

Fraxinus L. ASH

Fraxinus dipetala Hooker & Arnott, CALIFORNIA ASH, FLOWERING ASH. Shrub or small tree, winter-deciduous, in range 2.5–6.5 m tall; shoots essentially glabrous (winter buds puberulent with inconspicuous reddish hairs, lepidote); bark slightly rough, tan to grayish. **Stems:** cylindric to somewhat 4-sided, internodes to 70 mm long and when young 4-ridged below young node (ridges sometimes purplish red); twigs with circular, tan-gray lenticels, leaf scars crescent-shaped. **Leaves:** opposite decussate, odd-1-pinnately compound with (0)2–4 lateral pairs of leaflets, petiolate, without stipules; petiole cylindric, 3–40 mm long; blade ovate to \pm oblong in outline, 55–170 \times 25–120 mm, glabrous or sparsely puberulent becoming glabrate; rachis 2-ridged and channeled, between pairs to 34 mm long with either first or second segment longer, when leaf unexpanded often with purplish red spot at petiolule; petiolules of lateral leaflets shallowly channeled, indistinct from tapered and channeled base of blade, with tawny short hairs at junction with rachis; blades of leaflets subequal, ovate to elliptic or lanceolate (obovate), 20–60 \times 10–30 mm, lower leaflets often the smallest, tapered to long-tapered at base, low-serrate on margins mostly with at least 10 regular teeth per edge (entire), acute to rounded or \pm truncate at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface. **Inflorescence:** panicle of racemes, axillary, produced near tips of winter twigs from dormant buds before new leaves, racemes arranged mostly opposite decussate (subopposite) as diverging lateral branches, at anthesis 60–100 mm long, many-flowered, bracteate, puberulent on main axes and glabrous above; peduncle 0–5 mm long, when absent 2 lateral branches arising at the base (= same point as main axis); bract subtending each lateral branch (2 per node), cupped-obovate to fan-shaped, 3–4 mm long, green, veiny, sometimes puberulent at tip, early-deciduous leaving a crescent-shaped scar; bractlet sometimes subtending or near base of pedicel, oblanceolate to spatulate, 1–2 mm long, often with small teeth; pedicel ca. 5 mm long increasing in fruit. **Flower:** bisexual, bilateral, 12–14 mm across, strongly fragrant like mild lilac (*Syringa*); **calyx** ca. 4–5-toothed; tube bell-shaped, 1.5–2 mm long, green, teeth short and unequal; **petals** 2, spreading sharply from near base, oblanceolate-oblong, 5–7.5 \times 1.8–3.5 mm, cream, obtuse to rounded and somewhat cupped upward at tip, faintly 3-veined at base; **stamens** 2, free, alternate with petals; filaments 2–2.5 mm long, whitish, flared at base, strongly bent to position anthers spreading horizontally and flattened on upper (inner) side; anthers dorsifixed, dithecal, narrowly triangular, 3.2–4 mm long, yellow, longitudinally dehiscent, pollen light yellow, dry, copious; **pistil** 1, 2–2.5 mm long; ovary superior, conic compressed side-to-side, 1 mm long, green, flattened \perp to septum, 2 edges ridged (somewhat winged), with minute, convex, fragrance-producing glands on surface, 2-chambered, each chamber with 2 pendent ovules; style ca. 1 mm long, colorless; stigmas 2 on opposite sides of style tip but appearing angular-capitate, greenish, short-papillate. **Fruit:** 1-seeded samara (“winged achene”), pendent on a drooping or spreading, thin, wiry axis, narrowly obovate, typically 23–28 \times 6–8 mm, shorter if immature or when seed aborted; seed body somewhat twisted, compressed so boundary not defined, = 2/3 fruit, base rounded, containing 0–1 seed; wing stiff-papery, tannish light brown, with principal veins from base, wing tip acute to \pm rounded but never notched. **Seed:** \pm compressed-oblong, 13–15 \times 4 mm, rough and irregularly, longitudinally wrinkled, orange-red to red-

brown; hilum at upper end with linear groove along seed length in which funiculus rests.
Early March–late April.

Native. Native tree species occasionally encountered at higher elevation, in tall chaparral on north-facing slopes in SMM. *Fraxinus dipetala* has opposite, pinnately compound leaves that are glabrous. Although misnamed as flowering ash—all ash species produce flowers—*F. dipetala* has showy flowers with 2 cream-colored petals and a very strong fragrance, suggesting insect pollination, although pollen is abundant and can easily be carried by the wind.

B. A. Prigge & A. C. Gibson