

Vascular Plants of Williamson County

Solanum dimidiatum – WESTERN HORSE-NETTLE, POTATO WEED [Solanaceae]

Solanum dimidiatum Raf., WESTERN HORSE-NETTLE, POTATO WEED. Perennial herb, coarse and somewhat spinescent, taprooted, not rosetted, 1–several-stemmed at base, branches mostly ascending, to 100 cm tall; shoots with only cauline leaves, stellate-hairy with hairs mostly having 7–10 arms, the prickles on stems and other axes widely spaced, to 3 mm long, greenish and somewhat glossy, straight and radiating to slightly backward-oriented, sharp-tipped not hooked or barbed; developing leaves densely hairy and blade often mottled purple (including hairs). **Stems:** ± cylindric, to 10 mm diameter, tough, green, somewhat zigzagged, internodes to 65 mm long, stellate-hairy. **Leaves:** helically alternate, pinnately lobed ± halfway to midrib, petiolate, without stipules; petiole ± flat on upper side, (5–)12–80 mm long, with prickles 1–2.5+ mm long, upper side sometimes with 2 purplish stripes; blade ovate in outline, (40–)70–200 × (30–)40–130 mm, symmetric and broadly tapered at base or asymmetric and conspicuously unequal with tapered and truncate sides, principal lobes < 10, never opposite, broadly triangular to triangular and acute to obtuse at lobe tips, margins somewhat wavy and with shallow and wide, poorly defined teeth and sublobes, sinuses roundish, acute at tip, pinnately veined with most veins raised on lower surface, upper surface sometimes with short prickles along midrib, the large prickles initially with several stellate hairs on surface, having veins raised by creases and with minute glandular hairs (including on sides of veins), lower surface with regularly spaced stellate-hairs. **Inflorescence:** racemelike cyme, axillary, to 6-flowered, without bracts, stellate-hairy; peduncle cylindric to 23 mm long, green, with prickles; rachis zigzagged, internodes ca. 4 mm long increasing in fruit; pedicel with pulvinus at base, at anthesis ascending, cylindric, 17–18 mm long increasing and reflexed in fruit, green, with prickles, stellate-hairy. **Flower:** bisexual, radial, 30–39 mm across, star-shaped; **calyx** 5-lobed, 8–9 mm long increasing in fruit, green, stellate-hairy on outer (lower) surface; tube bell-shaped, 4–5 × 4–6 mm, hairs with 5–8 spreading rays + central axis; lobes ovate with acuminate tip, ca. 4 × 3.5–3.8 mm, green and above midpoint with a pair of membranous shoulders, inner (upper) surface with some stellate hairs approaching tip; **corolla** 5-lobed, dark blue-purple to purplish blue with star-shaped yellow eye on throat; tube to 1.5 mm long, tube + throat to midpoint, outer surface glossy green-yellow, inner surface glossy bright yellow with band of white above yellow, with raised midvein to each lobe; lobes triangular, ca. 10.5 × 7–8 mm increasing to 14 mm long in fruit, blue-violet, lower surface with stellate hairs, upper surface above midpoint having stellate hairs with fewer arms, webbing tissue of throat between lobes lacking hairs; **stamens** 5, attached at top of corolla tube ca. 1.3 mm from corolla base; filaments erect, 1.3–1.5 mm long, light yellow, glabrous; anthers basifixed, dithecal, ± erect, subequal, lanceoloid, 7–8.5 × 2 mm, bright yellow, dehiscent by terminal pores (2 opening per anther); pollen white; **nectary disc** beneath ovary, white; **pistil** 1, ca. 16 mm long; ovary superior, spheroid, 2–2.2 mm, white, glabrous, 2-chambered, each chamber with many ovules attached to center; style cylindric curving above midpoint, white, 2-branched at tip, the branches appressed and sticky, 1.6–1.9 mm long, stigmas exerted 3 mm above anthers and covered with wet, glutinous, green tissue. **Fruit:** berry, many-seeded, spheric to oblate spheroid, 15–30 × 25–30 mm, immature with dark green stripes from base to midpoint and pale green, aging pale yellow,

exocarp tough, mesocarp (pulp) firm, ca. 3.5 mm thick, with greenish, watery chambers; calyx appressed during fruit development, later with recurved lobes and splitting downward from sinuses, brown, slender tips to 4 mm long, with midvein raised on lower surface. **Seed:** discus-shaped and \pm roundish (never circular in outline), 3.5–4.8 \times 3.5–4.8 \times 1–1.2 mm, tannish, often with depressed center.

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