

Vascular Plants of Williamson County

Tinantia anomala – FALSE DAY FLOWER, WIDOW'S TEARS [Commelinaceae]

Tinantia anomala (Torrey) C. B. Clarke, FALSE DAY FLOWER, WIDOW'S TEARS. Annual or perennial herb, fibrous-rooted, not rosetted, 1–5-stemmed at base, with ascending lateral branches breaking through leaf sheaths (below leaf blades), to 60 cm tall; shoots with several basal leaves and to 8 cauline leaves, basal and lower cauline leaves more slender than other cauline leaves, appearing glabrous but with pilose hairs on margins of blade margins. **Stems:** cylindric, to 6 mm diameter, internodes to 90 mm long (short for basal leaves), lower stem often light purple and above where exposed pinkish or with pinkish purple veins approaching node, exposed segments sometimes glaucous; solid. **Leaves:** helically alternate, simple and sheathing, petiolate (basal leaves) and sessile (cauline leaves); sheath of lower leaves open, keeled along raised midrib from blade, white with pink-purple veins, long-ciliate on margins, sheath of middle and upper leaves closed, of cauline leaves to 8–25 mm long, raised at axillary bud (becoming lateral shoot); petiole of basal leaves (to 160 mm long) indistinct from blade; blade of lower leaves linear to narrowly oblanceolate-linear, to 10 mm wide, long-tapered at base, entire and pilose-ciliate, of cauline leaves narrowly lanceolate to narrowly ovate, 30–90 × 10–24 mm, appearing round at base with clasping lobes nearly touching, entire and sometimes wavy on margins, parallel-veined but veins not raised, in range mostly not glaucous, cells domed. **Inflorescence:** cyme, terminal, 1-sided, often 5+-flowered, bracteate, glabrous; bract subtending peduncle spreading, leaflike lacking sheath, ovate and mostly flat (neither strongly folded nor fused along margins), 35–55 mm long, green, ± cordate at base, wide-acuminate at tip; peduncle cylindric, to 8 mm long, light green; bractlet subtending pedicel lacking sheath, ovate and somewhat asymmetric, at anthesis 3.5–5 × 2.3–3 mm, green with narrow membranous margins; pedicel at anthesis curved (flower vertically presented), 4.5–6 mm long increasing in fruit. **Flower:** bisexual, bilateral, 20–27 mm across; **sepals** 3, ± monomorphic, larger upper sepal overlapping smaller lateral sepals, boatlike and keeled, and ovate, 12.5–18 × 6–7 mm (upper sepal) and 11–14 × 5.3–7 mm (lower sepals), green with narrow membranous margins, obtuse at tip, parallel-veined, glabrous, persistent and concealing developing capsule; **petals** 3, dimorphic, lateral petals widely spreading, broadly fan-shaped, 10–19 × 10–19 mm, blue but white only at base, rolled around flower, lower petal appressed to filaments of lower stamens, elliptic-ovate to obovate, 4–5 × 2.3–3 mm, white, subentire above midpoint on margins, inconspicuously parallel-veined with midvein visible only to midpoint; **stamens** 6, heteromorphic, 3 stamens on upper side of ovary, 3 stamens on lower side of ovary adjacent to style; of outer whorl (alternate with petals), filaments dimorphic, of lower 2 stamens ca. 11 mm long, cylindric, very pale violet to midpoint and white and curving upward above midpoint, having a dense tuft of light violet, beadlike hairs on margins and upper side of filament from 1.5 to 3.5 mm from base, the hairs 3.5–4.5 mm long, filament of upper central stamen having dense, beadlike hairs concealing ovary (7.5–8 mm long), hairs nearly from base to top (except along back of filament), ascending, 1.8–2.8 mm long, violet at base and pale light yellow above midpoint; of inner whorl, filaments dimorphic, lower central stamen 9–10 mm long, very pale violet to midpoint and white and curving upward above midpoint, glabrous, filaments of 2 upper stamens ascending and straight with pompomlike tuft of hairs at top, exposed

filament ca. 7 mm long, very pale violet, pompom 2–2.5 mm across with tuft of beadlike hairs ca. 1.5 mm long, violet at base and mostly pale light yellow above; anthers dimorphic, of lower stamens versatile, dithecal, 1.6–2.1 mm long, bright yellow; of upper stamens dorsifixed, dithecal, 0.9–1 mm long, pale yellow, longitudinally dehiscent; pollen yellow and pale yellow; **pistil** 1, 11–12 mm long; ovary superior, ± fusiform and somewhat 3-sided with bulging ovules, 3–4 × 1.3–1.5 mm, greenish white, with inconspicuous stalked glandular hairs, 3-chambered, each chamber with 2 large ovules; style straight and whitish from base and yellowish and strongly curved above midpoint toward center of flower, 9–10 mm long, white; stigma capitate, close to level of lower anthers, disclike, ± 0.3 mm diameter, light blue, with domed cells. **Fruit:** capsule, loculicidal often dehiscent to base, 3-valved, (7–)8–11 mm long, valves golden brown, with point at top; calyx persistent, concealing capsule, papery brown. **Seed:** hard, ca. 3 × 2.5 × 2 mm, dull brown (white when immature), minutely bumpy on surface, with sunken circular hilum (calderalike) at midpoint of a long face but offset to one edge and having 10+ ribs radiating from rim of hilum.

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