

*Eulobus californicus* Torrey & A. Gray, MUSTARD EVENING PRIMROSE. Annual, taprooted, flat-rosetted, 1–several-stemmed at base, when mature large specimens branched at most nodes, basal branches spreading and others ascending, erect, (20–)40–180 cm tall; shoots with basal leaves and cauline leaves, during early development sparsely short-strigose and with scattered, short, finely stalked, colorless glandular hairs, becoming ± glabrescent.

**Stems:** cylindric, to 20 mm diameter at base, green, breaking easily, becoming conspicuously glaucous and aging purplish red at base with some darker dots or bumps, on old specimens with peeling periderm (exfoliating) exposing satiny surface; solid, with wide, colorless pith. **Leaves:** helically alternate, pinnately lobed with 6–13 lateral lobes per edge (basal leaves) and simple and unlobed (upper cauline leaves), petiolate, without stipules; petiole subcylindric to flattened or channeled on upper side, to 40 mm long (rosette leaves) decreasing to 1.5 mm (the uppermost cauline leaves), mostly glabrous except white short-strigose in channel, with inconspicuous glandular hairs when very young; blade narrowly oblanceolate or elliptic to narrowly lanceolate, 100–200+ × 25–42(–65) mm (basal and lower cauline leaves) to 40 × 6 mm (the uppermost cauline leaves), the lobes opposite or alternate, irregular and cut, 4–24 mm long, the longest lobes ± spreading with associated sinuses nearly to midrib, lobes commonly shorter and narrower on basal portion of basal leaves, dentate to short-dentate on margins (including sinuses) and becoming dark reddish purple, acute to narrowly acute at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface, midrib purplish pink, upper surface developing purple spots, white short-strigose or sparsely so or appearing glabrous, lower surface pale green and glabrate. **Inflorescence:** flowers solitary (or treated as a leafy raceme), axillary, spreading on a pedicel-like ovary, lacking bracts, glaucous; pedicel at anthesis ascending and < 2 mm long increasing to 5.5 mm long and strongly hooked in fruit. **Flower:** bisexual, radial, 16–22 mm across; hypanthium above ovary, cup-shaped, 0.6–1 × 1.5–1.8 mm, green, externally with finely stalked glandular hairs, **nectary** just below top of hypanthium, 4-lobed and opposite sepals or ringlike, greenish yellow to orange-yellow, pubescent with short, erect hairs, producing copious nectar in bud; **sepals** 4, lanceolate to linear, 7.5–8.2 × 1.5–2 mm, ± bulbous at reddish tip, reflexed individually or usually in pairs remaining adherent along shared margins or only at tips, light green, finely veined, becoming reddish on veins, margins, and tip; **petals** 4, spreading to form a dish-shaped corolla, widely elliptic to rhombic-obovate, 6–11.5 × 3.5–8.8 mm, vivid yellow, rounded to tapered at base, obtuse to rounded at tip, with or without a semicircle of red or reddish orange spots at base, in bud strigose but at anthesis sparsely so; **stamens** 8 in 2 sets, free, arising on hypanthium rim, dimorphic; filaments ascending to spreading, 3.8–7 mm long (opposite sepals) and 2.5–5 mm long (opposite petals), brilliant yellow to greenish yellow, glabrous; anthers dorsifixed, dithecal, dimorphic, oval to oblong, 1.5–2.1 mm long (outer stamens) and oblong, 0.8–1.3 mm (inner stamens), light yellow to greenish yellow, longitudinally dehiscent; pollen yellow, connected with minute threads (viscin threads); **pistil** 1; ovary inferior, straight-cylindric, 20–30 × 1 mm, in bud with finely stalked glandular hairs, at anthesis hairs not visible, slightly tapered from base to tip, 4-chambered, each chamber with numerous ovules; style exerted, in range 5.5–7 mm long, yellow-green, mostly glabrous but with radiating colorless hairs on basal portion; stigma positioned at level of outer stamen anthers, capitate and hemispheric, in range 1.3–1.8 mm wide, light yellow-green, densely papillate. **Fruit:** capsule, loculicidal,

dehiscent by 4 valves, many-seeded, sharply reflexed, linear, 50–75(–110) × 1.4–1.7 mm, straight to somewhat curved, quadrangular in ×-section, tapered in upper 10 mm, conspicuously glaucous before mature. **Seed:** irregularly ellipsoid to lanceoloid and somewhat angular, 1.3–1.6 × 0.5–0.7 mm, yellowish green, some faces flattish, often flecked with purple dots, with seed coat smooth or papillate (large seeds). Late January–mid-July.

Native. Annual occurring in openings and on disturbed slopes of chaparral and coastal sage scrub throughout the range, especially after fires. *Eulobus californicus*, formerly named *Camissonia californica*, during winter forms a distinctive basal rosette with reddish leaves, but the rosette leaves are absent during most of the flowering season. The plant has a central stem, but during springtime a plant normally forms a lateral branch from each axillary bud, and an individual may be almost as tall as a person and very bushy. Flowers of mustard evening primrose are vivid yellow and produce copious nectar, but this species is mostly self-pollinated and always self-compatible.

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