Amaranthus californicus (Moquin-Tandon) S. Watson, CALIFORNIAN AMARANTH. Annual, somewhat fleshy, taprooted, several–many-stemmed at base, matlike, principal branches to 50 cm long, procumbent or decumbent on longer flowering shoots, < 15 cm tall; monoecious; shoots with dense foliage mostly on axillary branches, nearly glabrous; not rooting at nodes. **Stems:** cylindric, to 5 mm diameter, lacking ridges but with stubs of petioles remaining after cauline leaves abscise, whitish becoming rose without whitish streaks, initially with sparse, short hairs aging glabrescent. **Leaves:** helically alternate, simple, petiolate, without stipules; petiole 0.5–15 mm long, whitish, fleshy; blade elliptic to ovate or obovate, typically 2–20 × 1.3–12 mm, the smaller leaves on axillary shoots, not folded upward, tapered to broadly tapered at base, entire on translucent whitish, planar or wavy margins, acute to obtuse or shallowly notched at tip commonly with a colorless to rose midrib extension to 0.4 mm long, pinnately veined with principal veins slightly sunken on upper surface and raised on lower surface, yellowish green or aging deep magenta before abscising, glabrous, the veins pale green to whitish or becoming rose. **Inflorescence:** short, highly condensed cymes of unisexual flowers (cymules), axillary, spikelike throughout the plant, typically < 2.5 mm long, many-flowered, mostly with pistillate flowers but having some staminate flowers intermixed (1–2 per cymule), bracteate, glabrous; axes zigzagged when mature; bract subtending branchlet or bractlet (bracteole) subtending pedicel awl-shaped to lanceolate, 1.2–1.5 mm long, greenish along midrib and becoming rose-red approaching tip, translucent whitish on margins, weakly keeled, typically acuminate at tip. **Staminate flower:** radial, ca. 1 mm across; **tepals** (perianth parts) 2–3, equal, lanceolate, 0.7–2.2 mm long, white, folded longitudinally, acuminate (2-toothed or fringed) at tip; **stamens** 3, free, attached on margin of nectary; filaments 1–1.2 mm long, whitish; anthers dorsifixed, dithecal, linear, ± 0.5 mm long, light yellow, longitudinally dehiscent; pollen light yellow; **nectary** papillate; **pistil** absent. **Pistillate flower:** radial, 1 mm across, larger than staminate flower; **tepals** (perianth parts) 1–3, barely fused at base, unequal, lanceolate, 0.4–0.8 mm long (the shortest on the opposite side of pistil), not spinescent, translucent-white to ± colorless, persisting on fruit base; **stamens** absent; **pistil** 1; ovary superior, compressed-ovoid, to 1.3 mm long, green, 1-chambered with 1 ovule; styles (2–)3(–4), ascending, ± 0.5 mm long, stigmatic and papillate entire length. **Fruit:** utricle, ± dehiscent around circumference (circumscissile) or indehiscent, cap not easily separating when touched, sometimes splitting irregularly (delayed), 1-seeded, slightly compressed-spheroid, 1–1.2 mm long, light brown, papery, somewhat pebbly around the widest part, with persistent, short-beaked styles; subtended typically by 1 persistent sepal, readily abscising from inflorescence. **Seed:** lenticular, in range 0.7–0.9 × ± 0.25 mm, glossy dark brown, smooth. Mid-August–late September.

Native. Prostrate annual sometimes occurring on the muddy fringe of a pond or drying creek bed in late summer after the water level has dropped, as at SMMNRA Rocky Oaks and SMMNRA Peter Strauss Ranch. This species resembles the larger, common ruderal *Amaranthus blitoides*, called the prostrate or procumbent amaranth, but *A. californicus* actually grows flatter against the ground and has more yellowish green leaves. *Amaranthus blitoides* has obvious ridges on the stem, but in *A. californicus* ridges are absent. These two species are closely related, and there are technical differences to separate them, such as number and sizes of floral parts, but high magnification and careful

dissection is required to observe these, so the simplest way to tell them apart is by the seed size, which is much smaller in *A. californicus*.
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