

IOWA STATE UNIVERSITY

Extension and Outreach

CROP NOTES for May 21, 2020

Iowa State University Extension Information for Northeast Iowa

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Past issues of Crop Notes are posted at:

<http://www.extension.iastate.edu/winneshiek/page/crop-notes-brian-lang>

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Contents

WEATHER	2
Soil Temperatures for Warm-Season Annuals.....	2
CORN EMERGENCE	2
Scouting.....	2
Stage Corn from Your Computer	2
ALFALFA.....	2
Timing First Crop Harvest of Alfalfa with PEAQ.....	2
INSECTS	3
Iowa Moth Trapping Network Update on True Armyworm & Black Cutworm	3
Insect Pest Crop Scout Calendar	3
Common Stalk Borer Egg Laying Window.....	4
Alfalfa Weevil	4
Bean Leaf Beetle (BLB)	4
Trapping Network for Corn Rootworm – Free Traps for Cooperating.....	5
DISEASE	6
Fusarium Head Blight (FHB) in Wheat	6
COVID-19.....	6
Farmers – Coronavirus Food Assistance Program.....	6
Livestock Farmers – RCC & Emergency Mortality Issues	6
UPCOMING EVENTS	7
June 10, Four-State Dairy Nutrition and Management Conference, Virtual	7

WEATHER

Soil Temperatures for Warm-Season Annuals

Still too cool to plant warm-season annual forages like sorghum-sudangrass, millet and teff. Maybe with the current warmer weather by the end of the week we will be close to an average 4-inch soil temperature of 65°F.

<http://extension.agron.iastate.edu/NPKnowledge/soiltemphistory.html> However, the typical planting window for warm-season summer annuals is usually the last week in May.

CORN EMERGENCE

Scouting

Many corn and soybean fields have emerged. This is an excellent time to do some scouting. Did you get your intended plant population, seed depth placement, inter-row plant spacing, or why not? Take notes for adjustments for next spring if needed. If everything looks normal, it's a quick scout. Look for 'not normal' such as gaps, uneven emergence, lower plant population than intended, and investigate further. It could be equipment issues, seed depth placement, erratic weather and uneven soil moisture, but are there any insect pests (above and below ground) or seedling disease problems at these locations? Always do some digging to inspect below ground. The following article runs through the grocery list of things to look for with this first scouting:

<https://crops.extension.iastate.edu/cropnews/2019/05/evaluating-corn-stands>

Stage Corn from Your Computer

Corn takes about 90-120 GDD from planting to emergence, and soybeans about 110-140 GDD. You can get an estimate of GDD relative to your planting dates by going to the Iowa Mesonet at: <https://mesonet.agron.iastate.edu/GIS/apps/coop/gplot.phtml?var=gdd50&year=2020> Select your parameters of GDD base 50 and your planting date. Click on "Make Plot", and you will get GDD for various locations in Iowa. However ignore the Decorah weather site on this web page. The equipment is running high and needs maintenance. From this website, accumulated GDD from May 1 to today is about 130, so corn and soybeans planted May 1 should have emerged. If not, do some scouting to check on seedling health. Emerged corn will now develop a new leaf stage every 84 GDD. Example: April 20 planted corn near Oelwein shows 212 GDD from the Iowa Mesonet website. Subtract about 110 DD to account for planting to emergence (212-110 = 102 GDD), and it takes ~84 GDD per leaf stage, so this field should just beyond V1 stage corn.

ALFALFA

Timing First Crop Harvest of Alfalfa with PEAQ

Timing first crop alfalfa harvest by calendar date does not work well. Spring climates vary from year to year, and fields managed differently also affects spring regrowth. Different varieties, age of stand, fertility, last season's cutting schedules, fall harvest or not, can all influence the rate of regrowth in spring. This spring we had both a cooler spring and a significant frost on May 9, each of which potentially setting back first crop harvest about a week.

PEAQ can help time first crop harvest. PEAQ stands for predictive equation for alfalfa quality, and is a quick and easy method to assess when individual alfalfa fields are ready for harvest based on a forage quality estimate. All you need is a yard stick and Table 1 in ISU Extension publication CROP 3141, which is available from your county ISU Extension office or download at: <https://store.extension.iastate.edu/Product/15234>

PEAQ provides a RFV estimate for the standing crop. It is critical that you subtract from your standing crop RFV reading in Table 1 by either 15 RFV units for a haylage harvest or 25 RFV units for a hay harvest to account for anticipated forage quality harvest losses. So if you are targeting alfalfa haylage for 150 RFV, you would harvest when Table 1 for PEAQ reads 165 RFV (bud stage alfalfa, stem height 27-28 inches). Typical alfalfa quality targets for cattle are 150 RFV for 1st trimester dairy and calves, 135 RFV for stocker cattle, and 120 RFV for lactating beef cattle. And, of course, take into account the weather forecasts. Don't wait for a little more stem growth if it's going to put you into a rain delay.

This spring ISU Extension staff around the state will be providing some PEAQ readings from alfalfa fields and posting them on a website at: <https://www.extension.iastate.edu/dairyteam/peaq> . You will be able to track these postings over time, but we strongly encourage that you take PEAQ readings from your own alfalfa fields for best assessment of harvest time. A few current readings from this website include: Bremer county field checked on May 19 with a 224 RFV; Sioux county field checked on May 19 with a 224 RFV; and Winneshiek county field checked on May 20 with a 237 RFV.

INSECTS

Iowa Moth Trapping Network Update on True Armyworm & Black Cutworm

The May 20 update on moth trapping is available at: <https://crops.extension.iastate.edu/blog/ashley-dean/iowa-moth-trapping-network-update-week-7> *True Armyworm*. Moth trapping continues to be light in the north half of Iowa but have now picked up in the south half of Iowa.

Black Cutworm. Moth trapping resulted in a prediction of May 25 to begin scouting for Black cutworm larva feeding on emerged corn in northeast Iowa. Overall, trapping continues to be light in the north half of Iowa, but as we scout corn emergence, population, weed control, etc., we can also give some attention to any insect feeding. Tips on scouting, identification and thresholds for treatment is available at: <https://crops.extension.iastate.edu/cropnews/2020/05/2020-scouting-recommendations-black-cutworm>

Insect Pest Crop Scout Calendar

I sent this on Crop Notes back on April 3, 2020. Just sending it again as it is time to zero in on more insect pest scouting.

<https://www.extension.iastate.edu/winneshiek/sites/www.extension.iastate.edu/files/winneshiek/CropNotes/Crop%20scout%20insect%20pest%20calendar%20%26%20degree%20days.pdf>

Also sent back in April was this list of useful crop scouting resources and equipment.

<https://www.extension.iastate.edu/winneshiek/sites/www.extension.iastate.edu/files/winneshiek/CropNotes/Crop%20scout%20resources%20and%20equipment%20list.pdf>

Common Stalk Borer Egg Laying Window

For those that lose corn plants in the first few rows along grassy field borders or grass-back terraces, you may have a problem with Common Stalk Borer.



There are 3 basic options for controlling this pest.

Option 1 was to use a controlled burn in late March-early April of the grass field border of the corn field to kill the eggs. The over-wintering stalk borer eggs are on the dead grass residue bordering corn fields.

Option 2 is to apply an insecticide over the grass field border during the egg hatch window. This window runs about 575 to 750 degree days (base 41 from Jan. 1). Current degree days (DD) for regions along Hwy 9 and Hwy 20 are 550 DD and 600 DD, respectively. Current predictions to 600 DD for regions along Hwy 9 is May 23.

Option 3 is to wait for larval migration from the grass field border to the first few rows of corn, and apply an insecticide over the grass field border and first few rows of corn. This is timed at 1,300-1,700 DD, which is usually around mid-June.

Also, some Bt corn controls or suppresses stalk borer and some do not. Check the “Handy Bt Trait Table” for those products: https://agrilife.org/lubbock/files/2020/02/BtTraitTable_FEB_2020.pdf

Alfalfa Weevil

I still have not seen any alfalfa weevil yet, and have no reports at this time from anyone else in northeast Iowa. Greater risks would be on south-facing slopes and proximity to woodlands. The quickest and easiest way to initially scout for Alfalfa Weevil is to use a sweep net just to survey a field. If there are some alfalfa weevil in the net, then refer to the scouting procedure and threshold information in this May 6, 2020 article

<https://crops.extension.iastate.edu/cropnews/2020/05/alfalfa-weevils-active-throughout-iowa> If the pest reached economic injury levels, and the field is within a week from harvest, the recommendation is to not treat, but just harvest the field a few days earlier.

Bean Leaf Beetle (BLB)

While we have not seen much of any early season BLB activity in northeast Iowa for many years, the mild winter would have improved survivability of this overwintering pest. So as you scout emerged fields for plant population, uniformity of stand, etc., also pay attention to any feeding on cotyledons and initial leaf development. BLB often scatter and hide when disturbed. So you may have to just go by degree of defoliation of young plants ($\geq 40\%$), rather than beetle

numbers per plant (VC stage - 3/plant; V1 stage – 5/plant). The beetles can be different colors and with or without spots, but the defining feature is that they all have a black triangle at the front of the abdomen.



Figure 1. Bean leaf beetle.



Figure 2. VC stage soybean seedlings with 30% defoliation.

Trapping Network for Corn Rootworm – Free Traps for Cooperating

ISU Extension is starting up a new trapping network for corn rootworm. If you are interested in volunteering to set up and monitor traps for corn rootworm or would like additional information, send an email to bugtraps@iastate.edu by June 15, 2020. Please include your contact information and mailing address in the email. As part of the Iowa corn rootworm monitoring network, ISU will provide enough traps for each cooperators to monitor one transect (4 traps) for 4 weeks. Traps and a protocol will be mailed to you in late June. Trapping would likely begin during the third week of July (depending on degree days for the season).

<https://crops.extension.iastate.edu/blog/ashley-dean-erin-hodgson/new-trapping-network-corn-rootworm>

DISEASE

Fusarium Head Blight (FHB) in Wheat

Minimal rainfall events in northeast Iowa reduces the risk of any serious occurrence of FHB in wheat, commonly called scab. But as the crop gets closer to flowering, its time to prepare for the option to use a foliar fungicide application at Feekes 10.5.1 growth stage. Scout fields as wheat enters this critical period for FHB. If considering a fungicide, suggested products include Prosaro, Caramba, Miravis Ace, and Proline. Replicated research indicates all of the suggested products are most effective on FHB when applied between Feekes 10.5.1 through 5 days after 10.5.1.

For an picture of Feekes 10.5.1, check the Purdue University publication on page 5: <https://www.extension.purdue.edu/extmedia/ID/ID-422.pdf>

For more information on FHB, go to:

<https://cropprotectionnetwork.org/resources/articles/diseases/fusarium-head-blight-of-wheat>

COVID-19

Farmers – Coronavirus Food Assistance Program <https://www.farmers.gov/cfap>

Signup begins on May 26 through your local FSA (USDA Farm Service Agency). While offices are open by phone appointment only, FSA will be working with agricultural producers by phone and using email and online tools to process applications. While the application process has not started, you can start gathering and understanding your farm's recent sales and inventory. Your local FSA staff will work with you to apply for the program, and through forms that will ask for the following information:

- Name and address
- Personal information, including your Tax Identification Number
- Farm operating structure
- Adjusted Gross Income compliance certification to ensure eligibility
- Direct deposit to enable payment processing

Please do not send any personal information to USDA without first initiating contact through a phone call. You can find contact information for your local USDA Service Center at <https://offices.sc.egov.usda.gov/locator/app?service=page/CountyMap&state=IA&stateName=Iowa&stateCode=19>

Livestock Farmers – RCC & Emergency Mortality Issues

Resource Coordination Center

The RCC connects producers with industry experts, state agencies and technical specialists to explore every option to harvest livestock. Iowa livestock producers can call the RCC at (515) 725-1005, Monday through Friday between 8 AM - 4:30 PM, or fill out a help form anytime at: <https://data.iowaagriculture.gov/rcc/>

Emergency Livestock Mortality

USDA NRCS financial and technical assistance to livestock producers for animal mortality disposal resulting from impacts of the COVID-19 pandemic. To receive assistance, producers

must have both an application and an approved early start waiver filed at the local NRCS office **prior** to disposal of animal carcasses. Details at: https://www.bah.state.mn.us/media/EQIP-Livestock-Mortality-Initiative-fact-sheet-4_2020.pdf

UPCOMING EVENTS

June 10, Four-State Dairy Nutrition and Management Conference, Virtual

This conference presents the latest research on issues concerning the dairy industry including feed efficiency, calves and transition cows. Participate live on the virtual conference.

Registration fee: \$75 before June 1, \$100 after June 1. Live presentations and Q&A sessions will be recorded and available to participants for 60 days after the conference. Registered participants will be emailed where to receive links to the conference recordings and PDF materials. Program details are at: <http://fourstatedairy.org/> or contact Jim Salfer at salfe001@umn.edu , or 320-203-6093.

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