

MINNESOTA TURF SEED GROWERS NEWSLETTER
May 25, 2010

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2010 growing season with comparisons to the last four years. A base temp of 32 degrees F will be used for ryegrass (T-Base =32 F). The GDD information presented in Table 1 is for March to May in 2006 - 2009 and March, April and May 1 - 23 in 2010.

Table 1. Growing degree days (GDD) for March – May in 2006 - 2009 and March, April & May 1-23 in 2010 at Roseau MN.

Year	2010	2009	2008	2007	2006	2010 vs. 09
March	137	30	6	90	53	+107
April	476	247	202	322	529	+229
May		515	501	746	730	
May 1-23	470					
Total	1,083	792	709	1,158	1,312	

Last week we accumulated an average of 32.5 GDD/day. The short term forecast is for continued warm weather and evening low temperatures in the high 50's and low 60's. The recent rains coupled with warm temperatures will accelerate plant growth and development.

Thus far, through mid-May, we have accumulated 1,083 GDD. This is more than the last two years for the entire month of May (in 2009 through May we had 792 GDD and in 2008 through May we had 709 GDD). The 2010 season is a good three weeks ahead of the last two years.

GENERAL CROP CONDITION

Ryegrass

Ryegrass fields are in jointing to boot stage. Spring seeded ryegrass and ryegrass seeded in August will have ryegrass seed heads visible later this week.

Bluegrass

Bluegrass fields are in the heading stage and will soon begin to shed pollen. Bluegrass usually sheds pollen early in the morning and can give the appearance of a fog rolling over the field.

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 2010 season we have accumulated 1,083 GDD. Last week we averaged over 32 GDD/day. IF the GDD model holds, we may see crown rust show up within two weeks and leaf and stem rust in three weeks.

The USDA-ARS tracks rust development and movement from the Gulf of Mexico to the northern plain states. As of May 11, wheat leaf rust was detected as far north as northern Kansas. The Cereal Rust Bulletin is published every two weeks. The link to this site:

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

Bluegrass

Mildew has been observed in bluegrass fields. Thus far, infection levels are low. However, mildew can flare in a few days with moisture or heavy dews. Recent conditions have been favorable for mildew and field scouting will determine the incidence and level of mildew infection.

CROP MANAGEMENT

Ryegrass

Growth regulator applications in ryegrass may begin later this week. Apogee at 6 oz/A has given consistent performance. Always use a surfactant and 28% nitrogen with Apogee. Apogee has a wide window of application, however with the recent rains and projected warm temperatures an application of Apogee will reduce the rank growth of ryegrass.

Rust is a foliar disease that can cause significant yield losses in ryegrass. The data in Table 2 was from the 2006 season.

Table 2. Fungicides applied to Ragnar II perennial ryegrass in Lake of the Woods County (Pieper Farms) in 2006.

Fungicide	Rate (oz/A)	Application Date	Ryegrass Yield (#/Acre)	Rust Rating at harvest*
Quilt + Quilt	12 + 12	6/13 + 7/5	755	2
Quilt	12	6/20	740	2
Tilt	4	6/13	681	5
Quilt	12	6/13	678	3.7
Headline	8	6/13	589	5
Untreated	None	None	107	8.7
LSD (5%)			302	0.6

* Rust rating scale 1 to 9; 1 = no rust and 9 = severe infestation

This trial was conducted in 2006 at the onset of leaf and stem rust. The first fungicide application was applied to ryegrass at 5% headed on June 13th. A single late Quilt application was applied on June 20th to ryegrass that was 80% headed. Observations from this trial:

- Disease pressure at this location was heavy through harvest
- Fungicides were applied after the onset of rust in ryegrass
- All fungicides and timings increased ryegrass seed yield compared to the untreated
- Quilt treatments had the lowest rust rating at harvest

Grass Seed Research Results are now available on the web. Research reports from 1967 to the present are available at the web address below.

http://www.mnturfseed.org/html/progress_reports.html

SUMMER GRASS SEED FIELD TOUR

Mark your calendar, the annual grass seed field tour has been scheduled for Wednesday, June 23. Tour will begin at 5:00 pm. More details will follow in future newsletters.

The next edition of this newsletter will be released on June 1, 2010.