

# Extension Crop Update

This newsletter, and previous issues from recent years, can be found on-line at:

<http://www.extension.iastate.edu/plymouth/info/cropupdate.htm>

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**Growth and Development Update:** Yes, we are behind in growing degree days – about 240 behind in NW Iowa – or about 8 to 10 days of average temperatures right now. But, I don't want to catch up! I want us to be about average or slightly less from here to maturity – that gives us the biggest yield potential for corn, according to what we have seen in the past. There is risk of yield loss from an early freeze, and later maturity tends to mean wetter corn. But, I prefer slow ear fill (bigger kernels) without heat or moisture stress, and then unseasonably warm temperatures in October to aid in dry down. Am I asking too much? I hope not!

**Soybean Aphid Update:** I have heard reports and observed some fields that had rapidly growing aphid populations in NW Iowa this past week. **THIS IS A GREAT TIME FOR YOU TO SCOUT ALL OF YOUR SOYBEAN FIELDS FOR APHIDS!** Remember, the treatment threshold is 250 aphids/plant on at least 80% of the plants. Or, use the Minnesota Speed Scouting threshold, which uses a percent of infested plants method to assess the same threshold. Check out the ISU Soybean Aphid page for links to lots of soybean aphid management information, including a link to the Minnesota Speed Scouting publication site: <http://www.ent.iastate.edu/soybeanaphid/>. The actual injury threshold (where there is enough aphids to cause yield loss big enough to pay for the insecticide treatment) is 654 aphids/plant, according to much research. We want to treat before then, if possible.

As a reminder, aphid populations are favored by plants under drought stress, potassium deficient soils, cool temperatures, and the absence of beneficial insects.

When do we stop scouting? Our ISU Extension Entomologist, Dr. Erin Hodgson, suggested scouting until the R6 stage. R4 beans are described as having one pod at least ¾" long at one of the top 4 nodes on the main stem with a fully developed trifoliate leaf. It normally takes about 10 days to go from beginning R4 to beginning R5. R5 is described as having a seed 1/8" long in the pod at one of the top 4 nodes. Stage R5 to R6 typically takes about 15 days. Stage R6 is described as having a green seed that fills the pod cavity in one of the top 4 nodes – and from there to maturity (R7, one brown pod on the main stem) it takes about another 15 days.

Don't forget to watch harvest intervals!

**Aphids in Corn:** I have received several calls on this pest, too. These creatures are not acting according to what is written about them in the research journals – these articles all discuss the stress from aphids in top whorls and tassels during pollination. Thresholds are set on the damage during pollination, I cannot find anything showing threshold data from colonies that start at the base of plants and spread upward after pollination is com-

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plete. In fact, my observations from most years in the past would show some aphids at pollination, but the little critters would be disappearing about this time of year. Maybe they still will!

ISU Entomologist Erin Hodgson recently printed an ISU ICM News article about these pests, review it here: <http://www.extension.iastate.edu/CropNews/2009/0807hodgson.htm>. It discusses the different types of aphids we are seeing on corn. However, there are no printed thresholds for this time of year. The concern probably isn't from feeding on lower leaves, particularly since we are not drought stressed; but more concern of the sooty mold growing on the honeydew on leaves at and above the ear leaf. So, here's an "educated guess" on a treatment threshold. If colonies are found on the ear leaf and above (ignore leaves below the ear, they don't contribute much to kernel fill), on a very high percentage of the plants (80%?), then an insecticide treatment might pay benefits. But, note this is just an estimated guess based on data from leaf loss, expected behavior of aphids, and other related information. There is no data to support it, so I ask that producers leave check strips if they treat fields, note the level of infestation when you treat, and share harvest data with me so I can learn from your experience, too!

**Dig Soybean Roots for SCN** – While scouting for aphids, take your spade with you and evaluate soybean roots for cyst nematodes. For help on scouting and other SCN questions, look at ISU's Soybean Cyst Nematode web page: <http://www.plantpath.iastate.edu/html/soybeancyst/index.htm>.

**Root Pit Meeting Aug. 27** - The Iowa Learning Farm will host a field day at the Nate Ronsiek farm, 1871 480th Street, Hawarden, on Thursday, August 27, beginning at 6:00 p.m. Nate is a cooperator with the Iowa Learning Farm (ILF) and will offer information about his demonstration site and tell of his experiences in adopting no-till. I will discuss root health and growth in a no-till system using a soil pit as a visual aid. And Sioux County NRCS District Conservationist Greg Marek will talk about cost-share incentives for trying and adopting no-till.

The field day includes a complimentary evening meal served by the Sioux County Cattlemen and sponsored by Farmers Elevator Company and Farm Credit Services of America. The event is free and the public is invited to attend, but an RSVP is recommended. Please call the Sioux County ISU Extension office to register for this event, 712/737-4230.

**"Thanks for Subscribing!"**