

## Vascular Plants of Williamson County

*Cynanchum barbigerum* var. *barbigerum* – BEARDED SWALLOW-WORT  
[Apocynaceae/Asclepiadaceae]

*Cynanchum barbigerum* (Scheele) Shinn. var. *barbigerum*, BEARDED SWALLOW-WORT. Perennial herbaceous vine, twining, not rosetted, several-stemmed at base, climbing on neighboring plants and fences; shoots with only cauline leaves, stems with internodes >> leaves, mostly appearing glabrous and lacking glandular hairs; latex somewhat cloudy. **Stems:** ± cylindrical (weakly ridged), < 1 mm diameter, tough, green, internodes to 65 mm long, glabrous (lacking a line of short hairs from node to next node), flared approaching node and ledges, having inconspicuous, widely spaced, minute sessile glandular hairs, along each ledge having 3–4 erect, green, ampulelike extrafloral nectaries 0.25–0.4 mm long often with a minute drop of liquid at tip. **Leaves:** opposite decussate, simple, petiolate and fused across node forming a pair of ledges, without stipules; petiole channeled with 2 edges on upper side, to 5 mm long, not twining, with arched short hairs along 2 edges; blade lanceolate to narrowly ovate, 9–48 × 2.5–13 mm, broadly tapered to rounded at base (not cordate), entire and sparsely short-strigose ciliate on margins, acuminate at tip, pinnately veined with midrib slightly raised on both surfaces, lower surface with short hairs chiefly along midrib. **Inflorescence:** “axillary” cyme, adjacent to emerging axillary shoot typically 1 per node, flat-topped, to 12 mm long, nodes along axis helically alternate, 7+-flowered, on condensed axes, bracteate; peduncle to 1.5 mm long, green but often purplish red on upper side with some arched short hairs or glabrous; rachis highly condensed; bractlet subtending pedicel, appressed, awl-shaped, to 1.2 mm long, green, with a glandlike hair at tip, early-abscised; pedicel cylindrical, at anthesis 2–4 mm long, glabrous, with minute bumps or low ridges to calyx. **Flower:** bisexual, radial, ca. 5 mm across; **calyx** 5-lobed essentially free to base; lobes appressed to corolla, ovate, 1–1.6 × 0.5–0.7 mm, green with thinner membranous margins and tip, green surface with minute, sessile glandular hairs on outer (lower) surface; **corolla** 5-lobed, 4–5.5 mm long; tube cup-shaped, 1–1.5 × 2 mm, continuous with filament column above, yellowish green; lobes in bud forming a 5-sided cone obtuse at tip, lobes somewhat recurved, fleshy and triangular, to 4 × 0.8 mm, mostly white, aging inrolled to lower side, upper (inner) surface bearded, densely short-hairy with white hairs arising from spongy tissue, lower (outer) surface light yellow-green with narrow, white margins or center aging pinkish; **stamens** 5, fused into staminal column with filaments surrounding but free from lower pistils and anthers fused to enlarged stigmatic head (stigma + anthers = gynostegium) with a whorl of 5 appendages (corona) from upper filament column; filament column ca. 1 mm long, fused at base to corolla tube, light green, with 5 short, finlike ribs diverging to corona opposite calyx lobes; corona lobes flat and linear arching inward over center, 1.3–1.4 × 0.15–0.2 mm, somewhat flattened and solid, lacking horns; anthers dithecal, ± trapezoidal, < 1 mm long, (broad at base), laterally winged, bulging and fused to stigma except for wings and terminal appendage, anther sacs and connective colorless, laterally appressed to adjacent wing of neighboring anther and forming a vertical slit 0.5 mm long with gland (corpusculum) of pollinia positioned above slit; terminal appendage ascending from side of gynostegium, free portion semi-circular, 0.4 × 0.3 mm, membranous with purplish line in center; pollen united into pollinia, each pollinium teardrop-shaped (not flattened), ca. 0.2 mm long, yellowish, united by translator arms ca. 0.1 mm long to a strawberry-colored to red-purple,

elliptic corpusculum 0.15 mm long, opposite corolla lobe just above vertical slit; **pistils** 2, together somewhat chalice-shaped, ca. 1.6 mm long; ovaries superior, ellipsoid,  $0.7\text{--}0.8 \times 0.35$ , light green, glabrous, each 1-chambered with many ovules; styles below gynostegium ca. 0.3 mm long, light green, fused above midpoint; gynostegium capitate hemispheroid (includes some stylar tissue), ca.  $0.5 \times 1$  mm, 5-lobed, the top concealed by membranous appendages, light green. **Fruit:** follicle, dehiscent along upper (inner) face base-to-tip, to 12-seeded,  $\pm$  straight to somewhat curved upward, narrowly lanceoloid long-tapered to tip,  $35\text{--}55 \times 5\text{--}5.5$  mm, green, smooth, rounded and slightly grooved on side of aperture, with long, slender tip enclosing seed hairs, glabrous; calyx persistent, ca. 2 mm long. **Seed:** seed chamber with a tuft of many silky hairs; seed body winged-obovate cupped away from embryo chamber,  $4.5\text{--}5.6 \times 3\text{--}3.5$  mm, brown, faces finely textured with convex cells, on face having raised embryo chamber with or without ridges radiating from chamber, other face with fine midvein ca.  $2/3$  length and minor veins having several, erect, minute fingerlike projections; wing margin somewhat toothed and wavy, mostly 0.5–0.7 mm wide, brown or dark brown along margin; seed hairs attached to truncate base; seed hairs fused at base, fine, while within fruit straight, 15–28 mm long, white, when dispersed spreading often having several kinks below midpoint.

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