



Carolina Horse Nettle, Horse Nettle

Solanum carolinense

Horse nettle is a coarse, branching perennial that grows to 1 to 3 feet high. It has spines on the stem and leaves.

The mostly oval leaves have several large teeth or shallow lobes on each side. On the underside are microscopic, star-shaped hairs.

The clustered flowers are pale-violet to white and give rise to spherical fruit about 0.5 inch in diameter. The fruit is green with light green vertical bands until maturity, when it becomes uniformly yellow.

Distribution and habitat

This plant is distributed across the eastern part of Texas and the entire eastern half of the United States. It may be found mostly in sandy soils in fields, open woodlands and waste places. Regions: 1, 2, 3, 4, 7.

Toxic agent

Horse nettle is a nightshade. Nightshades contain glycoalkaloids, which are broken down in the body to sugars and alkaloids. The toxicity may depend upon the maturity of the plants, because more toxins are present in the fruits than in the leaves.

Almost every animal species has been poisoned by nightshade, but *S. carolinense* is probably mostly

responsible for cases involving cattle and horses. Hay and silage containing the mature plants have been associated with poisoning and deaths.

Livestock signs

It is thought the glycoalkaloids are responsible for the clinical signs associated with the gastrointestinal tract, and the alkaloids are associated with the signs in the central nervous system.

The signs may include:

- Anorexia
- Depression
- Excess salivation
- Diarrhea or constipation
- Trembling
- Weakness
- Colic

The star-shaped hair and seeds of this plant are readily identifiable in the gastrointestinal contents of acutely poisoned animals by microscopic techniques.

Integrated management strategies

Carolina horse nettle is not a palatable plant, and consumption by animals should not be forced. Avoid including the mature plants in hay, silage or green chop.

Chemical control strategies may be warranted in fields or pastures

infested with dense populations. Apply 0.6 to 0.9 pound a.i./acre of Grazon P+ D® as a broadcast treatment or a 1 percent solution as an individual plant treatment when plants begin to flower in the spring.



↖ Fruit
Whole plant ↗
Flower ↓

