KFGC Field Day Huge Success in Spite of 4” of Rain

Over 100 dedicated people came to the 2006 KFGC Field Day held at Gene and Marcy Dobbs beef cattle farm in Campbell County, northern Kentucky. The field day brought 4” of much needed soaking rain, more than the total summer rainfall in the county. The inclement weather prevented the field tours, but all planned presentations were given in two large barns. Speakers included: Dr. Ray Smith, Dr. Garry Lacefield, Gene Dobbs, Ed Thompson, Don Sorrell, Jerry Brown, Tim Henricks, Tom Keene, and KDA hay testing coordinator Kim Fields. KFGC President, Dan Grigson, welcomed the group and a special plaque was presented to Gene and Marcy for hosting the event, Campbell county agent Don Sorrell for making the logistical arrangements, and the Campbell County Cattlemen’s Association for preparing the meal.

Roundup Ready Grazing Tolerant Alfalfa: Application for Kentucky

All of you have heard of the release of Roundup Ready alfalfa, but did you know that there is a Roundup Ready Grazing Tolerant variety. Dr. Joe Bouton has spent the last 10 years developing an improved Alfagraze with high levels of disease resistance and less fall dormancy. He teamed up with Monsanto to introduce the Roundup Ready gene into this variety and seed will be available for sale next spring for $7 to 8 per pound. We are cooperating with forage researchers from across the southeast in a series of experiments and demonstrations for this variety. We are looking to see how this variety can be best used in Kentucky. For example: Should Alfagraze 300RR be grazed in pure stands? Does it make sense to use this variety to clean up a weedy field for a year and then interseed with orchardgrass, novel endophyte tall fescue, and other forage species? Will Alfagraze 300RR improve the success rate of establishing alfalfa into stands of KY31? We look forward to reporting the results from this research in upcoming issues of Forage News.

26 Roundup Ready Alfalfa Varieties

Garry and I have just gotten back from a workshop in St. Louis on Roundup Ready alfalfa. This technology provides many new options for Alfalfa producers in Kentucky and there are now 26 RR varieties available for sale in the U.S. Over 15 of these varieties are adapted to Kentucky. Several people have asked us which variety is highest yielding and unfortunately we have not been able to provide a good answer. The technology is so new (just approved fall 2005) that few of these varieties have been entered into University yield trials. Companies do have some private data, but they often don’t compare to the varieties you are familiar with. So what do you do? Since it will be 1-2 years before University yield comparisons are readily available, it is important that you purchase seed from knowledge dealers who have earned your respect. Here is a list of some of the current varieties.

A Selection of Roundup Ready Varieties

<table>
<thead>
<tr>
<th>FD</th>
<th>Variety Name</th>
<th>Marketer</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Alfagraze 300 RR</td>
<td>America’s Alfalfa</td>
</tr>
<tr>
<td>3.0</td>
<td>DKA34-17RR</td>
<td>Dekalb</td>
</tr>
<tr>
<td>3.5</td>
<td>Ameristand 405T RR</td>
<td>America’s Alfalfa</td>
</tr>
<tr>
<td>4.0</td>
<td>425RR</td>
<td>Allied/Southern States</td>
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<tr>
<td>4.0</td>
<td>4G418</td>
<td>Mycogen</td>
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<tr>
<td>4.0</td>
<td>6443RR</td>
<td>Garst Seed</td>
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<tr>
<td>4.0</td>
<td>Consistency 4.10RR</td>
<td>Croplan</td>
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<td>DKA41-18RR</td>
<td>Dekalb</td>
</tr>
<tr>
<td>4.0</td>
<td>GH709RR</td>
<td>Golden Harvest</td>
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<td>Liberator</td>
<td>NK/Syngenta</td>
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<tr>
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<td>RRalf 4R100</td>
<td>Trelay/Eureka</td>
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<tr>
<td>4.0</td>
<td>V-45RR</td>
<td>Dairyland</td>
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<tr>
<td>4.0</td>
<td>WL355RR</td>
<td>W-L Research</td>
</tr>
</tbody>
</table>

Hay Export Markets May Benefit All Growers

Developing hay export markets in Vietnam and China could improve hay prices and positively impact the U.S. economy, according to Pete Moss, National Hay Association (NHA) consulting nutritionist and export market specialist. Moss works with NHA’s International Market Development Committee to create new markets for U.S. hay; recent efforts have been on the growing Vietnamese dairy market.

"We could be exporting between 300,000 and 400,000 metric tons of U.S. hay into Vietnam by 2010," he says. Past NHA marketing efforts, for example, helped increase U.S. hay exports to Japan from 200 metric tons in 1972, to 1.5 million metric tons in 2004, Moss adds.

The Vietnamese government wants to increase its country’s dairy production from the 2002 level of 40,000 dairy cows to 100,000 dairy cows by 2010. The number of larger herds, made up of 200 to 1,200 cows, is increasing.
"Milk production is low in Vietnamese dairies due to heat stress, poor forage and inadequate management," Moss explains. "Poor forage is a problem throughout the country. It is difficult to meet the needs of a large herd when hauling hay with an oxen and a cart."

Wet, hot, humid conditions rule out alfalfa production. Vietnamese producers can grow some grass hay, but only during the rainy season, and the hay is hard to put up. There is very limited grazing. Green-chopped forages are carried to cows by hand. Rice straw is often fed during the dry season. Some poor-quality silage is available, but silo management is poor.

Moss says imported U.S. alfalfa hay can economically compete with the forage alternatives available to Vietnamese dairies. NHA has conducted three years of research comparing U.S. hay to local forages. The studies concluded that U.S. alfalfa hay kept well with no mold, mushy odor or other problems in the humid climate.

Numerous feeding studies were also conducted. Feeding U.S. alfalfa increased milk production by 2-10 lbs/cow, increased feed intake and body condition and showed positive economic outcomes. NHA then presented research results at conferences in Vietnam. "The researchers and dairy managers were enthused about feeding U.S. hay," Moss reports.

Similar market development activities have been undertaken in dairies in southern provinces of China. Because Chinese dairies are more advanced than Vietnamese dairies, a U.S. hay export market should develop more rapidly. "There seem to be unlimited opportunities for selling U.S. hay in China," Moss states.

Contact NHA at 800-707-0014 to learn more about its market development efforts.

The previous paragraphs give us good insight as to some of the expanding markets for the hay industry worldwide. Any additional hay that is exported reduces the amount hay for our livestock here in our country, thus allowing for more opportunities for cash hay sales throughout the country. (Source: Tom Keene, UK Hay Marketing Specialist, adapted from EHAY Weekly, September 12, 2006)

PREVENT MACHINERY FIRES

Three things must be present for a machinery fire to occur: air, a material to burn and a heat source. Machinery fire prevention focuses both on keeping machinery clean of possible fire-causing materials, and eliminating all possible sources of heat that could lead to a fire, according to John Shutkske, University of Minnesota Ag safety and health specialist. He urges producers to pay special attention to the engine compartment because over 75% of all machinery fires start in that area. All caked-on grease, oil and crop residue should be removed from the engine area. Clear any machinery fires start in that area. All caked-on grease, oil and crop residue should be removed from the engine area. Clear any exposed electrical wiring for damage or signs of deterioration. Replace any worn or malfunctioning electrical components with proper parts from your dealer. Keep an eye out for worn bearings, belts and chains. A badly worn bearing can glow red-hot. Any rubber belt subjected to intense heat from a worn part can burst into flames.

Shutkske recommends a 5-lb, fully charged, ABC dry chemical fire extinguisher be kept on tractors. He suggests a 10-lb unit for combines. Select only extinguishers with an Underwriter's Laboratory approval. Having two extinguishers on the machine is even better in case one malfunctions or loses pressure. Keep one extinguisher mounted in the cab and one where it can be reached from the ground. Check extinguishers periodically and pay special attention to the pressure gauge. To function effectively, the gauge must show adequate pressure to expel the powder inside.

Fire extinguishers should be checked periodically by someone from the local fire department or insurance company. Any extinguisher that has been even partially discharged must be fully recharged before it is used again. During even a brief discharge, Shutkske says the tiny dry chemical particles will create a small gap in the internal seal of the extinguisher valve. This tiny opening will cause any remaining pressure to leak out in a few hours or days.

In the event of a fire, having a cell phone or two-way radio nearby will help get professional assistance to the field more quickly.

Shutkske urges producers to remember that it may not be possible to put out every fire. If the fire is in a difficult-to-reach area or seems out of control, don't risk the chance of injury or death. Wait for help to arrive.

Five research articles with detailed fire protection information can be found at www.safe-design.net/machinery_fires/index.html. (SOURCE: University of Minnesota)

ETHANOL GROWTH CHALLENGES HAY MARKETS

Hay producers in some parts of the country are facing growing competition from the ethanol industry as distiller’s grains are added to dairy and beef diets, squeezing out part of the hay market. As the ethanol industry continues to grow and expand, cattle feeding operations likely will change feeding methods as well, according to Greg Lardy, North Dakota State University extension beef cattle specialist. Nebraska is already using a large portion of the byproduct from ethanol plants and will likely find ways to use even more, he notes. Distiller’s grains can also be used in cow diets and as supplements for pastured cattle.

Each bushel of corn used by an ethanol plant produces about 2.3-2.7 gallons of ethanol and about 18 lbs of dried distiller’s grains. A plant producing 40 million gallons of ethanol annually will use approximately 17 million bushels of corn and produce about 132,000 tons of dried distiller’s grains. “This is enough byproduct to feed 185,000 head of feedlot cattle annually, assuming a 15% dietary inclusion level on a dry matter basis," Lardy explains.

According to the Renewable Fuels Association, 33 ethanol plants are under construction in the U.S. They will add 1,893 million gallons of annual production capacity when completed, more than a 40% increase. The bulk of the current expansion is taking place in Nebraska, which will add 455.5 million gallons of production. South Dakota has also seen dramatic expansion. The South Dakota Corn Utilization Council says ethanol plants use 1 in every 4 bushels of corn grown in the state. (SOURCE: North Dakota State University IN Pennsylvania Forage & Grassland News, Vol. 16, No. 4, Fall 2006)

HAY PRODUCTION UP

Production of hay was forecast to be up from the 2005 crop. Spring and summer rains have hurt hay quality while the rains have produced large crops. Alfalfa hay production was forecast at 918,000 tons, up 10 percent from the previous year. Yield was estimated at 3.40 tons per acre. Other hay production was estimated at 5.63 million tons with harvested acreage estimated at 2.25 million acres. Other hay acreage was a record high. Yield was estimated at 2.50 tons per acre. (SOURCE: Kentucky Agri-News, Vol. 25, No. 16, August 2006)

UPCOMING EVENTS

NOV 21 Kentucky Grazing Conference, Lexington
DEC 10-13 Third National Conference on Grazing Lands, St. Louis, MO

2007
JAN 11-13 KCA Annual Convention & Trade Show, Lexington
JAN 24-25 Heart of America Grazing Conference, Mt. Vernon, IL
FEB 22 27th Kentucky Alfalfa Conference, Cave City

Garry D. Lacefield
Extension Forage Specialist
October 2006