

Solanum L. NIGHTSHADE

Solanum elaeagnifolium Cav., WHITE HORSE-NETTLE. Perennial herb to subshrub, dieback in late summer, spinescent, rhizomatous, much-branched, ascending, 30–70(–100) cm tall; shoots gray-green to silver-green or ashy gray, densely covered with tannish white stellate hairs having spreading arms (rays) fused at center + an erect central arm, typically prickly; with the prickles scattered (absent), needlelike and sharp-tipped, 1.5–5 mm long, golden to reddish orange. **Stems:** ± cylindric, tough, prickly, with projecting leaf bases. **Leaves:** helically alternate, simple (sometimes lobed), petiolate, without stipules; petiole shallowly channeled, 3–35 mm long, often with prickles on the longest petioles, densely stellate-tomentose (often concealing channel); blade lanceolate to oblong or elliptic, 35–95 × 10–42 mm, commonly folded along midrib, oblique and subcordate to symmetric and truncate at base (on lobed blade), entire and somewhat wavy to shallowly crenate or pinnately lobed on margins, acute or obtuse to slightly notched with short point at tip, pinnately veined with principal veins raised on lower surface, soft-pubescent, with stellate hairs denser on lower surface, sometimes with erect prickles along lower midrib and less commonly along upper midrib before midpoint, scattered hairs occasionally rose-colored. **Inflorescence:** racemelike cyme, 3–8-flowered, with erect flowers, somewhat 1-sided and definitely so in fruit, bracts lacking, densely stellate-pubescent; pedicel ascending, at anthesis 8–12 mm long increasing to 30 mm long and pendent in fruit, sometimes with short prickles along axis approaching or on calyx. **Flower:** bisexual, radial, 20–30 mm across; **calyx** 5–6-lobed, at anthesis 6–11 mm long, densely stellate-pubescent; tube bell-shaped, ca. 4 mm long, becoming longer and rotate in fruit, often with a ridge to each lobe, with a purple line to each sinus, sometimes having ascending prickles along ridges, internally mostly glabrous; lobes unequal with 1 or 2 sinuses deeper than others, tapered lanceolate, 2–6 mm long, densely pubescent, the narrow tips of varying lengths and typically absent in fruit; **corolla** 5–6-lobed, cymbal-shaped (rotate) and star-shaped, 20–30 mm wide, shallowly to moderately lobed, blue to blue-purple, thickened by a ridge (spoke) to each lobe tip, stellate-pubescent along broadened ridge on under surface, with a radiating yellow vein over each ridge on upper surface, lacking basal spots; **stamens** 5–6, fused to base of corolla, basal band ca. 1.2 mm long; filaments erect, 0.8–2 mm long, greenish yellow, not fused at bases, glabrous; anthers exserted, dorsifixed, dithecal, erect, ± equal, narrowly lanceoloid, 6.5–9.5 × 1.3–1.5 mm, bright yellow, oblique at base, dehiscent via terminal pores; pollen light yellow; **nectary disc** beneath ovary, ringlike, 1 mm long, whitish, glabrous; **pistil** 1, 9–13 mm long; ovary superior, subspheric, 1.3–1.5 × 1.5 mm, somewhat truncate, greenish white, densely stellate-pubescent, 2-chambered, each chamber with many ovules attached to center; style to 12 mm long, ± = stamens, white, glabrous or with several stellate hairs at base, 2-branched, the branches 0.7–0.9 mm long; stigmas 2, dark green. **Fruit:** berry, many-seeded, spheric, 8–15 mm, pale green with dark green basal stripes when immature, at maturity yellow to orange-brown without stripes; exocarp leathery and persistent, with scattered stellate hairs or glabrate; pulp dry at maturity. **Seed:** flat-obovoid to discus-shaped, 2.5–3.5 mm long, brownish, glabrous. Early June–mid-August.

Naturalized. A perennial weed collected once in range in a highly disturbed habitat at a cultivated site. White horse-nettle gets its name from the presence of prickles on axes (stems, long petioles, and pedicels) and sometimes on the calyx. The plant has a reflective appearance due to the presence of overlapping stellate hairs, resembling that of Russian olive (*Elaeagnus*, Elaeagnaceae). Flowers of *Solanum elaeagnifolium* are attractive, having large, bright yellow anthers against the blue-violet corolla, and so it is very distinctive and easily recognized from the prickly, yellow-flowered *S. rostratum*, another horse-nettle.

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