

Vascular Plants of Williamson County

Melilotus indicus – SOURCLOVER, INDIAN MELILOT [Fabaceae]

Melilotus indicus (L.) All., SOURCLOVER, INDIAN MELILOT. Annual, taprooted, 1–several-stemmed at base, principal shoots sometimes branched at every node, erect to ascending, 15–120 cm tall; shoots initially sericeous becoming glabrescent, pleasantly scented when fresh or drying; roots nodulated. **Stems:** initially strongly ridged aging \pm cylindric, to 7 mm in diameter, with 3 ridges descending from each leaf, \pm tough, semiglossy to glossy; old stems inconspicuously striped; hollow. **Leaves:** helically alternate, pinnately 3-foliolate with paired lateral leaflets, petiolate with pulvinus, with stipules; stipules 2, attached to sides of petiole base for 1–5 mm, awl-shaped to acuminate-lanceolate, 3.8–15 mm long, green, often lobed or with a basal tooth or lobe on outer edge, typically entire but sometimes short-serrate (large stipules), at lower nodes partially sheathing and often with narrower lobes and wide below midpoint, pubescent aging glabrescent and scarios; petiole with pulvinus above stipules, channeled (including pulvinus), 4–40(–65) mm long, the pulvinus ca. 1 mm long, not swollen, above pulvinus with fine hairs; rachis channeled, 1.5–6.5 mm long; petiolule = pulvinus, 1–1.5 mm long, often pubescent; blades of leaflets rhombic-elliptic to obovate or oblanceolate, 8.3–35 \times 3–24 mm, terminal leaflet as long as lateral leaflets or slightly wider, broadly tapered at base, entire from base to midblade but regularly short-serrate on margins above midblade, truncate or slightly notched with a short tooth at tip, pinnately veined with straight vein to each tooth, upper surface dull bluish green and glabrous, lower surface lighter green with appressed hairs.

Inflorescence: raceme, axillary, ascending, cylindric and 5–6 mm diameter in flower and fruit, 10–60-flowered, flowers alternate and sometimes in loose pseudowhorls, at first flowering raceme < 25 mm long increasing to 150 mm long and appearing interrupted in fruit; peduncle 12–45 mm long; rachis conspicuously many-ridged, each ridge descending from a bractlet (pedicel), short-hairy with arching hairs; bractlet subtending pedicel fingerlike attached to raised base, 0.6–0.9 mm long with upper portion < 0.5 mm long and curved toward pedicel, persistent; pedicel 1 mm long, arched becoming recurved after anthesis and in fruit often reddish on upper side. **Flower:** bisexual, bilateral, papilionaceous, 1.3–2.5 mm across, 2–3 mm long, in bud spreading at anthesis nodding; **nectary** nectar-producing receptacle below ovary, nectar present within stamen sheet; **calyx** 5-lobed, 1.5–2.2 mm long, green, sparsely hairy; tube inconspicuously 10-veined; lobes acute-lanceolate, unequal, 0.5–1.5 mm long, the lowest lobe < other lobes; **petals** 5, short-clawed, bright yellow; banner obovate, 2.5–3 \times ca. 1.5 mm (including short claw), arching upward and at anthesis spreading, whitish at base; wings 2, locked to keel, ca. 2.5 \times 0.5 mm, claws \pm 0.8 mm long, white; keel of 2 petals partially fused on lower edge, \pm 2.5 \times 0.7 mm, with whitish claw 0.7–1 mm long, rounded along fused edge, arching up to the rounded tip; **stamens** 10, diadelphous (9 filaments fused and 1 free), to 2 mm long; filaments sheet 1–1.5 mm long, whitish; anthers basifixed, dithecal, < 0.2 mm long, pale yellow to pale orange, longitudinally dehiscent; pollen pale yellow to pale orange; **pistil** 1, 2–2.5 mm long and slightly > stamens, short-stalked (stipe); ovary superior, narrowly fusiform and compressed side-to-side, 1–1.2 mm long, greenish, papillate hairy, 1-chambered with 1–3 ovules attached to upper side; style slightly curved, whitish; stigma minute, yellowish green. **Fruit:** pod (legume), indehiscent, typically 1-seeded, ellipsoid

compressed side-to-side, 3–5 × 2–2.7 mm, tannish and papery, sides veiny, sutures raised slightly; beak (style) often observed on developing fruits. **Seed:** ellipsoid, 2.5–3.3 × ca. 1.7 mm, dull grayish brown to olive brown.

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