

*Lepidospartum squamatum* (A. Gray) A. Gray, SCALE-BROOM. Shrub, evergreen, many-stemmed from base, broomlike and green-stemmed (virgate), much-branched with ascending and spreading shoots, with rounded canopy, in range 60–150 cm tall; shoots with persistent, scalelike cauline leaves and photosynthetic, decurrent leaf bases defined by narrow furrows, the furrows short-hairy aging glabrescent, dotted with stomates, widening and splitting as stem diameter increases; aromatic with resin ducts in leaves. **Stems:** hidden by leaf bases, white-woolly beneath blade; old stems tan and light brown, with bark somewhat spongy from persistent leaf bases. **Leaves:** helically alternate, simple, sessile, without stipules; leaf bases linear, initially 3–5 × 1 mm at ends of sterile branches, aging 10–20 × 1.5–2 mm (while still green); blade appressed, ovate, 1.5–2.5 mm long, ± fleshy, stiff, entire, typically acuminate and orangish at tip, venation inconspicuous, inward-facing surface cobwebby woolly. **Inflorescence:** heads, in terminal, racemelike or paniclelike arrays of several–35 heads, array when paniclelike having 1–several heads at the tips of ascending lateral branches, head discoid, 8–12 mm across, with 9–13(–17) disc flowers, bracteate; peduncle = stem covered with decurrent leaf bases; **involucre** narrowly bell-shaped, in range 6–8 × 3.5–5 mm, phyllaries (7–)15–20(–23), in several overlapping series, fleshy and oozing resinous liquid if punctured, outer phyllaries grading from scalelike leaf blades and short-hairy, inner phyllaries 4–6.5 mm long, conspicuously ridged, with margins narrowly membranous and ± jagged to short-ciliate on margins; receptacle convex, narrow, without bractlets (paleae), deeply pitted with conspicuous rim surrounding each ovary, minutely glandular-hairy, honeycombed in fruit. **Disc flower:** bisexual, radial, 3–4 mm across; **calyx (pappus)** of many, densely arranged capillary bristles in many whorls, 5–8 mm long, at anthesis exposed above involucre, whitish; **corolla** 5-lobed; tube cylindrical, 3–4.5 mm long, very pale yellow-green, throat 2 mm long, yellow; lobes strongly recurved, acuminate, 2–2.5 mm long, bright yellow, sometimes also twisted; **stamens** 5, fused to corolla at base of throat; filaments 2 mm long, white; anthers fused into cylinder surrounding style, exerted almost entirely above throat, basifixed, dithecal, 2.5 mm long, arrow-shaped at base, acute at tip, orange with reddish streak, longitudinally dehiscent; pollen orange-yellow; **pistil** 1; ovary inferior, inversely conic, 2–2.5 mm long, often somewhat angled and arched, inconspicuously 10-ribbed, 1-chambered with 1 ovule; style exerted, 2-branched, the branches erect at level of anthers but eventually spreading and recurved above anthers, yellow; stigmas yellow aging purplish red, short-papillate. **Fruits:** cypselae, narrowly oblanceoloid, 2.5–4.5 mm long (shorter when aborted), glossy dark brown, 10(–15)-ribbed, with brown rim spreading to pappus, glabrous; pappus bristles dense, ascending, 5–8 mm long, light tawny, persistent. Mid-July–late October.

Native. A nearly leafless, summer-flowering, green-stemmed (virgate) shrub restricted locally to washes in SMM, best known from Malibu Creek State Park and Big Sycamore Canyon, growing in rocky banks above creek with deeply penetrating roots.

*Lepidospartum squamatum* has scalelike leaf blades but photosynthetic “stems,” and actually the stems are basically covered with decurrent leaf bases dotted with stomates, separated by longitudinal grooves. This shrub flowers during the hot, dry summer and early fall. Each head forms a puff of pappus, connected to ribbed, glossy brown fruit

bodies, but in range very few of the ovaries seem to mature as viable fruits, so that much of the annual reproductive effort locally appears to be wasted.

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