

Vascular Plants of Williamson County
Astragalus leptocarpus – BODKIN MILKVETCH [Fabaceae]

Astragalus leptocarpus Torrey & A. Gray, BODKIN MILKVETCH. Annual, fine-taprooted, initially rosetted, 1–several-stemmed at base, with ascending branches in canopy, in range < 20 cm tall; shoots with basal leaves withered at flowering and cauline leaves < 30 mm long, short-strigose with white, upward-pointing appressed hairs, plant totally lacking glandular hairs, not glaucous. **Stems:** low-ridged, to 1.5 mm diameter, with 3 ridges descending from each leaf, green or reddish and ridges on lower stem often red-purple, short-strigose with upward-pointing hairs. **Leaves:** helically alternate, odd-1-pinnately compound with 5–6 opposite pairs of lateral leaflets, petiolate, with stipules; stipules 2, attached to petiole base and stem at node (not fused), deltate to triangular, 2–3.5 × 1–2 mm, green, short-strigose with upward-pointing hairs; petiole slender-cylindric (pulvinus not evident), to 10 mm long, green, short-strigose; rachis like petiole; petiolules = weak pulvinus, 0.3–0.35 mm long, whitish, with 0–several hairs; blade of leaflets elliptic to oblong or obovate, mostly 3.5–4 × 1.2–1.5 mm, oblique and tapered at base, entire on margins often 1 margin with several short-strigose hairs, shallowly notched to truncate at tip, 1-veined with midrib closer to trailing edge, dull green, upper surface glabrous, lower surface short-strigose along midrib. **Inflorescence:** raceme, axillary from each leaf in canopy, in range 1–2-flowered (observed; elsewhere 2–7-flowered), flowers alternate, bracteate; peduncle ascending, slender, somewhat angled, 20–25 mm long increasing 2× in fruit, short-strigose with upward-pointing hairs; bractlets (bractlet and bracteole) subtending pedicel 2, unequal, short-strigose on lower surface, lower bractlet awl-shaped, ca. 1.2 mm long, upper bractlet ca. 2 mm long, with slight swelling at tip, reddish; pedicel ca. 0.7 mm long increasing in fruit, pale green. **Flower:** bisexual, bilateral, pealike (papilionaceous), ca. 5 mm across; **nectary** on receptacle beneath ovary, nectar not observed; **calyx** 5-lobed, ca. 3.5 mm long, green or blushed rose to crimson, white short-strigose with upward-pointing hairs; tube ± bell-shaped and not compressed, to midpoint; lobes subequal, narrowly triangular, 1.4–1.8 mm long, on lower side central lobe < lateral lobes; **petals** 5; banner without claw, arching upward and spreading at margins, obovate with cupped, wedge-shaped base and roundish limb, in range ca. 8.5 × 5.5 mm, base and central portion pale purple (whitish) bordered by rose-purple and having darker nectar lines radiating from light center through purple to margins; wings 2, overlapping at tips in front of keel, clawed, claw slightly curved and linear, ca. 2 mm long, white, limb ± oblong, ca. 6 × 1.5–1.8 mm, with short backward-pointing lobe at base, lobe and lower portion white and upper portion rose-purple; keel of 2 clawed petals fused most of length along lower edge and on upper side ca. 2 mm to tip, ca. 5.5 mm long, claws ca. 2 mm long, white, limbs upcurved 75° and scooplike with slender tip, purple on scoop and white along upper side; **stamens** 10, diadelphous (9 filaments fused and 1 free), ca. 6 mm long; filaments fused into rectangular sheet 3.6–4 mm long, white, margins of filament sheet slightly curving upward around ovary, filament free portion 1.8–2.1 mm long, curved upward conforming to curve of keel; anthers dorsifixed, dithecal, monomorphic, 0.35–0.4 mm long, yellow-orange, longitudinally dehiscent; pollen yellow-orange, released in bud; **pistil** 1, ca. 5.5 mm long, short-stalked, the stalk < 1 mm long; ovary superior, straight and linear, ca. 3.5 mm long, green, glabrous, incompletely 2-chambered with a descending partition and

having a row of ca. 10 ovules attached to upper side of each placenta; style 1.5–2 mm long, curved upward 90°, pale green, glabrous; stigma capitate, minute. **Fruit:** pod (legume), somewhat 2-lobed, dehiscent by breaking lengthwise within partitions into 2 segments with to 10 seeds enclosed within each valve, before dehiscent straight with tip short-curved + beak (style) ca. 2 mm long \perp fruit tip, in range 20–26 \times 3.8 mm, dark brown, veiny, glabrous; stalk below fruit 1.5–2 mm long. **Seed:** kidney-shaped compressed side-to-side, ca. 1.6 \times 1.3 mm, glossy light brown, hard.

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