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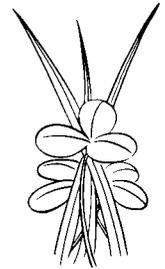
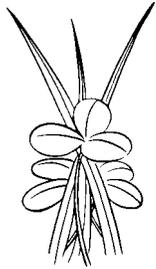
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FORAGE NEWS



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October 2001

Garry D. Lacefield and Jimmy C. Henning, Extension Forage Specialists • Christi Forsythe, Secretary

KENTUCKY GRAZING CONFERENCE

With the success of the Grazing Conference held this past year in Bowling Green, the organizing committee has put together an outstanding program for November 29 in Lexington. The Conference will feature leading speakers from throughout Kentucky covering practical aspects of grazing. In addition, we are fortunate to have Mr. R. L. Dalrymple from Oklahoma, who is one of the leading grazing authorities in the USA, along with Dr. Gary Bates, Extension Forage Specialist from the University of Tennessee as our keynote speakers.

The conference will be held at the Fayette County Extension Office with registration beginning at 8:00 a.m. The registration fee will be a nominal \$15.00 and will cover refreshments, meal, proceedings and a number of grazing-related publications. Commercial and educational exhibits will be set up and staffed covering services and supplies related to grazing.

Additional information can be obtained by contacting Dr. Jimmy Henning, 859.257.3144, e-mail jhenning@ca.uky.edu, Dr. Garry Lacefield, 270.365.7541 X202, e-mail glacefie@ca.uky.edu or Ms. Christi Forsythe, 270.365.7541 X221, e-mail cforseyth@ca.uky.edu

This conference will be the Kentucky Forage and Grassland Council's Winter Forage Conference. A short business meeting will be held at lunch, highlighted by our annual Awards Program.

Beware of Prussic Acid Frost Approaches

The primary cause of hydrocyanic (prussic) acid poisoning in domestic animals is the ingestion of plants containing this potent toxin. Cyanide-producing compounds (cyanogenic glucosides) occurring in living plant cells are converted to prussic acid when cells are crushed or otherwise ruptured.

The prussic acid potential of plants is affected by species and variety, weather, soil fertility and stage of plant growth. Plants of the sorghum group (including johnsongrass) and leaves of wild cherry trees have a potential for producing toxic levels of prussic acid. There are wide differences among varieties. Some of the sudangrasses, such as Piper, are low in prussic acid. Pearl millet is apparently free of prussic acid in

toxic amounts.

Cause: Prussic acid is one of the most potent toxins in nature. As ruminants consume plant materials containing cyanide-producing compounds, prussic acid is liberated in the rumen, absorbed into the bloodstream and carried to body tissues where it interferes with oxygen utilization. If toxin is absorbed rapidly enough, the animal soon dies from respiratory paralysis.

Symptoms: When lethal amounts are consumed, dead animals may be found without visible symptoms of poisoning. Symptoms from smaller amounts include labored breathing, irregular pulse, frothing at the mouth and staggering.

Prevention: Forage species and varieties may be selected for low prussic acid potential. The risk from potentially dangerous forages may be reduced by following certain management practices:

1. Graze sorghum or sorghum cross plants only when they are at least 15 inches tall.
2. Do not graze plants during and shortly after drought periods when growth is severely reduced.
3. Do not graze wilted plants or plants with young tillers.
4. **Do not graze for two weeks after a non-killing frost.**
5. **Do not graze after a killing frost until plant material is dry (the toxin is usually dissipated within 48 hours).**
6. **Do not graze at night when frost is likely.**
7. Delay feeding silage 6 to 8 weeks following ensiling.
8. Do not allow access to wild cherry leaves whether they are wilted or not. After storms, always check pastures for fallen limbs.

FORAGE CONFERENCE SET FOR FARM BUREAU CONVENTION

The Farm Bureau Forage Commodity Committee has finalized plans for their Forage Conference to be held beginning at 1:45 p.m., December 3, 2001 at the Galt House in Louisville. The conference will be one of several featured during the Farm Bureau Convention. The committee has selected three important topics for the conference: The Endophyte of Tall Fescue: Past-Present-Future—Dr. Garry Lacefield, Phase I and Forage-Livestock Program in Kentucky--

-Dr. Jimmy Henning, and our keynote speaker will be Dr. Don Ball from Auburn University. Dr. Ball is an internationally known forage scientist and will address the topic "Forage Quality Concepts". Look forward to seeing you in Louisville on December 3.

HAY FEEDING IN BEST BARGAIN

To get a hay test in Kentucky, all you have to do is call the Hay and Grain Division of the Kentucky Department of Agriculture at 800.248.4628 and set it up. You don't even have to leave your farm! They will come to you. And the cost is only \$10 per lot of hay tested.

We believe this is one of the best bargains going. For your \$10 per lot of hay sampled, a representative from the Kentucky Department of Agriculture will come to your farm, take a forage sample or samples, and get them analyzed for protein and energy. These results will be on the way back to you in approximately 5 days. In addition, the Department of Agriculture representatives will offer to balance a simple ration for you for the livestock that might consume the hay. This extra service was developed in conjunction with UK. The ration information will be made available back to you either directly from the Department of Agriculture or from your local county extension agent.

Don't forget that testing your hay for quality through the Department of Agriculture is also a way to get your hay listed for sale. If you indicate that you wish to sell the hay, then visual and other characteristics of your hay will be noted and listed on the hay test sheet. This information will be compiled and held by the Department of Agriculture and made available to anyone calling in looking for hay. This system is the best of any in the country and Allen Johnson and the Department of Agriculture is committed to making this a quality service for Kentucky Farmers. **All you need to do is make the toll free call.**

CROP RESIDUE: QUESTIONS & ANSWERS

Which crop residue offers the most feed? Although residue from corn, soybeans, or sorghum may be used, the major source of crop residue in Kentucky is from corn following grain harvest. The corn plant has over fifty percent of its weight in stalks, leaves, shocks and cobs. Considerable grain may also remain in the field after combining. Even with conservative combining techniques, 4 to 6 bushel of corn per acre may remain.

How much feed remains after grain harvest? Corn residue will offer the most feed. A crop with a 100 bushel grain yield will usually yield 2-3 tons of residue. In general, corn will yield two to three times more residue than soybeans. Sorghum is usually intermediate.

What about quality? It depends on plant type and plant part. Corn residue is higher quality than soybeans. Leaves on all species are high quality than stalks. Corn leaves, husk and cobs are 58-60 percent digestible while stalks are less than 50%. Soybean pods are over 50% digestible and stalks (stem) are less than 35. Crude protein is 7.0 percent in corn leaves and 2-4% in cobs and stalks.

How should crop residue be utilized? Grazing represents the least cost method of utilizing crop residues. In general, only a small amount 20-40% of the total residue is harvested by grazing. An acre of corn residue (100 bu. grain yield) will provide 35-50 days of grazing per cow. Since cows will consume the more palatable portions of the plant first, reducing field size with a temporary fence will reduce selective grazing and increase the amount of residue used.

Are there health concerns when grazing crop residue?

YES. Historically, we have always cautioned against founder if excess amounts of corn were left in the field. We have also cautioned against prussic acid poisoning, especially as frost approaches and we have a lot of johnsongrass in the field. During normal years (non-drought), we usually do not worry about nitrate poisoning. If nitrate levels were high in the plant at the time of combining, they are likely high now. We have seen some very high nitrate readings this year. As we mentioned above, animals usually graze selectively - selecting the highest quality plant parts first. While this reduces utilization percent, it helps from a nitrate standpoint. Nitrates are highest in the lower third of the stalk and lowest in the leaves. Animals should not be forced to consume the lower 1/3 to 1/2 of the stalk from a quality - animal performance standpoint and when high nitrates are suspected.

Should I be concerned about the herbicide I used on the crop from a grazing perspective? YES, especially with soybeans. In the University of Kentucky Chemical Control of Weeds publication, on page 115, I counted 48 herbicides used for soybeans in Kentucky. According to the label, 38 say DO NOT FEED. Most of the others have severe limitations on grazing. Regardless of crop or herbicide used, always read and follow label directions.

KFGC AWARDS NOMINATION DEADLINE OCTOBER 15

Each year the Kentucky Forage & Grassland Council recognizes excellence in the forage industry with four prestigious awards. Awards are presented to one representative each from the following sectors: 1) Producer, 2) Industry, 3) Public (State) and 4) Public (County). This year the awards will be presented during lunch of the Kentucky Forage Council's sponsored Grazing Conference which will be in Lexington on November 29. If you would like to nominate some deserving individual for any of the above awards, please send nominations consisting of name, address and a one page or less written summary of the nominee's accomplishments to KFGC President, Mr. Bill Talley. Bill can be reached by e-mail at btalley@seedbiotics.net or at 10100 S. Jefferson St., Princeton, KY 42445. Thanks for your help in identifying worthy recipients of these prestigious awards. Deadline for receiving nominations is October 15, 2001.

UPCOMING EVENTS

- NOV 29 Kentucky Grazing Conference
- DEC 3 Farm Bureau Forage Conference, Louisville
- 2002
- JAN 11 Forages at KCA, Bowling Green
- JAN 24 Four-State Grazing Conference, Rend Lake Community College, Illinois
- FEB 21 XXII Kentucky Alfalfa Conference, Cave City
- JUL 18 UK All Commodity Field Day, Princeton

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Extension Forage Specialists

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