

Lupinus L. LUPINE

Lupinus concinnus J. Agardh var. *agardhianus* (A. A. Heller) C. P. Smith, BAJADA LUPINE. Annual, taprooted, 1–several-stemmed at base, with ascending lateral shoots, decumbent to erect, in range 5–20 cm tall; shoots appearing grayish, loosely white-villous with spreading hairs to 1 mm long + short-villous with arching hairs (stems); roots nodulated; cotyledons petiolate with bases fused across node, withering but petioles persistent. **Stems:** cylindric, to 2 mm diameter, reddish to deep red-purple at base. **Leaves:** helically alternate, palmately compound with 5–8 leaflets, petiolate, with stipules; stipules 2, attached to petiole above pulvinuslike base, ascending, linear, 1–3 mm long, green, with long hairs; petiole ascending, cylindric above enlarged base, in range 8–25 mm long; petiolules 0.2 mm long, whitish; blades of leaflets oblanceolate to narrowly obovate, in range 1–10 × 0.5–3 mm, terminal leaflet reduced to short basal leaflets, folded upward along midrib, tapered at base, entire, obtuse at tip, midrib only conspicuous and raised on lower surface, dull. **Inflorescence:** raceme, slightly exserted above canopy or concealed within canopy, precociously terminating a shoot or appearing axillary with new shoot arising from base of peduncle, several-flowered, flowers strictly alternate, bracteate, pilose; peduncle short–14 mm long, stemlike; rachis often purplish, hairy; bractlet subtending pedicel lanceolate, 2.5–3.5 mm long, green; pedicel 0.8–1.6 mm long increasing 2× in fruit, reddish. **Flower:** bisexual, bilateral. pealike (papilionaceous), 2–3 mm across; **calyx** 2-lipped, 4–5 mm long, green, villous with white hairs to 1 mm long; tube 0.6–1 mm long; upper lip deeply 2-lobed, lobes narrowly triangular to acuminate-lanceolate, 2.2–2.5 × 0.6–1 mm, 1-veined; lower lip lanceolate but 3-toothed at tip, 3.3–3.8 × 1.1–1.6 mm, green, 3-veined, teeth deltate, the lateral teeth < 0.3 mm long, the central tooth sometimes shorter and colorless; **petals** 5, glabrous; banner ascending and spreading, lacking claw, elliptic, 4–4.8 × 2–2.5 mm, whitish at base to reddish purple at margins, with purplish spots in transition, ridged on outer surface with yellowish along midvein; wings 2, clawed, claw ca. 1 mm long, white, limb 4.3–5.2 × 1.3–1.9 mm, slightly yellowish but purplish along outer margin, not fused at tip, lobe at base of limb ± semi-circular, 0.3 × 0.5 mm; keel of 2 partially fused petals, clawed, claw 1.3–1.5 mm long, limbs fused base to tip along lower margins, ± spatulate-elliptic to oblanceolate and curved upward, 5–5.5 × 1 mm, mostly white with purplish at tip; **stamens** 10, monadelphous (10 filaments fused into column); column fused for 2–2.8 mm, whitish, free portions 1–2 mm long alternating long and short; anthers basifixed, dithecal, 0.2–0.4 mm long with longer filaments having shorter anthers, orange-yellow, longitudinally dehiscent; anthers orange-yellow, copious, sticky; **pistil** 1, 4–5.6 mm long; ovary superior, 2–3 mm long, green, white-villous except on most of lower edge, 1-chambered with 3–5 ovules attached to upper side; style exserted, gradually curved upward, green, glabrous; stigma terminal, green, papillate with whitish hairs on periphery. **Fruit:** pod (legume), dehiscent via 2 valves sometimes twisting, oblong, 8–13 × 3–4 × 2.5 mm, tannish to light brown, bulging at seeds, villous, with persistent style; persistent on pedicel. **Seed:** compressed-obovoid to compressed broadly ellipsoid, ca. 2.5 mm long, dull, mottled tan and brown. Early March–mid-May.

Native. Annual occasionally encountered in open shrubland after burns. *Lupinus concinnus* var. *agardhianus* is the name best applied to plants in range, although not all authors recognize varieties. In comparison with desert populations of *L. concinnus*, which are densely brown-hairy and have well-defined terminal inflorescences, our plants are loosely white-villous, and the inflorescences tends to be either hidden within the canopy or barely extending above it. More study is needed to determine whether varieties of bajada lupine should be recognized.

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