**Soft Winter Wheat**

notes and observations for Michigan

April, 2017

**Stripe rust in 2017?**

So far, no one has fond Stripe rust that I know of, but I will probably show up before too long. Then it will just be a matter of whether the weather is favorable for it. We do not need to worry about resistant varieties, but most of MI's acreage has moderately resistant (MR) to susceptible (S) varieties, all of which bare watching (see [Stripe rust susceptibility to Mi wheat varieties](#)).

Relative to application timing, it is clear from last season's experience that growers do not need to use a fungicide in early spring where Stripe rust is the sole concern. Rather, one can wait to see if the disease actually develops and then apply a fungicide at flag leaf emergence. In fact, 2016 research in the Thumb and on the MSU campus showed that the flag leaf timing performed as well or better than a fungicide at tillering plus one at flowering. It was also clear that a flowering application was too late for Stripe rust control. This is not to discourage a fungicide application at flowering as this tends to be the optimum timing for other leaf diseases as well as Fusarium head scab.

**Traffic damage from ATV…why?**

This spring we are seeing traffic damage from when clover was broadcasted on frosted ground. Some growers have noted this in past, even with relatively light-weight ATV's or 4-wheelers.

It's a bit surprising knowing wheat stands can take lots of traffic on frozen soil or at green-up once the ground is thawed. I assume the crowns are being crushed and that it is related to the temperature and ice within crowns. Has anyone seen this and do you have an explanation? At what air temperatures is it more likely to occur? (Thanks to Jeff Krohn, Elkton for picture)

**Nitrogen applications**

Wheat that received N early is looking a bit better than fields where no N has been applied as yet. However, in trials delaying N until late April does not usually translate to a reduction in yield potential. Even if rainfall continues to delay field activity, wheat should do well even if N is not applied until 1st joint.

Others have asked about N loss due to our excessive rain this spring. The main cause of loss is due to denitrification, particularly on loams and silt loam soils. Where soils have remained saturated for several days, the loss may be around 10-20 percent depending on several variables. Where wheat is grown on course soils subject to leaching, the loss could be greater.
Joint stage just around the corner

The appearance of 1st joint (aka growth stage 6) often occurs around the last week of April or the first week of May in central MI. This spring, I would guess that we are pretty much on schedule. There could be a difference of several days between those fields planted in mid September vs. mid October.

First joint marks the end of the tillering stages and the beginning of head development; and the time wheat becomes much more sensitive to injury from 2,4-D herbicides, traffic, and nutrient deficiencies. It is the time a node can be seen (or at least felt) above the soil line.

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