

Orobanche L. BROOMRAPE

Orobanche uniflora L., NAKED BROOMRAPE. Parasitic perennial herb, achlorophyllous, with haustorial root, erect flowering stalks to 6(–12) cm tall; plant aboveground glandular-hairy, the hairs with short stalks and small heads; root attachment tuberlike embedded in host root. **Stem:** subterranean. **Leaves:** helically alternate, subterranean scales, sessile, without stipules. **Inflorescence:** racemelike with subterranean axis and 1–3+ erect, emergent flower stalks arising from top of stem, bracteate, glandular-hairy; bractlet subtending each pedicel, simple, sessile, appressed, partially or completely encircling pedicel, scalelike, 1.5–8.5 mm long, whitish; pedicels cylindric, in range to 65 mm long and ± 1.2 mm diameter, light orangey brown to straw-colored, glandular-hairy, the hairs transparent with yellowish amber heads. **Flower:** bisexual, bilateral, $5\text{--}5.5 \times 7\text{--}8.5$ mm across, 20–22 mm long; **calyx** 5-lobed, slightly bilateral with a wide sinus between lower 2 lobes, in range 7–8 mm long, pale orangey brown, glandular hairy; tube cup-shaped, $3\text{--}3.5 \times 3$ mm; lobes equal, long-tapered awl-shaped, 4–4.5 mm long, at anthesis appressed, with obscure venation; **corolla** 2-lipped; tube slightly compressed side-to-side, $\pm 8 \times 3.5\text{--}4.5$ mm, constricted above ovary to 2–3 mm wide, greenish yellow except for violet-purple on upper side near constriction; throat 8–10 mm long, expanding to 4–5 mm at mouth, mostly dark violet, yellow on lower side, internally longitudinally 2-ridged by inward folds of the tube, these ridges vivid yellow, minutely hilly (colliculate) and sparsely papillate; lips with sinuses 3–3.5 mm deep, all lobes 3-veined, glandular-hairy on surfaces, densely glandular with shorter hairs on margins; upper lip 2-lobed, lobes spreading, oblong, 2.7–3 mm wide, rounded, glandular-hairy slightly more so on margins, the sinus between lobes ± 2 mm; lower lip 3-lobed with 2 lateral lobes and central lobe, lateral lobes \pm oblong, 2.8–3 mm wide, dark violet, similar to lobes of upper lip, central lobe somewhat flattened round, 2.5×2.8 mm, violet with yellow at base; **stamens** 4, fused to corolla at base of throat, 2 from the upper side of corolla, 2 from lower side, without staminode; filaments 4.5–5 mm long, lower pair ca. 0.5 mm longer and attached to corolla slightly lower than upper pair; anthers dorsifixed, dithecal, pale yellow, with short tail at base, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 11 mm long; ovary superior, ellipsoid slightly compressed side-to-side, 4×2.3 mm, glabrous, 1-chambered with numerous ovules on 4 placentae (parietal); style glabrous, ± 7 mm long, white except reddish at tip, glabrous; stigma 2-lobed, each lobe \pm triangular. **Fruit:** capsule, loculicidal, 2-valved (weakly 4-valved), to 12-seeded, ovoid-ellipsoid, $4\text{--}4.5 \times 3$ mm, slightly compressed \perp septum, light brown, enclosed by persistent calyx; calyx purplish in developing fruit aging brown, with 5 conspicuous, low ribs alternating with lesser ones on expanded tube, lobes erect, to 4 mm long. **Seed:** not observed. Late April–early June.

Native. An elusive parasite perennial herb rarely seen in range and mostly observed growing on roots of *Ribes*, best known from Malibu Creek State Park. *Orobanche uniflora* is so named because a single flower terminates each stalk, but this is to be expected for a raceme where the aboveground stalk is actually a pedicel. If recognized, our populations would be called subsp. *occidentalis*.

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