

Vascular Plants of Williamson County

Melilotus albus – WHITE SWEETCLOVER [Fabaceae]

Melilotus albus Medik., WHITE SWEETCLOVER. Annual (biennial herb), taprooted, several-stemmed at base, with ascending branches throughout, ascending to erect, 50–200 cm tall; shoots sparsely short-strigose becoming glabrescent, freshly scented (like alfalfa, *Medicago sativus*); roots nodulated. **Stems:** 5–6-ridged, to 8 mm diameter, with 3 conspicuous ridges descending from each leaf, tough, green and finely striped; pith white, stem aging hollow. **Leaves:** helically alternate, pinnately 3-foliolate with paired lateral leaflets, petiolate with pulvinus, with stipules; stipules 2, fused to petiole base and stem at node on a thickened flap, free portion linear to narrowly awl-shaped, 5–12.7 mm long, green, linear portion with 1 vein; petiole with pulvinus above stipules, channeled (including pulvinus), 4–25 mm long, the pulvinus ca. 1 mm long, not swollen, above pulvinus with fine appressed hairs or glabrous; rachis channeled, 1.5–8 mm long; petiolule = pulvinus, short, ± 1 (–several) mm long, finely hairy; blades of leaflets elliptic or oblong to ovate, (10–)15–37.5(–40) \times 2.5–20 mm, terminal leaflet 2–7 mm $>$ lateral leaflets, broadly tapered at base, regularly short-serrate on margins, rounded or truncate at tip, pinnately veined with midrib raised on lower surface, dull, lower surface typically sparsely short-strigose. **Inflorescence:** raceme, axillary, cylindric, to 170 \times 10–12 mm, typically 20–60-flowered, flowers helically alternate, bracteate, puberulent; peduncle \geq subtending leaf, to 100 mm long, peduncle and raceme axis conspicuously ridged, with each ridge descending from a bractlet (pedicel) and having a swelling on ridge just below bractlet; bractlet subtending pedicel threadlike, to 1 mm long, sparsely hairy, somewhat persistent; pedicel 1–2 mm long, arching or often recurved. **Flower:** bisexual, bilateral and pealike (papilionaceous), 2 mm across, with a faint, sweet fragrance; **nectary** nectar-producing receptacle below ovary, nectar present within stamen sheet; **calyx** 5-lobed, ± 2 (–3) mm long, green; tube 1.5–2 mm wide, 5-veined (inconspicuously 10-veined), short-strigose; lobes subequal, acuminate, 0.8–1(–2) mm long; **petals** 5, all \pm white; banner lacking claw, broadly ovate, 3.5–5 \times 2.5–4 mm, with margins initially folded over wings but at anthesis with margins and above midpoint spreading upward and outward; wings 2, clawed at base, \pm oblong, 2.5–4 mm long, claws ca. 1 mm long and upwardly curved, with a backward-pointing, fleshy tooth at base of upper margin, adhering to keel below tooth; keel of 2 petals partially fused on lower edge of limbs, short-clawed at base, 2–3.8 \times 1 mm; **stamens** 10, diadelphous (9 filaments fused and 1 free), 2.3–3.4 mm long; filaments sheet to about midpoint, whitish; anthers basifixed, dithecal, 0.25–0.3 mm long, light orange or bright to creamy yellow, longitudinally dehiscent; pollen whitish, discharged before flower opens; **pistil** 1, 2.5–3.3 mm long and slightly $>$ stamens, short-stalked (stipe); ovary superior, narrowly fusiform, green, 1-chambered with 3 ovules attached to upper side; style curved, pale green to whitish, glabrous; stigma obliquely capitate. **Fruit:** legume (pod), indehiscent, 1-seeded, ovoid, 3(–5) \times 2 mm, conspicuously net-veined, pointed at tip. **Seed:** \pm ovoid, 1.7–2 \times 1.3–1.5 mm, dull orange-yellow to light yellow-brown, smooth.

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