Early Wheat Management Tips

By Mike Stanyard, Regional Agronomist, Cornell Cooperative Extension

It is time to start thinking about your wheat! I know it is hard to believe staring out my window in mid-February at the huge piles of snow lining my driveway. The good thing is that the wheat is under a protective blanket. This was not the case back in January when we saw record-breaking negative temperatures. See Bill Verbeten’s article about assessing wheat stands.

Nitrogen. In past articles I have discussed counting the number of tillers to determine if you should put all of your nitrogen up front, split it into two applications, or put it all on at a second application at Stage 6 (jointing). Once the snow finally melts, we need to get out there and start assessing how many plants and tillers we have per square yard. See chart as example of tiller number and N timing. If your plant/tiller counts are low, be prepared to get N on early as wheat plants wake up fast and need to be fed. This N is utilized to increase vegetative production and promote additional tillers. If tiller counts are in the middle, then get some N on early and the remainder on at jointing. If tiller counts are high, hold off on applying N at green-up and apply it all at jointing. Last year I saw many fields that were over 1200 tillers per square yard! This later N application timing should coincide with stem elongation which means nitrogen is going towards increasing the number of seeds per head and seed size, not additional tillers. Wheat takes off quickly at this stage so be diligent and prepared to spray!

Figure 1: Counting Wheat Tillers

Table 1: Wheat Nitrogen Based on Tillers

<table>
<thead>
<tr>
<th>Tillers/square yard</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;300</td>
<td>60 units of N at green up, rest applied at GS 5-6</td>
</tr>
<tr>
<td>450-600</td>
<td>45 units of N at green up, rest applied at GS 5-6</td>
</tr>
<tr>
<td>&gt;700</td>
<td>30 units of N at green up, rest applied at GS 5-6</td>
</tr>
</tbody>
</table>

Mike Stanyard, PhD, CCA
Regional Field Crops Specialist
NWNY Dairy, Livestock, and Field Crops Team
Cornell Cooperative Extension
(585) 764-8452 cell
http://www.nwnyteam.org/

Bill Verbeten, MS, CCA
Regional Field Crops Specialist
NWNY Dairy, Livestock, and Field Crops Team
Cornell Cooperative Extension
(585) 313-4457 cell
http://www.nwnyteam.org/
billsforagefiles.blogspot.com

Cornell Cooperative Extension provides equal program and employment opportunities.
Weeds. We continue to encourage the earliest planted fields to be sprayed for winter annual weeds (purple deadnettle, chickweed, chamomile) in late fall. Some of the later planted fields may have had a burndown sprayed prior to planting. You never know what the weather will be like in the spring and timely weed control can be tricky. Most fields are sprayed in the spring. We are still encouraging that you do not mix your herbicide and nitrogen applications and spray separately. The leaf burning can cost us up to 10 bushels and could get worse as temperatures increase.

If grasses such as roughstalk bluegrass and cheat are a problem, Osprey, a newly labeled product for NY, is available. It has no activity on broadleaves. Research by Russ Hahn has found that it has been very effective on bluegrass with better control achieved in the spring versus the fall. It can be applied up to the jointing stage in winter wheat.

Fungicides. We have seen that fungicide applications in wheat can really pay off. Powdery mildew and leaf rust can move in during the early vegetative stages and result in yield losses. These leaf diseases can be more prevalent with thicker wheat stands. Weather conditions also can play a role. Wet, cool conditions are more conducive to disease development. We saw this situation occur in 2013 and many acres had to be sprayed for powdery mildew. Early scouting of all your wheat fields is crucial to stay on top of this disease! If you applied higher N rates, 90-120 pounds, fungicides are even more important to keep the wheat healthy to prevent lodging.