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Forage News [2007-04]

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FORAGE NEWS

For more forage information, visit our UK Forage Extension Website at: **http://www.uky.edu/Ag/Forage**

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Conference Proceedings on Web

Proceedings from our 27th Kentucky Alfalfa Conference are available on our website at http://www.uky.edu/Ag/Forage/ProceedingsPage.htm

Growers can Continue to Grow and Use Roundup Ready Alfalfa, but Monsanto Company is Disappointed with Preliminary Injunction Affecting Purchase and Planting; Will Continue to Support Growers' Right to Choose Roundup Ready Alfalfa for their Forage Operations

Monsanto Company (NYSE: MON) said today it is disappointed that a preliminary injunction will affect the plans of many farmers who want to use Roundup Ready alfalfa in their forage operations. The preliminary injunction was issued in a lawsuit currently pending in the U.S. District Court for the Northern District of California; the lawsuit was brought by the Center for Food Safety and others against the U.S. Department of Agriculture (USDA) as Geertson Seed Farms Inc. et al. v. Mike Johanns, et al. In this case, the court had previously ruled that USDA had failed to follow procedural requirements of the National Environmental Policy Act in granting non-regulated status to Roundup Ready alfalfa under the Plant Protection Act, and would have to prepare an Environmental Impact Statement.

"We are hopeful that a reasoned approach in this matter will address questions about the regulatory approval process for Roundup Ready alfalfa while maintaining farmer access to this beneficial technology," said Jerry Steiner, executive vice president for Monsanto. "The extensive regulatory dossier for Roundup Ready alfalfa, combined with farmer stewardship agreements, provides a robust and responsible approach to managing the environmental questions raised by the plaintiffs in this case."

The March 12 preliminary injunction order allows continued harvest, use and sale of Roundup Ready alfalfa, but placed limits on the purchase and planting of seed until further hearings are held. Growers who intend to plant Roundup Ready alfalfa and have already purchased the seed as of March 12 may do so if said seed is planted by March 30, 2007. The order also said growers intending to plant alfalfa after March 30, 2007, must plant non-genetically engineered alfalfa and that sales of Roundup Ready alfalfa seed are prohibited after March 12 pending the court's decision on permanent injunctive relief. The court has scheduled oral arguments on the nature of any permanent injunctive relief in this case for April 27, 2007.

In some parts of the country, the March 30 planting deadline does not leave enough time to plant Roundup Ready alfalfa that has been purchased. "We don't plant alfalfa until the middle of May," said Dale Scheps, who operates a 145-cow dairy farm in Almena, Wisc. Scheps planted 35 acres of Roundup Ready alfalfa in 2006 and had already purchased enough seed to plant another 35 acres in 2007.

"It's a major setback to have this technology taken away from us," Scheps said. "It will needlessly drive up our feed costs because we will have to replace superior quality hay."

Monsanto, Forage Genetics International and several farmers were granted intervener status in this case on March 8. Plaintiffs, defendants and interveners can participate in oral arguments for this case on April 27.

The court has already accepted the fact that Roundup Ready alfalfa poses no harm to humans and livestock. As part of its regulatory filing for Roundup Ready alfalfa in April 2004, Monsanto provided USDA with an extensive dossier that addresses a variety of environmental, stewardship and crop management considerations. Other regulatory agencies around the world, including Canada and Japan, have confirmed the environmental safety of Roundup Ready alfalfa.

Monsanto Company is a leading global provider of technology-based solutions and agricultural products that improve farm productivity and food quality. For more information, please visit the company's web site at www.monsanto.com. (SOURCE: Monsanto Company News Release, St. Louis, March 12, 2007)

New Posters Featuring Forages Now Available/ *Southern Forages* Book Now in Fourth Edition

Two new 24x30-inch posters, *Forage Legumes* and *Forage Grasses*, are now available from the International Plant Nutrition Institute (IPNI). Each poster features color photographs of 30 species of important forage plants, along with descriptive text on seeding/establishment, fertility needs, pest considerations, and other practical tips. The posters were prepared by the authors of the popular book, *Southern Forages*. They are Dr. Don Ball, Auburn University; Dr. Carl Hoveland, University of Georgia; and Dr. Garry Lacefield, University of Kentucky. The book was first published in 1991 and has become a standard among farmers, educators, horse owners, individuals managing wildlife plots, and many others.

The new posters provide one more level of information accessibility for the many people interested in forage grasses and legumes. We have seen the popularity and usefulness of the *Southern Forages* book for many types of audiences and believe the posters will effectively enhance understanding of forage production and management," noted IPNI President Dr. Terry Roberts. Many of the species included on the posters are grown across large areas of North America and even in other countries.

The posters would be appropriate for display in classrooms, seed outlets and farm stores, Extension and soil/water conservation meeting rooms, farm offices, and various other settings.

A single poster is available for purchase at US$3.00 plus shipping. The cost for a set including one of each poster if US$8.00 sent folded or US$9.00 rolled in a mailing tube.

The Fourth Edition of the book *Southern Forages* was published by IPNI in early 2007 and is now available from IPNI for US$30.00 plus US$4.00 shipping and handling for a single copy. Discounts are available on larger quantities.

For more information and cost details, contact: Circulation Department, IPNI, 655 Engineering Drive, Suite 110, Norcross GA 30092-2837; phone 770-825-8082; fax 770-448-0439; e-mail: circulation@ipni.net. Or check the website at: www.ipni.net *(SOURCE: IPNI News Release, Norcross, Georgia, USA, March 1, 2007)*

Teff

We have had several questions about "Teff" in the last few weeks. Although we do not have much research data in Kentucky to date, several seedings were made in 2006 including research by Dr. Tim Phillips. We will be making some research seedings this year.

Teff is a warm season annual grass that originated in Africa, where it was utilized as a grain crop. It can grow to over four feet tall and can produce over 6 tons per acre per year. It is a very small seeded grass with approximately 1.3 million seeds per pound. It is relatively easy to establish and seeding rates are 5-8 lbs/A. As a warm season annual, it requires a frost-free growing season. A major threat to growing Teff is frost. Seed must be planted in spring after the risk of frost has passed. The variety that has received the most publicity to date in Kentucky is "Tiffany" Teff.

Removal of Tall Fescue from Kentucky Bluegrass Pastures

Introduction. Nearly all equine pastures in Kentucky have a tall fescue component and one can assume that all of the tall fescue is infected with the natural race of *Neotyphodium*, an endophytic fungus. Equine breeding farms are particularly sensitive to the endophyte infected tall fescue because of the reproductive problems often encountered when mares graze infected tall fescue. Elimination of tall fescue from desirable Kentucky bluegrass or orchardgrass pastures is the goal of many horse farms.

Tall Fescue Removal Option 1. In pastures with greater than 50% tall fescue, it may be desirable to kill all the grasses with glyphosate (Roundup or other glyphosate containing product) and seed a desirable grass. The optimum time for this approach is to apply glyphosate in mid July and seed desirable grasses in early September. It is important to have at least 4 weeks between glyphosate treatment and grass seeding—this allows the grasses killed by glyphosate to decay and not interfere with emergence of the seedling grasses.

Tall Fescue Removal Option 2. The other option is to selectively remove tall fescue with herbicides when the tall fescue infestation is less than 50%. Research at UK has shown good control from Plateau applied at 10 or 12 ounces/acre. Plateau must be applied with methylated seed oil or a non-ionic surfactant; consult the Plateau label for specifics. Tall fescue was controlled at these rates when applied from May through October. Two consecutive annual applications did not harm Kentucky bluegrass. Weekly mowing of the pasture did not reduce tall fescue control from Plateau applications. Cimarron at 1 ounce/acre will also remove tall fescue; however, the amount of tall fescue removal from Cimarron is less than that obtained with Plateau.

Issues - Orchardgrass. Care should be exercised when applying Plateau to orchardgrass. Under good growing conditions (warm, moist soil, warm air temperature) our research has revealed excellent tall fescue control without injury to the orchardgrass. However, under abnormally cool, dry conditions in early spring experienced near Lexington in 2005, orchardgrass injury was noted in some fields from treatment of Plateau.

Issues – Plateau and Cimarron Persistence in Soil. Follow the label directions for seeding pastures after Plateau or Cimarron applications. Under very dry conditions such as the summer of 2005, Plateau can persist in the soil and prevent germination and emergence of Kentucky bluegrass and orchardgrass. Consult the Plateau label for specific instructions.

Issues – Nimblewill in your Pastures. Plateau and Cimarron may reduce tall fescue in pastures but will have no effect on nimblewill. Usually, when tall fescue is killed, especially in large patches, nimblewill and other weedy grasses will replace the tall fescue. This occurs because the removal of the fescue provides bare ground which provides an excellent site for nimblewill germination and growth. Pastures containing large amounts of nimblewill and tall fescue should be renovated using Option 1 described above since glyphosate will kill the nimblewill in addition to the tall fescue. Establishment of a good cool season grass mixture in the fall severely limits nimblewill germination in the spring. (SOURCE: William W. Witt, Department of Plant and Soil Sciences, University of Kentucky)

Phoenix Alfalfa has Substantial Resistance to Sclerotinia Crown and Stem Rot

Southern States is marketing a new cultivar of alfalfa called 'Phoenix'. Normally the release of a new alfalfa cultivar is of modest importance from a disease management standpoint. However, this cultivar is important because its progenitor line (a line called 50t176, from FFR Cooperative) has exhibited significant levels of resistance to Sclerotinia crown and stem rot (SCSR) in UK tests.

SCSR is a disease that attacks fall-seeded alfalfa. It attacks during the period from mid-October through mid-December or so following a fall seeding; then the disease resumes activity during cool, wet periods in the spring. Sometimes, a crop seeded in late August or September is so susceptible that stand loss the following spring can be 50-95%.

SCSR can be a difficult disease to control. Most alfalfa cultivars are susceptible or highly susceptible to this disease, and few management options exist. Planting earlier, say in early August, gives the plants more time to develop resistance, which gives the stand a better chance of surviving an attack from SCSR. However, early August seedings are more prone to damage from temporary hot, dry spells.

Although a handful of cultivars with partial resistance to SCSR do exist, the level of resistance exhibited by some of these has been inadequate. In other cultivars like Cimarron SR and WL338 SR, partial resistance is present but there is room for improvement for Kentucky conditions. In fairness to alfalfa breeders, breeding progress against this disease has been a challenge, and research suggests that the SCSR pressure we experience in Kentucky is probably the highest in the nation (possibly along with our good neighbors to the south, Tennessee). So it is not surprising that cultivars that show good levels of resistance in other states have not looked as good here.

In the mid-1990's, the UK Departments of Plant Pathology and Plant and Soil Science began field evaluations of alfalfa selections under the severe pressure of SCSR typical for our region. In addition to seeing how selections perform under our conditions, we have used our research sites as a "disease nursery" where breeders could come and select survivors that might carry some resistance to SCSR. Alfalfa line 50t176 was tested under those conditions, and selected data on its performance are shown in table 1.

Phoenix also is reported to have high levels of resistance to other important diseases in Kentucky, such as bacterial wilt, Fusarium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot race 1. Given the severity of SCSR, this cultivar should be given consideration when planning fall seedings of alfalfa, particularly in fields with a high risk of the disease. The Extension publication, *Risk Factors for Sclerotinia Crown and Stem Rot in Fall-Seeded Alfalfa*, (available online at http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/ppfsagf2.htm) will help producers identify the highest-risk fields.

Table 1. Percent row fill following the first cutting after a fall sowing.

Test I	**Percent row fill, 24 May 2002**	
Alfalfa line	**Untreated**	**Fungicide-treated**
50t176	79 c	98 ab
WL338 SR	66 cd	100 a
Cimarron SR	51 def	99 ab
MSR2	45 ef	96 b
P5454 (susceptible check)	13 g	98 ab
Test II	**Percent row fill, 15 May 2003**	
Alfalfa line	**Untreated**	**Fungicide-treated**
50t176	61 c	99 ab
Cimarron SR	41 d	98 ab
P54V54 (susceptible check)	11 f	97 ab

Means followed by the same letter are not significantly different, Waller-Duncan k-ratio test, k=100, P=0.05.*(SOURCE: Paul Vincelli, UK Extension Plant Pathologist)*

KFGC Summer Field Day

The KFGC Summer Field Day will be held June 14, 2007 beginning at 4:00 CDT in Monroe County. We are fortunate to be able to meet at the John Hagain Farm, Gentry Circle Road in Mt. Hermon. Topics on the tours include: MaxQ Tall Fescue, Economics of Rotational Grazing, Summer Grazing Options, Goat Production Techniques, Summer Weed Control, Beef Production, Quality Summer Pastures and Grazing Options for Horses. Directions to the farm, along with additional information, are on our website at www.uky.edu/Ag/Forage.

Upcoming Events

MAY 30-JUN 1	Southern Pasture & Forage Crop Improvement Conference, Tallahassee, FL
JUN 14	KFGC Field Day, Monroe County
JUN 24-27	American Forage & Grassland Council Annual Meeting, State College, PA
JUL 26	UK All Commodity Field Day, UKREC, Princeton
OCT 25	8th Kentucky Grazing Conference, WKU Expo Center, Bowling Green
2008	
JAN 7-8	Heart of America Grazing Conference, Columbia, MO
JAN 26-FEB 1	SRM/AFGC Forage Conference, Louisville

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