Poisonous Plants Of Pennsylvania

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may foster toxic accumulations in weather unfavorable for plant growth. Drought may similarly affect cyanogenetic plants (sorghum, sudan grass, prunus species) so that toxic concentrations of cyanide are present.

Kinds of Poisonous Plants

A. Cyanogenetic Plants — Those which contain poisonous amounts of hydrocyanic acid (HCN). Hydrocyanic acid ties up blood hemoglobin and a sufficient amount of HCN intake quickly kills animals by suffocation. Lesser amounts may be sufficient to kill a fetus or cause shortness of breath (dyspnea) when the animal exercises.

The Prunus Family — All wild and domestic plants of this family — The Cherry Family — contain a glycoside in the green leaves. When leaves wither, the glycoside breaks down into HCN and sugar. Animals which are not especially fond of green cherry leaves will seek out and eat withered leaves, because these are more palatable, with disastrous results. At times, a few handfuls of choke cherry leaves may be capable of killing a mature cow. This type of poisoning should always be suspected when animals dies suddenly following violent storms during the pasture season. Control — The only safe way livestock owners can eliminate wild cherry poisoning danger is to pull out the plants or cut them down and treat the stumps anytime there are no leaves present. Spraying wild cherry leaves with herbicides will make them deadly until the leaves are completely dry.

Sorghum, sorghum-sudan hybrids, and sudan grass are cyanogenetic plants. Research at Penn State has shown that sorghum and sorghum-sudan hybrids under 36 inches in height may contain deadly amounts of HCN. Aftermath of these plants is extremely dangerous after a frost or dry spell. Sorghums and sorghum-hybrids can be safely fed to livestock if:

1. They are at least 36 inches tall when fed.
2. They are not showing recent frost damage.
3. They are not used within five days following a rain during a drought period.
4. Aftermath material is made into silage before feeding it.

Whenever there is any possibility that these plants may be toxic they should be put in a conventional silo (not an airtight silo) and allowed to ferment for at least two weeks before using as feed. During dry periods it is not wise to feed these plants alone as the sole source of forage. Sudan grass is much safer than sorghum or sorghum-sudan hybrids. Toxic levels of HCN are usually only present immediately after a killing frost has damaged the green leaves. Thoroughly frost-killed sudan grass pastures have been eaten to the ground with no ill effects if the grass has been allowed to dry out for a few days before feeding it. Sudan grass growing between 12 inches and 36 inches tall have insignificant amounts of HCN. The margin of safety using sudan grasses during dry periods is much greater than for sorghum or sorghum-sudan hybrids for both HCN and nitrite-nitrate poisoning.

B. Plants Containing Poisonous Alkaloids. — Textbooks list a host of native and ornamental plants of Pennsylvania which contain deadly alkaloids. Alkaloids usually produce symptoms affecting the nervous system. Convulsions, teeth grinding, abnormal movements or conduct, abnormal heart rate, diarrhea or constipation may be observed. Fortunately, most of these plants are extremely unpalatable.

1. Kinds of Alkaloid-bearing Plants

a. Water Hemlock and Poison Hemlock — contain a potent, deadly alkaloid — conine. It is rare, indeed, that animals which eat this plant (usually the root crown in early spring) are observed sick or dying. They are usually found dead not far from where they have eaten the plant.

b. Poison Hemlock — is a more attractive plant than Water Hemlock. This is the "hemlock" that dispatched Socrates so swiftly. It is often used as an ornamental plant in farm gardens. The flowers, resembling Queen Anne's Lace, are often used for large mixed flower arrangements in country churches and social events. In fertile, moist soil, both Water Hemlock and Poison Hemlock may reach massive proportions. Plants six to eight feet tall are common.

Control — The only safe time to remove these plants is in the summer when they can be found easily and pulled out. Be careful not to contaminate drinking water with juices from damaged roots. This plant is common in all of the central, northern and

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Washington County, Maryland

May 2

Pen-Mar Acres — Gilbert Martin, 17510 Broadfording Road, Hagerstown. Route 70 to north on Route 63 (Greencastle Pike) to right on Broadfording Road. Approximately 1.5 miles to farm, just east to McDade Road. *One hundred* percent grass, most seeded last year, crossbred herd.

June 6

Brookside Dairy Farm — Gilson Eby. From Boonsboro go west on MD Route 68. Cross Route 65, go one mile, turn left (south) on Reichard Road. Go a mile, turn right on Jordan Road. Go ½ mile to farm. New (2000) dairy grazing farm.

July 5

Rick Reid — Harpers Ferry Road. One mile south of Sharpsburg. Cow/calf, EQIP fencing and water, perennial grasses, Marshall annual ryegrass and *several warm season* grasses.

August 29

Peace Hollow Farm — Myron Martin, 2148 Rohersville Road, Knoxville. MD Route 67, just south of Brownsville. Approximately three miles north of MD Route 340. Harvesting corn silage early.

October 3

Leggett Farms — Craig Leggett. From Alt Rt. 40. Three miles north of Boonsboro turn east (right) on Tom's Road. Go ¼ mile, continue straight onto Lemuel Lane and go to last farm on the road. Established grazing dairy farm with TMR feeding.

November 7

Aldine Eby. From Frederick take Route 70 west to I-81 north to Route 58 (Cearfoss Pike) go west 1.5 to farm. Grazing Dairy farm comparing Barcel, Barolex and Max Q tall fescues.