

Vascular Plants of Williamson County

Ranunculus macranthus – LARGE BUTTERCUP, SHOWY BUTTERCUP [Ranunculaceae]

Ranunculus macranthus Scheele, LARGE BUTTERCUP, SHOWY BUTTERCUP. Perennial herb, with fleshy (tuberous) roots and more slender absorbing roots (never nodal), lacking bulbils, rosetted, with ascending to spreading, shootlike, axillary inflorescences, in range < 30 cm tall; shoot with basal leaves, initially velveteen and villous aging somewhat hispid (glabrescent); fleshy roots to 3 mm diameter, pinkish. **Stems:** short and hidden beneath basal leaves (stemlike axis = peduncle). **Leaves:** helically alternate, odd-1-pinnately compound with at least 2 pairs of opposite lateral primary leaflets, blades bilaterally symmetric, petiolate, without stipules; petiole to 75 mm long, flattened and white at base, channeled and purplish red and green above, flexible; blade \pm ovate in outline, to 45 \times 40 mm, < petiole, 1^o lateral leaflets obovate, to 22 mm long, rachis channeled, to 25 mm long, often purplish red on upper side, 2^o leaflets and lobes \pm oblanceolate with or without a tooth, lobes on a blade \pm asymmetric (lateral leaflet) or symmetric (terminal leaflet), veins divergent (e.g., forking below a sinus), veins not terminating conspicuously in teeth or lobes, hairs of mature leaves often appressed short-ciliate. **Inflorescence:** several-flowered cyme, axillary to basal leaves, bracteate, axes densely villous and velveteen with radiating hairs aging somewhat hispid; peduncle cylindric, green or green with purple-red lines; bractlet subtending pedicel 1–2-pinnately dissected or compound, leaflike but reduced, not bilaterally symmetric, lobes elliptic to oblanceolate, entire to lobed or with several teeth; pedicel ridged, at anthesis to 30 mm long, with appressed and ascending hairs to 1 mm long. **Flower:** bisexual, radial, (18–)25–29(–46) mm across; receptacle (torus) elevated and hidden, covered with pistil; **sepals** 5, helically alternate, spreading at anthesis, cupped-ovate, 8–11 \times 6–7 mm, light yellowish green with membranous margins, often with purple midstripe but absent at base and not continuous to purplish tip (sometimes with purple dots), with parallel veins at base, densely pilose on lower (outer) surface aging somewhat hispid, hairs to 2 mm long, abscising after flowering; **petals** in range mostly 12–22 in several series, helically alternate, obovate, (7.5–)13–17(–27) \times 6.3–7.6(–11) mm, bright yellow, ca. 7-veined from base, upper surface not glossy, glabrous, from base with nectary on upper surface; **nectary** (scale) flaplike and \pm fan-shaped, 1.5–2(–2.5) \times 1.5–2(–2.5) mm, bright yellow, free above midpoint, outward-facing and slightly raised from surface, producing nectar collecting on petal base; **stamens** mostly 125+, helically alternate, free on lower portion of torus; filaments 2–2.5 mm long, yellow; anthers basifixed, dithecal, 1.8–2 mm long, < filament, bright yellow, longitudinally dehiscent; pollen bright yellow; **pistils** mostly 50+(> 20), touching in a tight, helically alternate arrangement, on torus elongate mound with pistils ca. 4 \times 2.5 mm; ovaries superior, ellipsoid compressed side-to-side, 0.6–0.7 mm long, whitish, 1-chambered with 1 ovule, glabrous; style with decurrent stigma fingerlike curved outward, 1.1–1.4 mm long, white aging reddish. **Fruits:** achenes, vertically oriented, in helically alternate cluster; cluster ovoid, 8–15 \times 8–10 mm with cylindric torus to 9 mm long; fruit body acute-ovate in outline with slender beak, fruit body compressed side-to-side, < 3–5.5 \times 2.8–3.5 mm, brown and glabrous, chamber round lens-shaped (slightly bulging) to 2.5 mm diameter, margin aging winglike, 0.4–0.6 mm wide; beak terminal, projecting, and \pm straight, in range to 2.5 mm long and mostly persistent.

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