

## Vascular Plants of Williamson County

### *Asclepias viridiflora* – WAND MILKWEEED [Apocynaceae/Asclepiadaceae]

*Asclepias viridiflora* Raf., WAND MILKWEEED. Perennial herb, with fibrous roots from caudex, not rosetted, 1–several-stemmed at base, ascending, in range to 50 cm tall; shoots with only paired cauline leaves, foliage leathery and wavy, short-tomentose, lacking glandular hairs; latex white, copious when shoot broken. **Stems:** cylindric, to 5 mm diameter, tough, with to 30 nodes, internodes mostly 20–25 mm long to 40 mm long just below flowering canopy, in range short-tomentose or aging sparsely hairy. **Leaves:** opposite decussate, simple, short-petiolate, without stipules; petiole hemi-cylindric, to 4.5 mm long, cream-colored; blade obovate to somewhat oval (broadly elliptic),  $< 20\text{--}52 \times 12\text{--}28$  mm, broadly tapered at base, irregularly wavy and hard papillate on margins, truncate to roundish (slightly notched) mostly with a deltate point at tip, pinnately veined with white midrib raised on lower surface, minor veins with elaborate network with a submarginal vein near edge margin with no principal vein reaching margin, upper surface with denser hairs. **Inflorescence:** cyme (umbel), “axillary” and 1 per node formed on ledge between petioles on successive nodes in canopy, cyme hemispheroid ball-like, ca. 40 mm across, 40+-flowered, bracteate; bract subtending peduncle leaflike and sessile,  $<$  cyme; peduncle spreading, 3–5 mm long, densely short-tomentose, persistent with or without development fruits; bractlet subtending pedicel acuminate-linear,  $4.5\text{--}6 \times 0.5$  mm, short-tomentose, early-deciduous; pedicel 11–12.5 long, to 0.8 mm diameter at base, cream-colored, short-tomentose. **Flower:** bisexual, radial, ca. 5 mm across, ca. 12 mm long; **calyx** 5-lobed, strongly reflexed, green purplish at tips, outer (lower) surface short-tomentose; tube platelike, ca. 0.5 mm long; lobes narrowly ovate, ca.  $3.5 \times 1.1$  mm, finely parallel-veined at base; **corolla** deeply 5-lobed, lobes reflexed; tube moundlike becoming inverted,  $< 0.6$  mm long; lobes oblong-lanceolate,  $6.5\text{--}7 \times 2.4\text{--}2.6$  mm, pale green with white margins, parallel-veined at base, acute at tip, glabrous; **stamens** 5, fused into staminal column with filaments surrounding but free from lower pistils and anthers fused to the enlarged stigmatic head (stigma + anthers = gynostegium), with a whorl of colorful appendages (corona) below anthers, the corona 5-lobed and erect appressed to staminal column, lacking horns; filament column ca. 0.9 mm long, purple-red, fused to and continuous with corolla tube; corona hoods (lobes) arising from filament column, strongly cupped-ovate, ca. 5 mm long, reddish-rose, subtruncate at tip, below midpoint with a pair of toothlike lobes on inner side; anthers dithecal, dehiscent along tip, flat and fused to sides of stigma except for a horny, projecting, lateral wing and a terminal appendage; anther sacs and connective green and with shallow fold on each face of gynostegium; lateral wings triangular, projecting ca. 0.5 mm, the widest at base,  $\pm$  light yellow, sideways (laterally) appressed to adjacent wing of neighboring anther and forming a slit with gland (corpusculum) joining the pollinia positioned at top of slit; terminal appendages depressed-ovate to  $\pm$  widely depressed trowel-shaped, ca. 1.2 mm long, wings papery and whitish, the appendages arched over top gynostegium mostly concealing the exposed stigma; pollen united into pollinia, each pollinium flattened and narrowly teardrop-shaped,  $\pm 2.8 \times 0.5$  mm long, glossy yellow, 2 pollinia from adjacent anthers united by spreading translator arms to a deep purple gland (corpusculum); gland visible on surface of gynostegium, translator arms flattened, reddish and colorless, ca. 0.5 mm long; **pistils** 2, together appearing 2-stemmed and chalice-shaped,  $\pm 6.5$  mm long; ovaries superior, free at base,

ovoid but flattened on common side,  $\pm 0.7 \times 0.7$  mm, greenish, 1-chambered with many ovules attached on inner side; styles 2,  $\pm$  straight, ca. 3 mm long, greenish and fused at stigma; stigma capitate (includes some stylar tissue), ca.  $2 \times 2$  mm, the top deeply depressed, 5-cornered, light green. **Fruit:** follicle, erect to ascending on deflexed stalk, 1 per flower, many-seeded, narrowly elliptic-lanceoloid, ca. 75–125 mm long, mostly smooth and glabrate. **Seed:** with a terminal tuft of many seed hairs, seed body ovate in outline strongly flattened and narrowly winged,  $5.5\text{--}7 \times 4$  mm, obtuse at tip, chamber bulging, brown, wings completely around seed, stiff; seed hairs light cream-colored (tan).  
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