

## Vascular Plants of Williamson County

*Galium virgatum* – WAND BEDSTRAW, SOUTHWEST BEDSTRAW [Rubiaceae]

*Galium virgatum* Nutt., WAND BEDSTRAW, SOUTHWEST BEDSTRAW. Annual, taprooted, (1–)several-stemmed at base, principal shoots erect to ascending, to 28 cm tall; shoots with only cauline leaves, generally not scabrous. **Stems:** 4-sided and 4-angled, square in  $\times$ -section, to 0.7 mm diameter, never woody, internodes to 20 mm long, short-bristly along colorless angles but lacking hooks, glabrous. **Leaves:** whorled, 4 per whorl, simple and sessile, without obvious stipules; stipules 2, indistinguishable from leaves (treated here as leaves); blade elliptic to oblong, 2–8  $\times$  0.8–2 mm, short-ciliate on margins, acute at tip, 1-veined with vein obscure on upper surface and raised on lower surface, lower surface with milky, raised, blisterlike structures ca. 0.25 mm. **Inflorescence:** flowers 1–2 per node, later a condensed leafy cyme, subsessile on a dwarf shoot having a short stem and 2 bractlets; bractlet subtending subsessile flower leaflike, ovate, 2.5–3.5  $\times$  1 mm, with milky, raised, blisterlike structures on lower surface. **Flower:** bisexual, radial,  $< 1$  mm across; **perianth (corolla)** 4-lobed, of 1 whorl, cymbal-shaped (rotate), greenish white; tube short; lobes spreading, deltate to triangular, 0.5–0.6  $\times$  0.3–0.4 mm, inconspicuously veined; **stamens** 4, fused to corolla tube; filaments erect, 0.2 mm long, white; anthers dorsifixed, dithecal, ca. 0.1 mm long, light whitish, longitudinally dehiscent; pollen white; **nectary disc** inconspicuous on top of ovary; **pistil** 1; ovary inferior, conspicuously 2-lobed, 0.5 mm long, covered by hooked bristles, 2-chambered, each chamber with 1 ovule; styles 2 (fused) erect, ca. 0.45 mm long, 2-branched, branches ascending, pale green; stigmas exerted at level of anthers, capitate, pale green. **Fruit:** schizocarp, reflexed, 2-chambered forming 2 dry, 1-seeded nutlets (mericarps) with fruit wall  $\pm$  fused to seed coat; mericarp body subspheroid with flat side (1 mericarp aborted) or hemi-ellipsoid, 1.3–1.9 mm across, brown to dark brown, densely covered with hooked prickles  $\pm$  0.8 mm long, lacking hairs; sometimes the late-maturing mericarp dispersed with attached bractlet.

A. C. Gibson