NORTHERN MINNESOTA GRASS SEED GROWERS
NEWSLETTER
June 25, 2012

SUMMER GRASS SEED FIELD TOUR

The annual grass seed field tour has been scheduled for 5:00 pm on Wednesday, June 27th at the Magnusson Research Farm. Directions to the Magnusson Research Farm:
from the intersection of Hwy 11 and 89 travel approximately 2 miles north on Hwy 310, turn left (west) off Hwy 310 onto Roseau County 16 and for approximately 3 miles. The farm is located on the north side of Roseau County 16. Bluegrass, ryegrass and fescue variety trials will be included on the tour. In addition, weed control research in ryegrass, fertilizer management (dry, coated and liquid) fertility rate and timing in ryegrass, ryegrass growth regulators and fungicides and other research will be included on this tour.

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2012 growing season with comparisons to the last five years. A base temperature of 32 degrees F will be used for ryegrass (T-Base = 32 F).

For the week ending June 24th, accumulated GDD was 212 (30.3/day), and for the year accumulated GDD is 2,158 (Table 1). The 10 day forecast predicts an average high temperature of 82 degrees and an average low of 55 degrees. If this forecast holds true the next 10 days will be the warmest of the year and we will accumulate an average of 36 GDD/day!

In the first 20 days of June, we have had 8 days (40%) with winds from a southerly direction. Winds from a southerly direction bring rust, armyworms and other pests into the area.

Table 1. Growing degree days (GDD) for March and April from 2007 - 2012 near Roseau MN.

Year	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**	**2012 vs. 11**
March	304	7	137	30	6	90	+297
April	370	278	476	247	202	322	+92
May	726	639	707	515	501	746	+87
June		898	911	860	870	990	
June 1-24	758						
Total	2,158	1,822	2,231	1,652	1,579	2,148	

GENERAL CROP CONDITION

Ryegrass

Ryegrass fields are in the pollen shed and seed filling stage. Over the weekend heavy pollen shed was observed in area ryegrass fields. Hopefully, this will result in good pollination and seed set.

Bluegrass

Swathing has begun in ‘Park’ bluegrass and with good drying weather the combines will be rolling within a week.

PEST MANAGEMENT

Ryegrass

Late last week we had the first reports of isolated rust infestations in ryegrass. Most ryegrass fields are heading and are shedding pollen. The GDD model indicates we are now into the time frame when leaf and stem rust can be observed in ryegrass.

Three strategies for rust control in ryegrass at this time are:

1) Scout ryegrass fields for rust every two- to- three days. In favorable environmental conditions rust can increase rapidly and this fungal pathogen can "explode" in just a few days
2) If a fungicide has been applied with a previous trip across the field, apply a fungicide when the first fungicide is about to "run out". The number of days the fungicide will provide disease protection will depend upon the fungicide used and product rate.
3) Spray a fungicide after the accumulation of 1900 GDD. Historically, we have first observed leaf and stem rust at approximately 1,900 GDD. A full rate of a fungicide will provide rust protection for 21 to 28 days. A fungicide applied at 1,900 GDD should provide disease protection until ryegrass swathing (approximately 2800 GDD).

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.

CROP MANAGEMENT

Army worms and grasshoppers have been found in area ryegrass fields. At this time, insect infestations are NOT to threshold levels. As would be expected, the most likely areas to find armyworms are in lodged areas and grasshoppers in field edges of ryegrass fields.

Threshold levels

Grasshoppers can be a problem in grass seed crop. 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.

The economic threshold for armyworms has not been established for ryegrass. However, in wheat, the action level is 4 or more larvae/square foot if the wheat is headed. If the wheat is headed, the action level is 2 larvae/square foot. With the majority of the ryegrass headed it would seem that the lower action level should be considered. Armyworms moths tend to lay eggs in lodged areas of the fields and will be the first place to check for armyworms.

The next Grass Seed Newsletter will be released on July 2, 2012.