

Oligomeris linifolia (M. Vahl) J. F. Macbr., LINE-LEAF WHITEPUFF, DESERT-SPIKE, FLAXLEAF WHITEPUFF. Annual, taprooted, 1–several-stemmed at base, branched above but having most axillary shoots unexpanded with clusters of leaves at each node, decumbent to erect, in range 18–27 cm tall; shoots slightly fleshy, grayish green with epidermis aging white, glabrous. **Stems:** initially conspicuously fine-ridged, to 3 mm diameter, ridges descending from each leaf, the ridges narrow, semi-transparent, whitish, and irregularly bumpy along edge (swollen cells), aging cylindric and tannish. **Leaves:** helically alternate (subopposite at base of expanded lateral shoots), simple, obscurely short-petiolate, with stipules; stipules 2, fused to petiole just above base, narrowly membranous, each with 1 or 2 linear to acuminate, colorless teeth, 0.2–0.7 mm long; petiole indistinct from blade, < 0.7 mm long; blade linear, 18–42 × 1–2.1 mm, dull green, slightly tapered at base, entire, acute at tip, with only midrib visible. **Inflorescence:** spike, terminal on every expanded shoot, slender, to 115 mm long in fruit, many-flowered, with flowers initially densely clustered but later spaced, bracteate; peduncle 1–3 mm long increasing to 6× in fruit; rachis conspicuously ridged with minute bumps; bractlet subtending flower narrowly triangular, 1.9–2 × 0.6–0.7 mm, green with white-membranous margins sometimes with teeth near base, acute to acuminate at tip. **Flower:** bisexual, bilateral, 2 mm across, nonshowy; **sepals** 4, lanceolate, in range 1.5–1.8 × 0.4–0.6 mm, green with white-membranous margins, acute at tip, persistent; **petals** 2, present on inner side of flower (next to axis), ± obovate, 1.5–1.7 × 0.7–0.8 mm, white, persistent; **stamens** 3, free, present only on inner side of flower, with diffuse nectar at base (**nectary**); filaments scarcely fused at base, 1–1.4 mm long, white, expanded at base; anthers exerted, basifixed, dithecal, oblong to broadly heart-shaped, 0.5–0.6 mm long, yellow to light yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, 8-lobed at base and 4-lobed above midpoint with each lobe having a free, conic projection, 2 × 2 mm, green, 4-chambered, each chamber with 32–36 ovules, weakly sealed (tightly appressed) at top of chamber between the conic projections; style absent; stigmas 4, at tip of each conic projection. **Fruit:** capsule, dehiscent at top by 4 acute valves spreading from the fruit center upward on the inner sides of the conic projections, to 18-seeded, subspheroid, 3–4 mm across, green at maturity, persistent on rachis; with persistent bractlet and sepals. **Seed:** roundish with conspicuous radicle, 0.6–0.7 × 0.6 mm, in range glossy black, smooth; with oily embryo. Early March–Early April.

Native. Annual characteristic of desert hardpan and salt flats, as well as coastal bluffs, but collected once in range along the coastal bluff northwest of Sycamore Canyon. *Oligomeris linifolia*, which is probably native to North America, is somewhat fleshy when growing in its saline environments, although for many years botanists have conjectured that it may have arrived in the New World with settlers from Europe. Its nonshowy flowers have bilateral symmetry, with the two white petals and three stamens positioned on the inward side of the flower. Interestingly, the upper portion of the ovary is not “closed,” and therefore is highly unusual for an angiosperm. In fruit the appressed tissues of the conic projections spread open, rather than splitting, thereby permitting the crowded seeds to be discharged.

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