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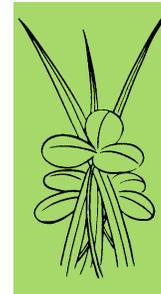
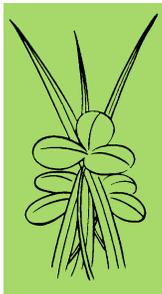
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FORAGE NEWS



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December 1999

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

KFGC PRESIDENT'S CORNER

Kentucky Forage and Grassland Council - KFGC is an affiliate of the American Forage and Grassland Council; so, our members are also members of AFGC. As such, we can participate in AFGC activities such as their annual meetings and receive their quarterly magazine the "Forage Leader". One part of the annual meeting KFGC participates in almost every year is the Forage Spokesperson Contest. Forage producers from across the US and parts of Canada present programs on their farming operations and are judged by a panel of experts. Kentucky has had more winners in the Forage Spokesperson Contest than any other state. The annual meetings and contest next year will be in Madison, Wisconsin July 16-19. We hope to have a good group from Kentucky make the trip.

With the new year approaching, now is the time to join KFGC or renew your membership. Why should you be a member of KFGC? Besides the benefits of supporting forage agriculture in Kentucky and North America, there are some direct benefits to members:

- ◆ The latest forage information through the "Forage Leader" magazine and our own forage newsletters.
- ◆ Learning opportunities through our state forage conferences, the annual alfalfa conference, the one-day and three-day grazing schools and our annual forage field days.
- ◆ A coupon book for big savings on forage-related products.

Anyone interested in becoming a KFGC member can contact Jimmy Henning or me for information. (*Monroe Rasnake*)

ONE DAY GRAZING SCHOOLS ARE EARLY CHRISTMAS PRESENT

There are three one-day grazing schools planned for December (December 2 - Paducah; December 3 - Owensboro; December 14 - Bowling Green). These will be in the extension offices in the respective locations. These programs will each begin at 8:30 AM and end at 3 PM Central Time.

You can get the full program from your local county agent or from the Kentucky Forage and Grassland Council web site (www.kfgc.org). Frankly these are the best bargains for forage and grazing information that I know of.

When you come to the schools you will receive Southern Forages, pocket forage guide, full color grass identification guide, Kentucky Beef Book, Kentucky Grazing Stick, plus all of the associated support materials that will go into your notebook (provided) which will come from the speakers. And we feed you

a good lunch. And when you pay your registration fee, you are automatically a member of the Kentucky Forage and Grassland Council (or your membership is renewed). A conservative estimate of the value of all of these is \$100.

Your registration fee for these schools is \$20. And that is not factoring in any value for the things that you will see and learn while there. Clearly this is the best deal you can get this year. Think of it as an early Christmas present.

FORAGES AT FARM BUREAU

Mark your calendar and plan to attend the Forage Commodity Conference at the Annual Farm Bureau Convention. The Forage Commodity Conference will be held **December 6 from 10:15 to 11:45**. The program committee has put together three timely topics that should be of interest to all participants. The topics include: Drought of '99: Impact & Implications; Kentucky Hay: Supply, Quality Testing and Ration Balancing; and Reviving Drought Stressed Pastures with Legumes. See you December 6 at 10:15 in Louisville.

KFGC EXPANDS WEB SITE CONTENT

In keeping with our mission of promoting forages through education and communication, you will find more information posted on the KFGC web site (www.kfgc.org). First, on the front page, you see the one day grazing schools highlighted.

Second, both the October 5 proceedings articles and the last two years of 'Forage News' have been posted under 'Resources.' Clicking on 'Resources' will send you into the section that contains links to these important forage information sources. More resources are planned. Stay tuned.

FORAGE QUALITY TERMS

It is sometimes confusing when we get a "hay test" back from the laboratory. Let's consider some of the "basic" items on most "Forage Analysis Forms". We will discuss the additional items in future columns.

Moisture, expressed as percent, is the water present in the forage analyzed. **Dry matter (DM)** is the percentage of the forage that is not water.

Crude protein (CP) is the sum of the true protein and non-protein nitrogen. It is calculated by measuring the nitrogen concentration and multiplying by 6.25. (True protein in forages contains about 16% nitrogen, so there 6.25 lb of total protein for each pound of nitrogen present.) It is a measure of a forage's ability to meet the protein needs of livestock.

Most protein in forages is true protein, with exceptions for

nitrate-accumulating summer annual grasses such as sudangrass and pearl millet. Although high-protein forages are also often high in energy, CP content is of little value in determining energy content. Since protein is one of the most costly supplements for livestock, high protein forages are desirable.

Acid detergent fiber (ADF) is the percentage of highly indigestible plant material present in a forage. It contains cellulose, lignin, and silica. Acid detergent fiber is a useful predictor of energy and digestibility in forages. Low ADF values mean higher energy value and digestibility since lignin and silica are not digestible by ruminants. Therefore, low ADG values are desirable. In fact, all the energy estimates presently used in forage testing are calculated from ADF alone.

Neutral detergent fiber (NDF) represents all of the structural or cell wall material in the forage. The NDF of a forage is inversely related to the amount that a cow or calf is able to consume; thus, forages with low NDF will have higher intakes than those with high NDF. In general, legumes tend to have lower NDF values than grasses.

Total digestible nutrients (TDN) reports the percentage of digestible material in a forage. Total digestible nutrients are calculated from ADF and express the differences in digestible material between forages. This term is used more often with rations for beef or sheep than with dairy rations.

Relative feed value (RFV) is used to compare one forage to another on an energy basis. It is derived by taking into account the digestibility (calculated from ADF) and the potential intake (calculated from NDF) of a given forage.

RFV is becoming a very valuable term in describing the overall value of a forage. In fact, Minnesota research found RFV the most important price determinant in their quality-tested hay auctions.

For more information on Interpreting Forage Quality Reports see U.K. Cooperative Extension Publication ID-101.

USE OF ENERGY SUPPLEMENTATION TO DILUTE FESCUE ENDOPHYTE EFFECTS DURING SPRING GRAZING AT EDEN SHALE

Forty-eight, yearling Beefmaster x Angus steers grazed individual .5 acre paddocks of endophyte-infected Ky 31 tall fescue from May 5 to July 6 in three consecutive years at the Eden Shale Farm of the University of Kentucky. Steers were also fed ground shelled corn at 0, .2, .4, and .6% of individual body weight once daily throughout the grazing period to determine if energy supplementation would increase gain on spring fescue pasture. Daily gains from May 5 to May 22 were 3.3 lb/hd and no effect of corn supplementation was found. However, average daily gains increased linearly as daily corn supplementation increased from 0 to .6% of body weight from May 22 to June 10 and from June 10 to July 6. Overall daily gains for the 62-day period were 1.3, 1.8, 1.8, and 2.0 lb/hd for the 0, .2, .4, and .6% corn feeding, respectively. Supplementation lowered body temperatures and altered some rumen and blood measurements to provide evidence to conclude that energy supplementation does dilute some of the effects of endophyte when steers graze Ky 31 tall fescue in May and June. The optimum level of daily supplementation, for maximum gain, appears to be .6% of steer body weight. (D.G. Ely)

FORAGES AT KCA



Merry Christmas and Happy Year 2000

This marks the fifth consecutive year that we have joined forces with the Kentucky Cattlemen to offer a Forage Conference to kick off the Kentucky Cattlemen's Convention. The conference will be January 7 from 9:30 - 11:00 at the Executive Inn West in Louisville. The program committee has selected a 'Grazing' theme and put together three very timely topics. Topics include: The Value of Improved Grazing Management; Putting Forage Species Together for Year-round Grazing; and Dollars and Sense of Intensive Grazing. See you January 7, 9:30 at the Executive Inn West in Louisville.

20TH KENTUCKY ALFALFA CONFERENCE

Our "Twentieth Anniversary Kentucky Alfalfa Conference" will be held February 24 at the Cave City Convention Center. New features include an Awards Program and a Silent Auction. Since it is our 20th Anniversary, we will have TWO (2) 'Keynote' speakers. Dr. Don Ball, nationally recognized Forage Specialist from Auburn University and Dr. Becky Greenwald, nationally recognized Industry Leader in Alfalfa, will be featured on the program.

UPCOMING EVENTS

- DEC 2 One-Day Grazing School, McCracken County Extension Office, Paducah
- DEC 3 One-Day Grazing School, Daviess County Extension Office, Owensboro
- DEC 6 Farm Bureau Forage Commodity Conference, Galt House, Louisville
- DEC 14 One-Day Grazing School, Warren County Extension Office, Bowling Green

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- JAN 7 Forages at KCA, Executive Inn-West, Louisville
- FEB 24 20th Kentucky Alfalfa Conference, Cave City
- JUL 16-19 AFGC, Madison, WI
- JUL 20 U.K. All Commodity Field Day, Princeton

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