

Medicago lupulina L., BLACK MEDICK, YELLOW TREFOIL. Annual, taprooted, several-stemmed at base, prostrate to ascending, typically < 8 cm tall, radiating to 60 cm from root crown; shoots initially sericeous maturing short-pilose; roots nodulated. **Stems:** 4-ridged aging cylindric, to 3 mm diameter, with 3 ridges descending from each leaf, internodes 5–55 mm long, pubescent with erect or ascending hairs. **Leaves:** helically alternate, pinnately 3-foliolate with paired lateral leaflets, petiolate with pulvinus, with stipules; stipules 2, attached to petiole base and stem or sometimes only petiole base, asymmetrically lanceolate, 3–8.5(–10) × 1.5–2.7 mm, green but paler where attached to petiole, clasping at base, entire or toothed and sometimes ciliate on margins, ± acuminate at tip (2-toothed), short-pilose sometimes becoming glabrescent; petiole 2–30 mm long, jointed and with pulvinus just above stipule attachment; rachis narrowly channeled, 1.5–3.5 mm long, soft-pubescent; petiolules = pulvinus, 0.5–0.6 mm long; blades of leaflets broadly elliptic to obovate or roundish to rhombic, 4–12.5(–17) × 3–9.5(–15) mm, terminal leaflet > lateral leaflets, broadly tapered at base, entire to short-dentate or short-crenate on margins, obtuse to truncate or short-notched at tip typically with a tooth at end of midrib, pinnately veined with parallel and evenly spaced lateral veins, somewhat soft-pubescent. **Inflorescence:** headlike raceme, axillary, ascending to erect, asymmetrically ovoid, 3.5–4 mm across, 10–42-flowered, flowers helically alternate, initially erect and formed lower on outer side of rachis than inner side, bracteate; peduncle 8–25 mm long increasing in fruit, ≥ subtending leaf, < 0.6 mm diameter, densely soft-pubescent; rachis 2.5–3 mm long increasing to 3× in fruit; bractlet subtending pedicel narrowly awl-shaped, 0.5 mm long; pedicel = bractlet length. **Flower:** bisexual, bilateral, pealike (papilionaceous), < 1 mm across; **nectary** receptacle below ovary, but nectar not observed; **calyx** 5-lobed, 1.5–1.7 mm long; tube 0.6–0.9 mm long; lobes unequal, long-acuminate, 0.5–1 mm long, the lobe opposite keel the longest (0.7–1 mm), the 2 lobes alternate with banner the shortest (0.5–0.6 mm), thinly sericeous; **petals** 5, short-clawed, bright yellow; banner broadly obovate, 1.5–1.8(–2.5) mm long, folded concealing wings and keel and never spreading; wings 2, 1.2–1.4 mm long, yellow at tip fading to base, locked to keel; keel of 2 petals fused most of length on lower edge of limbs, 1.2–1.4 mm long, yellow at tip fading at base; **stamens** 10, diadelphous (9 filaments fused and 1 free); filament sheet ± 0.5 mm long, white, filament free portions ± 0.6 mm long, expanded at base; anthers basifixated, dithecal, 0.05–0.1 mm long, light yellow, longitudinally dehiscent; pollen pale yellow to whitish; **pistil** 1, snail-like, ± 1 mm long, with stalk (stipe) ± 0.2 mm long, green; ovary superior, ovoid compressed side-to-side, ± 0.4 × 0.3 mm, green, pubescent with stalked glandular hairs, 1-chambered with 1 ovule attached to upper side; style hooked, ± 0.4 mm long, white-translucent, compressed side-to-side, ± 0.2 mm wide at base tapering to stigma; stigma capitate. **Fruit:** pod (legume), indehiscent, 1-seeded, plump kidney-shaped, 2.4–3 × 1.8–2.4 mm, very dark brown to blackish (fully mature), strongly veined, with curved veins from base but netlike venation near outer margin, lacking prickles, when immature with stalked glandular hairs aging glabrescent. **Seed:** ± kidney-shaped and filling fruit, dull light tan and sometimes tinged reddish purple around hilum, minutely veined. January–December.

Naturalized. Annual appearing occasionally in range, typically occurring in or close to lawns of parks, where plants receive supplemental water and flower therefore any time of

the year following rapid growth. *Medicago lupulina* has cloverlike, three-foliate leaves and tiny headlike racemes of yellow flowers. The flowers are typically closed and probably self-pollinated, and each readily forms a veiny, very dark, blackish fruit, hence the common name black medick.

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