MINNESOTA TURF SEED COUNCIL
NEWSLETTER
June 11, 2024

PERENNIAL RYEGRASS GROWING DEGREE DAYS (GDD)

Perennial ryegrass GDD's will be tracked in the 2024 growing season with comparisons to the previous seven years. The accumulation of GDD's will begin after the snow has melted from the perennial ryegrass fields and continue through swathing. A base temperature of 32 degrees F is used for perennial ryegrass (T-Base = 32 F).

- Year to date GDD = 1,198 (Table 1)
- GDD last week (June 3 - 9) = 190; Long term average = 177
- GDD projected in next 10 days = 339 or 33.9/day (Table 1)
- Average GDD for the second week of June = 186 or 26.6/day
- The ten-day forecast suggests warmer than average temperatures for the third week of June. Projected GDD is 33.9/day compared to the long-term average of 28.1/day.

Table 1. Growing Degree Days (GDD), March - June 2017 to March - June 2024 near Roseau MN.

Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2024 vs. 2023**
March	0	0	0	131	30	0	0	90	0
April	296	93	95	236	183	211	184	458	+203
May	653	959	649	640	600	548	815	679	-306
June 1-9	249								
June		1,064	959	1,007	995	919	1,007	945	
Total		2,116	1,703	2,014	1,808	1,678	2,006	2,172	
*June 3-12	339								

* Forecasted GDD at Roseau for the next 10 days.

GENERAL CROP CONDITION

Spring seeded perennial ryegrass with healthy crown this spring are in the heading stage and are a deep green color. If a growth regulator had yet to be applied this week would be a good time to make an application of a growth regulator. The next critical stage in development is pollen shed which will begin after plants are fully headed on the main stem. Perennial ryegrass typically will shed pollen in mid-morning and these pollen clouds almost look like dust from gavel roads. Spring seeded fields with significant winter injury look to be a couple of weeks behind the spring seeded ryegrass.

ISOLATION STRIPS IN GRASS SEED CROPS

Many grass seed fields require an isolation strip in the certification process. Kris Folland is the local Field Supervisor with the Minnesota Crop Improvement Association (MCIA). If you have questions or concerns, please contact your grass seed agronomist, seed conditioner or Kris with MCIA (218-791-2156).

CROP MANAGEMENT

If ryegrass is heading, is it too late to apply herbicides for weed control? Research conducted at the U of MN Magnusson Research Farm indicates that headed perennial ryegrass is tolerant to many broadleaf herbicides. The data set in Table 2 is from research conducted in 2012. Herbicides were applied to 'Arctic Green' that was 60% headed with minimal weed pressure.

Table 2. Late season broadleaf weed control applied to 'Arctic Green' perennial ryegrass at the U of MN Magnusson Research Farm in 2012

Treatment	Rate/acre	Seed Yield (#/acre)	Seed Yield (% of untreated)
MCPE	1-pint	1433	107.8
2,4-D amine	1-pint	1439	108.3
Aim	1 oz + 0.25% NIS	1350	101.6
2,4-D+Clarity	1+1pint	1320	99.3
Basagran	1.5 pint +1%MSO	1302	98.0
2,4-D ester	0.75-pint	1299	97.7
Stinger	6 oz	1296	97.5
Clarity	1-pint	1252	94.2
Untreated		**1329**	**100**
LSD (0.05)		137	10.3

PEST MANAGEMENT

Armyworms

Recent low level jet streams and south winds have carried a flush of army worm moths and other pests (aster leafhoppers) to northern Minnesota. In the last six days the armyworm moth trapping project collected a total of 203 (average of 33.8 moths/trap) last week. The range was a low of 8 to a high of 53 moths/trap. The highest moth capture is in areas with thunderstorm activity that was accompanied by strong southerly winds.

Leaf and stem rust

Leaf and stem rust can cause economic losses in perennial ryegrass seed productions fields. The rust pathogen that infects perennial ryegrass is blown into northern Minnesota from southern states. Field observations have NOT detected leaf and stem rust yet this year. However, reports of stripe or yellow rust in wheat have been detected as far north as Brookings SD. Field scouting will continue to look for the presence of rust in perennial ryegrass fields.

SUMMER GRASS SEED FIELD TOUR – June 27

The annual grass seed summer tour is scheduled for the late afternoon of June 27th and will be held at the U of MN Magnusson Research Farm. Additional details will follow in future newsletters.

HYBRID RYE FIELD TOUR – June 27

A hybrid rye field tour is scheduled for the morning of June 27th at the U of MN Magnusson Research Farm. More details will follow in future newsletters.

Next week's newsletter will be released on June 18th .