Vascular Plants of Williamson County

Vicia ludoviciana subsp. leavenworthii – LEAVENWORTH VETCH, DEERPEA VETCH [Fabaceae]

Vicia ludoviciana Torrey & A. Gray subsp. leavenworthii (Torrey & A. Gray) Lassett. & C. R. Gunn, LEAVENWORTH VETCH, DEERPEA VETCH. Annual vine, taprooted, with tendrils, several-stemmed at base, branched, sprawling and climbing over other plants; shoots somewhat 2-dimensional (plagiotrophic) or not, short-villous (villous); tendril = terminal portion of blade, unbranched to unequally 3-branched, the branches modified leaflets; roots nodulated. Stems: 3-5-angled, in range < 2 mm diameter, with 3 ridges descending from petiole midvein and stipules, flexible, internodes < 30 mm long, green or ridges purplish. Leaves: helically alternate, 1-pinnately compound with (4-)8-16 alternate and subopposite leaflets, short-petiolate, with stipules; stipules 2, \pm equal in a pair, spreading, 2-lobed, asymmetric, linear-lanceolate to linear (lanceolate) commonly with an outpointing, \perp basal lobe, $1.4-3.5 \times 0.5-0.7$ mm and basal lobe < 1 mm long, green with red-purple, soft-hairy to glabrescent; petiole slightly channeled, 1.5-3.5(-5)mm long, often red-purple, soft-hairy; rachis shallowly channeled with leaflets attached to the edges of channel, to 40 mm long below tendril, green but red-purple where leaflets attached, short-villous; petiolules to 0.6 mm long, pale green (whitish), sparsely hairy; blades of leaflets elliptic or oblong to ovate (obovate), $7-11 \times 2.5-5.5$ mm, tapered at base, entire, rounded (obtuse) with short point at tip, pinnately veined with midrib slightly raised on lower surface, dull green, in range surface soft-hairy; tendril shallowly channeled at base to nearly cylindric approaching tip, principal axis to 30 mm long, sometimes pinkish. **Inflorescence:** 2–5-flowered raceme, axillary, in range no more than midpoint on the adjacent leaf, lacking bracts, soft-hairy and green tissue with minute glandular hairs; peduncle ca. 4-ridged, at anthesis 6–25 mm long increasing some in fruit, green with purplish ridges, flexible, short-strigose; rachis short extending beyond last flower by 1.5-2 mm; pedicel 0.5–1 mm long, with decurrent base along rachis. Flower: bisexual, bilateral, pealike (papilionaceous), 1–1.5 mm across, 5 mm long; calvx 5-lobed, 3.5–4 mm long, short-villous with minute glandular hairs; tube bell-shaped compressed side-to-side, \pm 1.5 mm long, green and reddish, not inflated or pouched; lobes unequal, linear to narrowly triangular flared at base, 1.1–2.3 mm long, the lower lobe longer; petals 5, banner strongly folded over flower, not clawed, obovate and shallowly 2-lobed, ca. 5×4 mm, light violet at base and above midpoint with white between with ascending darker veins; wings 2, adherent to keel, clawed, claws linear, 1 mm long, white, lobe oblongobovate, ca. 4×1.3 mm, toothed at base, the tooth basally pointed on upper edge of wings ca. 0.6 mm long, white; keel of 2 petals fused base nearly to tip, curved upward, white with dark purple blotches on exposed portion, notched at tip; stamens 10, diadelphous (9 filaments fused and 1 free); filament sheet 2.8-3.1 mm long, whitish, free portions ca. 1 mm long, white, arching upward 90°, the free filament flat and flared tapered from broad base; anthers dorsifixed, dithecal, of 2 sizes, 0.25–0.3 mm long and 0.4 mm long, orangeyellow, longitudinally dehiscent; pollen pale orange-yellow; pistil 1, with short stalk (stipe); ovary superior, elliptic compressed side-to-side, ca. 2.5×0.7 mm, green, glabrous, 1-chambered with to 7 ovules attached to upper side; style to 1.5 mm long, bent sharply (90°) at base, white above bend, short-hairy on 0.5 mm of style and tip; stigma minutecapitate. **Fruit:** pod (legume), dehiscent, 2-valved, 6–7-seeded, \pm oblong slightly compressed side-to-side, 18–22 × 4 mm, tapered at base, prowlike and short-beaked at tip, not veiny, not bulging at seeds, glaucous brown with purple blotches. **Seed:** subspheroid, 2–2.4 × 1.8–2 mm, dull olive to dark olive-brown with black spots and blotches, having hard seed coat; hilum 1–1.5 × 0.25 mm, brown. A. C. Gibson