

**NORTHERN MINNESOTA GRASS SEED GROWERS
NEWSLETTER
April 30, 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 29th, we accumulated 118 GDD (16.8/day). Compared to March of this year, April seems to be on the cool side. However, only one year, (2010) in the last five, have more GDD's been accumulated than April of 2012 (Table 1).

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 1-29	346						
Total	650	285	613	277	208	412	

The 10 days forecast predicts an average high temperature of 66 and an average low of 45. If the forecast holds, we should accumulate an average of 24 GDD/day. With the daily lows in the mid-40's ryegrass and other plants, including weeds will begin a rapid growth phase.

PEST MANAGEMENT

Ryegrass

Wild oats in tilled ground have emerged as have common lambsquarters, wild buckwheat and wild mustard. Perennial and winter annuals are growing, although slow due to the recent cool temperatures. 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.

University Research

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

CROP MANAGEMENT

Ryegrass

Early seeded spring wheat has emerged and it won't be too long until herbicides will be applied in wheat. What are herbicide choices if ryegrass has been underseeded with wheat? The results in Table 2 are from a herbicide screen conducted at the Magnusson Research Farm in 2011.

Table 2. Seeding year ryegrass tolerance and percent stand as influenced by herbicides applied in spring wheat, Magnusson Research Farm in 2011.

Herbicide	Rate	Additive*	RG Tolerance	RG Stand %
Achieve L	0.5 pt	NIS + 28%	Good	95
Affinity+2,4-D	0.6 oz+0.5pt LV6	NIS	Fair	75
Assert	1.2 pt	NIS	Good	95
Avenge	3 pt	NIS	Good	90
Axial	1 pt	None	Poor	15
Callisto	5 oz	COC + 28%	Good	95
Everest 70WG	0.6 oz	NIS	Fair	65
Everest 2.0	0.9 oz	NIS	Fair	70
Express+2,4-D	0.3oz + 0.5pt LV6	NIS	Fair	70
Nortron	2 pt	None	Good	90
Tecoma	10 oz	None	Good	90
Wolverine	1.7 pt	NIS + 28%	Good	90
Untreated	0	None	Good	100

*NIS - Nonionic surfactant (0.25% v/v), COC - Crop oil concentrate (1% v/v), 28% Nitrogen (2.5% v/v).

All herbicides were applied on June 24, 2011. Spring wheat variety 'Samson' was 6-8 inch tall and the perennial ryegrass variety 'Arctic Green' was 1.5 - 2 inches tall (2-3 leaf). Perennial ryegrass stand reductions were taken on October 21, 2011.

Tecoma is the same active ingredient and formulation as Puma.

Buctril at 1 pint/acre was applied to the entire area for broadleaf weed control.

The data in Table 2 indicates perennial ryegrass has good tolerance to several herbicides. However, perennial ryegrass has POOR tolerance to Axial and FAIR tolerance to affinity+2,4-D, Everest and Express+2,4-D.

The 2012 season may be a good year for wild oats as wheat fields have been planted early and wild oat has been observed emerging with the wheat. Avenge was included in the above trial to evaluate the ryegrass response. Avenge is a potential choice for wild oat control if the field has a history of resistant wild oats.

The next Grass Seed Newsletter will be released on May 7, 2012.