

Paeonia L. PEONY

Paeonia californica Nutt., CALIFORNIA PEONY. Perennial herb, with several or more principal roots (fascicled roots), many-stemmed at base, forming a clump with erect to ascending shoots, 25–80 cm tall × 40–130 cm diameter; shoots each with 1–several bractlike, rose-red first leaves and 7–12 deeply dissected, green cauline leaves, glabrous, with musty odor when crushed; roots typically straight, fingerlike, 11–15 mm diameter, dark brown, solid and white internally, with woody cylinder several mm thick. **Stems:** cylindric, 6–12 mm diameter at base, ± fleshy, not woody, rose-red at emergence becoming light green and aging tannish, glaucous; solid with wide pith but becoming hollow when fruiting. **Leaves:** helically alternate, simple and sessile (subterranean leaves) or compound and petiolate (aboveground leaves), without stipules; petiole hemicylindric, 60–170 mm long, fleshy, with raised edges, often rose to rose-red; the lowermost, unlobed leaf lanceolate to ovate, 25–40 mm long; cauline leaf (compound) 3-parted, fan-shaped, 100–300 mm long, leaflets deeply palmately lobed and fan-shaped, 55–170 mm long, with principal veins forked to each lobe, upper surface much darker green than lower surface with pale veins; petiolule hemicylindric, 0–40 mm long; central leaflet typically asymmetrically 3-parted, with primary sinuses unequal and 1/3 to 3/4 leaflet length, tapered at base, lobes commonly divided 1 or 2 more times into 2 or 3 lobes at each division, ultimate lobes triangular or lanceolate to elliptic in outline, 3–17 mm wide, entire, acute; lateral leaflets wider than central leaflet, with major sinus almost extending to base of blade, other lobes like on central leaflet, long-tapered at base and grading into indistinct petiolule. **Inflorescence:** flowers solitary, terminal, erect in bud but nodding at anthesis, bracteate, glabrous; peduncle and axis stemlike, 20–50 mm long, arched approaching flower; bracts along axis typically 1–3, resembling diminutive leaves. **Flower:** bisexual, radial, 25–35 mm across (excluding leafy portions of sepals), with faint, sweet fragrance; **sepals** 5(–7), helically alternate, overlapping, dimorphic, glaucous, outer 2 or 3 sepals with dilated, dark red bases and green leafy portion usually lobed, the leafy portion spreading in bud and ± reflexed in flower; inner 2–4 sepals round or broadly ovate to compressed elliptic and cupped, 17–25 mm wide, leathery, green to reddish orange or purplish red to very dark red or a mixture of green and shades of red, lighter colored and sometimes minutely toothed on margins, thinner on margins, greenish at tip, persistent in fruit; **petals** 5–7, helically alternate, unequal, roundish or broadly ovate, 15–25 × 15–20 mm, cupped inward, thick at base, very dark red centrally and basally, ± surrounded by a band of lighter red or rose-strawberry and sometimes with an outer band of light yellowish-green on margins; **stamens** > 100, helically arranged, attached to nectary disc, mostly free but adjacent filaments occasionally fused along length; filaments arching inward, 3–8 mm long, whitish, somewhat compressed front-to-back; anthers basifixed, dithecal, (2.5–)4–5.5(–7) mm, pale pink or yellow, longitudinally dehiscent, dehiscing first from center outward; pollen yellow; **nectary disc** surrounding pistils but typically not producing nectar, fleshy and wartlike to ovoid (tuberculate) with ca. 8 or 9 prominent pointed lobes and several smaller, rounded lobes, ca. 4.5 mm tall, yellow, persistent in fruit; **pistils** 2–5, free, erect to appressed, initially projecting 1–3 mm beyond anthers and increasingly so with age; ovaries superior, narrowly conic, ± 15 mm long, cream and somewhat greenish near tip, 1-chambered, each chamber with many ovules attached to

upper margin; style absent; stigma initially 2-lipped and yellow, becoming crestlike and reddish. **Fruits:** follicles, 2–5 (often 3), subtended by persistent calyx and yellowish, warty nectary disc, spreading, opening on upper side, each to 14-seeded, boat-shaped, 25–45 mm long; pericarp spongy-fleshy drying stiff; seeds in 2 rows, pendent from upper margins. **Seed:** sausage-shaped or with 2 sides sunken forming ridge, 12–14 × 6–7 mm, ± straight, initially covered with fleshy, cherry red or red-orange aril, when aril removed aging dark brown; surface rough, ± dull and sometimes retaining some red aril cells; hilum basal, 2 mm long, tan or light brown. Late December–early May.

Native. Herbaceous perennial locally common in certain stands of chaparral, appearing in open patches and especially noticeable for several years after a burn. *Paeonia californica* is most frequently encountered where soil is a sandy loam. Its repeatedly divided leaves are distinctive, as are the nodding red flowers with many stamens and typically three pistils, which mature as large, boat-shaped follicles. The large seeds are initially covered with a colorful, fleshy aril.

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