

Poisonous Plants in Pastures

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Common Misconceptions

- “I have never had an animal poisoned from eating toxic plants”
 - Just because death doesn't result, does not mean the animal was not poisoned.

Types of Toxicity

- Acute – One time exposure, very damaging, animal dies within feet of the specimen or soon thereafter.
 - Rare
- Chronic – Repeat exposure over long periods of time. Common symptom is wasting.
 - Very common; not all toxic plants kill the animal

Common Misconceptions

- “I have never had an animal poisoned from eating toxic plants”
 - Poisoned and death due to poisoning is not the same thing.
- Poisonous plants in hay are safe
- You can't poison a goat

Sensitivity to poisonous plants

- Species
 - Sheep/Horses >> cows >> goats
- Age of animal
 - Young and old animals are more sensitive to poisonous plants.
- Time of year
 - Many plants are most toxic in the fall. Toxins commonly accumulate in the seeds.

Why are toxic plants eaten?

Plants produce toxins to discourage grazing

– Often results in bad taste or smell.

1. When desirable grazing is scarce.
2. Young animals exploring.
3. We give them bad food.
4. Some animals are repeat offenders.

I think my animal is poisoned, what do I look for?

- Standing alone
- Acts disoriented
- Holds head down
- Refuses feed
- Drinks large amounts of water
- Wasting
- Shaggy coat

Next step: call your county agent

Common Poisonous Plants

Cherry



- Many different species
- All are toxic

Laurel Cherry

Black Cherry and Persimmon



Black Cherry and Persimmon



Black Cherry



- All parts extremely toxic
- Wilted leaves are the worst
- Toxin: cyanide
- All animals are susceptible, but especially ruminants

Black Cherry



- Symptoms: staggering or convulsions within 15 to 30 minutes; death within 1 hour
- Control: cut down and remove tree, treat stump to prevent resprouts

Azaleas



- All parts toxic
- Toxin: glycosides that affect stomach and intestines
- Symptoms: nausea, weakness, salivating
- Death is rare and most cattle recover without treatment

Bracken Fern



Bracken Fern



- Toxic parts: whole plant, particularly roots.
- Toxin: thiaminase
 - Horse: vitamin B₁ deficiency
 - Cow: Hemorrhaging
- Symptoms:
 - Horse: high fever and incoordination
 - Cattle: swelling and bloody waste

Bracken Fern



- Poisoning is usually cumulative and can occur over many weeks.
- Sheep and goats are less susceptible.
- Control: mow, use Cimarron, spot treat with glyphosate.

Lantana



Lantana camara

Photo by Glenn Fleming
USF Herbarium Slide Collection

Lantana



- Escaped ornamental.
- Commonly found along fencerows and tree lines.

Lantana



- Toxic parts: whole plant
- Toxin: lantantin
- Symptoms
 - Large quantities: acute toxicity
 - Lower amounts: mouth sores and skin cracking
- Recovery is rare.
- Control: Removal

Coffee Senna



Coffee Senna



Virginia Tech Weed ID Guide



Sicklepod

Senna vs sicklepod



Coffee Senna



- Toxic parts: all, but mainly seeds
- Toxin: unknown
- Symptoms: wasting or dark brown urine
- Large quantities must be eaten

Coffee Senna



Virginia Tech Weed ID Guide

- Poisoning most common in fall soon after frost
- Control: mowing after frost or herbicides

Crotalaria or Rattlebox

Crotalaria spectabilis
Photo by Allen Boatman



Crotalaria



- Toxic parts: whole plant, especially the seeds.
- Toxin: monocrotaline
- Symptoms: weakness and confusion. Jaundice due to liver damage may occur.

Crotalaria



- Animal may die months after ingestion.
- Control: little herbicide data is available. Glyphosate or triclopyr is likely best option. Repeat mowing is also possible.

Nightshade



- Toxic Parts: primarily berries with leaves to a lesser degree. Green berries are most toxic.
- Toxin: the alkaloid solanine

Nightshade



- Symptoms: acute toxicity or progressive unthriftiness and gastric distress
- Nightshade is very unpalatable and animals will rarely eat enough to result in death.

Perilla mint



- Toxic Parts: whole plant, especially the flowers
- Toxin: perilla ketone
- Symptoms: labored breathing

Perilla mint



- Commonly found in shaded areas: along tree lines or next to buildings
- Control: 2,4-D or Crossbow are effective.
- Toxicity most common in the fall

Conclusions

- Animals generally don't want to eat toxic plants
- Weed toxicity is all about
 1. Timing
 2. Amount
- Grazing management and proper fencing is the best safeguard against toxic weeds
- Mowing, particularly in the fall, is also a good defense against weeds.
- You may not have had animals die, but reduced weight gain can cost lots of money