

## Vascular Plants of Williamson County

*Physalis acutifolia* – SHARPLEAF GROUND-CHERRY, WRIGHT GROUND-CHERRY  
[Solanaceae]

*Physalis acutifolia* (Michx.) Sandw., SHARPLEAF GROUND-CHERRY, WRIGHT GROUND-CHERRY. Annual, taprooted, several-stemmed at base, with branches spreading to ascending, in range to 45 cm tall; shoots leafy, initially puberulent with upward-pointing, short, nonglandular hairs, not sticky. **Stems:** conspicuously  $\pm$  10-ridged, to 12 mm diameter, with 2–3 conspicuous ridges descending from each leaf, striped green and paler, initially having puberulent hairs along ridges aging without hairs. **Leaves:** helically alternate to opposite (not 180° apart), simple, petiolate, without stipules; petiole 2-channeled with raised midvein, 20–40 mm long, raised edges not violet; blade ovate to broadly lanceolate,  $< 40\text{--}70 \times < 20\text{--}35$  mm, blade  $>$  petiole, tapered at base, serrate to wavelike on margins, acute at tip, pinnately veined with midrib somewhat raised and other veins slightly sunken on upper surface and principal veins raised on lower surface, veins not ending in teeth, initially puberulent aging with sparse hairs on midrib and persisting along margins. **Inflorescence:** leafy cyme with solitary flower appearing axillary at each fork (alternatively interpreted as solitary axillary flowers), flower nodding, lacking bracts; pedicel ascending but hooked approaching flower, slender, at anthesis to 20 mm long increasing 2 $\times$  and pendent in fruit, green, puberulent with upward-pointing hairs. **Flower:** bisexual, radial, ca. 15 mm across; **calyx** 5(–6)-lobed, in range 3.5–4  $\times$  2.5 mm; tube broadly bell-shaped but depressed at pedicel, 10-veined with a principal vein from base to each lobe tip and partially toward each sinus, light green, weakly 5(–6)-ribbed, outer surface puberulent with upward-pointing hairs; lobes deltate, in range ca. 1.5 mm long increasing to 2 $\times$  in fruit, puberulent on inner (upper) surface; **corolla** 5(–6)-lobed, pleated in bud, initially broadly bell-shaped becoming spreading, cymbal-shaped (rotate) and star-shaped, lacking a conspicuous spot below each lobe, limb not wavy; tube 1 mm long, pale yellowish green not blushed rose or purple); throat broadly flaring, ca. 4.5 mm long, light yellow-green in star shape, on green tissue papillate-hairy in 5 patches alternate with filaments and with colorless hairs at bases of filaments, lower surface with patches of puberulent hairs on green tissue; lobes low,  $< 0.5$  mm long, puberulent-ciliate and on lower surface submargins with puberulent hairs; **stamens** 5(–6), fused at top of corolla tube 1 mm above base, alternate with corolla lobes; filaments erect, somewhat flattened front-to-back, 2– 2.3 mm long, pale green, with colorless hairs to midpoint; anthers basifixed, dithecal, in range 1.5–1.8 mm long, pale bluish green with whitish stripe, longitudinally dehiscent; pollen white; **nectary disc** a band surrounding ovary base, 0.5 mm tall, green; **pistil** 1, 4.5 mm long; ovary superior,  $\pm$  broadly ovoid, ca. 1.5  $\times$  1.3 mm, pale green, 2-chambered with many ovules attached to center; style tapered tip to base, ca. 3 mm long, pale green lacking purple, glabrous; stigma exerted, terminal, capitate, 0.4  $\times$  0.8 mm, green, positioned at midpoint of anthers. **Fruit:** berry, fleshy, pendent and enveloped by expanded calyx tube, fruit completely hidden by calyx with orifice 4 mm across; berry many-seeded, spheric, 10–10.5 mm, green, appearing smooth but viscid with minute glandular hairs; wall firm, pulp light green to whitish, with bladderlike cells (not juicy); calyx truncate-ovoid, in range 20–25  $\times$  16–20 mm, greenish aging light brown and papery, 10(–12)-ribbed, lobes converged, acute, to 2.5 mm long, scarcely parted. **Seed:** biconvex

lens-shaped compressed side-to-side (waferlike), 1.1–1.5 × 1.4 × 0.5 mm, length > width, yellowish tan to tan, minutely bumpy.

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