Calystegia purpurata (Greene) Brumm. subsp. purpurata, PACIFIC FALSE BINDWEED. Perennial herbaceous vine, twining, rhizomatous, several-stemmed at base; shoots long, with widely spaced leaves, glabrous or glabrescent with sparse, fine, short hairs becoming glabrate; latex milky. **Stems:** cylindric, to 3 mm diameter, when young with 2 faint ridges descending from each leaf, with long internodes, green aging purple and forming purplish brown periderm at base. Leaves: helically alternate, simple with a pair of backward or spreading basal lobes, petiolate, without stipules; petiole slightly channeled, 9–32 mm long, with 2 inconspicuous ridges along channel, short-winged at base, the ridges continuous with descending ridges on stem, sparsely puberulent; blade with spreading basal lobes (\pm hastate) to arrow-shaped, $25-54 \times 12-39$ mm, each basal lobe typically with a conspicuous tooth or another lobe or sometimes 2-toothed at tip, above lobes narrowly triangular to lanceolate, palmately (5)7-veined at base with principal veins raised on lower surface. **Inflorescence:** flowers solitary and in 2–3-flowered cymes, axillary; pedicel stemlike, cylindric at base, above \pm quadrangular in \times -section, 43–110 mm long, terminated by bractlets; bractlets 2(4), opposite or subopposite, several mm below flower and not concealing calyx, erect, narrowly lanceolate, in range 9.3–14 × 1.1–2.7 mm, green, entire, 1-veined and sometimes with lateral veins evident at base, glabrous to sparsely strigose or pubescent, with tips somewhat overlapping calyx, with lateral veins descending on peduncle; pedicel 3.5–7 mm long. Flower: bisexual, radial, 20–45 mm across; pleated in bud; **sepals** 5, free or scarcely fused at base, erect, overlapping, ovate to elliptic or oblong, in range $9.3-13 \times 4.8-6$ mm, green but commonly reddish purple on exposed surfaces, entire and membranous on margins, glabrous except slightly ciliate at shortpointed tip; corolla funnel-shaped and pleated, in range 20–36 mm long, 5-angled, 5ribbed, whitish to pale yellow but on outer surface light green at base and light green aging reddish purple along ribs, the ribs slightly thicker than rest of corolla, 2–3.5 mm wide at base, tapered from base to top, terminating in an angle, the angles rounded, folded, or notched to blunt or \pm pointed, pubescent-ciliate, corolla irregularly short-dentate to jagged between angles; **stamens** 5, fused to corolla at base for 3–5 mm; filaments 10–17 mm long, 1.2–1.7 mm wide at base, tapered to \pm cylindric tip, glandular-papillate below midpoint; anthers included, basifixed, dithecal, linear or narrowly lanceolate to narrowly triangular, 3–6.5 mm long, arrow-shaped to cordate and 0.6–1.3 mm wide at base, whitish, longitudinally and laterally dehiscent; pollen whitish to pale yellow; **nectary disc** at base of ovary, ringlike cup, 0.6–1.1 mm long, 1.5–2 mm across, light golden yellow, 5-angled in ×-section, scalloped to 5-angled on rim; **pistil** 1, 11–20 mm long; ovary superior, broadly ellipsoid to ovoid, 1.8–2.3 × 1.5–1.7 mm, villous, 1-chambered with slightly intruding septum with 4 ovules attached at base, densely and long silky hairy inside chamber; style 8.5–14 mm long, glabrous except slightly villous at base; stigmas 2, whitish, narrowly oblong, $2.5-3.2 \times 0.6-0.9$ mm, \pm hemi-cylindric and flat on inner face, stigmatic on outer and inner faces. Fruit: capsule, loculicidal, dehiscent by several unequal valves, mostly 1–2-seeded, ovoid-spheroid, ca. 8 mm long, light brown, longhairy on inner surface. **Seed:** subspheroid, $3-4 \times 3-3.5$ mm, dull brown, minutely warty, with inner side flattened if touching another seed. Late May-early July.

Native. Climbing perennial herb known so far from a small area in the central SMM. *Calystegia purpurata* is a twiner that superficially resembles, but is easily separated from,

the common *C. macrostegia* subsp. *cyclostegia* by having a pair of narrow bractlets (bracteoles) attached several millimeters below the flower, and therefore not hiding the calyx. On vigorously growing plants, *C. purpurata* has both solitary and two-flowered or three-flowered cymes produced from the leaf axil.

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