

Vascular Plants of Williamson County

Sherardia arvensis – SPURWORT, FIELD MADDER [Rubiaceae]

Sherardia arvensis L., SPURWORT, FIELD MADDER. Annual, taprooted, 1–several-stemmed at base, growing in clumps, decumbent to \pm ascending, 10–16 cm tall; shoots with only 1 axillary reproductive shoot per node, \pm scabrous and typically short-hispid. **Stems:** conspicuously 4-sided and strongly 4-ridged, to 1 mm diameter, with ridges descending from leaf midribs, puberulent with stiff, downward-pointing hairs. **Leaves:** whorled, 4 or 6 per node, simple, sessile to subsessile, stipules 2 indistinguishable from blades in whorl (here treated as leaves); petiole 0–1 mm long, whitish; blade lanceolate to elliptic or oblanceolate, 4.5–10.5(–13) \times 1.5–4.5 mm, broadly tapered at base, entire but with stout, upward-pointing hairs on translucent margins, acuminate at tip, pinnately veined typically with only midrib conspicuous and sunken on upper surface and raised with upward-pointing hairs on lower surface, upper surface sparsely short-hirsute. **Inflorescence:** headlike cyme, axillary, 2–10-flowered within a leafy involucre, bracteate, with some upward-pointing short hairs; peduncle to 20 mm long, stemlike but glabrous and more slender; **involucre** of 6–8(–10) bractlets subtending pedicels, cup-shaped, bractlets somewhat fused at base, acuminate-lanceolate, 5–9 \times 1.2–3.3 mm, mostly green but pale green near the base and with stout short hairs on translucent margins, each bractlet 3-veined, with short-stalked, capitate glandular hairs near pedicel; pedicel $<$ 0.3 mm long, green. **Flower:** bisexual, radial, 2.5–3 mm across, erect and slightly exserted from involucre; **calyx** 4–6-lobed, fused to ovary; tube extending slightly beyond the upper rim of ovary; lobes unequal, toothlike, \pm 0.5 mm long increasing 2 \times in fruit, green, short-hispid with colorless, upward-pointing and erect hairs; **corolla** 4(–5)-lobed, trumpet-shaped (salverform); tube narrow, 2.2–3 mm long, whitish, expanding into funnel-shaped throat 0.5 mm from orifice, mostly lavender; lobes spreading, narrowly ovate, 0.9–1.2(–1.5) mm long, lavender or light to moderate purplish pink; **stamens** 4(–5), fused to midthroat of corolla, alternate with corolla lobes; filaments 0.5–0.7 mm long, whitish, erect at anthesis then arching out and downward between corolla lobes after pollination; anthers exserted, dorsifixed, dithecal, (0.2–)0.3–0.4 mm long, pink-rose but darker on connective tissue, longitudinally dehiscent; pollen pale pink, apparently shed within flower bud; **pistil** 1; ovary inferior, deeply 2-lobed, the lobes compressed bell-shaped, 0.5 mm long, enclosed in calyx tube, 2-chambered, each chamber with 1 ovule; style threadlike, 2.7–4 mm long, whitish, unequally 2-branched near tip, the branches 0.25–0.5 mm long; stigmas slightly exserted, capitate, rose-red, papillate. **Fruit:** schizocarp, 2-chambered forming 2 dry, 1-seeded nutlets (mericarps) with fruit wall \pm fused to seed coat; mericarps obovoid, 2.5–4 mm \times 1.5 mm, \pm cuplike at tip having a persistent, crownlike calyx, (2–)3-ribbed (= veins to calyx lobes) on the convex face and broadly grooved on the lower face, brown, scabrous and short-hispid; calyx lobes on outer 1/2 of rim, erect and webbed between bases. **Seed:** part of mericarp.

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