Leaf diseases developing slowly

Leaf diseases have been developing slowly this season. There has only been one field reported as having stripe rust so far that I know. Some powdery mildew and Septoria leaf spot can be found especially on susceptible varieties that were planted early. These two will still make a play for the newer leaves but so far its been too cool. If you did not apply a fungicide at full tillering, don’t hesitate to apply one at full flag or boot if diseases are becoming aggressive. In fact, most years, this timing is better against leaf diseases than early timings. On the other hand, this might be the season one can wait until flowering when a fungicide application can help against both leaf diseases and Fusarium head blight.

Nitrogen applications - protect the flag leaf

N application have been difficult to make on a timely basis this spring. A light application can still be made, but be careful not to burn the flag leaf. Assuming leaf removal has the same affect as leaf burn, MSU assistants Kyle McCarty and Tim Wilkie physically removed flag leaves in both 2008 and 2009 during the boot, flower and milk stages. The average yield reduction was 21, 17 and 7 percent respectively. When we just burned half the leaf with N at flowering, yields were reduced by 14 percent.

If you intend to apply N before heading, use streamers and consider diluting with water. We sometime still get some burning but it usually is not too severe.

Freezing temperatures

On May 8 temperatures dipped well below 32 degrees. Below is a chart from the Midwest Regional Climate Center providing the average low temperatures for May 8. According to a Kansas State University publication, the low temps (sustained for at least two hours) that might damage wheat is approximately 24 F degrees at jointing, 28 F at boot, and 30 F at heading. Of course some areas or pockets within fields may have experienced much colder temperatures than recorded here. The first picture below is where freezing occurred during second joint - the flag leaf emerges already dead as is the head. In the second pic., individual florets of a head are killed where temps were not cold enough to kill the entire head.
Average Minimum Temperature (°F)
May 08, 2017 to May 08, 2017

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