

## Vascular Plants of Williamson County

### *Mimosa roemeriana* – ROEMER SENSITIVE-BRIAR [Fabaceae]

*Mimosa roemeriana* Scheele, ROEMER SENSITIVE-BRIAR. Perennial herb, trailing, spinescent, not rosetted, several-stemmed from base, branches long with axillary inflorescences, principal branches long and procumbent, spreading, and trailing close to ground and on neighboring plants; andromonoecious; shoots with only compound cauline leaves, secondary leaflets folding together when touched (thigmotropic), internodes long, axws often armed with sharp prickles curved backward, shoots nearly glabrous or with scattered short hairs. **Stems:** ± angled, with 3 weak ridges descending from each leaf, to 3 mm diameter, tough, internodes to 60 mm long, having scattered backward-curved prickles < 1 mm long, glabrous or sparsely short-hairy. **Leaves:** helically alternate, even-2-pinnately compound in range with 2–5 opposite pairs of primary leaflets (pinnae) spaced along channeled rachis, primary leaflet to 20 × 8 mm having 10–11 pairs of secondary leaflets, petiolate with pulvinus, with stipules; stipules 2, attached to leaf base below pulvinus, threadlike, 2–4 mm long; petiole pulvinus to 1.5 mm long, green, above pulvinus 4-ridged and channeled, to 30 × 0.4 mm, with or without backward-pointing prickles on lower side along ridges and on pulvinus; rachis lacking glands; rachis 2-winged and 2-ribbed, mostly to 20 mm long, pointed at tip above primary leaflets, with or without backward-pointing prickles, axis with a swelling having an ascending, straight prickle on upper side between pairs of primary leaflets, the prickle 0.7–1.5 mm long; petiolule of primary leaflet pulvinus < 1 mm long, green, “stipels” of primary leaflet 2 arising on upper side at the top of pulvinus, to 0.5 mm long and reddish with ephemeral, minute food bodies at tip, above pulvinus axis to 1 mm long, with several inconspicuous hairs; rachilla of primary leaflet to 13 mm long (including tip), 2-ridged on upper side having secondary leaflets, lacking prickles or spines, lower side glabrous or with sparse short hairs; secondary petiolule pulvinus, 0.3–0.35 mm long, yellow-green; blades of secondary leaflets oblong to obovate, 2–5 × 1–1.8 mm, bluish green, asymmetric and rounded at base, entire and short-ciliate on margins, acute to obtuse with short point at tip, with only midrib visible and not raised, minor veins obscure, glaucous, glabrous or short-hairy.

**Inflorescence:** headlike spike, axillary, 1–2 per node and branch appearing like a leafy cymelike array, spike on long peduncle, peduncle > petiole, spike spheroid, 17–20 mm across (exserted stamens), ca. 75-flowered, flowers densely packed, helically alternate, subsessile, lower flowers staminate and upper flowers bisexual (occasionally 2 adjacent flowers fused); bracteate; peduncle straight, several-angled with low ridges below midpoint, 25–60 mm long increasing 2× in fruit, 0.6–1 mm diameter, tough, light green, with pulvinus at base ca. 1.5 mm long, sparsely hairy (= collapsed short hairs), somewhat scabrous with backward-curved prickles; rachis cylindrical, lacking glandular hairs and not viscid; bractlet subtending pedicel inconspicuous, membranous, acute-ovate to truncate, 0.4–0.7 × 0.3 mm, = calyx, colorless or purple-red at tip; pedicel absent, ovary somewhat sunken in rachis. **Staminate flower:** radial, ca. 2 mm across (excluding twisted stamens); receptacle lacking **nectary** at base of stalk of pistil, producing thin nectar; **calyx** inconspicuously 4–5-lobed, membranous, bell-shaped, 0.4–0.5 mm long increasing 2× during flowering, with several short, rose teeth, lacking veins, glabrous; **corolla** (3–)4–5-lobed (lobes sometimes not separating), funnel-shaped, 2.9–4 mm long, cream-colored to

translucent with 5 greenish veins to midpoint, glabrous; tube not ridged; lobes acute-triangular, elliptic-ovate, 1.5–1.8 × 0.8 mm with lower lobe more flat and ca. 2 × 0.7 mm and 2-ribbed with others somewhat hooded at tip and cupped and 1-ribbed, greenish at base to purple-red above midpoint; **stamens** 10, free; filaments ascending, twisted in bud, radiating but rarely straight, 8–9 mm long, dark pink to rose or lavender pink (white in bud), glabrous; anthers dorsifixed, dithecal, 0.4–0.65 mm, pale yellow to light yellow, longitudinally dehiscent; pollen pale yellow to light yellow; **pistil** absent. **Bisexual flower:** radial, ca. 2 mm across (excluding twisted stamens); receptacle lacking **nectary** at base of stalk of pistil; **calyx** funnel-shaped inconspicuously 4–5-lobed, membranous and colorless, bell-shaped, 0.4–0.5 mm long increasing 2× during flowering, with several short, rose teeth or green to reddish tips, lacking veins, glabrous; **corolla** (3–)4–5-lobed (lobes sometimes not separating), funnel-shaped, 3–4 mm long, cream-colored to translucent with greenish veins; tube not ridged; lobes elliptic-ovate, 1.5–1.8 × 0.8 mm, greenish at base to purple-red above midpoint; **stamens** 10, free; filaments ascending, twisted in bud and never straight, ca. 9–10 mm long, dark pink to rose or lavender pink or light lavender above midpoint (white in bud); anthers dorsifixed, dithecal, 0.4–0.65 mm, pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 8–10 mm long, exerted 1–3 mm above anthers with twisted filaments, short-stalked; ovary superior, fusiform-oblong or narrowly ellipsoid somewhat 4-sided, 1.4–1.7 × 0.35 mm, green to light yellow-green, with minute blunt teeth along several ribs, 1-chambered with several tiny ovules on upper side; style twisted, ca. 0.25 mm diameter, white at base to pink or pink-purple at tip; stigma terminal, recessed. **Fruit:** pod (legume), dehiscent by lengthwise strips (ridges), potentially to 12-seeded but often without mature fertile seeds, stalked, the stalk bell-shaped to 3 mm long, linear ± flat or slightly twisted bulging at seeds or where seed began forming, mostly 40–70 × 4–6 mm (excluding spination) with beak (style) to 4 mm long, having conspicuous ridge on each edge and recessed on face, with dense, radiating prickles, weakly spinescent especially along ridges but less dense of faces, the prickles to 4 mm long and with widened at base, mixed with inconspicuous short hairs. **Seed:** ellipsoid compressed side-to-side, ± 5 × 2.5 × 0.8 mm, brown, with short, subterminal hilum, attached by a curved funiculus to 2 mm long.

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