Morella californica (Cham. & Schltdl.) Wilbur, PACIFIC BAYBERRY, CALIFORNIA WAX MYRTLE. Large shrub (small tree), evergreen, in range to 500 cm tall; each plant with unisexual and bisexual flowers (polygamomonoeceous); shoots gland-dotted, strongly aromatic. Stems: cylindric, sparsely villous. Leaves: helically alternate, simple, petiolate, without stipules; petiole cylindric, to 8 mm long, indistinct from blade; blade oblanceolate to elliptic, $28-115 \times 8-24$ mm, long-tapered at base, serrate to subentire on margins, obtuse to slightly notched at tip, pinnately veined with principal veins sunken on upper surface and midrib raised on lower surface, upper surface villous along midrib below midpoint. Inflorescences: catkinlike spikes, axillary, of unisexual flowers (staminate or pistillate) or mixed (unisexual with some bisexual flowers), having tightly overlapping bracts prior to anthesis, spikes from axils of all but the lowest bracts; staminate spikes produced from lower leaf axils, ca. 10–20 mm long, < 25 staminate flowers; mixed spikes ovoid to ellipsoid, to ca. 11 mm long, with mostly staminate flowers and 1–3 pistillate flowers; pistillate spikes produced from upper leaf axils, 8–12 mm long; bract deltate or deltate-ovate to depressed-ovate or semicircular, $1-1.5 \times 1-1.7$ mm, leathery, broadly attached and sometimes \pm cordate at base, villous-ciliate on margins (the lowest bracts) reduced to a tuft of villous hairs at tip (most bracts) or mostly glabrous except for several hairs restricted to a few minute marginal teeth (the uppermost bracts), orange-scurfy on exposed outer surface, membranous and generally entire on margins of the broader bracts; bractlets (bracteoles) of staminate and bisexual flowers 2, opposite, orthogonal to bract, lanceolate to oblong, 0.5–1.3 mm long, narrowly acute to truncate or 2-toothed at tip, sometimes with several hairs at tip; bractlets (bracteoles) of pistillate flowers 4–6, minute, short-ciliate. **Staminate flower: perianth** absent; **stamens** 3–12, fused at bases; filaments on 1–3 axes from fused base, lateral branches 0.5–2 mm long; anthers dorsifixed, dithecal, each sac \pm kidney-shaped but thicker approaching tip, $0.7-1.2 \times$ 0.5–0.7 mm, light yellowish tan becoming purplish red on exposed sides and then aging hazelnut brown, longitudinally dehiscent; pollen light yellow; pistil absent. Pistillate flower: perianth absent; stamens absent; pistil 1, ca. 1.7 mm long; ovary "superior" (becoming inferior in fruit), conic, 0.5×0.4 mm; style absent; stigma 2-lobed, commonly unequal, each lobe lanceolate, $0.6-1.2 \times 0.1-0.35$ mm, sometimes folded lengthwise. **Bisexual flower:** perianth absent; stamens 6, fused at bases; filaments on 1–3 axes from fused base, lateral branches 0.5–2 mm long; anthers dorsifixed, dithecal, each sac \pm kidney-shaped but thicker approaching tip, $0.7-1.2 \times 0.5-0.7$ mm, light yellowish tan becoming purplish red on exposed sides and then aging hazelnut brown, longitudinally dehiscent; pollen light yellow; **pistil** 1, ca. 1.7 mm long; ovary "superior" (becoming inferior in fruit), conic, 0.5×0.4 mm; style absent; stigma 2-lobed, commonly unequal, each lobe lanceolate, $0.6-1.2 \times 0.1-0.35$ mm, sometimes folded lengthwise. Fruit: (not observed in range) drupelike, spheroid, 4–6 mm, with warty protuberances covered with white wax. Late March-early May.

Native. Evergreen shrub known from riparian vegetation in Santa Monica Canyon (SMM), which is now mostly developed. *Morella californica*, formerly treated in the genus *Myrica*, has aromatic leaves with monoterpenes produced in glands in the blade, as is also found in the commercial bayberry of New England used for candles and soap

products. In California wax myrtle staminate, pistillate, and bisexual flowers can be found on an individual plant, and the inflorescences and flowers are difficult to interpret. B. A. Prigge & A. C. Gibson