

*Orobanche parishii* (Jepson) Heckard, PARISH'S BROOMRAPE. Perennial herb, nonphotosynthetic root parasite (holophyte lacking chlorophyll), fleshy, branched belowground, with several subterranean stems (< 10), erect, in range 5–30 cm tall; shoots densely glandular-pubescent, the hairs with colorless heads. **Stems:** cylindric, 4–8.5 mm diameter, from a swollen, subterranean base attached to host root, 40–120+ mm long (mostly subterranean), fleshy, pale yellowish and tinged reddish aging brownish. **Leaves:** reduced to nonphotosynthetic scales; scales helically alternate, congested at swollen base of stem and appressed becoming increasing spaced and like bractlets of inflorescence, broadly deltate to triangular, 1.5–5.5 × 1.8–5 mm, fleshy, pale yellowish aging pinkish to purplish red, obtuse at tip. **Inflorescence:** spikelike raceme, appearing scapose, 20–45-flowered, flowers helically alternate, bracteate, densely glandular-pubescent; rachis irregularly short-ridged, 50–180 mm long, with ridge descending from each bractlet and flower; bractlet subtending pedicel achlorophyllous, sessile, narrowly triangular to oblong, 5–11 × 1.3–2.8 mm, pale yellowish, glabrous on upper surface and glandular-pubescent on lower surface; pedicel appressed to suberect, cylindric, 1–2.5 mm long, yellowish, glandular-pubescent, with 2 bracteoles at top, bracteoles opposite, linear, 8.5–14 × 0.7–1.7 mm, glandular-pubescent on lower side and on upper side approaching tip. **Flower:** bisexual, bilateral, ± 10 mm across, 17.5–25 mm long; receptacle inversely conic, < 1 mm long; **calyx** 5-lobed, radial, 9.8–16.5 mm long, glandular-pubescent (exposed surfaces); tube cup-shaped, 2.5–4.5 × 2.5 mm, pale yellowish aging orange-brown; lobes appressed to corolla at anthesis, narrowly triangular to long-taped awl-shaped (subulate-attenuate), 6.7–12 × 1.2–3.3 mm, 3-veined with prominent midvein; **corolla** 2-lipped, pale to light yellowish but becoming reddish orange to purplish red along veins or ± uniformly reddish orange to purplish red on inside except pale yellow on margins; tube 4–4.7 mm long, conforming to shape of ovary and constricted above ovary; throat slightly arched outward, 7–8.3 mm long, 1.5–2.3 mm wide at base, 2.7–4.5 mm wide at orifice, pale yellowish with reddish rose to purplish red veins, longitudinally 2-ridged (palatal folds) on lower inside surface by inward folds of the tube (extending length of throat); upper lip 2-lobed, 3.7–6 mm long, lobes erect to spreading, narrowly semi-circular to oblong, 1.4–2 × 1.2–3.5 mm, rounded to acute at tip, the sinus between lobes shallow, 3-veined at base; lower lip 3-lobed, 3.8–5.5 mm long, lobes equal to subequal, ovate to lanceolate or narrowly triangular, 4.7–5.5 × 1.3–4.3 mm, acute to obtuse at tip, lobes 3-veined at base; **stamens** 4, lacking staminode, fused to corolla at base of throat, 2 fused to lower side and 2 to upper side; filaments 4–9 mm long, of lower stamens > upper stamens and attached lower on corolla tube, ± sigmoidal with a gentle curve at base and a tight bend approaching anther, glabrous; anthers dorsifixed, dithecal, 0.8–1.7 mm long and wide, creamy white, each sac ± oblong to D-shaped and acute at base, tomentose along margins of dehiscence, longitudinally dehiscent along outer margin (latrorse); pollen light yellow; **pistil** 1, 10–13 mm long; ovary superior, oblong to ellipsoid, ca. 2.5 × 1.7 mm, glabrous, 1-chambered with 4 placentae and numerous ovules; style 7–12 mm long, white or pale yellowish green except reddish at tip, glabrous; stigma umbrellalike to funnel-shaped, 1–2.6 mm diameter, sometimes asymmetric, papillate. **Fruit:** capsule, loculicidal, 2-valved, many-seeded (300+), ovoid to ellipsoid, 7–8 × 2.8–4.5 mm, brown, enclosed by persistent calyx. **Seed:**

mostly ovoid to subspheroid, 0.3–0.5 × 0.3–0.35 mm, dark brown to light grayish tan, netlike. July–early August.

Native. Parasitic perennial herb growing in coastal sage scrub in several localities, but rarely observed, most recently discovered by Jay Sullivan at SMMNRA Palo Comado (SH) on roots of *Corethrogyne filaginifolia* (Asteraceae) in coastal sage scrub beginning to return to southern oak woodland after fire damage, and also at Charmlee Park in Malibu (SMM). *Orobanche parishii* has several recognized subspecies, but ours appears to be an unnamed subspecies mentioned in *The Jepson Manual*, second edition, that has “narrow buff to yellow spikes, often with ± red marking on the corolla lobes, in oak-chaparral at 300–1500 meters elevation growing on *Isocoma* and other Asteraceae in San Diego, Orange, Los Angeles, and Riverside counties.”

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