

## Vascular Plants of Williamson County

*Euphorbia missurica* – PRAIRIE SPURGE, PRAIRIE SANDMAT [Euphorbiaceae]

*Euphorbia missurica* Raf., PRAIRIE SPURGE, PRAIRIE SANDMAT. Annual, taprooted, several-stemmed at base, principal branches spreading to ascending with flowering canopy fine-stemmed, in range to 60 cm tall; shoots with only cauline leaves, widely spaced, glabrous and foliage  $\pm$  glaucous; latex white. **Stems:** cylindric,  $< 5$  mm diameter, internodes to 60 mm long and swollen above node, green and rose-reddish on exposed side, flowering branchlets with slender internodes 0.5–0.6 mm diameter, lower stems woody. **Leaves:** opposite decussate, simple, petiolate, with stipules; stipules 2 (4 per node), attached on node fused to base of petiole, sometimes adjacent stipules somewhat fused as ledge, commonly acuminate or awl-shaped, to 1.6 mm long, greenish to whitish sometimes with red, sometimes with shorter, adjacent triangular segment, persistent; petiole cylindric, 1–3 mm long, rose-rose on exposed side; blade linear to narrowly oblong-linear or narrowly wedge-shaped, in range (3–)8–24(–30)  $\times$   $< 0.7$ –2.5 mm, tapered and often folded upward, entire, rounded to truncate with short tooth (mucron) at tip, pinnately veined with only midrib visible and raised on lower surface, midrib continuous to mucron, surface  $\pm$  glaucous. **Inflorescence:** cyathium (= involucre with staminate flowers and 1 pistillate flower), solitary and when young appearing in cymelike array, arising axillary with stalked solitary cyathium and 1–2 elongating shoot; peduncle 4–11 mm long, slender with faint ridges; cyathium ca. 3.5 mm wide (including spreading glands attached to appendages); **involucre** bell-shaped, (1.2–)1.6–1.9  $\times$  1.2–1.4 mm, light green rose-red on exposed side, not glaucous, with 5 bracts and 4 glands, the bracts of involucre fused most of length, the glands alternate with bracts (1 absent), nectar-producing, raised, horizontally oval, 0.3–0.6  $\times$  0.3–0.7 mm, somewhat fleshy, pale yellowish green aging reddish in fruit, with midfurrow, short-hairy on lower side, appendages ovate to elliptic, widely spreading, in range 0.4–1.5 mm long, white aging pale rose in fruit, entire, acute at tip; bract lacking gland and appendage suberect having a pair of triangles with acuminate center lobe, ca. 0.5 mm long, whitish; involucre cup fringed on inner surface approaching margin; staminate flowers 24+ in 5 clusters, each with pedicel-like stalk, each cluster associated with 1 bractlet, the bractlet oblanceolate, ca. 2 mm long, white, fringed above midpoint; the pedicel of staminate flowers to 1.2 mm long, exerting flowers sequentially; pistillate flower on stalk (gynophore), at anthesis gynophore erect, at anthesis  $< 2$  mm long, pale green, later gynophore elongating and becoming recurved with maturing ovary exerted. **Staminate flower:** reduced to 1 stamen; **stamen** filaments 0.4–0.5 mm long, white; anther conspicuously dithecal, each sac spheroid, 0.3 mm, pale yellow, longitudinally dehiscent; pollen pale yellow. **Pistillate flower:** **pistil** 1; ovary superior, ovoid 3-lobed, 0.5  $\times$  0.5 mm, pale yellow-green, glabrous, 3-chambered, each chamber with 1 ovule; styles 3, ascending lateral diverging, 1 mm long, 2-branched at midpoint, whitish soon aging pale green. **Fruit:** capsule, 3-seeded, 3-lobed, in range 1.9–2.1  $\times$  ca. 3 mm, immature light green or with rose-red blotches, glabrous, elastically dehiscent along septa and chamber into 3 dry valves, central axis (columella) ca. 1.8 mm long; pedicel  $\pm 2.5$  mm long, at maturity capsule  $\pm$  ascending and not touching cyathium involucre. **Seed:** lacking aril-like caruncle, plump-ovoid with 3 low ribs, in range 1.3–1.6  $\times$  1.2 mm, rose before drying brown, low convex to flat at base, obtuse at top, dull and inconspicuously roughened.

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