Vascular Plants of Williamson County

Asclepias asperula var. *capricornu* — ANTELOPE-HORN MILKWEED, ANTELOPEHORNS [Apocynaceae/Asclepiadaceae]

Asclepias asperula (Decne.) Woods. var. capricornu (Woods.) Woods., ANTELOPE-HORN MILKWEEK, ANTELOPEHORNS. Perennial herb, with taproot-caudex, not rosetted, severalstemmed at base, not rosetted, principal branches decumbent, < 30 cm tall; shoots with only cauline leaves oriented to upper side of shoot, foliage and axes uniformly short-hairy; latex white, copious; shoots with only cauline leaves, short-hairy; latex when injured copious, milky; caudex vertical, to 15 mm diameter, with a deep, soft-woody taproot. **Stems:** cylindric, to 4 mm diameter, green, tough when woody, internodes to 25 mm long. **Leaves:** helically alternate, simple, petiolate, without stipules; petiole hemi-cylindric, < 1–5 mm long, light yellow-green, having a half-ring of ampulelike nectaries on upper side, with scattered short hairs; blade acute-lanceolate (the earliest leaves elliptic to ellipticlanceolate and small), $(35-)80-116 \times (8-)12-35$ mm, somewhat folded upward, broadly tapered to roundish at base, entire, pinnately veined with principal veins slightly raised on upper surface and raised on lower surface, often having 3 unequal veins at base, uniformly short-hairy, slightly scabrous. Inflorescence: umbel-like cyme, terminal, hemispheric to nearly spheric, 45–95 mm across, 17–40+-flowered, conspicuously short-hairy on green tissues; peduncle short above the closest leaf, with an expanded, expanded and domelike bearing flowers; bractlets subtending pedicel, acuminate, to 4 mm long, to 0.35 mm at base, light green with reddish at tip, conspicuously short-ciliate, with ampulelike glands to 1.5 mm long, reddish; pedicel cylindric, at anthesis 18–33 mm long flared and funnelshaped beneath receptacle, light green. Flower: bisexual, radial, 15–20 mm across; calvx 5-lobed, light yellow-green, short-hairy on lower surface; tube \pm 0.5 mm long; lobes appressed to corolla (never reflexed), acute-ovate, ca. 5.5×2 mm, 7-veined from base, glabrous on upper (inner) surface, short-hairy on lower surface; corolla 5-lobed, continuous with filament column above; tube platelike, ca. 2.5 mm long, orifice 1.6–1.7 mm across; lobes appressed to calvx lobes, acute-ovate, ca. 10×6 mm, upper surface pale yellowish green with margin white to 0.6 mm wide to midlobe, lower surface blushed reddish approaching rounded tip, 7-veined at base; stamens 5, fused into staminal column with filaments surrounding but free from lower pistils and anthers fused to enlarged stigmatic head (stigmas + anthers = gynostegium) with a whorl of elaborate appendages (corona) from upper filament column; filament column fused at base to corolla tube, green alternating with purple; corona of 5 hoods, hoods filled with thin nectar, each hood lacking an enclosed horn, the hoods alternate with corolla lobes, lower portion inrolled and upper portion hollow formed as a pocket, from the side somewhat curved club-shaped, spreading lower portion 3.5–4.5 mm long and ascending upper portion to 5 mm long, whitish to cream-colored but reddish purple to purple-red and sometimes greenish approaching base, minutely ciliate to papillate on margins, thickened along lower edge; anthers dithecal, triangular, ± trapezoidal, the broadest at base, laterally winged dehiscent along top, flat and fused to stigma except for wings and terminal appendage, anther sacs and connective greenish, lateral wing triangular, ca. 2×0.7 mm, the widest above midpoint, horny, laterally appressed to adjacent wing of neighboring anther and forming a slit with gland (corpusculum) of pollinia positioned at top; terminal appendages appressed to top of stigma, \pm semicircular, ca. 0.6×1 mm, colorless and papery; pollen united into pollinia,

each pollinium flattened and teardrop-shaped, ca. 1.5×0.8 mm, glossy light yelloworange, united by reddish translator arms 0.6–0.7 mm long to a purple-red corpusculum 0.3–0.35 mm long; **pistils** 2, 4.5–5 mm long, fused by the uppermost style and stigmas; ovaries superior, \pm conic, ca. 1.2 \times 1.2 mm, light green, ca. 10-ribbed, each ovary 1chambered with many ovules attached on inner side; styles 2, ± 5-ribbed, free portion longtapered from ovary, greenish; stigma capitate (includes some stylar tissue), 5-sided pyramidal, ca. 1.5×2.5 mm, light green, depressed in center with 5 rounded lobes. Fruit: follicle (only 1 ovary matures), dehiscent along a deep longitudinal groove, many-seeded, ascending, immature ovoid 60–70 mm long, dehiscent fruit ascending to spreading, ovate, 35–40 mm wide, brown, having widely scattered pricklelike projections, projections flattened side-to-side, to 2 mm long, blunt at tip and wide at base, surface minutely puberulent; peduncle channeled, 30+ mm long, greenish; pedicel strongly reflexed mewhat appressed to fruit surface, channeled, to 25 mm long, with tannish periderm aging dark. **Seed:** body flatted ovate often cupped, $5.2-6.1 \times 3.5-5$ mm, dull brown, winged, truncate at base, surfaces minutely puberulent; seed hairs attached to flat base, fine silky white, 27–45 mm long, fused into ring at base. A. C. Gibson