

# White Snakeroot

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*Providing research-based information to Minnesota horse owners*



Mature plant



White snakeroot along a wooded edge

**Scientific Name:** *Ageratina altissima* (formally know as *Eupatorium rugosum*).

**Origin:** Native to North America.

**Lifecycle:** Perennial reproducing by seed and rhizomes.

**Identification:** Plants are one to three feet tall, smooth, erect, and branched at the top. Leaves have toothed edges and taper to a pointed end. Flowers are small, white, and arranged in clusters.

**Distribution:** Found from Minnesota south to northern Louisiana and east, with the exception of the Florida peninsula.

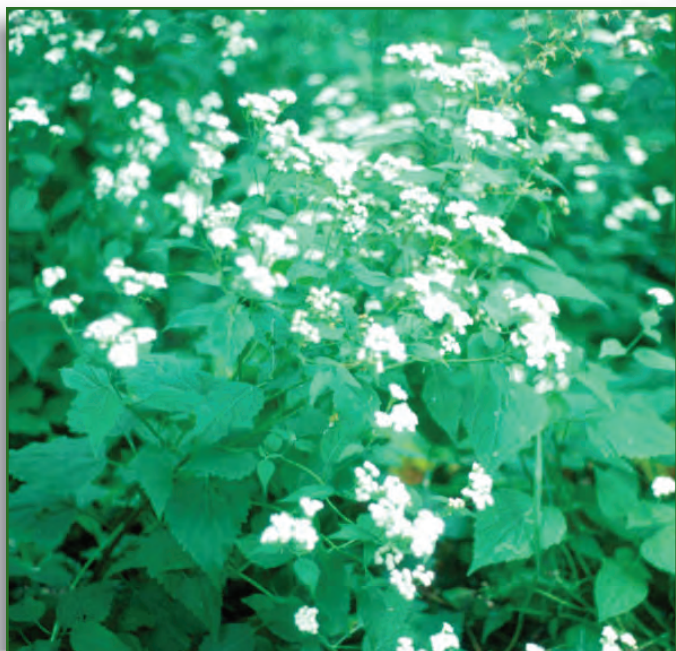
**Habitat:** Found in hardwoods, timber areas, woodlands, and damp and shady pastures. It grows only in shady areas.

**Control:** Do not allow animals to graze this plant under any circumstance. Fence off wooded areas, and provide supplemental feed (especially in the late fall or during dry conditions). Be aware that control of white snakeroot with one application of a herbicide is rarely acceptable, and multiple applications are usually needed. Exclusionary fencing, mowing, and multiple herbicide applications may be the best control options. When using a herbicide, be sure to carefully follow all grazing restrictions and other pertinent information stated on the herbicide label.

**Toxin:** Tremetol is a viscous oil extract of the white snakeroot plant that contains a number of chemicals including tremetone, dehydrotremetone, hydroxytremetone, and desmethylenecalin.

**When Toxic:** Even though tremetol concentrations decrease slowly as the plant dries, toxicoses have occurred after ingestion of hay or dry plant stalks in winter. White snakeroot is also toxic when eaten fresh.

**Toxicity:** Exact toxicity levels have not been reported for horses, however, horses are generally believed to be more susceptible to white snakeroot than ruminant livestock.



White snakeroot plants

Toxicity occurs in cattle ingesting 5 to 10% of their body weight over several days. A single dose of 5 mg/kg of body weight of green material is reportedly toxic to Angora and Spanish goats.

**Signs and Effects of Toxicosis:** Horses may die one to two days after ingestion of the plant. They develop difficulty swallowing, muscle trembling, and a basewide stance with their head held close to the ground. As the disease progresses, skeletal and heart muscle damage occurs, and horses are unable to stand.

**Treatment:** Remove horses from the white snakeroot source. Activated charcoal, followed by a cathartic, may reduce absorption or prevent reabsorption of the tremetone.

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In Partnership...



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