CROP NOTES for July 20, 2015
Past issues of Crop Notes are posted at:
http://www.extension.iastate.edu/winneshiek/page/crop-notes-brian-lang

Iowa State University Extension Information for Northeast Iowa
By Brian Lang, ISU Extension Agronomist
325 Washington St., Suite B, Decorah, IA 52101
563-382-2949

TABLE OF CONTENTS
CORN
   Corn Growing Degree Days, Growth & Development
SOYBEANS
   Growth and Development
FORAGES
   Plan Now for Late Summer Seeding
INSECTS
   Corn Rootworm
   European Corn Borer – Second Generation
   Green Cloverworm
   Potato Leafhopper
   Soybean Aphid
LEAF DISEASES
   Corn
   Soybeans
NUTRIENT MANAGEMENT
   Farmer Workshops on Interpreting Soil and Manure Tests
EVENTS
   July 21, Aug 24, Sept 9, Nov 10, Greenhorn Grazing Program, NE Iowa
   July 22, SWCD Walking Tour of Conservation Practices, Calmar
   July 24 and Aug. 18, CSIA Preparation Session
   July 29, Crop Development and Pest Update Session near Saratoga
   Aug. 3-7, Weeds Week, 5 locations in Iowa
   Aug. 5, Hewitt Creek Farmer-led Watershed Improvement Project Bus Tour, Dyersville
   Aug. 5, Progressive Ag Safety Day, Dairy Center, Calmar
   Aug. 10-21, Farmland Leasing & Land Values Meetings, many locations in Northeast IA
   Aug. 11, TQA and PQA Plus Certification, Manchester
   Aug. 12, Farmer Workshops on Interpreting Soil and Manure Tests, 8 locations in northeast IA
Aug. 19, Crops Field Day at the ISU Northeast Research Farm, Nashua

CORN
Growing Degree Days (GDD), Growth & Development
Northeast IA is currently anywhere from 1170 to 1,300 GDD from May 1 to today depending on location, which is 1 to 2 days behind the long-term normal. Average GDD through July is 22 per day. April 15 planted corn is around V19 with tassels almost completely emerged and silks developing. May 1 planted corn is around V17 stage. We continue to have a new leaf developing about every 56 GDD, about every 2.5 days on average. To determine GDD for any given period of time, go to:

SOYBEANS
Growth and Development
Most soybean fields are at R1 stage (first open flower anywhere on the plant) to R2 stage (a flower open in one of the top 2 nodes of the main stem). Early planted soybeans are entering R3 stage (pod at least 3/16-inch long at one of the four uppermost nodes on the main stem with a fully developed leaf).

FORAGERS
Plan Now for Late Summer Seeding
August will be here soon, and best timing for late summer establishment of alfalfa or pasture is August. Early to mid-August for northern Iowa, mid- to late August for central Iowa and late August to early September for southern Iowa. Depending on the intended field in question, it might be time now to deal with perennial weed control, soil testing and possible lime and fertilizer application prior to preparing a seedbed, variety selection, etc. For more details, go to: http://www.extension.iastate.edu/CropNews/2010/0719barnhart.htm

INSECTS
Corn Rootworm
The first few beetles should start showing up anytime now. As corn reaches VT-R1 stage, we always scout to make sure that beetles are not excessively clipping silks. This is usually limited to later planted corn silking in August, but at times when we have had failures of corn rootworm control like with Bt-resistant corn rootworm, we have had silk clipping in some of those fields in July.

European Corn Borer – Second Generation
For those with corn fields with non-Bt European Corn Borer (ECB) hybrids, we are entering the typical window to scout for second generation ECB. It is a bit complex to describe, and is explained in detail at the following web site. This section of the web site explains scouting and thresholds: http://www.ent.iastate.edu/pest/cornborer/manage/tassel This section of the web site explains timing of the
As I said, it’s a bit complex, so if you have trouble with it, give me a call.

**Green Cloverworm**
In a few fields, I noticed higher than normal populations of Green cloverworm with up to 10% of plants infested, although these populations are still minor. It seems like a lot, but a normal stand (30-inch row width) has 8 to 10 plants per foot. 10% is only one Green cloverworm per foot. The following article discusses defoliation threshold levels along with insect ID, and mentions threshold is at least 5 per foot of row. [http://www.extension.iastate.edu/CropNews/2010/0712hodgson.htm](http://www.extension.iastate.edu/CropNews/2010/0712hodgson.htm) Or rather than trying to count insects, just use the defoliation threshold level of at least 20% (pictures of defoliation levels are included in the article). This 20% would include all defoliators including grasshoppers, Japanese beetles, other caterpillars, etc.

**Potato Leafhopper**
Continue scouting through August. Information on ID, thresholds and management is available at: [http://www.extension.iastate.edu/CropNews/2014/0602hodgson.htm](http://www.extension.iastate.edu/CropNews/2014/0602hodgson.htm)

**Soybean Aphid**
This insect continues to slowly increase in my field location near Decorah, now at 17% infestation but still only averaging 5 aphids/plant. This level is still on the low side compared to the last 5 to 6 years, and nothing to be concerned about at this time (see attachment). Similar numbers are being reported in southwest WI and southern MN. West central MN has a bit of a hot spot as indicated by their blog: [http://nw-minnesota-crops.blogspot.com/2015/07/its-time-to-keep-track-of-soybean-aphid.html](http://nw-minnesota-crops.blogspot.com/2015/07/its-time-to-keep-track-of-soybean-aphid.html) , however, this is a drier region that is also beginning to have some spider mite issues. Regardless, it is now time for all soybean growers to begin regular scouting of soybean aphid. The easiest and quickest scouting method to use is “Speed Scouting”. The Speed Scouting instruction sheet is available at: [http://www.ent.iastate.edu/dept/faculty/hodgson/files/ul/2009%20Speed%20Scouting%20blank%20form.pdf](http://www.ent.iastate.edu/dept/faculty/hodgson/files/ul/2009%20Speed%20Scouting%20blank%20form.pdf) When scouting, pull the individual plant out of the ground to view the underside of all leaves, as soybean aphids are starting to spread throughout the plant.

**LEAF DISEASES**

**Corn**
Eyespot is the most widespread of the main leaf diseases in northeast IA. Northern Corn Leaf Blight (NCLB) is now being found with more frequency in northeast IA. Gray leaf spot (GLS) is not common in northeast IA this season, and Common rust is quite minimal at this time. A few plants with Goss’s wilt has also been found in northeast IA, but of course a foliar fungicide is no help with this bacterial disease. Just take good notes to assist with future management on hybrid selection, crop rotation and residue management to counter this disease.

Scouting tips for fungicide applications:
1) Stage the crop: We can scout for disease anytime now matter what the crop stage. When the silks have emerged we are technically at R1 stage, however, in most fields silks emerge before tassel emergence is complete, and before the final leaves have fully developed. Let’s wait for complete tassel emergence before we begin foliar fungicide applications.
2) Scout for ANY disease presence found on the 3rd leaf below the ear leaf on up the plant on > 50% of the plants. NCLB and GLS are potentially more serious rapidly developing diseases, followed by Eyespot, and then Common Rust. However, Eyespot infestations are more widespread this season than most.

3) Is the field continuous corn with overwintering corn residue on the soil surface (reduce-till or no-till)? This adds risk for disease development.

4) Is the hybrid susceptible to the disease(s) in question being found on the leaves? If the hybrid is only moderately susceptible to the disease(s) in question, consider additional risk factors to make the decision; i.e. more risk with a disease history in the field, surface crop residue, and predicted weather conditions favorable for disease (while the right kind of weather is critical for development of a given disease, weather prediction for the span of a month or so is typically not all that accurate). NCLB and Eyespot prefer a cooler than normal summer, while GLS prefers warm and very humid conditions.

Soybeans
I still find more Bacterial Blight and remnants of contact burn herbicide than I do for Septoria brown spot. While Bacterial blight can reduce yield, a foliar fungicide is no help. Take notes and consider other management in the future. http://extension.agron.iastate.edu/soybean/diseases_bblight.html Septoria brown spot can also reduce yield, but it’s only a concern if the disease advances into the mid- to upper canopy this time of season. Here’s some brown spot photos, early stage at http://iasoybeans.mobi/publications/diseases/foliar/septoria_brown_spot.php and more severe at http://msue.anr.msu.edu/news/more_septoria_brown_spot_in_soybeans_in_some_areas. Its normal to find brown spot in the lower canopy. Don’t confuse this with contact herbicide burn (mostly from the Diphenylether herbicide family of products including Cobra, Phoenix, Flexstar, Reflex, Blazer…). Here’s a few photos of the chemical burn: Mild injury at http://www.omafra.gov.on.ca/english/crops/facts/herbinjury_gallery/soybean_diphenylether.htm and more severe injury at http://fyi.uwex.edu/weedsci/1840-2/. Depending on what you find, R3 stage is good timing for a fungicide application for this disease.

NUTRIENT MANAGEMENT
Farmer Workshops on Interpreting Soil and Manure Tests
ISU Extension agronomists and dairy specialists are offering workshops to fine-tune soil nutrient management programs. “We will take a step-by-step approach on how to read a soil test and determine fertilizer needs,” said Brian Lang, agronomist with ISU Extension. “We’ll interpret manure tests to determine how much of the crop nutrient needs can be met with manure applications. This knowledge will optimize on-farm resources, and likely reduce commercial fertilizer costs while increasing producer income.” It’s a 2-hour workshop that starts promptly at 10:00 AM, with the first hour-plus on step-by-step instructions working through soil and manure tests, and the remaining time mostly for questions and answers. Participants may bring along recent soil and manure tests from their farm operations for interpretation. There are nine workshop dates and locations available in August. The program is free, but seating is limited so please call ahead to make your reservation. For more information or to make reservations, contact the local Extension County office or visit www.extension.iastate.edu/content/county-offices
• Thur., Aug. 13 – Fayette Co. Extension office, Fayette, 563-425-3331
• Tues., Aug. 18 – Allamakee Co. Extension office, Waukon, 563-568-6345
• Wed., Aug. 19 – Sac Co. Extension office, Sac City, 712-737-4230
• Thur., Aug. 20 – Howard Co. Extension office, Cresco, 563-547-3001
• Thur., Aug. 20 – Sioux Co. at NW Iowa Comm. College, Campus Bldg. A, Rm 119, Sheldon, 712-737-4230
• Tues., Aug. 25 – Delaware Co. Extension office, Manchester, 563-927-4201
• Wed., Aug. 26 – Dubuque Co. Extension office, Dubuque, 563-583-6496
• Thur., Aug. 27 – Clayton Co. Extension office, Elkader, 563-245-1451

EVENTS
July 21, Aug 24, Sept 9, Nov 10, Greenhorn Grazing Program, Northeast Iowa
A program designed for livestock producers with an interest in beginning or transitioning grazing practices. Offered as a 5-part series with both classroom and hands-on field activities. Each date’s workshop will be held at different locations within Clayton, Delaware and Dubuque county, but is open to all producers in northeast Iowa. For a list of the activities by date, see the news release at: http://www.iowabeefcenter.org/news/GreenhornGrazingNE2015.html Registration is $75 per person for all 5 sessions in the series, and includes a resource notebook and lunches. For more information on specific locations or details contact Schwab by phone at 319-721-9624 or email at dschwab@iastate.edu To register, contact the Delaware County Extension Office at 563-927-4201.

July 22, SWCD Walking Tour of Conservation Practices, Calmar
9:00 to Noon with lunch included. Program starts at the Wilder Business Center. Over the past several years, NICC and the Northeast Iowa Dairy Foundation have installed a variety of conservation practices including bioswale, conservation plantings, shelterbelts, native trees, butterfly garden, storm water wetlands, grassed waterways, sediment basin, cover crops, infiltration trench, enhanced rain garden, permeable pavers and sediment basin. Field activities include touring these sites, a rainfall simulator trailer demonstration, and a Hagie Cover Crop Interseeder demonstration. Registration is required if stay for lunch. Any questions, contact Michelle Elliott or Corey Meyer at 563-382-4352 ext. 3 no later than July 15.

July 24, and Aug. 18, CSIA Preparation Session
1:00 to 5:00 pm, July 24 at Fayette Co. Extension Office, Fayette. Aug. 18 at Delaware Co. Extension Office, Manchester. http://www.iowapork.org/common-swine-industry-audit-training-sessions-offered/

July 29, Crop Development and Pest Update Session near Saratoga
9:30 to 11:30 AM. In association with the Howard County Experimental Farm, Riceville FFA and Howard County NRCS, there will be a 2-hour session on corn and soybean crop growth and development and a discussion on current insects and diseases from Brian Lang, ISU Extension Agronomist, plus an update on the local weather station from the NRCS. The Howard County
Experimental Farm is on Hwy 9, just 3.5 miles west of Davis Corners (Jct. of Hwy 63 & Hwy 9), or 1.5 miles east of Saratoga.

Aug. 3-7, Weeds Week, 5 locations in Iowa
The primary goal of Weeds Week is to increase knowledge and understanding of herbicide resistance and develop a hands-on, practical approach to developing a long-term weed management plan that works. We will walk through the most common weeds in Iowa, their known resistances, how to interpret effective rates of active ingredients for pre-mixes, designing resilient herbicide programs, and look at non-chemical control options. Each location will also have herbicide mode of action plots to walk through and discuss. The session is 2.5 hours long, is broken down into sessions for farmers and sessions for ag retailers, and will provide 2.5 hours of pest management credits for CCA’s. Registration is $25 (includes materials and lunch) and is open until 4 days prior to the start of each session. Additional information and on-line registration can be found at http://www.aep.iastate.edu/weeds/

Times & Locations:
Morning session for farmers - check-in at 9:00 am, program 9:30 - noon followed by lunch
Afternoon session for agribusiness - check-in at noon with lunch, program follows from 1:00 - 3:30 pm
Aug 3 - Southeast Research and Demonstration Farm, Crawfordsville, IA.
Aug 4 - Armstrong Memorial Research and Demonstration Farm, Lewis, IA.
Aug 5 - Northeast Research and Demonstration Farm, Nashua, IA.
Aug 6 - Northwest Research and Demonstration Farm, Sutherland, IA.
Aug 7 - Field Extension Education Lab, Boone, IA.

Aug 5, Hewitt Creek Farmer-led Watershed Improvement Project Bus Tour, Dyersville
1:00 to 5:00 pm starting at the Jeff Pape Farm, 31406 Floyd Rd, Dyersville. The tour is for community and agriculture leaders, policymakers and people involved in Iowa's water quality improvement efforts. This voluntary, farmer-led effort started in 2005 and serves as a model for the Midwest. It uses an incentive structure and performance measures to help farmers target practices and management strategies that have lowered nutrient concentrations in the Hewitt-Hickory Creek. The tour agenda: At 1:00 pm board the air-conditioned tour bus and travel through the watershed viewing some of the practices installed during the 10 years of the project. Stop 1 is near stream monitoring site and will discuss challenges and accomplishments of the farmer-led approach. Stop 2 is at one of the watershed's denitrifying bioreactors. Next the bus travels through the livestock dense watershed to view several large scale projects. Stop 3 is at one of the many cattle feedlots in the watershed to hear about producer changes in nutrient management. Then return to the Pape farm for a light lunch and a short Q & A opportunity. For more information and to RSVP a seat on the bus contact Chad Ingels, 563-425-3233, ingels@iastate.edu https://hewittcreek.wordpress.com/

Aug. 5, Progressive Ag Safety Day, Dairy Center, Calmar
9:30 AM to 2:30 PM, ages 4 to 12 covering safety topics with animals, ATVs. Electrical, fire, first aid, lawnmower, machinery, and sun. Cost is $5, includes lunch, ice cream, T-shirt and goody bag. Pre-registration required, contact Gloria Reiter, 888-844-6322 or 563-557-0354 or reiterg@nicc.edu
Aug. 10-21, Farmland Leasing & Land Values Meetings, many locations in Northeast IA
Times vary by location, 2.5 hour meeting covering updates on land value and rental rate surveys, types of farmland lease arrangements, determining fixed and flexible cash rents, landlord-tenant communication, terminating a farm lease and other resources including a comprehensive workbook. Pre-registration $20, $25 for walk-ins. Pre-register by calling the phone number listed for the location. Meetings in addition to those listed below are at: http://www.extension.iastate.edu/agdm/info/meetings.html

Aug. 10, starts 9:00 AM, Fayette Co. Extension office, 218 S. Main St., Fayette. 563-425-3331.


Aug. 11, starts 9:00 AM, Osage, VFW, 3693 Hwy 218, 641-732-5574.


Aug. 12, starts 1:30 PM, Allison, Butler Co. Extension office, 320 N. Main St., 319-267-2707

Aug. 12, starts 1:30 PM, Cresco, Howard Co. Extension office, 132 1st Ave. W., 563-547-3001.

Aug. 12, starts 6:30 PM, New Hampton, Chickasaw Co. Extension office, 104 E. Main St., 641-394-2174.

Aug. 13, starts 9:00 AM, Calmar, Dairy Center, 1527 Hwy 150 S., Rm 115, 563-382-2949.

Aug. 17, starts 9:00 AM, Charles City, Floyd Co. Extension office, 112 N. Main St., 641-228-1453.


Aug. 20, starts 6:30 PM, Elkader, Freedom Bank, 210 S. Main St., 563-245-1451.

Aug. 21, starts 9:00 PM, Dyersville, Kennedy Library, 320 1st Ave., E., 563-583-6496.

Aug. 11, TQA and PQA Plus Certification, Manchester
12:30 to 3:00 pm for TQA
3:15 to 6:00 pm for PQA Plus
The Iowa Pork Producers Association, ISUEO & IPIC are teaming up to offer PQA Plus certification at no charge. To pre-register or for more information, contact IPPA at (515) 225-7675 or e-mail dricheson@iowapork.org

Aug. 12-27, Farmer Workshops on Interpreting Soil and Manure Tests
ISU Extension agronomists and dairy specialists are offering workshops to fine-tune soil nutrient management programs. “We will take a step-by-step approach on how to read a soil test and determine fertilizer needs,” said Brian Lang, agronomist with ISU Extension. “We’ll interpret manure tests to determine how much of the crop nutrient needs can be met with manure applications. This knowledge will optimize on-farm resources, and likely reduce commercial fertilizer costs while increasing producer income.” It’s a 2-hour workshop that starts promptly at 10:00 AM, with the first hour-plus on step-by-step instructions working through soil and manure tests, and the remaining time mostly for questions and answers. Participants may bring along recent soil and manure tests from their farm operations for interpretation. There are nine workshop dates and locations available in August. The program is free, but seating is limited so please call ahead to make your reservation. For more information or to make reservations,
Aug. 19, Crops Field Day at the ISU Northeast Research Farm, Nashua
1:00 to 4:15 PM, begins with Chad Hart, ISU Extension Grain Market Specialist, discussing grain market trends and providing a market forecast; followed by Ram Shrestha, ISU Entomologist, to cover the latest research on corn rootworm resistance; then Mahdi Al-Kaisi, ISU Extension Soil Management Specialist, will address soil health issues in crop production; and Mark Licht, ISU Agronomist, will discuss corn and soybean growth and development along with other crop production issues. The field day is free and open to the public. It starts at the Borlaug Learning Center Headquarters on the ISU Northeast Research and Demonstration Farm. Directions: From Nashua at the Jct. of Hwy 218 (Exit 220) and Co. Rd. B60, go west on B60 1.1 miles to Windfall Ave., then south 1 mile to 290th St., then east 0.2 miles to the farm. CCA credits are available (1 SW, 1 PM, 1CM, 1 PD). For more information about the event, call Brian Lang at 563-387-7058.

Iowa State University Extension and Outreach programs are available to all without regard to race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Compliance, 3280 Beardshear Hall, (515) 294-7612. Cooperative Extension Service, Iowa State University of Science and Technology, and the United States Department of Agriculture cooperating.

Brian Lang
Iowa State University Extension
Agronomist
325 Washington St., Suite B
Decorah, IA 52101
Office 563-382-2949
Fax 563-382-2940
Cell 563-387-7058
www.agronext.iastate.edu/