in outline 3-sided with rounded edges, ca. 1.3 × 1 mm, very pale green, glabrous or with several nonglandular hairs at top, 3-chambered, each chamber with 2 translucent ovules; style cylindric but often crooked or with a bend, ca. 3.5–6 mm long, translucent at base and light violet above, papillate stigma truncate and very pale violet at level of anthers. **Fruit:** capsule, loculicidal, dehiscent from top downward, to 6-seeded, 3-valved, ± obovoid 3-sided with bulging at seeds to oblong 3-sided, in range 4.5–7.5 × 2.5–4 mm, pale green before drying, with persistent style to 6 mm long; petals attached to base of fruit papery with elaborate venation. **Seed:** carapace-shaped compressed, in range ca. 3–3.5 mm, amber, with low moundlike regions on surface and an elongate hilum in groove on back.

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