

Medicago L. BURCLOVER

Medicago polymorpha L., CALIFORNIA BURCLOVER. Annual, taprooted, several-stemmed at base, prostrate and mat-forming to decumbent, 10–40 cm tall; shoots inconspicuously strigose aging glabrescent; roots nodulated. **Stems:** 4-ridged, with 3 ridges descending from each leaf, green to purple-red, tough, outer 2 faces concave, other faces convex on upper internode becoming flat on lower internode. **Leaves:** alternate distichous, pinnately 3-foliolate, petiolate, with stipules; stipules 2, fused along petiole base below pulvinus, semi-ovate in outline, 5–12.5 × 2–5.5 mm, lobed at base, jagged on margins with 9–23 teeth, the teeth acuminate, (0.3–)1.5–2(–3) mm long, fading to pale green where fused to petiole, glabrous; petiole shallowly channeled above pulvinus, 13–35 mm long, glabrous or sparsely strigose, typically with a few hairs at junction with rachis; rachis shallowly channeled, 0.8–7 mm long, glabrous but with a few hairs at junction with petiolules, sometimes with a few, scattered straight hairs; petiolules = pulvinus, 0.5–1 mm long, pinkish; blades of leaflets obovate to ovate, rhombic, or heart-shaped, 5–24 × 5.3–19 mm, terminal leaflet > lateral leaflets, tapered to rounded and reddish at base, short-toothed on margins, notched at tip with short point, the point reddish and pubescent, pinnately veined with parallel and evenly spaced lateral veins and midrib raised on lower surface, each vein extending as a minute point, upper surface glabrous, lower surface sparsely strigose at least along midrib or becoming glabrate. **Inflorescence:** raceme short and somewhat umbel-like, axillary, typically 3–7-flowered often with 2 or 3 flowers per node, bracteate; peduncle slender, at anthesis ascending and 2–17 mm long increasing 2× and spreading in fruit, ± strigose; bractlet subtending pedicel awl-shaped, 1–1.5 mm long; pedicel 0.3–0.6 mm long. **Flower:** bisexual, bilateral, pealike (papilionaceous), 3–3.5 mm across; **calyx** 5-lobed, 2.5–3.7 mm long, sparsely strigose; tube bell-shaped, faintly 10-veined, sometimes purple-spotted at sinuses; lobes = tube length, subequal, long-acuminate, with conspicuous midvein; **petals** 5, bright yellow; banner slightly clawed or lacking claw, spreading and arching upward, obovate, 4.5–5 × 3.1–3.7 mm, tapered at base, notched at tip, with ca. 6 purplish to dark red, radiating nectar lines; wings 2, clawed, 3.3–3.7 × 1.1–1.4, < banner, lobed at base, whitish on claw and lobe; keel of 2 partially fused petals, clawed, 3–3.2 × 0.8–1.1 mm, wings > keel, claw ca. 1.5 mm long, lobed at limb base, whitish on lobe and claw; **stamens** 10, diadelphous (9 filaments fused and 1 free); filaments fused into sheet around pistil, sheet 2–2.5 mm long + free portion < 0.5 mm long, free filament 1.6–2 mm long, pale green; anthers basifixed, dithecal, < 0.2 mm long, yellowish, longitudinally dehiscent; pollen yellowish; **pistil** 1; ovary superior, compressed crescent-shaped to linear and partially twisted, 2 mm long, ± cobblestonelike, 1-chambered with several ovules attached to upper side; style upturned; stigma narrowly peltate, green, densely fringed from below with kinky hairs. **Fruit:** pod (legume), indehiscent, 4–6-seeded, 2–6-coiled, 4.5–8 × 7–10 mm, with 2 rows of prickles on outer margin, the prickles minutely hooked and spreading, 1–2 mm long. **Seed:** kidney-shaped, 2.5–3.2 × 1.5–1.9, light tan. Late December–mid-July.

Naturalized. Annual occurring throughout the range in disturbed locations and along roadsides and drainage ditches. *Medicago polymorpha*, originating from the Mediterranean Region, is fully naturalized and in range probably is the most common

trifoliolate herb, whereas its smaller cousin, *M. lupulina*, is still restricted to recreational parks and around urbanized communities. Fruits are tightly coiled (“burclover”), which makes it is easily distinguished from the trifoliolate *Melilotus indica*, which occurs in the same habitats and often in mixed stands.

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