

CROP NOTES for Aug 5, 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 2, [Alfalfa Production Clinic](#)

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WEATHER

Degree Days for Corn

From May 1 to Present:

Nashua = 1,409 GDD (317 below normal)

Cedar Rapids = 1,504 GDD (337 below normal)

GDDs are two “summer” weeks behind normal. Normal GDDs in northeast Iowa for early Aug are 21, and late Aug are 17.

HAIL DAMAGE ISSUES

Posted on Extension Website

All of the hail damage and assessment information that was on Crop Notes for the last week is now organized and posted at:

<http://www.extension.iastate.edu/disasterrecovery/info/haildamage.htm>

This includes the most recent information about the Crisis Exemption Label for Gramoxone Inteon to use as a silage harvest aid on heavily damaged corn. In the near future ISU Extension Livestock and Farm Management staff will post additional information pertaining to this situation.

CORN

Understanding Pollination

With many corn fields showing rather uneven development, pre-tasseled and brown-silk corn in the same fields, plus hail and wind damaged corn, I thought I would include a few comments about the pollination process.

Pollen shed begins on a plant after the tassel fully emerges. This is usually 1 to 3 days before silk emergence. Typical silk emergence begins 3 days after full tassel and all silks emerge within 5 days after the first silks appear. Peak pollen shed is about 3 days after full tassel, and pollen shed usually continues for another 4 to 5 days. Most pollen settles within 20 to 50 feet of where it was released. One tassel can pollinate about a dozen plants if timing and distribution are right.

Each corn silk is a long, slender tube leading to an ovule which, if fertilized, becomes a kernel of corn. A silk will continue to grow until a pollen grain lands on it. Fertilization occurs within 12 to 24 hours after a pollen grain lands on a silk. Silks from near the base of the ear emerge first; those from the tip appear last. The first visible sign of successful pollination is that silks stop growing, wilt and turn brown. During the first ten days to two weeks after pollination, the cob develops to its full length and diameter. The developing kernel does not reach the watery blister stage until one to one and one-half weeks after fertilization.

Additional information and photos on pollination issues are at:

http://www.agry.purdue.edu/ext/corn/news/articles.01/Krnl_Set-0820.html

Corn pollinated prior to the hail damage, and recent hail having caused significant leaf loss, will have plants abort kernels relative to what the plants remaining photosynthetic area can now

support. Kernels are particularly susceptible to abortion the during the first two weeks after pollination. Beyond this, poor conditions for grain fill results more so in lower test weight grain. These issues are discussed in more detail at:

http://www.agry.purdue.edu/ext/corn/news/articles.01/Grainfill_Stress-0717.html

ACRE

On-line Decision Tools

This link takes you to on-line decision tools and a voiced presentation on “ACRE Economics Update”.

<http://www.extension.iastate.edu/agdm/crops/html/a1-45.html>

INSECTS

Corn Leaf Aphid

Once corn is pollinated, corn leaf aphid is less of a threat to the crop. There are no known thresholds for this insect on corn after pollination, but it would require many 100's of aphids on corn to become an issue. Climate is also a factor, with aphids being a larger threat in a more drought-stress type of environment. On Monday there were a few reports of corn leaf aphids in a few fields in southwest Iowa. I have no other reports on this insect at this time.

Corn Rootworm

The slowest developing corn (the corn last to silk in the area), should be watched for the possibility of silk clipping by rootworm beetles. A rescue treatment is warranted if green silks are being clipped to 1/4 inch or less. Once pollinated, silks turn brown and silk clipping is not important. For a photo of silk clipping, go to:

http://www.agry.purdue.edu/ext/corn/news/articles.01/Krnl_Set-0820-Gallery.html

Japanese Beetles

Japanese Beetle activity continues to bother mostly ornamental crops. This insect has expanded its territory again this year, but beetle populations on crops (soybean leaves, corn silks) are lower than last year. ISU Extension Agronomist Jim Fawcett in east central Iowa, the Japanese Beetle Hotspot says he has not seen any soybean fields anywhere near the 20% defoliation (<http://www.ipm.iastate.edu/ipm/icm/2002/7-29-2002/soydefoliation.html>) that it takes to justify an insecticide treatment. Corn fields that are still pollinating should still be scouted to make sure that the beetles do not silk-clip, interfering with pollination.

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

Here are the last few weeks of data from my research plot near Decorah, including twice a week scouting for the last 2 weeks. I also applied the Speed Scouting Method to this trial. The Speed Scouting Method is explained at:

<http://www.iasoybeans.com/checkoff/publications/aphidcard/aphidcard.pdf>

Date % plants with aphids Average aphids/plant Speed scouting results

July 12	60%	3	--
July 19	95%	13	--
July 26	100%	26	Don't treat
July 29	100%	45	Don't treat
Aug 1	100%	99	Treat (took 31 plants to get results)
Aug 4	100%	187	Treat (took 11 plants to get results)

Winged aphid migration is underway. Winged aphids per plant increased from 0.05 winged aphids per plant (July 26) to 0.55 winged aphids per plant (Aug 1) to 1.85 winged aphids per plant (Aug 4). However, compared to other years, these winged-aphid numbers are still quite low.

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

Western bean Cutworm

We continue to find very low trap catches for this pest. Its normal peak in moth flight is mid-to late July. This season the peak activity appears to be running later. A trap in Fayette County reported increased activity for the last 3 readings during this last week, now totally 225 catches. These are still very low total catches relative to populations that cause problems. But we will continue to watch to see if next week's catches continue to increase or taper off to be a non-problem. Overall, it looks like no problems with this pest in Iowa for 2009. The internet reporting page is at: <http://www.ent.iastate.edu/trap/westernbeancutworm/> Click on "Trap sites" in the upper left side of the page to find trap catches.

DISEASE

Soybean Rust Update

The risk to Iowa soybeans remains very low. Dr. Yang's latest spore movement prediction map suggests a possible northward spore movement from Gulf areas to Tennessee where the deposition condition seems to be favorable to disease establishment. If so, there is a high probability that the disease could be in Tennessee sometime in September if that region has soybeans. The actual rust reports on the USDA web site are still only found close to the Gulf Coast: <http://sbr.ipmPIPE.org/cgi-bin/sbr/public.cgi>

Soybean Leaf Diseases & Foliar Fungicides

Brown Spot: We continue to find Brown spot in many fields, with the disease not just on the unifoliate leaves, but also on the 1st and 2nd trifoliate leaves in some fields. This is not necessarily a problem, as long as the disease does not continue to climb up the plant. It usually does not, but the weather pattern is favorable this season. See photos at:

<http://www.plantpath.iastate.edu/soybeanrust/lookalike>

Bacterial Blight: It is a very good season for Bacterial Blight. Foliar fungicides do not control this disease. It is easy to confuse with other diseases. ID photos and Extension publication of

Bacterial Blight and Brown Spot is available at:

<http://www.extension.iastate.edu/Publications/PM1662.pdf>

Downy Mildew is evident in some fields. It usually shows up first on the upper leaves. Photos are available at: <http://www.plantpath.iastate.edu/soybeanrust/lookalike> The common foliar fungicides targeted for control of Brown Spot, Frogeye and Cercospora are not labeled for control of Downy Mildew.

Frogeye Leaf Spot and Cercospora Leaf Blight are disease that usually do not start showing up until late July. This season some fields showed first signs of these diseases by mid-July.

Cercospora is quite prevalent and easy to see in some fields. See ID photos of these diseases at: <http://www.plantpath.iastate.edu/soybeanrust/lookalike>

Many varieties have excellent resistance to these diseases, but some do not. If these diseases are present, and variety resistance is questionable, and the weather pattern is favorable, then a fungicide application at R3 to R4 may be profitable.

Eyespot in Corn

Eyespot is a common disease in corn. See photo and description at:

<http://www.extension.iastate.edu/CropNews/2008/0718robertson.htm> with detailed information on Eyespot at: <http://www.extension.iastate.edu/Publications/PM963.pdf>

It usually starts on the lower leaves, and under favorable conditions (presence of disease, susceptible hybrid, cooler wetter weather) it infests leaves further up the plant. Under a wet and cool weather pattern with susceptible hybrids, if Eyespot is found either on the ear leaf and/or 1 to 3 leaves below the ear leaf on a majority of plants near tassel stage, a foliar fungicide application may be warranted. Currently, I can find Eyespot on the ear leaves in some fields, but practically not at all in other fields. Scouting and knowledge of hybrid resistance is important in making a decision to treat with fungicide.

Gray Leaf Spot in Corn

Gray Leaf Spot is being found across Kansas, Nebraska and southwest Iowa. See photo and description at: <http://www.ipm.iastate.edu/ipm/icm/2002/8-19-2002/grayleafspot.html> . It usually starts on the lower leaves, and under favorable conditions (presence of disease, susceptible hybrid, warm and very humid weather) it infests leaves further up the plant. Under a very humid environment, if Gray Leaf Spot is found either on the ear leaf and/or 1 to 3 leaves below the ear leaf on a majority of plants near tassel stage, a foliar fungicide application may be warranted.

Considerations for Foliar Fungicides on Corn and Soybeans

Consideration for the use of a fungicide remain the same as mentioned in this article back on July 21: <http://www.extension.iastate.edu/CropNews/2009/0721MuellerRobertson.htm>

ALFALFA

Late-Summer Seeding of Alfalfa

“Fall” seeding of alfalfa or other forage legumes and grasses is best accomplished in August. Early August for northern Iowa, late August in southern Iowa. If the seeding is to be a renovation of a current sod cover like an old pasture, then plans for killing off the old sod (i.e. glyphosate application) should have been done already or very soon. Since the majority of weeds do not germinate very well this late in the season, we do not recommend a companion

crop or pre-plant herbicide. But keep an eye on the stand, because a rare flush of weeds, volunteer oats, etc. could be very competitive with the limited soil moisture in August and warrant early post-emergence weed control. The warm soil temperatures will get alfalfa off to a quick start, but since soil moisture may be a bit limiting, make sure you achieve excellent seed-to-soil contact when planting (use of press-wheels or cultipacker).

EVENTS

Aug 4-20, The Dairy Financial Situation Meetings, Various Locations in Iowa

People in the dairy industry are invited to attend one of 10 a local 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. 4 - Northeast ISU Research Farm, 3321 29th Street, Nashua

Aug. 5 - Northeast Iowa Dairy Foundation, 1527 Highway 150 South, Calmar

Aug. 6 - Oelwein Public Library, 201 E. Charles Street, Oelwein

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

Aug 4-12, Farmland Lease Meetings, 33 Workshops Across Iowa, Pre-registration Required

Producers will explore different methods of establishing agricultural land lease values and review the components and value of a written lease. Pre-registration is required. Contact your local Extension office. Workshops in northeast Iowa are listed below. For a full list of

workshops across the state, go to: <https://www.extension.iastate.edu/agdm/info/meetings2.html>

Aug 4, 1:00 to 3:00 pm, Library, Riceville

Aug 5, 1:30 to 3:30 pm, Borlaug Learning Center, Northeast ISU Research Farm, Nashua

Aug 6, 6:30 to 9:30 pm, Mason City

Aug 11, 9:30 to 11:30 am, James Kennedy Public Library (Hoffman Room), Dyersville

Aug 12, 1:30 to 3:30 pm, Hawkeye Community College, Waterloo

Aug 5, Pasture-Walk Event, Lansing

1:00 to 3:00 pm hosted on the farm of by Steve and Patty Scholtes, the program will highlight their 100+ Ewe rotational grazed system, pasture converted from CRP, new seedings, interseedings, and frost-seedings. Directions: Take Hwy 9 either west from Lansing 2.7 miles to Gruber Ridge Rd., or east from Churchtown about 3 miles to Gruber Ridge Rd. Follow Gruber Ridge Rd about 2.7 miles to the farm (2207 Gruber Ridge Rd).

Aug 6, Hail Damage Meeting, Hwy 56 south of Elgin

10:00 to 11:30 am, Tyson Hog Buying Station located at the junction of Highway 56 (Filmore Rd) and County Road W51 (Cedar Rd). The site is located approximately half way between West Union and Elkader. In case of rain, the meeting will move 1 mile west on Hwy 56 to 4823 Filmore Road. The program includes: (1) Dale Thoreson ISU Extension Livestock Specialist to discuss salvaging damaged crop, feed value and harvest issues. (2) Brian Lang, ISU Extension Agronomist, and a Crop Insurance Agent to talk about crop growth and development, crop

damage assessment, emergency forages and other agronomic issues. Other crop insurance representatives and local agribusinesses are welcome to attend and provide input at this meeting.

Aug 8, Home Demonstration Gardens Field Day, Northeast ISU Research Farm, Nashua

Starting at 4:00 pm, this year's field day will highlight: Storing and Preserving Vegetables; Ghostly Pumpkins; and "Other Oddities". Details are provided in the news release at: <http://www.extension.iastate.edu/news/2009/jul/060101.htm> Directions: From the Jct. of Hwy 218 & B60 at Nashua, go west on B60 1 mile, then south on Windfall Avenue 1 mile, then east on 290th St. ¼ mile.

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>

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