

**MINNESOTA TURF SEED COUNCIL
NEWSLETTER
June 4, 2017**

PERENNIAL RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2017 growing season with comparisons to the previous six years. A base temperature of 32 degrees F will be used for ryegrass (T-Base = 32 F)

Reported GDD are based on the total accumulation from the beginning of the calendar year to the current date. Thus far in 2017, we have accumulated 1,198 GDD, as of June 4th (Table 1). Last week, the accumulated GDD was 208 (29.7/day) which is above the long term average of 177 (25.3/day) for the last three days of May and the first four days in June. Forecast for the week ending June 11th suggests above normal temperatures as projected GDD accumulation of 256 (36.6/day) compared to the average of 186 (26.6/day).

Table 1. Growing degree days (GDD), March - June 2011 to March - June 2017 near Roseau MN.

Year	2017	2016	2015	2014	2013	2012	2011	2017 vs. 16
March	90	38	119	0	0	304	7	+52
April	285	263	367	159	80	370	278	+22
May	679	765	659	654	640	726	639	-86
June		945	941	964	975	979	898	
June 1-4	144							
Total	1,198	2,011	2,086	1,777	1,695	2,379	1,822	
June 5-11*	256							

* Forecasted GDD at Roseau for the next 7 days.

GENERAL CROP CONDITION

With the warm temperatures and the above average temperatures predicted for this week, look for ryegrass to begin heading. With the onset of heading, now is the time to scout fields and schedule an application of a plant growth regulator. Ryegrass fields are more variable in 2017 than in 2016. This will make the decision on when to plant growth regulators more of a challenge. Regular field scouting will help to schedule management decisions based on when the majority of the ryegrass plants are in the proper stage of growth for growth regulator timing.

SUMMER GRASS SEED FIELD TOUR -JUNE 28

Mark your calendar for the annual grass seed summer tour. The tour this summer is scheduled for 5:00 pm on Wednesday, June 28th at the U of MN 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 Hwy 16. More information on specific tour stops will follow in future newsletters.

PEST MANAGEMENT

What are the consequences of a tank mix application of Apogee and grass herbicides? Previous research has indicated that separate application of a grass herbicide and Apogee have provided more consistent results than if tank mixed. If the grass herbicide has not been applied yet, it's important this application be made as soon as possible! However, the application window for Apogee may be a bit early, especially if a fungicide is to be tank mixed for extended disease control in ryegrass. However, if time, labor and environmental constraints are such that a tank mix of a grass herbicide and Apogee is necessary, this tank mix can be applied in ryegrass. U of MN Research suggests potential yield reduction compared to separate applications.

CROP MANAGEMENT

The amount of biomass produced by a crop of ryegrass will vary from year to year. For example, ryegrass biomass production in 2012 & 2015 was less (thin line) than 2011, 2013, 2014 or 2016. In years of lush ryegrass growth (more biomass) it will take a higher rate of Apogee growth regulator than years of 'thin line' ryegrass growth. As a result, a lower rate of Apogee was required to regulate ryegrass growth, in years of thin line growth, compared to years when ryegrass exhibits lush growth (increased biomass production). Thus far, it appears ryegrass biomass production in 2017 will be more than in 2012 and 2015, but may be less than in 2011, 2013, 2014 and 2016.

General guidelines for Apogee in perennial ryegrass:

- The onset of heading (10%) is a good benchmark for Apogee application in ryegrass seed production fields
- Spring planted ryegrass with moderate to high fertility, good stands and deep green color should receive an Apogee rate of 6 to 8 oz./acre with the 8 oz. rate a good benchmark
- Apogee rate of 6 to 8 oz. /acre, if plant available nitrogen is over 120 pounds/acre
- Fall planted ryegrass generally exhibits less growth compared to spring seeded ryegrass and usually will require 2 to 3 oz./acre less Apogee than spring seeded ryegrass
- Always use a nonionic surfactant and nitrogen source with Apogee. No differences in Apogee performance have been observed with 28% or AMS
- The timing of grass herbicides and Apogee may not be ideal as the grass herbicides should be applied prior to ryegrass heading. Tank mixes of grass herbicides and Apogee have been successfully used in ryegrass however, separate applications have provides more consistent results
- U of MN research has not detected reduced performance when mixing fungicides with Apogee plant growth regulator.

Next week's newsletter will be released on June 13th, 2017.