Atriplex coulteri (Moq.) D. Dietr., COULTER'S SALTBUSH, COULTER'S ORACH. Perennial herb, several-stemmed at base, principal shoots with unexpanded lateral shoots often at most nodes, decumbent, in range to 15 cm tall; monoecious; shoots grayish to tannish because initially densely covered with 2–3 layers of tightly packed, salt-accumulating, balloonlike hairs (vesicular hairs) collapsed when dry surfaces with mealy coating (scurfy), beneath hairs young shoot often purplish red. **Stems:** cylindric, young twigs slender, 1–1.5 mm diameter, internodes on principal stems only several mm long, old stems glabrate. **Leaves:** mostly helically alternate but first nodes on new shoots opposite decussate, simple, short-petiolate, without stipules; petiole to 1 mm long, crescent-shaped in ×-section, appressed to axillary bud and firmly attached, purplish red beneath hairs; blade narrowly ovate to elliptic or obovate, in range 3–10 × 2–4 mm, tapered at base and indistinct from petiole, entire (never wavy on margins), acute to acuminate-acute often with exposed red point at tip, obscurely pinnately veined usually with only midrib visible, meal on surfaces. **Inflorescences:** unisexual, dense clusters (cymes, glomes), bracteate, with vesicular hairs aging scurfy; **staminate inflorescence:** glome ± spheroid, 2–3 mm across, of several sessile flowers, glomes arranged in a bracteate, terminal, spikelike array; bract subtending peduncle leaflike; peduncle of array short; spikelike axis to 15 mm long but very short on unexpanded axillary shoots, mostly congested near tip; bract subtending each basal glome leaflike but shorter and acuminate at tip, decreasing upward and becoming narrow and awl-shaped (upper glomes); **pistillate inflorescence** at nodes approaching tips of shoots, cyme of 2–3 sessile flowers, axillary of leaflike bract; bracteoles 2 enclosing pistillate flower, bracteoles fused at base or to midpoint, obovate-rhombate, at anthesis ca. 1.4 × 1.4 mm, with tooth at tip 0.4–0.5 mm long and often 2 smaller teeth on each side on upper margin, densely vesicular-hairy becoming scurfy. **Staminate flower:** radial, at anthesis ca. 2 mm across; in bud often wine red; **perianth (calyx)** 4-lobed, fused at base; lobes equal, broadly obovate, ± 1.3 × 1 mm, reddish (greenish), scurfy on lower surface; **stamens** 4, opposite calyx lobes, fused at base and sometimes forming a short tube; filaments 0.4–0.5 mm long, whitish; anthers exserted, dorsifixed, distinctly dithecal, 0.45–0.55 mm long, light to vivid yellow or edge reddish, the sacs joined by connective at tip, longitudinally dehiscent; pollen light yellow; **pistil** absent. **Pistillate flower: perianth** absent; **stamens** absent; **pistil** 1, 1.8–2 mm long; ovary superior, ellipsoid, 0.2 mm long, green, 1-chambered with 1 ovule attached at base; style erect and exserted from bracteoles, green at base but reddish where exserted above midpoint, 2-branched, nearly free to base, the branches stigmatic 0.6–1 mm at tips. **Fruit:** utricle, vertical, enclosed by 2 sessile bracteoles fused to about midpoint; utricle becoming thin, membranous, and adherent to seed; bracteole ovate to broadly obovate, ca. 2.5–3 × 2.5–3 mm, broadly tapered at base, toothed on margins with longer central tooth, sometimes with several projections on outer surface below midpoint (tuberculate), covered with densely packed vesicular hairs, becoming swollen with fruit, bracteole wall thick and hard. **Seed:** vertical, ± discoid, 1.2 × 1 mm, reddish brown, with tip of radicle at top. Late April–late May.

Native. Perennial currently known in range from a tiny population of stressed plants growing on one coastal bluff in Malibu, although likely present in the same coastal microhabitat where nobody has recently botanized. *Atriplex coulteri* tends to have purple-

red pigment (betalain) in shoot tissues, concealed by vesicular hairs but visible when fleshy tissue or points on leaves and bracts are exposed, but also betalain may color the perianth of staminate flowers, which can appear wine red in bud. Bracteoles in fruit are small, fused to midpoint, and bony hard, and they have several teeth along the free margin and sometimes projections on the surface (tuberculate).
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