## **Vascular Plants of Williamson County**

Oxalis dillenii – YELLOW SOUR-CLOVER, DILLEN'S OXALIS [Oxalidaceae]

Oxalis dillenii Jacq., YELLOW SOUR-CLOVER, DILLEN'S OXALIS. Perennial herb, taprooted with old lower stems fibrous-rooted, not rosetted, 1-several-stemmed at base, initially erect, older axes decumbent with erect shoots and suberect to ascending lateral branches, sometime somewhat mat-forming, 5–25 cm tall; shoots with basal leaves and cauline leaves, shoots at night at night or during water stress with leaflets moving downward and folding along leaflet midribs fully reflexed and touching, pubescent. **Stems:** cylindric, < 2 mm diameter (erect stems) and 2.5 mm diameter (basal stems), strigose to short-strigose, basal stems aging purplish red. Leaves: helically alternate, palmately 3-foliolate, longpetiolate, without stipules (stipules obscure); petiole ascending, to 55 mm long, with conspicuous construction near base, below constriction flaring and broadly attached to stem, to 2.5 mm long, sparsely hairy with hairs to 1 mm long, above constriction with pulvinus, above pulvinus flat on upper side and < 1 mm diameter, sparsely short-strigose with upward-pointing hairs; petiolule = pulvinus, 0.6–0.8 mm long, reddish, short-hairy; blades of leaflets inversely heart-shaped,  $4-12.5 \times 5.5-18$  mm, length < width, tapered at base, entire with rounded lobes, deeply notched at tip < 1/3 to base, pseudopalmately veins with principal veins slightly raised on lower surface, upper surface flat, dull, with scattered short hairs, lower surface short-strigose. **Inflorescence:** umbel-like cyme, axillary, erect, 1–5-flowered, on long peduncle, flower oriented horizontally, bracteate, short-hairy; peduncle with pulvinus to 2 mm long, above pulvinus straight, to  $90 \times 1$  mm, green, strigose and short-strigose with upward-pointing hairs, when first developing curved before straightening; bractlets subtending each pedicel 2, in series opposite decussate, appearing congested at top of peduncle, narrowly lanceolate or narrowly oblanceolate to lanceolatelinear,  $1.5-5.2 \times 0.4-0.7$  mm decreasing upward, green, short-hairy, at least the largest 2 at top of peduncle persistent, from cyme secondary axis having peduncle below opposite decussate bractlets, those bractlets erect; pedicel 10–13 mm long. Flower: bisexual, radial, 7–13.5 mm across; sepals 5(–6), overlapping at base, free but appearing fused at base (= receptacle), ascending at anthesis and in fruit, ± erect, lanceolate to oblong or elliptic,  $4.5-5.4 \times 1.3-2$  mm, green, obtuse to slightly notched at tip, lacking a tuft of hairs at tip, inconspicuously (3)5-veined at base, short-strigose on lower (outer) surface; **petals** 5(-7), not obviously fused, 7.2–11.5 mm long; tube to 2 mm long, with 5(-7) tooothlike attachments to receptacle (i.e, deltate openings), lacking a bulge above each tooth, colorless and greenish at base to light yellow approaching lobes; lobes spreading, fanshaped,  $5.5-9.5 \times 2.5-4.5$  mm, bright vellow to vivid vellow, with (2-)3-7 red streaks on lower lobe between nectar lines, nectar lines ca. 9 more visible on lower surface and faint in small flowers; stamens 10(-15) in 1 set fused into column surrounding pistil; tube membranous, 1.5–2 mm long, white; filaments dimorphic, alternating long and shoot, the longer ones opposite openings at base of corolla, 1–1.3 mm (short filaments) and 1.8–2.2 mm, white, flattened on inner surface; anthers dorsifixed, dithecal, 0.4–0.5 mm long, vivid yellow, longitudinally dehiscent; pollen yellow; **nectaries** 5(-7), bumps at base of staminal tube below each short filament, producing nectar to form a drop of nectar, potentially pooling between sepals and petals; **pistil** 1 = the longest stamens, 3.5-4.5 mm long; ovary superior, columnar with 5(-6) ribs, green, ribs slightly bulging from ovules, the basal

portion initially glabrous and above midpoint white-pubescent, 5(-6)-chambered, each chamber with 10-16 ovules attached to center; styles = chambers, erect, ca. 1 mm long, green with white hairs, short 2-lobed at stigmatic tip, lobes 0.3-0.4 mm long, wet. **Fruit:** capsule, loculicidal, dehiscent by 5 valves, erect, columnar and strongly 5-angled,  $< 15-26 \times 3.5-4$  mm, short-strigose with downward-pointing hairs with pilose hairs along rib edges, sometimes bulging at seeds, chambers short-pilose. **Seed:** with aril, discoid-ovoid (excluding aril)  $1.1-1.3 \times 0.9-1$  mm, compressed, rounded to obtuse at tips, transversely ridged, often with bumps along ridges, surfaces minutely papillate; before drying aril covering seed, fleshy, broadly ellipsoid, 1.3-1.4 mm long, milky-translucent, smooth; sepals ascending-spreading.

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