

Erodium brachycarpum (Godron) Thell., FOOTHILL FILAREE. Annual, taprooted, rosetted, “acaulous” with several–many ascending, leafy inflorescences, 10–60 cm tall; shoots with basal leaves (so-called cauline leaves treated here as bracts), long-hirsute, the nonglandular hairs slightly upward-pointing, inflorescence glandular-pubescent. **Stems:** cylindric, fleshy, purplish red, hairs radiating to recurved, 1-celled, to 2 mm long. **Leaves:** helically alternate (bracts opposite, with some pairs markedly unequal, i.e., anisophyllous), odd-1-pinnately lobed with 1–4 lobes per side, petiolate, with stipules; stipules 2, attached to stem at node, triangular to ovate, 4.5–7 × 2.5–3.5 mm, membranous and semi-translucent or whitish aging tannish, ciliate on margins, acuminate at tip, surfaces glabrous; petiole ± hemi-cylindric to elliptic in ×-section approaching blade, 50–100 mm long, sparsely hirsute but densely pubescent on flat upper side, lacking glandular hairs (bracts glandular-hairy); blade ovate in outline, 22–60 × 14–36, < petiole, cordate at base, lobes ± ovate to oblong, dentate or deeply crenate and long-ciliate on margins, pinnately veined with principal veins sunken on upper surface and raised on lower surface, dull, upper surface ± hirsute on lobes and glabrous centrally, lower surface appearing glabrous except strigose along veins. **Inflorescence:** leafy, cymelike array with 3–6 umbel-bearing branches, axillary from each basal leaf, axes at each fork unequal and subtended by an unequal pair of leaflike bracts (cauline leaves of some authors), the larger bract subtending the continuing axis, the smaller bract subtending a short lateral branch having a narrower axis, umbel from each node 3–4-flowered having erect flowers, bracteate, glandular-pubescent above peduncle with slightly upward-pointing hairs; bract at principal node leaflike including stipules, petiolate (at subsequent nodes commonly sessile), bract stipules broadly fused to stem, the bract stipules 2 but 1 of each pair fused across node, free stipules (2) triangular, 4.5–7 × 2.5 mm, fused stipules deltate, 4.5–7 × 3.5–4 mm, semi-translucent or whitish, ciliate on margins, acuminate at tip, surfaces glabrous, flat and commonly outwardly bent on margins, convex and less transparent in central area, the bract petiole to 50 mm long, the bract blade ovate, 35–45 × 20–30, similar to leaf blade but more deeply lobed and notably serrate on margins; peduncle cylindric, 50–155 mm long, swollen at base, green becoming purplish red on exposed sides and at base, long-hirsute with hairs to 2 mm long; axes above basal pair of bracts to 100 mm long in fruit, at fork unequal in diameter, gradually decreasing upward, swollen at base, short glandular-hairy or sometimes the lowest main axis hirsute grading to glandular-hairy; branchlet below umbel at anthesis 9–35 mm long increasing to 4× in fruit, swollen to 2.7 mm diameter at base, becoming densely mottled with purplish red on exposed parts but often remaining green at base; **involucre** of bractlets subtending pedicels of an umbel, bractlets 8–11 in 2–3 whorls, stipulelike, ovate to broadly lanceolate, 1.5–3 × 0.7–2.5 mm, semi-translucent to whitish, ciliate on margins, acuminate at tip, sometimes the outermost bractlet with a light green midvein; pedicel at anthesis ascending (flower erect) and 5–7.5 mm long increasing to 2× in fruit, ± 1 mm diameter and swollen at base and tip, erect or bent outward 90° at base and then up 90° at tip, soon becoming dark purplish red but often remaining green at base (concealed by involucre) and just below flower, glandular with short capitate hairs. **Flower:** bisexual, radial, 6–8 mm across; **sepals** 5, initially ascending, overlapping, lanceolate, 4.5–5.3 × 1.8–2.5 mm increasing to 2× and erect in fruit, membranous and long-ciliate on margins, the overlapping margins broadly membranous, exposed margins very narrowly membranous, acute at tip and ± with subterminal appendages, 3-veined or 5-

veined (broader sepals) at base, the veins darker green, upper surface glabrous, lower surface densely glandular-hairy and, for at least 3 sepals, densely hirsute at base, the subterminal appendage fingerlike (shorter than an awn), < 0.5 mm long, with 2–5 bristly hairs at tip; **petals** 5, spreading to ascending, equal, overlapping, obovate (not clawed), 5.5–6.5 × 2–2.5 mm, thin, dark reddish purple, 3-veined from base with darker pigmentation along base of veins, upper surface glabrous, lower surface mostly glabrous but at base ciliate on margins and pubescent on neighboring surfaces; **nectaries** 5, appressed to bases of stamens (alternate with petals), horizontally oblong, ca. 0.3 mm wide, yellowish green to greenish; **stamens** 5 fertile opposite sepals, staminodes 5 opposite petals, free; filaments erect, lanceolate, 3.5–4 × 1.5–1.7 mm, translucent, acuminate at tip, strigose from above nectary to midpoint; anthers versatile, dithecal, oblong, 0.8–0.9 × 0.6–0.7 mm, deep purple, longitudinally dehiscent; pollen vivid yellow to golden yellow; staminodes narrowly lanceolate, < 2 mm long, membranous; **pistil** 1, 3.3 mm long, densely hairy; ovary superior, 5-lobed, ca. 1.5 mm long, densely short-villous, 5-chambered, each chamber with 1 ovule attached to center; style column ca. 1.7 mm long with 5 free, spreading tips ± 0.3 mm long, greenish at base, reddish purple and densely white-strigose above, the branches stigmatic on inner side. **Fruit:** schizocarp, of 5 dry, 1-seeded mericarps, before dehiscence erect, needlelike (= beaks) with swollen base (= seed bodies), to 80 mm long, striped green and purplish red below midpoint, mericarp separating from base by coiling upward (= awn) from the persistent portion of style column; seed body narrowly oblanceoloid, 6–7.5 mm long, long-tapered and sharply pointed at base, cinnamon brown, open on inner edge, hirsute with whitish to tawny ascending hairs, transversely wrinkled on surface with a low chevron at base of each hair, with a pair of pits (1 on each side of seed below style), pits ± circular to semicircular, glandular on surface, with a prominent, crescent-shaped ridge on lower margin and several hairs above midpoint, each pit subtended by a shallow, transverse furrow below the ridge or sometimes with another faint furrow; beak (style column) 50–73 mm long, brown, hygroscopic, coil below midpoint with at least 5 tight coils and 1 expanding coil above midpoint, outer surface erect-pubescent, inner surface long-strigose with hairs 3–13 mm long. **Seed:** oblanceoloid, 3–4.2 × 1–1.2 mm, almond to reddish brown; with folded embryo. Late February–mid-May.

Naturalized. A seldom recognized annual of SMM, especially found in disturbed habitats the vicinity of Agoura Hills and Westlake Village, growing in mixed stands with the ever-present, pinnately compound *Erodium cicutarium*, which has much shorter fruits. *Erodium brachycarpum* has long-petiolate, pinnately lobed leaves forming a basal rosette with leaves either flat against the ground or, in crowded situations, with ascending leaves. This species is best interpreted as having a basal rosette with ascending inflorescences, rather than as having stems with cauline leaves. The bracts are paired and somewhat unequal, and of the two subsequent axes one is the umbel-forming branchlet and the other continues the axis, until the final fork yields two umbel-bearing branchlets. In *E. brachycarpum* the petals are overlapping and have more interesting pigmentation than in the other introduced species.

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