## **Vascular Plants of Williamson County**

*Ipomoea cordatotriloba* var. *torreyana* – COTTON MORNINGGLORY [Convolvulaceae]

Ipomoea cordatotriloba Dennstaedt var. torreyana (A. Gray) D. F. Austin, COTTON MORNINGGLORY. Perennial vine, twining, lacking tendrils, climbing on neighboring plants and along ground; shoots with only widely spaced cauline leaves, axes pimply with many bumps (potential hair bases), essentially glabrous; latex cloudy. **Stems:**  $\pm$  angled and lowridged, to 2.5 mm diameter, with 2 fine ridges descending from each leaf, internodes mostly to 60–140 mm long, rarely straight and often twining around support, pimply. **Leaves:** helically alternate, mostly unlobed and some leaves 3-lobed, petiolate, without stipules; petiole shallowly channeled, 20–120 mm long, somewhat angled with upper edges sometimes purplish, pimply and glabrous; blade ± inversely heart-shaped in outline with 2 rounded basal lobes and sometimes shallowly 3-lobed,  $32-65(-110) \times 24-50(-85)$ mm, deeply cordate at base, lobes rounded, entire, short-ciliate, and minutely papillate on margins, obtuse with short point at tip (extension of midvein), pinnately veined with principal veins raised on both surfaces, surfaces lacking hairs or with several short hairs on upper surface along midrib. **Inflorescence:** cyme, 5–12-flowered, axillary on long peduncle, bracteate, glabrous; peduncle somewhat angled, at anthesis 80–120 mm long increasing to 230 mm long in fruit, green, pimply and glabrous, in fruit tough; bract subtending the lowest branch lanceolate with persistent, enlarged base, ca. 7 mm long, bractlet subtending pedicel acuminate-lanceolate, 4–4.9 × 0.8–1 mm, green, with midvein raised on outer (lower) surface; pedicel ± angled, at anthesis 6–8 mm long, green, pimply and glabrous. Flower: bisexual, radial, 18–23 mm across; sepals 5, helically alternate. strongly appressed and overlapping, narrowly obovate to ovate with acuminate tip,  $8.5-10.3 \times 2.8-4.2$  mm within each flower, outer sepals green, longer and more narrow than inner sepals and with to 12 pustulate hairs on each margin, inner sepals opaque and whitish with green midvein and green at tip, glabrous, persistent and ascending in fruit; **corolla** 5-lobed, strongly twisted in bud, with many fine parallel veins; tube + throat funnel-shaped, tube slightly flared upward, ca. 4 mm long, striped purple-rose and  $\pm$  white (decurrent bases of filaments); throat pleated, outer surface green aging pink-purple, inner surface of lower throat glossy pink-purple and with short hairs often purplish; lobes broad and short, ca. 2.5 ×10 mm, purplish pink with 2 raised veins to each whitish lobe tip; stamens 5, fused to top of corolla tube; filaments unequal, 10–14 mm long within each flower, purplish at base to white above (paler at anthesis), having pinkish to purplish or white hairs especially below midpoint; anthers at 3 levels, dorsifixed, dithecal, somewhat arrow-shaped, 1.2–1.4 mm long, white, longitudinally dehiscent; pollen white; **nectary** disc surrounding base of ovary, shallowly 5-lobed, 0.5–0.6 mm long, light yellowish green, nectar-producing; **pistil** 1; ovary superior, shallowly 4-lobed ovoid, ca. 1.3 × 1 mm, light green, glabrous, 2-chambered, each chamber with 2 ovules; style 14–17 mm long, < the longest stamen, gradually tapered to tip, white, glabrous; stigma of 2 spheroid lobes ca. 1.5 mm across, lobes 0.6–1 mm, white, bumpy (tuberculate) with conspicuous papillae. Fruit: capsule, loculicidal, dehiscent by 4 valves, 2–4-seeded, obovoid-spheroid, 5–6 mm, brown with white callus at tip and a narrowly conic beak, valves ovate,  $\pm 8 \times 4$  mm. **Seed:** hemispheroid to 3-sided, rounded on back and lateral faces  $\pm$  flat,  $4.5-5 \times 3-3.4$  mm, dull black, glabrous, basal hilum a circular dimple.

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