

MINNESOTA TURF SEED GROWERS NEWSLETTER
September 15, 2010

Topics discussed in this newsletter include: Rust in ryegrass, fall weed control options, ryegrass seed storage and fall fertilizer ryegrass and bluegrass.

GENERAL CROP CONDITION

Spring seeded ryegrass, for the most part, looks great going into the fall. Recent rains have been positive for area ryegrass and bluegrass fields going into fall.

CROP MANAGEMENT

Rust in Ryegrass

With the recent wheat harvest many fields under seeded to ryegrass have light to moderate levels of rust. No question this rust in ryegrass looks bad. However, previous research indicates leaf and stem rust will not survive the northern Minnesota winters. Thus, once ryegrass has overwintered 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 to the next years ryegrass growth, development and yield compared to ryegrass that didn't receive a fall fungicide treatment. The bottom line, rust on ryegrass in the fall looks bad, but no benefits have been observed from an application of a fall fungicide.

Fall Weed Control

Reports have winter annual broadleaf weeds becoming more of a problem in ryegrass fields. These winter annuals emerge in summer, produce a rosette of leaves in the fall, bolt, flower and produce seed early in the next spring. Shepardspurse, cockle, field pennycress, black seed plantain, catchfly, green flower pepper weed are examples of these winter annual weeds. These winter annual weeds grow rapidly in the spring, and often times are flowering or already have produced seed before a broadleaf treatment can be applied in the spring. These weeds allowed to go to seed will increase the cleanout percentage at the conditioning plant. Fall is a good time to control these winter annual broadleaf weeds.

A tank mix of Banvel and 2, 4-D will go a good job of winter annual and other broadleaf weed control. In addition to these winter annual weeds a fall herbicide treatment will control thistle, dandelion, dock, clovers and other broadleaf weeds. 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. For improved consistency, use a tank mix of ¾ pint Banvel and ¾ pint 2, 4-D.

Barnyardgrass and Foxtails

Barnyardgrass and foxtails were two grassy weed species observed from the combine during wheat harvest. Make note of these fields and plan to apply Puma or Assure II in Assure tolerant ryegrass. More than likely, if these grasses were seen from the combine during wheat harvest, they will be a problem in next year's ryegrass crop.

FALL FERTILIZER

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

The temperature data in the Table 1 was gleaned from the 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 (4 inch depth) from 2005 to 2009 was October 9 for Roseau and October 7 for Greenbush.

Table 1. Calendar Date of 50F Soil Temperature in Sod (4 inch depth) in Roseau and Greenbush from 2005 to 2008.

| <u>Year</u> | <u>Roseau</u> | <u>Greenbush</u> |
|--------------------|----------------------|-------------------------|
| 2009 | 10/7 | 10/6 |
| 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. This research suggests fertilizer applications after Halloween are generally at a higher risk loss due to snow and frozen soil conditions.

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 the spring.

RYEGRASS SEED STORAGE

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 quality due to elevated levels of seed moisture.