Plants that are Poisonous to Alpacas

Please Note:

Please consult with your veterinarian to discuss the plants poisonous to alpacas in your area.

There could be plants in your area that are also poisonous to alpacas that are not on this list.

Acorns:

African rue:

Agave lechuguilla:

Amaryllis:

Arrow grass:

Autumn crocus:

The plant has been mistaken by foragers for ramsons, which it vaguely resembles, but is a deadly poison due to the presence of colchicine, a useful drug with a narrow therapeutic index. The symptoms of colchicine poisoning resemble those of arsenic and there is no antidote. Despite its toxicity, colchicine is an approved treatment for gout and is also used in plant breeding to produce polyploid strains.

Azalea:

Bear grass:

Sand Begonia:

Bird of Paradise:

Bitter weed, Rubber weed:

Black laurel & Mountain laurel:

Black locust:

(Robinia pseudoacacia) – Black locust is a naturalized species that grows as a tree or shrub in open woods, waste places, and along fence rows throughout Ohio. Leaves are alternate and are pinnately compound, with more than 10 leaflets per leaf. A pair of spines occurs at the base of each leaf. White flowers appear in loose drooping clusters in May or June and later form long flattened brown seedpods.

Several toxic compounds are found in black locust sprouts, leaves, bark, flowers, and seed pods, including a glycoside (robitin) and phytotoxins (robin and phasin). Of grazing animals, horses are most susceptible to the effects of black locust. Poisoning and death have been reported for horses consuming bark, leaves, or sprouts. Livestock have also been poisoned by drinking water in which seedpods have soaked. Affected animals often stand with feet spread apart. Other signs include depression (often extreme), diarrhea, anorexia, weakness, posterior paralysis, colic, pupil dilation, coldness of extremities, laminitis, weak pulse, and rapid, irregular heartbeat. In severe cases, death can result from cardiac failure.

Black Walnut:

(Juglans nigra) – Black walnut is a large tree growing in rich forest soils throughout Ohio. Leaves are alternate and are pinnately compound with numerous toothed leaflets. The twigs have a characteristic chambered pith. Black walnut fruits consist of a nut surrounded by a thick husk and do not split open

when ripe.

The toxic phenolic compound, juglone, is found in the bark, wood, nuts, and roots of black walnut. Horses are primarily affected when exposed to shavings that contain black walnut wood. Shavings contaminated with less than 20% black walnut can cause poisoning in 24 hrs. Affected horses exhibit depression, lethargy, laminitis, distal limb edema, and increased temperature, pulse, respiration rate, abdominal sounds, digital pulse, and hoof temperature. Consumption of the shavings may also cause signs of mild colic. Symptoms usually disappear within a few days after shavings are removed.

Horses on pasture may show mild respiratory signs from pollen or fallen leaves.

Bladder pod:

Glottidium vesicarium

Robust annual becoming quite woody at base, 1 to 4 m tall. Leaves alternate, deciduous, compound, 10 to 20 cm long, evenly pinnate with 24 to 52 leaflets. Flowers yellow or sometimes pinkish or purplish in clusters of two or more on long slender stalks. Pod flattened, swollen, ends pointed, 5 to 8 cm long, two seeds per pod. Found in coastal plain North Carolina to Florida to Texas; most abundant in moist, fertile soil in waste places, along ditches and in pastures.

TOXICITY - Saponins have been detected in this plant. Cattle, sheep, goats, chickens and hogs have all been poisoned from consuming the seeds and green plant. The green seeds are the most toxic part. It is thought that the plant is distasteful to animals but some appear to develop a craving for the seeds even when other forage is available. Poisoning most often occurs in the fall or early winter when pasture or other feed is in short supply. Also, new additions to pastures containing the plants are often affected.

SYMPTOMS - Sheep and cattle exhibit hemorrhagic diarrhea, shallow and rapid respiration,

fast irregular pulse and become comatose before death. Constipation has been observed in affected cattle. Post mortem examination reveals hemorrhages in the abomasum and intestines, rumen stasis and dark tarry blood. Usually the seeds can be observed in the rumen.

TREATMENT - Remove all animals immediately from pastures containing the plant and confine them to clean pastures or a dry lot. General supportive treatment, including saline laxatives, rumen stimulants and intravenous fluid therapy is suggested.

Black Snakeroot (Deathcamas, Star Lily):

Deathcamas / black snakeroot All parts of the plant are poisonous, causing nausea, severe upset.

Bleeding heart:

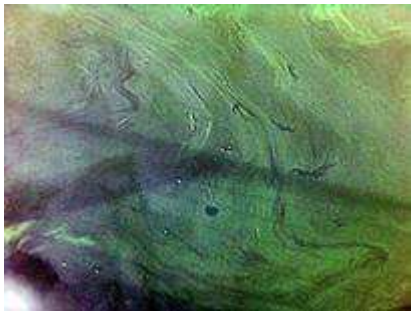
Dicentra has delicate, fern-like leaves with characteristic heart-shaped pink to white flowers.
Geographic range. Found in the eastern and western United States. Usually found in moist, rich soils of forests and woodlands.

Toxic principle - Isoquinolone alkaloids (protoberberins) are poisonous to cattle and horses but are not toxic to sheep. Other alkaloids in Dicentra may be responsible for poisoning in sheep.

Diagnosis - Clinical signs. In cattle, muscle tremors, staggering, and incoordination are seen. If a larger amount of plant is ingested, projectile vomiting, convulsions, and lateral recumbancy with extensor rigidity may be seen. Animals rarely die from Dicentra poisoning.

Treatment - None. Animals often recover when access to the plant is removed. A saline cathartic may be given to reduce further absorption of the toxins.

Box - (Blue-Green Algae):



Bracken fern:

Is the common name for a tall fern (*Pteridium aquilinum*) with large triangular fronds, widespread throughout the world, often as a weed. It is considered poisonous to livestock when eaten in quantity, but the rootstocks and the young shoots, cooked, are used for food. Bracken is also a source of tannin and is used for thatching and as bedding for livestock. A beverage is made from the roots. The names *bracken* and *brake* are sometimes also applied to other large, coarse ferns and, as general terms, to a thicket of such plants. Bracken is classified in the division Polypodiophyta, class Polypodiopsida, order Filicales, family Polypodiaceae.

Broom snakeweed:

Broom snakeweed is a bushy, short-lived, native, perennial shrub or subshrub that grows from 8 to 28 inches in height. It flowers August to October, reproduces from seeds. Maximum life span approximately 20 years. Numerous heads are arranged in a flat-topped cluster, which is rounded and loose. The flower heads are small, with yellow ray flowers. The bracts are leathery, shiny, green-tipped. Fruit is oval and covered with chaffy scales. A brown, densely hairy, seed. Alternate, threadlike leaves which are folded. The margins are entire. Glands on the leaves do produce resin, making the leaves slightly sticky. Twigs erect, thin, flexible, green to brown, and can be hairy or smooth. Trunk is short with brown bark which is shreddy and

smooth. Stems die back in the winter giving the plant its broom-like appearance.

Broom snakeweed occurs on rocky plains, dry foothills, ridgetops, and mountain slopes, and in semi-desert valleys. High water use efficiency and a high degree of drought tolerance enable broom snakeweed to survive on arid or semi-arid sites. Broom snakeweed occurs on a wide range of soil types including dry, well drained, sandy, gravelly, or clayey loams and heavy clays. Growth is reportedly best on clay loams of broad alluvial slopes, and shallow, rocky, or sandy soil. Growth is generally poor on saline or alkaline soils.

Associated Species: Big sagebrush, western wheatgrass, sandberg bluegrass, cheatgrass, curlycup gumweed.

Snakeweed provides little browse for domestic livestock. It is of minimal value to cattle and horses, but does provide fair quality winter browse for domestic sheep when green forage is scarce or lacking. It is otherwise worthless and can be an indicator of overgrazing. It's populations are also heavily cyclical, and heavy infestation can be and indicator of weather conditions rather than overgrazing. Broom snakeweed can be toxic to domestic sheep, goats, and cattle particularly during winter or early spring when poor forage availability forces animals to consume large quantities. Saponins present in the foliage are responsible for the poisoning, and can cause illness, death, or abortion in livestock. However, toxicity apparently varies with phenological stage and substrate. Higher toxicity levels are often associated with periods of rapid growth, such as early leaf development, and with growth on sandy rather than calcareous soils. Broom snakeweed is also a secondary or facultative absorber of selenium, which may cause illness or death when consumed in quantity.

This plant is commonly confused with rabbitbrush, but it can be distinguished by the presence of ray flowers. Rabbitbrush plants have none, nor do the stems die back in the winter.

Southwestern Indians and Mexicans used snakeweed as a broom. Decoctions were used for indigestion. Pieces of the plant were chewed and placed on bee and wasp stings.

Buckeyes:

(Aesculus spp.) – Several species of buckeye can be found in Ohio and are distinguished by opposite palmately-compound leaves (with five- to seven-toothed leaflets per leaf) and large glossy brown seeds with a whitish scar. Two species are native woodland trees, the Ohio buckeye (A. glabra) and sweet (or yellow) buckeye (A. octandra). The Ohio buckeye is widely distributed throughout the state, while sweet buckeye is confined to southern Ohio. Other buckeye tree and shrub species can be found in cultivation, including horse chestnut (A. hippocastanum).

Toxicity of buckeye is attributed to glycosides (e.g., aesculin, fraxin), saponin (aescin), and possibly alkaloids. Sprouts and leaves produced in early spring and seeds are especially poisonous. However, experimental feedings have shown that poisoning does not always follow buckeye consumption. Affected animals exhibit depression, incoordination, twitching, paralysis, inflammation of mucous membranes, and vomiting. Colic has also been reported in poisoned horses. Treated animals usually survive.

In the spring, while waiting for other forage to become available, animals should not be allowed to graze in woodland pastures where there are buckeye sprouts.

Buckwheat:

Buckwheat (*Fagopyrum sagittatum* Gilib) has been grown in America since colonial days, and the crop once was common on farms in the northeastern and northcentral United States. Production reached a peak in 1866 at which time the grain was a common livestock-feed and was in demand for making flour. By the mid 1960's the acreage had declined to about 50,000 acres. The leading buckwheat states are New York, Pennsylvania, Michigan, Wisconsin, Minnesota, and North Dakota. Canada has more buckwheat acreage than the United States.

Buckwheat enjoyed a resurgence of popularity in the mid 1970's that was brought on by the demand for commercially prepared breakfast cereal and by exports to Japan for making buckwheat noodles. This boom was due to the nutritional excellence of buckwheat. USDA-ARS analyses indicate that the grain has an amino acid composition nutritionally superior to all cereals, including oats. Buckwheat protein is particularly rich (6%) in the limiting amino acid lysine.

Until the recent increased interest in buckwheat for human food, about 75% of the grain produced was used for livestock and poultry, about 5-6% for seed, with the remainder milled into buckwheat flour. Between 5 and 10% of the seeded acreage was turned under for green manure. Several thousand acres were harvested green for extracting rutin. Today, the major use of buckwheat is for human food.

Buckwheat is a satisfactory partial substitute for other grains in feeding livestock. It has a lower feeding value than wheat, oats, barley, rye, or corn. The grain should be ground and mixed with at least two parts of corn, oats, or barley to one part buckwheat.

When fed continually or in large amounts to certain animals, buckwheat grain may cause a rash to appear on the skin. This rash is confined to the white-haired parts of the hide of the animal, and apparently occurs only when animals are exposed to light. The substances that

produce the rash are in the buckwheat hulls.

Tartary buckwheat has a lower feeding value for livestock than the common varieties, but it was used extensively as an ingredient of scratch feeds for poultry. The small, smooth, rounded seed of tartary makes it more satisfactory for poultry than the larger and more angular seeds of common buckwheat.

Buckwheat middlings are rich in protein, fat, and minerals, and are considered a good feed for cattle when not fed in large amounts or as the only concentrate. They may also be used satisfactorily as a substitute for linseed meal in a ration consisting of tankage, linseed meal, and alfalfa hay. Buckwheat middlings apparently have no harmful effect on dairy cows or dairy products. They are not satisfactory for pigs when fed as the only concentrate, and are not palatable to pigs as are other ground grains.

Buckwheat hulls have little or no feeding value, but they contain most of the fiber of the seed. They are sometimes combined with middlings and sold as buckwheat feed or bran. They are also used as soil mulch and poultry litter in the U.S. and for pillow stuffing in Japan.

Buckwheat straw is sometimes used for feed when well preserved, but may cause digestive disturbances when fed in large amounts.

Buckwheat seed is an ingredient in commercial bird feed mixes and the seed is sometimes planted to provide feed and cover for wildlife.

Buffalo Burr:

Scientific Name: Solanum rostratum
Common Name: Buffalobur Nightshade, Buffalo Burr
Flower Color: Yellow

Plant Type: Herb, Annual
Height: To 30 inches (76 cm) tall

Notes: Poisonous. The 1 inch (2.54 cm) wide flowers have 5, pointed lobes and 5, projecting, beak-like anthers (4 straight and a larger curved one). The dark green leaves are deeply pinnately lobed. The entire plant is covered in sharp spines that can cause intense, lingering pain if touched.

Burroweed, Ray less goldenrod:

Habitat and Distribution	Affected Animals	Important Characteristics	Toxic Principle and Effects	Remarks and Treatment
Dry plains, grasslands, open woodlands, and along irrigation canals; southwest	**Cattle, sheep, horses**	**Bushy perennial 2-4 ft tall, with many yellow flowerheads. Leaves alternate, linear, sticky.**	**Complex benzyl alcohol (tremetol); resin acid; primarily nursing young and nonlactating animals. Reluctance to move, trembling, weakness, vomiting, dyspnea, constipation, prostration, coma, death.**	**"Milksickness." Remove young and discard milk (hazardous to man).**

Bur sage, White ragweed:

Ragweeds (*Ambrosia*) is a genus of flowering plants from the sunflower family (Asteraceae).

The name of this genus is derived from the Greek word for "food of the gods".

They occur in temperate regions of the northern hemisphere and South America. They prefer dry, sunny grassy plains; sandy soils; and to grow along river banks, along roadsides, disturbed soils, vacant lots and ruderal sites. Ragweed was far less common in the Eastern United States before dense European settlement/agriculture in the late 1700s.

There are 41 species worldwide. They are very ordinary in appearance. Despite being all around, they are easily overlooked. Virtually no animal browses them. Many are adapted to the arid climates of the desert. Burrobush (*Ambrosia dumosa*) is one of the most arid-adapted perennials in North America. About 10 species occur in the Sonoran Desert.

These are annuals, perennials and shrubs and subshrubs with erect, hispid stems growing in large clumps to a height of 75 - 90 cm. The stems are basally branched. They form a slender taproot or a creeping rhizome.

The foliage is grayish to silvery green with bipinnatifid, deeply lobed leaves with winged petioles. But in the case of *Ambrosia coronopifolia*, the leaves are simple. The leaf arrangement is opposite at the base, but becomes alternate higher on the stem.

Total eradication of ragweed is considered impossible, owing to the plant's frugality and tremendous seed-producing capability. As of 2005, there is no known safe biological remedy (e.g. beetle or worm) to be used against ragweed in the open. Mechanical and chemical methods are available and can be used to control its spread, although there is evidence that these are actually no more effective than leaving the weed alone, in the long run[1].

The act of manually uprooting ragweeds, sometimes shown in the media for public awareness and propaganda purposes, is best avoided. It is ineffective, and skin contact may cause the onset of full-blown hay fever symptoms in persons with latent ragweed hyper-sensitivity.

Although the scythe and its motorized descendants have a reduced efficiency against ragweed, they remain indispensable tools, especially in populated areas and near delicate plantation, where herbicide use must be limited. Fighting ragweed with the scythe is a continuous process, because it is difficult to cut the plant right at the soil level, and the plant will regrow in two weeks (and often branch into three or four full-sized stems) if more than half an inch of the plant remains above the ground. Areas where ragweed has been reaped should be mowed down every three weeks to prevent regrowth.

It is considered important to control the spread of ragweed in large abandoned or uncultivated areas. Ragweed pollen can remain airborne for days and travel great distances, affecting people hundreds of miles away. One efficient method for large-scale ragweed extermination is chemical spraying. Because ragweed only reacts to some of the more aggressive herbicides, it is highly recommended to consult professionals when deciding on dosage and methodology, especially near urban areas. Some proven effective active ingredients include those that are gliphosat-based (Roundup, Gliphogan, Glialka), sulphosat-based (Medallon) and gluphosinat-ammonia based (Finale14SL). In badly infested areas usually 2 to 6.5 liters of herbicides are dispersed per hectare (equal to app. 0.2 to 0.7 US gallons per acre).

One especially effective method of controlling ragweed; cutting it, then burning it once the stalks have dried[2] (standing, live ragweed won't burn) has become less popular because the smoke produced is seen as unacceptable pollution, as with the decline in leaf-burning and trash burning. But this method has the added benefit of killing off the stems so the plant does not grow back, which (as noted above) is otherwise almost inevitable.

Buttercups:

TOXICITY RATING: Low. Most animals avoid buttercups, and seldom ingest enough to cause any serious toxicity.

ANIMALS AFFECTED: All animals that chew on or ingest the plant can be affected.

DANGEROUS PARTS OF PLANT: Fresh leaves and stems.

CLASS OF SIGNS: Oral and gastrointestinal irritation are the primary signs (oral irritation, salivation, abdominal pain, diarrhea which may be bloody).

PLANT DESCRIPTION: Buttercups arise from fibrous roots, thickened rootstocks, or bulbs to form a rosette of basal leaves and often a low stem with alternate and divided (three-parted) leaves. The axillary, solitary flowers have five green sepals, five glossy yellow petals, and numerous reproductive parts and seeds. Buttercups usually are found in moist woods, meadows, fields, pastures, and sometimes along roadsides and in drier sites. Bristly buttercup (*Ranunculus hispidus*, fig. 30A) is typical of the wet site species; celeryleaf buttercup (cursed crowfoot, *Ranunculus sceleratus*, fig. 30B) is typical of the small-flowered, dry-site species.

SIGNS: The toxin in buttercup is protoanemonin, a volatile yellow oil, which causes intense oral irritation and gastrointestinal irritation. Problems in livestock tend to occur most often in the spring, herbivorous pets may be poisoned at any time if they have access to the plant. The plant is not palatable, and causes almost immediate oral irritation, so animals tend to avoid it. The toxicity of buttercup varies greatly among the different species and during the course of the growing season. Seldom is buttercup reported as a significant threat to animals. In experimental feeding trials with greater quantities of buttercup, prostration, coma and death have been reported, but these signs are rarely reported under field conditions.

FIRST AID: No treatment is necessary unless severe gastrointestinal signs are present (colic, bloody diarrhea) or if a large quantity was observed to be eaten. Minor oral irritation will resolve on its own.

SAFETY IN PREPARED FEEDS: Reportedly, the toxin is volatilized ("evaporates off"), so processed feeds and hay may be safe for consumption. However, consumption of any significant quantity of contaminated feeds is not recommended.

PREVENTION: Buttercup is a common pasture contaminant, and tends to not cause problems as long as there is sufficient quantities of good forage available. Eradication is not usually necessary, since animals tend to avoid this plant on their own. If it has become a problem, mowing or eradication are recommended.

NOTE: Marsh marigold (*Caltha palustris*), a closely related plant found in similar habitats, also contains protoanemonin and causes mouth and stomach irritation as well as generalized distress when cattle, sheep, or horses eat the fresh tops. Hay has been considered safe for consumption. First aid is the same as for buttercups.

Butterfly weed:

Calla lily:

Calamondin orange tree:

Camas lily:

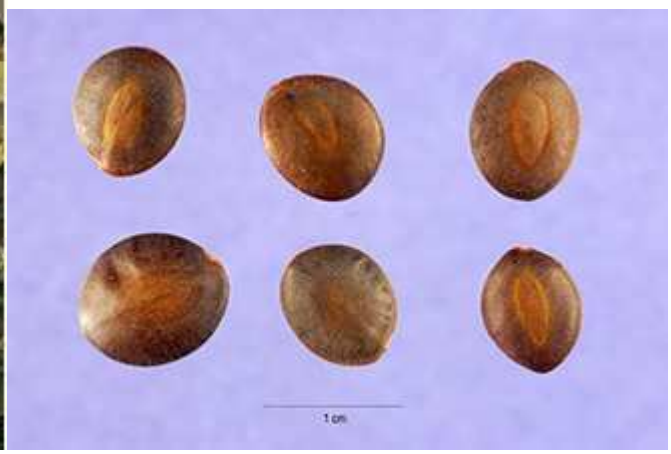
Carnation:

Castor bean:

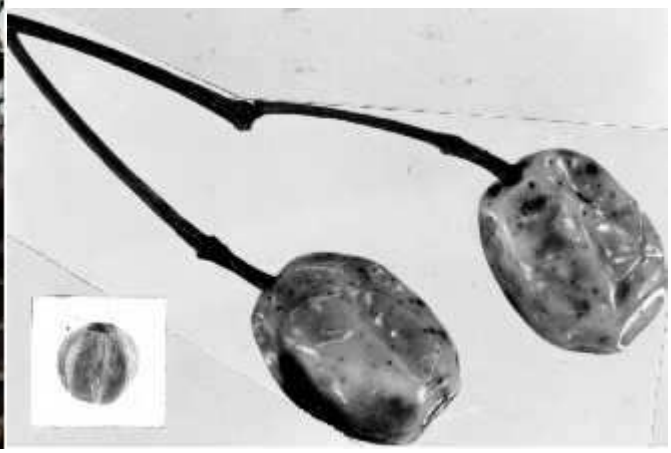
The toxicity of raw castor beans isn't well-known, though reports of actual poisoning are relatively common. Many children die from as few as three beans; adults may require eight or more. As an example of the rarity of castor bean poisoning, in recent years there have only been two cases reported in all of England, and in both the victims recovered uneventfully.

Castor Oil Plant; The phytotoxin is ricin, an extremely toxic water soluble protein, which is concentrated in the seed. Also present are ricinine, an alkaloid, and an irritant oil. Causes burning in mouth and throat, convulsions, and is often fatal.

Cat claw:



Chinaberry:



Chokecherry, Wild cherry, Wild plums, Pin cherry:

(Prunus spp.) – Many species of cherry and peach are poisonous. These species are characterized by alternate toothed leaves, white or pink flowers, and fleshy fruits (cherries or peaches). Crushed twigs and leaves yield a strong cyanide odor. Two native species of cherry are common in Ohio. Wild black cherry (P. serotina) is a large tree that is distributed widely throughout the state in woodlands, old fields, and along fence rows. Choke cherry (P. virginiana) grows as a large shrub or small tree and is scattered throughout Ohio in a variety of habitats, though it is more frequent northward. Peach (P. persica) is a small introduced tree that occasionally escapes from orchard cultivation through seed.

Seeds, twigs, bark, and leaves contain a glycoside (amygdalin) that quickly breaks down by hydrolysis (from bruising, wilting, frost damage) to form the highly toxic compound hydrocyanic (prussic) acid (or cyanide). Poisonings occur most frequently when wilted leaves are eaten, but have also been reported when leaves are consumed directly from the tree, or sprouts, or in dried hay. The amount of hydrocyanic acid formed once the plant material is ingested is affected by the type of stomach juices and the kind of feed the animal had previously consumed. Ruminant animals appear to be more susceptible to poisoning than horses.

Cyanide poisoning results in hypoxia (deficiency of oxygen reaching the tissues). The first symptoms appear within a few minutes following consumption of plant material. Affected animals exhibit excitement, uncoordination, convulsions, rapid and labored breathing, bloating, and coma. Death can occur in less than an hour due to internal asphyxiation.

Christmas cherry:

Clinical signs: abdominal pain, vomiting, bloody diarrhea, convulsions, delirium.

Christmas rose:

Clinical signs: abdominal pain, vomiting, bloody diarrhea, convulsions, delirium.

Cocklebur:

Corn lily:

Cress:

Crotalaria:

(there are many types of this species, this is one type)

Crow poison

Crucifers

Cyclamen

Daffodil:

The bulbs are poisonous and cause nausea, vomiting, and diarrhea. Can be fatal.

Daisy

Daphne:

The berries (either red or yellow) are poisonous, causing burns to mouth and digestive tract, followed by coma. Often fatal.

Deadly Nightshade (Belladonna):

All parts of the plant contain the toxic alkaloid atropine. The young plants and seeds are especially poisonous, causing nausea, muscle twitches, paralysis; often fatal.

Belladonna is one of the most toxic plants found in the Western hemisphere. Children have been poisoned by eating as few as three berries. Ingestion of a leaf of the Belladonna can be fatal to an adult. The root of the plant is generally the most toxic part, though this can vary from one specimen to another.[1]

All parts of the plant contain tropane alkaloids. The berries pose the greatest danger to children because they look attractive and have a somewhat sweet taste. Symptoms of belladonna poisoning are the same as those for atropine (a tropane alkaloid), and include dilated pupils, tachycardia, hallucinations, blurred vision, loss of balance, a feeling of flight, staggering, a sense of suffocation, paleness followed by a red rash, flushing, husky voice, extremely dry throat, constipation, urinary retention, and confusion. The skin can completely dry out and slough off. Fatal cases have a rapid pulse that turns feeble. The antidote is physostigmine or pilocarpine, the same as for atropine.

The reason for most of these symptoms is atropine's effect on the parasympathetic nervous system. Atropine competitively inhibits the action of acetylcholine (ACh) at the acetylcholine receptor in the nerve synapse, thereby preventing the parasympathetic nervous system from sending out electrical nerve impulses. Since the parasympathetic nervous system regulates non-volitional/subconscious activities (such as sweating, breathing, and heart rate) when it is prevented from sending out signals, the heartbeat and breathing become extremely irregular.

The Belladonna is toxic to many domestic animals and livestock; Belladonna poisoning can lead to colic, depression, weakness, and lack of coordination in horses, with fatalities reported even for small amounts from 1 to 10 pounds (0.5 to 5 kg).

Deathcamas (Sandcorn, Star Lily, Black Snakeroot):

All members of the genus are at least unpalatable to livestock because of alkaloids present especially in the bulbs. As the name Deathcamas suggests, some are seriously toxic to both animals and humans. Deathcamas can cause convulsions, coma, and death. All parts of the plant are poisonous, causing nausea, severe upset.

Devils ivy

Dieffenbachia (Dumb Cane):

The cells of the *Dieffenbachia* plant contain needle-shaped calcium oxalate crystals called raphides. If a leaf is chewed, these crystals cause a burning sensation in the mouth and throat; swelling can occur along with a temporary inability to speak, and from this effect the plants are commonly called **dumb cane** (other names include Galatea and Leopard Lily). Chewing could result in death if swelling of the throat blocks the airway. Slaves were supposedly sometimes punished by having dieffenbachia put into their mouths [1]. Young children (at the age where they regularly put things into their mouths) are at risk of suffocation and death if they eat or chew on *Dieffenbachia* leaves. These occurrences are exceptionally rare. Some cats eat houseplants and flowers; they are similarly at risk.

Dock:

Drymary

Dumb cane (Dieffenbachia):

All parts are poisonous, causing intense burning, irritation, and immobility of the tongue, mouth, and throat. Swelling can be severe enough to block breathing leading to death.

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English holly/English ivy

Elderberry:

The roots are, also, poisonous and cause nausea and digestive upset.

Elephant ears:

All parts of the plant are poisonous. Symptoms are generally irritation, pain, and swelling of tissues. If the mouth or tongue swell, breathing may be fatally blocked.

Eucalyptus

Eyebane

False hellebore, corn lily

Fiddleneck:

Firecracker

Fly poison, Stagger grass, Crow poison

Foxglove:

The leaves, seeds, and flowers are poisonous, containing cardiac or other steroid glycosides. These cause irregular heartbeat, and generally digestive upset and confusion. Can be fatal.

Depending on the species, the digitalis plant may contain several deadly physiological and chemically related cardiac and steroidal glycosides. Thus, the digitalis has earned several more sinister monikers: *Dead Man's Bells*, and *Witches' Gloves*.

The entire plant is a poison (including the roots and seeds), although the leaves of the upper stem are particularly potent, with just a nibble being enough to potentially cause death. Early symptoms of ingestion include nausea, vomiting, anorexia, diarrhea, abdominal pain, wild hallucinations, delirium, and severe headache. Depending on the severity of the toxicosis the victim may later suffer irregular and slow pulse, tremors, various cerebral disturbances, especially of a visual nature (unusual color visions with objects appearing yellowish to green, and blue halos around lights), convulsions, and deadly disturbances of the heart. For a case description, see the paper by Lacassie.[3]

There have been instances of people confusing digitalis with the harmless *Symphytum* (comphrey) plant (which is often brewed into a tea) with fatal consequences. Other fatal accidents involve children drinking the water in a vase containing digitalis plants. Drying does not reduce the toxicity of the plant. The plant is toxic to animals including all classes of livestock, as well as cats and dogs.

Digitalis poisoning can cause heart block and bradycardia (lowered heart rate) and tachycardia (increased heart rate). It is often quoted around the Internet that only bradycardia is associated with digitalis poisoning, but that is not true.[*citation needed*] It can cause either, depending on the dose and the condition of one's heart. It should however be noted, that electric cardioversion (to "shock" the heart) is generally not indicated in ventricular fibrillation in digitalis toxicity, as

it can increase the dysrhythmia in digitalis toxicity. Also, the classic drug of choice (www.erc.edu) for VF (ventricular fibrillation) in emergency setting, amiodarone (cordarone(R)) can worsen the dysrhythmia caused by digitalis, therefore, the second choice drug Lidocaine (100mg) is to be used

Geranium

Gingko Tree

Golden chain (shower) tree:

All parts, especially the seeds, are poisonous, causing excitement, staggering, convulsions, coma, occasionally fatal.

All parts of the plant are poisonous and can be lethal if consumed in excess. Symptoms of Laburnum poisoning may include intense sleepiness, vomiting, convulsive movements, coma, slight frothing at the mouth and unequally dilated pupils. In some cases, diarrhea is very severe and at times the convulsions are markedly tetanic. The main toxin in the plant is Cytisine, a

nicotinic receptor agonist.

Greasewood

Groundsel:

Gum weed

Halogeton glomeratus:

Hemlock, Poison hemlock:

All parts of the plant contain the relatively simple alkaloid coniine which causes stomach pains, vomiting, progressive paralysis of the central nervous system. Can be fatal; it is the poison which killed Socrates.

Conium is a genus of two species of perennial herbaceous flowering plants in the family Apiaceae, native to Europe and the Mediterranean region (*C. maculatum*), and to southern Africa (*C. chaerophylloides*).

By far the most familiar species is ***Conium maculatum*** (**Hemlock** or **Poison Hemlock**), the most common of several species of hemlock noted for their toxicity. It is a herbaceous biennial plant which grows between 1.5–2.5 m tall, with a smooth green stem, usually spotted or streaked with red or purple on the lower half of the stem. The leaves are finely divided and lacy, overall triangular in shape, up to 50 cm long and 40 cm broad. The flowers are small, white, clustered in umbels up to 10–15 cm across. The plant is often mistaken for fennel, parsley or wild carrot although the characteristic stem hairs of the wild carrots are missing. The Conium root is fleshy, white and often unbranched and can be mistaken for parsnip. When crushed, the leaves and root emit a rank, unpleasant odour often compared to that of parsnips.

contains the alkaloids coniine, N-methylconiine, conhydrine, pseudoconhydrine, g-coniceïne and atropine.

The most important and toxic of these is coniine. Coniine is a neurotoxin, which disrupts the workings of the peripheral nervous system and is toxic to people and all classes of livestock. Coniine causes death by blocking the neuromuscular junction in a manner similar to curare; this results in an ascending muscular paralysis with eventually paralysis of the respiratory muscles which results in death due to lack of oxygen to the heart and brain. Death can easily be

prevented by artificial ventilation until the effects have worn off.

Conium maculatum has been introduced and naturalised in many other areas, including much of Asia, North America and Australia. Poison hemlock is often found on poorly drained soils, particularly near streams, ditches, and other surface water.

A useful trick to determine whether a plant is poison hemlock rather than fennel, which it resembles, is to crush some leaves and smell the result. Fennel smells like anise or liquorice, whereas the smell of poison hemlock is often described as mouse-like or musty.[*citation needed*] Considering the high toxicity of poison hemlock, if the plant cannot be identified it must be discarded.

Conium is used as a food plant by the larvae of some Lepidoptera species including Silver-ground Carpet.

Poison hemlock flourishes in the spring, when most other forage is gone. All plant parts are poisonous but once the plant is dried, the poison is greatly reduced, however not gone completely. Hemlock is also known as "poison parsley" or "spotted parsley".

Poison hemlock is sometimes confused with water hemlocks in the related genus *Cicuta*, but are readily distinguished by the less finely divided leaves of the latter; the leaf veins of poison hemlock also run through the tips of the teeth, but those of the water hemlock run through the notches in between the teeth. The poison hemlock's root is long, white, and fleshy. It is unbranched and can usually be distinguished from the water hemlock's roots that are made up of several tubers.

Henbane:

Also known as Stinking Nightshade - seeds and foliage poisonous.

Henbane can be toxic in low doses. Its name came from Anglo-Saxon *hennbana* = "killer of hens". Hyoscyamine, scopolamine, and other tropane alkaloids have been found in the foliage and seeds of the plant.[1] Common effects of henbane include hallucinations,[1] dilated pupils,

restlessness, and flushed skin. Less common symptoms such as tachycardia, convulsions, vomiting, hypertension, hyperpyrexia and ataxia have all been noted.

Holly berry:

The berries are poisonous, causing gastroenteritis.

Horsebrush:

Horse Chestnut:

All parts of the plant are poisonous, causing nausea, muscle twitches, and sometimes, paralysis.

The nuts, especially those that are young and fresh, are slightly poisonous, containing alkaloid saponins and glucosides. Although not dangerous to touch, they cause sickness when eaten. Some mammals, notably deer, are able to break down the toxins and eat them safely. They are reputed to be good for horses with wind, but this is unproven and feeding them to horses is not advisable.

Hyacinth:

The bulbs are poisonous, causing nausea, vomiting, gasping, convulsions, and possibly death.

H. orientalis contains alkaloids and is toxic if eaten in large quantities. The bulb, however, is the most poisonous part and should not be ingested under any circumstances.
Retrieved from "http://en.wikipedia.org/wiki/Hyacinthus_orientalis"

Hydrangea blossom

Indian hemp

Ink weed, Drymary

Iris:

Ivy bush:

The leaves and berries are poisonous, causing stomach pains, labored breathing, possible coma.

Although far far more toxic than poison ivy, which is unrelated to this genus, ivy contains triterpenoid saponins and falcarinol, a polyyne. Falcarinol is capable of inducing an allergic reaction (contact dermatiti).

Jack-in-the-pulpit:

Jequirity bean:

The seed is highly poisonous but is unlikely to harm if swallowed raw and unbroken, as they have a hard seed coat.

The toxin present in *Abrus precatorius* is a close relative to ricin called abrin. It is a dimer consisting of two protein subunits, termed A and B. The B chain facillitates abrin's entry into a cell by bonding to certain transport proteins on cell membranes, which then transport the toxin into the cell. Once inside the cell, the A chain prevents protein synthesis by inactivating the 26S subunit of the ribosome. One molecule of abrin will inactivate up to 1,500 ribosomes per second. Symptoms are identical to those of ricin, except that the fatal dose of ricin is approximately 75 times greater than the fatal dose of abrin. Abrin can kill with a circulating amount of less than 3 µg (micrograms).

The seeds of *Abrus precatorius* are much valued in native jewelry for their bright coloration. The third of the bean with the hilum (attachment scar) is black, while the rest is bright red, suggesting a ladybug. Jewelry-making with jequirity seeds is dangerous, and there have been cases of death by a finger-prick while boring the seeds for beadwork.

Jerusalem cherry:

All parts, especially the berries, are poisonous, causing nausea and vomiting. It is occasionally fatal, especially to children.

The plant is perennial in zones up to USDA 8. Native to Peru, they can survive frosts and cold weather. They generally live up to 10 years, producing fruit usually in their 2nd or 3rd year, and every year after that. Their fruit is extremely similar to cherry tomatoes (as they share the same genus with tomatoes) in taste and texture, and are therefore easily confused with them. S. pseudocapsicum's poison is primarily solanocapsine, which is similar to other alkaloids found in their genus, such as solanine and atropine. Although the toxin is poisonous, it is generally not life threatening. It may cause gastric problems, including vomiting and gastroenteritis.

Jersualem cherries are poisonous to humans, and to dogs, cats, and birds as well.

Jimsonweed, Thornapple:

AKA: datura / thorn apple / stinkweed / Jamestown weed (*Datura stramonium*) All parts of the plant are poisonous, causing abnormal thirst, vision distortions, delirium, incoherence, coma. Often fatal.

There is a mnemonic device for the physiological effects of datura/atropine intoxication: "blind as a bat, mad as a hatter, red as a beet, hot as hell, dry as a bone, the bowel and bladder lose

their tone, and the heart runs alone." Another rhyme describing its effects is, "Can't see, can't spit, can't pee, can't shit." Regarding Datura, among the Navajo is the folk admonition, 'Eat a little, and go to sleep. Eat some more, and have a dream. Eat some more, and don't wake up.' The actual effects are reported to be: cycloplegia and mydriasis (extreme dilation of the pupil), flushed, warm and dry skin, dry mouth, urinary retention and ileus (slowing or stopping of intestinal movement), rapid heart beat, hypertension or hypotension, and choreoathetosis/jerky movements. In case of overdose the effects are hyperthermia, coma, respiratory arrest, and seizures. The vast majority of atropine-poisoning cases are accompanied by delirium with visual and auditory hallucinations.

The effects of Datura have been described as a living dream: consciousness falls in and out, people who don't exist or are miles away are conversed with, etc. The effects can last for days. Tropane alkaloids are some of the few substances which cause true hallucinations which cannot be distinguished from reality. It may be described as a "real" trance when a user under the effect can be awake but completely disconnected from his immediate environment. In this case, the user would ignore most stimuli and respond to unreal ones. This is unlike psilocybin or LSD, which only cause sensory distortions.

The doses that cause noticeable effects and the doses that can kill are very close with datura. This makes overdosing on *Datura stramonium* very easy. This can be fatal; it can cause fevers in the 105-110 (40-43°C) range which is a range that can kill brain cells, and lead to brain damage. There have been many instances of teenagers looking for a cheap high poisoning themselves to death on datura. If someone overdoses on datura it is advised to induce vomiting, to wash out his or her stomach, and to get the person hospitalized immediately.

If taken recreationally and the user does not notice any conscious effects, most people redose thinking it's not working, which is why overdoses are so common. The user doesn't realize that he or she was hallucinating. Some users have reported seeing an array of people from their lives. A few anecdotal reports also mention the user's perception of "phantom cigarettes"; the person believes that he or she is smoking a cigarette only to find that it has disappeared later, thus realizing that it never existed. There have been reports of the user interacting with other unreal objects also, such as looking down and seeing a cigarette lighter in one's hand then dropping it, and after a minute or two of searching, the user often realizes that this lighter or any other unreal object never existed. Returning to "reality" from datura-induced hallucinations is often coupled with momentary disorientation. At the peak of such experiences users often enter a true psychotomimetic state, in which they "lose touch with reality" altogether; at this point, many find it difficult or impossible to communicate with others.

A majority of users who have written reports on experiences with this drug have described those experiences as unpleasant and often terrifying. This is possibly due to their having taken excessive doses. The powerful effects of Datura continue until the body metabolizes the tropane alkaloids.

Scopolamine is the primary hallucinogen in Datura wrightii from California and other Daturas. Scopolamine can be slowly and erratically absorbed into the brain. In most people, scopolamine reaches the brain within an hour or so after ingestion and causes visual and

auditory hallucinations. In about 25% of people, scopolamine is very slowly absorbed into the brain, taking up to 13 hours to enter the brain. These are the people who are at the highest risk of overdosing. They become impatient waiting for their recreational high and take more of the plant extract.

Johnson Grass:

Jonquil

Juniper

Klamath weed

Labrador Tea

Lantana:

Larkspurs:

Contains the alkaloid Delsoline. Young plants and seeds are poisonous, causing nausea, muscle twitches, paralysis, often fatal.

All parts of the plant contain an alkaloid **delphinine** and are very poisonous, causing vomiting when eaten, and death in larger amounts. In small amounts, extracts of the plant have been used in herbal medicine. Gerard's *herball* reports that drinking the seed of larkspur was thought to help against the stings of scorpions, and that other poisonous animals could not move when covered by the herb, but does not believe it himself. Grieve's herbal reports that the seeds can be used against parasites, especially lice and their nits in the hair. A tincture is used against asthma and dropsy. The juice of the flowers, mixed with alum, gives a blue ink.

The plant was connected to Saint Odile and in popular medicine used against eye-diseases. It was one of the herbs used on the feast of St. John and as such warded against lightning. In

Transylvania, it was used to keep witches from the stables, probably because of its blue color.

Larkspur, especially tall larkspur, is a significant cause of cattle poisoning on rangelands in the western United States. Larkspur is more common in high-elevation areas, and many ranchers will delay moving cattle onto such ranges until late summer when the toxicity of the plants is reduced.

Laurel

Leopard Bane

Lillies-Easterlily, Camass lily:

Many plants in the family are poisonous if eaten.

Lily of the Valley:

Locoweed:

Lupine:

Manchineel:

All parts of this tree including the fruit contain toxic phorbol esters typical of the Euphorbiaceae. A present-day Spanish name is in fact ***manzanilla de la muerte***, "little apple of death". This refers to the fact that manzanilla is one of the most poisonous trees.

Mandrake

Maple - Red:

RED MAPLE (Acer rubrum) – Red maple is a large native tree found in moist woodlands and swamps throughout Ohio. Leaves are opposite, generally triangular with three or five lobes, coarsely toothed, and silvery white beneath.

Poisonings result from consumption of wilted leaves and have only been reported for horses. Toxicity is most prevalent from June through October, but may be greatest in autumn foliage. Dried leaves are reported to remain toxic for 30 days. The cause of toxicity is not known. Primary effects are acute hemolytic anemia, methemoglobinemia, and Heinz body formation in the red blood cells. Symptoms develop three to four days after ingestion of leaves and include rapid breathing and heart rate, weakness, depression, jaundice, cyanosis, brownish discoloration of blood and urine, coma, and death.

Mayapple:

Green portions of the plant, unripe fruit, and especially the rhizome contain the non-alkaloid toxin podophyllotoxin which causes diarrhea, severe digestive upset.

All the parts of the plant, excepting the fruit, are poisonous. This plant can kill humans within 24 hours. Even the fruit, though not dangerously poisonous, can cause unpleasant red/yellow diarrhea.

Mescal bean

Mesquite

Milkweed:

Mistletoe

Monkshood (Buttercup, Leopard Bane):

All parts of the plant are highly poisonous. Ancient warriors used it to poison their enemies water supplies. Used in the past for killing wolves. causes burning, tingling, and numbness in

the mouth, then the intestine, followed by vomiting, death by asphyxiation.

In a few minutes after the introduction of a poisonous dose of aconite, marked symptoms supervene. The initial signs of poisoning are referable to the alimentary canal. There is a sensation of burning, tingling, and numbness in the mouth, and of burning in the abdomen. Death usually supervenes before a numbing effect on the intestine can be observed. After about an hour, there is severe vomiting. Much motor weakness and cutaneous sensations similar to those above described soon follow. The pulse and respiration steadily fail, death occurring from asphyxia. As in strychnine poisoning, the patient is conscious and clear-minded to the last. The only post-mortem signs are those of asphyxia. The treatment is to empty the stomach by tube or by a non-depressant emetic. The physiological antidotes are atropine and digitalis or strophanthin, which should be injected subcutaneously in maximal doses. Alcohol, strychnine, and warmth must also be employed. It must be noted that these "antidotes" are historical ones, as few toxicological centers today would recommend warmth, digitalis, or strychnine for any poisonings.

The above description of poisoning is characteristic of an oral administration. It should however be noted that aconitine may be easily absorbed through the skin, and poisoning may occur through this route simply by picking the leaves without the use of gloves; the toxin in the sap is absorbed through the skin. From practical experience, the sap oozing from eleven picked leaves will cause cardiac symptoms for a couple of hours. In this event, there will be no gastrointestinal effects. Tingling will however start at the point of absorption, and extend up the arm to the shoulder, after which the heart will start to be affected. The tingling will be followed by numbness—it is fairly unpleasant. As remarked above, atropine is an antidote. Atropine is a constituent of Belladonna.

Aconitine is a potent neurotoxin that blocks tetrodotoxin-sensitive sodium channels. Pretreatment with barakol—10 mg/kg IV the compound is isolated from the leaves of *Cassia siamea Lam*—reduces the incidence of aconitine-induced ventricular fibrillation and ventricular tachycardia, as well as mortality. 5 μg/kg IV of tetrodotoxin also had the same effect. The protective effects of barakol are probably due to the prevention of intracellular sodium ion accumulation.

Morning glory

Mountain. laurel

Kalmia latifolia) – Mountain laurel is an evergreen shrub characterized by glossy leathery dark-green leaves and showy white to pink flowers formed in dense terminal clusters. The shrub occurs mostly in the southeastern portion of Ohio, where it grows in hillside woodlands and pastures.

All parts of mountain laurel, including leaves, twigs, flowers, and nectar (as well as honey made from it), contain a toxic resinoid (andromedotoxin); leaves and twigs also contain a cardiac glycoside (arbutin). Affected animals may exhibit incoordination; watering of the eyes, nose, and mouth; irregular breathing; vomiting; bloat; weakness; convulsions; coma; and death. Poisonings occur most often in winter or early spring when other green forage is not available. Horses are susceptible to poisoning; however, sheep poisonings are reported more frequently, since mountain laurel grows on land more suited for sheep.

Mountain mahogany

Mushrooms

Mustards, Crucifers, Cress

Narcissus (Daffodil & Jonquil)

Needlepoint ivy

Nightshade (black) berry:

An erect summer annual, reaching as much as 1 1/3 feet in height. Eastern black nightshade is primarily a weed of agronomic crops, pastures, and hay fields that is found throughout the United States east of the Rocky Mountains. A taproot with a branched fibrous root system. Stems below the cotyledons (hypocotyls) are covered with small hairs and are green or sometimes tinted maroon. Cotyledons are green on the upper surface, purple- or maroon-tinted on the lower surface. Young leaves remain purple- or maroon-tinted on the undersurface. Leaves are simple, alternate, ovate or ovate-lanceolate. Leaf margins may be entire or with blunt teeth. Leaf hairiness is variable, however leaves are most often found to be slightly hairy. Branching, round or angular, smooth or only partially hairy, and becoming woody with age. Flowers are Star-shaped (4-10 mm in diameter), white or purple-tinged, in umbel-like clusters of 5-7. A berry, 5-12 mm in diameter, green when immature, turning purplish-black at maturity. Berries contain 4-15 sclerotic granules. Cotyledons of young leaves are purple- or maroon-tinted on the undersurface. Emerging plants might be confused with Bittersweet Nightshade (*Solanum dulcamara*) seedlings, however most bittersweet nightshade plants spread via creeping stems that root at the nodes and do not have a purple- or maroon-tinted leaf undersurface. Additionally, mature nightshade plants may be distinguished by berry color (eastern black nightshade: purplish-black; bittersweet nightshade: red).

Oak Brush (shrub):

Most species foliage and acorns are mildly poisonous, causing digestive upset, heart trouble, contact dermatitis. Rarely fatal.

Oak tree (acorns & young leaf buds):

Most species foliage and acorns are mildly poisonous, causing digestive upset, heart trouble, contact dermatitis. Rarely fatal.

The leaves and acorns of the Oak tree are poisonous to horses in large amounts, due to the toxin tannic acid, and causes kidney damage and gastroenteritis. Additionally, once horses have a taste for the leaves and acorns, they may seek them out. Therefore, horse owners are encouraged to fence out Oak trees from their pasture, especially if forage is scarce. Symptoms

of poisoning include lack of appetite, depression, constipation, diarrhea (which may contain blood), blood in urine, and colic.

(Quercus spp.) – Oak species are commonly recognized by their leaves, thick bark, and cupped fruit (acorns). Leaves of many species are characteristically lobed while some have toothed leaves, except for the shingle and willow oaks, whose leaves are entire rather than lobed or toothed. Oaks are common in woodlands throughout Ohio.

Most species of oak contain toxic phenolic compounds (tannins). Large quantities of young leaves and sprouts are toxic when consumed in spring as are green acorns in the fall. Poisoning occurs when over half the diet is oak buds and young leaves, or acorns, for a period of time. Livestock have also been poisoned by drinking water in which oak leaves have soaked. Plant tannins or their metabolites cause gastrointestinal and renal dysfunction. Symptoms appear several days after the period of consumption and include abdominal pains, weakness, anorexia, colic, constipation, depression, diarrhea, presence of blood in urine, and jaundice. Death may result. Horses are less susceptible than ruminants. Oak poisoning resembles pigweed poisoning.

Oleander:

All parts are toxic, containing nerioside, oleandroside, saponins, cardiac glycosides, but especially the leaves and woody stems. They cause severe digestive upset, heart trouble, contact dermatitis. Very fatal. It is the deadliest plant in the world.

Oleander is one of the most poisonous plants and contains numerous toxic compounds, many of which can be deadly to people, especially young children. The toxicity of Oleander is considered extremely high and it has been reported that in some cases only a small amount had lethal or near lethal effects (Goetz 1998). The most significant of these toxins are oleandrin and neriine, which are cardiac glycosides (Goetz 1998). "Cardiac glycocides are naturally occurring" plant or animal compounds "whose actions include both beneficial and toxic effects

on the heart" (Desai 2000). They are present in all parts of the plant, but are most concentrated in the sap. It is thought that Oleander may contain many other unknown or un-researched compounds that may have dangerous effects (Inchem 2005). Oleander bark contains rosagenin which is known for its strychnine-like effects. The entire plant including the milky white sap is toxic and any part can cause an adverse reaction. Oleander is also known to hold its toxicity even after drying. It is thought that a handful or 10-20 leaves consumed by an adult can cause an adverse reaction, and a single leaf could be lethal to an infant or child. According to the Toxic Exposure Surveillance System (TESS) in 2002 there were 847 known human poisonings in the United States related to Oleander (Watson 2003). There are innumerable reported suicidal cases of consuming mashed oleander seeds in South India. In animals, around 0.5 mg per kilogram of body weight is lethal to many animals, and various other doses will affect other animals (Inchem 2005). Most animals can suffer a reaction or death from this plant.

Orange sneezeweed

Oxalis

Pasque flower

Philodendron

Pin cherry:

(Prunus spp.) – Many species of cherry and peach are poisonous. These species are characterized by alternate toothed leaves, white or pink flowers, and fleshy fruits (cherries or peaches). Crushed twigs and leaves yield a strong cyanide odor. Two native species of cherry are common in Ohio. Wild black cherry (P. serotina) is a large tree that is distributed widely throughout the state in woodlands, old fields, and along fence rows. Choke cherry (P. virginiana) grows as a large shrub or small tree and is scattered throughout Ohio in a variety of habitats, though it is more frequent northward. Peach (P. persica) is a small introduced tree that occasionally escapes from orchard cultivation through seed.

Seeds, twigs, bark, and leaves contain a glycoside (amygdalin) that quickly breaks down by hydrolysis (from bruising, wilting, frost damage) to form the highly toxic compound hydrocyanic (prussic) acid (or cyanide). Poisonings occur most frequently when wilted leaves are eaten, but have also been reported when leaves are consumed directly from the tree, or sprouts, or in dried hay. The amount of hydrocyanic acid formed once the plant material is ingested is affected by the type of stomach juices and the kind of feed the animal had previously consumed. Ruminant animals appear to be more susceptible to poisoning than horses.

Podocarpus

Poinciana

Poinsettia:

Notable for *not* being poisonous, despite persistent beliefs to the contrary, although may cause upset stomach.

In the United States and perhaps elsewhere, there is a common misconception that poinsettias are toxic. The origin of this could be found in the fact that most plants of the spurge genus are indeed toxic and also because the name of the plant seems to refer to the word poison. This misconception was spread by a 1919 urban legend[8] of a two-year-old child dying after consuming a poinsettia leaf. While it is true that the plant is not very toxic, those sensitive to latex may suffer an allergic reaction and it is therefore not advisable to bring the plants into the home of sensitive individuals.

In a study in the American Journal of Emergency Medicine 22,793 cases of poinsettia exposures were electronically analyzed. 98.9% of the exposures were accidental with 93.9% involving children. 96.1% of the exposed patients were not treated in a health care facility and 92.4% did not require any type of therapy.[9] If eaten, poinsettias may sometimes cause diarrhea and vomiting in animals and humans.

Poison hemlock (see Hemlock)

Poison ivy:

Poison ivy vine with typical reddish "hairs".

All parts of these plants contain a highly irritating oil with urushiol (this is actually not a poison but an allergen). Skin reactions can include blisters and rashes. It spreads readily to clothes and back again, and has a very long life. Infections can follow scratching. As stated, this is an allergen, and the toxin will not affect certain people. The smoke of burning poison ivy can cause reactions in the lungs, and can be fatal.

Poison Oak:

berries / climbing variation / ground variation

Pacific Poison Oak

Western Poison-oak leaves and twigs have a surface oil, urushiol, which causes an allergic reaction. Around 15%[1] to 30%[2] of people have no allergic response, but most if not all will become sensitized over time with repeated or more concentrated exposure to urushiol.

For those who are affected by urushiol, it causes a very irritating rash. In extreme cases, corticosteroids are needed to treat rashes and severe itching. The first symptom of contact is a severe itching of the skin that develops into reddish colored inflammation or non-colored bumps, and then blistering of the skin occurs. In severe cases, clear fluids ooze from open blistered sores. Once the urushiol poison has had contact with the skin, it is quickly bound to the skin. The poison can be washed off within a short time after contact, but once bound to the skin, it cannot be washed away.

After the urushiol is removed, the rash cannot usually be spread by contact with an affected area or by scratching. The oozing fluids released by itching blisters do not spread the poison. However, scratching can open the skin especially in cases with significant blistering, making it possible for the skin to become infected by opportunistic bacteria (known as a *secondary infection*). The appearance of a spreading rash indicates that some areas received more of the poison and reacted sooner than other areas. The blisters and oozing result from blood vessels that develop gaps and leak fluid through the skin; if the skin is cooled, the vessels constrict and leak less. If poison oak, ivy, etc., is burned and the smoke then inhaled, this rash will appear on the lining of the lungs, causing extreme pain and possibly fatal respiratory difficulty. If eaten, the digestive tract, airway, kidneys or other organs can be damaged.

Urushiol oil can remain active for several years, so handling dead leaves or vines can cause a reaction. In addition oil transferred from the plant to other objects (such as pet fur) can cause the rash if it comes into contact with the skin.

Poison suckleys

Poison sumac:

All parts of the plant contain a resin called urushiol that causes skin and mucous membrane irritation to humans. When burned, inhalation of the smoke causes diarrhea and other internal irritations.

In the U.S., it is listed under the Federal Noxious Weed Act of 1974, as amended (7 U.S.C. 2801 et seq.), as a "noxious weed". Most U.S. states list this plant in similar categories. It is considered one of the "U.S. Invasive Weeds" [1]. In terms of its potential to cause urushiol-induced contact dermatitis, poison sumac is far more virulent than its relatives poison ivy and poison oak. According to some botanists, poison sumac (*Toxicodendron vernix*) is the most toxic plant species in the United States (Frankel, 1991).

The poison shows itself in painful and long continued swellings and eruptions.

Pokeweed:

Leaves, berries and roots contain *phytolaccatoxin* and *phytolaccigenin* - toxin in young leaves is reduced with each boiling and draining.

Toxic Principle Saponins, believed to be the primary toxic constituents, are present in the berry juice and other parts. Other toxic constituents have also been identified including the alkaloid phytolaccine (in small amounts) and the alkaloid phytolaccotoxin, as well as a glycoprotein. If used as food, the water in which they are boiled must be thrown away.

Clinical signs

In humans:

The eating of nonfatal quantities of poke, perhaps of the shoots, may cause retching or vomiting after two hours or more. These signs may be followed by dyspnea, perspiration, spasms, severe purging, prostration, tremors, watery diarrhea (often bloody) and, sometimes, convulsions. If a fatal quantity is eaten, perhaps including roots, the above signs are followed by paralysis of the respiratory organs and other narcotic effects, culminating in the death of the poisoned person.

In horses:

Colic, diarrhea, respiratory failure.

In swine:

Unsteadiness, inability to rise, wretching. Jerking movements of the legs. Subnormal

temperature.

In cattle:

Same general signs plus a decrease in milk production.

Poppy

Potato plant:

Pothos

Prince's plume

Privet:

Berries and leaves are poisonous. Berries contain ligustrin and syringin, which causes difestive disturbances, nervous symptoms. Can be fatal.

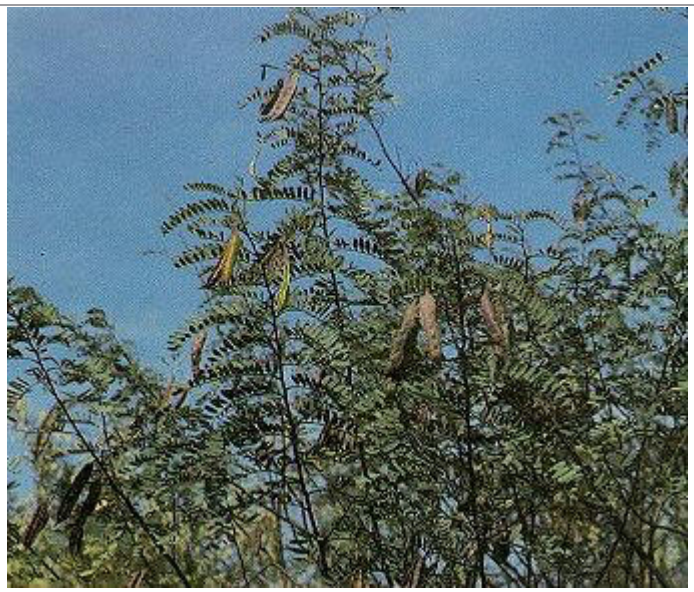
Privet is one of several plants which are poisonous to horses. In the some parts of the world where they are not native, some privet species have become invasive weeds, spreading into wilderness areas and displacing native species. This is particularly a problem in North America, where no species of the genus occurs naturally.[4] Privet is a huge problem in New Zealand. It is banned from sale or cultivation in New Zealand due to the effects of its pollen on asthma sufferers. Privet pollen is known to cause asthma and eczema in sufferers. Privet can be removed by contacting the local government to report its presence.

(Ligustrum spp.) – Privet species are introduced semievergreen or evergreen shrubs commonly used as ornamental shrubs or hedges. They are characterized by small opposite leaves, white flowers, and hard black berrylike fruits that persist through winter. One privet species (L. vulgare) frequently escapes cultivation in Ohio and is well scattered throughout the state. It may be found in woods and bottomlands, at abandoned home sites, and along fence rows.

Leaves and fruit of privet contain several toxic glycosides (e.g., ligustrin, syringin) which are primarily gastrointestinal irritants. Poisonings have been reported for horses eating privet leaves. Symptoms include diarrhea, abdominal pain, incoordination, partial paralysis, weak pulse, hypothermia, convulsions, and sometimes death.

Pyrocantha

Rattlebox:



Daubentonia punicea

Shrub or small tree to 4 m tall. Leaves alternate, deciduous, 10 to 20 cm long, evenly pinnately compound with 12 to 40 leaflets. Flowers conspicuous, orange to red, shaped like a sweetpea, 2 to 2.5 cm long; in drooping, axillary clusters. Pods four-winged, 6 to 8 cm long, indehiscent, tough and somewhat leathery. Found in lower coastal plain Florida to Louisiana. Most abundant in moist fertile soils, marshes, along ditches, fence rows, pastures and waste places; planted as an ornamental and widely escaping.

TOXICITY - The seeds contain a saponin which is quite toxic to poultry, cattle, sheep, goats and humans. It has been shown that as few as nine seeds per bird can be fatal. Sheep can be killed by consuming as little as 50 grams/ 100 pounds of body weight.

SYMPTOMS - Animals appear severely depressed, have a rapid pulse and diarrhea. Poisoning usually occurs in the fall when other forage is scarce.

TREATMENT - Saline purgatives should be given.

Rayless goldenrod

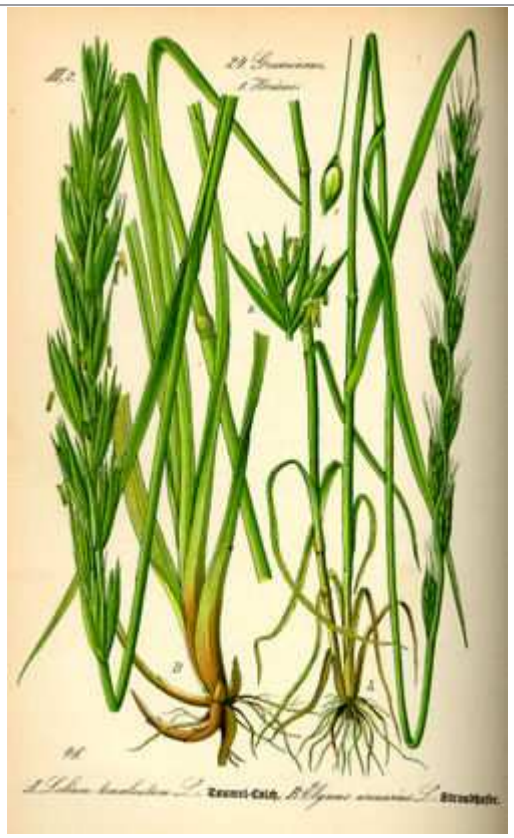
Rhododendron

Rhubarb:

Rhubarb leaves contain poisonous substances. Rhubarb leaves contain oxalic acid, a corrosive and nephrotoxic acid that is present in many plants. The LD_{50} (median lethal dose) for pure oxalic acid is predicted to be about 375 mg/kg body weight,[*citation needed*] or about 25 g for a 65 kg (~140 lb) human. While the oxalic acid content of rhubarb leaves can vary, a typical value is about 0.5%,[4] so a rather unlikely five kilograms of the extremely sour leaves would have to be consumed to reach an LD_{50} dose of oxalic acid. However, the leaves are believed to also contain an additional, unidentified toxin.[5] In the petioles, the amount of oxalic acid is much lower, especially when harvested before mid-June (in the northern hemisphere), but it is still enough to cause slightly rough teeth.[*citation needed*]

The roots have been used as strong laxative for over 5,000 years. [6] The roots and stems are rich in anthraquinones, such as emodin and rhein. These substances are cathartic and laxative, which explains the sporadic abuse of Rhubarb as a slimming agent. Anthraquinones are yellow or orange and may colour the urine.[*citation needed*]

Rye Grass:



It usually grows in the same production zones as wheat and is considered a weed. The similarity between these two plants is so extensive that in some regions cockle is referred to as *"false wheat."* It bears a close resemblance to wheat until the ear appears.

The seeds and seed heads of this common garden weed may contain the alkaloids temuline and loliine. Some experts also point to the fungus ergot or fungi of the genus endoconidium both of which grow on the seed heads of rye grasses as an additional source of toxicity

Rubberweed

Russian thistle

St. Johnswort, Klamath weed

Sandcorn(Deathcamas, Star Lily):

Sesbane

Silverling

Skunk cabbage

Snow-on-the-mountain

Sorghum

Spathe flower

Spurges

Stagger grass

Star of Bethlehem

String of pearls

Tansy ragwort

Thornapple, Jimsonweed:

There is a mnemonic device for the physiological effects of datura/atropine intoxication: "blind as a bat, mad as a hatter, red as a beet, hot as hell, dry as a bone, the bowel and bladder lose their tone, and the heart runs alone." Another rhyme describing its effects is, "Can't see, can't spit, can't pee, can't shit." Regarding Datura, among the Navajo is the folk admonition, 'Eat a little, and go to sleep. Eat some more, and have a dream. Eat some more, and don't wake up.' The actual effects are reported to be: cycloplegia and mydriasis (extreme dilation of the pupil), flushed, warm and dry skin, dry mouth, urinary retention and ileus (slowing or stopping of intestinal movement), rapid heart beat, hypertension or hypotension, and choreoathetosis/jerky movements. In case of overdose the effects are hyperthermia, coma, respiratory arrest, and seizures. The vast majority of atropine-poisoning cases are accompanied by delirium with visual and auditory hallucinations.

The effects of Datura have been described as a living dream: consciousness falls in and out, people who don't exist or are miles away are conversed with, etc. The effects can last for days. Tropane alkaloids are some of the few substances which cause true hallucinations which cannot be distinguished from reality. It may be described as a "real" trance when a user under the effect can be awake but completely disconnected from his immediate environment. In this case, the user would ignore most stimuli and respond to unreal ones. This is unlike psilocybin or LSD, which only cause sensory distortions.

Tobacco tree, tobacco

Tomato leaves:

Trumpet vine

Tulip

Vetch

Violet seeds

Water hemlock:

The root, when freshly pulled out of the ground, is extremely poisonous and contains the toxin Cicuta virosa. When dried, poison is reduced to roughly 3-5 percent of what it contained when fresh.

The plant is occasionally mistaken for parsnips, due to its clusters of white tuberous roots; this is an often fatal error, as the *Cicuta* is extremely poisonous. Indeed, some consider water hemlock to be North America's most toxic plant.[1] Cicuta is fatal when swallowed, causing violent and painful convulsions. Though a number of people have died from water hemlock poisoning over the centuries, livestock have long been the worst affected (hence the name "cowbane"), causing death in as little as 15 minutes. [2] [3]

The chief poison is cicutoxin, an unsaturated aliphatic alcohol that is most concentrated in the roots. Upon human consumption, nausea, vomiting, and tremors occur within 30-60 minutes, followed by severe cramps, projectile vomiting, and convulsions. There are occasional long-term effects, like retrograde amnesia.[4]

White ragweed

White snakeroot:

All parts are poisonous, causing nausea and vomiting. Often fatal.

White Snakeroot contains the toxin tremetol and when consumed by cattle the meat and milk becomes contaminated. When milk or meat from cattle feeding on White Snakeroot is consumed by humans, the poison is passed onto humans and can result in tremetol poisoning called milk sickness (notably the cause of death of Nancy Hanks, mother of Abraham Lincoln). It is also poisonous to horses, goats, and sheep. Signs of poisoning in these animals include depression and lethargy, hind feet placed close together (horses, goats, cattle) or held far apart (sheep), nasal discharge, excessive salivation, arched body posture, and rapid or difficult breathing.

Wild carrots

Wild cherry:

(Prunus spp.) – Many species of cherry and peach are poisonous. These species are characterized by alternate toothed leaves, white or pink flowers, and fleshy fruits (cherries or peaches). Crushed twigs and leaves yield a strong cyanide odor. Two native species of cherry are common in Ohio. Wild black cherry (P. serotina) is a large tree that is distributed widely throughout the state in woodlands, old fields, and along fence rows. Choke cherry (P. virginiana) grows as a large shrub or small tree and is scattered throughout Ohio in a variety of habitats, though it is more frequent northward. Peach (P. persica) is a small introduced tree that occasionally escapes from orchard cultivation through seed.

Seeds, twigs, bark, and leaves contain a glycoside (amygdalin) that quickly breaks down by hydrolysis (from bruising, wilting, frost damage) to form the highly toxic compound hydrocyanic (prussic) acid (or cyanide). Poisonings occur most frequently when wilted leaves are eaten, but have also been reported when leaves are consumed directly from the tree, or sprouts, or in dried hay. The amount of hydrocyanic acid formed once the plant material is ingested is affected by the type of stomach juices and the kind of feed the animal had previously consumed. Ruminant animals appear to be more susceptible to poisoning than horses.

Wild cucumber

Wild parsnip

Wild peas

Wild plums

Wisteria

Yellow Jessamine:

All parts are poisonous, causing nausea and vomiting. Often fatal. It's possible to become ill from ingesting honey made from jessamine nectar.

All parts of this plant contain the toxic strychnine-related alkaloids gelsemine and gelseminine and should not be consumed. The sap may cause skin irritation in sensitive individuals. Children, mistaking this flower for honeysuckle, have been poisoned by sucking the nectar from the flower. The nectar is also toxic to honeybees, and causes brood death when gathered by the bees.

Yew tree:




All parts of the plant, except for the fleshy red bit of the fruit, contain taxane alkaloids. The seeds are especially poisonous and are quickly fatal when ingested.

All parts of the tree are toxic, except the bright red aril surrounding the seed, enabling ingestion and dispersal by birds. The major toxin is the alkaloid taxine. The foliage remains toxic even when wilted or dried. Horses have the lowest tolerance, with a lethal dose of 200–400 mg/kg body weight, but cattle, pigs, and other livestock are only slightly less vulnerable.[7] Symptoms include staggering gait, muscle tremors, convulsions, collapse, difficulty breathing, and eventually heart failure. However, death occurs so rapidly that many times the symptoms are missed. The tree should be fenced off or removed from pasture land to prevent grazing animals from consuming it.

(Taxus spp.) – Yews are evergreen shrubs characterized by linear leaves that are glossy dark-green above and yellowish-green below with a distinct mid rib, and by fruit consisting of a single seed within a bright red fleshy cup-shaped structure resembling a berry. Leaves are alternate and are spirally arranged along the twig, although they appear to be in two rows. One native species of yew grows in Ohio, the Canada yew (or ground-hemlock) (T. canadensis). It is patchily distributed throughout the state and is most common in the northeast. Many cultivated species are used as ornamentals, including Japanese yew (T. cuspidata) and English yew (T. baccata).

Leaves, bark, and seeds (but not the fleshy pulp) of yews contain alkaloids (taxine) that affect the nervous system and are toxic whether green or dry. In small quantities, yew may be

harmless. Canada yew is heavily browsed by deer. But when large quantities are eaten, death may follow rapidly due to cardiac failure, with few preceding symptoms. Poisoning often occurs when clippings are placed where they are accessible to animals. Symptoms include gaseous distress, diarrhea, vomiting, tremors and convulsions, dilated pupils, respiratory difficulty, weakness, collapse, slowed heart rate, circulatory failure, coma, and death.

Poisonous Substances

WALNUT:

Contact with the horse's body by the bark, the hull of the nut, or the wood will cause laminitis (founder) in the horse. The most common contact occurs from people using walnut shavings or sawdust as bedding. The shavings of walnut are dark in color and would be most often found in shavings from furniture factories.

MONENSIN :

This substance is commercially known as Coban or Rumensin. This substance is a feed supplement commonly used for cattle and poultry. It is lethal in its pure form at the level of 1—2 mg/Kg of horse. Poultry feed with 100 g/ton or cattle feed premixes at 300 g/ton are lethal to the horse. Signs of poisoning include anorexia, profuse sweating, colic, stiffness, posterior paralysis, tachycardia, dyspnea (shortness of breath), hyperpnea (increased respiration rate), and uneasiness. Sublethal doses cause poor performance, unthrifty appearance, and often heart failure.

UREA:

Another substance used as a feed supplement for ruminant animals. Urea has little feed value to the horse, but the horse can tolerate cattle feeds containing some urea without death. However, if the horse would ingest pure urea it would cause death.

MYCOTOXINS and MOLDS:

Mycotoxins have become a problem with all animals, including horses. Currently it appears that three toxins are the major difficulty – aflatoxin, fusarium, and zeralone. Feed manufacturers currently test most commercial feed grains for aflatoxin. Using home or locally grown feed that has been improperly harvested or stored may cause problems. Under no conditions should feed with apparent mold be fed. Mold can be destroyed, but there is no practical method of removing the toxin. Mold toxins will cause liver damage, damage to the nervous system, and death. Molds grow rapidly with moisture over 16% and temperatures of 65º or higher. Sweet feeds can be a problem because of moisture and readily fermentable carbohydrate.

BLISTER BEETLES:

This beetle has received much publicity due to several deaths caused by horses ingesting them. The blister beetle infests alfalfa fields that are in bloom. The beetles contain the irritant cantharidin, and if the beetle gets baled into the hay and then is ingested by the horse, excessive irritation to the digestive tract and death can occur. This beetle is about one inch in length, pure black or black with gray edges on the wings, or black with a red head or gray with a red head, or yellow brown with dark stripes, or gray. They have distinctive heads and long cylindrical bodies.

Blister beetles are not a common problem in hay raised in Ohio, but if hay is purchased from the west and southwest, it should be inspected to be sure it is free of the beetle. If the hay is only mowed, the beetles can leave during the drying process, but hay that is crushed as it is mowed will contain the dead and dangerous beetles. It would take about 50 dead beetles to be

lethal to a horse.

Annoying Plants

FOXTAILS:

(*Setaria* spp.) are common summer annuals that occur throughout Ohio. Giant foxtail (*S. faberi*) is most common, with densely pubescent upper leaf blades and distinctly nodding seed heads. Green foxtail (*S. viridis*) has smooth leaf blades, hairs along the sheath margins, and loosely erect seed heads. Yellow foxtail (*S. glauca*) is short (one to two feet), with flat stems, erect culms, and long, sparse hairs at the base of the leaf blade. Although not poisonous, bristles on the panicles stick to skin and have caused abscesses.

STINGING NETTLE:

(*Urtica dioica*) is a bristly, stinging, erect perennial that reproduces by seeds and creeping rootstocks. Stems and leaves are covered with numerous stinging hairs, the sting resembling that of a bee. Plants grow up to six feet in height, with slender, rigid stems branching mostly at the top. Leaves are opposite, three- to six-inches long, pointed with saw-toothed margins, sometimes rounded at the base. Flowers are green to white and arranged on branched spikes arising from leaf axils. The plant is found throughout Ohio, especially along roadsides, fencerows, ditchbanks, shady or moist wood edges. Contact with the plant can cause

inflammation and welts may form.

POISON IVY:

(*Toxicodendron radicans*) is a native plant that is found throughout Ohio, on roadsides, forest edges, and waste areas. Poison ivy is a creeping perennial vine or bush that reproduces by seed and vegetatively by roots. Woody stems grow along the ground and can climb on a permanent structure (e.g., walls, trees, utility poles, or fenceposts). Once it begins to climb, adventitious roots appear from the stem that hold it in place, giving the stem a fuzzy appearance. The leaves of poison ivy are alternate, with three leaflets, and often shiny with a reddish hue. The shape of the leaflets can be variable (elliptic to egg-shaped), as can the amount and position of hairs. Leaf margins may be either smooth, toothed, or lobed. The green-yellow-white flowers have five petals and bloom in June and July. The small white berries (about one-eighth inch in diameter) are round and hard. All parts of this plant contain an oily resin (3-pentadecylcatechol) that can cause allergic reactions. Virtually anything that comes in contact with the oily resin (e.g., animals, clothes, gloves, tools) can carry the resin and cause dermatitis. Smoke of burning poison ivy plants can be extremely dangerous.