

Vascular Plants of Williamson County

Triodanis leptocarpa – PRAIRIE VENUS' LOOKING GLASS, SLENDER-LEAVED VENUS' LOOKING GLASS [Campanulaceae]

Triodanis leptocarpa (Nutt.) Nieuwl., PRAIRIE VENUS' LOOKING GLASS, SLENDER-LEAVED VENUS' LOOKING GLASS. Annuals, taprooted, not rosetted, 1-stemmed at base, unbranched below flowering canopy and canopy often unbranched, ascending, in range to 55 cm tall; shoots with only cauline leaves. **Stems:** ridged and angled, to 2 mm diameter, with a pair of ridges descending from each leaf, green or the lowest stem sometimes reddish to red-purple, somewhat scabrous with downward-pointing, having some short hairs along ridges. **Leaves:** helically alternate, simple and petiolate (the lowermost leaves) and sessile (upper leaves and bracts), without stipules; petiole \pm hemicylindric with raised midvein, to 35 mm long, 1-ridged on lower side (midvein), sparsely hairy; blade elliptic to lanceolate or ovate to oblanceolate, 10–50 \times 5–16 mm, long-tapered to tapered at base (margins somewhat inrolled and appearing petiolelike), low-toothed and short-ciliate on margins, acute at tip, pinnately veined with principal veins somewhat raised on lower surface, upper surface with sparse hairs, lower surface short-hirsute especially along veins. **Inflorescence:** subsessile cyme, axillary to leaflike bract in canopy (= unbranched upper 1/2 of plant), mostly 1–3-flowered, of mostly cleistogamous flowers, bracteate; peduncle stemlike with paired ridges descending from each leaf, often purple-red on upper side; bractlet subtending first flower narrowly lanceolate to lanceolate-linear, $<$ or $>$ ovary, to 12 \times 2 mm, green, entire or with several remote teeth, minutely ciliate on margins, acute with minute red point at tip, bractlet subtending successive flowers oblong and shorter. **Cleistogamous flower:** bisexual, radial, to 5 mm across; **sepals** 4–5, fused at base forming rim around top of ovary, at anthesis erect, acuminate-triangular to narrowly lanceolate, 3–5.5 \times 0.6–0.7 mm, subequal on each flower, green, minutely toothed on margins, margins inrolled to lower surface, 1-veined with midvein raised on lower surface, surfaces lacking hairs, sinuses and lower margin with minute conic glands; **corolla** \pm club-shaped as a sack, 1.5–1.7 \times 0.8 mm, white, 5-ribbed from below midpoint to tip, each rib beaded along suture, persistent on top of fruit; **stamens** 4–5, free; filaments to 0.4 mm long, colorless; anthers adherent to style, \pm basifixed, dithecal, 0.8 mm long, whitish, longitudinally dehiscent; pollen white; **nectary** absent; **pistil** 1; ovary inferior, mostly 2-lobed, ca. 4 \times 1 mm, green, with deep furrows, blunt teeth along lobes, glabrous, 1–2-chambered with many ovules; style columnar, ca. 1 mm long, papillate at tip. **Chasmogamous flower:** bisexual, radial, 12–19 mm across; **sepals** 5, fused at base forming rim around top of ovary, acuminate-triangular, 5.5–9 \times ca. 1 mm, often unequal on each flower, green, minutely toothed on margins, margins slightly inrolled to lower surface, 1-veined with midvein raised on lower surface, surfaces lacking hairs, sinuses and lower margin with minute conic glands, tip with a colorless, flask-shaped hair 0.2 mm long at tip; **corolla** 5-lobed; tube and throat ca. 4 mm long, white at base (white eye) to blue to light violet-blue approaching lobes; lobes ascending to spreading, ovate to elliptic, 7–9 \times 4–4.8 mm, blue to light violet-blue (upper surface) and paler (lower surface), having 3 darker veins at base, acute at tip; **stamens** 5, free; filaments erect, ca. 1.5 mm long, white, to midpoint flared and roundish and narrower above; anthers dorsifixed, dithecal, \pm 3.2 mm long, white, longitudinally dehiscent; pollen white; **nectary** on top of ovary, producing pool of nectar around base of style; **pistil** 1;

ovary inferior, elongate strongly 3-lobed, at anthesis $9-10 \times 1.5-2$ mm, green, the deep furrows base to top of ovary = sites of valves, surface with minute bumps resembling backward-pointing, blunt teeth along lobes, glabrous, to 3-chambered with many ovules; style overall club-shaped, 4×1 mm, white, glabrous at base, conspicuously short-hairy above, (2-)3-branched, the branches mostly appressed, fleshy and tongue-shaped, ca. 0.9 mm long, rounded on other surface. **Fruit:** capsule, appearing 1-chambered, many-seeded, suberect and mostly straight, 15-25 mm long (chasmogamous flowers) or shorter and more strongly twisted and divergent from rachis 8-18 mm long (cleistogamous flowers), drying light brown. **Seed:** flattish and biconvex ellipsoid, in range ca. 0.9×0.7 mm, glossy and tannish, smooth.

A. C. Gibson