## **Vascular Plants of Williamson County**

*Callirhoe involucrata* var. *lineariloba* — WILLIAMSON COUNTY POPPYMALLOW, SLIMLOBE POPPYMALLOW [Malvaceae]

Callirhoe involucrata (Torrey) A. Gray var. lineariloba (Torrey & A. Gray) A. Gray, WILLIAMSON POPPYMALLOW, SLIMLOBE POPPYMALLOW. Perennial herb, taprooted, rosetted, several-stemmed at base, principal branches spreading with ascending tips, to 25 cm tall and procumbent principal shoots to 50 cm long; shoots with basal leaves and cauline leaves, leaves deeply palmately lobed with sublobes at least to midblade and teeth, having long hairs with swollen cell at base (stellate hairs rarely observed). Stems:  $\pm$ cylindric, to 4 mm diameter, tough, internodes to 115 mm long, having mostly spreading unbranched hairs to 2.5 mm long. Leaves: helically alternate, palmately (3)5-lobed and 7lobed, long-petiolate, with stipules; stipules 2, attached across node, persistent, asymmetric-triangular to ovate (obovate) in outline,  $3.5-9.8 \times 5.5-8(-10)$  mm, the larger basal lobe roundish, ciliate with simple hairs having swollen cell at base on margins, broadly acute at tip, surfaces mostly lacking hairs (several unbranched hairs), green aging papery; petiole broadly channeled, to  $153 \times 1.2 - 1.5$  mm, tough, with simple hairs; blade roundish to deeply kidney-shaped or inversely heart-shaped in outline, to 60 × 70 mm, principal lobes radiating from base trowel-shaped to obovate (broadly ovate), the largest to  $40 \times 27$  mm, each lobe or major sublobe with 3 teeth at top, palmately (3)5-veined or 7veined at base with principal veins sunken on upper surface and raised on lower surface, with unbranched hairs especially along veins. **Inflorescence:** solitary flower, axillary (= leafy raceme), bracteate, with unbranched hairs having swollen cell at base; bractlet = cauline leaf; pedicel at anthesis  $35-105 \times 1.5$  mm, with twisting ridges descending from bracteoles, with spreading unbranched hairs and sometimes inconspicuous stellate hairs approaching flower, with 3 bracteoles at top of pedicel (epicalyx) pseudowhorled on 3angled ring, reminiscent of sepals, spreading-ascending, linear-narrowly oblanceolate to narrowly obovate or spatulate, appearing petiolate,  $7-10 \times 1.2-3.2$  mm, green, ciliate having hairs with swollen bases on margins, surfaces veins not raised, glabrous. Flower: bisexual, radial 26–46 mm across; sweetly fragrant; calvx 5-lobed, to 13–24 mm long, green, outer surface with unbranched hairs especially along veins; tube cup-shaped to hemispheroid, 4–6 mm long, green, appearing warty when only basal portion of hair persistent; lobes spreading, somewhat unequal, ± broadly-acute triangular, to 18 mm long, 3-5 mm wide, reddish above midpoint, with 3 raised, principal veins from base, upper surface pilose and short-pilose with upward-pointing hairs; petals 5, fused to broad white base of staminal column, thick-clawed and narrowly fan-shaped  $\pm$  truncate at top,  $13-24 \times 10^{-24}$ 9–14 mm, whitish to pale pink with pale purplish pink veins with white claw, the veins > 20, the thickened, upper surface short-pilose, claw margins short-pilose ciliate with hairs ca. 3 mm, limb somewhat jagged on outer margin; stamens 50–100+, monadelphous (all fused part of length) forming column; tube enclosing styles 5-8(-10) mm long,  $\pm 1.5$  mm diameter at midpoint, white, expanded basal portion thick-walled, tube furrowed and with sparse, inconspicuous stalked glandular hairs, filament free portions spreading to ascending, < 3 mm long; anthers ± versatile, monothecal, 0.8–1.3 mm long, cream-colored, longitudinally dehiscent; pollen cream-colored to white; nectary fencelike surrounding ovary to midpoint and fused at base, 2-toothed per chamber, pale green; **pistil** 1; ovary

superior, tirelike with depressed center, 14–20-segments each 2-lobed, at anthesis 1.5–2 × 3–4 mm, dark green, upper portion glabrate with several short hairs and some short glandular hairs, many-chambered, each chamber with 2 portions, the lower portion with 1 fertile ovule and the upper portion with an aborted ovule; style arising in center at midpoint of ovary, to 15 mm long, forming a column ca. 2 mm long, whitish, with pink and rose, ascending, tentaclelike branches 1 per chamber,  $7-12 \times 0.1-0.2$  mm, the terminal 2-3 mm exserted above anther, with decurrent, rose, papillate-hairy stigma on inner side. Fruit: schizocarpic capsule, septicidally breaking into segments (mericarps), each mericarp 1seeded and indehiscent; intact fruit tire-shaped depressed in center, ca. 9.5–13.5 mm across and 3.5–4 mm tall, typically of 14–16 mericarps; mericarps wedgelike and D-shaped + a sterile, center-pointing flange, and 2-lobed on outer face,  $3.5-4 \times 4.5 \times 1.8-2.3$  mm, immature flange 1.5 mm long, green, and slightly elevated, with short, unbranched shorthirsute hairs mostly on top, seed chamber netlike on flat faces, covered on 2-lobed outer face and top by fleshy, opaque white to greenish tissue 1 mm thick aging dry, with several short-hirsute hairs on the innermost edge on top, when fleshy tissue removed seed chamber cover netlike and whitish drying brownish, D-shaped, ca.  $3.5 \times 3$  mm; calyx tube appressed to side of wheel with lobe ascending outward or inward, covered with hirsute hairs. Seed: somewhat kidney-shaped (comma-shaped) with hilum in notch,  $2.8-3 \times 2 \times 1$  mm (somewhat loose in chamber, dark green aging dark brown, minutely textured. A. C. Gibson