

*Astragalus trichopodus* (Nutt.) A. Gray var. *lonchus* (M. E. Jones) Barneby, SOUTHERN CALIFORNIA LOCOWEED. Perennial herb, dying back to caudex during summer drought, many-stemmed at base, often branching at each node, erect to ascending, in range 30–80 cm tall; shoots with ascending cauline leaves, whitish or grayish, densely canescent to short-sericeous or with short-villous hairs, some individuals greenish with sparser and sometimes longer hairs. **Stems:** angled and low-ridged with 3 ridges descending from each leaf, slightly zigzagged, generally densely canescent to short-sericeous and short-villous; hollow. **Leaves:** helically alternate, odd-1-pinnately compound with 18–48 opposite to subopposite leaflets (sometimes alternate approaching tip), petiolate, with stipules; stipules 2, attached to petiole base and stem at node, occasionally fused and sheathing, acuminate-deltate, 2–5 mm long, pale green aging tannish, ± membranous and becoming reddish on margin, sericeous to short-villous on outer surface; petiole 8–45 mm long, flared at base, hollow; rachis deeply channeled, (40–)75–155 mm long, with leaflets attached to upper edges, hollow at base and solid above; petiolule = pulvinus, 0.5–1.5 mm long, (peripherally fleshy with vascular tissue ± in center), yellowish green becoming reddish on exposed surfaces, sericeous to short-villous with white hairs and aging orangey at base; blades of lateral leaflets lanceolate to elliptic or oblanceolate but terminal leaflet heart-shaped, 3–32 × 1.5–11 mm, decreasing upward, obtuse or broadly tapered at base, entire and narrowly reddish on margins, rounded (leaflets below midblade) to slightly notched (leaflets above midblade) at tip, inconspicuously pinnately veined, dull bluish green and short-sericeous or occasionally glabrate on upper surface. **Inflorescence:** raceme, axillary, (15–)26–36-flowered, flowers helically alternate, bracteate, short-hairy; peduncle ca. 7-ridged, 80–175(–200) mm, tough, curving upward, short-villous to canescent; rachis ridged, 1/3–3/4 length of peduncle, with ridge descending from each bractlet (pedicel); bractlet subtending pedicel triangular, 1.8–2.5(–3.3) mm, short-sericeous to short-villous with some (mostly basal) hairs aging maroon, persistent; pedicel ascending, 1–2 mm long increasing to 4 mm long in fruit, short-sericeous with a mixture of white and maroon to blackish hairs; bracteoles absent (or 2 and rudimentary). **Flower:** bisexual, bilateral, pealike (papilionaceous), 4–7 mm across; **nectary** nectar-producing receptacle beneath ovary not visible; **calyx** 5-lobed, 6–8 mm long; tube bell-shaped but ± oblique and slightly compressed side-to-side, 3.5–4.5 × 2.8–3.3 mm, mostly light green or light yellowish green but darker green at base where fused to receptacle disc, finely and sparsely short-sericeous with a mixture of dark reddish (nearly black) and white hairs; lobes often subequal, narrow acuminate, 1.3–3 mm long, < tube, sinus between upper lobes deeper and wider than other sinuses; **petals** 5, cream to ivory or pale greenish white, sometimes with pale pink or purple veins; banner obovate to ± rhombic, 11.5–18(–19) mm long, arched upward to 45–60° from beyond midpoint, somewhat spreading to bent backward at margins, notched at tip, with 2 ridges enveloping a portion of keel, cream to ivory white or pale yellow approaching tip, with 5–9 purplish pink veins opposite keel tip, light yellowish green on ridges, white at base; wings 2, clawed, ± lanceolate, 13–15 × 2–2.5 mm (including claw 6–9 mm long), with a free, backward-pointing lobe 1.5–3 mm long and an inward projection (ca. 0.5 mm long) locking with keel; keel of 2 petals fused along lower margins from 1–2 mm above base, clawed, upcurved 90° and scooplake above midpoint, (8.5–)10.5–13 mm long (including narrowly tapered claw 6–8 mm long), < wing length, with large dark lavender to purple spot opposite anthers fading after anthesis,

having a pair of backward-pointing lobes on each side and then a pair of dimples above claw, the lobes 0.7–1 mm long, the dimples clasping margin of wings; **stamens** 10, diadelphous (9 filaments fused and 1 free), 8.5–13 mm long; filament sheet 7–9 mm long, filament free portions 1.5–4 mm and curving upward 90° from end of sheet, white to pale green; anthers versatile, dithecal, oblong, ca. 1 mm long, orange-yellow, longitudinally dehiscent; pollen orange-yellow, copious, sticky; **pistil** 1, 10–13 mm long including stalk (stipe), stipe 2.3–3 mm long; ovary superior, narrowly fusiform-lanceoloid, 3.5–6 mm long, white-sericeous, 1-chambered with 26–30 ovules attached to upper side; style curved upward 90° or more and nearly forming a semicircle, mostly green and glabrous but white-sericeous at base; stigma terminal, minute, light green. **Fruit:** pod (legume), pendent (resulting from joint between ascending pedicel and reflexed stipe = gynophore), indehiscent, to 30-seeded, greatly inflated and ± boat-shaped with a slightly keeled lower suture and an upturned, prowl-like beak, typically (13–)17–32 × 8–16 mm, tan, rounded at base, slightly furrowed on upper side, aging veiny, sparsely short-strigose, 1-chambered; beak short and broadly deltoid, slightly flattened side-to-side; gynophore 5–12 mm long. **Seed:** kidney-shaped to oblong or ± cuboid, 1.7–2 (–3.2) × 1.5–1.8 mm, compressed side-to-side, dark brown, notched at hilum, dull and smooth. Late November–late May.

Native. Perennial herb occurring commonly in coastal sage scrub near the coast from the Pacific Palisades to Point Mugu and inland along the western edge of the range near Camarillo. *Astragalus trichopodus* var. *lonchus* is a bushy plant that begins flowering at the start of the winter rainy season, and is one of the few species blooming during December. Its shoots are often sericeous and tend to appear somewhat silvery, and flowers of this locoweed are mostly creamy to white or greenish white, and they give rise to distinctive, inflated pods containing many seeds.

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