

**NORTHERN MINNESOTA GRASS SEED GROWERS
NEWSLETTER
May 21, 2012**

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 May 20th, accumulated GDD was 184 (26.3/day), and for the year the accumulated GDD is 1,163 (Table 1). The 10 day forecast predicts an average high temperature of 70 degrees and an average low of 50 degrees. If this forecast holds, we will accumulate an average of 28 GDD/day.

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		639	707	515	501	746	
May 1-20	489						
Total	1,163	924	1,320	792	709	1,158	

GENERAL CROP CONDITION

Thus far in 2012, the fungal (leaf) diseases have been at a low level compared to the last couple of years. This, most likely, is due to the dry conditions we have experienced this spring. Dew points have been low, in the 40's, which has been a deterrent to the development of leaf disease. In general, leaf diseases do well when the dew points are in the 50's, or higher.

The insect of the year, so far has been leafhoppers. It seems this year the leafhopper is an equal opportunity pest and can be found in most crops. What are the consequences of elevated numbers of leafhoppers? Data is very limited in leafhopper damage to grass crops in northern Minnesota. The most likely economic damage from leafhoppers in grass crops would be the transmission of a viral disease. In prior years, viral diseases have NOT been reported in grass seed crops. A limited data search from other ryegrass growing regions did not report viral diseases as a problem in ryegrass seed production. The 2012 crop will be monitored potential viral disease expression.

PEST MANAGEMENT

Ryegrass

In previous years in northern Minnesota environments, crown rust has been observed after approximately 1,500 GDD and leaf and stem rust at 1,900 GDD. Thus far in the 2012 season we have accumulated 1,163 GDD. Last week we averaged 26.3 GDD/day. IF the GDD model holds, we may see crown rust show up in approximately two weeks and leaf and stem rust in four week weeks. If we experience warmer than normal weather this will shorten this time line and if we are cooler than normal this will lengthen this timeline.

The USDA-ARS tracks rust development and movement north from the Gulf of Mexico to the northern plain states. As of May 8th, Leaf rust was widespread from the southern great plains the east coast. Rust has NOT been observed in Minnesota as of mid-May. Scouting reports will be monitored to track the progress of rust as it moves northward. For additional information see the link below for The Cereal Rust Bulletin. The link to this site:

<http://www.ars.usda.gov/mwa/cdl>

CROP MANAGEMENT

Ryegrass

Most ryegrass fields are jointing (spring seeded 2 - 3 nodes and fall seeded late tillering to two nodes). Many area ryegrass fields are or will be soon taller than the wheat stubble. The next major growth stage in ryegrass is heading. With ryegrass heading right around the corner, it's time to schedule an application of Apogee growth regulator. To keep ryegrass from lodging, it may take an Apogee rate of 6 to 8 oz, especially if the available nitrogen is over 120 pounds/A.

General guidelines for Apogee rates in 2012:

- Spring planted ryegrass with moderate to high fertility, good stands and deep green color should receive an Apogee rate of 6 to 8 oz/A
- Fall planted ryegrass usually has less growth compared to spring seeded ryegrass and an Apogee rate of 6 oz/A is a good benchmark
- Always use a nonionic surfactant and nitrogen source (AMS, 28%) with Apogee

Consult with your fieldman or agronomist for local experience.

The next Grass Seed Newsletter will be released on May 28, 2012.