

## Vascular Plants of Williamson County

*Solanum elaeagnifolium* – SILVERLEAF NIGHTSHADE, WHITE HORSE-NETTLE [Solanaceae]

*Solanum elaeagnifolium* Cav., SILVERLEAF NIGHTSHADE, WHITE HORSE-NETTLE. Perennial herb to subshrub, spinescent, rhizomatous, sometimes clonal, 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; prickles scattered (absent), needlelike and sharp-tipped, 1.5–5 mm long, golden to reddish orange. **Stems:** ± cylindrical, to 8 mm diameter, tough, prickly, with projecting leaf bases. **Leaves:** helically alternate, simple, 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 or ovate to oblong or elliptic, 35–125 × 10–57 mm, often folded upward from midrib, oblique and subcordate to symmetric and truncate at base, entire and often wavy to crenate or pinnately lobed on margins, acute or obtuse to slightly notched with short point at tip, pinnately veined with principal veins somewhat sunken on upper surface and raised on lower surface, soft-pubescent, often bicolor with upper surface green and lower surface silvery having stellate hairs denser on lower surface, sometimes with erect prickles along lower midrib and less commonly along upper midrib below 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, 20–40 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 cymbal-shaped (rotate) in fruit, often with a ridge to each lobe, having 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, 20–40 mm wide, shallowly to moderately lobed, blue to blue-purple with bright yellow star pattern at center, lobes triangular or deltate, to 12 mm, thickened by a ridge (spoke) to each lobe tip, stellate-pubescent along broadened ridge on lower surface, with a radiating yellow veins over each ridge on upper surface, lacking basal spots; **stamens** 5–6, fused to base of corolla, alternate with corolla lobes, basal band 1.2–2 mm long; filaments erect, 0.8–2 mm long, greenish yellow, not fused at bases, glabrous; anthers exerted, dorsifixed, dithecal, unequal, narrowly lanceoloid, 6.5–10 × 1.3–1.5 mm, bright yellow, oblique at base, dehiscent by a terminal pore; pollen light yellow; **nectary disc** beneath ovary, ringlike, 1 mm long, whitish, glabrous; **pistil** 1, 9–19 mm long; ovary superior, subspheric, 1.3–1.8 × 1.5 mm, somewhat truncate, greenish white, densely stellate-pubescent, 2-chambered, each chamber with many ovules attached to center; style to 16.5 mm long, ≥ anthers, white, glabrous or with several stellate hairs at base, 2-branched, the branches 0.7–0.9 mm long; stigmas 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

glabrescent; pulp dry at maturity. **Seed:** flat-obovoid to discus-shaped, 2.5–3.5 mm long, brownish, glabrous.

A. C. Gibson & B. A. Prigge