

Acmispon glaber (Vogel) Brouillet, CALIFORNIA BROOM, DEERWEED. Shrub or subshrub, often hemispheric, drought-deciduous, green-stemmed (photosynthetic), much-branched with ascending to spreading branches, 50–140 cm tall (–200 cm tall in dense chaparral); shoots appearing sparsely leaved, leaves with “sleep movements,” ± short-strigose; roots nodulated. **Stems:** slightly angled when young (appearing with furrows when dried) becoming cylindrical and woody, slender, flexible, green and photosynthetic for several years (stomates present), conspicuously short-strigose with upward-pointing whitish hairs aging glabrescent. **Leaves:** helically alternate, in range pinnately 3-foliolate with opposite to subopposite lateral leaflets, short-petiolate without pulvinus, with stipules; stipules 2, attached to petiole, initially glandular and ± conic compressed top-to-bottom and acuminate, fleshy, greenish, sometimes becoming dotlike to hemispheric with loss or desiccation of tip, short-strigose, drying to orangey brown or sometimes black; petiole-rachis 2.5–6 (–7) × 0.6–1 mm, base narrowly tapered and < 0.5 mm long and stiff, with pulvinus (hinge) and then shallowly channeled above, reddish at base, pulvinus light green; petiolules = pulvinus 0.3–0.5 mm long, light green to pinkish; blades of leaflets lanceolate to oblanceolate or obovate, 5.5–13(–21) × (1.5–)2–4.5(–6) mm, terminal leaflet the largest, broadly tapered to rounded at base (terminal leaflet) to oblique (lateral leaflets), entire, acute to rounded with short point at tip, with only midrib evident and slightly raised on lower surface, dull dark green, lower surface sometimes glaucous. **Inflorescence:** leafy panicle of axillary 2–5(–7)-flowered umbels, bracteate, short-strigose; panicle to 400 mm long, having flowers and buds mostly clustered approaching tips, axis ridged, with ridge descending from each bract; bract subtending umbel leaflike, 3-foliolate, with 2 stipules; peduncle of umbel < 1 mm long; bractlet subtending each pedicel reduced to 2 red, compressed-conic stipules resembling stipules of leaves ca. 0.4 mm long, with blisterlike glands on base (= extrafloral nectaries); pedicel spreading to recurved, 1–1.5(–2) mm long, short-strigose. **Flower:** bisexual, bilateral, pealike (papilionaceous), ca. 5 mm across, (6–)8–11 mm long; **nectary chamber** around nectar-producing receptacle beneath ovary, 0.8–1 mm long, ± fleshy, green; **calyx** 5-lobed (teeth), (2.5–)3.5–5 mm long, green, short-strigose; tube ± cylindrical, 2.8–4 × 1–1.7 mm, often with curved base, 10-veined at base (5-veined), 5-veined above with 1 vein to each lobe; lobes ± equal or unequal, acuminate to acute, 0.5–1 mm long, upper 2 slightly wider and sometimes longer; **petals** 5, clawed, the claws 3–5 mm long and pale greenish yellow; banner 7.9–10.7 mm long, limb initially ± folded over wings and keel, at anthesis arching upward and spreading, after folded again, oblong to round, 4.9–6 × 4–5 mm, bright yellow to vivid yellow, notched or not at tip, developing orange markings along midvein and aging after pollination with radiating lines from base of banner; wings 2, ± as long as flower, limbs parallel with and concealing keel or only partially so, oblanceolate, 1.7–2.3 mm wide, bright yellow, lobed at base of blade; keel of 2 petals with limbs fused on lower margins to tip or nearly so, limbs ± oblanceolate and arching upward to 90° at tip, length slightly < to 1 mm > wings, light to vivid yellow but often paler than wings, with backward-pointing basal lobes, slightly to conspicuously notched at tip; **stamens** 10, diadelphous (9 fused and 1 free), 6.5–8.3 mm long; filaments fused nearly base-to-tip (staminal sheet), gradually tapered and curved, filament portion free 0.5–0.7 mm, greenish white; anthers dithecal, ca 0.4 mm long, pale yellow, longitudinally dehiscent; pollen white, copious, sticky; **pistil** 1, 7–9 mm long, ≥ stamens, subsessile; ovary superior, cylindrical, green, short-sericeous, grading into style, 1-

chambered with several ovules attached to upper side; style curved upward and > staminal sheet, whitish, tuft of hairs absent below stigma; stigma minute, slightly wider than style, flat to conic-capitate. **Fruit:** pod (legume), short-stalked (stipe) to 1 mm long, indehiscent, 1–2(–3)-seeded, ± straight to slightly curved cylindrical with an arching to hooklike beak and persistent style, 10–15 mm long (including stalk and style), seed-bearing portion to midpoint, purplish red, short-strigose to glabrescent, with ridge on lower edge, 1 seed at base and 1 seed just before tapered beak. **Seed:** oblong, 1.8–3 × 0.5–0.6 mm, dull dark brown, smooth, with hilum on side near midpoint. Early January–late August.

Native. Shrub to subshrub common throughout the range in coastal bluff, coastal sage scrub, and chaparral communities where often a codominant with *Eriogonum fasciculatum* and either *Salvia mellifera* or *S. leucophylla*. *Acmispon glaber* formerly was treated as *Lotus scoparius*. This is a “broom” plant with small trifoliolate leaves and flexible, photosynthetic stems, and it is an important nitrogen fixer for the communities. Two varieties are currently recognized; the widespread typical variety tends to have relatively long flowers in which the keel is approximately the same length as the wings. In *A. glaber* var. *brevialatus* (Ottley) Brouillet, mostly found in desert communities, flowers are comparatively short, and the keel is longer than the wings. In range both extremes and of the characteristics can be found, without showing an obvious geographic pattern, and it is impractical to force our populations into varietal categories.

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