



Southwest MN IPM STUFF

All the pestilence that's fit to print

SW Minnesota IPM STUFF 2009-3

06/21/2009

If you receive these newsletters as forwards and would like to be on the mailing list send a request to Molly Werner at werne022@umn.edu.

You get what you pay for. This is a free newsletter.

**University of Minnesota Southwest Research and Outreach Center (SWROC),
Lamberton, MN events.**

<http://swroc.cfans.umn.edu/upcoming/upcoming.htm>

Crop Weather

To keep up to date on all the crop weather details during the growing season see:

<http://swroc.cfans.umn.edu/Weather/weather.htm>.

Welcome rain occurred in much of our viewing area. Much of Southwest Minnesota is now looking good for moisture. Unfortunately, there are still areas of moisture stress, particularly north of the Minnesota River.

Spring wheat is now headed and early varieties are flowering. I have not seen any leaf rust pustules but may have some rust flecking starting show on winter wheat. We will know if it is leaf rust in a few days. The cool, damp weather the past also week led to low levels of **powdery mildew** infection on winter wheat. A related form of the fungus was common on bluegrass in shady areas.

Early planted corn fields have closed the rows and most fields are V6 (6 collar) stage and up. The growing point of these plants is now above ground. Soybeans from emergence to V3 (4 open trifoliates) are present. Unfortunately, this range of growth stage is sometimes found in the same field. Iron deficiency chlorosis (IDC) symptoms are extremely pronounced this year. I am not a soil scientist but based on what I have seen in the field, there may be a miracle product for IDC on the market. Since most things have a down side, this product could significantly increase the soybean acres attractive to soybean aphids in future years.

Typical mistakes

As corn and soybeans move from seedling stage to early vegetative growth, it is a good time as any to reflect on early season problems. Many of the early-season corn and soybean problems that I am aware of can be traced back to two non-pest issues. They are anything but new.

First, planting depth (most often too shallow rather than too deep) can create multiple problems with emergence and water/ nutrient uptake. Shallow planting leads to poor root development in corn. Shallow planting can lead to uneven emergence in both corn and soybean through low moisture and temperature extremes near the soil surface. Yes, it can be hard to keep planters at a consistent depth even within a field. Plant corn at 2 inches (step on the row first if soil is very loose) and check the depth often to make sure you are planting where you think you are. Dry topsoil combined with shallow planting has led to very uneven soybean emergence in some fields this year. Trust me, I speak from experience.

Residue management is the second problem associated with uneven corn stands. Regardless of tillage system, poorly sized and positioned corn and soybean residue in the row slows down early season corn growth and often creates nutrient deficiency symptoms where residue is heavy. You don't necessarily need to bury all residue but you do need to get it out of the corn row.

Both planting depth and residue management can be compromised when working and planting soil that is too wet. Shallow planting and poor residue management can both occur in the same fields; usually with disheartening results and questions from neighbors. I thought the spring was going pretty smoothly for getting things planted into good conditions and in a timely manner. Hmmm...

Try not to repeat other typical mistakes this year. For example, when spraying soybeans, remember that corn in the neighboring field, while it may be tolerant to Glyphosate, is not tolerant to the grass herbicides you added for volunteer corn control. Those pesky yield monitors tend to pick up mysterious areas of low yield along field edges in the fall. Trying to time weed control with insecticide and/or foliar fungicide applications can and often does end poorly.

Wheat

A reminder that fungicide applications applied pre-heading have little activity on *Fusarium head blight (scab)*. Fungicide applications for scab are ideally timed at early flowering and can protect against late season leaf rust as well. Most scab fungicide optimum timings in SW MN spring wheat would have been last week or this week.

Alfalfa

Alfalfa weevil treatment has occurred in scattered fields, particularly to the north. **Potato Leafhopper** populations remain low at the SWROC.

Corn

First generation **European Corn Borer** light trap captures were very low at the Lamberton and Fulda locations this spring.

Soybeans

Areas with recent heavy rains and particularly with hail will likely see some bacterial blight develop. This disease is usually not a big yield concern unless continued heavy rain.

Wetter soils are showing some minor **root rot** issues, Symptoms of Rhizoctonia and what appears to be Fusarium are the most common on the diseased roots I have looked at.

SCN are visible on roots of soybeans with 2 or more trifoliates.

A network of informants has been reporting **Soybean aphids** at very low levels since early June on volunteer soybeans and some early planted fields. At the SWROC, we began finding aphids on June 15 and at West Central Research and Outreach Center, Morris on June 18. Based on the size of colonies, they had likely been present for a week or more. The SWROC populations are focused in areas with the largest soybeans again indicating the initial colonization may have happened earlier. Of interest is the large number of alate (winged) aphids being produced on plants with little crowding and the rapid colonization of new plants in the field. More heavily infested areas are now at 10% or the plants with aphids with up to 40 aphids/plant (average is much lower).

Soybean aphids are not a big deal at Lamberton, Morris and I suspect most other fields at this time. All upper Midwest Land Grant Universities use 250 soybean aphids/plant average with 80% or more of the plants infested as the economic or treatment threshold.

Ants are finding these scattered aphid outposts. Unlike 2008, predators, seven-spotted lady beetle in particular, are finding some of these initial colonies and I would give them a chance to control aphids. Remember, early treatment increases the probability of needing a second insecticide application. Whether the second application comes out of your pocket or whether it is paid for as part of a guarantee, why put yourself through the extra stress? Hopefully, we can mostly ignore this insect until after the Fourth of July and maybe longer.

Sometimes informants provide depressing information. I did receive a report of a small upper Minnesota River valley field with unusually high (for this time of year) soybean aphid population. To avoid any surprises, you may want to check a field or two that typically have early infestations (small fields, fields in areas with heavy buckthorn, fields with lighter soils and drier areas). Based on aphid distribution in fields at Lamberton, you may want to focus on areas in addition to the field edge. Watch the drier areas of the state for early developing aphid populations as the season progresses.

Note: This aphid update is intended to help you avoid surprises. It is not an endorsement of tank mixing insecticides and herbicides or spraying invisible aphids! There are plenty of others ready to endorse such things. Caveat emptor is as true now as when the Romans were saying it.

Bruce Potter
IPM Specialist SW Minnesota
University of Minnesota Extension Service
Department of Entomology
University of Minnesota Southwest Research and Outreach Center
23669 130th Street
Lamberton, MN 56152
Ph: 507.752.5066 Fax: 507.752.5097
E-mail: bpotter@umn.edu
<http://swroc.cfans.umn.edu/SWMNPEST/swmnpest.htm>