If you would like to be added to this mailing list, send a request to Molly Werner at werne022@umn.edu. This newsletter and the advice herein are free. You usually get what you pay for.

**Crop weather**
Rainfall, air and soil temperatures, degree-days, soil moistures, and other current and historical weather data for a little spot about two miles west of Lamberton, MN can be found at the University of Minnesota Southwest Research and Outreach Center (SWROC) website: [http://swroc.cfans.umn.edu/WeatherInformation/index.htm](http://swroc.cfans.umn.edu/WeatherInformation/index.htm).

At the SWROC, 1405 degree-days (Base 50F) have been accumulated from May 1 through July 28; 4-5 days behind the long-term average of 1495 degree-days. The SWROC is slightly behind the long-term precipitation average for the same period. We received 0.74 inches last week and needed it.

Corn is silking but development is variable in fields with compaction, hail and water damage. Pollination seems to be going well. Early soybeans are at R4 - R5. With the exception of replants and beans after peas, most are now at R4 (beginning pod) stage and approaching the end of vegetative growth. See the image and table below for late reproductive stages.

**Corn rootworm**
Rootworm emergence has been late. From the limited roots l
have examined, damage seems to be lower this year. Ken Ostlie reports some beetle emergence in early planted Dakota County experiments.

Along with some of you that I have talked to, I have not yet seen a western or northern corn rootworm beetle in 2014.

We are delaying root digs to see if additional damage occurs. Only a very few pupae were observed 7/21 with 1st to 3rd instar larvae composing > 80% of the population.

Watch for beetles in late pollinating corn.

**Soybean aphid**

Most reports are of low aphid populations. Most reports are of infestations on field edges and small areas of the field. A few fields may be approaching threshold but I have not been in any of these. At the SWROC, areas that typically see aphid populations early are approaching 50% plants infested but numbers/plant are still very low.

We are seeing winged aphids being produced in "hot spot" areas and moving to un-colonized plants. Soybean reproductive rates are very impressive now. Some plants caged with 5 aphids/plant went from over 200/plant in one week, populations doubling in as little as 1.3 days. Caged plants exclude predators and prevent emigration so populations double more quickly than open fields. Field populations of soybean aphids usually take 3 days or more to double - unless large numbers of winged aphids are immigrating.

The next three weeks will see migrations of winged aphids to new fields and areas and determine how 2014 stacks up for soybean aphid populations.

The 2014 soybean aphid season is likely to be interesting. On the one hand, in general, initial aphid populations are lower and later than typical. On the other hand, soybean development is very uneven. Late planted fields and areas of fields could see significant aphid populations later in the season.

Here are a couple new resources for soybean aphid. A fact sheet: [http://www.extension.umn.edu/agriculture/soybean/pest/docs/soybean-aphid-scouting.pdf](http://www.extension.umn.edu/agriculture/soybean/pest/docs/soybean-aphid-scouting.pdf), and a hastily put together video on early season scouting: [http://youtu.be/SW_oLAHUP24](http://youtu.be/SW_oLAHUP24). I seemed to have lost a grasp of the English language in the latter. It will also be quite obvious that Marin Scorcese and Francis Ford Coppola were otherwise engaged while we were working on this. Thanks to Emily Neperman at the SWROC for helping work on this.

Finally, here is a piece originally from 2009, that explains why you may want to wait to treat aphids: [http://swroc.cfans.umn.edu/prod/groups/cfans/@pub/@cfans/@swroc/documents/asset/cfans_asset_483918.pdf](http://swroc.cfans.umn.edu/prod/groups/cfans/@pub/@cfans/@swroc/documents/asset/cfans_asset_483918.pdf).
For those that have already applied insurance insecticides, you would be wise to continue scouting soybean aphids. There is still risk even if your insecticide is purported to be harmless to beneficial insects or have long residual control. As mentioned earlier, aphids are preparing to move about the countryside. Some aphids are treated too early, some aphids are treated to late and some aphids get treated just right, the later is the most profitable for the soybean producer.

Happy trails,

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