### MINNESOTA TURF SEED GROWERS NEWSLETTER May 18, 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 - 16 in 2010.

Table 1. Growing degree days (GDD) for March -May in 2006 - 2009 and March, April & May 1-16 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 1-16	242					
Total	855	792	709	1,158	1,312	

Last week we accumulated an average of 20.6 GDD/day. If the short term forecast holds, we may see an average GDD accumulation of over 30 GDD/day. With the recent rains and the projected heat units, plant growth and development will occur at a rapid pace this week.

Thus far, through mid-May we have accumulated 855 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 compared to the last two years.

# **GENERAL CROP CONDITION**

#### Ryegrass

Ryegrass fields are in the late tillering to early jointing stage of growth. The next major stage of growth in ryegrass is the jointing. The jointing stage is when ryegrass begins to push nodes above ground. The main stem of ryegrass usually has three to four nodes above ground prior to heading.

#### **Bluegrass**

Bluegrass seed heads are beginning to emerge in area fields. It's normal for the bluegrass variety 'Park'to exhibit an uneven pattern during the boot to seed head emergence. After a couple of weeks of this uneven seed head emergence the stand will even out and the plants will be of similar height.

# PEST MANAGEMENT

#### Ryegrass

With the mild winter, a concern has been expressed, will rust overwinter? To date, research has suggested leaf and stem rust will not overwinter in northern Minnesota conditions. However, crown rust can over winter in this area. Leaf and stem rust is the most aggressive rust in ryegrass and has the potential to cause the most serious ryegrass yield loss. In previous years, crown rust has been observed at approximately 1500 GDD and leaf and stem rust at 1900 GDD. More on this next week

# Bluegrass

Mildew has been observed in bluegrass fields. Thus far, infection levels are low. If fields have not been sprayed, regular field scouting will be needed as mildew can flare in just a few days. Now that

mildew is visible in bluegrass fields the product of choice for mildew control is Tilt. Product rates of 2 to 4 oz/A have been used successfully in previous years. Keep in mind the higher use rate will offer extended period of disease control.

### **CROP MANAGEMENT**

#### <u>Ryegrass</u>

A frequent question asked is how late can spray treatments be applied in ryegrass? The data in Table 2 is from the 2008 season.

Table 2.	Effects of lat	e spray a	pplications to	o perennial	ryegrass	(Arctic	Green)	at the	Magnuss	on
Research	Farm in 2008	8.								

Herbicide	Rate	Additive	Ryegrass Yield	<b>Ryegrass Yield</b>
			(% of untreated)	(#/A)
Untreated	None	None	100	1192
2,4-DE + Banvel +	1pt + 1pt	2.5% N	125	1490
Apogee + Quilt	10 oz + 10 oz			
2,4-DE + Banvel +	1pt + 1pt	None	106	1267
Quilt	10 oz			
2,4-D E + Banvel	1pt + 1pt	None	103	1228
2,4-DE + Banvel +	1pt + 1pt	0.25% NIS	82	978
Assure + Quilt	10 oz + 10 oz			
LSD (5%)			19	244

This trial was conducted in an area with low weed pressure and was applied to ryegrass that was 30% headed. This one shot timing would **NOT** be recommended as "normal" weed pressure would be detrimental to ryegrass seed yield and weed seed production. However, a couple of items gleaned from this trial.

- The application of a growth regulator gave 298 more pounds of ryegrass seed yield
- 2,4 DE + Banvel applied to headed ryegrass gave similar seed yield as the untreated
- Disease pressure was low in this trial thus, limited benefit from fungicides
- Late applications of a tank mix of Assure II with 2,4-D + Banvel tended to caused ryegrass injury

#### **Bluegrass**

Silvertop has been observed in area bluegrass fields. One of the causes of silvertop (bluegrass head prematurely turns white with no seed production) is the Capsus bug. One of the primary control measures against the Capsus bug is a complete burn of the bluegrass straw. If the burn is erratic or incomplete, the Capsus bug can overwinter, emerge and will burrow into the bluegrass stem and cut off the translocation to the developing seed head. The result is a bluegrass seed head with a white color with no seed production. The emergence of this insect corresponds to the time when lilac's are in bloom. Lilacs will bloom this week. Malathion has given good control of this pest in previous research.

# 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 May 25, 2010.