

**NORTHERN MINNESOTA GRASS SEED GROWERS
NEWSLETTER
April 16, 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 April 15th, we accumulated 59 GDD (8.4/day). In the last couple of weeks, the daily high temperatures have moderated from the warm temperatures we experienced in March.

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		278	476	247	202	322	
April 1-15	173						
Total	477	285	613	277	208	412	

The 10 days forecast predicts an average high temperature of 58 and an average low of 38. If the forecast holds, we should accumulate an average of 16 GDD/day.

Soil temperatures remain cool. As of Monday morning recorded soil temperatures in tilled ground was 47 and in turf conditions was 39. Soil temperatures have moderated in the last two weeks with the cooler temperatures. With the return to more seasonal temperatures, expect soil temperatures to increase later in the week with the forecast high temperatures in the mid-50's and lows in the mid-30's.

PEST MANAGEMENT

Bluegrass

In the last four years, mildew infestations have corresponded to the accumulation of approximately 650 GDD. Thus far in 2012, we have accumulated 477 GDD. When will we begin to see mildew in bluegrass? Field scouting will determine the actual incidence of pest outbreaks. However, if the GDD model acts like previous years, we should begin to see mildew in bluegrass after the accumulation of an additional 173 GDD, or approximately two weeks with average temperatures.

Ryegrass

Winter annuals are beginning to bolt and will soon flower and set seed. If broadleaf herbicides were not applied last fall, now would be the time to scout ryegrass fields to determine the infestation level of winter annuals, perennial broadleaf weeds (dock, dandelion, clovers) and cool season broadleaf weeds (wild mustard, wild buckwheat, common lambsquarters, smartweeds). Weeds grow fast, especially when temperatures raise into the high 60's to low 70's. Regular scouting is essential to determine the best weed control program for your situation.

CROP MANAGEMENT

Ryegrass

Once broadleaf weeds are sprayed one of the next management step in perennial ryegrass seed production is grass control. Assure II is used for grass control in the Assure II tolerant ryegrass varieties and Puma is used for grass control in non-Assure II ryegrass varieties. When using Assure II additive choice can make a difference in weed control and crop injury. The data in Table 2 was gleaned from U of MN research conducted at the Magnusson Research Farm in 2008.

Table 2. The influence of spray additive with Assure II on perennial ryegrass height and seed yield.

Herbicide*	Additive	Plant Height inches	Ryegrass Yield in #/A
Assure II 10oz/A	Surfactant 0.25%	25	1100
Assure II 10oz/A	Crop Oil 1.0%	23	740

*Banvel + 2, 4-D (3/4 +3/4 pint/A) was applied as a separate application.

The data in Table 2 suggests that Assure II applied with a crop oil additive has the potential to cause injury to ryegrass. Assure II applied with a crop oil additive resulted ryegrass seed yield of 360 pounds less than Assure II applied with a surfactant.

Ryegrass Fertility

Last week was a busy week for application of fertilizer in ryegrass and will continue this week. Rainfall amounts on Friday and over the weekend ranged from a couple tenths to over a half of inch. Some areas had snow accumulation in addition to rainfall. This amount of moisture generally will be enough to move this nitrogen into the root zone.

University Research

University of MN Grass Seed Research Reports from past years can be viewed at the Minnesota Turf Council web site. Web address: www.mnturfseed.org

The next Grass Seed Newsletter will be released on April 23, 2012.