

Ceanothus spinosus Torrey & A. Gray, GREENBARK CEANOTHUS. Large shrub to small tree, evergreen, densely rigid-branched, 200–500+ cm tall; shoots often spine-tipped on short lateral shoots (= stem spines). **Stems:** initially ridged becoming cylindrical, yellow-green aging olive green on woody branches, puberulent to glabrous; forming dull dark gray bark only on the lower trunk. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, awl-shaped, 1.5–4 mm long, greenish aging dark purplish, strongly keeled, sometimes winglike near base, puberulent, deciduous; petiole \pm cylindrical, 1.5–8 mm long, upper side puberulent, lower side (upper side) short-strigose; blade elliptic or oblong to narrowly obovate, 10–45(–55) \times 6–20(–30) mm, \pm thin and flexible, flat, broadly tapered to \pm tapered at base, entire or with obscure teeth on margins approaching tip, obtuse, rounded, or shallowly notched at tip, conspicuously pinnately veined with 1 dominant vein from base and midrib raised on lower surface, glossy especially when young, upper surface dark green and glabrate, lower surface sparsely short-strigose along principal veins. **Inflorescence:** paniclelike, terminal, 60–120 \times 15–40 mm, showy, with many lateral branchlets to 40 mm long, branchlets with 1–3 flowers per node (cyme), bracteate; peduncle and rachis puberulent to short-tomentose; bract subtending lateral branchlet broadly ovate to deltate or trowel-shaped and cupped to hoodlike, 2–4 mm long, tinged reddish except greenish along slightly raised midvein, short-tomentose, fleshy at base, deciduous, sometimes membranous on margins below midpoint; branchlets slightly elongated or not; bractlet subtending pedicel similar to but narrower and slightly $<$ bract to narrowly lanceolate at tip of branchlet; pedicel slender, 3.5–10 mm long in flower and fruit, flexible, white to purple or violet. **Flower:** bisexual, radial, 4–5 mm across; protandrous; hypanthium subtending fleshy disc and ovary, colored like pedicel but darker or greenish; **sepals** (4–)5(–6), strongly incurved, ovate-deltate, 1–1.5 mm long, white to light lavender or light violet (darker in bud), mostly lacking midridge on upper surface, minutely hairy on margins above midpoint; **petals** (4–)5(–6), initially ascending but later spreading to reflexed, narrowly clawed and conspicuously hooded, \pm 2 mm long, same color as sepals; **stamens** 5(–6), free, opposite petals, in bud enclosed in petal hood; filaments slightly $<$ petals, curved-ascending or arching inward; anthers dorsifixed, dithecal, 0.6–0.8 mm long, light yellow, longitudinally dehiscent in bud; pollen light yellow; **nectary disc** ringlike, slightly scalloped or wavy, \pm 0.25 mm thick, 1–1.2 mm diameter, dark to light purple or greenish, with a shallow sinus between filaments and a notch opposite filament; **pistil** 1, 1.3–2 mm long; ovary superior, dome-shaped without horns, green, 3-chambered, each chamber with 1 ovule; style 1–1.4 mm long, pale violet to light purplish blue, 3-branched in upper 1/3, cylindrical with branches appressed prior to anthesis increasing to 1–1.3 mm long and spreading after anthers discharge pollen; stigmas minutely papillate, darker than style but soon fading. **Fruit:** schizocarpic capsule, explosively separating into 3 1-seeded parts from persistent nectary disc, 3-lobed, \pm 4.8 mm diameter, the outer layer brownish, glabrous, dry and cracking, the inner layer hard, straw-colored, smooth. **Seed:** \pm spheric, 2.6–3 \times 2.2–2.7 mm, slightly compressed front-to-back, dull olive brown to grayish violet, smooth. Early November–late May (–late July).

Native. Large shrub common in tall phases of chaparral throughout the range and especially on north-facing slopes, where it can be a codominant, commonly coexisting

with one to three other species of *Ceanothus*. *Ceanothus spinosus* has green old stems, and the leaves tend to be somewhat glossy, especially when young; it can be distinguished from other violet-flowered species by having one dominant vein from the base of the blade, versus three subequal veins in the other species.

B. A. Prigge & A. C. Gibson