Vascular Plants of Williamson County *Evolvulus sericeus* – SILKY EVOLVULUS [Convolvulaceae]

Evolvulus sericeus Sweet, SILKY EVOLVULUS. Perennial herb, rhizomatous, fibrous-rooted, not rosetted, several-stemmed at base, branches ascending to low-spreading, in range < 26cm tall and shoots < 35 cm long; shoots with only cauline leaves, stem on young shoot zigzagged with ascending leaves, leaves evenly spaced and bi-colored appearing green on upper surface and silvery on lower surface, axes and lower surfaces of foliage having a dense cover of stiff, unequally 2-armed hairs (T-shaped) from a short basal structure ("sericeous"), the arms oriented with axis of the organ, lacking glandular hairs; latex milky; rhizomes \pm horizontal, ca. 1 mm diameter, off-white, glabrous, with scale leaves, scales $1-1.4 \times 0.8$ mm, truncate at base, with projecting leaf base. Stems: cylindric, to 1 mm diameter, green, internodes 10-15 mm long, leaf > internode, green tissue visible through hairs, on lower stem hairs sometimes aging purple-red. Leaves: helically alternate, simple, short-petiolate, without stipules; petioles ± 0.5 mm long; blade narrowly elliptic (oblanceolate), $9-23 \times (2.2-)3-4(-6.5)$ mm, tapered at base, entire, acute at tip, pinnately venation with 3(5) principal veins arising near base and the finer, midrib raised on lower surface, lateral veins not approaching tip, arms of hairs \pm straight, stiff, < 2 mmlong. Inflorescence: 1(-2)-flowered cyme, appearing as a solitary flower with other flower much delayed or never appearing, axillary, bracteate; peduncle ca. 0.5 mm long arising from axil; bractlets subtending pedicel $2 \pm$ opposite (not hiding calyx), lanceolateovate, $2.5-3 \times 0.8-0.9$ mm, with stiff, 2-armed hairs on green surfaces, persistent; pedicel at anthesis to 2.5 mm long increasing 2× and recurved in fruit, green, hairs with straight arms, in fruit hairs of lower pedicel sometimes reddish (including basal portion). Flower: bisexual, radial, 13–16 mm across; calyx 5-lobed, scarcely fused at base with helically alternate lobes appressed to corolla before, during, and after flowering but spreading above midpoint and persistent in fruit, exposed outer (lower) surface "sericeous" having 2-armed hairs with unequal, appressed arms, inner surface glabrous; lobes overlapping, subequal, acuminate-ovate, $5-5.5 \times 1.7-2.1$ mm, outer lobes green, finely 5(7)-veined from base, outer surface covered with hairs base-to-tip, the inner 2 lobes somewhat cupped and with wide whitish margins, on both surfaces having minute, sessile glandular hairs above midpoint; corolla low 5-lobed, broadly funnel-shaped, 8-10.5 mm long, pleated and twisted in bud; tube bell-shaped, ca. 1.5×1.1 mm, greenish (cream-colored), glabrous; throat 5-pleated, cream-colored at base changing upward to pure white, on lower surface above throat midpoint having a panel of 2-armed hairs to each sinus; lobes \pm semicircular, ca. 2×7 mm; stamens 5, arising near base of corolla tube; filament fused portion flared, free portion arising from top of corolla tube, ascending, unequal, 4–5.5 mm long, white; anthers dorsifixed, dithecal, arrow-shaped, 1 mm long, white, longitudinally dehiscent; pollen colorless; nectary disc flat, appressed to base of ovary, weakly 5-lobed, thin, ca. 0.3 mm long, surface and margin sometimes reddish; **pistil** 1, ca. 7 mm long; ovary superior, ovoid, $1 \times 0.8-0.9$ mm, pale green, depressed at top with 4 short rounded lobes, glabrous, 2-chambered, each chamber with 2 ovules; styles 2, in depression at top of ovary, deeply 2branched ca. 0.5 mm from base, slender and tentaclelike, 4–6 mm long, white, somewhat wider stigma at tip, on each branch with a strip of domed cells base-to-tip. Fruit: capsule, (1-)4-seeded, oblate-spheroid, ca. 3.5×4.5 mm, valves leathery, glabrous; calvx >

capsule, conspicuously sericeous. Seed: 3-sided rounded on back and flat on 2 sides, ca. 3.5×2.5 mm, brown. A. C. Gibson