



# FORESTRY EXTENSION NOTES

## POISONOUS PLANTS COMMONLY FOUND IN WOODLANDS

There are a number of plants in Iowa's woodlands which may be poisonous to livestock. Some of these plants will only make animals delirious; others will kill them. For some plants, only certain parts of the plants are poisonous. The plants may not be poisonous to all livestock. The following table provides a listing of common poisonous woodland plants. It provides information about the toxic substance, the animal's symptoms, the parts of the plants that are poisonous and which animals have been known to be affected by the plant. This information may help your veterinarian diagnose poisoned livestock.

Name	Poisonous Principle	Important Physical Action	Poisonous Plant Part	Animals Affected
Bracken fern ( <i>Pteridium aquilinum</i> ) & others	Thiaminase (in horses) Unidentified in cattle	Cardiac irregularities; 1) weight loss, mucus, appetite loss; 2) incoordination; 3) convulsive; 4) death in 4-8 days.	all plants esp. leaves	horses, cattlesheep
Buttercup ( <i>Ranunculus acris</i> ) dried buttercup not poisonous	Higher Alcohol (Anemenol)	Irritant 1) decrease in milk production; 2) diarrhea; 3) nervous twitchings; 4) convulsions.	all parts	all animals
Climbing bitterweet ( <i>Celastrus scandens</i> )	Euonymin (not definitely known)	1) nausea 2) prostration Not fatal.	leaves	horses, sheep, cattle
Cocklebur ( <i>Xanthium sp.</i> )	Carboxy-atractyloside	1) vomiting, weakness, ataxia, subnormal temperature; 2) spasmodic contractions of limbs & neck; 3) death in 4-48 hours.	small plants & seeds	Mainly hogs; cattle, others possible
Dutchman's breeches ( <i>Dicentra cucullaria</i> )	Alkaloid (Cucullarine)	Spinal cord (convulsive), trembling, salivation, vomiting, convulsions	plants, especially tubers	cattle, horses
Horsetails or Scouring Rushes ( <i>Equisetum spp.</i> )	Thiaminase	Maintain appetite, excitability, staggaering, diarrhea, convulsions & coma. Death 2 hours to several weeks	all parts	sheep, cattle, (horses less susceptible)
Jack-in-the-Pulpit or Indian turnip ( <i>Arisaema triphyllum</i> )	Calcium oxalate crystals possibly alkaloid	Burning sensation in throat, mouth, & stomach; colic	corms	cattle, sheep, goats, swine

F-351/Revised/October 1999

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Stanley R. Johnson, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

Name	Poisonous Principle	Important Physical Action	Poisonous Plant Part	Animals Affected
Jimsonweed ( <i>Datura stramonium</i> )	Alkaloid (Hyoscyamine)	Brain (deliriant), dilated pupils, muscular twitching, frequent urination, convulsing & coma precede death	all parts, especially seeds & leaves	man, stock
Larkspur ( <i>Delphinium sp.</i> )	Alkaloid (Delphinine)	Heart & Nervous system; weakness, twitching of muscles, back arched, nausea, vomiting, constipation, bloating	plant, esp. roots	cattle, pigs
Nightshade ( <i>Solanum americanum</i> )	Glycoalkaloid	Anorexia, vomiting, diarrhea, pupil dilated, death from respiratory paralysis	foliage, green berries	sheep, goats, chickens, ducks, & pigs
Poison hemlock ( <i>Conium maculatum</i> )	Alkaloid (Coniine)	Heart depressant, paralysis, coma, slowing of heart, death from paralysis of respiratory muscles	plant, esp. seed, leaves	man, livestock poultry
Squirrel corn ( <i>Dicentra canadensis</i> )	Alkaloid (Cucullarine)	Spinal cord (convulsive)	plant, esp. tubers	cattle, horses
White snakeroot ( <i>Eupatorium rugosum</i> )	Trematol	Nervous system, tremors, incoordination, weakness, often fatal	aerial parts	cattle, horses, man (via milk of cows, goats)
<b>Trees &amp; Shrubs</b>				
Black locust ( <i>Robinia pseudoacacia</i> )	Phytotoalbumin (Robin)	Brain (deliriant) diarrhea, death by cardiac failure	all parts, esp. inner bark, even water where pods are lying	man, livestock
Buckeye ( <i>Aesculus sp.</i> )	Glucoside (Aesculin)	Irritant with nervous symptoms of delerium, incoordination (rarely fatal)	seeds and young shoots and sprouts	man, cattle, swine, horses, sheep
Kentucky Coffee tree ( <i>Gymnocladus dioica</i> )	Alkaloid (Cytisin)	Irritant with nervous symptoms, diarrhea with considerable strainin, death	leaves, fruit	man, livestock
Oaks ( <i>Quercus sp.</i> )	Tannin (quercitrin & quercitin)	Anorexia, excessive thirst, frequent urination, diarrhea, death in 2 wks. to 1 month (if large amounts are eaten)	young leaves, acorns, water where oak leaves are soaking	cattle, sheep
Wild Cherry ( <i>Prunus sp.</i> )	Cyanogenetic Glucoside (Amygdalin)	Spinal cord (convulsive), breathing through mouth, muscle spasms, convulsions and coma within 10 minutes. Death results from internal asphyxiation.	leaves & twigs	stock
Yews ( <i>Taxus sp.</i> )	Taxine	Nervousness, incoordination, collapse, gastroenteritis, death from cardiac failure	all parts	all livestock and humans