

*Atriplex leucophylla* (Moq.) D. Dietr., WHITELEAF ORACH. Perennial herb, evergreen, halophytic,  $\pm$  woody at base, many-branched with lower stems buried but not rooting at nodes, prostrate to decumbent, 12–30 cm tall, principal shoots to 100 cm long; in range monoecious; shoots greenish gray, with only cauline leaves, crowded on branch ends where internodes  $<$  leaves, initially thickly covered with colorless, watery hairs (vesicular) aging white-scurfy. **Stems:** cylindrical, reddish beneath thin, scurfy layer, aging glabrate and tannish with periderm fracturing. **Leaves:** helically alternate (opposite), simple, sessile but large leaves subsessile, without stipules; petiole  $<$  1 mm long; blade ovate to elliptic or oblong, 8–30(–40)  $\times$  4–18 mm, rounded at base, entire, broadly acute to obtuse at tip, pinnately veined and 1-veined or 3-veined at base but initially only midrib somewhat evident beneath vesicular hairs but principal veins becoming apparent on senescent and dried leaves. **Inflorescences:** unisexual, staminate, pistillate, or mixed staminate and pistillate, staminate inflorescences and mixed inflorescences terminal with flower clusters (glomes) in spikelike arrays 5–60 mm long, axillary inflorescences of pistillate flowers  $\ll$  blade, bracteate, vesicular aging white-scurfy. Glomes of staminate and mixed inflorescences congested or to 9 mm apart; bract subtending glome ovate to lanceolate, 5–11 mm long, acuminate at tip; glome spheric, ca. 4 mm, ca. 10-flowered (staminate) or with 5–10 staminate and 1–4 pistillate flowers (mixed). Glomes of pistillate inflorescences (1–)3–4-flowered; bracteoles enclosing pistillate flower 2, sessile, broadly ovate, at anthesis to 3.5  $\times$  3  $\times$  2.5 mm, with wartlike growths on outer (dorsal) surface, fused at least 2/3 length, acute and thick at spreading tip, densely vesicular-scurfy. **Staminate flower:** radial, 2–2.5 mm across; **perianth** calyxlike, 5-lobed, fused at base; lobes unequal, roundish to ovate, 0.7–1.1  $\times$  0.6–1.2 mm, densely and thickly vesicular, internally pale green with whitish margins; **stamens** 5, fused at base; filaments  $\pm$  0.6 mm long, light green; anthers dithecal, ca. 0.5 mm long, yellow to orange yellow, the sacs broadly ellipsoid joined by a short connective, longitudinally dehiscent; pollen light yellow; **pistil** absent. **Pistillate flower:** **perianth** absent; **stamens** absent; **pistil** 1, 3–4 mm long; ovary superior, vertical, slightly heart-shaped to  $\pm$  discoid, 1  $\times$  1.3 mm, 1-chambered with 1 ovule attached at base; style 2-branched, lower portion 0.2–1.3 mm long, thick, mostly green but light reddish brown below branches, the branches equal or unequal, 1–2 mm long, light reddish brown, stigmatic most of length, thick at base. **Fruit:** utricle, with membranous wall and seed free from fruit wall, enclosed in bracteoles; fused bracteoles broadly ovoid, 5.5–7  $\times$  4–6 mm, sessile but sometimes forming a conic base, ridged on margin, obtuse and spreading at tip, conspicuously wartlike (tuberculate) and densely vesicular-scurfy on exposed surfaces, the walls thickened,  $\pm$  spongy but inner layer dense and harder, the tubercles spongy, rounded or conic-peaked. **Seed:** discoid and somewhat round to ovoid, 2.7–3  $\times$  2–2.4 mm, dull orange-brown, finely pebbled; embryo with radicle ascending to top. Late April–early October.

Native. Perennial mostly observed in sandy areas of coastal dunes, coastal strand, and salt marsh above high tide where exposed to salt spray, but formerly also occurring inland at Lake Eleanor and several sites in Malibu. *Atriplex leucophylla* has distinctive bracteoles that are fused at least two-thirds and covered with wartlike projections, but it appears that the seeds are often eaten by seed predators, so that the bracteoles appear empty or have only the membranous pericarp present.

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