



# White Snakeroot



Photo by: Lawrence S. Gilliam  
Hosted by the USDA-NRCS  
PLANTS Database

## Plant Characteristics

*Eupatorium rugosum*: This is a perennial herb, .6 to 1.5 meters tall, with erect branched or unbranched stems arising from a mat of fibrous roots. Leaves are opposite, simple, ovate 3.5 to 17 cm long, 2.5 to 11 cm wide, crenate to serrate. Flowers showy, white: borne in open terminal clusters, blooming late in summer or fall. This is easily confused with relatives that are not poisonous. Positive identification requires the services of a trained botanist. Probably found in all of the southern states east of the Mississippi River except in the state of Mississippi. Plants grow well in rich moist soils and in deciduous woods or bordering streams. This plant is common throughout most of Illinois.

## Toxicity

The toxic principle has been identified as an alcohol called tremetol. Tremetol is unusual in that it is a fat-soluble molecule that becomes concentrated in the milk of lactating animals. It is found in all parts of the plant whether green or dry. All domestic livestock, some Laboratory animals, and human beings are all susceptible to the effects of this plant. Animals may be poisoned by consuming the actual plant or from ingesting milk from cows, sheep or mares that have eaten the plant. Drinking milk from cows eating white snakeroot has accounted for an illness called "milk sickness" and for deaths in humans.

## Symptoms

Trembling is the most commonly observed sign. The condition has been called "trembles." Animals are stiff and sluggish, stand with feet side apart and may eventually become recumbent. Slobbering, vomiting, sweating, labored and rapid breathing, dilated pupils, constipation and dribbling of urine are also seen. A ketone odor may be detected on the breath. Humans may exhibit delirium after drinking toxic milk. Death may be sudden, this affliction is what reportedly killed Abraham Lincoln's mother.

## Treatment

Laxatives may be of benefit but there is no specific treatment.

## Information Sources

- Poisonous Plants of the Southern United States
- <http://plants.usda.gov/>
- Bulletin 762 Horse Nutrition Ohio State University.



USDA is an equal opportunity provider, employer, and lender.

ILLINOIS • 2004

[il.nrcs.usda.gov/](http://il.nrcs.usda.gov/)