

Vascular Plants of Williamson County

Allowissadula holosericea – VELVET-LEAF MALLOW [Malvaceae]

Allowissadula holosericea (Scheele) Bates, VELVET-LEAF MALLOW. Perennial herb, not rosetted, several-stemmed at base, principal branches from ground erect with spreading axillary branches in canopy, in range to 120 cm tall; shoots with only cauline leaves, foliage velveteen, having a dense cover of soft stellate hairs, on shoots having 10+ unequal arms and often a short stalk, axes having long-stalked glandular hairs to 0.7 mm long with yellowish heads, canopy strongly scented when handled. **Stems:** initially slightly ridged but concealed by pubescence aging cylindrical, to 10 mm diameter, with 1 ridge descending from each leaf, tough, zigzagged especially above midplant, woody at base, glandular hairs present on portions of stem and especially in canopy; pith intact, white. **Leaves:** helically alternate, simple sometime somewhat 3-lobed above midblade, long-petiolate without pulvinus, with stipules; stipules 2, attached to stem at node, threadlike, 3.5–5.5 mm long, with short stellate hairs and abundant, scattered, radiating, long-stalked glandular hairs, abscising after leaf mature; petiole cylindrical, of mature leaves 15–175 mm long, tough, stellate-hairy and with abundant, scattered long-stalked glandular hairs; blade inverted heart-shaped to somewhat triangular, of mature leaves 40–220 × 30–195 mm, cordate (subcordate) at base, serrate on margins, acuminate to acute at tip, palmately veined at base with 5, 7, or 9 principal veins raised on lower surface, if 3-lobed upper (distal) 3 principal veins to lobes, conspicuously velveteen on developing leaves with especially the lower surface gray-green with dense, soft tomentum, surfaces lacking glandular hairs.

Inflorescence: leafy cyme on axillary lateral shoot, several-flowered, bracteate, stellate hairy on green surfaces with long-stalked glandular hairs except on bractlet blades; peduncle stemlike; bractlet subtending pedicel, leaflet with 2 stipules and a blade with delayed devilmont on a well-defined petiole; pedicel cylindrical, at anthesis 6–11 mm long, with abundant glandular hairs, lacking bracteoles at top or associated with calyx (epicalyx lacking). **Flower:** bisexual, radial, 32–42 mm across; **calyx** 5-lobed, ca. 12 mm long not increasing in fruit, green, outer (lower) surface stellate-hairy with scattered, long-stalked glandular hairs, in bud appearing strongly 5-ribbed; tube cup-shaped, 10-ribbed with ribs darker green, inner surface glabrous; lobes triangular, 5–6 × 5 mm, darker green than tube and often purplish on margins, acute with cylindrical point 1 mm long at tip, 3-veined from base with central vein raised on lower surface, inner surface sparsely hairy with stellate hairs having few arms; **corolla** 5-lobes, fused at base and with base of stamen column, platelike (rotate); tube (with stamens) < 2 mm long, thin and white-papery to midpoint, fleshy and pale yellow above midpoint, glabrous; lobes petal-like with thickened, narrowed base, conspicuously overlapping, fan-shaped to obovate, in range 14–18 × 14–18 mm, light yellow-orange, on thickened base stellate-ciliate on margins with colorless, ascending arms to 0.7 mm long, many-veined from base raised on both surfaces; stamens 60+, monadelphous (all fused) forming column at base hiding ovary; column volcanolike, ca. 3 × 1.2 mm at top, light yellow-orange, free filaments exerted, widely spreading, 3.5–5.5 mm long, light yellow-orange to dark yellow; anthers dorsifixed monotheal, strongly curved, 0.7–1 mm long, light yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, 2 × 3 mm with depressed center on top, top covered with dense white cover of elongate stellate hairs ca. 1 mm long hiding 5(–6) blunt horns on perimeter, glabrous on side, 5(–6)-chambered, each chamber with 3 ovules; style attached in depressed center of

ovary, ca. 10 mm long, 5(-6)-branched, lower portion 2.5-3 mm long, pale yellow-green, the branches exerted arising through stamen column then curved and widely spreading mixed with filaments, ca. 7.5 mm long, dark yellow, slender at bases; stigmas terminal, capitate and hemispheroid. **Fruit:** schizocarpic capsule, loculicidal initially splitting on top ca. 4 mm, later breaking along septa and from central post into 5(-6) dry, 2-3-seeded segments (mericarps); intact fruit hemispheroid, 6-7 × 10-11.5 mm, with depressed center at top, strongly lobed above midpoint, with a closely spaced pair of short, blunt horns along rim at top, stellate-hairy base to top with many hairs and arms 1+ mm long on top; mericarps = obovoid wedges ca. 5 × 7 mm having a pair of wide lobes at top, dehiscent between pair of horns. **Seed:** plump D-shaped and 3-sided, ± 2 × 2 × 1.5 mm, dull black (dark brown) with granular surface.

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