

Oxalis L. OXALIS, WOOD-SORREL

Oxalis pes-caprae L., BERMUDA BUTTERCUP. Perennial herb, clonal, rhizomatous and bulb-bearing, rosetted with ascending leaves, scapelike, when in flower 15–50 cm tall; shoots with a short, erect stem and only basal leaves, leaflets showing sleep movements at night and when water stressed, soft-hairy (sericeous) becoming glabrescent; rhizome arising from bulb or bulblet, taprootlike, vertical, thick, fleshy, whitish and purplish red; bulbs deep-seated, pale brown, ovoid or oblong-ovoid, to 25 mm long, long-tapered at the tip, the cover longitudinally ridged; bulblets sometimes at base of new shoot, < bulbs, pointed. **Stems:** with short internodes. **Leaves:** helically alternate, palmately 3-foliolate, long-petiolate, with stipules; stipules = 2 thin, ciliate, membranous wings along base of petiole below pulvinus; petiole 80–200+ mm long, pulvinus often conspicuously swollen to orient petiole upright, with ringlike groove between pulvinus and petiole base; petiolules hingelike, < 0.5 mm long, often purplish red on upper side and with transverse constrictions, sparsely soft-hairy; blades of leaflets heart-shaped, 20–40 mm wide, length < width, dull, broadly tapered at base, entire and ciliate on margins, 2-lobed at tip, pinnately veined with midrib raised on lower surface, upper surface sometimes with irregular purple spots, lower surface pale green, sparsely sericeous and densely papillate. **Inflorescence:** cyme, axillary of older basal leaves, umbel-like at tip of peduncle, several–20-flowered; peduncle cylindrical, to 450 mm long, green, fleshy, stouter than petiole, essentially glabrous with scattered hairs especially approaching cyme; bracts and bractlets subtending each pedicel in pairs, long-acuminate, 2–4 mm long, persistent, green with a yellow-orange, Λ -shaped structure near tip, with ascending hairs; pedicel 10–30 mm long, slender, with ascending hairs; flower buds nodding, with short, erect, nonglandular hairs. **Flower:** bisexual, radial, 15–38 mm across; **sepals** 5, appearing fused at base, erect, overlapping, \pm equal, lanceolate, 5.5–8 mm \times 1.6–2.2 mm, green, pubescent on exposed outer surface, with or lacking a pair of swellings (tubercles) at tip, the tubercles elliptic to oblanceolate, 0.3–0.5 mm long, yellow-orange; **corolla** 5-lobed, funnel-shaped, 15–26 mm long, bright yellow; tube 5–5.5 mm long, appearing clawed with 5 gaps at base, each gap opposite a sepal and archlike, 1.2–2 mm long, veins sometimes reddish; lobes spreading to ascending, broadly spatulate to narrowly fan-shaped, to 26 \times 12.5 mm, conspicuously parallel-veined below midpoint, sericeous on surfaces exposed in bud; **stamens** 10, fused into ring, alternately short and long; filaments erect, 3–3.5 mm long and curving outward at tip (short stamens) and 6–7 mm long (long stamens), yellowish green, sparsely pubescent with colorless glandular hairs, with a prominent basal tooth, the tooth on the outer surface of filament, < 0.5 mm long, thicker than filament; anthers versatile, dithecal, 1.1–1.2 \times 1 mm, vivid yellow to yellow-orange, longitudinally dehiscent; pollen vivid yellow to yellow-orange; **nectaries** 5, bumps on base of staminal tube below each short filament, producing copious nectar (escaping through openings to form a nectar pool between sepals and corolla); **pistil** 1, 3–4.5 mm long, < short set of fertile stamens; ovary superior, 5-lobed columnar, with straight white hairs, 5-chambered, each chamber with many ovules attached to central post; styles 5, curved outward, strigose; stigmas 5, discoid-capitate, greenish, distinctly papillate. **Fruit:** absent (California); capsule, \pm loculicidal, erect, 40–50-seeded, 6–25 mm long, angled. **Seed:** 0.6 mm long, with small translucent aril. Late November–late May.

Naturalized. Perennial herb and very attractive winter and spring geophyte occurring especially throughout SMM, where it has escaped from cultivation, but especially noticeable in large colonies near the coast. *Oxalis pes-caprae* has become an invasive, clonal weed that cannot be eradicated because it is impossible to remove all bulbs and bulblets from soil. The bulbs are dispersed during torrential runoff and earthmoving. *Oxalis pes-caprae* has scapelike inflorescences of bright yellow flowers, but fertile fruits have not been observed in southern California.

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