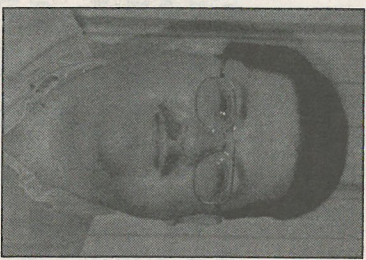


Livestock owners: Prussic acid caution



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Prussic acid interferes with oxygen utilization.

University of Kentucky Extension Forage Specialists and Ruminant Veterinarian have

developed several tips to reduce prussic acid poisoning in livestock: 1) Frost/freezing is especially

dangerous because the plant cells actually rupture allowing prussic acid to

be released. Do not graze until well after the entire plant and new shoots are

killed and have turned brown (dry). New forage growth following drought

or frost is dangerously high in prussic acid. Wait at least 7 days after

a killing frost to allow the cyanide to dissipate: 2) Leaves produce much

more prussic acid than stems, especially young upper leaves. New

shoots often contain high concentrations of prussic acid. Never graze

sorghums or sorghum-cross plants less than 15 inches tall ("knee high")

to significantly reduce the potential for poisoning: 3) Feed hungry cattle hay

or grain before allowing them to graze forages

which may contain prussic acid therefore reducing the amount consumed. Do not graze at

night when frost is likely; 4) Drought increases the chance for prussic acid

because slowed growth and the inability of the plant to mature favors the

formation of cyanogenic compounds in the leaves; 5) Do not graze until 2

weeks after a non-killing frost; 6) Plants grown in high nitrogen soil

(and low in phosphorus and potassium) tend to have more prussic

acid potential. Splitting nitrogen applications will reduce the risk of toxicity.

Herbicides such as 2,4 D can also increase prussic acid for several weeks

following application: 7) Chopping or ensiling plants high in prussic acid

will reduce toxin levels if properly cured. However dangerous levels of

prussic acid may remain if extremely high before cutting. If in doubt,

analyze suspect forages before feeding: 8) Johnson grass and sorghum-

sudan grass hybrids also have the potential for nitrate accumulation,

especially during drought conditions. Nitrate tends to accumulate in the

lower stem, so cutting hay very short, or overgrazing so that cattle have to eat

the lower stem bases (the "stubble") can cause more intake of nitrate and signs

similar to prussic acid poisoning. Nitrates can persist even in hay; 9) If

you cut Johnson grass or sorghum-sudangrass for hay, it is safe from prussic

acid poisoning because the hay curing process neutralizes any prussic

acid; and 10) Wild cherry leaves contain the cyanide compounds. Do not allow

access to wild cherry leaves whether they are wilted or not. After storms

always check pastures for fallen limbs.

For more information, contact the Estill County Extension office at

723-4557. Educational programs of the

Cooperative Extension Service serve all people regardless of economic

or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion,

political belief, sex,

sexual orientation, gender identity, gender expressions, pregnancy,

marital status, genetic information, age, veteran status, or physical or

mental disability. **Kentucky Beef Conference is Oct. 21**

The 2019 Kentucky Beef Conference is scheduled for Monday, October 21st

at the Fayette County Extension office, off Red Mile Road (behind

Central Equipment). Registration begins at 9 a.m. and the program

runs 10 a.m. to 3 p.m. This year's conference

will cover cattle marketing strategies and market trends, nutrition during

drought, water issues during drought, animal disease traceability

update, and confinement feeding options for winter feeding.

Registration is \$10 per person to cover cost of a buffet lunch

and refreshments. You will pay at the door but please register with us by

October 18th so enough food will be prepared. Our office phone number is 723-4557.

Grazing Conference The Heart of America

Grazing Conference is October 30th in Burlington, KY (Boone County). The theme is

"Kicking the Hay habit: Optimizing Profitability."

The keynote speaker is Jim Gerrish, independent grazing lands consultant

providing services to farmers and ranchers on both private and

public lands across five continents. He conducted 22 years of beef-forage

systems research and outreach while on the faculty of the University of

Missouri-Forage Systems Research Center (FSRC). His research encompassed

many aspects of plant-soil-animal interactions and provided the

foundation for many of the basic principles of Management-Intensive

Grazing. Jim is a gifted speaker, author, scientist and pasture ecologist.

Registration can be paid online at the following site: <https://2019hoa.eventbrite.com> or call the Extension office for

details.

With cool weather

finally appearing,

livestock producers

need to beware of the

potential of prussic acid

poisoning after a frost.

Certain plants, such as

johnsongrass, sudangrass,

and sorghum/sudangrass

hybrids contain cyanide-

producing compounds

that are released with frost

damage to the plant. The

amount of the compound

in a plant depends on one

or more factors including

the size and variety of the

plant, whether drought

conditions are present,

and the extent of physical

damage caused by frost.

When an animal eats

plants containing high

levels of the compounds,

prussic acid poisoning