

Carpobrotus N. E. Brown FIG-MARIGOLD

Carpobrotus chilensis (Molina) N. E. Brown, SEA-FIG. Perennial herb, leaf-succulent, evergreen, fibrous-rooted, not rosetted, several-stemmed at base, mat-forming, trailing and rooting at buried nodes, prostrate and decumbent, \pm 10 cm tall; shoots with equal cauline leaves at each node, glabrous. **Stems:** 2-angled from edges of 2 leaf bases, to 9 mm diameter, covered with succulent leaf bases, tough, green when young, internodes 5 to 45 mm long, the shortest ones near the shoot tip, basal stems aging nonsucculent and irregularly several-ridged to narrowly winged, 3.5–6 mm diameter, covered with brown, withered leaf bases. **Leaves:** opposite decussate, simple, sessile with paired leaves fused across node and notched and creased at midpoint of stem, without stipules; blade 3-sided and \pm fingerlike curving slightly toward the stem, 25–50 mm long, typically reddish, the lower faces convex and 6–9 mm wide, the widest in middle, the upper face typically flat and 5–8 mm wide and the widest near base, becoming reddish above midblade, angles mostly smooth, cartilaginous and irregular below tip but not serrate, prowlike at tip with minute point, the lower angle acute and lateral angles typically obtuse; in \times -section with mucilage cells throughout the central area. **Inflorescence:** flowers solitary, terminal, short-stalked or sessile, lacking bracts, glabrous; peduncle (pedicel) $<$ 5 mm long. **Flower:** bisexual, radial, in range 25–30 mm across; **sepals** 4–5, dimorphic; outer 2 sepals typically opposite, leaflike, narrowly triangular to acuminate, 10–25 mm long, not membranous on margins except sometimes membranous at base of lateral angles, the lower angle typically smooth or sometimes cartilaginous and irregular but not serrate; inner 2–3 sepals helically alternate, with a submarginal, prowlike projection from base, 5–15 mm long, fleshy, the base ovate to roundish (oblate), membranous on margins, the membrane becoming spotted greenish and then in fruit showing reddish to maroon glands, spreading in fruit; **petals** 70–140 in 2–3 series, linear, in range 8–12 \times 0.5–1.5 mm, of the outer most series longer, broader, and sometimes 2–4-toothed at tip, strong reddish purple to magenta (rose), typically acute at tip, glabrous except of the inner series with ascending hairs at base (= petaloid staminodes); **stamens** 100+ in 3–4 series, free, erect; filaments 2.5–3 mm long within a flower, whitish to pale yellow, with numerous transparent ascending hairs at base; anthers basifixed, dithecal, 1–1.5 mm long, light yellow, narrowly arrow-shaped at base, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary inferior, sunken in receptacle tissue, typically 8–9-chambered, each chamber with many ovules attached to outer wall; styles absent; stigmas = number of chambers, tentaclelike, in range 6–8 mm long, yellowish green, conspicuously papillate on inner surface. **Fruit:** capsule, berrylike, indehiscent, 200–350-seeded, \pm ovoid, 17–20 \times to 16 mm, surrounded by persistent fleshy sepals; fleshy cover \pm drying while still attached to plant; chambers filled with mucilaginous liquid, seeds borne on long funiculi. **Seed:** \pm D-shaped compressed side-to-side, 1.2–1.4 \times 0.8–1 mm, glossy brown, with a low-convex cellular pattern on surface. Late April–late September.

Naturalized. Creeping leaf-succulent perennial herb growing on beach dunes along the California coastline and recorded in range but potentially always at risk of being removed by violent wave action. This species has reddish purple flowers that are much narrower than the widespread, dark-colored forms of *Carpobrotus edulis*. When the two species

grow side by side, *C. chilensis* is easily identified by having shorter and typically more bluish leaves, but the two species can and do hybridize, so expect some variability in a collection versus the above description.

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