MINNESOTA TURF SEED GROWERS NEWSLETTER
September 30, 2009

In this edition of the grass seed newsletter topics to be covered include: Fertilizer applications in ryegrass and bluegrass, rust on ryegrass, ryegrass seed storage and fall weed control options.

FUTURE MEETINGS

A mini-field day is scheduled for 4 pm on October 13, 2009 to be held at the Magnusson Research Farm. Donn Vellekson, with the U of MN will be in the area and will be on hand to review fall fertilizer data in bluegrass and ryegrass, view a ryegrass date of planting trial, look at various broadleaf and grass cover crops in ryegrass, look at a starter fertilizer trial in ryegrass and other topics.

GENERAL CROP CONDITION

Spring seeded ryegrass, for the most part, looks good going into fall. Ryegrass seeded into fallow or PP ground generally is not a far along as spring seeded ryegrass, however these fields also look good. Recent rains have been positive for area bluegrass fields going into fall.

FALL FERTILIZER

When can we apply fall fertilizer in grass seed crops with minimal loss to the environment and maximize the utility to the crop? Urea is the most common source of nitrogen in grass seed crops. Urea left on the soil surface can be lost in warm, wet and waterlogged conditions. Previous research suggests minimal nitrogen loss occurs at soil temps < than 50 F. When does the soil temps reach 50 F in northern Minnesota?

The temperature data in the table is from NDAWN weather recording network. The Roseau location is north of Wannaska and Greenbush is west of the city of Greenbush. The average calendar date of 50 F soil temperature in sod from 2005 to 2008 was October 9 for Roseau and October 7 for Greenbush.

Calendar Date of 50F Soil Temperature on Sod in Roseau and Greenbush from 2005 to 2008.

Year	Roseau	Greenbush
2008	10/14	10/13
2007	10/9	10/8
2006	10/9	10/1
2005	10/5	10/5
Average	**10/9**	**10**/7

University of Minnesota fertility research in grass seed crops indicates better utilization of nitrogen by bluegrass when applied in early rather than late October. (See attached document). The data in the attached document suggests fertilizer applications after Halloween are at risk for loss, early October applications of P and K are beneficial compared to nitrogen alone and ammonium sulfate may have an advantage on soils that test low for sulfur.

Split applications of nitrogen are becoming more common in grass seed crops. In bluegrass, it appears a best management practice is to apply the majority of nitrogen in the fall. Limited research suggests a spring top dress application of 20 to 30 pounds nitrogen may improve bluegrass seed yields. In ryegrass, a best management practice would have all P and K and approximately 1/3 to 1/2 of the years nitrogen requirements applied in October with the remainder of the nitrogen applied in two three applications in the spring.

CROP MANAGEMENT

Ryegrass

Reports of rust in fall and summer seeding have been common in the last few weeks. Rust at this time looks bad. However, previous research has indicated rust will not survive the winter and for rust to infect ryegrass the following summer, rust spores must be blown in from the south. Fungicides applied in the fall are effective against rust. However, fall applied fungicides didn't show any benefit in the next years ryegrass growth, development and yield compared to ryegrass that didn't receive a fall fungicide. The bottom line, rust on ryegrass in the fall looks bad, but no benefits have been observed from an application of a fall fungicide.

Spring seed ryegrass may be growing in fields that have significant amount of straw. This straw can act like a blanket and smother the ryegrass. Field experience has suggested a benefit to ryegrass growth and development from a spike toothed harrow that redistributes these straw and fines.

Take the time to scout ryegrass fields for broadleaf weeds. Winter annuals, cockle and thistles are present a consideration would be to apply a broadleaf herbicide to control these weeds in this fall. Cockle and the winter annuals have a rapid growth habit in the spring and tend to produce seed before many of the other broadleaf weeds are out of the ground. Herbicide application this fall will control weeds this fall and will allow a more timely application broadleaf weeds that emerge in the spring.

Ryegrass seed in storage should be 11% or less. Take the time to check bins for seed moisture and "hot spots". The last thing we need is to go through all the work to get the crop in the bin and loose seed loose quality due to elevated levels of seed moisture.

Bluegrass

Most of the broadleaf herbicides have been applied in bluegrass. If broadleaf herbicides have not been applied, this should be done as soon as conditions allow. We had a light frost in much of the grass seed growing area on Sept. 28. Often times perennial weed control is improved after the first frost of the year as the frost seems to trigger the plant to send more food to the roots and more of the herbicide gets into the root zone.

UNIVERSITY OF MINNESOTA RESEARCH

Ryegrass Date of Planting Trial

Ryegrass was seeded at eight dates of planting from late July to late September. Ryegrass was seeded at 5 and 8 pounds/acre with wheat as a cover crop at 20#/acre.

Bluegrass and Ryegrass Variety Trials

Variety trials have been seeded and to be harvested next summer. In addition, a ryegrass winter hardiness trial has been established to evaluate various ryegrass varieties ability to withstand winters in northern Minnesota.

Ryegrass Starter Fertilizer Trial

Two seeding dates of this trial have been established and will be taken to harvest next summer. These trials will be monitored into the fall. Preliminary indications suggest phosphate may promote seedling growth and development. Will that have an impact on winter survivability? This determination will be made next spring.