

Lobelia L.

Lobelia dunnii Greene var. *serrata* (A. Gray) McVaugh, ROTHROCK'S LOBELIA. Perennial herb, rhizomatous, 1-stemmed or several-many-stemmed at base, decumbent to ascending, 17–50(–85) cm long; shoots glabrous throughout or glabrous below and bristly pubescent above with stiff short hairs. **Stems:** ± cylindric, < 3 mm diameter, typically with 2 faint ridges descending from each leaf, mostly glossy green but purplish at base, glabrous. **Leaves:** helically alternate, simple, ± sessile, without stipules; blade of lower leaves obovate to narrowly oblanceolate, in range 10–44 × 5–10 mm, long-tapered at base, short-serrate on margins, acute to obtuse at tip, pinnately veined with midrib raised on lower surface, blade of middle and upper leaves narrowly elliptic to lanceolate or narrowly oblanceolate, 20–48 × 2–8 mm, narrowly broadly tapered at base, entire to remotely serrate and minutely toothed on margins, sometimes with reddish, gland-tipped or calloselike teeth, acuminate to acute at tip, pinnately veined with midrib raised on lower surface, glabrous to bristly pubescent. **Inflorescence:** raceme, terminal, ± congested or approaching headlike, several–23-flowered, leafy with flowers inverted by twisting 180° near pedicel base, bracteate, short-hirsute; peduncle short; rachis ± zigzagged; bractlet subtending pedicel leaflike, linear-elliptic or narrowly lanceolate, 7–11 mm long, reduced upward, entire to minutely toothed; pedicel at anthesis 2–4 mm long increasing < 2× in fruit. **Flower:** bisexual, bilateral, 10–12 mm across, 18–20 mm long; hypanthium bell-shaped to inversely conic, enveloping ovary to midpoint or 3/4, 1.5–3 mm long, with rim free from ovary ca. 0.5 mm, green, bristly pubescent to glabrous; **sepals** 5, ascending from rim of hypanthium, long-acuminate, 5.5–7 × 0.8–1 mm, green, swollen at base, spreading to somewhat recurved at tip, 1-veined, bristly pubescent to glabrous, sinuses often aging purple-red; **corolla** 2-lipped; tube ± cylindric, in range 7–12 mm long, expanded at base around top of ovary, whitish, conspicuously 5-ribbed, bristly pubescent, internally pilose, producing nectar diffusely at base, sometimes veins becoming dark reddish at base next to hypanthium; throat portion of lips 0.5–1 mm long, mostly white changing to pigmented above, with midvein raised on lower surface below each lobe; upper lip 2-lobed, lobes 4.5–7 × 0.8 mm, lavender-blue to strong violet or white with violet in middle; lower lip 3-lobed, lobes spreading, 8 × 3 mm (central lobe) and 6–7 × 2–3 mm (lateral lobes), sometimes with a prowl-like tip, lavender blue to violet, sparsely bristly pubescent to short-pilose; **stamens** 5, free at base 3.5–6 mm but weakly adherent to corolla tube; filaments arising at different levels, free portion flat, 1-veined, and short-pilose on outer side and glabrous on inner side, fused above forming a tube surrounding style; anthers exerted, basifixed, dithecal, 2–2.5 mm long, bluish gray to deep red-violet or purple with a paler or whitish connective, with free acute tips cupped inward, white-pilose on outer sides of sacs, with tuft of white bristles of tip of 2 short stamens (opposite lower lip), the bristles tapered and flat, 0.3–1.1 mm long, longitudinally and inwardly dehiscent; pollen whitish to light yellow; **pistil** 1; ovary half-inferior, narrowly obovoid to ellipsoid, 3.8–6.5 mm long, 10-ribbed, 2-chambered, each chamber with ca. 50 ovules attached to thick central post; style eventually exerted and spreading to 1.5 mm above fused anthers, 10–12 mm long, translucent-white to pale green, 2-branched, the branches cupped-obovate to roundish, 0.6 × 0.5 mm, purple with red-purple stigmatic papillae. **Fruit:** capsule, loculicidal, hidden by persistent, papery corolla, dehiscent at tip by 2 valves from tip to

level of hypanthium, many-seeded, compressed-obovoid, 6–7 mm long including pointed beak (lower style), straw-colored, to midpoint strongly 10-ribbed below hypanthium rim, glabrous to sparsely bristly pubescent. **Seed:** ellipsoid-lenticular, ca. 0.5 mm long, glossy light brown, smooth. Late July–late October.

Native. Perennial herb rarely encountered growing in shady canyons along creeks out of cracks in wet rock faces. *Lobelia dunnii* var. *serrata* is known from Malibu Canyon and Trancas Canyon westward to SMMNRA Circle X Ranch. The corolla tube contains nectar, perhaps for butterfly pollination, but each ovary forms a many-seeded capsule, indicating that it is self-compatible and may not require a pollinator because the stigma lobes touch the anthers and are easily dusted with pollen.

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