

*Vicia ludoviciana* Torrey & A. Gray subsp. *ludoviciana*, DEERPEA VETCH. Annual vine, taprooted, with tendrils, 1-stemmed at base, branched, sprawling and climbing over other plants; shoots somewhat 2-dimensional (plagiotropic) or not, short-strigose, villous, and short-villous; roots nodulated. **Stems:** winged, < 3 mm diameter, with 3 wings descending from petiole from midvein and lateral veins, flexible + leaflets at end converted into 2(–3) tendrils, sparsely soft-hairy. **Leaves:** helically alternate, 1-pinnately compound with 6–9 alternate leaflets, sessile to short-petiolate, with stipules; stipules 2, unequal in a pair, asymmetrically lanceolate to narrowly triangular commonly with a  $\perp$  basal lobe, 4–6.5  $\times$  1–2.5 mm and basal lobe 3–3.5 mm long, green, generally developing a tooth on smaller lobe on outer margin (stipule appearing 3-lobed), the ascending larger lobe triangular to lanceolate, 4–4.5 mm long, the spreading (downward-pointing) later lobe triangular to lanceolate, 3–3.5 mm long, often toothed on inner margin near base, the tooth deltate to narrowly triangular, 0.6–1.1 mm long; petiole to 1 mm long; rachis slightly channeled, 50–70 mm long, with leaflets attached to the edges of channel, villous; petiolules < 0.5 mm long, pale green becoming reddish with a reddish ring around base, hairy; blades of leaflets narrowly oblong, 10–28(–35)  $\times$  2–5.5 mm, entire, rounded (truncate) with short point at tip, pinnately veined with veins slightly raised on lower surface, dull green, upper surface glabrous, lower surface sparsely sericeous. **Inflorescence:** 2-flowered raceme, axillary, in range 45–50 mm long,  $\pm$  equaling or > the leaflet-bearing portion of the subtending leaf rachis, lacking bracts, soft-hairy throughout; peduncle strongly ribbed, 27–30 mm long increasing to 43 mm long in fruit,  $\pm$  villous; rachis 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), to 4.5 mm across, 5.5 mm long; **calyx** 5-toothed, 5-ribbed, ribs green and pale green or whitish becoming reddish purple between ribs, long-hairy; tube ca. 2 mm long; teeth unequal, linear, flared at base, 1–1.5 mm long, the lower teeth longer; **petals** 5, clawed, violet at exposed margins fading to center and base; banner spreading outward and curving upward beyond claw, roundish, ca. 5 mm long including claw < 1.5 mm long, violet with ascending darker veins and a white triangular center tapering toward tip, notched at tip; wings 2, arching upward, clawed,  $\pm$  oblanceolate, ca. 4.8  $\times$  1.8 mm including claws ca. 1.5 mm long, toothed at base, the tooth basally pointed on upper edge of wings ca. 0.6 mm long; keel of 2 partially fused petals, curved upward,  $\pm$  semicircular but clawed and toothed at base, with an ill-defined violet mark below tip fading to pale yellow or whitish at base; **stamens** 10, diadelphous (9 filaments fused and 1 free); filaments 2.8–3.5 mm long, filament sheet pale green, free portions 0.8–1.5 mm long, whitish, arching upward 90°, the free filament straight; anthers versatile, dithecal, of 2 sizes, 0.25–0.3 mm long and 0.4 mm long, orange-yellow, longitudinally dehiscent; pollen orange-yellow; **pistil** 1, with stalk (stipe), stipe < 1 mm long; ovary superior, ca. 3 mm long, green, glabrous, 1-chambered with 4–5 ovules attached to upper side; style 1.5–1.7 mm long, bent sharply (90°) at base, short-hairy on 0.5 mm of style and tip; stigma minute-capitate. **Fruit:** pod (legume), dehiscent, 4–5-seeded,  $\pm$  oblong compressed side-to-side, 21–28  $\times$  6.5–7.3 mm, tapered at base, prowl-like and short-beaked at tip, green and thickening as seed mature, glaucous. **Seed:** mature seeds not observed.

Native. Annual vine rarely observed but collected several times in range along hiking trails in coastal canyons and at the Rocketdyne site (SH). *Vicia ludoviciana* is easily

confused with *V. hassei*; overall the two plants are quite similar, and the only reliable way to identify each with conviction is to observe the hairs on the style just subtending the stigma; in *V. ludoviciana* the short hairs completely surround the stigma.

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