Vascular Plants of Williamson County

Callirhoe involucrata var. *involucrata* – PURPLE POPPYMALLOW [Malvaceae]

Callirhoe involucrata (Torrey) A. Gray var. involucrata, PURPLE POPPYMALLOW. Perennial herb, taprooted, initially rosetted, several-stemmed at base, principal branches trailing and procumbent to decumbent, in range < 20 cm tall; shoots typically with cauline leaves, shoot with straight unbranched hairs and stellate hairs with several appressed arms; adventitious roots absent trailing stems. Stems: cylindric, tough, internodes to 140×3 mm, stiff-pilose with straight hairs to 3 mm long. **Leaves:** helically alternate, deeply palmately 5-lobed and 7-lobed, long-petiolate, with stipules; stipules 2 fused to base of petiole across node, leafy, asymmetrically arrow-shaped with basal lobes somewhat clasping, $6-9 \times 4.5-8$ mm, wavy and long-ciliate on margins, obtuse to rounded at tip, parallel-veined with many veined from base, persistent; petiole flat on upper side, to 130 × 1.5–1.8 mm, flexible, pilose; blade with sinuses 2/3 to base, to 70×75 mm, lobes \pm obovate in outline, to 72 × 40 mm, subcordate to cordate at base, with shallow sublobes and teeth at or above midlobe, palmately veined with a principal vein to each lobes and minor veins or veinlets to sinuses, dull with scattered pilose hairs. **Inflorescence:** solitary flower, axillary, on long pedicel, bracteate, with some stellate to short-stellate hairs; pedicel cylindric, > leaf, 54–170+ mm long, with stellate hairs mostly with 3–4 arms and some scattered pilose hairs below midpoint; bracteoles at top of pedicel (epicalyx) 3, < 1 mm from receptacle, oblong to oblong-oblanceolate, $4.5-8.5 \times 0.8-2.1$ mm, green, rounded at tip, having stellate hairs close to base and glabrate or sparsely short-stellate above on outer (lower) surface, inner surface glabrous. Flower: bisexual, radial, 27–51 mm across; calvx 5-lobed, green; tube bell-shaped, $4.5-6 \times 6-8$ mm, 15-veined with raised veins, outer (lower) surface pilose along veins and sometimes some stellate hairs; lobes acuminate-triangular, $11-16 \times 3.5-5.5$ mm, overlapping at base, with 3 raised veins at base, ciliate and outer surface with few pilose hairs along veins + some appressed stellate hairs, inner (upper) surface densely short-tomentose, with only 1 vein at tip; corolla 5lobed, fused to base of staminal column, lobes twisted in bud; lobes widely spreading, clawed, fan-shaped, 17–26 × 11–18 mm, claw 2–4 mm long, thick, white, densely ciliate on margins, limb rose-red ("purple") with white at base, minutely jagged on outer margin, many-veined from base; stamens 50–100, monadelphous (fused into column surrounding pistil, club-shaped in outline, $5-8 \times 3.5$ mm, white; column ca. 3 mm long, white, with scattered minute glandular hairs (incl. on filaments), filaments ascending, 1.1–2 mm long, some forked; anthers dorsifixed, monothecal, 0.35–0.8 mm long, cream-colored, longitudinally dehiscent; pollen pale yellowish; nectary disc lobed around ovary, 2-lobed per chamber, pale green; **pistil** 1; ovary superior, wheel-like, ca. $1.5 \times 3.5-4$ mm, exposed top green and with domed surface (= future hairs), 15–20-chambered, each chamber 2celled with ovule in lower cell and vestigial ovule in upper cell; style fused into column with staminal column, several-forked with 15–20 exserted above anthers, ascending, tentaclelike branches aging curved and twisted, tentaclelike branches, column 5–6 mm long, white to midpoint and pink above with rose papillate stigmas on inner side. Fruit: schizocarpic capsule, septicidally breaking into segments (mericarps), each mericarp 1seeded and indehiscent; intact fruit tire-shaped depressed in center, ca. 13 mm across and 3.5–4 mm tall, typically of 16–21 mericarps; mericarps wedgelike and D-shaped + a

sterile, center-pointing flange, and 2-lobed on outer face, $3.5-4\times3.8-4.7\times1.8-2.3$ mm, immature flange 1.5 mm long, green, and slightly elevated, with short, unbranched short-hirsute hairs mostly on top, seed chamber raised 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 brown, D-shaped, ca. 3.5×3 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, $2-2.3\times2\times1$ mm (somewhat loose in glossy chamber), dark green aging dark brown, minutely textured. A. C. Gibson