



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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July 16, 2021

Vegetable Crops

Vegetable Crop Insect Scouting - David Owens, Extension Entomologist, owensd@udel.edu

Sweet Corn

Our early July **corn earworm** flight continues, with some sites recording unusually intense activity. I am concerned that we have a relatively strong flight for this time of year right when field corn is silking, possibly setting us up for a robust August flight. We have tested 90 moths against cypermethrin treated vials this week and had a survival rate of 45%. This is considerably higher than when we started testing in early June. Pyrethroids should not be relied on alone to control earworm. Also pay attention to young sweet corn for signs of **armyworm** infestation. Look for windowpaning on the inner most whorl leaves. By the time large holes are noticed in the whorl, the larva may be too deep to get good coverage or may have already left the plant to pupate. Thresholds for young plants are 15% infested whorls. This rises to 30% until tassel push before decreasing to 15% infested emerging tassels. To date, we have not captured any European corn borer in our pheromone traps. If you are using a relaxed spray schedule right now, check your field for **sap beetle**, especially as silks begin wilting and browning. You may need to make an application specifically targeting them.

Thursday corn earworm trap captures are as follows:

Trap Location	BLT - CEW	Pheromone CEW
	3 nights total catch	
Dover	3	88
Harrington	1	20
Milford	1	31
Rising Sun	0	30
Wyoming	1	32
Bridgeville	0	41
Concord	1	15
Georgetown	0	31
Greenwood	1	22
Laurel	3	131
Seaford	5	---
Lewes	---	5
Millsboro	1	8

Melons

Continue scouting watermelons for rind feeding pests. First generation **cucumber beetle** adults are coming out of the soil. New young beetles have whitish stripes on the wings which gradually turn to the characteristic yellow. They like to feed on flowers, and because flowers are only open in the morning, you can look at the flowers to gauge cucumber beetle activity. Cucumber beetles are best controlled by acetamiprid (Assail, premixes like Savoy, and other generics). **Worm pests** are active in many fields. If you see large meandering rind feeding paths, it is probably the work of various worm species. Active worms include **corn earworm**, **yellow striped armyworm** and **beet armyworm**, with other species mixed in. Earworms and beet

armyworm are more difficult to control with pyrethroids, other excellent materials include diamides (Coragen, Besiege, Harvanta, Exirel, and Minecto Pro), spinosyns (Radiant), growth regulators (Intrepid), and indoxacarb (Avaunt). Harvanta and to some extent Exirel, have activity on cucumber beetles. Minecto Pro has abamectin in it and is an excellent miticide.

Peppers

Continue scouting for **beet armyworm**. Female moths lay egg masses, so often several plants in a row will be heavily damaged as larvae grow and disperse. Pyrethroids are ineffective on them and have the potential to flare up aphid outbreaks.

PSNT for Sweet Corn - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

I was recently asked about using the Presidedress Soil Nitrate Test for sweet corn. The Presidedress Soil Nitrate Test (PSNT) was developed to assess the nitrate levels in soils just prior to sidedressing in field corn and relate that to expected crop response to nitrogen fertilizer. As soils warm, mineralization of organic matter increases along with nitrification. By measuring nitrate levels prior to sidedressing a “snapshot” of N available from organic sources is obtained. Therefore, the PSNT is used where manures have been applied or leguminous cover crops have been grown and limited fertilizer N has been applied preplant or at planting. This test has been adapted to several vegetable crops such as sweet corn, cabbage, peppers, and pumpkins. Soil samples are taken about a week prior to normal sidedressing at a depth of 12 inches. They are dried and then tested for nitrate at a laboratory or using a quick testing kit (available from several sources). An example for sweet corn from Rutgers University is shown below.

Sidedress Nitrogen Recommendations for Sweet Corn Based on the PSNT Soil Test Level and Manure History

PSNT Soil Test Level (ppm NO ₃ -N)	Sidedress N Recommendation (lbs/acre)*
<i>Manured Soils</i>	
0 to 10	160
11 to 15	120
16 to 20	80
21 to 25	40
greater than 25	0
<i>Non-Manured Soils</i>	
0 to 15	160
16 to 20	120
21 to 25	80
26 to 30	40
greater than 30	0

*When 100 lbs. or more of sidedress N are recommended on very light sandy soils, apply half of the sidedress when the corn is 12 inches tall and half when the corn is 18 to 24 inches tall.

One grower reported that they used a Pre-Sidedress Nitrogen Test (PSNT) in areas that had received manure and values indicated that no additional N was needed. However, nitrogen deficiencies were found in very sandy areas and low spots. These are areas where the most N loss would be expected. While the PSNT is a valuable tool to manage nitrogen in sweet corn, any recommendations should take into account weather at and after the time of sampling. Low PSNT values may result from heavy rains just prior to sampling (it is recommended to wait several days after heavy rains to take samples for PSNTs). High PSNT values (>30 ppm) would indicate no additional N is needed. However,

extended heavy leaching rains could still render the crop N deficient even with these high values.

Overhead Irrigation of Vegetables - Gordon Johnson, *Extension Vegetable & Fruit Specialist*; gcjohn@udel.edu

I was recently asked about irrigating snap beans prior to harvest. Irrigation is a critical management tool for producing high yielding and high-quality vegetable crops. Scheduling irrigation for different vegetables grown under center pivot, travelling gun, or solid set overhead systems involves knowledge of the soil water holding capacity, the effective rooting depth of the crop (how deep water can be drawn by the crop), how efficiently water is being delivered (water losses to evaporation before it reaches the crop and how much water is lost to runoff), how much water is being used by the crop (transpiration) and how much water is being lost from the soil and wetted surfaces directly (evaporation). The combination of transpiration and evaporation losses is termed evapotranspiration.

To schedule irrigation, the goal is to replace water lost through evapotranspiration without excessive runoff or excessive loss through percolation out of the root zone. Another factor to consider is the permissible water depletion; how much will you allow the soil to dry down between irrigations. For most crops we set this at 50% of the water holding capacity of the soil. However, for some shallow rooted crops you may want to keep that value lower (only allow for 30% depletion between irrigations). By knowing how much water is being lost and how much is left in the soil, you can determine when to irrigate and how much to irrigate.

In general, vegetable water use at the start of the rapid growth phase is 0.10 to 0.15 inches per day and increases weekly to full canopy where water use is from 0.25 to 0.33 inches per day. For example, with cucumbers, water use 20 days after planting was 0.13 inches per day, water use 40 days after planting was 0.27 inches per day, and water use at peak (50 days) was 0.30 inches per day.

Fusarium Crown Rot in Squash - Jerry Brust, *IPM Vegetable Specialist, University of Maryland*; jbrust@umd.edu

A county agent sent pictures of squash that were turning yellow and wilting (Fig. 1). This was found to be *Fusarium* crown rot caused by the fungus *Fusarium solani* f. sp. *cucurbitae* with a little Anthracnose caused by *Colletotrichum orbiculare* mixed in with it. In the field, *Fusarium* crown rot is generally a problem in summer and winter squash, and some pumpkin cultivars, but most cucurbits have been found to be susceptible.

Early symptoms of *Fusarium* crown rot consist of stunting and wilting of the plant. The symptoms first observed at the crown include light colored water-soaked areas that become increasingly darker. A characteristic dark brown necrotic rot of the crown and at times the upper portion of the tap root develops soon after initial symptoms (Fig. 2). Infected plants break off easily at or just below the soil line. During typical summer weather (hot and humid), white or pink mycelial growth can be seen on the lower stem. While the roots of a plant can become infected, this pathogen is most often found in the stem just above the soil line or possibly in the fruit of the plant. If fruit are attacked there is a dry (not mushy) rot that develops. These rotted areas can develop a bulls-eye pattern. Other soil borne pathogens can make *Fusarium* crown rot even worse and the occurrence of anthracnose in these particular plants did not help matters.

Inoculum can come from the soil or the seed. Inoculum from the soil comes from previously infected plants incorporated into the soil. From seed, *Fusarium* crown rot can be internally or externally seedborne. It is found in the seed coat and between the seed coat and cotyledons, however, it generally does not infect the cotyledons or reduce seed viability of seeds. It remains viable in seeds for 1-2 years. This pathogen is host specific and occurs as races.

Fusarium crown rot occurs sporadically in most areas, and disease severity is determined by the amount of soil moisture and inoculum density. Because the fungus survives in the soil for 2-3 years as chlamydospores a 4-year rotation is

often effective for disease control. Planting fungicide-treated seed also helps in reducing the occurrence of the disease that is introduced from infected seed.



Figure 1. Squash plants turning yellow and wilting



Figure 2. Rotted base of stem of squash from Fusarium crown rot

Black Dot Root Rot Found in High Tunnel Tomatoes - Jerry Brust, IPM Vegetable Specialist, University of Maryland; jbrust@umd.edu

A root disease that is most commonly associated with potato has turned up on tomato in a high tunnel. This disease goes by the delightful name of black dot root rot. The causal agent is

Colletotrichum coccodes, which also causes anthracnose fruit rot on tomato (sunken, water-soaked, circular lesions).

C. coccodes infection on tomato roots appears as lesions on the root surface that produce black microsclerotia (the 'black dot' in its name) (Fig. 1). Infected plants will sometimes wilt with the lower and middle leaves of the plant turning yellow.

C. coccodes has a very large host range, which includes members of Solanaceae, Cucurbitaceae and Leguminosae, both crops and weeds. Nightshade in particular (a solanaceous weed) can harbor the fungus, often without showing symptoms. The pathogen can survive in the soil for up to eight years as microsclerotia.

This pathogen causes problems only under poor growing conditions or when other pathogens are present. The disease occurs in greenhouses or high tunnels where there has been a continuous cropping of tomato for several years, resulting in very high levels of inoculum. Other conditions that can be encountered in high tunnels, such as high soluble salt levels, low pH, low or excessive fertilization, high temperatures and water stress, can predispose plants to infection and root rot by *C. coccodes*. These infected plants can at times show few symptoms, but still be responsible for yield reductions.

The disease can be prevented by growing in optimal conditions for tomato in the high tunnel. Deep plowing (12-15 inches, not easy to do in a high tunnel we know) degrades infected plant debris more rapidly and buries propagules both of which may help reduce fungal populations. Steam sterilization of the soil can greatly reduce disease incidence. Crop rotation is another tried and true management plan if growers can rotate out of any solanaceous, leguminous or cucurbit crops for 3-4 years - something most growers probably cannot financially do. Grafting is another possibility, but even grafted plants can still become infected with this disease. A particular root stock may be resistant or more tolerant of the disease, but this is something that would need to be checked before using. Small grain or corn can be used in rotation to reduce fungal populations.



Figure 1. Black dots (microsclerotia of *C. coccodes*, arrows) on tomato root

Fruit Crops

Selecting Strawberry Varieties for Plasticulture - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Growers should be ordering plants for September planting in plasticulture systems. In the past, there have been only a handful of varieties available for growers to choose from and most varieties came from California breeding programs.

We are fortunate now to have several active breeding programs in our region: USDA Beltsville, North Carolina State, and Cornell. There were also releases from a legacy breeding program at Rutgers and a testing program for new California proprietary varieties in North Carolina.

As new varieties are released, growers should do test plantings on their farms before going to full production. Go to university and other testing programs to view variety trial results to view their performance in different areas (Penn State, Virginia Tech, and North Carolina State have recent variety trial information).

Variety selection will depend on several factors including: Yield; berry size, brix, taste, texture, and holding; harvest season start and length; availability; and disease reaction.

The following are some sites to visit to obtain information about breeding programs and testing programs:

NC State:

<https://strawberries.ces.ncsu.edu/straberry-breeding-progam/replicated-cultivar-and-selection-breeding-trials/>

<https://strawberries.ces.ncsu.edu/2020/06/replicated-breeding-trial-data-now-online/>



Comparing some California bred varieties with new releases from North Carolina State.

Barclay Poling's site on testing new Lassen Canyon Varieties in North Carolina
<https://smallfruits.org/2020/10/our-continuing-search-for-better-strawberry-varieties/>

Cornell Breeding Program
<https://news.cornell.edu/stories/2018/09/new-high-yield-strawberry-raspberry-varieties-released>

USDA breeding program
<https://www.ars.usda.gov/news-events/news/research-news/2019/a-new-ars-strawberry-is-a-keepsake/>



A new strawberry cultivar, Keepsake, is the first resulting from an increased effort by the Agricultural Research Service to develop strawberries with improved shelf life.

https://www.youtube.com/watch?v=oy77XRiPVQ_Q

Virginia Tech Variety Trials on-farm:
https://vtechworks.lib.vt.edu/bitstream/handle/10919/102517/19437714_HortTechnology.pdf?sequence=1

Penn State variety trials:
<https://extension.psu.edu/strawberry-cultivars-for-plasticulture>

Agronomic Crops

Agronomic Crop Insect Scouting - David Owens, Extension Entomologist,
owensd@udel.edu

Alfalfa

Scout alfalfa for **potato leaf hopper**. Fields that have hopperburn have already lost yield potential. Cutting alfalfa will kill the majority of leafhopper nymphs, but adults will disperse. If you have multiple plantings near each other, pay special attention to non-cut plantings and be ready to treat with a pyrethroid. We have a threshold table that takes into account the value of hay, cost of control, and plant height in our recommendation guide:

<https://www.udel.edu/academics/colleges/canr/cooperative-extension/sustainable-production/pest-management/commercial-field-crop-pest-management/alfalfa/>.

Soybean

Now that the earliest planted soybeans are approaching the R4 stage, pay special attention to **stink bugs** and **corn earworm**. Stink bug thresholds are 5 bugs per 15 sweeps. Corn earworm thresholds can be figured out using the NCSU earworm threshold calculator:

<https://www.ces.ncsu.edu/wp-content/uploads/2017/08/CEW-calculator-v0.006.html>. Using some ballpark figures would put a threshold between 1.5 and 2 earworms per 15 sweep sample.

Pasture Grasses

True armyworm larvae were observed in field crop fields this week. Last year, there were reports by the end of July of armyworm stripping grass pastures. Check pastures weekly for signs of caterpillar infestation. The good news is true armyworm are relatively easy to control.

Foliar Disease Scouting in Corn - Alyssa Koehler, Extension Field Crops Pathologist;
akoehler@udel.edu

THE USUAL SUSPECTS

Grey Leaf Spot

Consistently our most common disease of corn, GLS has been becoming more noticeable over the past week with the end of week/weekend rain and humid weather. GLS usually begins on lower leaves as small, tan, rectangular lesions with a yellow halo. When lesions are young, they can be difficult to distinguish from other common corn foliar diseases. As lesions mature, they become more diagnostic. At maturity, lesions are grey to tan in color, with a long rectangular shape (Figure 1); partially resistant hybrids can have more jagged margins than lesions on susceptible cultivars. Lesions often join to form large necrotic areas under favorable environmental conditions.



A Koehler, University of Delaware

Figure 1. Corn leaf with grey leaf spot lesions

Yield reductions are typically observed when lesions are present on the two leaves below the

ear leaf or higher, so these are the leaves to pay close attention to when scouting. If over 50% of plants have lesions on 5% or more of this leaf surface, you may want to consider a fungicide application. If applying a fungicide, VT/R1 timing has shown the greatest chance of economic return. We have been busy with our VT/R1 fungicide trial applications this week and last week. Results from these trials will be shared at the end of the season. Results from 2020 can be found in the 10.16.20 WCU article <https://sites.udel.edu/weeklycropupdate/?p=15952>

Northern Corn Leaf Blight

It has been a few years since NCLB was widespread in the area, but I usually find a few lesions from this disease around each season. Like many fungal diseases, NCLB is favored by wet weather, heavy dew, or overcast conditions. The oblong lesions are somewhat cigar shaped, typically ranging from 1-7 inches in length (Figure 2).



Figure 2. Corn leaf with northern corn leaf blight symptoms

Residue-borne leaf diseases like Grey Leaf Spot and Northern Corn Leaf Blight become common in no till and especially corn on corn irrigated production. It is possible to select hybrids with good/excellent resistance to these diseases, which will reduce the amount of foliar disease observed. Resistant hybrids typically have smaller lesions and reduced spread of spores.

DISEASES EMERGING IN THE AREA

Diplodia Leaf Streak

In recent years, especially in irrigated corn, I will see a few cases of Diplodia Leaf Streak. This

disease is caused by the fungus *Stenocarpella macrospora*. *Stenocarpella maydis* is also present in the region and can cause Diplodia Ear & Stalk rot later in the season; we will discuss this disease in a future article. Lesions of Diplodia Leaf Streak can look very similar to Northern Corn Leaf Blight, but the difference is that inside of the lesions, you will see black fungal fruiting structures called pycnidia; these are not present in lesions from Northern Corn Leaf Blight (Figure 3). Diplodia leaf streak has oval to elongated, brown lesions with yellow margins and these can expand into long streaks (Figure 4). Currently, this disease is not reported to cause yield loss and management is not often necessary.



Figure 3. Corn leaf with Diplodia Leaf Streak, note black structures in the center of the lesion



Figure 4. Diplodia leaf streak lesions that have expanded into long streaks

Curvularia Leaf Spot

Towards the end of the 2020 growing season, I began observing lesions in the upper canopy that resembled young grey leaf spot lesions, but when the leaf was flipped over and held up to the light, a gray center, prominent margin, and yellow halo were observed (Figure 5). Under the microscope, we observed crescent shaped spores characteristic of the pathogen that causes Curvularia leaf spot. We molecularly confirmed that the organism we were working with was *Curvularia lunata*. The range of Curvularia leaf spot in the US has been expanding in recent years. While there have not been any reports of extreme yield loss from Curvularia in the US, the impact of this disease is not yet fully understood. Curvularia leaf spot starts as small tan lesions. These lesions have a brown/maroon border often surrounded by a yellow halo that is particularly noticeable with back lighting. Symptoms can be observed at any growth stage, but I did not start observing this disease until R4/R5 last year. Now that it is in the region, we will continue to keep an eye on this disease for the 2021 growing season. Care should be taken to not confuse these lesions with young grey leaf spot. Data from other states has shown

fungicides to lack efficacy for Curvularia leaf spot and there are not currently any fungicides that list Curvularia on their label. Excessive dew and sporadic rainfall favor the development of this disease.

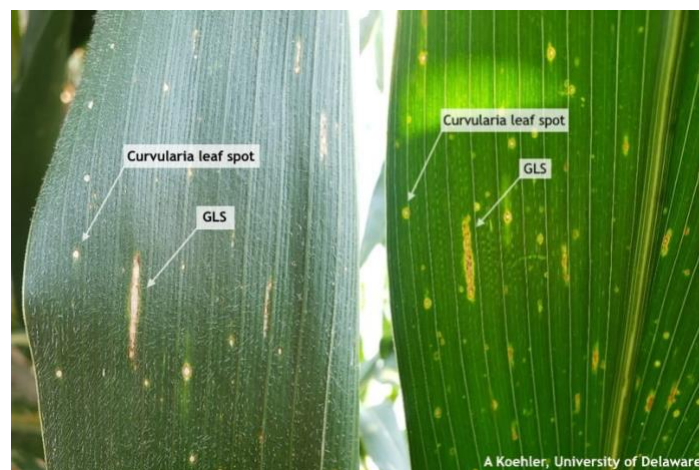


Figure 5: Corn leaves with grey leaf spot and Curvularia leaf spot. Left image top side of leaf, right image underside backlit with sun.

A NEW CORN DISEASE TO LOOK OUT FOR

Tar Spot

To begin, this disease has not been found in Delaware or Maryland to date; however, it was observed in PA last year and is one we want to keep an eye on for spread into DE/MD. Tar spot is a fungal disease that was first discovered in the US in Indiana during the 2015 growing season. While there is a complex of organisms involved in Latin America, to date *Phyllachora maydis* has been the only organism involved in the US. Over the past seasons, tar spot has been spreading across the corn belt and it was confirmed in Lancaster County, PA in 2020 (Figure 6). Symptoms of tar spot are raised lesions with glossy black coloring that look like paint or tar is present on the leaf (Figure 7). Symptoms typically occur VT through maturity. Again, this disease has not yet been reported or found in DE or MD, but keep it in mind as you scout fields this season. Please contact Alyssa Koehler (akoehler@udel.edu) if you suspect you found this disease and we will work with you to confirm identification.

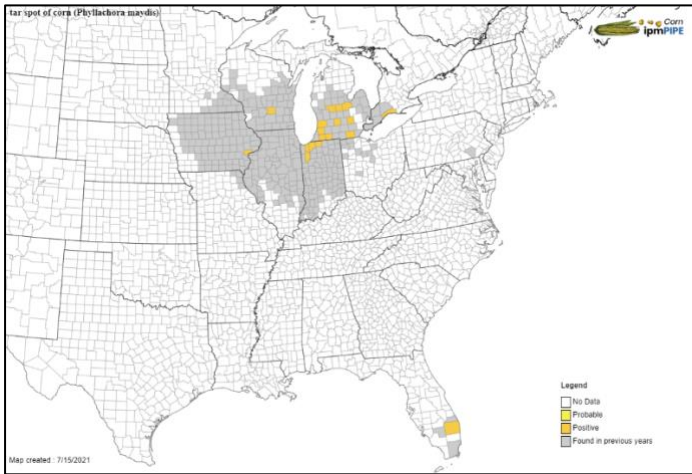


Figure 6: Map of tar spot in the US as of 7.15.21.
Map generated from:
<http://corn.ipmPIPE.org/tarspot/>.



Figure 7: Tar spot symptoms on a corn leaf

July Temperatures and Corn Pollination -

Jarrod O. Miller, Extension Agronomist,
jarrod@udel.edu

According to data from the last two years (<https://sites.udel.edu/agronomy/2020/09/23/2019-2020-corn-growing-degree-days/>), silking and pollination (R1) has occurred between 1320 and 1594 growing degree days, while VT (tasseling) occurs between 1200-1300 (Table 1). In many of our research fields, VT also began to occur in this range last week, followed quickly by silking.

Stress during pollination can determine initial pollination and kernel set, so temperature becomes very important. Planting date is an important part of this, as corn growth will follow heat accumulation, so cooler springs will take longer to reach R1 and vice versa.

This year many of our fields in Georgetown could have reached silking about July 5th if planted on April 15-April 22, but taken 2-3 days longer every week after that. Fields planted May 15 should start pollination right now, but it will be variety and field management specific. For example, our cover crop trials have had a range in the start of R1 by a few days.

When observing Figure 1, it becomes clear why this is important as a few days in July could add additional stress for pollination. The cooler period during the first week was very conducive to fields already at R1 (planted April 15th), but our highs in the 90s may be causing later planted fields to abort *some* of their kernels. A lot of this is luck, as a warmer April would lead to earlier R1 stages, but a cooler April could place corn growth at the same stage as May planting. Still, this week is known to be one of the warmest of the summer, so watching your typical days to R1 based of past weather data (<http://www.deos.udel.edu/>) may give you a better expectation of whether your planting date may hit this warmer milestone.

Table 1. GDD for corn reproductive stages based on 2019-2020 growing seasons.

	R1	R2	R3	R4	R5	R6
Days from Planting	59-82	60-90	67-96	83-106	78-118	106-138
Growing Degree Days	1320-1594	1559-1684	1733-2003	1957-2187	2028-2509	2686-2926
Total Light	1389-1804	1408-2003	1616-2147	1887-2367	1845-2567	2351-2952

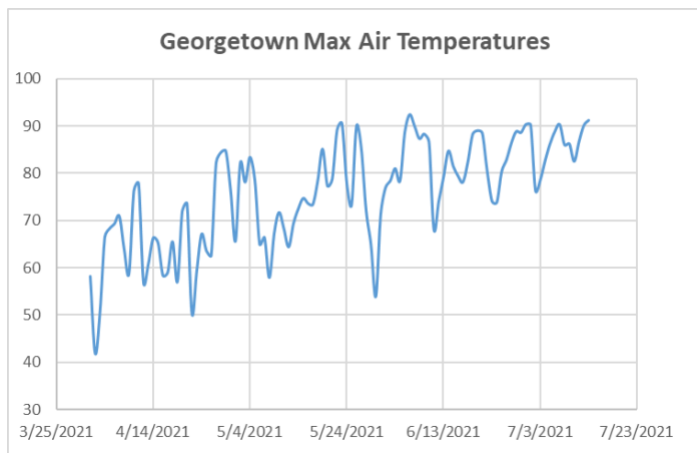


Figure 1. Maximum air temperatures in Georgetown from April 1st to July 13th.

General

Guess The Pest! Weeks 15 & 16 - David Owens, Extension Entomologist, owensd@udel.edu

Get out your field guides and practice your pest management knowledge by clicking on the GUESS THE PEST logo or following this link: <http://www.udel.edu/008255> and submitting your best guess. For the 2021 season, we will have an “end of season” raffle for a scouting toolkit for one lucky winner, and five winners will be sent a small jar of locally produced honey. Remember, you can’t win if you don’t play!

My apologies for not updating the Google form last week, which may have caused some confusion. So this week, I thought we would continue with the mystery moldy cukes and add another one.

As a reminder, last week’s Guess The Pest challenge was:



And this week, we are going to jump back into soybean. Who is this little 2nd instar worm in a sweep net of R3 soybean?



Go to <http://www.udel.edu/008255> to Guess the Pest!



Announcements

Pesticide Safety Exam Reviews

Beginning in March the Delaware Department of Agriculture Pesticide Section will provide a Pre-Certification Pesticide Core Exam Review. This review will provide essential information, covering laws, equipment, personal safety and more to help you prepare for the core certification exam.

The core exam is for private pesticide applicators and a prerequisite for all commercial pesticide applicators.

2021 Pesticide Exam Dates

Wednesday, August 11, 2021
 Wednesday, September 29, 2021
 Wednesday, November 17, 2021

Schedule for Exam/Review Dates

Core Exam Review: 9 – 11:30am
 Lunch Break
 Pesticide Testing for ALL: 1 – 4pm

You may choose to test in the afternoon of the review or on another testing date.

Sign up is free!

Log into your account on dda.force.com/pesticide then click on Exam Registrations.

For more information on this training course and testing please contact Amanda Strouse at amanda.strouse@delaware.gov or 302-698-4575.

COVID-19 Vaccination Opportunities in Delaware

COVID-19 vaccination is currently available to Delawareans ages 12+ at numerous sites throughout the state. Some sites require an appointment and others offer walk-in hours. Information about vaccine sites and appointments is online at <https://coronavirus.delaware.gov/vaccine/where-can-i-get-my-vaccine/>.

Mental Health First Aid Training

What is this training about?

The Mental Health First Aid training is an 8 hour evidence based program that introduces participants to risk factors and warning signs of mental illnesses, builds understanding of their impact, and overviews common ways to help and find support. Using interactive educational methods, you'll learn how to offer initial help in a mental health crisis and how to connect with the appropriate level of care. You will also receive a list of community healthcare providers and national resources, support groups, and online tools for mental health and addictions treatment and support.

What is the training format?

The course will be offered in two parts. The first part is offered online in a self-study format, takes about 2 hours, and needs to be completed before the live session. The second part will be offered live and virtually via a Zoom connection. This session will be held from 9am-3pm. You will receive the link for the self-paced session and Zoom info for the live session after you have registered. You need to register by the dates listed below to be able to attend the schedule live Zoom training date.

Why attend?

In Delaware our agriculture community is facing many stressors. Those who are in the position to consult and aid them need to know the signs, symptoms and strategies to best serve them. Farm family members also need to know how best to help their loved ones. This training is being taught by instructors from the Delaware Mental Health Association.

A certificate of completion is provided to attendees who attend all 8 hours of the training.

There are four dates for the Zoom session. Seating is limited. Please choose only one:

Mental Health First Aid Zoom Sessions with Registration Links

Friday, September 24, 2021 9 a.m.–3 p.m. Register by August 24

<https://www.pcsreg.com/mental-health-first-aid-training-sept-2021>

Friday, October 5, 2021 9 a.m.–3 p.m. Register by September 5

<https://www.pcsreg.com/mental-health-first-aid-training-oct-2021>

This training is underwritten by the Sustainable Coastal Communities Project, Delaware Farm Bureau and University of Delaware Cooperative Extension. These organizations are equal opportunity providers.

Nematode Field Day

Thursday, August 19, 2021 3:00-6:00 p.m.
Carvel Research & Education Center
16483 County Seat Hwy
Georgetown, DE 19947

Save the Date! Interested in learning more about nematodes? This field day will cover nematodes of concern in agronomic and vegetable crops, highlight ongoing research, and end with a boxed dinner.

Details on registration coming soon! Please contact Alyssa Koehler akoehler@ude.edu with any questions.

Soybean Insect ID Review

Monday, July 19, 2021 7:30 p.m.

Online

David Owens will hold a virtual soybean insect identification review on Monday, July 19 starting at 7:30. If you have insect identification questions, you can send them ahead of time to owensd@udel.edu.

Zoom meeting link is

<https://udel.zoom.us/j/5682701927>.

Extension302 Podcast

Episode 20: The State Fair Returns!

(feat. Doug Crouse of Delaware 4-H / UD Extension and the Delaware State Fair!)

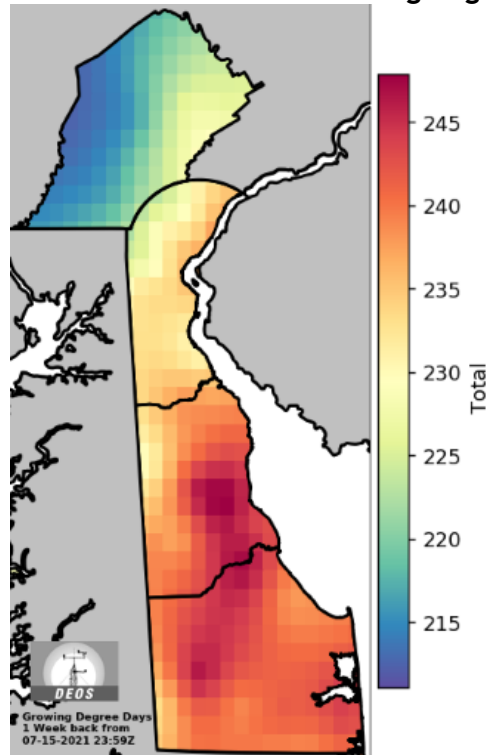
The 2021 State Fair is your passport to summer fun! Get the inside scoop with a very special guest: Doug Crouse (Delaware State Fair Executive Board Member / Treasurer and our very own Delaware 4-H State Program Leader! The Delaware State FAir will be held July 22 to 31.

To listen, go to:

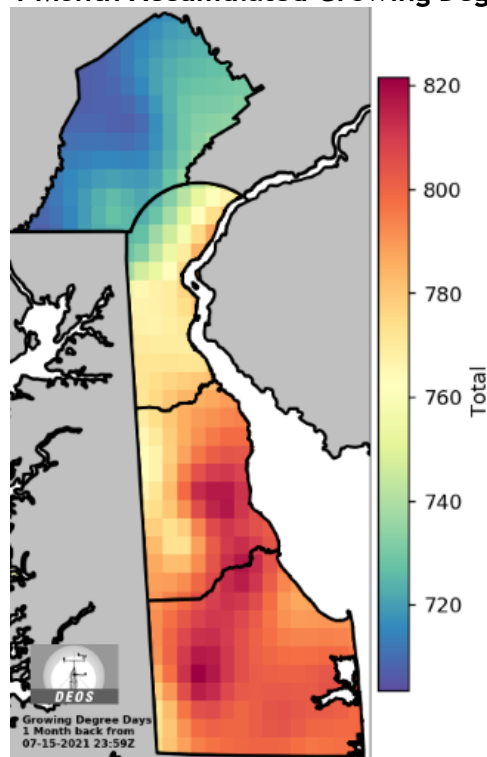
<https://www.udel.edu/academics/colleges/canr/cooperative-extension/about/podcast/>

New Weather Summary!

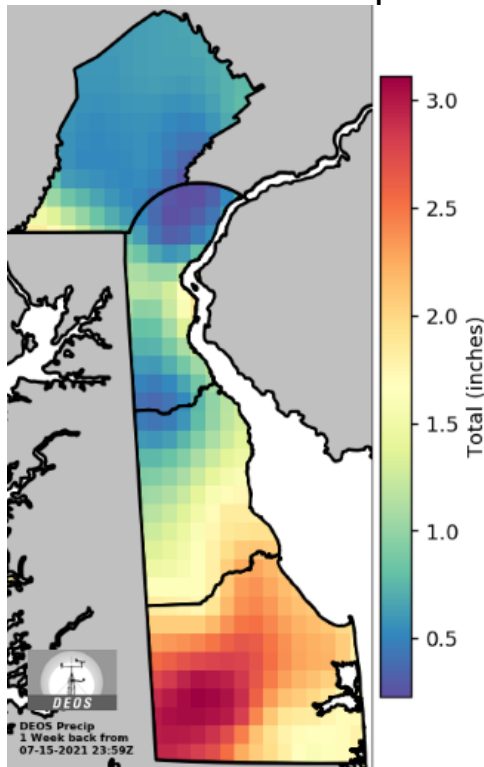
1 Week Accumulated Growing Degree Days



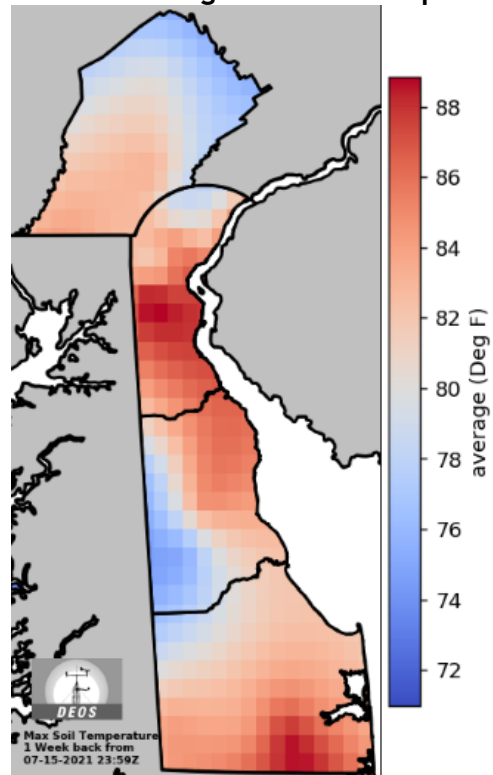
1 Month Accumulated Growing Degree Days



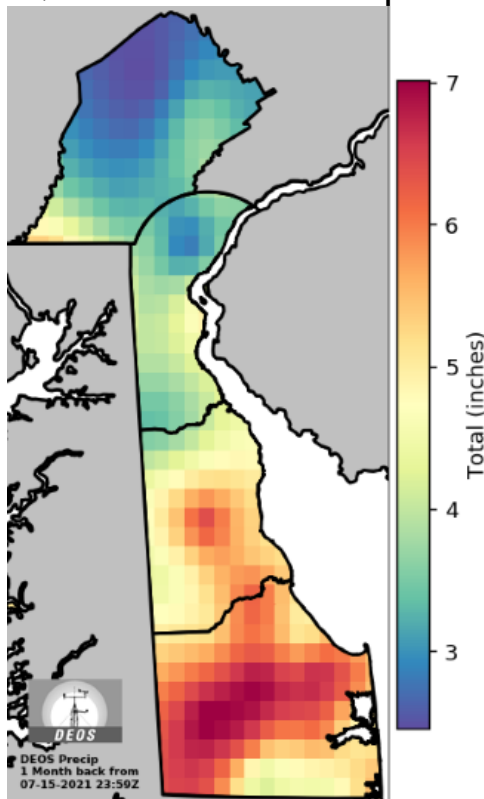
1 Week Accumulated Precipitation



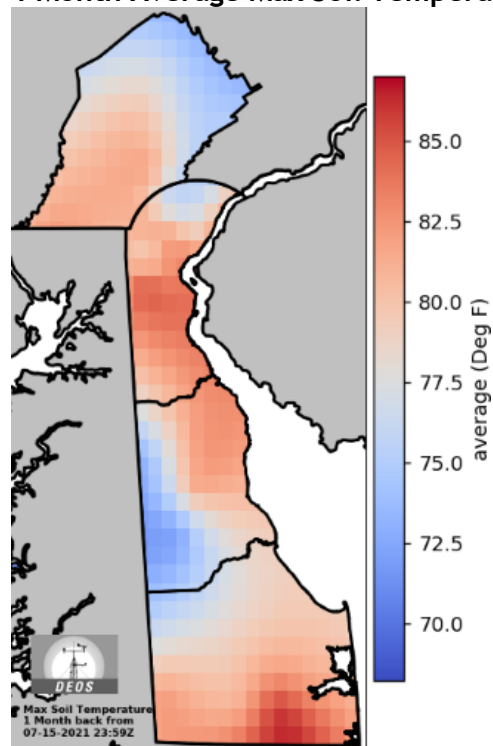
1 Week Average Max Soil Temperature



1 Month Accumulated Precipitation



1 Month Average Max Soil Temperature



These weather maps are generated from DEOS weather station data and are part of a new Ag Weather website that is under development. Your feedback is welcome!

Thanks!! Emmalea (emmalea@udel.edu)

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

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