

## Vascular Plants of Williamson County

*Asclepias viridis* – GREEN MILKWEED [Apocynaceae/Asclepiadaceae]

*Asclepias viridis* Walter, GREEN MILKWEED. Perennial herb, ± taprooted with crown, 1–2-stemmed at base, decumbent with ascending shoot or spreading, in range to 50 cm tall; shoots with only cauline leaves, foliage somewhat leathery when old appearing mostly glabrous; latex copious, milky. **Stems:** initially to 3-lobed aging cylindric, to 7 mm diameter aboveground, each lobe descending from a leaf, tough, green aging purple-red on exposed side, short-hairy aging essentially without hairs. **Leaves:** alternate to subopposite (opposite) irregularly spaces, simple, petiolate, without stipules; petiole shallowly channeled, 2.5–6 mm long, short-hairy to glabrate on upper side, at base and at top boundary with blade having sets of conic glands to 1 mm long, translucent drying reddish, viscid when fresh; blade oblong to ovate or lanceolate, in range 33–113 × < 18–42 mm, broadly tapered to subtruncate at base, entire and sometimes somewhat wavy on margins, acute at tip but appearing obtuse to rounded, pinnately veined with principal veins raised on upper surface and initially on lower surface, surfaces with ± appressed hairs to 1 mm long persisting mostly along veins, principal veins sometimes aging pink to purplish red. **Inflorescence:** umbel-like, terminal, of several–20 flowers, bracteate, with weak hairs; bract subtending peduncle linear, ca. 6 × 0.8 mm, green, short-hairy; peduncle often 3-lobed, stout, to 5 mm long, at top often 3-forked with cylindric axes 5–6 mm long, short-hairy; bractlet subtending pedicel linear, to 5 mm long decreasing upward, green often reddish at tip, short-hairy; pedicel ascending and flexible, cylindric, at anthesis 12–15 mm long, light green, appressed short-hairy with upward-pointing hairs, at base sometimes with viscid, conic glands as on petiole. **Flower:** bisexual, radial, 26–30 mm across; **calyx** 5-lobed; tube short-platelike, 0.5 mm long, greenish, sparsely short-hairy with appressed hairs, at sinuses with short, viscid, conic glands; lobes widely spreading, acute-oblong to ovate, 4–6 × 1.8–2.2 mm, yellowish green with narrow colorless margins and often purplish red at tip, with 3 inconspicuous parallel veins at base, upper surface glabrous, lower surface with short, weak nonglandular hairs and minute glandular hairs; **corolla** 5-lobed; tube platelike, 1.2–1.5 mm long, yellowish; lobes ± spreading, ovate, in range 12–15 × 5.8–6.5 mm, light yellow-green to green with narrow colorless margins, with ca. 7 parallel veins at base, upper surface glandular-hairy several mm approaching tip; **stamens** 5, fused into staminal column with filaments surrounding but free from lower pistils and anthers fused to enlarged stigmatic head (stigmas + anthers = gynostegium), filament column fused at base to corolla tube, 3 mm long, green, with 5 hemi-ellipsoid yellow-green structures 2 mm long; corona = 5 hoods, each hood lacking a projecting horn, the hoods alternate with corolla lobes, inflated by not fleshy, pouchlike wrapped inward, from the side obovate in outline, 4.5–5 mm tall attached sideways (decurrent) and fused sideways and upward to central column, red-purple with pink blotch near top or rose with white blotches, inner surface and margins of opening conspicuously papillate-ciliate, incipient horn visible inside pocket with an evaginated, papillate lining (white); anthers dithecal, ± trapezoidal, ca. 2 mm long, the broadest at base, laterally winged, the wings brownish and scarious and projected to form edges of a vertical slit with gland (corpusculum) of pollinia positioned at top just above a wavy, liplike flap purplish red on margin, terminal appendages translucent scarious, inverted heart-shaped, ca. 0.7 mm, appressed to top of

gynostegium, the 5 appendages forming a star-shaped aperture on top of gynostegium exposing green stigma; pollen united into pollinia, each pollinium flattened and narrowly teardrop-shaped,  $1.1\text{--}1.2 \times 0.25\text{--}0.3$  mm, glossy yellow to light orange, united by reddish to red-orange translator arms (ca. 0.7 mm long) to a deep purple or blackish corpusculum ca. 0.3 mm long; **pistils** 2, together chalice-shaped, ca. 5 mm long; ovaries superior, fused or free at base, hemi-conic flattened on common side,  $1\text{--}1.2 \times 0.8\text{--}1.2$  mm, pale green and glaucous, inconspicuously ridged, glabrous, each 1-chambered with many ovules attached on inner side; styles 2, 2–2.3 mm long, light green, fused at stigmas as an inverted cone  $2 \times 2$  mm, near ovary each with a pair of short, translucent, minutely crenate wings ca.  $0.5 \times 0.1$  mm; gynostegium capitate (includes some stylar tissue), the top flat 5-sided (pentagonal), green. **Fruit:** follicle (typically only 1 ripened ovary), ascending, < 30-seeded, before dehiscing  $\pm$  lanceoloid, in range ca.  $90 \times 13\text{--}15$  mm, coarsely ridged with 4 principal ridges at tip, fully open ovate ca.  $90 \times 30$  mm, wall leathery, thick, and somewhat spongy, from below midpoint filled with long silky hair; pedicel recurved and hooked at base,  $\pm 17$  mm long. **Seed:** flat-ovate, in range  $6.5\text{--}7.5 \times 4.7\text{--}5.8$  mm, brown, truncate on 1 end 2.1–2.4 mm long, rounded at outer end, winged, the wing 0.5–0.9 mm wide (missing at truncate end), with many fine silken white hairs attached to truncate end, the hairs spreading, 24–32 mm long.

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