MINNESOTA TURF SEED GROWERS NEWSLETTER July 7, 2009

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2009 growing season with comparisons to the last three years. A base temp of 32 degrees F will be used for ryegrass (T-Base =32 F). The GDD information presented in the table below is year to date data through and including July 5 for 2006 to 2009.

| Year | 2009 | 2008 | 2007 | 2006 | 09 vs. 08 |
|----------|-------|-------|-------|-------|-----------|
| March | 30 | 6 | 90 | 53 | +24 |
| April | 247 | 202 | 322 | 529 | +45 |
| May | 515 | 501 | 746 | 730 | +14 |
| June | 860 | 870 | 990 | 943 | -10 |
| July 1-5 | 153 | 168 | 188 | 171 | -15 |
| Total | 1,805 | 1,747 | 2,336 | 2,426 | +58 |

The 2009 season is 58 GDD ahead of 2008, but -531 and -621 GDD behind the 2007 and 2006 seasons, respectively. The average GDD/day in the first five days in July was 33.6.6, 37.6 and 34.2 for 2008, 2007 and 2006, respectively. How does 2009 compare? The accumulated GDD/day in first five days of July in 2009 was 30.6/day.

GENERAL CROP CONDITION

Ryegrass

The spring seeded ryegrass has been shedding pollen for several days. Ryegrass pollen is typically shed in mid-morning and in times of heavy pollen shed, pollen dust clouds look similar to dust off of gravel roads. Fall seeded ryegrass ranges from vegetative to early heading.

Bluegrass

The 'Park' and 'Minnfine' bluegrass fields, for the most part, are in the late seed filling stage. Environmental conditions will dictate when bluegrass will be swathed. When will bluegrass be swathed? Bluegrass responds to temperature and cooler than average will slow the maturation process while, temperatures warmer than average will hasten the ripening process. If the short-term forecast holds, look for swathers to be rolling later in the week.

PEST MANAGEMENT

Ryegrass

Leaf and stem rust can be a serious disease in ryegrass. Leaf and stem rust has been detected in susceptible wheat varieties in Douglas County (Alexandria) in Minnesota and near Carrington, North Dakota. How long will it be until rust spores make it to northern Minnesota? Environmental conditions and southerly winds will determine the prevalence and severity of rust in ryegrass.

In the last three years, leaf and stem rust have been detected in ryegrass after the accumulation of approximately, 1,950 GDD. To date, in 2009, we have accumulated 1,805 GDD. If we average 35 GDD/day we should begin to see leaf and stem rust in 4 days. Field scouting will determine the actual incidence of leaf and stem rust in ryegrass.

Leaf and stem rust that infects ryegrass is carried into our area on southerly winds. Rust infection and spread is most likely with daily high temperatures in the mid-70's and lows in the 60's. Rust also requires free water on the leaf surface. We usually have dew on the grass until mid-morning in the summer and many days have temperatures that fit into the ideal range for rust development.

Several fungicides are effective for rust control in ryegrass. Previous experience has indicated when field scouting has detected rust in ryegrass an application of Quilt provides effective control. Quilt rates from 8 to 10 oz/A have been successfully used in ryegrass. The higher rate will provide a few more days protection, and the 10 oz rate will protect the head and flag leaf for three to four weeks.

CROP MANAGEMENT

Grasshoppers are an insect pest that can be a problem in grass seed crop. Field scouting has indicated light to moderate infestations of grasshoppers. Action thresholds for grasshopper nymphs are 30-45/square yard (6 to 8 adults or 25% defoliation) if grass is vegetative and insect feeding is on the leaf tissue. Threshold levels will be lower if insect feeding is on the seed head. Field scouting will determine the infestation level and the type of feeding.

Armyworms are another insect pest that can damage grass seed crops. Armyworms moths tend to lay eggs in lodged areas of the fields and will be the first place to check for armyworms.

Ryegrass

Spring seeded ryegrass is headed. This is a good time to apply Apogee as a growth regulator in ryegrass. Apogee use rate is rate 6 to 8oz/A and should be applied with surfactant and 28% nitrogen.

UNIVERSITY OF MINNESOTA RESEARCH

Herbicide tolerance study: In response to the concern that many of you have expressed over the herbicide resistant wild oat problem, Don Wyse from the University of Minnesota is initiating studies to better understand the issue. The first study is focused on fields where producers have observed little or no control of wild oat populations following herbicide treatments for two years or more. If you have a field where wild oat is not being controlled with current herbicide treatments please call Dave Grafstrom (218 463 1071) or email <u>Dave.Grafstrom@northlandcollege.edu</u> to set up a time for him to come out to your farm and collect wild oat seed samples from the field. The wild oat populations will then be evaluated for resistance to selected herbicides in St. Paul. Each producer will receive a summary of the results from the evaluation of their wild oat populations and the information will be kept confidential.

The next edition of this newsletter will be released on July 14, 2009.