

Samolus L. WATER-PIMPERNEL, BROOKWEED

Samolus parviflorus Raf. Perennial herb, ± aquatic, fibrous-rooted, rosetted from creeping, slender stem, 1-stemmed from rosette, unbranched or diffusely branched, erect, 10–40(–60) cm tall; shoots glabrous; roots adventitious. **Stems:** cylindric, slender, < 1 mm diameter, wiry. **Leaves:** helically alternate, simple, petiolate, without stipules; petiole winged, grading into blade, to 4 mm long, very short on upper cauline leaves; blade broadly elliptic or oval to obovate or ovate, 12–35(150) × 6–20(40) mm, typically tapered at base, entire, obtuse to round at tip (basal leaves) or broadly acute (cauline leaves) at tip, pinnately veined with conspicuous midrib and faint lateral veins. **Inflorescence:** raceme, terminal, several–many-flowered, to 70 mm long, somewhat delicate, bracteate, glabrous; peduncle ca. 10 mm long; rachis straight, flexuous, slender; bractlet subtending pedicel absent; pedicel ascending, 9–18 mm long, thin, ± flat-topped, initially overtopping buds, spreading in fruit, with another bractlet at midpoint or lower on pedicel, elliptic, 1–2 mm long. **Flower:** bisexual, radial, 2(–3) mm across; **calyx** 5-lobed, green; tube cup-shaped, ± 1.2 mm long; lobes ascending, triangular, 0.5–0.8 mm long; **corolla** 5-lobed, 1–1.5 mm long, white; tube ca. 0.2 mm long; lobes ascending like calyx lobes, round-oblong, 0.8–1.2 mm long, ± truncate or slightly notched at tip; **stamens** 5 fertile stamens (opposite corolla lobes) and 5 sterile staminodes (alternate with corolla lobes), fused to corolla; filaments and staminodes ± 0.3 mm long, white, tapered; anthers dorsifixed, dithecal, ca. 0.2 mm long, yellow, longitudinally dehiscent; pollen yellow; **pistil** 1; ovary ± inferior, fused to calyx tube, hemispheric and truncate, 1-chambered with many ovules attached to central post; style ± absent; stigmas (3)5, terminal, slightly lobed, papillate. **Fruit:** capsule, loculicidal, 5-valved, many-seeded, when open cup-shaped to bell-shaped, 2–3 mm across, 5 triangular calyx lobes opposite and partially covering 5 tannish, recurved valves, rarely splitting below midpoint, seeds on basal central post; calyx tube portion of fruit finely 10-ribbed. **Seed:** 4–5-sided, ± 0.5 mm long, dull reddish brown; seed coat minutely bumpy. Early July–early November.

Native. A rarely observed perennial growing in shade along several creeks on the coastal side of the SMM, e.g., in Trancas Canyon and at Leo Carrillo State Beach where it is wet most of the year at a permanent spring, hence it can be classified as an aquatic plant. Our specimens appear to be somewhat diminutive for the species, but more observations are needed. Flowers of *Samolus parviflorus* are rather tiny, and therefore difficult to study.
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