

*Ceanothus* L. CALIFORNIA-LILAC

*Ceanothus cuneatus* (Hooker) Nutt. var. *cuneatus*, BUCK BRUSH. Large shrub, evergreen, unarmed, with a short trunk, highly branched with a spheric canopy of  $\pm$  stiff stems, 150–450 cm tall; terminal shoots with long-shoot, spur-shoot design and inflorescences developing mostly from spur shoots; trunk and thick stems deeply fluted where old branches died and abscised; bark rough, light gray aging dull gray. **Stems:**  $\pm$  cylindrical, light greenish or reddish brown aging light gray, young stems initially puberulent. **Leaves:** opposite decussate, simple, petiolate, with stipules; stipules 2, fused to stem at node, typically not touching stipule of opposite leaf (at least 0.5 mm apart),  $\pm$  conic and corky, 1–1.5 mm across, reddish brown aging dark gray, acute to pointed at tip, persistent; petiole 2–4 mm long, puberulent; blade oblanceolate or obovate to elliptic, 8–30  $\times$  2–12 mm, thick and stiff but not fibrous, initially flat or becoming inrolled under when water stressed, broadly tapered at base, entire (with 1–several inconspicuous teeth on margins), obtuse or short-pointed at tip, pinnately veined and 1-veined from base with principal veins scarcely raised on lower surface, upper surface glabrescent or aging glabrate, lower surface canescent around sunken stomatal chambers (stomatal crypts, visible with hand lens), the veins glabrous or sparsely hairy with appressed, short, straight hairs. **Inflorescence:** racemelike, axillary on spur shoots or clustered at tips of long shoots in showy clusters, 8–13 mm long and wide, ca. 10–25-flowered, lateral cymes paired along axis and (1–)2–3-flowered, bracteate, puberulent; spur shoot typically having 1 pair of diminutive, deciduous leaves with persistent stipules; bracts subtending peduncle 2, broadly ovate-deltate and cupped, 2.5–3.5 mm long, greenish below and reddish purple above midpoint, obtuse or rounded at tip, puberulent, early-deciduous and leaving ledgellike base; peduncle < 1 mm long; rachis < 6 mm long; bractlet subtending pedicel, for each cyme somewhat dimorphic, the outer bractlet similar to bract, inner bractlets lanceolate to narrowly lanceolate, < outer bractlet, pale green to white, sometimes reddish purple above midpoint, puberulent; pedicel slender, 5–7 mm long increasing to 10 mm in fruit, flexible, greenish white in bud becoming white or pink-rose aging green in fruit. **Flower:** bisexual, radial, 4.5–7 mm across, protandrous (dehiscing in bud); hypanthium subtending fleshy disc and ovary base, colored like pedicel but darker or greenish to dark purple; **sepals** (4–)5–6(–7), spreading and becoming reflexed, ovate-deltate, 1.3–2(–2.5)  $\times$  1.2–1.5(–2) mm, white or tinged light purple near base; **petals** (4–)5– 6(–7), initially ascending and with hood cupping anther or often twisted, later recurved, narrowly clawed to ca. midpoint and conspicuously hooded, 1.5–2.5(–3) mm long, white; **stamens** (4–)5–6(–7), free, opposite petals; filaments attached below edge of nectary disc, ascending or spreading, ca. 1.5 mm long, whitish to pale rose, arching inward and sometimes approaching stigmas or later appressed to ovary; anthers initially enclosed in petal hood, dorsifixed, dithecal,  $\pm$  0.7 mm long, light yellow or greenish yellow, longitudinally dehiscent; pollen light yellow; **nectary disc** flattened ringlike, weakly scalloped with 2 small lobes at base of each stamen, ca. 0.5 mm thick,  $\pm$  1.8 mm diameter, dark purple or green-tinged, raised slightly around base of ovary; **pistil** 1, ca. 1.5 mm long; ovary superior, triangular in  $\times$ -section, 3-lobed with incipient horns, greenish or purple becoming greenish, 3-chambered, each chamber with 1 ovule; style 0.7–1 mm long increasing after pollen discharged, typically light purple, 3-branched in upper 1/3, at anthesis cylindrical, the

branches appressed later spreading, typically light purple; stigmas dark purple. **Fruit:** schizocarpic capsule, at maturity separating explosively into 3 parts from persistent disc, 3-lobed with 1 erect, hornlike projection (crest) on tip of each valve, 4–5 mm across, brownish at maturity before dehiscence, glabrous; persistent disc 3.5–4 mm diameter. **Seed:** oval, 3.5–4 × 2.5–2.7 mm, dark green, smooth. Early-December–early May.

Native. Shrub occurring inland in mid-elevation chaparral of SMM, such as Tapia State Park and SMMNRA Rocky Oaks, often co-occurring with *C. crassifolius*. *Ceanothus cuneatus* is similar to *C. crassifolius* in having opposite, thick, evergreen leaves, but buck brush is less hairy on the lower blade surface, so that the individual stomatal crypts can be observed easily with a hand lens, and the stipules are slightly smaller and typically not touching. Flowers of the two species are almost indistinguishable, although in *C. cuneatus* the inflorescences are not as dense, so the plant overall is less showy.

B. A. Prigge & A. C. Gibson