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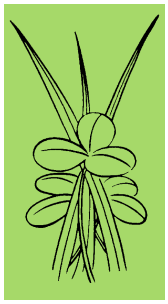
Forage News [1999-09]

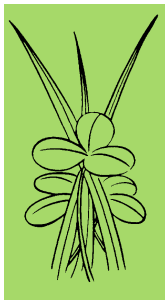
Department of Plant and Soil Sciences, University of Kentucky

UNIVERSITY OF KENTUCKY
COLLEGE OF AGRICULTURE
Lexington, Kentucky 40546

COOPERATIVE EXTENSION SERVICE

FORAGE NEWS





September 1999

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

FERTILIZING DROUGHT-STRESSED FORAGES

A hot and dry July and August have severely stressed our cool-season forages in Kentucky. A good fertility program can help them recover and provide extra feed this fall. If lime, phosphate and potash are needed, they can be applied in the fall. Nitrogen can be applied any time now in anticipation of the rains that will come - they always have.

The later fertilizer is applied, the lower the yield response will be. However, the most important effect now may be getting plants ready for winter and having a good, strong stand of grass next spring.

More information on dealing with drought damaged forages is being planned for the Kentucky Forage and Grassland Council Annual Meeting which is scheduled for October 5 at the Fayette County Extension Office in Lexington. *(Monroe Rasnake)*

HARVESTING SOYBEANS FOR HAY: WHAT KIND OF HAY DOES IT MAKE? YIELD? PROBLEMS?

What Kind of Hay does it make? Soybeans are not an easy crop to harvest for hay because of their thick stems and the tendency of leaves to shatter when the crop is dry. Therefore hay made from soybeans will not be high quality hay. Soybean hay tends to be very dusty.

What kind of quality is the standing crop? Research from Minnesota on full season beans harvested at mid-pod stage found them to have 16.5% crude protein and to be 61% digestible. Most present beans do not have any beans present, and therefore we would expect our beans to be lower in quality than the Minnesota numbers.

What about yield? The Minnesota study got 3.4 tons of dry matter per acre, with much of the yield coming from the filling of the pods. Kentucky yields will be all over the board, but will more likely be from 1 to 2 tons per acre.

Will soybeans ensile? Yes, if the standard requirements for ensiling are followed - appropriate moisture (50 to 65%), exclusion of oxygen, tight packing. If there are lots of beans in the soybeans, then the high oil content can inhibit ensiling. However, that is not the case for most of our beans.

Will conditioning the crop help? Yes. Using a conditioning mower will break and possible crush the stems and help speed up their drying.

What about herbicide used on these soybeans? Whether soybeans can be harvested and fed to livestock will depend on the herbicides used on the crop. Several common soybean herbicides do not have a label that allows these beans to be fed to livestock. Those that do have waiting periods. For example, the waiting period after spraying Roundup is 8 weeks. The full information on herbicides that are acceptable for soybeans to be harvested for hay is found in UK publication AGR-6 Chemical Control of Weeds, pages 104-105.

NEW ROUND BALE HAY STORAGE AT EDEN SHALE

A 30' x 102' round bale hay storage was built this summer by the Eden Shale Farm Crew. It is a hoop type structure set on top of 6' tall Cedar posts with solid wooden sides. The Cedar posts and the lumber for the sides were cut and sawed on the farm. The metal hoops are set on 6' centers and are covered with a vinyl cover that has a 15 year warranty. It took the farm crew one day to install the hoops, install and tighten the cover. The barn will hold 204 large round bales (6' x 6') and cost less than $2.00 per square for the hoops, cover and hardware. The barn was built for hay storage but will be used in the off season for equipment storage and possibly as a calving shelter during calving season.

NITRATES IN FORAGES

Nitrate in feed on dry matter basis		
%	ppm	Comments

SAFE	0.0 - 0.25	0 - 2,500	Generally considered safe.
CAUTION	0.25 - 0.50	2,500 - 5,000	Generally safe when fed with a balanced ration. For pregnant animals limit to half of total dry ration.
DANGER	0.5 - 1.5	5,000 - 10,000	Limit to 25% of ration.
TOXIC	Over 1.5	over 15,000	Do not use in free-choice feeding program.

Method of expression	Chemical design-ation	To convert to nitrate-nitrogen multiply by	To convert to nitrate multiply by	To convert to potassium nitrate multiply by
Nitrate	NO_3	1.00	0.23	1.63
Nitrate-nitrogen	NO_3-N	4.40	1.00	7.20
Potassium nitrate	KNO_3	0.61	0.14	1.00
Example:	1.0% nitrate x 0.23 = 0.23% nitrate-nitrogen 1.0% potassium nitrate x 0.14 = 0.14% nitrate-nitrogen To convert ppm to percent, move the decimal point four places to left, e.g. 4,400 ppm = 0.44%, 5,000 ppm = 0.5%.			
ppm = parts per million				

(SOURCE: Forage Crop Pocket Guide. 1999. D.M. Ball, C.S. Hoveland and G.D. Lacefield. PPI.)

FALL GRAZING SCHOOL

The Fall Grazing School is set for October 12-14. It will be held at the University of Kentucky Research and Education Center in Princeton. Registration is $125.00 and includes all materials, grazing manual, two books, refreshments and selected meals. Enrollment is limited to the first 45 to register. For more information, contact Dr. Jimmy Henning, U. K. Agronomy Department, phone - 606/257-3144, fax - 606/323-1952 or e-mail - jhenning@ca.uky.edu

WHAT ABOUT DRILLING SMALL GRAINS INTO DORMANT PASTURES?

This sounds so logical it seems like it must work. But in most cases, it does not. I am often guilty of being too simplistic in answering this question as there are some cases where drilling something new into dormant pastures might be cost effective, but there is very little data (actually I know of none) to support drilling rye or wheat into dormant fescue pastures. I have personally seen it done, and the small grain will germinate but will seldom add much growth for fall grazing. First the ground is so dry that it takes some time for enough rain to fall so the seed can germinate and emerge. The moisture that must fall for the small grain to get started will also start up the dormant cool season grasses as well. In the competition for limited water, the small grain seedling is at quite a disadvantage against a full established sod, even one which has been damaged by drought. The best bet for getting quick fall pasture, assuming no herbicide restrictions, is to plant rye into tobacco fields or corn fields or soybean fields that have been harvested.

KFGC ACCEPTING NOMINATIONS

The Kentucky Forage and Grassland Council is now accepting nominations for their annual awards program. Nominations should include name, address and a one-page biographical write-up of the nominee along with name, address and phone number of nominator. Award categories include; 1) Public Service to Forages Award - State; 2) Public Service to Forages Award - County; 3) Industry Award, and 4) Grassroots (Forage Producer) Award. Send nominations to Dr. Monroe Rasnake, President KFGC, University of Kentucky Research & Education Center, P. O. Box 469, Princeton, KY 42445. Nominations will be accepted through September 27, 1999.

UPCOMING EVENTS

OCT 5	KFGC Conference, Fayette County Extension Office, Lexington
OCT 12-14	KY Grazing School, U.K. Research & Education Center, Princeton
OCT 31-NOV 1	American Society of Agronomy, Salt Lake City, Utah
2000	
JAN 7	Forages at KCA, Executive Inn-West, Louisville
FEB 24	20th Kentucky Alfalfa Conference, Cave City

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