

Vascular Plants of Williamson County

Oxalis drummondii – DRUMMOND'S OXALIS, DRUMMOND'S WOOD SORREL [Oxalidaceae]

Oxalis drummondii A. Gray, DRUMMOND'S OXALIS, DRUMMOND'S WOOD SORREL.

Perennial herb, geophytic, bulb-bearing, fibrous-rooted, scapose, in range with inflorescence to 25 cm tall; shoot with 1–several basal leaves having long petioles and arising belowground, leaflets showing sleep movements at night and when water stressed, essentially glabrous; bulb ovoid, to 12 × 10 mm, covered with papery dark brown scales, outer scales initially cupped-ovate, white, and fleshy, 3-veined and short-ciliate to long-ciliate on margins, veins raised on outer surface with bulblet in axil of leaf; adventitious roots at base of bulb. **Stem:** absent (short subterranean plate). **Leaves:** helically alternate, palmately 3-foliolate, long-petiolate, with stipules; stipules 2, thin, membranous wings belowground, < 1 mm wide, colorless, sparsely ciliate; petiole cylindrical (pulvinus not obvious), < 180 × 1 mm, white belowground and green aboveground; petiolules = hingelike pulvinus, < 0.5 mm long, red-purple with conspicuous transverse constrictions, glabrous but sometimes several long hairs at top of petiole and near bases of leaflets; blades of leaflets broadly heart-shaped to widely V-shaped, 15–35+ mm wide, length < width, dull and sometimes somewhat glaucous, broadly tapered at base, entire or with several inconspicuous short hairs (long hairs) on margins, 2-lobed at tip, lobes obtuse to rounded, pinnately veined with midrib raised on lower surface, upper surface sometimes with irregular purple spot or spots to 5 mm from petiolule, lower surface paler, glabrous with conspicuously domed cells (vesicular). **Inflorescence:** cyme, 4–9-flowered on long peduncle, with 1 open flower per day, bracteate, glabrous; peduncle cylindrical, aboveground 100+ × 2 mm, > petiole, green or tinged purplish (white belowground); bracts subtending cyme 2, appressed, membranous, broadly ovate, to 2.5 × 2.5 mm, acute to rounded at tip, keeled, short-ciliate or with several long hairs at tip, often fringed on upper margins; bractlet subtending pedicel membranous, acute-ovate, < bracts, colorless to pinkish, with backbone inflated; pedicel hooked in bud becoming erect to ascending in flower and curved downward in fruit, to 45 × 1 mm, reddish aging golden green, glabrous to glabrescent. **Flower:** bisexual, radial, 19–24 mm across; **sepals** 5, overlapping at base (not in 1 whorl), free but appearing fused at base (= receptacle), ascending at anthesis and in fruit, equal to subequal, elliptic, 6–7.9 × 1.6–2.5 mm, green with membranous margins, having 2 parallel, light orange elliptic-linear swellings and inconspicuous short hairs at tip; **corolla** deeply 5-lobed, funnel-shaped with spreading lobes, 18–20 mm long; tube 3.5–4.5 mm long, with 5 toothlike attachments to receptacle (i.e., with 5 deltate openings), light green, 25+-veined; lobes spreading, oblanceolate, 14–16 × 7.5–9 mm, lower portion green with darker veins and inner surface with sparse papillate hairs, next to green white (upper surface) below midpoint, pinkish purple to lavender above midpoint, upper surface darker, nearly truncate to slightly notched at tip; **stamens** 10, fused into a short column 0.4–0.7 mm around ovary, colorless; filaments dimorphic, alternately long and short, flattened front-to-back to midpoint and cylindrical above midpoint, the short ones opposite corolla tube attachments, 3.2–3.7 mm long, the longer ones opposite openings in corolla tube, ca. 5 mm long, with scattered, nonglandular short hairs above midpoint; anthers dorsifixed, dithecal, 0.7 mm long, orangish light yellow, longitudinally and upward dehiscent; pollen orangish light yellow; **nectaries** 5, bumps on base of staminal tube below each short

filament, green, producing nectar (escaping through openings of corolla tube forming a nectar pool between sepals and corolla); **pistil** 1, at anthesis ca. 3 mm long; ovary superior, conspicuously 5-lobed \pm ellipsoid, ca. 2×2 mm increasing rapidly after anthesis, green, glabrous, 5-chambered, each chamber having to 5 ovules attached to center; styles ascending to spreading and somewhat sigmoidal, light green, with inconspicuous short glandular hairs; stigmas at anthesis below level of all anthers eventually upper anther at same level, umbrellalike, 0.4 mm across, green aging reddish, papillate. **Fruit:** capsule (mostly aborted), late-maturing (November), loculicidal, 1(-5)-seeded, dehiscent by 5 valves, obovate in outline (variable with seed number and position) and 5-lobed having no more than 1 seed/chamber, ca. 5×3 mm (1-seeded); nodding on pedicel; calyx persistent and mostly concealing capsule. **Seed:** with inconspicuous aril, broadly ellipsoid, $1.5-1.6 \times 1.2-1.3$ mm, glossy brown, on 1 side with transverse ridges, whitish in groove.

A. C. Gibson