



# WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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## Vegetable Crops

**Vegetable Crop Insect Scouting** - David Owens, Extension Entomologist;  
[owensd@udel.edu](mailto:owensd@udel.edu)

### Sweet Corn

Earworm catches in pheromone traps have decreased considerably but still indicate high populations for sweet corn. Please note, moth populations in silking sweet corn may be quite a bit higher than the trap data indicated here. We have completed vial testing for the season; the last batch of 20 treated moths resulted in about 45% survivorship. Trap counts from Thursday are as follows:

Trap Location	BLT - CEW	Pheromone CEW
	3 nights total catch	
Dover	4	32
Harrington	1	26
Milford	7	47
Rising Sun	4	48
Wyoming	3	63
Bridgeville	2	52
Concord	2	43
Georgetown	1	123
Greenwood	2	
Laurel	3	61
Seaford	1	23
Trap Pond	1	1
Lewes		37

**Weed Control Surveys for Lima Bean and Pumpkin** - Kurt M. Vollmer, Extension Weed Management Specialist, University of Maryland;  
[kvollmer@udel.edu](mailto:kvollmer@udel.edu)

Fall is approaching and both lima beans and pumpkins will be harvested soon. Weed control can be challenging in these two crops given the presence of herbicide-resistant weeds such as Palmer amaranth. We are currently evaluating new weed control tactics for lima bean and pumpkin but would like more information on practices used in the area. If you grow lima beans, pumpkins, or both please complete these short surveys.

### Lima Bean

<https://www.surveymonkey.com/r/LTCL56T>

### Pumpkin

<https://www.surveymonkey.com/r/VWQVJJ7>

## Agronomic Crops

**Agronomic Crop Insect Scouting** - David Owens, Extension Entomologist;  
[owensd@udel.edu](mailto:owensd@udel.edu)

### Soybeans

Corn earworm, stink bugs, and soybean loopers are the primary pests active in fields right now. Other insects present include green cloverworm, grasshoppers, and soybean aphids. Soybean aphids usually come in too late and in not enough numbers to cause any harm. Green cloverworm, grasshoppers, and soybean loopers

are members of the defoliator complex. Defoliation thresholds are about 15% in reproductive stage soybean until we hit R6 - seeds touching each other in the pods in the upper canopy. Once this is achieved, plants can lose up to 50% of their leaves without significant yield loss. Grasshoppers and cloverworms are best controlled with a pyrethroid, if going after grasshoppers, higher rates are recommended. Soybean loopers are not affected by pyrethroids. If large numbers of loopers are present, consider a worm specific product such as Prevathon, Intrepid, or Steward. Stink bug thresholds are 5 bugs per 15 sweeps until R6.5.

## General

**Irrigation Management: The Tricky Stages** -  
*James Adkins, Agricultural Engineer;*  
[adkins@udel.edu](mailto:adkins@udel.edu)

Corn harvest is underway for most of the early corn while the mid to late season fields are still teetering on the edge of black layer. Determining when to irrigate both corn and soybeans in late August into September is challenging at best. The predictive models shown below start to break down as senescence begins and the end date for the model stages approach. As a rule, moisture should be maintained at or above 50% available water through black layer for corn and until the leaves yellow in soybean. While the daily usage estimates shown below are close, farmers should be using a soil probe to manually check field status to determine when irrigation is needed. This NRCS guide [https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs144p2\\_051845.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_051845.pdf) will help you calibrate yourself when probing fields to determine soil moisture levels.

The information presented below is an example of the soil moisture status at University of Delaware's Warrington Irrigation Research Farm. Actual field values will vary greatly depending on crop stage, soil type and local rainfall. There are many tools available that provide field by field values to assist farmers in making irrigation

scheduling decisions including paid services through local crop consultants, irrigation equipment manufacturer's, Climate Corp, etc and free tools like KanSched and the Delaware Irrigation Management System (DIMS) <http://dims.deos.udel.edu/>

### Field Corn

Daily corn evapotranspiration (ET) rates for April 25<sup>th</sup> planted 114 day corn at R5.9 (90% starch line) averaged 0.09"/day for the past week. This field received 1.3" of rain in 3 events on 8-22 (0.36"), 8-23 (0.7") and 8-25 (0.07"). This field is predicted to be a black layer in 2-3 days, after which no further irrigation is needed. The plant will continue to use water after black layer however there is no data to suggest an improvement in yield or test weight from post black layer water use.

Later planted and longer season corn will continue to use approximately 0.1" per day in during the 2 week period prior to black layer. Predictive models tend to fall apart during late summer as crop stage variability, early senescence and reduced ET's make daily use prediction difficult. At this point soil moisture evaluations with a soil probe, shovel or sensor should be used to determine whether the final irrigations are necessary.

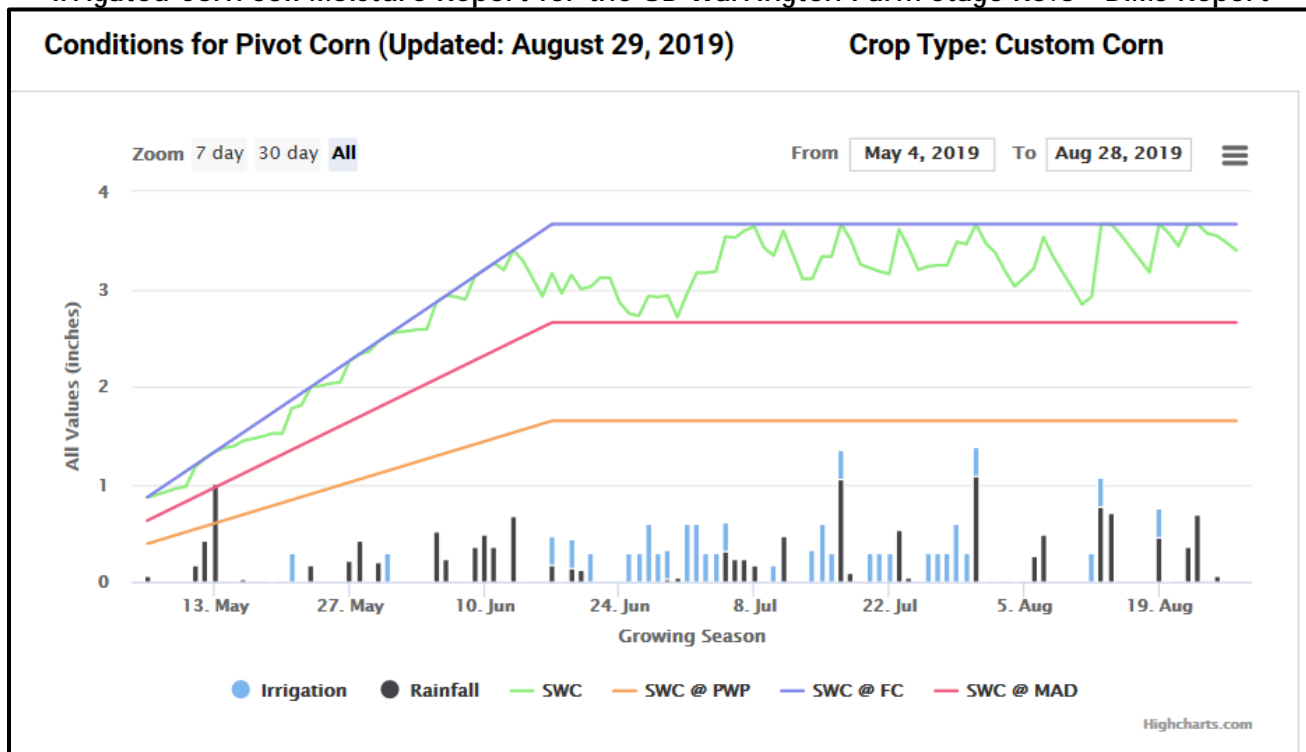
### Full Season Soybeans

May 2<sup>nd</sup> planted soybeans at the UD Warrington Irrigation Research Farm are into the R6 stage as of Aug 29<sup>nd</sup>. The average daily crop water use for the past week was 0.14" per day and the predicted daily ET for next week is roughly the same at 0.16" per day. Despite several rain events over the past week and a full soil profile last Friday, the beans will need irrigation on 8-30. Soil moisture sensors in the field are showing a similar water use and are calling for irrigation on the same day.

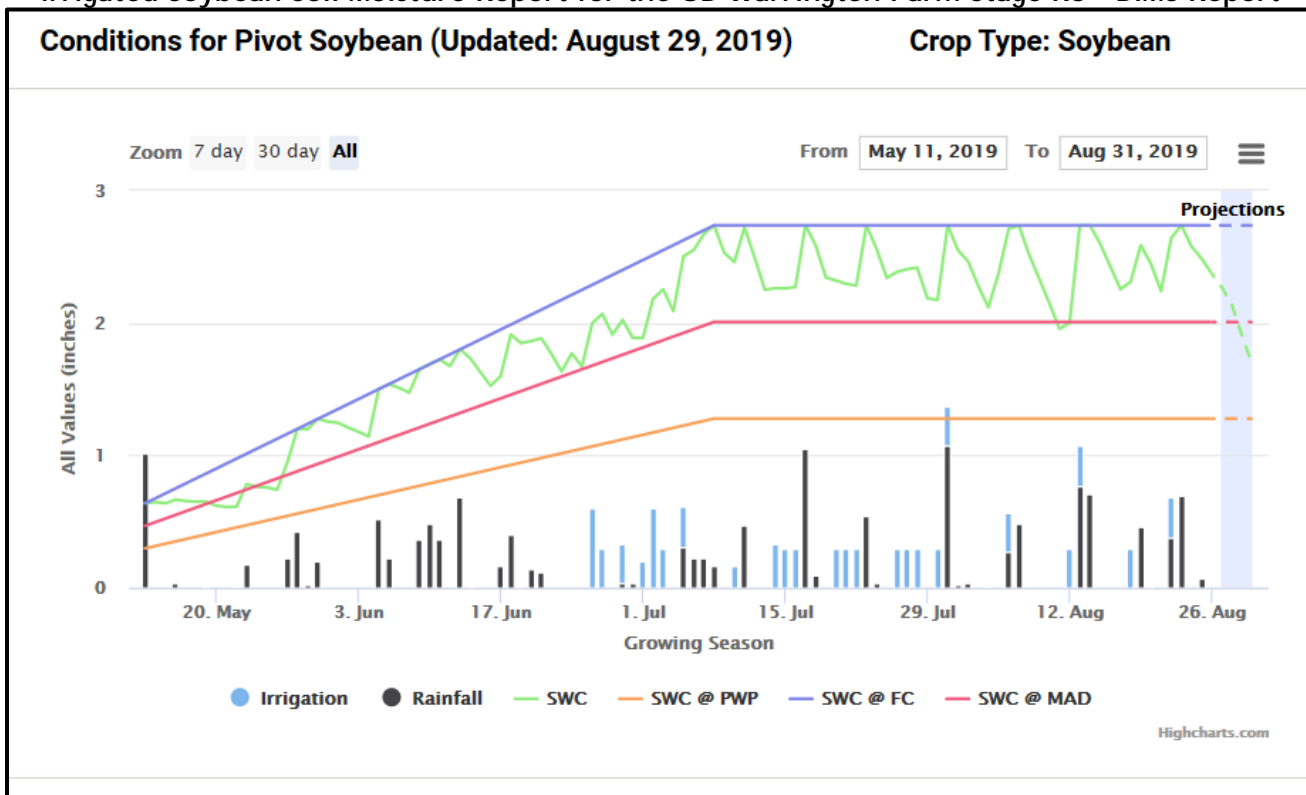
### Double Crop/Late Season Soybeans

At this point double crop soybeans have full canopied. Once full canopy is achieved, late soybeans will use the same amount of water as the full season beans above.

Irrigated Corn Soil Moisture Report for the UD Warrington Farm Stage R5.5 - DIMS Report



Irrigated Soybean Soil Moisture Report for the UD Warrington Farm Stage R5 - DIMS Report



**Fall Control of Perennial Weeds** - Mark VanGessel, *Extension Weed Specialist*; [mjv@udel.edu](mailto:mjv@udel.edu)

Fall is often a good time and the most convenient time to treat most perennial weeds because it is the time that plants are best able to translocate the herbicide to the roots where it will do the most good. When considering fall weed control the emphasis should be on what the patch of weeds will look like next spring or summer not the amount of dead stems this fall. Also, it is important to consider that a fall application will not eradicate a stand of perennial weeds; the fall application will reduce the stand size or the plant vigor, but applications in consecutive years are likely needed. Fall application of glyphosate is the most flexible treatment for most perennial weeds such as bermudagrass, Canada thistle, common milkweed, common pokeweed, yellow nutsege, horsenettle and johnsongrass. Rates of 1 to 1.25 lb acid per acre are consistently the most economical (or about 1.5X the normal use rate for annual weeds). Dicamba (Banvel) at 2 to 4 pints is also labeled for artichoke, bindweeds, dock, hemp dogbane, horsenettle, milkweeds, or pokeweed. Planting small grains must be delayed after dicamba application by 20 days per pint of dicamba applied. Fall herbicide applications should be made to actively growing plants. It is best to spray prior to mowing corn stalks and allow weeds to recover after harvest before application. Allow 10 to 14 days after treatment before disturbing the treated plants. If fall applications are delayed, remember weed species differ in their sensitivity to frost; some are easily killed by frost (i.e. horsenettle) others can withstand relatively heavy frosts. Check the weeds prior to application to be sure they are actively growing.

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**Guess the Pest! Week 20 Answer Beet**

**Armyworm** - David Owens, *Extension Entomologist*, [owensd@udel.edu](mailto:owensd@udel.edu)

This week's guess the pest challenge was Beet Armyworm. BAW is a pest of peppers, and some are currently trying to defoliate a would-be aphid trial of mine. Moths are also highly attracted to pigweeds to lay eggs, hence the

occasional find in weedy soybean fields and other vegetable fields. Larvae are not as choosy and can cause defoliation and rind feeding. BAW are resistant to pyrethroids. They can be distinguished from other worms by having 4 abdominal prolegs, no orange head (though sometimes earworms have greenish heads), and the presence of a black dot above the second pair of true legs behind the head.



P Coffey, University of Maryland



P Coffey, University of Maryland



**Guess the Pest! Week 21** - David Owens,  
Extension Entomologist, [owensd@udel.edu](mailto:owensd@udel.edu)

Test your pest management knowledge by clicking on the GUESS THE PEST logo and submitting your best guess. For the 2019 season, we will have an "end of season" raffle for a \$100.00 gift card. Each week, one lucky winner will also be selected for a prize and have their name entered not once but five times into the end of season raffle. A lucky winner will also receive a heavy duty sweep net.

Test your pest management knowledge by clicking on the GUESS THE PEST logo (<https://docs.google.com/forms/d/1oz5-yCm8xifZtDivZ-vPbd8a0GR-V6H9ddb9fhAyyzY>) and submitting your best guess. For the 2019 season, we will have an "end of season" raffle for a \$100.00 gift card. Each week, one lucky winner will also be selected for a prize and have their name entered not once but five times into the end of season raffle. A lucky winner will also receive a heavy duty sweep net.

While sweeping for cloverworms, loopers, grasshoppers, stink bugs, earworms, and bean leaf beetles, you see some healthy plants with a single dead trifoliolate. What is this a sign of?



To submit your answer, please go to:  
<https://docs.google.com/forms/d/e/1FAIpQLSfU>

[PYLZnTRsol46hXmggj8fvt5f8-J10eEUHb3QJaNDLG\\_4kg/viewform](https://docs.google.com/forms/d/e/1FAIpQLSfU)



## Announcements

### Upcoming MidAtlantic Women in Ag Events

#### Fall Farm Tour - September 4

Laurel Farmers Auction Market ▪ Covered Bridge Inn  
Historic Farmhouse and Wedding Venue ▪ Hopkins  
Farm Creamery ▪ Dogfish Head Brewery  
<https://www.extension.umd.edu/womeninag/farm-tours-0>

#### Wednesday Webinars

<https://www.extension.umd.edu/womeninag/webinars>

**Women in Ag Conference** – save the dates Feb 12 & 13, 2020

<https://www.extension.umd.edu/womeninag/annual-conference/2020-conference>

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### Cut Flowers 2: Advanced Annuals, Post-Harvest Handling & Season Extension

Saturday, September 28, 2019 1:00–4:00 p.m.

Masterpiece Flower Farm

7945 Old Ocean City Road, Whaleyville, MD 21872

Join us at Masterpiece Flower Farm and learn how to grow advanced annuals such as Dahlias, Ranunculus, and Lisianthus. Special focus will be given to post-harvest handling practices. We will also discuss tips for season extension. All experience levels are welcome. (Rain Date: September 29th, same time, same place.)

This workshop will be led by farmer/owner Crystal Giesey, who is deeply committed to growing flowers sustainably and organically. Thanks to Crystal and to the organizers Future Harvest CASA and the University of Delaware.

<https://www.eventbrite.com/e/cut-flowers-2-advanced-annuals-post-harvest-handling-season-extension-tickets-64194508503>

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**Small Ruminant Field Day:  
Nutrition for Productive and Efficient  
Sheep and Goat Farms**

Saturday, September 14, 2019  
8:45 a.m.-3:00 p.m.

DSU's Hickory Hill Farm  
2065 Seven Hickories Rd, Dover, DE 19904

**TOPICS**

- Basic nutrition for raising production sheep and goats
- Pregnancy and kidding nutrition
- Raising animals on pasture

**HANDS ON DEMONSTRATIONS**

- Pearson Square
- Grinding and Mixing Feed Ration
- Body Condition Scoring
- Evaluating Hay

**KEY PRESENTERS**

**Susan Schoenian**

Sheep and Goat Specialist, University of Maryland Extension

**Amanda Grev**

Extension Specialist, Pasture Management for Livestock Operation, University of Maryland Extension

Cost is \$15 per person! Lunch is included.

*Last day to register is September 7, 2019. Register online at: <https://www.eventbrite.com/e/small-ruminant-field-day-tickets-68734886897>*

*For more information, to register, or for assistance due to disabilities contact:*

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**Invasive Pond Plants Workshop**

September 26<sup>th</sup> 5:00 p.m.

DSU Outreach and Research Center  
884 Smyrna Leipsic Rd., Smyrna, DE 19977

Invasive pond plants are non-native species that spread very quickly. They threaten the diversity of other native plant species and also have a negative effect on the natural balance of local bodies of water. This presentation will give some examples of some invasive species to keep an eye out for as well as some management strategies for dealing with invasive pond plants. The presenter will be Mr. Brian O'Neill from Weeds Inc.

Aquatic Pesticide Applicator Credits: 2

*This workshop is free. For more information, or for assistance due to disabilities, contact: Megan Pleasanton, Extension Educator: 302.857.6438 or [mpleasanton@desu.edu](mailto:mpleasanton@desu.edu)*

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**Designer Ditches Workshop**

October 22 1:00 p.m.

St. Jones Reserve Coastal Training Center  
818 Kitts Hummock Rd., Dover, DE 19901

Ditches can quickly move floodwaters away from our properties and roadways. This workshop will give examples on how we can help reduce erosion, and help increase the absorption of excess nitrogen and phosphorus from leaching into our waterways. Planting the right plants in our ditch areas can reduce pollution, help water soak into the ground to replenish ground water, provide habitat for birds, butterflies, and pollinators, promote diversity by planting natives, and beautify our yards.

*This workshop is free. For more information, or for assistance due to disabilities, contact: Megan Pleasanton, Extension Educator: 302.857.6438 or [mpleasanton@desu.edu](mailto:mpleasanton@desu.edu)*

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## Building Wood Duck Boxes

January 30, 2020 5: 00 p.m.

DSU Outreach and Research Center

884 Smyrna Leipsic Rd., Smyrna, DE 19977

Build them and they will come. Justyn R. Foth, Ph.D., Environmental Scientist and Waterfowl, Turkey, and Upland Gamebird Biologist for DNREC, will give a brief presentation about the importance of wood ducks and why we should promote the species. You will be able to build and prepare a wood duck box and take it home with you free of charge.

*This workshop is free. For more information, or for assistance due to disabilities, contact: Megan Pleasanton, Extension Educator: 302.857.6438 or [mpleasanton@desu.edu](mailto:mpleasanton@desu.edu)*

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## Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of August 22 to August 28, 2019

Readings Taken from Midnight to Midnight

### Rainfall:

0.18 inch: August 22

0.62 inch: August 23

0.06 inch: August 25

### Air Temperature:

Highs ranged from 91°F on August 22 to 74°F on August 26.

Lows ranged from 71°F on August 22 to 57°F on August 25.

### Soil Temperature:

76.7°F average

Additional Delaware weather data is available at <http://www.deos.udel.edu/>

*Weekly Crop Update is compiled and edited by Emmalea Ernest, Associate Scientist - Vegetable Crops*

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