

IOWA STATE UNIVERSITY

Extension and Outreach

CROP NOTES for April 27, 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

by Brian Lang, ISU Extension Agronomist

325 Washington St., Suite B, Decorah, IA 52101

563-382-2949

TABLE OF CONTENTS

CLIMATE

4-inch Soil Temperature

CORN

GDD from mid-April

POPULAR QUESTIONS

Corn and Soybean Planting – see April 18 Crops Notes

Anhydrous Ammonia – see April 18 Crop Notes

ALFALFA

Making First Cut Decisions Using PEAQ

Researching Multiple Product Inputs for High Yield Alfalfa

INSECTS

Alfalfa Weevil

Bean Leaf Beetle

Black Cutworm

Common Stalk Borer Control in Corn

Corn Flea Beetle – Stewart's Wilt

EVENTS

June 7-9, A.I. Training, Dairy Center, Calmar

June 15-16, Four-State Dairy Nutrition and Management Conference, Dubuque

June 17, Corn Silage Conference Webcast

June 22-23, Farm Progress Hay & Forage Expo, Boone

June 23, ISU Southeast Research Farm Spring Field Day

June 28, ISU Northeast Research Farm Field Day, Nashua

CLIMATE

4-inch Soil Temperature

Current soil temperatures are in the mid-50's. The next few days will be cool and wet. The 6-10 day outlook suggests normal temperatures with a 50% chance of drier than normal

conditions. Soil temperatures and the 6-10 day outlook forecast is posted at:
<http://extension.agron.iastate.edu/NPKnowledge/>

CORN

GDD from April 15

GDD from April 15 to today is averaging about 130, which is about 45 GDD above normal. Typically corn requires 90 to 120 GDD from planting to emergence. Corn planted April 15 should be spiking about now. Since GDD are calculated based on air temperatures and do not factor in soil temperatures, soil moisture conditions, planting depth, tillage systems, or residue cover, this range may vary. Here's a GDD map for the state from April 15 to today. <http://mesonet.agron.iastate.edu/GIS/apps/coop/gspot.phtml?network=IACLIMATE&var=gdd50&year=2016&smoth=4&sday=15&emonth=4&eday=27> .

POPULAR QUESTIONS

Corn and Soybean Planting – see April 18 Crops Notes at

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

Anhydrous Ammonia – see April 18 Crop Notes at

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ALFALFA

Making First Cut Decisions Using PEAQ

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.

Researching Multiple Product Inputs for High Yield Alfalfa

Results from an alfalfa research trial planted in 2012, and managed with multiple product inputs from 2013-2015 is now available at:

<http://farms.ag.iastate.edu/sites/default/files/BestManagement.pdf> Products included various

combinations of insecticide, fungicide, foliar fertilizer, Bioforge and two soil fertilizer levels (optimum and high). Click on the web link for the research summary.

INSECTS

Alfalfa Weevil

Northeast Iowa has now exceeded 250 DD accumulation (base 48F, starting Jan. 1), so alfalfa weevil egg hatch is underway. The DD map is available at: http://mesonet.agron.iastate.edu/data/summary/gdd48_jan1.png . The only question is are there enough weevil to treat for. 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 a treatable level.

Bean Leaf Beetle

Normally, with a very mild winter (improves BLB winter survival) and warm conditions in April, we could have potential issues Bean Leaf Beetle on early soybean development. However, the basically non-existent population of BLB last year doesn't provide for much of an increasing population threat by this spring. So the threat this spring in northeast Iowa should again be minor and not require an insecticide seed treatment for this pest.

Black Cutworm

BCW pheromone traps across Iowa have had only a few light catches so far. Once we get significant catches we will comment about scouting and thresholds. The University of Illinois has had some significant catches, and is predicting initial scouting for Black cutworm to start in northern IL around May 21.

Common Stalk Borer Control in Corn

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 400 to 530 DD across

northeast Iowa <http://mesonet.agron.iastate.edu/cgi-bin/oa-gdd.py?year1=2016&month1=1&day1=1&year2=2016&month2=4&day2=27&base=41&max=86> and increasing on average about 13 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.

Corn Flea Beetle – Stewart’s Wilt

This insect can survive in Iowa in mild winters and possible be a threat more so to seed corn production than field corn. The Stevens-Boewe Index predicts potential risk of Stewart's disease based on the sum of the mean temperatures for December, January and February. A sum below 80 indicates a negligible risk; 80 to 85 is considered a low risk; 85 to 90 indicates moderate risk; and greater than 90 is considered a severe risk. Even though this was a very mild winter, the Stevens-Boewe Index for northeast Iowa is only 72, so it is assumed that this pest is of negligible risk for 2016. For East Central and Southeast IA, the index is in the high 80’s, suggesting a moderate risk. For photos and a discussion about the beetle and how it can spread Stewart’s Wilt disease, go to the 2011 article at: <http://crops.extension.iastate.edu/cropnews/2011/04/2011-prediction-stewarts-disease-corn>

EVENTS

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&ebclid=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 AM start for a special program for Certified Crop Advisors.
1:00 PM start for the spring field day.

Details will be available in the future at:

<http://www.extension.iastate.edu/Pages/eccrops/meetserc.html>.

June 28, ISU Northeast Research Farm Field Day, Nashua

1:00 to 4:30 PM. The field day will emphasize soil and water quality. Speakers to include: Kristine Tidgren from The Center for Ag Law and Taxation to discuss the latest legal issues on water quality; Tom Kaspar, USDA-ARS, covers your questions about cover crops; Rick Cruse, Agronomist, shares research of various farm practices on soil quality; and Matt Helmers, Ag Engineer, discusses practices to aid in soil and water quality improvements while reducing nutrient losses from farm fields. The program is free and open to the public. CCA's can receive four SW credits for a fee.

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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/

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