

**Vascular Plants of Williamson County**  
*Rhynchosida physocalyx* – SPEARLEAF SIDA [Malvaceae]

*Rhynchosida physocalyx* A. Gray) Fryx., SPEARLEAF SIDA. Perennial herb, taprooted, not rosetted, several-stemmed at base, decumbent and spreading, in range < 30 cm tall; shoots having mostly cauline leaves, stems and leaves with mostly stellate hairs but blade margins with unbranched hairs (hirsute), the stellate hairs to 7-armed having a domed center (no terminal arm) and ascending to spreading or somewhat appressed arms. **Stems:** cylindric, to 3 mm diameter, tough, green, with stellate hairs with to 5 appressed arms mostly oriented along axis. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, attached at side to base of petiole, acuminate-lanceolate, 3–5.5 × 1.2–1.8 mm, green, straight to slightly curved backward, hirsute-ciliate on margins with unbranched hairs, the longest hairs to 0.8 mm long; petiole cylindric, to 13 mm long, with stellate hairs having slender to thicker arms; blade ovate to oblong, 10–25+ × 5–17 mm, tapered at base, low-dentate on margins, acute at tip, palmately veined with 5 principal veins at base, having principal veins slightly raised on upper surface and raised on lower surface, upper surface glabrate or having hairs with 1–2 ascending arms, lower surface with stellate hairs having mostly 3–4 widely spreading arms and a dome at center. **Inflorescence:** solitary flower, axillary, at anthesis close to tip of shoot when subtending leaf (bractlet) small and unexpanded, lacking an involucre; pedicel cylindric, at anthesis ca. 10 mm long, flexible, stellate hairs with unequal arms and minute stalked glandular hairs with colorless heads, lacking bracteoles at top of pedicel or attached to calyx (epicalyx). **Flower:** bisexual, radial, 16–18 mm across; **calyx** 5-lobed, strongly pleated, at anthesis 8–9 mm long increasing 2× in fruit, green, outer (lower) surface with stellate hairs having stiff arms and minute glandular hairs; tube and lobes indistinct at anthesis, the lobes oversized, demarcated by grayish line along each pleat, coherent by a dense border of grayish, short hairs along margins, during fruit development separating downward to tube, tube saucerlike, in fruit ca. 5 mm long, lobes inversely cordate, each with a green, threadlike point to 1.5 mm at tip, the point with hirsute hairs including 1 hair at tip, inner (upper) surface with some minute glandular hairs below midpoint; in fruit lobes of calyx hiding fruit; **petals** 5, fused to expanded base of staminal tube, twisted in bud (convolute) and overlapping, asymmetrically obovate, 8–11 mm long, yellow fading and aging with conspicuous red-purple veins, veins raised on lower surface; **stamens** 25+, monadelphous (all fused part of length) forming a column also fused to petals, exerted as a ball-like cluster of anthers ca. 2.5 × 2.5 mm; filament column to 5 mm long below free filament, flared at base concealing ovary, green but lower portion aging with 5 pairs of purple lines; free filaments spreading, ca. 1 mm long, white; anthers dorsifixed, monotheical, 0.6–0.8 mm long, light orange, longitudinally dehiscent; pollen light orange; **pistil** 1, ca. 4 mm long, fully concealed by stamens; ovary superior, broadly conic truncate at top with depressed center (inverted apple-shaped), at anthesis ca. 1.3 × 2 mm, whitish appearing frosty, densely short-papillate, in range 10(–14)-chambered, each chamber with 1 ovule; style columnar low 10-ribbed (= 1 style per chamber), free styles covered by anthers, spreading to recurved, 1 mm long, pale green; stigmas capitate, spheroid, papillate. **Fruit:** schizocarp, wheel-like, of 10(–14) dry, 1-seeded, indehiscent segments (mericarps), ca. 8 mm across, mericarps fanned wedge-shaped, ca. 4 × 3 × 1.5 mm, furrow on outer side with 2 ridges, lacking beak, surfaces light brown with fine black thickenings, on broad faces

with many thickening radiating from truncate base becoming netted-veined approaching top, in furrow having black bridges between ridges, with short stellate hairs along ridges.  
A. C. Gibson