

Osmorhiza Raf. SWEET CICELY, SWEETROOT

Osmorhiza brachypoda Torrey, CALIFORNIA SWEET CICELY. Perennial herb, spring-active, thick-taprooted with caudex, rosetted with ascending leaves, 1–several-stemmed at base, each shoot unbranched, ascending, 30–60(–80) cm tall; shoots with several basal leaves and an ascending stem with 1–several cauline leaves and inflorescences, sparsely short-hairy, aromatic like licorice (*Glycyrrhiza*); caudex brownish, taproot portion to 15 mm diameter, stem portion with many horizontal creases from abscised leaves. **Stems:** cylindric, to 7 mm diameter, green, faintly striped having support tissue alternating with green photosynthetic tissues, with short, fine hairs, pinkish and glabrate at base; hollow. **Leaves:** helically alternate, odd-2-pinnately compound and lobed, to 570 mm long, long-petiolate, without stipules; petiole sheathing, to 250 mm long, cylindric above wing on basal portion to 45 mm long and cylindric above, wing ciliate on margins approaching tip, otherwise glabrous; blade deltate to widely ovate in outline, 80–300 mm long, scaling with petiole, symmetric and with paired subdivisions, the lowest primary leaflet to 160 mm long decreasing upward with the uppermost cauline leaves 3-divided, typically on a large leaf having 4–5 pairs of lateral primary leaflets with the lowest 1–2 pairs 2-pinnate and having at least 1 pair of 3-foliolate secondary leaflets, 2(–3) pairs of lobed leaflets and the terminal leaflet, the next 2 pairs of primary leaflets 5-foliolate or 3-foliolate, the terminal primary leaflet typically deeply 3-lobed; axes channeled and glabrescent, with leaflets arising from upper side; petiolules of primary leaflets (0)short–30 mm long and secondary leaflets 0–15 mm long, for terminal and some subterminal leaflets petiolules absent; blades of ultimate segments ovate or trowel-shaped to elliptic, to 50 × 35 mm, thin and easily wilted, principal lobes with sinuses at least halfway to midrib decreasing upward (sinuses shallow), lobes crenate-serrate on margins, acute at tip, pinnately veined with principal veins raised on lower surface, surfaces, margins, and veins sparsely stiff-puberulent, upper surface dull, lower surface somewhat glossy and veins with hairs leaning toward tip. **Inflorescence:** compound umbel, terminal or opposite upper cauline leaves, with 2–3(–5) umbellets, umbellet flat-topped, 5–13-flowered with 1–5 staminate flowers and 2–10 bisexual flowers, bracteate; peduncle ascending (absent), ± cylindric but slightly 5-sided, 90–180 mm long, short-pilose; **involucre** of bracts subtending primary rays absent or only 1 bract, bract narrowly acuminate-lanceolate, < 4 mm long; primary rays spreading-ascending, unequal, cylindric, < 90 mm long in fruit, short-pilose aging glabrescent, sometimes glaucous; involucrel of bractlets subtending outer flowers and pedicels typically 5, appearing whorled and fused, spreading (deflexed), elliptic to narrowly lanceolate, 4–8 mm long, entire and conspicuously wavy + short-ciliate on margins, acuminate at tip, pinnately veined with midvein raised and scabrous on upper surface; pedicel ascending to somewhat spreading, slender, 4–6 mm long increasing in fruit (staminate flowers) and more stout and 1–2 mm long (bisexual flowers). **Staminate flower:** radial, ± 3 mm across; **sepals** absent; **petals** 5, subequal within flower and overlapping at base, heart-shaped in outline, 1.5 mm long + 0.5 mm incurved acuminate tip, pale green, with weakly developed midridge on upper (inner) surface, glabrous, tardily dehiscent; **stamens** 5, free; filaments in bud strongly hooked becoming ascending, < 1 mm long, pale green; anthers dorsifixed, dithecal, 0.2–0.3 mm long, pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, vestigial; ovary inferior with gray pillowlike disc (stylopodium, styler

tissue) in center. **Bisexual flower:** bilateral, 4–5 mm across; **sepals** absent; **petals** 5, unequal within flower and overlapping at base, heart-shaped in outline, 2–2.5 mm long + tip, sometimes minutely jagged on margins, with weakly developed midridge on upper (inner) surface, glabrous, mostly early-deciduous but some petals remaining on developing fruits; **stamens** 5, free; filaments in bud strongly hooked becoming ascending, < 1 mm long, pale green; anthers dorsifixed, dithecal, 0.2–0.3 mm long, pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1; ovary inferior, cylindric club-shaped somewhat compressed side-to-side, not obviously 2-lobed, with a nectar-producing platform (stylopodium) on top, conspicuously 8-ribbed, the ribs bristly with stiff upward-pointing hairs, 2-chambered, each chamber with 1 ovule; styles 2, ascending, < 1 mm long; stigmas terminal. **Fruit:** schizocarp, of 2 dry, 1-seeded halves (mericarps), mericarps oblong-fusiform, 12–20 mm long, with 5 ribs having ascending bristles, 3 ribs on back and 1 along each edge; beak slender, tail 1–4 mm. Early March–late April.

Native. Perennial herb occasionally occurring in southern oak woodland in rich soil and always in shade, often with milk maids (*Cardamine californica*) and poison oak (*Toxicodendron diversilobum*). *Osmorhiza brachypoda* appears aboveground only in years having sufficient winter and early spring rain, and this woodland herb has thin blades that are easily wilted when water stressed. Its flowers are not showy and appear pale green at the top of the plant's canopy.

B. A. Prigge & A. C. Gibson