

Horse-nettle, *Solanum carolinense* L.¹

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Classification

Common Name: Horse-nettle

Scientific Name: *Solanum carolinense* L.

Family: Solanaceae, Nightshade Family

Seedling

The stem (hypocotyl) is stout, green with purple tinges, and densely covered with short, stiff, slightly downwardly angled, spreading hairs (Figure 1). The cotyledon blades are glossy green on the upper surface, light green on the lower surface, smooth on both surfaces, with short gland-tipped hairs along the margins. The midvein is evident on the upper surface as a depression and on the lower surface as a slight ridge. The petioles are flat on the upper surface and smooth. The leaves are alternate with blades that are dark green on the upper surface and light green on the lower surface. A sparse cover of appressed, unbranched and star-shaped hairs is on the upper surface of the older leaves. The fourth and all other leaves are slightly undulate or lobed on the margins. The petioles are flat on the upper surface and these

too are covered with star-shaped hairs. The stem is green, becoming purple with age.



Figure 1. Seedling, Horse-nettle, *Solanum carolinense* L.

Mature Plant

S. carolinense is a rhizomatous perennial that grows erect and can reach a height of approximately 1 m (Figure 2). The stems are spiny and roughly hairy with star-shaped hairs. The leaves are elliptic to ovate and measure approximately 1.9-14.4 cm in length and 0.4-8 cm in width. They are wavy and coarsely toothed with spines along the main veins. The few to many white, violet or blue flowers which may form a

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cluster at maturity are terminal. The sepals measure from 2-7 mm and often have small spines on the surface. The petals are ovately lobed and can reach a diameter of 3 cm. The anthers are erect and about 6-8 mm in length. The fruit is a berry 1-2 cm in diameter, globose, green and smooth, turning yellow and wrinkling upon maturation. The seeds are numerous, 1.5-2.5 mm in diameter, round or broader at the tip in outline, flat in cross section, orange to dark or light yellow, and their surfaces are smooth and glossy.



Figure 2. Mature plant, Horse-nettle, *Solanum carolinense* L.

History

Solanum is an ancient Latin name for an unknown species of plant. The species name *carolinense* is an English word put into Latin. It simply means "of Carolina" where the first specimen of this species was collected.

Habitat

This weed can be found on roadsides and in sandy openings and waste areas throughout Florida to Texas, and in the Northeast to Canada.

Biology

The foliage and fruits are used medicinally. The fruits are poisonous and have caused the death of cattle.