Identifying Poisonous Plants

The following are pictures of common toxic plants throughout the southeast:

**Figure 1. Azaleas or Rhododendrons**

*Plant Description:* Evergreen or deciduous shrubs, funnel-shape flowers various colors.

*Habitat:* Temperate regions of the northern hemisphere.

*Mode:* Ingestion

*Toxin:* Andromedotoxin

*Symptoms:* Burning of mouth, salivation, watery eyes, running nose, convulsions and death.

*Toxic:* All parts

*Treatment:* Induce vomiting or gastric lavage.

*Toxic Level:* Extreme

**Figure 2. Bitter Sneezeweed**

*Plant Description:* Erect, upper branching plant annual, 10-1 inches tall with yellow flowers.

*Habitat:* USA,

*Mode:* Ingestion

*Toxin:* Sesquiterpene Lactone.

*Symptoms:* Weakness, incoordination, vomiting, salvation, diarrhea.

*Toxic Parts:* Leaves, flowers, seeds

*Treatment:* Cathartics (laxative).

*Toxicity Level:* Unknown

**Figure 3. Black Cherry, Wild Cherry**

*Plant Description:* Deciduous tree, leaves alternate and flowers in an elongated cluster.

*Habitat:* Southern states (GA, FL etc.)

*Mode:* Ingestion

*Toxin:* Cyanogenic glycoside, amygdalin.
**Symptoms:** Gasping, weakness, excitement, pupil dilation, spasms and convulsions.
**Toxic Parts:** Wilted leaves, twigs and seeds.
**Treatment:** Intravenous injections of sodium nitrate and sodium thiosulfate.
**Toxicity Level:** Extreme

**Plant Description:** Coarse plant with slender, woody branches and rhizomes.
**Habitat:** All southern states.
**Mode:** Ingestion
**Toxins:** Thiaminase cyanide carcinogen.
**Symptoms:** Breathing difficulties, weight loss, bleeding disorders.
**Toxic Parts:** All parts
**Treatment:** Saline purgative, bland oils, thiamine-chloride IV.
**Toxicity Level:** Moderate

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**Boxwood**

**Figure 4.**

**Plant Description:** Evergreen shrub with simple, leathery leaves which are commonly used as hedge plants.
**Habitat:** USA
**Mode:** Ingestion and dermatitis.
**Toxins:** Steroidal alkaloids.
**Symptoms:** abdominal pains, vomiting, diarrhea.
**Toxic Parts:** Leaves and twigs.
**Treatment:** Induce vomiting or gastric lavage
**Toxicity Level:** Low

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**Burdock**

**Figure 6.**

**Plant Description:** Burs that are spherical shaped.
**Habitat:** USA
**Mode:** Mechanical injury.
**Toxins:** None
**Symptoms:** causes dermatitis
**Toxic Parts:** Burs
**Treatment:** Remove burs.
**Toxicity Level:** Low irritant

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**Buttercup**

**Figure 7.**

**Plant Description:** Perennial or annual herbs, yellow flower.
**Habitat:** USA
**Mode:** Ingestion, dermatitis.
**Toxins:** An oily glycoside and ranunculin.
**Symptoms:** Burning of mouth, abdominal pain, vomiting and bloody diarrhea.
**Toxic Parts:** All
**Treatment:** Non-specific, give purgatives initially.
**Toxicity Level:** Low

**Plant Description:** Shrub-likes with purplish stems.
**Habitat:** Most southern states.
**Mode:** Ingestion and allergic reaction.
**Toxins:** Ricin and ricinine.
**Symptoms:** Nausea, vomiting, abdominal and bloody diarrhea.
**Toxic Parts:** Broken seeds.
**Treatment:** Try neutralizing the toxin with vegetable oil, whole milk, cream or activated charcoal.
**Toxicity Level:** Extreme

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**Figure 8. Castor Bean**

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**Plant Description:** Small to medium size tree, ripe fruit dull black
**Habitat:** USA
**Mode:** Ingestion
**Toxins:** Resinoid andromedotoxin, glucoside arbutin.
**Symptoms:** Incoordination, excessive salivation, vomiting, weakness.
**Toxic Parts:** Leaves, bark, fruit and seeds
**Treatment:** Induce vomiting or gastric lavage.
**Toxicity Level:** Extreme

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**Figure 9. Cherry Laurel**

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**Plant Description:** Perennial herbs with smooth edges, elliptical or oval, leaves.
**Habitat:** Central, north and south America.
**Mode:** Ingestion or skin contact.
**Toxins:** Capsacin and other derivatives.
**Symptoms:** Digestive upset, burnin mucous membranes.
**Toxic Parts:** Fruits and seeds of the chili peppers.
Treatment: For eyes, flush with water, use demulcents such as milk or ice to relieve burning.
Toxicity Level: Unknown

**Figure 11. Chinaberry**

**Plant Description:** Medium size deciduous tree, showy, light-bluish-purple flowers.
**Habitat:** Southern Asia, VA, CA, TX, FL.
**Mode:** Ingestion
**Toxins:** Tetranortriterpene neurotoxins and unidentified resins.
**Symptoms:** Faintness, lack of coordination, diarrhea, vomiting, paralysis and death.
**Toxic Parts:** Leaves, bark and fruit.
**Treatment:** Induce vomiting or perform gastric lavage.
**Toxicity Level:** Extreme

**Figure 12. Coffeeweed, Coffee senn**

**Plant Description:** Branched, annual herb, leaves alternate and yellow flowers.
**Habitat:** USA
**Mode:** Ingestion
**Symptoms:** Diarrhea, tremors, dark brown urine.
**Toxic Parts:** All parts; seeds, roots, leaves, fruit.
**Treatment:** Treatment ineffective.
**Toxicity Level:** Moderate

**Figure 13. Common Cocklebur**

**Plant Description:** Coarse herbaceous annual.
**Habitat:** USA
**Mode:** Ingestion
**Toxins:** Carboxyztractyloside
**Symptoms:** Anorexia, reduces responsiveness, vomiting, rapid pulse.
**Toxic Parts:** Cotyledon and seeds.
**Treatment:** Treatment is not effective when symptoms have been observed.
**Toxicity Level:** Extreme

**Figure 14. Curly Dock**
Plant Description: Leaves mainly basal, simple flowers, reddish fruit.
Habitat: USA
Mode: Ingestion, Dermatitis
Toxins: Soluble oxalates
Symptoms: Nausea, stomach cramps, vomiting, headache.
Toxic Parts: Leaves
Treatment: IV Calcium Gluconate, magnesium sulfate, glucose and a balanced electrolyte.
Toxicity Level: Low

Plant Description: Herbaceous annual with yellow pea-like flowers in showy clusters.
Habitat: Southern states, FL, VA, MO
Mode: Ingestion
Toxins: Pyrrolizidine Alkaloids
Symptoms: Loss of appetite, salvation.
Toxic Parts: Seeds, leaves, and stems.

Figure 15. Crotalaria

Figure 16. Eastern Baccharis

Plant Description: Branched shrub or small tree, leaves alternate, flowers and fruits have many white bristles.
Habitat: FL, VA and TX
Mode: Ingestion, allergenic
Toxins: Cardioactive Glycoside
Symptoms: Staggering, trembling, convulsions, diarrhea and other gastrointestinal symptoms.
Toxic Parts: Leaves
Treatment: No specific treatment except for supportive therapy for digestive upset and liver damage.
Toxicity Level: Toxic if eaten in large quantities.
**Figure 17. Elderberry**

*Plant Description:* Tall deciduous bushes, compound leaves and small red, bluish or purple-black berries.
*Habitat:* Alaska, CA, NM, FL, GA, LA
*Mode:* Ingestion
*Toxins:* Alkaloid and cyanogenic glycoside
*Symptoms:* Nausea, vomiting and diarrhea.
*Toxic Parts:* Roots, stems, bark and leaves.
*Treatment:* Induce vomiting or gastric lavage.
*Toxicity Level:* Low

**Figure 18. Devil’s Trumpet**

*Plant Description:* Shrub-like, annual herb with purple stems, leaves alternate simple
*Habitat:* Florida
*Mode:* Ingestion
*Toxins:* Tropane alkaloids
*Symptoms:* Hot, dry and flushed skin etc.
*Toxic Parts:* All parts
*Treatment:* Unknown
*Toxicity Level:* High

**Figure 19. Habenero**

*Plant Description:* Round fleshy peppers
*Habitat:* Latin and North America, TX, CA and FL.
*Mode:* Ingestion or skin irritant
*Toxins:* Capsaicin and Derivatives
*Symptoms:* Burning or stinging mouth, nausea, vomiting and diarrhea.
*Toxic Parts:* Seeds, and fruit.
*Treatment:* Milk or water
*Toxicity Level:* Unknown

**Figure 20. Hairy Vetch**

*Plant Description:* 4-6 ft with hairy stems and leaves. The flowers are purplish.
Habitat: Europe and USA  
Mode: Ingestion and skin irritant.  
Toxins: Cyanide  
Symptoms: Diarrhea, poor appetite  
Toxic Parts: Seeds  
Treatment: Sodium thiosulfate nitrate and antibiotics.  
Toxicity Level: Unknown

Plant Description: Foul-smelling, glabrous annual, 0.5 to 1.5m tall, with green or purple tinged stems.  
Habitat: Throughout the south.  
Mode: Ingestion  
Toxins: Alkaloids atropine, hyoscyamine and scopolamine  
Symptoms: Weak rapid pulse and heartbeat.  
Toxic Parts: All parts, particular the seeds  
Treatment:: Nonspecific. Use tannic acid, gastric lavage and respiratory stimulants.  
Toxicity Levels: Extreme

Plant Description: Shrub or twining vines  
Habitat: North America and Europe  
Mode: Ingestion  
Toxins: Viburnin, tannin, saponin and coumarin.  
Symptoms: Restlessness, vomiting, constipation, cyanosis and rapid pulse  
Toxic Parts: Berries  
Treatment: Laxative  
Toxicity Level: Unknown

Plant Description: Coarse grass up to 2 m tall with stout rhizomes, appearing in dense clumps or nearly solid stands.  
Habitat: Southern states  
Mode: Ingestion  
Toxins: Cyanide  
Symptoms: Difficult breathing, anxious expression, staggering, convulsions and die.  
Toxic Parts: All parts when exposed to frost, drought.  
Treatment:: Sodium thiosulfate and sodium nitrate intravenously.  
Toxicity Level: Low
**Figure 24. Lantana**

*Plant Description:* Erect or spreading shrub, 0.5 to 1.2m tall., flowers are initially cream, yellow or pink changing to orange or scarlet.

*Habitat:* From Florida to Texas

*Mode:* Ingestion

*Toxins:* Lantanin

*Symptoms:* Severe weakness, paralysis of limbs and death

*Toxic Parts:* All parts

*Treatment:* Remove animal from sunlight and antibiotics

*Toxicity Level:* Extreme

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**Figure 25. Milkweed**

*Plant Description:* Erect or spreading, perennial herbs with milky sap from thick rootstocks or rhizomes.

*Habitat:* Southern states

*Mode:* Ingestion

*Symptoms:* Staggering, depression, weakness, labored respiration and dilated pupils.

*Toxic Parts:* All parts

*Treatment:* Use Laxatives and intravenous fluids.

*Toxicity Level:* Moderate

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**Figure 26. Nightshade**

*Plant Description:* Slender vine, deep purple potato-like flowers and red berries.

*Habitat:* FL, GA, AL

*Mode:* Ingestion

*Toxins:* Solanine, alkaloidal glycoside

*Symptoms:* Toxins

*Toxic Parts:* All Parts

*Treatment:* Induce vomiting or gastric lavage

*Toxicity Level:* Extreme

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**Figure 27. Poison Sumac**
**Plant Description:** Shrub or small tree 4 or 5m tall.

**Habitat:** Southern states

**Mode:** Skin and eye irritant

**Toxins:** Urushiol

**Symptom:** Skin irritant

**Toxic Parts:** All parts

**Treatment:** Consult a veterinarian

**Toxicity Level:** Skin irritant extreme

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**Plant Description:** Tuber-bearing herbaceous perennials with dark green, compound leaves and clustered whitish to purplish flowers

**Habitat:** North and South American, Europe and USSR.

**Mode:** Ingestions

**Toxins:** Phytolaccatoxin and related triterpene saponins, an alkaloid and histamines.

**Symptoms:** Burning mouth and throat, salivation, severe stomach irritation can be fatal.

**Toxic Parts:** All parts

**Treatment:** Induce vomiting or gastric lavage.

**Toxicity Level:** Extreme

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**Plant Description:** Large coarse annual herb, 1 to 1.5m tall, green flowers.

**Habitat:** Southern states

**Mode:** Ingestion

**Symptoms:** Weakness, trembling, incoordination, death.

**Toxic Parts:** Leaves

**Treatment:** Mineral-corticoid hormones, IV calcium gluconates

**Toxicity Level:** Extreme

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**Figure 28. Pokeweed**

**Plant Description:** A large, smooth, branching herb, white flowers, dark purple berry.

**Origin:** Southern states

**Mode:** Ingestion

**Toxins:** Phytolaccatoxin and related triterpene saponins, an alkaloid and histamines.

**Symptoms:** Burning mouth and throat, salivation, severe stomach irritation can be fatal.

**Toxic Parts:** All parts

**Treatment:** Mineral oil or various clays.

**Toxicity Level:** Extreme

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**Figure 31. Redroot Pigweed**

**Plant Description** Large coarse annual herb, 1 to 1.5m tall, green flowers.

**Habitat:** Southern states

**Mode:** Ingestion

**Symptoms:** Weakness, trembling, incoordination, death.

**Toxic Parts:** Leaves

**Treatment:** Mineral-corticoid hormones, IV calcium gluconates

**Toxicity Level:** Extreme

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**Figure 29. Potato**
Figure 32. St. John’s Wort

*Plant Description:* Perennial herb, dark yellow flower, plant 1-1.2m long.
*Habitat:* Southern states
*Mode:* Ingestion
*Symptoms:* Hypersensitive to the light, itching, scratching.
*Toxic Parts:* Leaves
*Treatment:* Provide shade, antibacterial preparation and antibiotics.
*Toxicity Level:* Low and Moderate.

Figure 32. Stinging Nettle

*Plant Description:* Stinging hairs, narrow heart shaped flowers, greenish in color.
*Habitat:* USA
*Mode:* Skin irritant
*Toxins:* Mixture of chemical, not well understood
*Symptoms:* Skin irritation minor, or lasting for only a few minutes.
*Toxic Parts:* Stems and Leaves
*Treatment:* Remove animal from affected area.
*Toxicity Level:* Low

Figure 33. Sweet Shrub

*Plant Description:* Shrub with branches, 1 to 3m tall, strap-like petals.
*Habitat:* FL, AL, GA, MS, TN and VA.
*Mode:* Ingestion
*Toxins:* Calycanthin and alakaloid.
*Symptoms:* Increased excitability and sedatives.
*Toxic Parts:* Seeds
*Treatment:* Use sedatives to control convulsions.
*Toxicity Level:* Toxic if eaten in large quantities.

Figure 34. Tung Oil Tree
Plant Description: Deciduous tree, heart shaped flowers; pale pink and white.
Toxins: China, Fl.
Mode: Ingestion
Toxins: Glycoside phytoxin
Symptoms: Severe stomach pain, diarrhea, weakness.
Toxic Parts: All parts, mostly seeds.
Treatment: Induce vomiting or gastric lavage
Toxicity Level: Extreme

Figure 35. Virginia Creeper

Plant Description: Climbing perennial vine with yellow showy flowers.
Habitat: South
Mode: Ingestion
Toxins: China
Symptoms: Stagger, incoordination, dilated pupils, convulsions, coma, death.
Toxic Parts: All parts
Treatment: Alkaloids
Toxicity Level: Extreme

A Final Note

It is not possible to determine the edibility of a plant by watching which ones the animals appear to have a preference for because what is poisonous to one animal may not be for another irregardless if they are of the same species. Ruminants have a chemical factory inside of them that is enables them to eliminate harmful substances by microbial activity. These organisms are able to reduce toxic compounds into innocuous ones before they are further utilized by the body.

However, this does not always hold true for every animal within the same species. Younger ruminants tend to have difficulty in developing a resistance to toxins in poisonous plants while older animals have developed a resistance to some toxins in plants overtime. Therefore, the individual animal’s response to a poisonous plant varies greatly.

The best policy to adopt on your farm is the following: (1.) keep the herd away from poisonous plants as much as possible, (2.) provide a balance ration for your herd, (3.) observe your herd...
daily for signs of illness, (4) maintain an adequate stocking rate, (5) have a plan on how you will manage your herd during a drought, (6) don’t dispose yard wastage in your goat pens without checking it out first, be aware of what is growing in your pastures and woodland areas, (6) learn when certain plants are toxic on your farm and (7.) keep all chemicals and feed out of the reach of your livestock.

References:


Disclaimer: The list of poisonous plants in this publication does not necessarily include every poisonous plant that is known. Furthermore, the treatments for plant poisoning in this publication are only meant for information purposes only. The author of this publication recommends you seek assistance and guidance from a veterinarian if you suspect your animals have been poisoned. In case of accidental poisoning in humans, contact
the Poison Control Center at 1-800-222-1222.