

Vascular Plants of Williamson County

Medicago lupulina – BLACK MEDICK, YELLOW TREFOIL [Fabaceae]

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 basifixed, 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.

A. C. Gibson & B. A. Prigge