

CROP NOTES for Aug 18, 2009

Past issues of Crop Notes are posted at:

<http://www.extension.iastate.edu/winneshiek/info/crops.htm>

Iowa State University Extension Information for Northeast Iowa

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Sept 15, [Soil Management Clinic](#)

Sept 17, Advances in Precision Ag Expo, ISU Southeast Research Farm, Crawfordsville

WEATHER

Degree Days for Corn

From May 1 to Present:

Nashua = 1,703 GDD (315 below normal)

Cedar Rapids = 1,804 GDD (353 below normal)

FARM FINANCE & RELATED ISSUES

Farm Financial Analysis & Planning Program

ISU Extension offers free one-on-one financial counseling and computerized analysis of the farm business. Details are provided at: <http://www.extension.iastate.edu/farmanalysis/index.htm>

Iowa Concern Hotline, 1-800-447-1985

Established during the farm crisis in the 1980's, this remains a resource for those in need of certain services such as legal aid, family finance issues, dealing with stress, depression, serious illness and more. The phone number is 1-800-447-1985. Additional information is at: <http://www.extension.iastate.edu/iowaconcern/>

Disaster Recovery Financial Guide

Other disaster recovery issues are covered in a 34-page publication "Disaster Recovery, A Guide to Financial Issues", which is available at the Hail Damage website at: <http://www.extension.iastate.edu/disasterrecovery/info/haildamage.htm>

INSECTS

Corn Leaf Aphid

Repeating last week's message: There are no known thresholds for Corn Leaf Aphids on corn after pollination, however, ISU has suggested the following Action Threshold to trigger an insecticide application. "Aphids on or above the ear leaf, increasing in population heavy enough to leave noticeable honey dew on the leaves." The deposited honey dew provides a growing medium for sooty mold which can reduce photosynthesis and in turn possibly reduce grain fill. Climate is also a factor, with aphids being a larger threat in a more drought-stress type of environment.

Potato Leafhopper

Scout weekly until late August. Scouting tips and photos are available in the 2009 ICM article at: <http://www.extension.iastate.edu/CropNews/2009/0615hodgson.htm>

Soybean Aphid Update

The research plot numbers at Decorah are finally leveling off.

Table below provides data for "untreated control" and "(insecticide treated seed)".

Plots treated with foliar insecticide on Aug. 3 currently average 180 aphids per plant.

| Date | Stage | % plants with aphids | | Avg aphids/plant | | Winged aphids/plant | |
|---------|-------|----------------------|--------|------------------|---------|---------------------|---------|
| July 12 | R1-R2 | 60% | (24%) | 3 | | | |
| July 19 | R2 | 95% | (54%) | 13 | | | |
| July 26 | R3 | 100% | (77%) | 26 | (11) | 0.05 | (0.03) |
| July 29 | R3 | 100% | | 45 | | 0.2 | |
| Aug 1 | R4 | 100% | (100%) | 99 | (41) | 0.6 | (0.5) |
| Aug 4 | R4 | 100% | (100%) | 187 | | 1.9 | |
| Aug 9 | R5 | 100% | (100%) | 584 | (416) | 3.0 | (2.6) |
| Aug 12 | R5 | 100% | (100%) | 940 | (580) | 4.5 | (11.0) |
| Aug 15 | R5 | 100% | (100%) | 2,054 | (1,625) | 8.5 | (8.1) |
| Aug 18 | R5 | 100% | (100%) | 2,025 | (2,090) | 7.0 | (8.0) |

How late do you treat? The 250 threshold applies up to R5.5 stage. There is insufficient research to define aphid thresholds beyond R5.5 stage. Soybean stages and approximate dry matter accumulation of seed at those stages are listed below. If aphid populations are high enough (500?, 1,000?, more?), there could be reasons to still protect soybeans at the very beginning of the R6 stage. Although if you have high aphid populations at beginning R6, you very likely had >250 aphids at R5.5. And with 50% DM already accumulated in the seed at R6 stage, what is the probability that you can at least preserve the 2-4 bushel per acre required to breakeven on treatment costs? Clearly, once soybeans are well into the R6 stage, there is no reason to treat for aphids.

R5 stage is beginning pod fill. Takes about 18 days until R6.

R6 stage is 1 pod in the top 4 nodes completely filled. Equals ~50% DM accumulation in seed. Takes ~18 days until R7.

R6.5 stage equals ~90% DM accumulation in the seed.

R7 stage (1 pod on the main stem a mature brown color) equals ~98% DM accumulation in seed.

A podcast covering state-wide soybean aphid activity is posted each week on Monday afternoon at:

<http://www.ent.iastate.edu/soybeanaphid/>

Nationally, you can check aphid activity at the USDA web site:

http://sba.ipmpipe.org/cgi-bin/sbr/public.cgi?host=All%20Legumes/Kudzu&pest=soybean_aphid

DISEASE

Soybean Rust Update

The risk to Iowa soybeans remains very low. Most soybeans are in the R5 stage and about one week from R6 stage. Once soybeans reach R6 stage, soybean rust becomes irrelevant.

Hurricane activity in the gulf could accelerate rust spore movement northward, but at this time all rust activity is still south of Tennessee. <http://sbr.ipmpipe.org/cgi-bin/sbr/public.cgi>

Sudden Death Syndrome (SDS)

SDS is now showing up nicely across field areas that were low, wetter spots in spring where the disease was initially present and susceptible varieties were planted. This disease starts as an infection through the roots. Soybean cyst nematode can aid this infection process often making SDS more prevalent in an SCN infested field. No foliar fungicides will control SDS because the leaves do not have a fungus on them. The leaf symptoms are due to a toxin produced by the disease present in the root and now stem region of the plant. Research shows that a crop rotation with corn does NOT reduce SDS presence in the field. Selecting resistant varieties is the most important means for future control. Photos and symptoms are discussed at:

<http://www.ipm.iastate.edu/ipm/icm/2006/9-18/sds.html> Management of this disease is addressed at: <http://www.ipm.iastate.edu/ipm/icm/2003/1-21-2003/sdsmanage.html>

White Mold

As with SDS, White Mold is now showing up in many areas across northeast Iowa. The only foliar fungicide recommended in the past has been Topsin, with the application timed around R1 stage before the White Mold symptoms show up. In reading some foliar fungicide labels, Domark carries a label for White Mold for an R3 stage application. However, most of the soybean are now R5 stage. Most important at this time is to recognize the problem, take notes, and identify resistant varieties to use in the future. General information and photos on White Mold can be found at: http://www.plantpath.wisc.edu/soyhealth/pdf/whitemold_06.pdf Also a recent article on White Mold Management was posted this week on the ICM News at: <http://www.extension.iastate.edu/CropNews/2009/0814yangsavi.htm>

EVENTS

Aug 18-21, The Dairy Financial Situation Meetings, Various Locations in Iowa

People in the dairy industry are invited to attend one of the four remaining workshops across Iowa to gain information that will help them deal with the current challenges created by the global economy. Details about the program at listed at:

<http://www.extension.iastate.edu/news/2009/jul/161702.htm>

Aug. 18 - Dubuque County Extension office, 14858 West Ridge Lane, Dubuque

Aug. 19 - Elkader AEA Building, 1400 2nd Street NW, Elkader

Aug. 20 - Jones County Extension office/Jones County Farm Bureau, 605 E. Main

Aug. 21 - Freedom Security Bank, 402 B Avenue, Kalona

Sept 2, Grand Opening of the Borlaug Learning Center, Northeast ISU Research Farm, Nashua

4:30 to 7:30. Inside exhibits, wagon tours and more. Tours occur between 4:30 to 7:30 with (1) separate 15-minute Agronomy wagon tours of the north farm and south farm, (2) research garden walking tour, (3) vineyard walking tour, (4) windbreak walking tour, (5) historic corn hybrids walking tour, (6) Borlaug Learning Center building tour (displays, donor recognition, energy conservation features like geothermal, rainwater collection, and more).

5:00 to 5:30 is the official Grand Opening Ceremony on the Borlaug Learning Center porch.

5:30 to 7:00, complimentary meal offered.

Directions: Take the Nashua exit off of Hwy 218, then west on Hwy B60 1.2 miles to Windfall Ave. South on Windfall Ave. 1 mile to 290th Street, and 0.2 miles on 290th Street to the farm.

Aug-Sept, Crop Management and Diagnostic Clinics, Ames

The Field Extension Education Laboratory is a 43-acre teaching and demonstration facility dedicated to providing a hands-on learning experience for crop production professionals. The demonstration plots are used to show a wide range of management problems, solutions, and diagnostic challenges. "We make the mistakes on these plots so you won't in the future!" The clinics and programs are taught by Iowa State University staff and faculty and invited specialists from other institutions and industry. Modern, air-conditioned classroom facilities complement the in-field sessions, all of which are within walking distance. Current open programs for this summer include the following. Just click on the program title (Ctrl + Click) for details:

Aug 25-27, [Iowa Drainage School](#)

September 2, [Alfalfa Production Clinic](#)

September 3, [Corn Disease Diagnostics and Management](#)

September 15, [Soil Management Clinic](#)

For other Agribusiness Education program information, check out the Homepage at:
<http://www.aep.iastate.edu/homepage.html>

Sept 17, Advances in Precision Ag Expo, ISU Southeast Research Farm, Crawfordsville

10:30 a.m. to 4:30 p.m. Come see the latest in precision ag technology, including RTK guidance systems, auto-steer, automatic shut-off planters and sprayers. The expo will feature field demonstrations and industry exhibits on the latest technology. For details about the program and exhibitor information go to:

<http://www.extension.iastate.edu/Pages/eccrops/09apaexhibitorbrochure.pdf>

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