Plants that poison farm animals

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If you suspect that poisonous plants are causing losses of your animals, see your county agent or call a local veterinarian.

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Introduction

Poisonous plants have been known to man since before the time of Christ. A number of references in the Bible allude to the poisonous properties of some plants. In early times, knowledge of these plants was used largely for ulterior motive, particularly, before much was known about metallic poisons. As civilization progressed knowledge of the poisonous plants has increased, due largely to the importance of grazing plants in the economy of livestock production.

In the United States annual losses among livestock caused by the consumption of poisonous plants has been estimated at many millions of dollars. It is very difficult to estimate the actual loss in Florida caused by livestock eating poisonous plants. Losses have occurred in all parts of the state and in certain instances have been very severe. The rapid development of the livestock industry in this state during the past 15 years has placed increased emphasis on the importance of poisonous plants. Losses from this cause often can be largely prevented, and it is with this thought in mind that this bulletin is being published.

It is important to realize in dealing with these plants that publications from other states, while basically correct in the information contained, do not necessarily reflect conditions here. Many poisonous plants which are of importance in other states may be of little consequence in Florida; conversely, some important poisonous plants in this state are of particular significance in other states. Also common names of plants often differ in many states and even localities. The name “coffee bean,” for instance, is a common name for at least eight plants in various Southeastern states. Therefore, it is essential that as much information as possible be at hand regarding these plants.

Early diagnosis is an important phase in controlling losses caused by poisonous plants. In cases of suspected plant poisoning in livestock a graduate veterinarian, who by training and experience should be able to give valuable assistance, should be consulted as early as possible. In this way what might develop into extensive losses often can be reduced to a minimum.

Conditions under which poisonous plants are eaten

Most animals will not eat poisonous plants under normal circumstances. The following conditions are associated with plant poisoning in this state.

Starvation

Well-fed animals receiving a properly balanced ration seldom voluntarily eat poisonous plants. Plant poisoning is frequent in range animals grazing on scant range during the winter months. Under this condition there is a shortage of suitable grazing and animals eat undesirable plants in an effort to survive.

Whenever possible winter grazing crops should be planted to supply feedstuff to supplement pasture during periods of shortage.

Deficient rations

Animals receiving a deficient ration, either improperly balanced or actually deficient in certain required ingredients, such as often occurs on range, often develop a craving for something they are not getting and will eat undesirable plants in an effort to find it. Thus, it is important that animals receive adequate amounts of proper mineral supplement in areas where known deficiencies occur.

Overgrazing and drouth

Under conditions in which pastures are overgrazed, either through grazing too many animals on a given area and thereby creating a shortage of suitable feed or through grazing them on pastures made short by drouth or other conditions, plant poisoning frequently occurs. Under these circumstances animals attempt to obtain sufficient food and eat plants they otherwise would not eat. Cyanogenetic plants, particularly, are potentially dangerous under these circumstances.

Waste and trash

Livestock should not be given access to waste or trash piles, particularly those containing discarded poisonous plants. For instance, under normal conditions cattle grazing in tung groves will not eat the foliage of the standing tree or the fallen nuts. However, if tung branches and nuts are discarded in a trash pile cattle have been known to consume them with relish. Oleander and wild cherry are other poisonous plants usually not eaten in the standing, living condition but readily eaten when trimmings are discarded in a trash pile.

Newly plowed areas

Such areas should be grazed with caution. Plowing may expose roots which are poisonous. Dor-
Boxwood (Buxus sempervirens L. and B. microphylla Sieb. & Zucc.)

Description

Boxwood (Buxus sempervirens L. and B. microphylla Sieb. & Zucc.) (Figure 3) are large or small bushes seldom over 5 feet in height. The shrubs have many upright branches and twigs thickly clothed with pairs of round or oval, thick, leathery leaves about \( \frac{1}{4} \) inch long. The small dark green leaves are very persistent and remain on the plant for several years, but the inconspicuous flowers seldom appear in Florida.

Habitat and distribution

Boxwood plants are seldom found anywhere but in the garden or around the house. They may be placed singly as specimen plants but more often they are used as a hedge. They are not found much farther south than Marion County. Clippings or hedge-trimmings are often dumped into the pasture lot.

Toxicity

The bark and leaves contain a number of toxic alkaloids. Cases of poisoning have been reported in horses and pigs. All parts of the plant are considered poisonous. Their bitter taste probably prevents animals from eating large quantities.

Symptoms

Small amounts of the plant have an emetic and purgative action; large amounts induce intense abdominal pain, diarrhea, tenesmus, convulsions and death. Extreme thirst, unsteady gait, convulsions and death have been observed in pigs which died within 24 hours after eating the plant.

Showy crotalaria (Crotalaria spectabilis Roth.)

Yellow crotalaria

Description

Showy crotalaria (Crotalaria spectabilis Roth.) is a robust annual plant 3 to 6 feet or more tall, with an erect, somewhat ribbed stem bearing several stout, ascending branches. The alternate leaves are short-stalked and simple; the leaf blades, 4 to 7 inches long, are dark green above, somewhat paler beneath, elliptic to cuneate, blunt but often tipped with a bristle. The stipules are leaf-like and nearly 1 inch long.
The yellow flowers, about 1 inch across, are pea-shaped and borne in upright spikes 8 to 15 inches long at the top of the plant and at the ends of the branches. The smooth pods, nearly 2 inches long, are inflated, light green when young, becoming nearly black when ripe. The seeds, nearly \( \frac{1}{2} \) inch long, are black and glossy. The whole plant is smooth to the touch and waxy so that water stands in drops on the leaves.

Habitat and distribution

Showy crotalaria is planted as a cover crop to enrich the soil and to reduce the population of root-knot nematode. It occurs commonly also as a roadside plant, in fencerows, in abandoned fields, around farm buildings, and about refuse disposal areas. It is seldom found on very wet soils. It occurs in nearly all parts of the state but is especially common in farming communities.

Toxicity

The alkaloid, monocrotaline, has been isolated from the leaves, stems, roots and seed; the concentration is highest in the seed. Monocrotaline lowers blood pressure and decreases the rate and amplitude of the heart beat in experimental animals.

Natural cases of poisoning have been observed in cattle, sheep, goats, horses, hogs, mules, chickens and turkeys. Nine pounds of the dried plant will kill a 300-pound steer in approximately four days. Two grams of ground seed fed daily will produce acute poisoning in 50-pound hogs in about seven days. Chickens have been killed in 30 to 60 days by consuming 80 mature seeds.

The frosted green or dry plant is toxic to all classes of livestock if eaten in sufficient quantity. Wild birds such as quail and turkeys apparently refrain from eating crotalaria.

Symptoms

Acute poisoning in cattle is marked by depression, loss of appetite, bloody feces, drooling saliva, nasal discharge and a yellowish discoloration of the visible mucous membranes. Death occurs within 5 to 10 days.

The most common type of poisoning observed in cattle under field conditions is the chronic form in which animals often die two to six months after eating the plant. In such cases very little evidence of illness is observed until 7 to 14 days before death. The hair coat may appear rough and there may be a slight unthriftness. Usually the first marked symptom noted is bloody feces. The eyes have an anxious or staring appearance. The animal appears slightly bloated and full in the middle. Loss of appetite, diarrhea, yellowish discoloration of the visible mucous membranes, partial eversion of the rectum and general weakness are other symptoms. Before death the animal “goes down,” due to general weakness, and is unable to stand on its feet.

The symptoms of crotalaria poisoning in sheep and goats are similar to those observed in cattle. The period of illness, however, is somewhat shorter. Hogs often die suddenly of gastric hemorrhage in acute cases of poisoning. Chronic cases may develop 2 to 4 months after the animals have had access to the plant. Loss of appetite, general unthriftness, weakness and occasionally anemia occur. Hogs on feed fail to gain weight.

Horses and mules have been known to become affected with crotalaria poisoning as long as nine months after contact with the plant. The first period of illness usually is marked by a gastro-intestinal disturbance (colic). Usually there is a diarrhea and congestion and yellowish discoloration of the visible mucous membranes. Intestinal movements can be heard at a distance of 15 to 20 feet from the animal.

Symptoms of extreme stupor and depression for a period of 2 or 3 days are interspersed with periods of 2 to 6 weeks during which the animal appears improved. During periods of severe illness affected animals walk listlessly, in circles, and stumble into various objects; they also push or lean against stationary objects and often meet sudden death by falling into awkward positions or becoming entangled in fences so that they cannot extricate themselves. The usual period of illness is 3 to 4 months, although some animals live much longer. During this period the general condition of the animal deteriorates and emaciation occurs. Death occurs as the result of cardiac failure.

Chickens and turkeys, particularly poult's, often are poisoned by eating the seed or green plant. Affected birds become listless and droopy; often there is diarrhea, darkness or paleness of the comb. Anemia and emaciation usually occur if the period of illness is longer than two weeks.

Prevention

Although poisoning by crotalaria may occur at any time during the year, it is most frequent when this plant is green and succulent while other forage is dry and unattractive. It should be considered extremely hazardous to permit livestock of any
kind to come in contact with this plant. There is some controversy among laymen as to the toxicity of C. spectabilis, as animals have been known to eat it without inducing illness. Animals having continual contact with the plant sometimes eat small quantities throughout the season and in this way develop a tolerance to the toxic principle. Some animals will not eat the plant, others will eat it only when insufficient desirable forage is available, while others may eat it even though they are well fed. The development of poisoning is dependent entirely upon the amount the animal eats.

Once the plant has been allowed to scatter its seed on the ground, many years are required to exterminate it, as some seed lie in the soil for years before sprouting. Planting infested areas in cultivated crops greatly assists in elimination of the plant.

Treatment

Animals which have developed symptoms of crotalaria poisoning rarely recover, regardless of treatment.

Jimsonweed (Datura stramonium L.)

Jimsonweed datura—Jamestown weed—Thorn apple

Description

Jimsonweed (Datura stramonium L.) is a large annual weed, 3 to 5 feet tall, with several widespread branches near the top of the stem. The main stem and branches are smooth and green or purplish. The alternate leaves are smooth, light green and stalked; the leaf-blades, 3 to 8 inches long, are thin, ovate to elliptical, pointed at both ends, and bear large, irregular, sharp-pointed teeth along the margins. The erect flowers, borne singly in the leaf axils, are short-stalked, funnel-shaped but flaring out into a 5-pointed star and white or pale bluish-purple in color. The 4-celled fruit is a dry, hard capsule, ovate, green, becoming pale brown, and covered with hard, sharp prickles. The pod, about 1 inch long, splits into four sections, each containing numerous seeds (Figure 5).

Habitat and distribution

Jimsonweed is found nearly all over the state, but more commonly in the northern areas. It occurs in cultivated fields, gardens, around farm buildings, particularly old barn lots, roadsides and refuse heaps, nearly always on fertile soil.

Toxicity

Jimsonweed contains the toxic alkaloids, hyoscyamine, atropine, and scopolamine, about 0.3 percent of the dry weight of the plant. All parts of the plant, particularly the seeds, are poisonous. Cattle are poisoned most frequently, but occasionally sheep, horses and hogs are affected. Children have been poisoned by eating the fruit or sucking the flowers. Ten to 14 ounces of the green plant will produce fatalities in cattle. The toxicity of the plant is not destroyed by drying, and poisoning occasionally has resulted from eating the weed mixed with hay. Cases of poisoning due to ensilage containing the weed have been reported.

Symptoms

Dryness of mouth, rapid pulse and respiration, partial blindness and frequent urination or retention of urine are common symptoms in cattle. Diarrhea, dilation of the pupils of the eyes and stiffness also have been observed. In the terminal stages of illness respiration becomes slow, weak and irregular, while the pulse becomes rapid and feeble, with death resulting from asphyxia.

Convulsive twitching of the entire body is described as an outstanding symptom in hogs.

Prevention

The weed has a rank, unpleasant odor and a strong taste, and animals are not likely to eat it unless confined to areas where there is little else to eat.
The plants should be cut and burned before the seeds mature. Grubbing is considered practical when small areas are involved. Care should be used that the weed is not included in hay.

**Purple rattlebox**  
*(*Sesbania punicea* (Cav.) Benth.)  
Daubentonia—False poinciana

**Description**

Rattlebox (*Sesbania punicea* (Cav.) Benth.) (synonym: *Daubentonia punicea* (Cav.) DC.) is a shrub or small tree seldom more than 10 feet in height. The trunk is slender, stiff and usually crooked, bare below and dividing into several stiff, widely spreading branches at the top. The bark on the twigs and trunks is dark gray to black and only slightly roughened with raised lenticels. The alternate leaves, 4 to 8 inches long, are stalked and pinnate, with 6 to 20 pairs of leaflets. Each leaflet is 1 inch or less long, elliptic with a minute, pointed tip, dark green above, smooth and rather firm. The flowers, borne in pendant clusters near the tips of the branches, are sweet-pea shaped, orange to red in color, and nearly 1 inch across, on short, slender stalks. The pods, 2 to 3 inches long and ½ inch wide, are green, turning dark brown on ripening, slightly flattened, pointed at both ends, and furnished with 4 flanges or wings running lengthwise the pod. The seeds are oblong to subglobose and brown (Figure 6).

**Habitat and distribution**

Rattlebox, a native of Mexico, was originally planted in Florida as an ornamental, but has become naturalized in many areas of the northern part of the state. It is most often found around houses, along fencrows and ditch banks, and in the flood plains of streams.

**Toxicity**

The toxic principle is a saponin, the greatest concentration being in the seed.

Cases of poisoning have been reported in sheep, chickens and pigeons. Approximately 50 grams of the plant per hundredweight are sufficient to induce fatal poisoning in sheep. Chickens may be killed by consuming as few as 6 to 18 seeds, while 3 or 4 seeds have been observed to cause death in pigeons.

**Symptoms**

The pulse is rapid and respirations are weak, irregular and usually labored in poisoned sheep. Death occurs with little or no struggling. Sheep which recover show diarrhea and depression for several days.

Drooping wings, ruffled feathers, profound depression, general debility, unthriftness, congested comb and profuse diarrhea are symptoms usually observed in affected chickens.

The period of illness in pigeons is short. The droppings are scant, watery and greenish. General weakness occurs. Recovery seldom is observed.

**Prevention**

Animals should not be allowed to contact areas in which the plant grows wild, particularly when there is a shortage of feed. When the plant is grown as an ornamental the pods should be picked before the seeds have an opportunity to shatter on the ground.

**Treatment**

A saline purgative, followed by stimulants and soft food, is beneficial.

![Figure 6: Rattlebox - flowering shoot and pod.](image-url)
Carolina-jessamine

*(Gelsemium sempervirens* (L.) Ait. f.)

Yellow-jessamine—Evening trumpet-flower

Description

Carolina-jessamine (*Gelsemium sempervirens* (L.) Ait. f.) is a high-climbing, woody vine that often covers the tops of small trees and bushes but, in the absence of support, may trail on the ground and produce many slender, more or less upright stems. The main stems of large vines are gray and 1 inch or more in diameter, but the majority of the branches are thin, wiry, much branched and tangled, glossy and dark reddish-brown in color. The short-stalked leaves are simple and always produced in pairs; the leaf-blades, ½ to 2½ inches long, are ovate to lanceolate, not very sharply pointed, rounded at the base, smooth on the margin and dark green, though often marked with irregular reddish-brown discolorations, especially in winter. The clear yellow, sweet-scented flowers, produced in late winter and early spring, are borne in small clusters in the leaf axils of the slender twigs in such profusion as to form conspicuous masses of color. The individual flowers, tubular with 5 flaring lobes, are 1 to 1½ inches long. The seed pods are brown, flat, less than 1 inch long and contain several small, winged seeds (Figure 7).

Habitat and distribution

Carolina-jessamine grows abundantly in open hammocks, but is also found in thickets, swamps and open fields, along fencerows, around stumps, and on rocky bluffs. The vine is most widely distributed in northern Florida, but occurs as far south as Osceola County.

Toxicity

Yellow-jessamine contains the crystalline alkaloid gelsemine and the amorphous alkaloids gelosemine and gelseudine. Other alkaloids have been reported isolated from the plant. These alkaloids constitute the poisonous principles in the plant. They chiefly depress and paralyze motor nerve endings.

Depression of the motor neurons of the brain and spinal cord result in respiratory arrest. The flowers, leaves and roots contain the toxic alkaloids, the greatest concentration being in the roots from which extractions have been made for medicinal purposes.

Cattle, sheep, goats, swine and horses have been reported poisoned by yellow-jessamine. Poisoning of cattle by this plant is of considerable importance in the Southeastern states, particularly during the winter months when there is a shortage of desirable green feed.

Single dosages of 5 pounds of green leaves to a 400-pound steer did not produce typical poisoning attributed to yellow-jessamine as observed in the field. The feeding of 180 grams of fresh green leaves to hens over a period of 15 days resulted in death in 20 to 26 days, with no indications of symptoms until four or five days before death. This would indicate that the poisonous principle is cumulative and that animals must eat the plant over a period of time before poisonous effects are observed.

Symptoms

Under range conditions animals poisoned by this plant usually are not found until they are “down.” Early symptoms consist of muscular weakness, staggering gait and dilation of the pupils of the eyes. As weakness progresses rapidly the animal “goes down” and death usually occurs in 24 to 48 hours. During this terminal period convulsive movements of the head and legs occur frequently. The pulse is feeble, respirations are reduced and the temperature usually is subnormal. Animals in
this condition should not be drenched, as paralysis of the throat often occurs, resulting in an inability to swallow. Death occurs from respiratory failure.

Prevention

Animals should not be allowed to graze in areas where pasture is scant and yellow-jessamine is plentiful. Grubbing is a means of eliminating isolated plants. When larger areas are involved, fencing off or bulldozing can be an effective procedure.

Bagpod

(Glottidium vesicarium (Jacq.) Harper)
Bladderpod—Coffeeweed—Coffeebean

Description

Bagpod (Glottidium vesicarium (Jacq.) Harper) (synonym: Sesbania vesicaria (Jacq.) Ell.) is a robust annual weed, often 6 feet and sometimes 12 feet high in rich soil. The stems are straight, erect, slender for their height and branched above the middle with several stiff, wide-spreading branches, the number depending upon the amount of competition with other plants. The alternate leaves are widely spaced on the stem, 4 to 10 inches long, pinnate with 10 to 26 pairs of leaflets. Each leaflet is elliptic with a small pointed top, 1/2 to 1 inch long, about 1 inch wide, dark green above and paler beneath, very smooth and waxy. The flowers, borne in clusters of 2 to 5 or more on slender stalks 3 to 5 inches long, are sweet-pea shaped, about 1/2 inch across and yellow striped with pink or entirely red all over. The pods, which persist long after the leaves have fallen, are 2 to 3 inches long, elliptic, pointed at both ends and bulged over each of the two seeds. At maturity the outer layer of the pod opens and exposes the thin, silky, white sack-like inner layer enclosing the seeds. The seeds, nearly 1/2 inch long, are oblong and greenish brown (Figure 8).

Habitat and distribution

Bagpod occurs nearly all over Florida. It is found most commonly in old fields, especially on rich, damp soil, along ditches and streams, around lakes and savannahs and sometimes on higher land in abandoned cultivated fields. (See Circular S-58.)

Toxicity

The toxic principle of bagpod is a saponin, which causes intense inflammation of the gastro-intestinal tract.

Cases of poisoning have been reported in chickens, hogs, goats, sheep and cattle. Approximately 150 mature seeds constitute a fatal dose for an adult chicken. The green seeds are considerably more toxic than mature seeds. About 5 pounds of the green plant and seeds are required to induce fatal poisoning in a 250-pound steer.

Symptoms

In affected chickens the comb becomes dark and congested. A yellowish diarrhea develops. Emaciation and unthriftness occur when the period of illness is prolonged. Bagpod seeds are found in the crop and gizzard of poisoned birds.

Symptoms of poisoning in cattle and sheep are similar. Marked depression and sluggishness are among the early symptoms when diarrhea occurs. The animal urinates frequently. Respirations are shallow and accelerated. Depression increases and finally the animal passes into a comatose condition and death soon ensues.

Prevention

Chickens most commonly are poisoned by the seeds which fall from the plant during the winter. The weeds should be mowed in the late summer or before the seeds mature.
does it occur on swampy soil. It is distributed on both sand and clay soils, well drained or even dry, usually associated with grasses of some sort.

Toxicity
Cases of poisoning have been reported in horses and mules. All parts of the plant contain a bitter principle. The milk of cows which have grazed on bitterweed commonly possesses an intense bitter flavor.

Hydrangea
(Hydrangea quercifolia Bartr.)

Description
Wild hydrangea (Hydrangea quercifolia Bartr.) (Fig. 10) is a shrub or small tree sometimes 15 feet in height. The stems and twigs are usually reddish brown or tan in color. The large leaves, 6 inches or more long, dark green above, grayish and fuzzy underneath, are deeply scalloped or lobed on the margin so that they resemble oak leaves in outline. The tiny white flowers are borne in large pyramidal panicles often a foot long. Their color becomes brownish or purplish with age.

Habitat and distribution
Wild hydrangea grows naturally on steep banks of sinkholes, river bluffs and rocky outcrops from Leon County westward. It usually grows in considerable shade, only rarely in full sunlight. However, nurserymen often use it as an ornamental and as such it may be found far out of its natural range.

Related species
Another wild hydrangea (Hydrangea arborescens L.) is less common in Florida. It is distinguished from the above by oval or elliptic leaves lacking the deep lobes. The garden hydrangea (Hydrangea macrophylla Ser.) (Figure 11) is found only in garden or other landscape plantings.

Toxicity
Wild hydrangea, as well as many of the ornamental species of hydrangea, contain a glucoside which yields hydrocyanic acid. Naturally occurring cases of poisoning by these species have been described in the horse and cow.
Symptoms
The character of symptoms produced would indicate the presence of a toxic substance in addition to hydrocyanic acid potentialities. Extreme restlessness, abdominal pain and profuse diarrhea, which becomes hemorrhagic and contains mucus, occur. Guinea pigs fed experimentally developed a severe gastro-enteritis.

Figure 10: Wild hydrangea flower cluster with leaves.

Common lantana
(Lantana camara L.)

Description
Lantana (Lantana camara L.) is a shrub or, in the northern areas, an herbaceous perennial reaching a height of 3 to 5 feet. The stems are widely branched, brittle at the joints, usually bluntly square, green or brown and armed with weak, sharp spines. The leaves, borne in pairs or whorls of three, are stalked and aromatic when crushed; the leafblades are ovate or elliptic, somewhat pointed at both ends, dark green above and paler below, 1 to 3 inches long and toothed along the margin. The flowers, creamy white, yellow or pink, changing to orange or scarlet, are borne in long-stalked clusters about 1 inch across in axils of the leaves. The individual flowers have 4 lobes or divisions and are tubular in the lower part.

The fruits, green to blue or black, are nearly ½ inch in diameter and contain 1 bony seed (Figure 12).

Habitat and distribution
Lantana has been planted widely as an ornamental and is most common around gardens and old home sites. It is also found along fencerows, in fields and the margins of woods. It is found nearly all over the state but is most common from Orlando southward.

Related species
Three other species are common in Florida. L. aculeata L. grows as high as 8 feet, has strongly spiny stems and yellow flowers, changing to orange or purple. L. ovatifolia Britton has unarmed stems about 5 feet or less high and yellow, unchanging flowers. L. montevidensis Briq. has weak, unarmed stems up to 5 feet in length and purple flowers. These species probably are equally toxic.

Toxicity
This plant contains a substance which sensitizes the skin of cattle and sheep which have eaten it to sunlight, causing the skin to become hard, swollen, cracked and painful. This process is called photosensitization. Plants having this action may be eaten and the animal sensitized but lesions will not develop unless exposure to sunlight follows. Experiments indicate that the feeding of ½ to 1 pound of mature dried leaves will induce poisoning in a 400-pound steer.
to the adjacent mucous membranes of the mouth and nasal passages. The skin of the muzzle becomes yellowish to orange in color; it then becomes dry, hard, painful and finally cracks. The skin may become detached, leaving large bleeding areas exposed. Bacterial infection may occur in such areas and extend into surrounding tissue.

Ulcers often develop on tongue, gums and lining of the cheeks. Affected animals refuse food; saliva drools from the mouth; loss of flesh occurs. The skin and membranes surrounding the eyes may become affected, as well as the eyeball itself.

**Prevention**

Lantana poisoning most frequently occurs as a result of a lack of desirable forage. The crushed leaves have a pungent odor and taste and animals will not eat them if sufficient suitable forage is available.

Animals unfamiliar with the plant occasionally become poisoned when moved to pastures in which it is growing. In most instances it is probably practical to remove the plants by grubbing.

**Treatment**

Affected animals should be kept in darkness or shade, out of contact with sunlight. Soft laxative feeds should be supplied. Affected skin areas should be treated with mild antiseptics and healing ointments.

The percentage of recoveries usually is not large, even though many times the symptoms appear mild. Lesions should be closely observed for screw-worm infestation and treated accordingly.

**Chinaberry** (*Melia azedarach L.*)

*China-tree—Pride of India*

**Description**

Chinaberry (*Melia azedarach L.*) is a small tree 20 to 40 feet high. The trunk is 1 to 2 feet in diameter, large in proportion to the rest of the tree, often divided near the base into several large branches. The bark is gray to dark gray-brown, roughened by narrow interlacing shallow furrows and broad flat-topped ridges. The alternate leaves, 1 to 3 feet long, roughly triangular in shape, are twice divided into numerous leaflets. The leaflets, 1 to 2 inches long, are broadly lanceolate or ovate in shape, dark green above and paler beneath, and sharply toothed or lobed along the margins. The fragrant
flowers are produced on long-stalked, much-branched axillary clusters soon after the leaves attain full size. Each flower is about 1 inch across and composed of five or six narrow purplish petals surrounding a pale column of stamens. The fruit is smooth, globular, yellow, about $\frac{1}{2}$ inch in diameter. The 1 large stone, covered by thin pulpy flesh, is strongly ribbed lengthwise and contains 5 or 6 seeds in small cavities.

Habitat and distribution

Chinaberry is native to Syria, Iran and northern India but it has been naturalized almost throughout Florida. It is also common in hammocks and around abandoned home-sites (Figure 13).

*Melia azedarach* L. var. *umbraculifera* Sarg., the umbrella chinaberry, is a small tree with a dense, much-branched, umbrella-shaped crown. It is frequently planted as an ornamental in door-yards.

Toxicity

The toxic principle of chinaberry has not been determined. Poisoning occurs most frequently among hogs from eating the green and ripe berries. The lethal dose for a 50-pound pig is approximately 150 grams of berries. The fruit is less toxic for goats, chickens and ducks. While fruits or berries are most toxic, flowers, leaves and bark also contain the toxic principle.

Symptoms

In hogs symptoms occur 3 to 4 hours after the berries have been consumed. Loss of appetite constipation, blood-stained stools, stiffness, lack of co-

ordination and general weakness are the chief symptoms. Death often occurs within 24 hours.

Prevention

Animals, and particularly hogs, should not have access to the fruit of the chinaberry tree.

Treatment

Berries of the chinaberry are almost always found in the stomach or intestines of animals poisoned by this plant. There is no specific treatment. Affected animals usually die within a short time after symptoms are noted; those which survive this period usually do so without treatment.

Common oleander

*(Nerium oleander* L.)*

Description

Oleander (*Nerium oleander* L.) is a woody shrub or small tree ranging in height from 5 to 25 feet. When allowed to grow naturally it produces a large number of stems and forms a dense clump, but occasionally plants are trimmed to a single large trunk with a much-branched crown. The bark on young stems is smooth and green, but older branches and trunks are gray and roughened by many raised lenticels. The numerous short-stalked leaves are borne in pairs or more often in whorls of 3 around the twigs; the leaf-blades, simple, narrow, evergreen, leathery, pointed at the tip, dull dark
green above with a prominent lighter colored midrib, are 3 to 10 inches long and smooth on the margin. The leaves usually turn yellow before falling and the leaf-scars are prominent on twigs and branches. The flowers, produced in early summer or all year in the warmer parts of the state, are borne in upright clusters at the ends of branches on the upper part of the shrub. They vary in color from white through pink, creamy yellow and rose to deep red. Normally there are five petals about 1 inch long with a fringed appendage at the base of each, but many cultivated forms with double (many petalled) flowers are found in gardens. The pods, not commonly produced, are long, narrow, cylindrical and paired. The numerous seeds are furnished with a tuft of brown hairs. All parts of the plants, but especially the new growth, exude a gummy, sticky sap when injured (Figure 14).

Habitat and distribution

Oleander, an exotic plant, is found only where it has been planted, but is has been widely used for hedges, screen plantings and as an ornamental. Since it grows vigorously it must be pruned often and the clippings frequently find their way to rubbish piles and dumping grounds.

Toxicity

Two toxic glucosides with properties similar to those of the digitalis glucosides have been isolated from oleander.

Cases of poisoning have been reported in all classes of livestock, as well as in humans. Approximately 15 to 20 grams of the green leaves are sufficient to induce death in mature cattle and horses. The dry leaves are almost as toxic as the green ones.

Symptoms

The symptoms of poisoning in horses, cattle and sheep are rather similar. Affected animals become weak. The pulse is rapid. Profuse sweating occurs. Purging usually is present during the entire period of illness. Abdominal pains often are severe. The extremities are cold. Blood often appears in the stool in the terminal stages.

Prevention

The leaves of oleander are fibrous and tough. Animals will not eat them unless there is a shortage of desirable feed.

Treatment

Affected animals can be treated by a veterinarian according to the symptoms shown, but if a lethal dose has been consumed treatment is of little avail.

Pokeweed

(*Phytolacca americana* L.)

Description

Pokeweed (*Phytolacca americana* L.) (synonym: *Phytolacca rigida* Small) (Figure 15) is a robust herbaceous plant growing 6 feet or more in height from thick fleshy roots. The stems, simple below, are much branched above. The stem and branches are smooth, colored green or purple. The lower leaves are a foot or more long, gradually diminishing until the upper are about 3 inches. All are spear-shaped. The flowers produced all summer are white, less than ½ inch across, borne in narrow clusters several inches long. The flattened, purple-black, juicy berries are ½ to ¾ inch in diameter and contain several seeds.

![Figure 15: Branch of Southern pokeweed bearing flower and fruit clusters.](image-url)
Habitat and distribution

Pokeweed occurs all over Florida. It is most often found in open hammocks and along their margins but it is also frequent on neglected cultivated land, along fencerows and around dumps or trash piles.

Toxicity

Pokeweed contains a toxic alkaloid and also a toxic substance called phytolaccotoxin. All parts of the plant, principally the berries and roots, are considered toxic to cattle, sheep, horses and hogs. Cases have been reported in which children were poisoned by eating the berries and roots of the plant. The young leaves have been used as greens after thorough boiling and discarding the first water.

Symptoms

Symptoms occur about 2 hours after the plant has been consumed. Severe gastric intestinal irritation occurs. Nausea, vomiting, purging, retching, spasms and severe convulsions occur, with death resulting from paralysis of the respiratory organs.

Prevention

The plants are not difficult to eradicate.

Treatment

The administration of bland oils and gelatinous foods has been suggested.

Bracken

(*Pteridium aquilinum* (L.) Kuhn.)

Brake—Brake fern—Hog brake—Upland fern

Description

Bracken (*Pteridium aquilinum* (L.) Kuhn.) is a coarse, herbaceous fern with long, stout, underground rootstocks or stems. The rootstocks, often 10 feet long, are black or dark brown, \( \frac{1}{2} \) inch or more in diameter and sometimes branched. The leaves, with stalks 1 to 3 feet long, are produced singly from the joints of the rootstock so that they occur in lines or rows; the leaf-blades, 1 to 3 feet across and roughly triangular in shape, are divided into three main segments, each of which is twice divided into smaller parts and finally the leaflets; the leaflets are very numerous, oblong or narrowly triangular, light to dark green in color and turned down at the edges. Young leaves are coiled at the top of the developing leaf-stalk. There are no flowers. Spores or reproductive bodies, borne in a line of tiny sacs (sporangia) along the edge of the lower side of the leaves, are dust-like and light brown in color (Figure 16).

Habitat and distribution

Bracken occurs in open, sandy areas, pastures, open woods, rocky fields, and sometimes in open spaces in hammocks. It is common over most of Florida as far south as Lake Okeechobee.

Toxicity

The toxic principle of bracken is unknown. Cases of poisoning have been observed in cattle, horses and chickens. Drying does not destroy the toxicity of the plant. Therefore, hay and bedding contaminated with the fronds are dangerous. The toxic principle has an accumulative action. One heavy feeding on the fronds will not cause poisoning. Typical bracken poisoning is caused by animals eating 3 or 4 pounds of the fronds daily; illness develops 3 or 4 weeks later.

Figure 16: Leaf of bracken.
Symptoms

Cattle affected with bracken poisoning usually have a high temperature, stand with head down and drool.

Bloody fluid trickles from the nostrils. Blood appears in the feces, either as black masses or bright red clots. The pulse becomes fast and weak, while respiration often is labored. Death often occurs within 48 hours after the onset of symptoms.

An unsteady gait usually is the first symptom observed in horses affected with bracken poisoning. They become drowsy, push the head against solid objects, and often have difficulty in swallowing.

From 7 to 20 days after the onset of symptoms, the animal “goes down.” General weakness increases and death occurs in several days, even though the animal may regain its feet.

Prevention

As a general rule animals eat bracken only when starving, on inferior forage, or on overgrazed pastures.

Hay containing bracken should not be fed. Bracken areas in pastures should be plowed and reseeded.

Treatment

Some animals recover if treatment is administered early. Saline purgatives or linseed oil should be given. Affected animals should be kept in a quiet place. Soft laxative feeds are beneficial. Recent reports in literature indicate that repeated doses of thiamine hydrochloride injected intravenously or intramuscularly are of considerable benefit in alleviating symptoms of bracken poisoning.

Oaks (Quercus spp.)

Description

Florida oaks (Quercus spp.) vary in size from low shrubs to tall trees. The leaves may be small or large, evergreen or deciduous, entire or deeply lobed. In spite of their variety of size, leaf form and character, they have 1 character in common: the fruits of all kinds are acorns.

Habitat and distribution

Oaks are among the most common of Florida trees, for a total of 28 species or varieties are native in the various parts of the state. Turkey oak, also known as sand black jack and scrub oak (Quercus laevis Walt.) (Figure 17) is a well known and widely distributed species especially common on the rolling sandy ridges known as high pine/turkey oak land or black jack ridges. It is common in the drier parts of many cattle ranges. Many other kinds such as white, basket, chestnut, red, scrub, runner, laurel, water, live and swamp oak are common and readily recognized in various parts of the state.

Toxicity

The toxic principle of oak leaves is unknown. Their toxicity is not due to the tannic acid content.

Oak poisoning occurs chiefly in cattle and sheep. Poisoning occurs as a result of eating buds, green shoots and young leaves as an almost exclusive diet when other forage is scarce, and consequently has been observed most frequently during the winter or spring.

Cases of acorn poisoning have been described in horses.

Figure 17: Turkey oak twig with leaves and acorn.
weak. There is marked depression and evidence of abdominal pain. Affected animals become progressively weaker and die within 2 to 14 days. In extended illness emaciation occurs.

Prevention

Animals should not be allowed to feed exclusively on oak leaves. Other feed should be provided, so that large quantities of oak leaves will not be consumed.

Treatment

Treatment of affected animals is not particularly satisfactory. Saline purgatives followed by emetics are of some value in treatment.

Castor-bean (Ricinus communis L.)

Palmacrista—Castor-oil plant

Description

Castor-bean (Ricinus communis L.) is a robust annual herb (or small tree southward). The strong stems, 4 to 10 feet high, are erect, often crooked, green or red to purple and sometimes covered with a white, waxy coating. The alternate leaves, 4 to 30 inches across, are simple and borne on long, stiff stalks; the leaf-blades are thin with prominent ribs, green or reddish, star-shaped with 5 to 9 or more lobes, thin and finely toothed along the margin. The stalk is attached to the leaf-blade some distance in from the edge.

The flower clusters are produced at the ends of branches, but because lateral branches grow past them they appear lateral. The flowers, produced in narrow, upright clusters 6 to 12 inches long, are greenish white or reddish brown, about ½ inch across and lack petals. The fruits are erect, oval, green or red and covered with stiff, fleshy spines. The seeds, 3 in each pod, are about ½ inch long, elliptic, black, white or mottled with gray, black, brown and white (Figure 18).

Habitat and distribution

Castor-bean, a native of the tropics, has been widely planted as an ornamental and to a less extent as a crop plant. From these plantings, seeds have been scattered widely all over Florida. It is common on rich soil in gardens, around dumping grounds and in the Everglades around Lake Okeechobee.

Toxicity

Castor-bean contains a poisonous principle, ricin, which is a true protein.

All parts of the plant, particularly the beans, are toxic for all classes of livestock. Castor pomace contains the toxic principle and should not be used as feed for livestock.

Symptoms

The symptoms of poisoning in horses, cattle and sheep are similar. Nausea, violent purgation which is sometimes bloody, and general toxic symptoms are observed. In case of prolonged illness, muscular tremors, general weakness and emaciation occur.

Prevention

Livestock seldom eat the plant or beans when sufficient desirable feed is provided.

Treatment

No specific treatment for castor-bean poisoning can be recommended.

Figure 18: Castor-bean - flowering shoot, leaf, fruit and seed.
Elderberry (**Sambucus canadensis** L. and **S. simpsonii** Rehder)

**Description**

Elderberry (**Sambucus canadensis** L. and **S. simpsonii** Rehder), (Figure 19) is a weak shrub or small tree 20 feet or less tall, often forming thickets of considerable extent. The leaves are in pairs, each leaf consisting of 5 to 11 leaflets, with the basal leaflets divided into smaller leaflets in the Florida species.

The flowers are tiny but borne in large flat-topped clusters on the ends of the branches. The flowers and the purple fruits that come later are about \( \frac{1}{4} \) inch in diameter. Flowers and fruits are often found on the bushes at the same time.

**Habitat and distribution**

Elderberries usually grow in full sunlight on moist soil. They may be found almost anywhere in the state but are most common in swamps, along streams and in the Everglades.

**Toxicity**

It has been reported that the fresh leaves, flowers, uncooked berries, and particularly the roots of elderberry contain a glucoside which is capable of producing small amounts of hydrocyanic acid. Cooking the berries is said to destroy the cyanogenetic glucoside. The plant has a bitter taste imparted to it by the presence of an alkaloid.

**Common nightshade**

(**Solanum americanum** Mill.)

Black nightshade—Deadly nightshade

**Description**

Nightshade (**Solanum americanum** Mill.) is a tender, low-growing plant with spreading or upright green stems and numerous branches. It may persist through the winter in protected places or grow all year in southern Florida. The alternate leaves, 1 to 4 inches long, are borne on rather short leaf-stalks that emerge into the leaf-blade. The leaves are oblong, oval or narrow, pointed at both ends, with wavy or sometimes slightly toothed margins. The flowers, borne at the leaf-axils in stalked clusters, are white, star-shaped with 5 petals and a yellow protruding center. The small berries, about \( \frac{1}{4} \) inch in diameter, become purple or black when ripe. Each berry contains several small, flat, yellowish seeds embedded in greenish pulp (Figure 20).

**Habitat and distribution**

Nightshade grows nearly everywhere except...
close to salt water. It prefers shady locations but is found also in open sunny places, often among high weeds, along fencerows, in old fields and gardens, and especially along the edges of hammocks.

Toxicity

The leaves and unripe berries contain a saponin-like alkaloidal glucoside, solanin. It has a paralytic action on the motor and respiratory centers of the brain. The greatest concentration of alkaloid is contained in the unripe berries; the ripe berries often are consumed by birds and humans without harm.

The green plant and unripe berries have been reported poisonous to all classes of livestock, including chickens.

The amount of alkaloid in the plant is said to vary with soil, climatic and growth conditions.

Symptoms

Weakness, stupor, staggering gait, extreme nervousness, staring eyes, dilated pupils and paralysis are symptoms of nightshade poisoning in cattle, sheep and hogs. The progress of the symptoms usually is rapid and poisoned animals often are found dead.

Prevention

The plant normally is an annual growing from the seed only, except in the southern counties; it should be removed and destroyed before the berries form. Eradication by this means is not difficult.

Treatment

No treatment is known for nightshade poisoning.

Sorghum

(Sorghum bicolor (L.) Moench)

Sorgho—Kafir—Dura—Milo—Feterita—Shallu—Kaoliang—Broomcorn—Sudan grass

Description

Sorghum (Sorghum bicolor (L.) Moench) and its varieties compose a large group of coarse annual grasses, with upright stems 2 to 15 feet in height having 7 to 18 joints. There may be several lateral shoots at the base. The leaves, 1 at each joint, are long, narrow, sharply toothed along the margin, and have a prominent midrib, white, gray or yellow in color. The flower cluster or seed head varies from 5 to 18 inches in length (longer in broomcorn) and may be dense or open and have the branches erect, spreading or drooping, but always in whorls. The seeds and kernels of the various kinds of sorghum vary in size, shape, and especially in color, being white, pink, yellow, buff, brown or reddish brown (Figure 21).

Habitat and Distribution

Sorghum and its varieties are seldom found except where they have been planted, although spilled seeds may occasionally produce plants along lanes and around farm buildings. They are widely planted in the northern part of the state for syrup, grain for feeds, hay and silage.

Toxicity

Although sorghum and its varieties are widely grown as feed crops, they become toxic under the conditions described below. They belong to a group known as cyanogenic plants. Such plants contain a glucoside from which prussic acid or hydrocyanic
acid is liberated. Hydrocyanic acid is one of the most potent poisons known. The acid must be liberated from the glucosidal combination before poisoning can result. Enzymes which are present in the plant tissues free the hydrocyanic acid from the remainder of the glucoside. The acid is absorbed and carried by the blood stream to the body tissues where the action of the oxidative enzymes is inhibited. The tissues fail to receive oxygen. The process in one of internal asphyxiation.

A number of factors affect the amount of cyanogenetic glucoside found in the plant. The application of nitrogenous fertilizers has been known to increase it 20 times, particularly on poorer soils. The amount of glucoside in the plant decreases as it matures. Differences in cultural practices and climatic conditions cause variation in glucosidal content. Second growth and plants stunted by drouth or other unfavorable conditions are particularly dangerous.

Much of the hydrocyanic acid is set free when the cut plant is dried slowly. Sorghum raised under drouth conditions is particularly dry when cut, dries quickly, and therefore is potentially dangerous and should be used as food with caution.

Cyanogenetic plants killed by frost often are dangerous for a number of days. While this may appear to be true in some instances, probably more important are the conditions under which the plant is used as food, as well as the physical condition in the stomach of the animal to which it is fed.

**Treatment**

Hydrocyanic acid poisoning progresses rapidly if a fatal dose has been consumed. Treatment, if beneficial, must be administered before respiratory paralysis begins to occur. Sodium nitrite, sodium thiosulphate, or both in combination, as well as methylene blue with calcium gluconate administered intravenously are effective antidotes. Treatment should be given promptly and preferably by a veterinarian.

**Carolina laurel-cherry**

*Prunus caroliniana* Ait.

Cherry-laurel—Mock orange

**Description**

Laurel-cherry (*Prunus caroliniana* Ait.) is a shrub or small tree sometimes reaching a height of 25 feet. The trunks are nearly black, dull, crooked, and often bear many lateral branches. The alternate leaves are short-stalked and simple; the leaf-blades, 2 to 4 inches long, are elliptic, pointed at both ends, very glossy on the upper side, and bear

![Figure 22: Laurel cherry - flowering and fruiting shoots.](image)

**Symptoms**

Lethal amounts of hydrocyanic acid cause death almost instantaneously, with spasms and respiratory paralysis. Smaller doses cause a short period of initial stimulation, associated with excitement and convulsions. Depression then occurs. Respiration become deeper and accelerated, later to become weak and irregular before finally ceasing. The pupils are dilated. The eyes are prominent, glassy, staring and non-sensitive to light. The nostrils and mouth usually are filled with foam. Involuntary urination and defecation often occur.

**Prevention**

The feeding of concentrates tends to prevent in the rumen the liberation of hydrocyanic acid from sorghum which may be eaten within approximately 24 hours thereafter. Large amounts of dextrose also tend to reduce harmful results. Drought-injured sorghum can be utilized with safety if placed in a silo, adding sufficient water to insure fermentation.
few to many sharp teeth along the margins. The
pinkish white flowers appear in late winter or early
spring in thick racemes 1 to 2 inches long in the ax-
ils of the leaves. The individual flowers, about \( \frac{1}{2} \)
inches in diameter, bear 5 small round petals. The
fruits, bluish-black to black and nearly \( \frac{1}{2} \) inch in di-
ameter, are borne in clusters of 2 to 5, often persist-
ing until the flowers of the following season appear.
Each fruit contains 1 round stone covered with dry,
purplish flesh. The leaves, twigs and kernels smell
strongly of peach-kernel odor when crushed
(Figure 22).

Habitat and distribution

Laurel-cherry is commonly used as a hedge plant
around homes and to mark driveways. It also oc-
curs in thickets at the edges of woods and ham-
mocks and along fencelows. It is found all over the
state.

Toxicity

Cherry-laurel is a cyanogenetic plant. See dis-
cussion under sorghum.

Black cherry (Prunus serotina Ehrh.)

Wild cherry—Wild black cherry—Rum cherry

Description

Black cherry (Prunus serotina Ehrh.) is a me-
dium to large native tree, sometimes becoming 100
feet tall and 5 feet is diameter, but small specimens
are more common. The bark on the trunk and
branches is smooth, glossy, reddish brown to black
and marked with numerous lines running around
the branches.

On old trunks the bark becomes dull, black and
broken into blocks or ridges. The alternate leaves
are slender-stalked and simple; the leaf-blades, 2 to
6 inches long, are slightly leathery when mature,
elliptic, pointed at both ends or rounded at the
base, and have numerous small stiff teeth along the
margins. The leaves fall early in autumn, often as-
suming bright red or yellow colors at that season.
The small white flowers are produced early in
spring on short lateral twigs bearing 1 to 2 small
leaves and 20 or more stalked flowers. Each flower,
about \( \frac{1}{2} \) inch broad, bears 5 small round white pet-
els. The fruits are glossy dark purple to black
when ripe and each contains 1 hard, nearly round
stone embedded in juicy, purple flesh which is ed-
ible and has a sweet acid flavor. When leaves,
twigs or kernels are crushed, they emit the odor of
peach-kernels (Figure 23).

Habitat and distribution

Black cherry is found as scattered individuals,
seldom in pure stand, from Orange County north
and west to the boundaries of the state. Trees are
common along fencelows where birds have distrib-
uted the seeds, as well as in hammocks, open woods
and pastures. In some areas the tree is best known
for its medicinal bark and valuable cabinet wood.

Toxicity

Black cherry contains the cyanogenetic glu-
coside, amygdalin, which, upon being hydrolyzed by
enzymes in the plant, yields hydrocyanic acid. Pois-
oning frequently occurs from eating the young
shoots or broken or discarded branches. The
leaves, bark and stones of the fruit contain the glu-
coside. Young leaves are considered more toxic
than mature ones. (See discussion under sorghum.)

Johnson grass
(Sorghum halepense (L.) Pers.)

Figure 23: Wild cherry - leaf, flowering shoot and fruit cluster.
cocklebur poisoning. However, when symptoms occur the major portion of the toxic principle has been absorbed; the poison also acts quickly, which reduces the benefits to be derived from treatment. Efforts should be made to prevent animals from consuming the seedlings.

Atamasco-lily
(Zephyranthes atamasco Herb.)
Easter-lily—Rain-lily

Description
Atamasco-lily (Zephyranthes atamasco Herb.) is a low, herbaceous, perennial bulbous plant, commonly growing in clumps. The bulb, buried 1 to 2 inches deep, is ovoid, 1 inch or less in diameter, composed of layers (like an onion), white inside but covered with a thin brown skin-like coat. The leaves, which appear late in fall or early spring, are narrow, grass-like, 4 to 10 inches long and about \( \frac{1}{2} \) inch wide, erect or reclining, and bluish green in color. The flowers, appearing in early spring, are borne erect on upright, slender stalks 2 to 6 inches long, 1 on each stalk. The flower, 2 to 3 inches long, is composed of 6 petal-like parts like a 6-pointed star, the points spreading or curling back, white or pinkish in color and with 6 golden yellow stamens on short stalks near the center. The seed-pods are 3-angled, about \( \frac{1}{2} \) inch across and contain several smooth, flat, black seeds (Figure 26).

Habitat and distribution
Atamasco-lily or a close relative grows nearly all over Florida. It is most common in flatwoods, low grassy fields and in the northern areas on tussocks in swamps.

Related species
Z. treatiae S. Wats. has narrow leaves, \( \frac{1}{6} \) inch wide, and grows scattered in flatwoods. Z. simpsonii Chapm., growing in the southern areas, has flowers which do not open wide, the floral parts remaining erect.

Toxicity
Cases of poisoning have been observed in horses, cattle and chickens. The bulb is the most poisonous part of the plant. It has an extremely acrid taste. Approximately 2 pounds of the fresh bulbs will prove fatal to a 300- to 400-pound steer. Forty grams of bulbs is lethal to a mature chicken.

Symptoms
The feces become soft in cattle and horses and often streaked with bloody mucus. Staggering occurs within 48 hours after the plant has been consumed. The affected animal collapses suddenly and usually dies without struggle.

Prevention
Do not allow animals to graze infested areas in the spring when there is not an abundance of desirable forage.

Treatment
No treatment can be recommended.
Other poisonous plants

Plants named in the following list occur throughout Florida and are known to be poisonous under some conditions. While it may be said that the first 8 are perhaps more poisonous than the remainder, results of eating them chiefly depend on amounts eaten. Almost all will produce symptoms and death if a sufficient quantity is consumed. Those marked • are introduced or foreign plants used in Florida for ornamental or other purposes.

- Abrus precatorius L., jequirity, rosary pea, crab-eye.
- Crotalaria retusa L., crotalaria.
- Crotalaria sagittalis L., arrow crotalaria.
- Delphinium spp., hardy larkspur.
- Jatropha curcas L., barbados nut.
- Kalanchoe latifolia L., mountain laurel, kalmia.
- Melilotus officinalis (L.) Pallas., yellow sweet clover.
- Aesculus pavia L., red buckeye.
- Allamanda cathartica L., common allamanda.
- Zigadenus muscaetoicus (Walt.) Regel, crow poison.
- Apocynum cannabinum L., hemp dogbane.
- Asclepias tuberosa L., butterfly milkweed.
- Asclepias verticillata L., whorled milkweed.
- Cephalanthus occidentalis L., common buttonbush.
- Cirtuta mexicana C. & R., water hemlock.
- Colocasia esculenta (L.) Schott, elephant’s ear.
- Euphorbia heterophylla L., painted euphorbia, wild poinsettia.
- Euphorbia maculata L., spotted euphorbia.
- Gloriosa superba L., glorylily.
- Gossypium spp., cotton.
- Lachnanthes caroliniana (Lam.) Dandy, blood redroot, paintroot.
- Leucothoe axillaris (L.) D. Don, drooping leucothoe.
- Leucothoe racemosa (L.) Gray, sweetbells leucothoe.
- Lobelia cardinalis L., cardinal-flower.
- Lupinus perennis L., sundial lupine.
- Lyonia mariana (L.) D. Don., staggerbush, lyonia.
- Lyonia ligustrina (L.) DC., he-huckleberry.
- Nicotiana glauca R. Grah., tree tobacco.
- Oxypolis filiformis (Walt.) Britton, water dropwort.
- Phaseolus lunatus L., lima bean.

- Ranunculus spp., buttercups.
- Solanum carolinense L., Carolina horse-nettle.
- Solanum tuberosum L., potato.
- Tephrosia virginiana (L.) Pers., Virginia tephrosia.
- Thevetia peruviana Schum., lucknut, thevetia, yellow oleander.
- Triglochin striata R. & P., ridged podgrass, arrow grass.

Hairy indigo (Indigofera hirsuta L.)

Hairy indigo (Indigofera hirsuta L.) is not a poisonous plant. In some instances when cattle graze hairy indigo the skin of the legs from the hooves as far up as the knees becomes swollen, scabby, cracked and often bleeding. Whether this condition is due to a mechanical injury following continual wetting of the skin of the legs, as occurs when well grown hairy indigo is grazed daily, or due to other factors or combination of factors is not known. In such instances, however, affected animals should be confined to keep the skin of the legs dry and only allowed on short pasture after it is dry from dew or rain. Sulfa ointments applied to the areas facilitate healing (Figure 27).

Figure 27: Hairy indigo - flowering shoot with fruit cluster.