

*Penstemon centranthifolius* Benth., SCARLET BUGLER. Perennial herb, evergreen, several-stemmed at base, principal branches mostly unbranched, erect, (30–)90–140 cm tall; shoots with only cauline leaves, glabrous, glaucous. **Stems:** cylindric, 4.5–7 mm diameter, light green, smooth, internodes 35–75 mm long. **Leaves:** opposite decussate, simple, sessile with pair ± connected by low, narrow ledges across node, without stipules; blade lanceolate to narrowly triangular (ovate), 35–80(–100) × 10–26 mm, cordate to weakly clasping at base, entire, acute to narrowly rounded with short point at tip, pinnately veined with midrib raised slightly at base on upper surface and raised on lower surface, green becoming reddish on margins approaching tip, glaucous. **Inflorescence:** panicle of racemes with paired, axillary dichasial cymes (thyrses), terminal, 550–660(–950) × 40–60 mm, many-flowered (the longest with several hundred flowers), each cyme 1–6-flowered, bracteate, glabrous, glaucous; bracts subtending peduncle 2, leaflike and fused across node (connate-perfoliate), to 20 mm long; rachis green becoming purplish red on exposed sides; bracts subtending paired branchlets at each node 2, connate-perfoliate, reduced upward, persistent; branchlets ascending, at flowering 20–50 mm long (rachis to base of the uppermost flower), increasing to 80 mm long in fruit; bractlet subtending pedicel not fused across node, ovate, 2–3 × 1 mm, entire; pedicel ascending, at anthesis 6.5–10 mm long increasing to 25 mm in fruit, green aging purplish red. **Flower:** bisexual, bilateral, 5–8.5 mm across, long-tubular; **calyx** 5-lobed, 4.8–5.3 mm long; tube cup-shaped, 1.2–2 mm long; lobes overlapping, ovate (roundish), 2.8–4.5 × 2.5–4 mm, green becoming purplish pink on membranous margins and at acuminate tip, entire below midpoint and slightly jagged approaching tip; **corolla** 2-lipped, 5-lobed, 20.5–28.5 mm long, mostly vivid red; tube cylindric, 5–6.5 × 3–4.1 mm (diameter around ovary) and constricted to 2.4–3.5 mm diameter at top of tube, whitish to pale yellowish green or pale tan at base, with vertical, amber-colored glands at midtube (nectaries), nectar copious and thin; throat expanding to 3.5–5 mm diameter at orifice or slightly below orifice and above that slightly narrower, the orifice wider than tall; upper lip 2-lobed, lobes ascending to spreading, semicircular to somewhat flattened (oblate), ca. 1.5 × 1.8–2 mm; lower lip 3-lobed, lobes oblong, 2–2.2 × 1.6–1.8 mm, reflexed at ca. 45° to orientation of tube, central lobe narrower than lateral lobes; **stamens** 4 fertile + 1 staminode, upper 2 stamens almost free and fused to base of corolla tube, lower 2 stamens fused to top of corolla tube, included; filaments arched at base and terminating at midthroat, to 19 mm long (upper stamens) and fused to tube for ca. 7 mm, free portion coiled or arched, 14–14.5 mm long and terminating almost at orifice (lower stamens), whitish to pale yellow below and tinged pink above midpoint, glabrous; anthers positioned against roof of throat, dorsifixed, dithecal, ∩-shaped, sacs plump-ellipsoid, 1.5–2 × 0.9–1 mm, light yellow, entire on suture, longitudinally dehiscent by slits continuous across outer face becoming ⊥ to filament after dehiscence; pollen white; staminode fused to top of corolla tube, slightly exerted or to edge of middle lobe of lower corolla lip, free at 10.5 mm, bent at base of free portion, free portion pressed to floor of throat, white most of length; **pistil** 1, 27–31.5 mm long; ovary superior, narrowly ovoid to conic, 5–7 × 1.8–2.4 mm, green but whitish at tip (or aging reddish), 2-chambered, each chamber with many ovules attached to center; style straight but arched and slightly thickened at tip, slightly < the shorter stamens, glabrous; stigma terminal, minute, papillate. **Fruit:** capsule, septicidal later loculicidal, dehiscent by 4 valves, 40–50-seeded, conic, 10–14 mm long, valve tips somewhat recurved. **Seed:** irregular polyhedral with

4–7 faces and wings, 2–2.9 × 1.2–2.1 × 1–1.6 mm, dark brown to blackish on body and light brown on wings, the faces long and curved to small and flat, irregularly and shallowly honeycombed from collapsed cells, but some cells remaining convex. Early February–mid-June.

Native. Perennial herb appearing in small, isolated populations in chaparral of SMM and SH. During summer drought, *Penstemon centranthifolius* has vivid red tubular flowers that are visited by hummingbirds. In pure form this species of *Penstemon* is easily recognized, but within range variations observed may be due to past introgressive hybridization with *P. spectabilis*.

B. A. Prigge & A. C. Gibson