

## Vascular Plants of Williamson County

*Proboscidea louisiana* subsp. *louisiana* – UNICORN PLANT, COMMON DEVIL'S CLAW, RAM'S HORN [Pedaliaceae]

*Proboscidea louisiana* (Miller) Thell. subsp. *louisiana*, UNICORN PLANT, COMMON DEVIL'S CLAW, RAM'S HORN. Annual, robust, taprooted, with spreading to ascending or suberect axes and branches, to 75 cm tall; shoots with only long-petiolate cauline leaves, densely and conspicuously glandular-hairy and viscid, foul-smelling when handled. **Stems:** cylindric, to 15 mm diameter, tough, green, densely glandular-hairy; hollow. **Leaves:** opposite decussate at base, subopposite to alternate in canopy, simple, long-petiolate, without stipules; petiole cylindric, to 200 × 12 mm, tough and somewhat fleshy, flexible, whitish, densely glandular-pilose, hollow; blade roundish or ± kidney-shaped to broadly ovate or inverted heart-shaped, 50–220 × 50–230 mm, broadly tapered at base, entire and wavy on margins, obtuse at tip, palmately veined with principal veins sunken on upper surface and raised on lower surface, densely glandular-hairy and viscid. **Inflorescence:** raceme, terminal (appearing axillary), to 20-flowered, flowers horizontally oriented from long pedicels, glandular-hairy and viscid; rachis with nodes closely spaced at flowering increasing in fruit; bractlet subtending pedicel linear, 8–12 × 1 mm, green, appearing to have a short petiole, glandular-hairy and viscid on outer surface and minutely pilose on inner surface; pedicel ascending, cylindric, at anthesis ± 20 mm long increasing 2× during flowering and more in fruit, tough, densely short-pilose and pilose-glandular, the longest hairs scattered and to 2 mm long grading to a mixture of shorter hairs, the shortest hairs lacking glandular heads; bracteoles subtending flower 2, opposite and lateral, sessile, linear-oblong, ca. 8 × 1.5 mm, green, glandular-hairy and viscid on outer surface and minutely pilose on inner surface. **Flower:** bisexual, bilateral, 34–58 mm across; **calyx** unequally 5-lobed, outer surface glandular-hairy and viscid; tube bell-shaped, 14–20 mm long, splitting to base on lower side between 2 lobes; central lobe (upper side) narrowly triangular, 9–10 mm long, middle lobes 2, triangular, ca. 5 mm long, lower lobes 2, obtuse, to 10 mm long, inner surface sparsely short-pilose glandular; calyx abscising at base after flowering; **corolla** ± 2-lipped, 5-lobed, 45–51 mm long, light lavender with light purple, reddish, and orange spots, before anthesis pale yellowish; tube short, ± cylindric, 4–5 × 4–5 mm, whitish with faded red-purple spots; throat bell-shaped to ± funnel-shaped, 13–15 mm wide, longer on lower than upper side, upper side somewhat keeled, outer surface uniformly glandular-hairy and yellowish, within throat base with colorless hairs ca. 1 mm long and floor with mostly red to red-purple spots and glandular hairs approaching upper lip; upper lip 2-lobed, lobes roundish, ± 11–15 × 11–18 mm, overlapping at base, lower lip 3-lobed, central lobe semicircular, 12–17 × 25–30 mm, light lavender with orange and light purple spots, lateral lobes spreading, 13–19 × 15–21 mm, < central lobe, with light purple spots; **stamens** 4, of 2 lengths + inconspicuous staminode, arising on corolla tube, the longer pair on lower side and shorter pair at midpoint; filaments sigmoidal with thickened lower bend, somewhat twisted and compressed side-to-side, lower long filaments ca. 15 mm long (straightened), short filament appearing ca. 12 mm long and 12–15 mm long (straightened), white with purple to purplish spots, with glandular hairs below midpoint having amber to colorless heads, with glistening short hairs near the base; anthers adherent in pairs on inner margins, medifixed but firmly attached, dithecal, ca. 5 mm long

(long stamens) and 4.5 mm long (short stamens), white, longitudinally and inwardly dehiscent; pollen white, abundant; **nectary disc** beneath ovary, barrel-shaped,  $1.5 \times 2$  mm, green, with copious nectar beneath colorless hairs around ovary; **pistil** 1, 25–29 mm long; ovary superior, ovoid to narrowly conic, ca.  $3 \times 2$  mm long, light green, weakly 4-ribbed, tapered to style, initially 1-chambered with 40+ ovules; style pale green at base to white or cream-colored at midpoint, flared to 2-lobed, paddle-shaped stigma, lobes flat, low stigma lobe roundish, ca.  $2 \times 2.3$  mm, upper lobe slightly shorter and narrower, shallowly notched and short-fringed, inward surfaces sticky and papillate-hairy. **Fruit:** drupelike capsule, outer fruit wall shed leaving hard endocarp, having a long curved and hooked beak before splitting lengthwise, 25–40-seeded; fruit body before mature ellipsoid,  $50\text{--}60 \times 15\text{--}25 \times 15\text{--}25$  mm, green, ridged on upper side, constricted around base, covered with glandular hairs but not viscid; inner fruit with loculicidal dehiscent and losing leathery outer wall, lanceoloid, ca. 15–17 mm diameter, endocarp sculptured and with a comblike crest erect from the upper side midline and grooved beneath, with 4 holes at base of 4–5 chambers; woody beak incurved backward ca.  $180^\circ$ , ca. 80–100 mm long, ca. 100 mm diameter at base gradually tapered to tip, ridged on inner side of curve. **Seed:**  $\pm$  elliptic in outline, irregularly compressed to flattened,  $6.5\text{--}9.2 \times 3.7\text{--}6 \times 2.2\text{--}3$  mm, dark brown, irregularly wrinkled, warty, and short-ridged.

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