Cercocarpus betuloides Torrey & A. Gray var. ***betuloides***, BIRCH-LEAF MOUNTAIN MAHOGANY. Shrub, ± evergreen, sclerophyllous, principal branches spreading and ascending, in range 150–500 cm tall; shoots exhibiting long short-short shoot organization with ascending, leathery leaves and inflorescences clustered on short shoots, each short shoot having many close, projecting bud scale scars; bark dull gray, smooth. **Stems:** cylindric, 2 mm diameter (of short shoots), reddish or reddish brown when young, gray-villous to gray-tomentose, aging with gray, glabrous and glaucous bark. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, broadly attached to base of petiole, asymmetrically ovate or oblanceolate to ± oblong, 2.5–8 × 1.8–4 mm, thin, light green to light greenish yellow (paler on thin margins and darker at base and ± along midvein) aging coppery brown, deciduous or with some persistent tissue as petiole wings, upper surface tomentose at base and along midvein, lower surface sparsely tomentose; petiole cylindric, 1–12 mm long, densely short-tomentose initially with white hairs aging brownish; blade broadly ovate to obovate or elliptic to rhombic, 10–65 × 8–45 mm, flat becoming cupped or curled under (not fully revolute), broadly tapered to rounded at base, regularly short-dentate to short-serrate with short point along upper 1/3 to 3/4 on margins, when inrolled and concealing teeth appearing entire or low-crenate, obtuse to rounded at tip, conspicuously pinnately veined with principal veins sunken on upper surface and raised on lower surface, the lateral veins mostly in 3–9 pairs, straight, and always ending in a reddish point (mucro), initially tomentose, upper surface becoming glabrescent and glossy or dull dark green, lower surface light green and whitish tomentose aging grayish tomentose. **Inflorescence:** 1–5 axillary clusters (fascicles) of 1–3(–4) flowers, bracteate, densely tomentose; bractlet subtending pedicel stipulelike, 1–5 mm long, early-deciduous; pedicel at anthesis 1–5 mm long increasing to 2–12 mm long in fruit. **Flower:** bisexual, radial, 9–11 mm across; protogynous; hypanthium funnel-shaped having a cylindric tube concealing ovary, 5–12 mm long, 4–7.5 mm wide at top, densely white-tomentose to silvery white-tomentose; tube at anthesis 3–9 × 0.8–1.3 mm increasing to 8–14 mm long in fruit, somewhat narrowed at top, internally glabrous; throat cuplike to broadly inversely conic and 5(–6)-lobed, 2.5–3 × 3–7 mm, yellowish green and sometimes with large crimson or purplish red spots, internally glabrous below lobes with 10(12) principal veins from base, abscised after flowering; lobes spreading, triangular to broadly deltate or acuminate, becoming reflexed, upper, surface tomentose; **sepals** absent; **corolla** absent; **stamens** 25–56, free, attached to upper throat of hypanthium at 3–4 levels with the uppermost set attached just below sinuses; filaments 1.2–3 mm long, lax and spreading to draping over hypanthium rim, light green, glabrous; anthers basifixed, dithecal, oblong or ± ovate to obovate or inversely heart-shaped, 1.1–1.7 × 0.9–1.3 mm, light yellow, pubescent, longitudinally dehiscent; pollen yellow to light yellow; **pistil** 1, at anthesis ca. 10–11 mm long (within hypanthium tube); ovary superior, ellipsoid to narrowly fusiform, 1–1.7 × 0.6–0.7 mm, sericeous with straight, white, appressed hairs, 1-chambered with 1 ovule; style included within hypanthium, as wide at base as ovary tapered toward stigma, 6.5–9 mm long, bent 90° above midpoint, long pilose-strigose below bend, with short ascending hairs above bend and progressively shorter to stigma, persistent; stigma decurrent but style bent at base of stigma resulting in the stigmatic surface facing upward (sometimes arched). **Fruit:** achene with persistent, flexuous style (beak); achene oblanceoloid, 7–10.5 × 1.3–2 mm, brown, longitudinally 5-grooved, strigose-sericeous

with appressed to ascending white hairs becoming glabrescent between grooves; beak open 1-coiled (± straight), in range 30–69 mm long, most of length compressed elliptic in ×-section, ascending-pubescent and long-hairy, the long hairs mostly 2–4 mm long but shorter at beak tip, ascending to spreading, white to tawny. **Seed:** tightly enclosed in thick-walled ovary, cylindric, orange-brown. Mid-February–mid-May.

Native. Evergreen shrub characteristic of chaparral throughout the range. *Cercocarpus betuloides* here has evergreen leaves produced on short shoots with a distinctive pinnate venation pattern that resembles birch (*Betula*) and alder (*Alnus*), and during summer drought the blades curl but remain photosynthetic. Nonshowy flowers are formed in small clusters, and the structure that appears to be the calyx we describe here as part of the hypanthium, with a cylindric base enclosing the pistil and a cuplike top bearing many stamens and small lobes that others might call calyx. There does not appear to be any morphologic differentiation, other than pubescence on the upper surface, between lobes and the hypanthium that would justify the recognition of the lobes as sepals. The flowers are likely always self-pollinated because the stigma is positioned beneath many anthers with copious pollen, and no nectar reward has been observed. This plant has a distinctive dry fruit with a long, feathery beak, which serves as a dispersal mechanism.

Two local varieties of *C. betuloides* are usually recognized: the widespread var. *betuloides*, and var. *blancheae* (C. K. Schneid.) Little, ISLAND MOUNTAIN MAHOGANY. Standard treatments have concluded that *C. betuloides* var. *blancheae* occurs on the Channel Islands and from the immediate coastal mainland areas of the SMM and Lompoc (Santa Barbara County). However, we also find larger-leaved individuals growing as far inland as Griffith Park. Our observations are that the drier, more exposed slopes have the smaller-leaved individuals (var. *betuloides*) and the moister, more shaded slopes have the larger-leaved individuals with more leaf veins (var. *blancheae*). Thus, one can walk a transect from a canyon bottom to a ridge and find broader-leaved individuals on the lower canyon slopes and smaller-leaves individuals on the higher slopes. We consider this to be phenotypic plasticity, and not natural selection for the two forms in different adjacent microhabitat.

B. A. Prigge & A. C. Gibson