

Vascular Plants of Williamson County

Symphotrichum drummondii var. *texanum* – TEXAS ASTER [Asteraceae]

Symphotrichum drummondii (Lindl.) G. L. Nesom var. *texanum* (E. S. Burgess) G. L. Nesom, TEXAS ASTER. Perennial herb, rhizomatous, fibrous-rooted, 1–several-stemmed at base, ascending, in range 35–100+ cm tall; shoots with 2 sizes of cauline leaves, leaves to midplant to 160 mm long with 1/3 appearing like a petiole, leaves and bracts in canopy sessile and < 3–50 mm long, new growth short-hairy. **Stems:** initially ridged aging cylindrical, to 6 mm diameter, with 3 or 5 ridges descending from each leaf, stems not straight having internodes to 40 mm long, short-hirsute and puberulent, older stems aging glabrescent. **Leaves:** helically alternate (opposite), simple, petiolate to sessile, without stipules; petiole indistinct from blade (long-tapered blade base appearing like petiole), petiole proper 0–10 mm long, flat and flaring at base, to 5-veined at base, above midrib sunken on upper surface, strongly raised on lower surface, and with leaflike wings, to 45 mm long, petiole at base flat and flared, petiole and often wings sparsely short-ciliate; blade of lower leaves asymmetrically ovate to 110 × 50 mm (expanded portion) decreasing upward to symmetric lanceolate (elliptic), 50 × 14 mm, on lower stem asymmetric base with truncate and tapered sides, serrate on margins, acuminate at tip, pinnately veined with midrib raised and principal veins slightly raised on lower surface, with scattered short-hairs; blades of upper branchlets sessile oblong or linear to oblanceolate or lanceolate, < 3–50 × < 0.5–14 mm, entire to subentire and sometimes sparsely short-ciliate.

Inflorescence: heads, in paniclelike array with several-headed cymelike ultimate branches, head radiate, 18–24 mm across, with (5–)7–15(–20) pistillate ray flowers and (7–)10–22 bisexual disc flowers, ray flowers < disc flowers, bracteate; peduncle to 10 mm long, ridged, puberulent, with several bracts (= bracts subtending future peduncles and heads), narrowly triangular; **involucre** ± bell-shaped, 6–7 × 4 mm, phyllaries 20–25 in 4–5 series, unequal, the outermost phyllaries triangular, 2 × 0.6 mm increasing to middle and inner phyllaries lanceolate or linear-lanceolate, 5 × 1 mm, with green central axis and short-ciliate, membranous margins, glabrous on back (outer surface); receptacle convex, lacking bractlets (paleae), crownlike around each ovary with triangular teeth to 0.4 mm long, glabrous. **Ray flower:** bilateral, 2–3 mm across; **calyx (pappus)** of ca. 40 capillary bristles in 1 series, unequal, 3–4 mm long, > corolla tube, off-white; **corolla** minutely 1–2 notched at tip; tube ± 2.5 × 0.3–0.35 mm, colorless; limb oblanceolate, (3–)7.5–10 × (0.9–)2.2–2.9 mm, aging strongly coiled under; **stamens** absent; **pistil** 1; ovary inferior, wedge-shaped and 3-sided, ca. 1.5 ± 0.5 mm, white, sparsely short-hairy, 1-chambered with 1 ovule; style exerted, ca. 4 mm long, 2-branched, white below fork, the branches spreading, 1.2–1.5 mm long, pale pink. **Disc flower:** bisexual, radial, < 1 mm across; **calyx (pappus)** of ca. 40 capillary bristles in 1 series, unequal, 3–4 mm long, ≤ corolla, off-white; **corolla** 5-lobed, 5.2–6 mm long; tube 5-ribbed, ca. 2 mm long, greenish; throat cylindrical and slightly wider, 3.5 mm long, nearly colorless but appearing yellow (anthers) aging pinkish to purplish red; lobes erect, triangular, ca. 0.5 mm long; **stamens** 5, attached to top of corolla tube; filaments ± 1.8 mm long, colorless; anthers with erect appendages exerted from corolla lobes, fused into cylinder surrounding style, basifixed, dithecal, 2 mm long including triangular appendages, light yellow with colorless appendages, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary inferior, wedge-shaped and 3-

sided, ca. 1.5 ± 0.5 mm, white, sparsely short-hairy or appearing glabrous, 1-chambered with 1 ovule; **nectary disc** at top of ovary surround base of style, ca. 0.15 mm long, reddish; style exerted 2–2.5 mm, ca. 7.5 mm long, 2-branched, white below fork, the branches ascending, ca. 1.5 mm long, white with orangish edges, somewhat bent at midpoint and conspicuously papillate above bend. **Fruits:** cypselae (achenes), elongate tapered at base, (4–)5(–6)-ribbed, $2.2\text{--}3.2 \times 0.5\text{--}0.6$ mm, brown to dark brown with tannish ribs, glabrous to midpoint and short-strigose above midpoint; pappus of ca. 40 stiff, ascending capillary bristles in 1 series coherent at base, ($< 3\text{--}$)4–5.2 mm long, brownish.

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