

Renwood Farms Wheat Update

The very cold winter is making some feel like the wheat crop has to be a long way behind the "normal" growth stage but, in fact, the 2014 wheat crop is pretty close to average in terms of Growing Degree Units (GDU). The warm spell around Christmas was the great equalizer. Once temperatures get below 32F, it really doesn't matter to the wheat if it is 30F or 13F. There is simply limited growth.

For wheat planted around Oct. 15, 2013 in Central VA, we have accumulated 1202 GDU compared to the ten-year average of 1197 which is pretty close to average (see table at right).

Wheat planted on Nov. 1, 2013 is about <u>300 GDU</u> <u>behind</u> the Oct. 15th wheat. There was a lot of wheat planted after Nov. 1 which means there are almost two different crops to be managed.

When the wheat reaches GS5/ GS30 (between 1200 and 1400 GDU), the heads will emerge from underground and joints will start to form. The head is always above the joint. As the wheat starts to joint, plant tissue samples can be taken to adjust the amount of nitrogen (N) to be applied in this last N application.

Most wheat fields will receive between 120 and 140 lbs. /acre of N total.

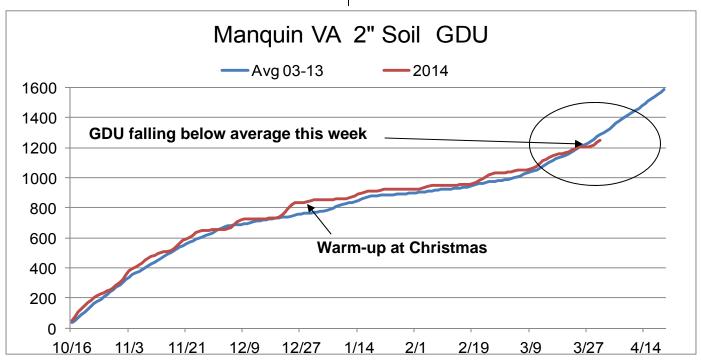
Most apply 35 lbs. /acre of N in the fall followed by 40 to 60 lbs. /acre when the wheat reaches 800 to 1000 GDU, usually from late January to Mid-Feb., depending on temperatures.

The last application of N at GS5/ GS30 ranges between 40 to 70 lbs. /acre depending on tissue sample results.

If sulfur has been applied in the first two applications, it may not be needed in this last application as it can cause ex-

Crop Year	YTD GDU as of 02/21	YTD GDU as of 03/24
2004	837	1071
2005	1046	1147
2006	904	1116
2007	967	1225
2008	1061	1298
2009	974	1233
2010	944	1208
2011	936	1276
2012	1263	1772
2013	1055	1209
Avg. 2003 -2013	959	1197
2014	979	1202

cessive leaf burn under certain conditions.



Recommendations made here are based on information available however, ag.systems does not warrant the success of any recommendation. Absolutely no warranties are made regarding the success of these recommendations for any particular purpose. User expressly assumes the risk of all factors, including but not limited to acts of God, drought, wind and rain damage, crop disease, and the like, which may effect these recommendations. Copyright©. All rights reserved



Wheat Update (continued)

Plant tissue sample results will also help determine if additional plant nutrients are required.

Manganese (Mn) and boron (B) are two elements that have tested low in these samples. The **very cloudy weather** we have had recently is contributing to low Mn levels. Wheat responds to both elements when applied at this growth stage. The photo at right shows a manganese deficiency in wheat taken last week.

Apply .125 to .25 lbs. /acre (1-2 qts) of Mn from 5% EDTA Mn or 1.0 to 1.25 lbs. /acre of Mn from manganese sulfate to improve manganese nutrition in wheat. The chelates tend to mix better than the sulfate salts. Apply B at .25 to .5 lbs. / acre from either Solubor or liquid boric acid. Zinc and copper have been recommended at this stage on occasion with good results.

Crop Protection

At the GS30 nitrogen topdress application, a fungicide is recommended to stop early tan spot, powdery mildew and/or septoria. Headline® or Quadris® at 4 to 6 ozs. /acre are recommended. These strobi materials help with nitrogen uptake in addition to stopping early disease. The obvious exception is if heavy powdery mildew present in which case 4 ozs. of Tilt® is required. Mildew has already been found in a few fields.

Karate® is recommended at this stage to stop cereal leaf beetle, Hessian fly, aphids and armyworms.



It is important to note that insecticides applied prior to GS30 have not worked as expected in the past.

For many fields, this is the final application. Rust is not strong in the South this year but we will wait for further developments. For wheat produced for seed, an at-flowering application of Prosaro or Caramba is recommended to reduce scab.

For late-planted fields, if topdressed at the same time as the early-planted wheat, will likely <u>not</u> benefit from the fungicide/insecticide application. Some fields have already had the entire nitrogen applied.

In both cases, growers can plan on an insecticide/fungicide application at the flag-leaf to boot stage to apply. Flag-leaf plant tissue samples taken at emergence can be tested to see if additional nitrogen is required. If so, apply a nonburning low-biuret urea nitrogen between 2 to 4 gals. /acre.