IOWA STATE UNIVERSITY
Extension and Outreach

CROP NOTES for May 9, 2016
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
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CLIMATE

4-inch Soil Temperature for Summer Forages

Those with plans to utilize warm-season forages (*i.e.* Sorghum-sudan, Millet, Teff), it's best not to plant these until soil temperatures will no longer drop below 65F. On average the general occurrence for this is about June 1 give or take a week.

CORN

GDD from April 15

GDD from April 15 to today is averaging about 195 for northeast Iowa. Here's a corn GDD web link for Iowa from which you can enter your planting date http://mesonet.agron.iastate.edu/GIS/apps/coop/gsplot.phtml?network=IACLIMATE&var=gdd50&year=2016&smonth=4&sday=15&emonth=5&eday=9 Typically corn requires 90 to 120 GDD from planting to emergence. Corn planted April 15 is up, and it's time to start scouting.

Scouting Emerged Corn

As we scout corn stands for early season weed control, seedling and foliar disease, soil and above ground insects, and intended stand population and uniformity, we always keep an eye out for what is 'not normal'. Lack of stand uniformity may be from planter operation, disease, insects, or other. So scout in general for 'not normal', *i.e.* gaps in the stand, uniform emergence or plant height, disease lesions on leaves, holes in leaves, cut plants, etc. If 'not normal' is found, then investigate further to define the problem in order to correct it. Dig plants to determine planting depth, root health, feeding from insects, etc. Here's a list of basic items to consider/investigate when field patterns &/or symptoms on seedlings are 'not normal':

- soil conditions
- seed depth and spacing, plant population, uniformity of emergence
- disease symptoms
- herbicide injury
- insect damage
- fertilizer burn
- recent weather trends (*i.e.* extreme temperature swings or extended wet or dry conditions)

The ISU Field Guide for Corn can be quite helpful with this. https://store.extension.iastate.edu/Product/Corn-Field-Guide-2nd-Edition There is also an ISU Field Guide for Soybeans. https://store.extension.iastate.edu/Product/Soybean-Field-Guide-2nd-Edition If you don't have a Field Guide or Seed Company guide, you can find corn stand evaluation information at http://www.agronext.iastate.edu/corn/production/management/planting/replanting.html Also, the University of Wisconsin has free pdf scouting guide with scouting pest calendars, tips and photos for corn, soybeans and alfalfa, plus nutrient deficiency and herbicide injury photos. It's a large file (15 MB): http://ipcm.wisc.edu/download/pubsPM/UW-IPM-ScoutingManual-web.pdf

ALFALFA

Making First Cut Decisions Using PEAQ

Alfalfa growth and development is running a little ahead of normal. Calendar date is not a good decision tool to best determine when to harvest the first crop of alfalfa due to climatic variations impacting alfalfa growth and development. The PEAQ method (Predictive Equations for Alfalfa Quality) developed by the University of Wisconsin takes climate variations into account to roughly estimate relative feed value (RFV) of standing alfalfa in the field to estimate the best time to harvest the first cutting. ISU Extension is monitoring some alfalfa fields across Iowa using PEAQ, and posting these readings at http://www.extension.iastate.edu/dairyteam/peaq/ You are welcome to follow the progress of

these reports, but I strongly encourage you to use PEAQ in your own fields to best estimate first crop harvest to help target the quality of forage you wish to achieve. The PEAQ website includes a fact sheet that explains the method. A critical step with the PEAQ method is to understand that the reading from the field represents standing crop quality. You need to adjust this reading to account for harvest losses. Harvest losses equal about 15 RFV units for haylage, and about 25 RFV units for hay. Therefore, if you wanted to target 150 RFV alfalfa, it is recommended to harvest haylage when PEAQ measurements predict about 165 RFV for the standing alfalfa in the field; or to harvest hay when PEAQ measurements predict about 175 RFV for the standing alfalfa in the field.

INSECTS

Alfalfa Weevil

Degree days indicate that if weevils are present they are active now. Reaching treatable levels in NE IA is somewhat rare, but can only be determined by scouting. Initial scouting can be accomplished with a sweep net to simply ID if there are any larva present. If so, then collect 30 stems at random and determine an average number of weevil larva per stem. Look closely at the top folded leaves on these stems as this is a favorable place to find very small larva. A threshold chart and larva photo is available at: http://www.extension.iastate.edu/CropNews/2015/0414Hodgson2.htm In a nutshell, it takes about 2 larvae per stem average to be at a treatable level.

Black Cutworm

BCW pheromone traps across Iowa have indicated some significant flights into Iowa. We take the dates of these flights and extrapolate based on degree days to predict when to start scouting for possible cutting damage. Current predictions for northeast Iowa are to start scouting around May 22. The recent ICM article provides the scouting date map, scouting information and thresholds to reach before considering any treatments: http://crops.extension.iastate.edu/cropnews/2016/05/black-cutworm-scouting-advisory-2016

Common Stalk Borer Control in Corn – Egg Hatch

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 options remaining this season for controlling this pest.

1) Some Bt corn controls or suppresses stalk borer, and some do not. Check the " Handy Bt Trait Table" for those products: http://msuent.com/assets/pdf/28BtTraitTable2016.pdf

2) You could wait for **egg hatch** and then treat those grassy areas with an insecticide. Egg hatch starts ~575 DD (base 41, starting Jan. 1). We are currently ranging about 500 to 650 DD across

northeast Iowa http://mesonet.agron.iastate.edu/cgi-bin/oa-gdd.py?year1=2016&month1=1&day1=1&year2=2016&month2=5&day2=9&base=41&max=86 and increasing on average about 18 DD per day.
3) You could wait for **larval migration** from the grass to the corn at which to apply insecticide on the grass field border and the first few rows of corn. This begins around 1,300 DD base 41, Jan. 1. We will track degree days and let you know when we approach this window. It often occurs around mid-June.

Hop Vine Borer – Control at Corn Emergence
There are a few fields, or rather spots within fields, in northeast Iowa that have a known history of Hop Vine Borer problems. This insect tends to stay in the same areas of a field year after year. If you have identified this as a pest in a part of a field in the past, the recommendation is to apply a pyrethroid insecticide at initial corn emergence (spike stage). For a photo of Hop Vine Borer larva, go to: http://www.ent.iastate.edu/imagegal/lepidoptera/hvborer/3936.79hopvineb.html In a field, the above ground plant injury looks like it is wilted (Photo 1) or dead plants since this insect tunnels up from below the soil line into the crown of the corn plant (Photo 2) and damages the main growing point.

Photo 1  Photo 2 

WEEDS
Early POST Application of Preemergence Soil Residual Corn Herbicides
With the rapid corn planting over the last week, and predicted 2-inches of rain over the next 3 days… not knowing when we can get back in the field, we might have some corn emerge before the opportunity to apply planned preemergence herbicides. Most soil residual herbicides can be applied after corn has emerged, but products such as Balance Pro, Radius, Fierce, Prequel, Sharpen and Verdict must be applied before corn begins to emerge. While many soil residual herbicides are applied with UAN carrier preemergence, once corn is emerging, the UAN carrier is not recommended with most of these herbicides. Consult product labels for tankmix and spray additive recommendations. Products containing atrazine must be applied before corn exceeds 12-inches tall, although the labels of some atrazine-containing products specify a smaller height. Labels provide the maximum corn growth stage or height beyond which applications should not occur. This can range from as early as two leaf collars (i.e. Corvus and Balance Flex) to as late as 40-inch tall corn (Dual II Magnum), so be sure to consult the respective product labels. The following link provides a partial list of this, however, still refer to herbicide labels for tankmix and spray additive recommendations for these circumstances. http://bulletin.ipm.illinois.edu/?p=745 A great website for looking up product labels is: http://www.cdms.net/LabelsMsds/LMDefault.aspx?t= Just enter the herbicide Brand Name into the Search Box to find a label for that product.

FARM MANAGEMENT

Cash Rental Rate Survey, May 2016
The newest version of the cash rental rate survey is now available on Ag Decision Maker at: http://www.extension.iastate.edu/agdm/wholefarm/html/c2-10.html In general, the rents trended lower for the third consecutive year.

EVENTS
May 20 through Fall, Pasture-Walk Schedule for Southwest WI
http://www.extension.iastate.edu/dairyteam/sites/www.extension.iastate.edu/files/dairyteam/2016%20Great%20River%20Graziers%20Crawford%20County%20Pasture%20Walk%20Schedule.pdf

June 7-9, A.I. Training, Dairy Center, Calmar
Three day, intensive hands-on class for those who wish to artificially inseminate their own cattle or gain experience to work for others. Class offered in partnership with Accelerated Genetics. For more information, go to: https://nicc.augusoft.net/index.cfm?method=ClassInfo.ClassInformation&int_class_id=50583&int_category_id=0&int_sub_category_id=0&int_catalog_id=0&upid=10513646&ebid=11981069&ebslid=726640&eblid=165
June 15-16, Four-State Dairy Nutrition and Management Conference, Dubuque
This conference presents the latest research on issues concerning the dairy industry including feed efficiency, calves, and transition cows. For more information, go to: http://www.extension.umn.edu/agriculture/dairy/learning-opportunities/four-state-dairy-conference/index.html

June 17, Corn Silage Conference Webcast
8:15 AM to 4 PM. Free program for those that preregistered by Monday, June 13. The news release, brochure and registration form are at: http://www.iowabeefcenter.org/events/huskercornsilageconference2016.html

June 22-23, Farm Progress Hay & Forage Expo, Boone
Details are available at: http://hayexpo.com/

June 23, ISU Southeast Research Farm Spring Field Day
9:00 to Noon for a special program for Certified Crop Advisors.
1:00 PM start for the annual spring field day.
Details for both programs are available at:
http://www.extension.iastate.edu/Pages/eccrops/meetserc.html.

June 28, ISU Northeast Research Farm Field Day, Nashua
1:00 to 4:15 PM. The field day will emphasize soil and water quality. Speakers include Kristine Tidgren, Attorney from The Center for Ag Law and Taxation, who will give her insights on the latest legal issues on water quality. Rick Cruse, Professor of Agronomy, will share research information on the aspect of soil quality as it pertains to farming practices. Tom Kaspar, USDA-ARS, will provide the latest up to date information on cover crops for growers. Matt Helmers, Ag Engineer, will address accepted practices that improve soil and water quality and help reduce

nutrient losses from farm fields. The program is free and open to the public. CCA's can receive 4 SW credits for a fee.

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