

WEEKLY CROP UPDATE



UNIVERSITY OF DELAWARE
COOPERATIVE
EXTENSION

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July 30, 2021

Vegetable Crops

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

Sweet Corn

Scout pre-tassel push sweet corn for fall armyworm now. Processing thresholds are 15% infested whorls early; mid-late whorl stages 30%, and tassel push thresholds are 15%. New Jersey recommends slightly lower whorl and tassel push thresholds for fresh market sweet corn. This worm feeds deep in whorls, use high water volumes. Pyrethroids will not control this worm completely, and in my opinion, we need to reserve chlorantraniliprole (Coragen, Besiege, Elevest) for silk protection vs earworms, unless you have small armyworm starting on husk leaves just prior to silking. If that is the case, you will see windowpaning on the leaves. This is also a good time to consider taking a survey of insect pest issues and management needs and decision making to help entomologists from across the mid-Atlantic and Northeast justify some proposed insect pest management research to refine regional thresholds for sweet corn. Please take a few minutes to provide us feedback!

https://ume.qualtrics.com/jfe/form/SV_9vRh1xHnDp4KEaa

Earworm trap counts are still fairly low, but a little higher than last week. Our next earworm flight will be starting soon. We also have not captured any European corn borer in pheromone traps this year.

Trap Location	BLT - CEW	Pheromone CEW
	3 nights total catch	
Dover	2	39
Harrington	1	42
Milford	2	49
Rising Sun	1	56
Wyoming	1	2
Bridgeville	0	41
Concord	1	39
Georgetown	1	9
Greenwood	0	28
Laurel	1	28
Seaford	1	---
Lewes	---	29
Millsboro	3	11

Watermelons

Continue scouting for rind feeding injury from cucumber beetle and from various Lepidopteran worms. Cucumber beetles are best controlled by acetamiprid. In recent trials, we have had good results from carbaryl and cyclaniliprole. Carbaryl

can flare mites. While mites are active, in most fields we have been at their populations are fairly low. Diamides like Harvanta and Exirel will stop cucumber beetle feeding, but they are very slow to kill cucumber beetles. They are excellent on worms.

Fall Brassicas

Scout seedlings and recent transplants for worms - our entire brassica pest complex is active. Imported cabbageworm, cabbage looper, and yellow striped armyworm can very quickly defoliate small plants. As we head into the fall season, you need to consider what materials and rotations you are going to use in case of diamondback moth.

Cucurbits

Continue scouting for squash bugs, cucumber beetles on smaller plants, and aphids. Pyrethroid sprays for squash bug and squash vine borer can flare up aphids by removing natural enemies.

Quality Problems in Fruiting Vegetables -

Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

We are seeing quality problems in many fruiting vegetables. Often this is due to poor pollination.

Signs of incomplete pollination in cucurbits include bottlenecked fruit or fruit with a pinched end, crooked or lopsided fruit, fruit small in size or nub-like; and fruits with prominent lobes or that are triangular in shape. Causes of incomplete pollination may be inadequate pollen transfer by pollinating insects; inadequate pollen sources (pollenizers); or hot, dry weather that reduces pollen viability or that desiccates flower parts during pollination. Research has shown that a minimum of 1,000 grains of pollen are required to be distributed over the three lobes of the stigma of the female flower of a watermelon to produce a uniformly shaped fruit.

Hollow cavities in fruit and vacant seed cavities are related to lack of seed formation, again

traced back to poor pollination. Fruit tissue separation, such as hollow heart in watermelon, has also been linked to inadequate pollination and may be worsened by rapid fluctuation in environmental conditions affecting fruit development.

Each year we see pumpkin fields with poor fruit set or fruit carry. Remember that in larger pumpkin sizes, each plant will only carry 1-2 fruits. The large vining plants also need considerable space - 25 to 50 square feet per plant. While planting Jack-o-lantern types at higher densities might at first seem to be a way to achieve higher yields, interplant competition will increase, and you can decrease fruit carry because of this competition.

A major reason for poor fruit set in some years is high temperatures during flowering in July. Day temperatures in the 90s or night temperatures in the high 70s will cause flower and small fruit abortion. For pumpkin growers that do wholesale and start shipping right after Labor Day, this will limit early pumpkin availability. Varieties vary considerably in their ability to tolerate heat and to set under hot conditions. Inadequate irrigation and excessive water stress can also reduce fruit set, increase abortions, and reduce fruit carry. High temperatures and water stress reduce photosynthesis and the ability of the plant to carry fruits. Drought can also cause a higher-than-normal male/female flower ratio, thus affecting the number of fruits per plant.

Sweet corn growers often see quality problems related to poor pollination as a result of high temperatures. This problem is more severe in less stress tolerant varieties and where irrigation is inadequate.

In corn silk elongation begins 7 to 10 days prior to silk emergence from the husk. Every potential kernel (ovule) on an ear develops its own silk that must be pollinated for the ovary to be fertilized and develop into a kernel. The silks from near the base of the ear emerge first and those from the tip appear last. Under good conditions, all silks for an ear will emerge and be ready for pollination within a span of 3 to 5

days and this usually provides adequate time for all silks to be pollinated before pollen shed ceases.

Pollen grains are borne in anthers, each of which contains a large number of pollen grains. The anthers open and the pollen grains pour out after dew has dried off the tassels. Pollen is light and can be carried considerable distances (up to 600 feet) by the wind. However, most of it settles within 20 to 50 feet. Pollen shed is not a continuous process. It stops when the tassel is too wet or too dry and begins again when temperature conditions are favorable.

Under favorable conditions, a pollen grain upon landing on a receptive silk will develop a pollen tube containing the male genetic material, develop and grow inside the silk, and fertilize the female ovary within 24 hours. The amount of pollen is rarely a cause of poor kernel set. Each tassel contains from 2 to 5 million pollen grains, which translates to 2,000 to 5,000 pollen grains produced for each silk of the ear shoot.

Poor seed set is often associated with poor timing of pollen shed with silk emergence (silks emerging after pollen shed). Shortages of pollen are usually only a problem under conditions of extreme heat and drought. Extreme heat and desiccating winds can affect pollen germination on silks or pollen tube development leading to poor seed set. Insects that clip silks during pollination can cause similar problems.

In tomatoes, day temperatures over 95°F and/or night temperatures in excess of 80°F can cause pollination problems due to reduced pollen production, reduced pollen viability, or reduced pollen germination or pollen tube production. This can lead to flower drop, smaller fruit, misshapen fruit, or reduced gel formation inside the fruit producing hollow areas. To manage these pollination related problems in tomatoes, use “hot-set” type tomatoes bred for better production under heat conditions. Use hot-set varieties for plantings where high temperatures are expected during pollination.

In snap beans and lima beans, plantings that flower and set pods during summer conditions when day and night temperatures are high will be susceptible to reduced sets and yields, split sets, small pods, and misshapen pods. Most of our currently grown lima bean varieties and many commercial snap bean varieties are susceptible to heat stress related yield losses due to reduced pollen production when nighttime temperatures are high before and during flowering. This is why bean crops are planted in certain periods to avoid pollination related losses (snap beans planted for spring and fall crops but avoiding summer crops, lima beans planted in June and early July for fall harvest).

Plasticulture Strawberry Planting and Fall Growth Considerations - Gordon Johnson, *Extension Vegetable & Fruit Specialist*; gcjohn@udel.edu

Early to Mid-September is the optimum period for planting strawberries in the plasticulture system on Delmarva. Most strawberry varieties should be planted by the third week in September for best spring yields. Strawberry establishment in the plastic bed takes 3-4 weeks. During establishment, the goal is to have plants root as quickly as possible in the soil and start to send out new growth. This requires attention at planting. Most Delmarva growers are using plugs. Plant so that the plug is at the level of the soil or is just covered with a small amount (1/8”) of soil but avoid getting soil into the crown of the plant. Deep planting will result in reduced stands and weak plants due to rotting in the crown area. Shallow planting (where part of the plug is out of the ground) will result in plugs desiccating and reduced stands. Soil should be firm around the plug and water provided at planting. It is advantageous to overhead irrigate several times, even with water provided by drip lines, to reduce plant shock. It is also hard to wet beds completely with the drip system in sandy soils thus affecting establishment.

Rooting also requires adequate bed soil temperature. Raise high beds, the higher the better to allow for good drainage. Lay plastic making sure there is a firm crowned bed. The goal is to have the plastic tight against the soil to allow for good heat transfer. Loose plastic will have poor heat transfer and can reduce fall growth. Beds with depressions that allow water to accumulate can lead to disease problems in strawberries.

The goal coming out of the establishment period is to have 3 or more fully green leaves on the plant. After establishment, plants will send out new growth and develop branch crowns during October and November. The goal by late fall is to have 2-3 branch crowns form from the mother plant. Crown growth occurs when temperatures are above 50°F. Flower buds are also initiated during this time. Often, growers receive plugs or plants later than September 20. For later plantings, low tunnels offer an opportunity to maintain temperatures above 50°F for a longer period achieving this goal. Early row covers may also be used to achieve this goal - research has shown that early row covers may not increase crown number but can increase flower bud initiation in the fall. While planting too late can reduce spring yields, planting too early risks too many crowns being developed, especially in Chandler, leading to smaller unmarketable. That is why we don't plant in late August on Delmarva

Plant size in the fall is also critical for high yields the following spring. Plants should be about 8 inches in diameter going into winter. Sugars produced in leaves are translocated into the crowns of the plant where they are converted into starch for winter storage. This starch is then used in the spring at greenup. Inadequate starch storage will also lead to lower yields in the spring. Plants should also go into winter with enough leaves to help insulate the crown.

Celery Leaf Curl Found Again in Some Celery Fields - Jerry Brust, IPM Vegetable Specialist, University of Maryland; jbrust@umd.edu

Last year we saw some samples of celery with celery leaf curl, or celery anthracnose. We are seeing the disease again, but in different fields than before, which is a bit worrisome. I honestly did not know there was this much celery grown in Maryland. First observed in the U.S. in 2010, this disease is becoming increasingly important in our celery crops. The most noticeable symptom in the field is unusual twisting or downward curling of celery leaves and petioles (stalks) (fig. 1). The curling of leaves looks like something you'd see from a growth regulating chemical. Infected plants may be somewhat stunted, but the foliage usually remains a green to pale green color (unlike the chlorotic (yellow) leaves caused by aster yellows). Brown elongated lesions develop on the stalks (fig. 2) that can enlarge over time. Secondary soft rot bacteria often invade infected plants, resulting in blackened, rotted crown tissue (fig. 3).

The fungus causing this disease was originally identified as *Colletotrichum acutatum*, but recent taxonomic research has divided the *C. acutatum* group into several species, and both *C. fioriniae* and *C. nymphaeae* in that group have been found to cause celery leaf curl. Both fungal species can cause disease on other crops, such as strawberry, but it's not known if there are differences between isolates from different crops.

These fungi can overwinter on infected plant debris or weed hosts. There are also reports that the fungi may be seed-borne. Warm (75-86° F), wet conditions favor outbreaks of this disease but even temperatures as cool as 60° F will allow it to spread in a field as spores can be splash-dispersed from plant to plant. This disease is usually most active when it has been very hot and humid with occasional thunderstorms (i.e., our usual summer weather pattern). Anything that increases the leaf wetness period will make the disease situation worse.

Management starts by using good sanitation techniques in transplant production (clean trays, no plant debris, scouting for symptoms). Hot water treatment of celery seed (50° C for 30 minutes) can eliminate the pathogen. Inspect plants for symptoms prior to planting and continue to inspect crops in the field (during dry weather) and rogue out any plants with symptoms. Keep weeds under control to encourage drying of foliage after rain events. Avoid overhead irrigation and use mulches to keep field soil from splashing into celery crowns. A 3-4 year crop rotation out of celery helps reduce the inoculum present in the field. Although a few celery varieties have shown some tolerance to the disease, no variety is resistant at this time and all can show symptoms.

Fungicides used to manage other celery foliar diseases are effective in managing anthracnose as well. Strobilurin fungicides in FRAC code 11 have been found to be particularly effective at slowing the spread of the disease and maintaining yields and quality. Fungicides should always be rotated to include different modes of action to avoid resistance development.



Fig. 1 Celery stalk infected with Anthracnose (right) vs stalk not infected (left)



Fig. 2 Brown lesions on stalk with anthracnose



Fig. 3 Secondary soft rot bacteria in crown of plant infected with anthracnose

Yellowing of Cantaloupe Leaf Edges - Jerry Brust, IPM Vegetable Specialist, University of Maryland; jbrust@umd.edu

I have been seeing and receiving a few samples of yellowing (chlorosis) around the margins of

cantaloupe leaves (Fig. 1). The marginal chlorosis observed in figure one would indicate salt burn, which is a noninfectious problem that mostly affects cantaloupes. This yellowing at the leaf margin is likely the result of guttation, which is how plants exude water at the margin of the leaf. Water droplets from the plant accumulate at the edge of a leaf in the early morning. This water often contains organic and inorganic compounds, and mineral nutrients, especially potassium. As the water evaporates these compounds are left behind and concentrated at the leaf margin. Over time the high concentration of compounds shows up as a marginal yellowing called 'salt burn'. These deposits also can have a toxic effect on the gas exchange pores (the hydathodes) located at the leaf edges. Salt accumulation often is associated with foliar applications of nutrient solutions or pesticides during very hot, dry weather. Frequent copper applications when it is hot and dry also can result in distinct bands of yellow tissue with veins remaining green around leaf margins (Fig. 2). Soil applied urea or ammonium nitrate fertilizers may contribute to the problem as well. In most cases there is no yield loss as a result of these symptoms and no control measures are needed; however there could be yield losses if salt burn is severe and widespread in the field.



Fig. 1 Yellow edges of cantaloupe leaves due to salts



Fig. 2 Marginal chlorosis most likely due to copper fungicide applications

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

Soybeans

Continue scouting for bean leaf beetle, Dectes, defoliation, and stink bugs. Towards the end of this week coming or the following, be on the lookout for corn earworm. Our next moth flight will be starting soon. For Dectes, my only recommendation is to keep notes of which fields have the greatest number of Dectes and prioritize them in the harvest queue as early as the beans will allow - don't let it sit for a long period of time, particularly if poor weather threatens during the harvest season. Defoliation thresholds during the reproductive stages decrease to around 20%. Well developed, full season bean canopies can withstand more defoliation, but double crop soybean cannot. Bean leaf beetle is active now, and may be damaging in isolated areas. Iowa State created a dynamic bean leaf beetle threshold that can be found here: <https://crops.extension.iastate.edu/cropnews/2011/08/new-bean-leaf-beetle-threshold-calculator-created>. Thresholds for July and August beetles typically come out to near 0.7 - 1 beetle per sweep, while second generation September beetle thresholds are nearly 4 times greater. Finally, be scouting for stink bugs in any fields in the R4 stage. Our threshold is 5 bugs per 15 sweeps.

Corn

Corn rootworm adults are now active. If you plan to follow 2nd year corn with 3rd year corn (or older continuous corn), and especially fields in New Castle County and western Kent county on heavier ground, look at the ears for rootworm. A good rule of thumb is 1 rootworm per plant warrants mitigation action for next season's corn.

Soybean Disease Updates - Alyssa Koehler, *Extension Field Crops Pathologist*; akoehler@udel.edu

Full season soybeans across the area are approaching or at R3. Overall, the heat and dry conditions of the past few weeks have kept disease pressure low across the region. There have been a few reports of low canopy Septoria Brown Spot (Figure 1), particularly in irrigated fields. This disease usually stays to the bottom of the plant, limiting yield impact. Fungicide applications in soybean are most economical when disease is present and fungicides are applied during R1-R6 growth stages, with R3 being the most common timing. If you have disease present, and are considering a fungicide application, it is important to scout fields and monitor the weather. Most soybean diseases are favored by humid, wet conditions. If weather patterns continue to be hot and dry, disease pressure will likely remain low. However, we do often see wet falls, so continue to monitor rainfall and disease pressure through R6. The 2021 National Fungicide Efficacy Recommendations for Foliar Diseases of Soybean can be found at <https://crop-protection-network.s3.amazonaws.com/publications/fungicide-efficacy-for-control-of-soybean-foliar-diseases-filename-2021-03-12-182833.pdf>. I have also included results from the 2020 irrigated full season soybean foliar fungicide efficacy trial conducted at the Carvel Research and Education Center. Disease pressure was low in 2020 and there were no ratable levels of foliar pathogens present.



Figure 1: Low canopy Septoria brown spot (Photo: A. Koehler)

2020 Soybean Foliar Fungicide Trial

Variety: CZ 3930GTLJ treated with Poncho/VoTiVo + Ilevu Planting Date: 5/11/20
 Plant Population: 150,000 sd/a, 30 inch rows Harvest Date: 10/22/20

Treatment [†]	% Green Stems at Harvest [‡]	Test Weight	Moisture	Yield [§]	Avg. Purple Seed Stain [*]	Avg. Diaporthe/Phomopsis Seed Decay [¶]
Control	6.2	55.0	15.8	67.2 ab	2.4 ab	1.2
Revytek (R3) 8 oz/a	8.3	55.4	15.6	69.7 ab	1.6 ab	0.4
Priaxor (R3) 4 oz/a	4.9	55.5	15.6	65.4 b	0.8 ab	0.6
Veltyma (R3) 7 oz/a	10.0	55.2	15.6	75.7 ab	1.8 ab	1.0
USF0411 (R3) 8 oz/a	6.2	55.3	15.5	68.8 ab	1.6 ab	0.6
Delaro (R3) 8 oz/a	8.5	55.2	15.5	78.7 a	1.0 ab	0.8
Topguard EQ (R3) 5 oz/a	6.2	55.1	15.8	68.2 ab	1.8 ab	0.6
Lucento (R3) 5 oz/a	7.1	54.9	15.6	71.5 ab	1.8 ab	1.2
Miravis Neo (R3) 13.7 oz/a	4.4	55.5	15.2	71.2 ab	0.6 b	1.0
Miravis Top (R3) 13.7 oz/a	5.8	55.5	15.2	71.0 ab	1.0 ab	0.6
Quadris Top SBX (R3) 8 oz/a	8.7	55.5	15.3	74.9 ab	0.6 b	0.6
Miravis Neo (R5) 13.7 oz/a	6.9	55.1	15.4	71.9 ab	3.0 a	1.0
Miravis Top (R5) 13.7 oz/a	7.0	55.0	15.4	70.7 ab	0.8 ab	0.4
Miravis Neo (R3) fb Trivapro (R5) 13.7 + 13.7 oz/a	7.4	55.3	15.6	66.3 ab	0.8 ab	0.4
p-value	0.184	0.141	0.30	0.04	0.017	0.844
LSD ($\alpha=0.05$)	3.654	0.452	0.491	7.52	1.35	1.05

[†]R3 treatments applied 7/30/20, R5 8/12/20 using a CO₂ pressurized backpack sprayer equipped with extended range 8002VS flat fan nozzles calibrated to deliver 20 GPA at 40 psi. Plots were set up in a randomized complete block design with five replications. All treatments included 0.125% non-ionic surfactant, Induce 90SL.

[‡]Percent of green stems out of total stems in rows 2 and 3 of each plot the day of harvest. Means followed by the same letter are not significantly different based on Fisher's Least Significant Difference (LSD; $\alpha=0.05$).

[§]Yield was calculated from the center two rows of each plot and adjusted to 13% moisture.

^{*}Avg. number of seeds in 10g subsample from each plot with purple discoloration.

[¶]Avg. number of seeds in 10g subsample from each plot with white/chalk appearance.

What to do about Palmer Patches - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

I suspect all have heard about the need for preventing Palmer amaranth seeds from entering the soil and preventing seed production to stop the spread of seed with the combine. A few questions have come in about patches of Palmer amaranth and what options you might have late in the season.

There is no easy solution. Hand removal is the best option. Many of the plants already have seeds present so nothing short of removing the seed heads from the field will eliminate seeds from being returned to the soil. Those immature seeds on the plant will continue to pull nutrients from other parts of the plant and allow them to mature. Pulling plants and leaving them in the field, chopping plants, mowing plants, or spraying plants will not stop seed production, it will only prevent the production of additional seeds.

Palmer amaranth plants retain their seeds late into the summer and fall. Therefore, seeds will not be scattered as seedheads are removed from the field. However, that means the plants will still have seeds when the field is combined. It appears that crop desiccants will not cause seed drop either. So mature plants at the time of harvest have a very high probability of being spread, both making the current patches larger and even more troublesome, spreading seeds to other fields.

Hand removal of seedheads from the field is important, or the alternative is not harvesting these patches to prevent the spread of the seeds. If planning to mow Palmer amaranth plants on field edges, one mowing will not be enough to stop seed production. I do not know how frequent you will need to mow to stop seed production, but one mowing will not be adequate. In addition, be sure to clean the mower before you move it from an infested area, so seeds are not spread

General

Guess The Pest! Weeks 17 Answer: Pernicious Vegetable, Garden, and Field Edge Weed - David Owens, Extension Entomologist, owensd@udel.edu

Congratulations to Mona Steele and others who correctly identified last week's pernicious vegetable, garden, and field edge weed as Bermuda grass or wire grass. It spreads both with above ground stolons and below ground rhizomes. Fortunately, it can be controlled with grass specific herbicides, even in lawns with other primary turf grasses, depending on product and rate used.

Guess The Pest! Week 18- 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!

Time to test your knowledge of pests! Please click on the logo below to enter your guess for what is going on with this sweet corn leaf.



Go to <http://www.udel.edu/008255>

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 scheduled 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.

Extension302 Podcast

Episode 22: Facing Fake News

Only 26 percent of Americans are confident they can recognize fake news. Are you one of them? The crew sits down with [Dr. Cara L. Cuite \(Rutgers\)](#) to discuss the rise of misinformation and how it might be affecting you.

To listen, go to:

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

Virtual Professional Development Opportunities

Presented by DSU Cooperative Extension & Northeast SARE

With guest, Dr. Nancy Franz
Professor Emeritus, Iowa State University, School of Education

Getting Your Point Across
August 23, 2021, 1:30-3:00 PM (EDT)

Tips and tools for using storytelling to engage your audience, encourage behavior change, and improve your success stories.

Improving Your Outreach Strategy
September 8, 2021, 10:00-11:30 AM (EDT)

Using situation analysis and needs assessment techniques to better serve your constituents and be more efficient.

Register for either or both here:
<https://forms.gle/9MyG6FKdgDnCdvsZ8>

Email jchallandes@desu.edu if you have any questions.

Cooperative Education in Agriculture, Youth Development, and Home Economics. Delaware State University, University of Delaware and the United States Department of Agriculture cooperating, Dr. Dyremple B.

Marsh, Dean and Administrator. It is the policy of the Delaware Cooperative Extension System that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age, or national origin.

Field Tour of Carvel Crops Research

Wednesday, August 11, 2021 3:30-5:30 p.m.
University of Delaware
Carvel Research & Education Center
16483 County Seat Hwy
Georgetown, DE 19947

Please mark your calendars and save the date to join us for the 2021 Crops Research Tour at the University of Delaware Carvel Research and Education Center. This event will include wagon tours of agronomic and vegetable research plots.

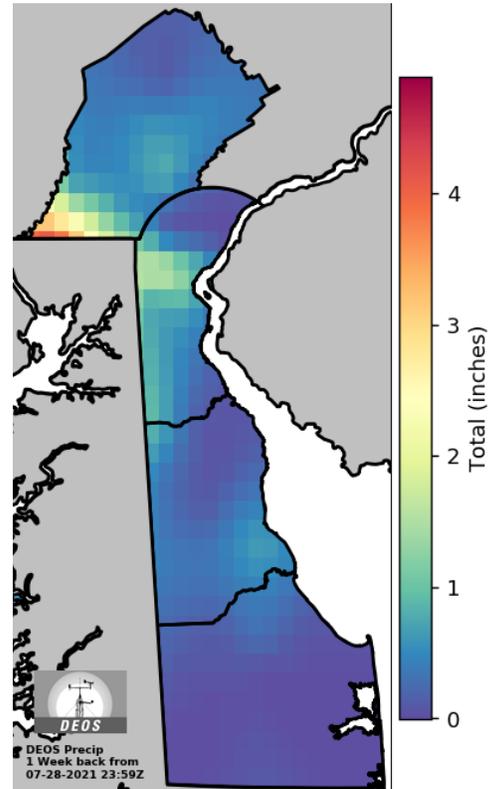
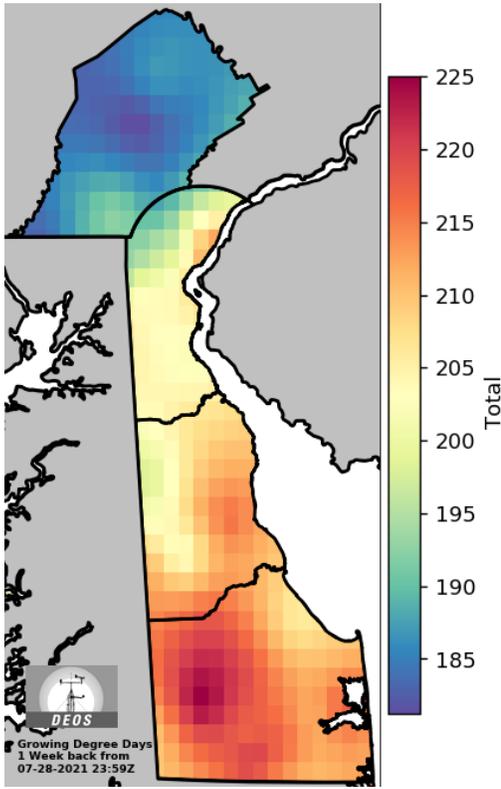
CCA and Nutrient Management credits will be available.

A box lunch will be provided.

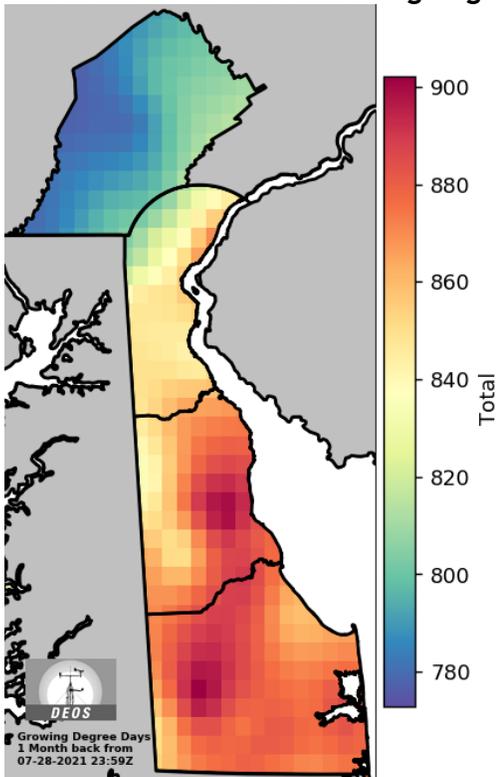
More details will follow in the coming weeks.

Weather Summary

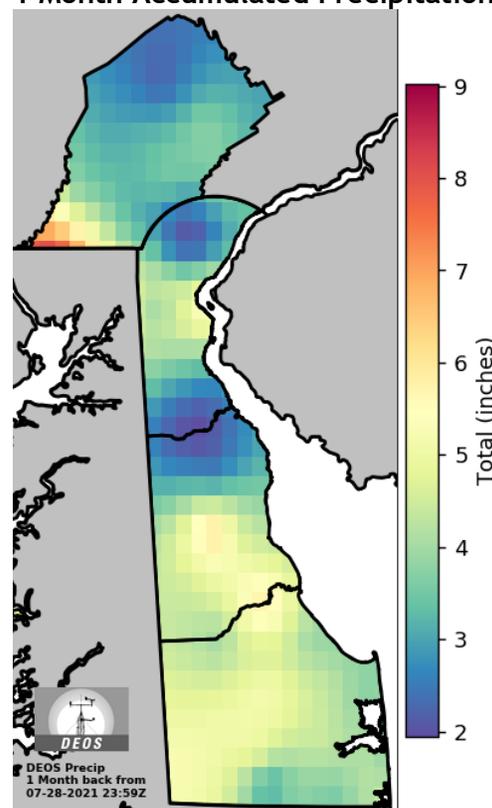
1 Week Accumulated Growing Degree Days



1 Month Accumulated Growing Degree Days

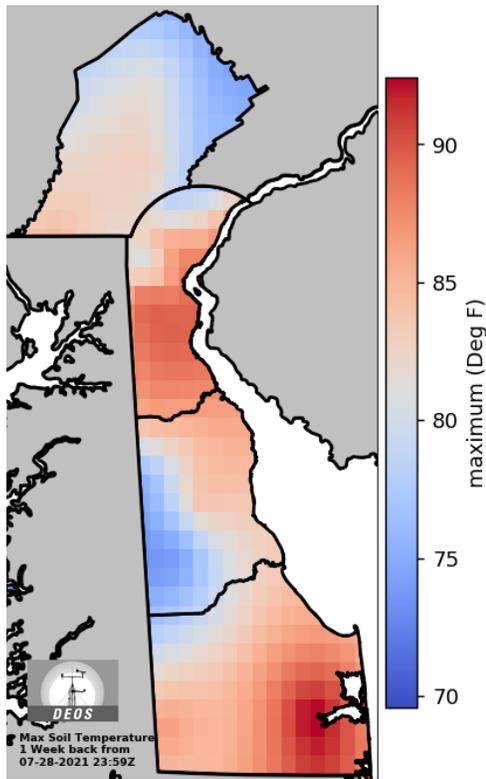


1 Month Accumulated Precipitation

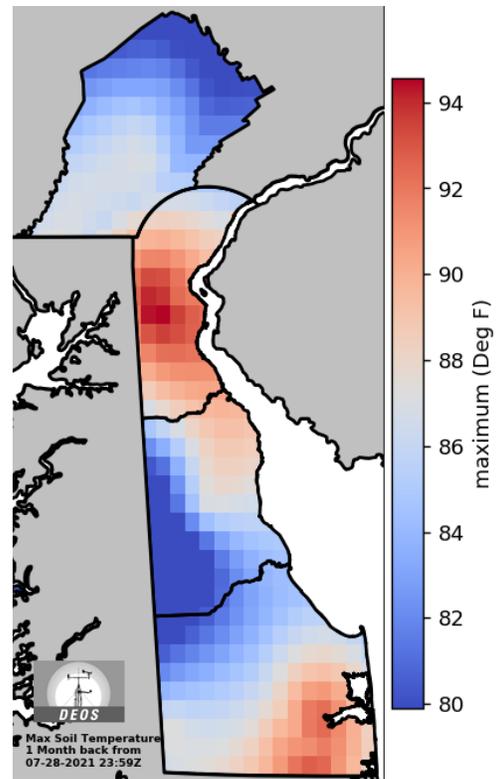


1 Week Accumulated Precipitation

1 Week Average Max Soil Temperature



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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