Lastarriaea coriacea (Goodman) Hoover, LEATHER SPINEFLOWER. Annual, taprooted, rosetted, essentially acaulous with several inflorescences arising at base, prostrate to decumbent, 2–10(–15) cm tall, to 30 cm across; shoots with only basal leaves, short-lived, ± short-villous, lacking glandular hairs. **Stems:** not visible or < 10 mm long, purplish red, puberulent. **Leaves:** helically alternate, simple, petiolate, without stipules (no ocrea); petiole present, indistinct from blade but winged and broad at base; blade linear, 5–30 × 0.2–0.8 mm, the widest approaching tip, entire, acute with hard point at tip, midrib only conspicuous, sparsely puberulent, the hairs mostly on margins and upper surface. **Inflorescence:** dichasial cyme having 1-flowered involucres, each inflorescence axillary to basal leaf (several per plant), primary axis repeatedly and equally 2-forked having erect branches and 1 involucre terminal in fork per node between 2 branchlet axes, at some terminal nodes 1 branchlet sometimes suppressed, bracteate, short-villous, awned and grasping; axes cylindric, < 1 mm diameter, typically glossy dark purplish red where sunexposed, at fork 1 branchlet growing shorter than the other branchlet; bracts subtending each fork 2, opposite and fused across each node to 0.5 mm, $\pm \text{ erect}$, narrowly ovate to oblong, in range $4-13 \times 0.8-1.5$ mm including awn, decreasing upward, puberulent only on lower surface, midrib conspicuously raised on exposed surface and terminating as awn, the awn somewhat hooked (uncinate, hooked downward) to nearly straight (long bract), in range, 0.4–1 mm long, initially green aging tannish or orangish; **involucre** of 3 whorled bracts subtending flower, short-stalked, awned, bases of bracts fused across node, ± linear arching outward, in range 3–4 mm long including awn, green often aging with purplish red, somewhat 3-sided, having a conspicuous midvein terminating in awn, sparsely puberulent on both surfaces, the hooked awn ca. 1 mm long; flower sessile, with anthers slightly exserted from involucre. Flower: bisexual, \pm radial, narrow and concealed within involucre; **perianth** 5-lobed (tepals), 5-awned, 2–3 mm long (including awns); tube cylindric, 0.6–1.5 mm long, green, with sinuses of different depths, somewhat tough; lower portion of lobe < tube, lobes unequal, tapered to hooked awn, 1–1.6 mm long, green and sparsely villous below awn, awn green aging tannish; stamens 3, fused to top of perianth tube; filaments erect, in range 0.25–0.3 mm long, yellowish green; anthers dorsifixed, dithecal, 0.4–0.5 mm long, yellow, longitudinally dehiscent; pollen yellow; **pistil** 1, 0.9– 1.5 mm long; ovary superior, 3-angled ellipsoid, greenish, glabrous, 1-chambered with 1 ovule; styles 3, 0.1 mm long; stigmas capitate, yellowish green. Fruit: achene dispersed within the dry, persistent, awn-tipped perianth (diclesium) and involucre, upper portion scarcely visible from perianth and involucre, narrowly lanceoloid, 2.5–3 mm long, papery (mature ovary wall) appearing dark brown (enclosed seed), 3-angled with 3 low ribs above midpoint, glabrous. **Seed:** lanceoloid, < fruit, black, without angles. Early April–late May.

Native. Annual rarely encountered in sandy coastal patches. *Lastarriaea coriacea*, alternatively and perhaps correctly treated as *Chorizanthe coriacea* Goodman, has a basal rosette from which arise several spreading branches. Each inflorescence is repeatedly branched, basically a dichasial cyme; at each fork are a pair of bracts fused across the node and a terminal involucre sandwiched between a pair of branchlets. The branchlets of the cyme have the same diameter, but one characteristically continue as the main axis and the other one becomes subordinate and shorter. The involucre is one-flowered, although good

magnification is required to examine the flower hidden within the involucre. The plant has hooked (uncinate) awns on bract and bractlets of the involucre, and, unique of the species in range, also uncinate awns on the lobes of the perianth. Leather spineflower is so named because its perianth is tough, and the stamens are attached at the top of the tube so that the anthers are scarcely exserted.

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