

Vascular Plants of Williamson County

Ambrosia trifida var. *texana* – GIANT RAGWEED [Asteraceae]

Ambrosia trifida L. var. *texana* Scheele, GIANT RAGWEED. Annual, robust, taprooted, not rosetted, 1-stemmed at base, with ascending branches above midplant, in range < 60–450 cm tall; monoecious; shoots with only cauline leaves widely spaced with long internodes, branching distinctly opposite decussate, foliage conspicuously scabrous, dominant hairs with persistent, hardened, enlarged bases. **Stems:** initially \pm 5-angled aging cylindrical, to 15 mm diameter, green with thinner black stripes, internodes to 190 mm long. **Leaves:** opposite decussate, palmately 3(5)-lobed and unlobed, symmetric mostly with a pair of lateral lobes having deep sinuses, if 5-lobed basal lobes defined by shallow sinuses, petiolate, without stipules; petiole \pm hemi-cylindrical broadly channeled at base, < 10–75 mm long, tough, often 2-ridged above midpoint, lateral and lower sides with 5 blackish lines, scabrous hairs curved upward; blade mostly ovate in outline, in range 85–240 \times (45–)80–230 mm, principal lobes ovate, terminal lobe to 165 mm long, > lateral lobes > basal lobes, broadly tapered at base or with narrow taper along petiole, low-serrate with blunt, short teeth, the teeth aging blackish, acute at tip, when lobed with 3 principal veins near base and pinnately veined above, principal veins raised on upper surface and principal + minor veins raised on lower surface, lower surface with sessile glandular hairs having colorless hairs. **Inflorescence:** unisexual heads, in terminal, racemelike arrays of 0–3 alternate, condensed, cymelike shoots at base with up to 3 pistillate heads per shoot and upper portion with 60+ alternate, nodding staminate heads, pistillate portion with sessile heads, staminate portion to 140 \times 9.5–10.5 mm with radiating, stalked heads; heads discoid, pistillate head 1-flowered and 2.5 mm across, staminate head 4–1+-flowered and 2–3.5 mm across, bracteate; bract along across opposite decussate, 3-lobed, to 6 mm long, with midvein raised, bract subtending pistillate flower sessile, oblanceolate and weakly 3-lobed, to 15 mm long, lateral lobes diminutive, with 1–3 black lines. **Staminate head:** bract subtending peduncle absent; peduncle spreading, at pollination 1–3 mm long, pale green, sharply bent at tip making head reflexed \perp inflorescence axis, scabrous with short hairs and inconspicuous slender hairs; rachis pale green, hairy; **involucre** broadly funnel-shaped, 1.6–3.5 \times 1.8–4 mm, length < width, of fused phyllaries inconspicuously lobes with undulating margin, green with (1–)2–3 “black” lines, the lines of raised, dark, blackish purple tissue on inner surface, outer surface with hairs. **Staminate flower:** radial, 1 mm across, ca. 2 mm long, exerted to 0.6 mm from involucre; **calyx (pappus)** absent; **corolla** 5-lobed, funnel-shaped, colorless, glabrous; lobes triangular, 0.4 mm long, ascending; **stamens** 5, free; filaments weakly fused at base of corolla, ca. 0.5 mm long, colorless; anthers not fused, basifixed, dithecal, 0.8–0.9 mm long with threadlike appendages at tip, light yellow, longitudinally dehiscent; pollen light yellow; **pistil** lacking ovary, club-shaped, 0.8 mm long, colorless, papillate at top. Pistillate head: bracts subtending cymelike array 3, each 3-lobed, the lowest bract alternate, oblanceolate with diminutive lobes near base, to 15 mm long, the upper 2 opposite, like miniature 3-lobed leaves, to 6 mm long, each lateral lobe with blackish vein; **involucre** obovoid with small hole in conic beak, 4–5 \times 2.5 mm, with 8–9 ribs, green and glabrous with blackish purple spots below greenish, short-hairy beak. **Pistillate flower:** **calyx (pappus)** absent; **corolla** absent; **stamens** absent; **pistil** 1; ovary “inferior” (no other flower parts present), obovoid,

ca. 2.2×1.3 mm, white blushed purple-red at top, 1-chambered with 1 ovule; style 2-branched, the branches exerted through short beak, fused at base, stalk to 0.8 mm long, exerted stigmatic branches fingerlike, 1.3–1.5 mm long, whitish, with groove on upper side. **Fruit:** cypsela within involucre (perigynium), obovoid, $< 4\text{--}5.5 \times 2.5\text{--}3.8$ mm, brown, blunt at base and pointed at top, having 0–5 short-pointed knobs approaching top above the widest diameter, each knob terminating a poorly defined, decurrent rib, lacking hairs.

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