

Calochortus clavatus S. Watson var. *gracilis* F. Ownbey, SLENDER MARIPOSA LILY. Perennial herb, geophytic, bulb-bearing, fibrous-rooted, 1-stemmed at base, ascending to erect, 20–35 cm tall; shoots with 1 basal leaf and to 5 slender cauline leaves, glabrous; bulb deep-seated, broadly ovoid, with membranous coat and 2 thick, nutrient-storing leaves. **Stems:** cylindric, < 2 mm diameter, green aging reddish, stiff and fibrous, straight, internodes to 80 mm long, often somewhat glaucous around nodes. **Leaves:** alternate distichous, simple with sheath; sheath closed (lower leaves) and open (upper cauline leaves), extremely short at node, open sheath with membranous margins 3–5 mm long; blade linear, 200–300 mm long, to 1.5 mm wide midblade, entire and sometimes inrolled to upper side on margins, parallel-veined. **Inflorescence:** cyme, terminal, open, 1–several-flowered, lacking lateral cymes, bracteate, glabrous; bractlet subtending pedicel leaflike; pedicel ± erect, at anthesis to 35 mm long increasing in fruit, glaucous. **Flower:** bisexual, radial, ca. 40 mm across, bell-shaped to cup-shaped, 25 mm deep; **sepals** 3, cupped-ovate to boat-shaped, 22–25 × 9–10 mm, membranous on margins and wider on exposed margin, glabrous, lower (outer) surface light yellow with pale yellow or whitish margins and ± uniformly dark reddish brown at tip, upper surface bright yellow with pale yellow to white on margins, having a zigzagged to arched, transverse, reddish mark at ca. 1/3 length above base and glaucous, with 9–12 ± parallel veins, lacking blotches or other markings near base; **petals** 3, with hairy nectary gland, cupped at base and fan-shaped or with broad obtuse tip (obtrullate), 28–30 × 25–27 mm, with an inconspicuous notch at tip, lower surface yellow but greenish yellow at base, bulging beneath nectar-producing gland, inner surface brilliant yellow with 2 reddish bands, club-shaped hairs, and nectary gland, the lower band broader and ca. 5 mm from base, the upper band arching and ca. 13 mm above base; **nectary** on upper surface between bands but closer to lower band and centered, circular and depressed, 2 mm diameter, yellow without darker markings, rimmed on margin, scattered hairs on surface, the rim membranous at base and ciliate, the ciliate hairs thick-stalked, unbranched or several-branched at tip, the surface hairs thick-stalked and many-branched at tip (coralline hairs); **stamens** 6, free; filaments nearly erect, ca. 10 mm long, fleshy, yellow, subcrescent-shaped in ×-section, bent outward, tapered to tip; anthers ascending, appearing basifixed, dithecal, narrowly oblong, 6–7 mm long, strong violet, longitudinally dehiscent; pollen violet; **pistil** 1, ± 17.5 mm long; ovary superior, columnar and conspicuously 3-angled, light green and somewhat glaucous, 3-chambered, each chamber with ± 30 ovules along 2 placentae attached to center, the portion approaching tip sterile; style poorly differentiated from ovary; stigma 3-lobed, yellow, each lobe recurved with lateral margins folded up and appressed together, 1.8–2 mm long. **Fruit:** capsule, septicidal, dehiscent by 3 valves downward from top, many-seeded, erect, 3-angled narrowly lanceoloid, in range 35–52 × 5–8.5 mm, acutely angled, appearing beaked and narrow-acuminate at tip (> 10 mm long), when immature somewhat reddish but not purplish along angles, becoming tannish when dry. **Seed:** in face view elliptic but with pointed ends, 4–4.5 × 2.5–3 × 0.5–0.7 mm, light tan, in lateral view flattish, with lateral sides ± ⊥ to broad faces, surface finely netlike. Late May–early July.

Native. Geophytic perennial herb for several years reported from SMM and eventually confirmed in June, 2010, from Zuma Creek at 428 meters elevation growing in shallow, gravelly soil over volcanic bedrock on the edge of *Ceanothus* chaparral growing with *Eriogonum cinereum*. *Calochortus clavatus* var. *gracilis* was presumed to be restricted to

the San Gabriel Mountains, but now should be searched for in range in appropriate habitat. In comparison with the common variety *pallidus*, variety *gracilis* is shorter in stature and has a stem that is not noticeably zigzagged and forms very narrow cauline leaves, hence the varietal name. Overall the flower and capsule of variety *gracilis* is smaller than of variety *pallidus*, but there are overlapping values. However, its anthers are short and deep violet, there is a characteristic reddish mark above the nectary gland on the petal, and there are subtle differences in the hairs on the petals. A population along Cornell Road in Agoura Hills was found to have some flower sizes of variety *gracilis* but instead had anthers too long and lacked the diagnostic reddish upper band on the petal.

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