WEEKLY CROP UPDATE
UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 29, Issue 9 **May 21, 2021**

Vegetable Crops

Vegetable Crop Insect Scouting

– *David Owens, Extension Entomologist,* owensd@udel.edu

Cucurbit Crops

Striped cucumber beetles are moving into fields quickly. These beetles aggregate in a field, and can develop high populations in fairly small areas of a field, thus you need to check multiple locations in the field. This is particularly important for cantaloupe or musk melon, as these aggregations result in a feeding frenzy with numerous beetles defecating on the same leaf. Morning dew or other leaf wetness washes fecal matter into the wounded plant tissue which is how Bacterial wilt is introduced into the plant. Watermelon is resistant to this disease, but it is still important to manage these beetles now so that the summer generation which feeds on rinds will be suppressed. Watermelon thresholds in our region are 2 beetles per plant, although some recent research from Purdue University suggests this threshold could be as great as 5 per plant.

The most common insecticide control is a neonicotinoid application through the drip, and care needs to be taken not to accidentally overthink a chemigation rate and under-apply. Essentially, the label foliar rate needs to be applied on the same field footprint, not plastic footprint. Many labels have rate charts for drip irrigation depending on bed spacing. Pay special attention to these. However, some of the earliest fields may be flowering very soon and have bees on them in less than 2 weeks. In these fields, pay special attention to aggregations and thresholds, and consider using a foliar treatment of Assail.

There are two diamides labeled for cucumber beetle control, Harvanta and Exirel. In our tests, they do not kill adults at the same level as the neonics, but treated beetles stop feeding. These materials are probably best deployed during the summer months when Lepidopteran rind feeders also need to be managed as they are excellent worm products unmatched by either neonic or pyrethroid.

Solanaceous Crops

Continue scouting for **Colorado potato beetle** in potato and eggplant. Adults can fly once the temperature reaches 80 degrees. There are many modes of action available for CPB control. If the crop has been previously treated with a neonicotinoid, rotate to a different chemistry, as this insect is especially prone to resistance.

Flea beetles may also cause problems in eggplant. Their feeding is a characteristic small shot hole over the entire leaf. Thresholds depend on size; small transplants less than 3 inches are 2 beetles per plant. Admittedly, two beetles per plant can make an eggplant look terrible quickly. Many of the same modes of action for Colorado potato beetle are effective on flea beetles, including neonics, Entrust, Torac, Verimark, and Harvanta.

Begin scouting potato for **potato leafhopper**. They typically begin arriving in early June,

although with hot, dry conditions they may migrate into fields earlier. Thresholds are 1 adult per sweep or 1 nymph per 10 leaves. The only product labeled for both leafhopper and CPB is Torac and various neonicotinoids. Several other materials are labeled, and leafhoppers are sensitive to pyrethroids.

Snap Bean
Begin scouting potato for **potato leafhopper**. Thresholds in snap beans are 100 nymphs per 20 sweeps.

Bolting in Spring Planted Vegetables

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

Bolting is the term used for flower stalk formation in vegetables. Bolting response may be related to temperature, daylength, or a combination.

Bolting in spinach, lettuce, and some radishes (oriental types) will occur naturally as days get longer (daylength effect). High temperatures will accelerate bolting in spinach and lettuce. Lettuce may also be induced to bold just by high temperature stress.

Seed exposed to low temperatures early in the season may also be induced to bolt. This is called vernalization. Many mustard family plants need a cold period (vernalization of seed) along with lengthening days to flower. The amount of cold needed depends on the species and variety. Mustards are very prone to cold initiated spring bolting; turnips, Chinese cabbage, and salad radishes require more cold to initiate the bolting response.

In the cole crop group, cabbage planted very early in cold springs may bolt and premature flowering in broccoli, cauliflower, kale, and collards also occurs when planted too early, or if the spring is abnormally cold. However, cole crop transplants have to be of a certain physiological age to be susceptible to this cold-initiated bolting.

Other biennial vegetables such as beets, carrots, and onions also can be induced to bolt but only once plants have reached a certain size (they are past the juvenile growth stage). This is uncommon in our region.

Controlling bolting starts with planting during the recommended planting window. Early planting will contribute to bolting in some crops (such as cabbage), late planting in others (such as lettuce).

Use of transplants can also reduce bolting in cole crops. Transplants are produced from non-vernalized seed and are less susceptible to bolting.

Select varieties that are adapted to the spring planting season (an example would be Savannah mustard). Choose slow bolting varieties of spinach and lettuce. Choose spring adapted varieties of oriental radishes and Chinese cabbage.

One issue that complicates this is the use of high tunnels for early production. High tunnels allow for earlier planting but cold snaps still may drop temperatures enough to cause the cold induced flowering response in many of these crops.

Bolted spinach plant. This variety is not well adapted to spring planting.

When to Switch from Black to White Plastic Mulch –*Gordon Johnson, Extension Vegetable & Fruit Specialist;* gcjohn@udel.edu

High temperatures (90˚F or higher) coupled with clear skies can lead to heat buildup on the surface of black plastic mulched soils. We have found temperatures of over 140˚F at the surface of black plastic mulch. This can cause losses with transplants because stems near the mulch are damaged by the high heat. In crops seeded through the black mulch, germination is often reduced, and if plants do emerge, they can be killed by the excess heat. Another problem is high soil temperatures under black mulch which can lead to fruit quality issues in tomatoes and peppers. In onions, black mulch can cause damage to bulbs due to excess heat.

One solution is to reduce bed temperatures by using white mulches. White mulches can lower bed temperature by up to 20˚F. Use of white mulch increases transplant survival and increases germination and survival of seeded crops. The cooler soil also can increase root function and reduce fruit disorders such as white tissue, blotchy ripening and yellow shoulders in tomatoes and blossom end rot in tomatoes and peppers.

In onions, cutting the black mulch in mid-June as bulbs are increasing size has been shown reduce to reduce bulb damage.

In the past, a rule of thumb has been to switch to white mulch in the middle of June when days are longer and air temperatures are higher for longer periods of time. White mulch should also be used for crops planted in July and the first half of August.

The most common mulch used is white on black. The black side reduces weed germination, and the white top reflects solar radiation this cooling the surface and the soil beneath.

Is there an advantage to switching earlier? Up to the middle of May, black plastic (or other soil heating colors) should be the preferred mulch to get warm season vegetable plants off to a good start when soil temperatures can be variable and bed heating improves crop performance. The second half of May can see some very hot weather as can the beginning of June, but this varies from season to season. Past research has shown no benefits to using white mulch in this period and often reduced crop performance in warm season crops such as watermelons. If long range forecasts are for warmer than normal temperatures, laying white or reflective plastic earlier in June may be advised for sensitive crops.

White mulches have also shown benefits in spring planted cool season crops such as broccoli, lettuce, onions, and day neutral strawberries planted in April.

Fruit Crops

Alternate Bearing in Fruits –*Gordon Johnson, Extension Vegetable & Fruit Specialist;* gcjohn@udel.edu

Biennial or alternate bearing refers to the tendency of perennial fruits to put on a heavy crop one year and then little or no fruit the second year. This is most common in tree fruits such as apples.

Next year's flowers are initiated this year. If there are too many fruits on the plant in the current season, most of the energy goes to fruit development and less to flower initiation for next year. As a result, a fruit tree often produces a small number of flowers and fruits the year after a heavy crop.

Alternate year bearing is often variety related, so choose varieties that do not have alternate bearing habits when possible.

The main tool that we use to prevent alternate bearing is fruit thinning. Apples are commonly chemically thinned during bloom. If the chemical thinning was incomplete, hand thinning may be required if fruit loads are too high. In peaches, fruit thinning starts with dormant pruning to remove fruiting wood in vigorous varieties. This is followed by mechanical blossom thinning and the hand thinning to reach the optimal fruit load.

Hand thinning of apples should be done within six weeks of full bloom. Leave the largest apple in a cluster unless it is damaged. After thinning, apples should be spaced about 8 to 10 inches

apart on the branches. Pears, apricots, and peaches may also need to be thinned. Fruit should be spaced 6 to 8 inches apart on the branches. Plums and cherries will generally thin themselves.

Fruits such as apples are prone to alternate bearing. A heavy crop as seen above may lead to a light crop the next year.

‘Bruising’ on Strawberry Foliage – *Jerry Brust, IPM Vegetable Specialist, University of Maryland*; jbrust@umd.edu

Over the last few weeks, I have been sent pictures of and have seen dark spots on the foliage of strawberry plants (Fig. 1). These spots can look pretty bad at times and are thought to possibly be the start of some disease such as angular leaf spot or anthracnose. The dark spots are usually on the upper or lower surface of the leaf, but at times can be found on both surfaces of a leaf. These damaged areas of strawberry foliage can be very disconcerting when they appear as dark spots on the stems (Fig 2.; these dark markings on petioles are not sunken as they would be if it were anthracnose).

Figure 1. Dark areas on strawberry leaves often mistaken for the start of a foliar disease

No bacteria or fungi have ever been found associated with these dark spots. I have seen this type of discoloration in strawberry foliage many times over the years and have never seen the spots turn into any disease problem or any other type of problem. The best that we can come up with is that the plant has ‘bruised’ foliage, usually appearing within a short time span after high winds occur. It is possible that disease organisms might enter the plant through this damaged tissue, but I have never seen this occur to any extent in the field—even during the wettest spring. Nothing needs to be done about this bruising, growers just need to be aware of the possibility occurring after wind events.

Figure 2. Strawberry stem with dark spot

Cyclamen Mites Found in Strawberries

Jerry Brust, IPM Vegetable Specialist, University of Maryland; jbrust@umd.edu

Cyclamen mites have been found in a few mid-Atlantic strawberry fields as well as more widespread to the south of us in North Carolina. So once we start to really warm up they may become more of a problem along with two spotted spider mites. The cyclamen mites have been found most often in plasticulture strawberries and less often in matted row systems. Usually cyclamen mites (*Phytonemus pallidus*) cause much of their damage to bedding plants, but they also can cause significant problems in strawberries. Adult cyclamen mites are usually never seen as they are only a quarter of a mm long and a 20X hand lens or dissecting microscope is needed to see them.

Adult mites are oval-shaped and a glossy creamy orange (Fig. 1) with males being smaller than females. The hind legs of females are thread-like and in males are pincerlike (the male uses these hind legs to transport female pupae to new locations on the plant). The eggs are translucent and comparatively large, about ½ the size of an adult (Fig. 1). Masses of eggs in leaf crevices can be so numerous that they look like tiny piles of salt. Female adults overwinter in strawberry crowns and also can be present on transplants. Female mites lay their eggs on strawberry leaves that hatch into tiny, white, six-legged larvae (Fig. 1). The entire life cycle of the cyclamen mite is less than 3 weeks and therefore populations can build quickly. Although there are multiple generations each year, populations tend to peak in early spring and again in late summer.

Figure 1. Adult female cyclamen mite (yellow arrow), eggs (black arrows) and larva (red arrow)

Cyclamen mites use their piercing-sucking mouthparts to feed on plant material. Symptoms of infestation can be found throughout the plant. However, at low populations cyclamen mites can usually be found along the midvein of young, unfolded leaves and under the calyx of newly emerged flower buds. As numbers increase mites can be found anywhere on the plant. The infested leaves will appear stunted and crumpled (Fig. 2), while flowers wither and die and fruit becomes shrunken with protruding seeds (Fig. 3). By the time these symptoms appear, it is too late to limit damage, so cyclamen mites should be managed preventively. Treatments should be applied when 1 leaf in 10 shows cyclamen mite damage.

Figure 2. Cyclamen mite damage to strawberry—crinkled deformed younger leaves

Figure 3. Cyclamen mite damage to strawberry fruit-protruding seeds

Growers should watch for deformed leaves starting when new buds emerge from the crown and continuing until harvest. Older fields will most likely have more problems. In order to be sure of the presence of cyclamen mite, you need to examine the newest leaves in the crown, specifically the mid vein and lower part of a leaf where it joins the petiole. Magnification (20-40X) is recommended for confirmation of cyclamen mites.

Early detection of cyclamen mites is essential in achieving best control. Thorough spray coverage of the crown leaves is important for good control, so high volumes of water are needed (60-100 gal/a). Horticultural oils can be used if temperatures are below 88° F. Agri-Mek SC or Portal XLO also can be used for mite control. Predatory mites can be used and work best if cyclamen mite populations are small and confined to scattered hot-spots in a field.

Agronomic Crops

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

Alfalfa
Begin scouting regrowth for **potato leaf hopper**, which typically appears towards the end of May. Stubble treatments are rarely necessary, as cut alfalfa stimulates adults to seek 'greener pasture.' Resistant varieties have glandular trichomes that glue nymphs down and trap them; these varieties may have as much as 75% fewer leafhopper than non-resistant varieties. There are also non-yellowing varieties which still need to be scouted for as they will suffer leafhopper damage even without the visual after-the-fact symptoms.

Field Corn
Continue scouting for **cutworm** damage to corn. We have now accumulated degree days to where black cutworm larvae, if present, are large enough to cut plants.

Soybean
In the past few days, reports of **seedcorn maggot** damage have come in on early planted soybean. Affected plant stems have a shredded appearance internally from where maggots have been feeding. Cotyledons may also have small holes and pathways etched into them that look similar to, but smaller than, slug feeding. Seedcorn maggot is favored by cool conditions and recent tillage incorporating crop residue or manure. Unfortunately, there are no rescue treatments. Even neonicotinoid seed treatments may not provide adequate stand protection in situations in which a large number of flies migrate into a field to lay eggs. The best thing to do is to do stand counts and discuss with your county agent as to whether or not the damage would justify replanting. The first two

generations of seedcorn maggot are the most damaging. The second generation is passing, meaning that beans should not face seedcorn maggot again this year.

2021 is Warmer and Drier - *Jarrod O. Miller, Extension Agronomist, jarrod@udel.edu; Cory Whaley, Sussex Co. Extension Ag Agent, whaley@udel.edu; Jake Jones, Extension Agriculture Agent, Kent County, jgjones@udel.edu; Dan Severson, Agriculture Agent, New Castle County, severson@udel.edu*

At this point last year (Table 1) we had accumulated about 80 growing degree days (GDD) less than we have in 2021 (Table 2), particularly if you had planted by April 15th. The only advantage in temperatures in 2020 was if you planted May 6th, a period which had seen slightly warmer trends compared to this year. One major cause of this trend last year was the cold temperatures from late April to Mid-May (Figure 1), which flattened GDD accumulation in 2020. This year, while there was slower GDD accumulation at the beginning of May, it did not last as long (Figure 1).

Table 1: 2020 Accumulated Growing Degree Days Based on Planting Date Through May 19th

Planting Date	New Castle	Kent	Sussex
15-Apr	159	186	200
22-Apr	159	179	192
29-Apr	157	175	175
6-May	87	98	94

Table 2: 2021 Accumulated Growing Degree Days Based on Planting Date Through May 17th

Planting Date	New Castle	Kent	Sussex
15-Apr	244	268	278
22-Apr	225	241	254
29-Apr	183	193	207
6-May	71	69	79

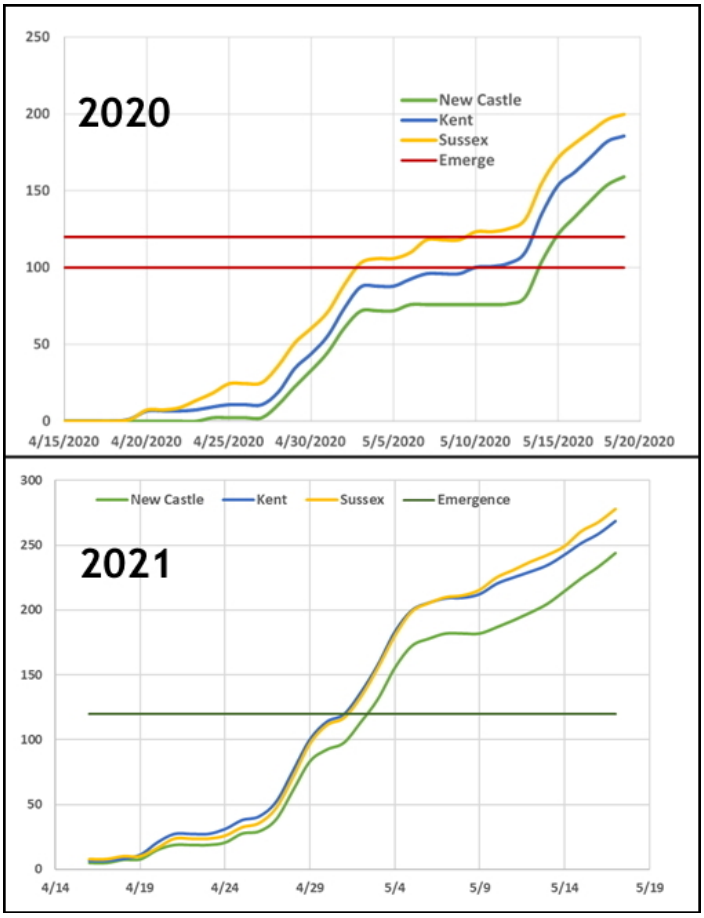


Figure 1. Accumulated Growing Degree Days in each County Since April 15th in both 2020 and 2021.

Temperatures are not our limiting factor in 2021 for good crop germination and early growth. Instead we are seeing abnormally dry conditions, which has been conducive to field work, but may start limiting crop growth and survival. We have observed little to no rain in the forecast over the next week, which could and will hopefully change. However, there are significantly drier portions of the Delmarva than were observed last year (Figure 2). Volumetric water content was low last year in Sussex County, but this year we are experiencing very dry conditions (Figure 2, darker orange), particularly on the border of Delaware and Caroline County, Maryland. Most of New Castle and the eastern half of Kent had very adequate moisture last year, but now much of Delaware is approaching drought conditions. Topsoil moisture in the upper inch may not be enough to assist with germination, so making sure planter settings are correct is very

important. Any field that has irrigation should be maintaining soil moisture as best it can.

We would expect these dry conditions to start to severely decrease good germination. In some cases, fields with high biomass from crop or cover crop residues should benefit field crop production, providing a mulching layer that reduces the loss of moisture to the atmosphere. Combining irrigation with good soil infiltration and reduced evaporation will be beneficial.

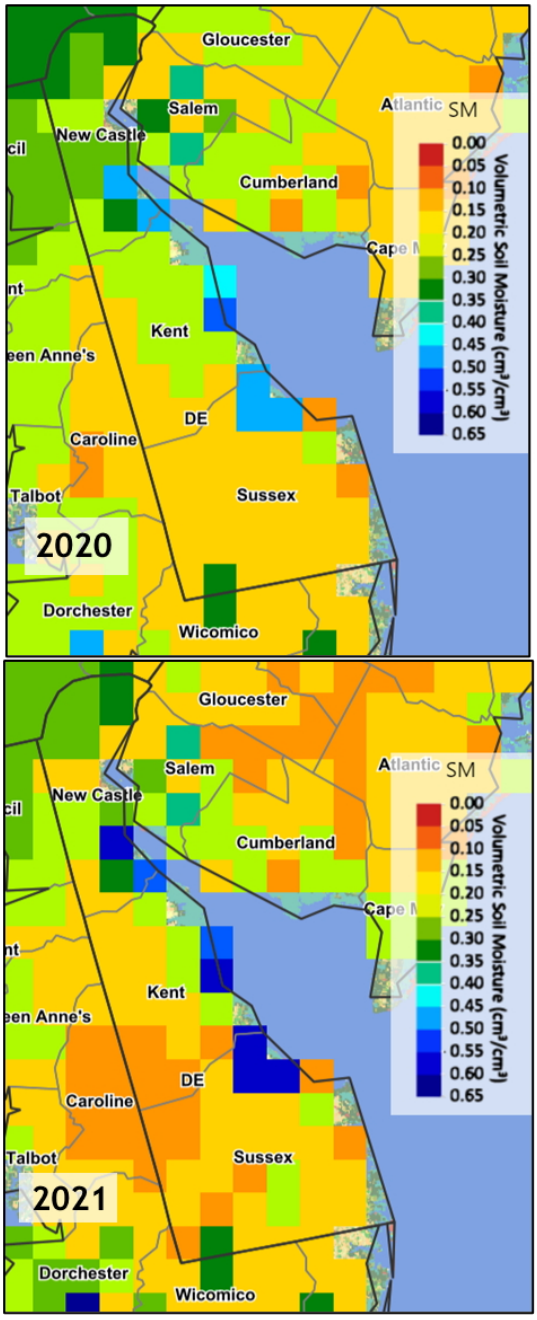


Figure 2 Statewide Soil Moisture in Mid-May 2020 and 2021 (USDA/NASA/GMU)

Scouting Fields for Fusarium Head Blight

Alyssa Koehler, Extension Field Crops Pathologist; akoehler@udel.edu

Wheat anthesis is coming to a close throughout most of the state. We have continued to remain at low risk for FHB (Figure 1). It has been an opposite year from recent springs; this year conditions are quite dry. While this is helpful for reduced FHB, I have been receiving quite a few calls about disease risk and irrigation. If possible, aim to allow at least 10 days after flowering before irrigation. Keep an eye on secondary tillers that may still have yellow anthers and be susceptible to infection. Once wheat has flowered, symptoms of FHB are visible in 18-24 days, but cool weather can slow symptom development. Heads with FHB will have bleached florets or bleached sections of the head (Figure 2) and may have pink growth on spikelets. Glume blotch may also be present, but typically has more of a grey appearance. You can follow these steps to assess the level of FHB present in your field.

1. For every 10 acres of field, randomly select one spot to survey.

2. Keeping your line of sight above the wheat heads, walk 40-50 yards and randomly pick 10-20 heads to look at on the plant or detach and place into a bag. (You don't want to be looking down and biasing the heads you select).

3. Once you have randomly collected the heads, rate the percent of each head with symptoms of FHB (bleaching or pink growth on spikelets).

4. After you have recorded values for each head, determine the average percent FHB severity by dividing the sum of disease severities by the total number of heads collected.

(Ex. You rate 10 heads with severity values: 0, 10, 30, 0, 0, 20, 10, 0, 0, 0. These add up to 70. 70/10 heads = 7% FHB severity)
Higher levels of FHB are typically associated with elevated levels of DON and possible issues with yield and test weight. It is possible to have delayed or lower levels of symptoms and still have DON.

5. Repeat this assessment as needed to get an overall rating for the field. Fields with greater

than 10% FHB severity are at higher risk for yield losses or elevated DON. Fields with elevated DON should be harvested as early as possible and you may want to consider increasing combine fan speeds and shutter openings to reduce the amount of scabby kernels harvested.

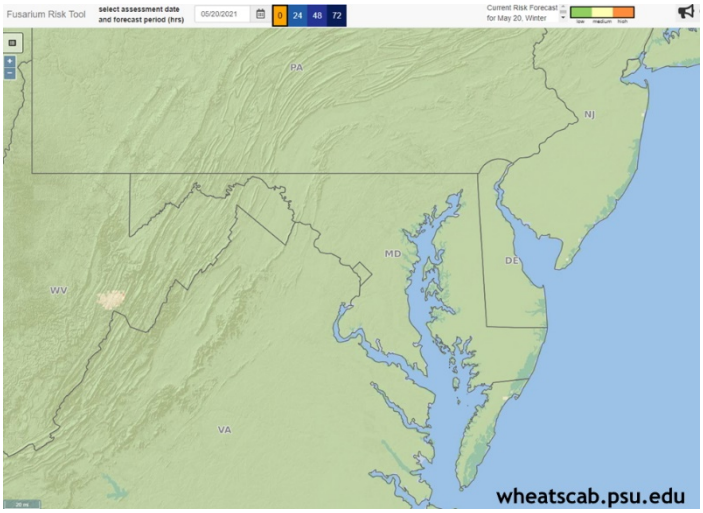


Figure 1. FHB Risk Model for May 20, 2021

Figure 2. Symptoms of Fusarium Head Blight

General

Dry Weather and Weed Control – *Mark VanGessel, Extension Weed Specialist*; mjv@udel.edu

The local weather forecast does not look favorable for rain. Here are some thoughts on what that could mean weed control.

If you have irrigation and your preemergence herbicides have not had water to "activate" them, run the pivot to move the herbicide into the top inch of soil. Preemergence herbicides need to be absorbed by the roots and shoots of weed seedlings as they grow through treated soil; and herbicide only on the soil surface is much less effective.

If you do not have irrigation, physically incorporating with a field cultivator is an option. However, an additional cultivation will further dry the soil. Other implements can be used for incorporation if they thoroughly mix the soil and leave a smooth soil surface. A rule of thumb, a field cultivator will incorporate half the depth of the cultivating tines so set it to run 3 to 4 inches deep. Unfortunately, incorporating is not an option for no-till fields.

If you have a cover crop that has not been killed yet, check the field for soil moisture. Most of the cover crops seeded last fall are large and may have depleted soil moisture. In which case, it may be best to delay termination or planting until rain.

If you applied your herbicides over a week ago and have had not water, there is not much you can do to activate many of them. Root absorbed herbicides such as triazines, HPPD (i.e. Callisto), PPO (i.e. Authority or Valor) and ALS herbicides and may get taken up if activation occurs before the roots develop.

In most situations, you have the option to spray postemergence. So be sure to scout these fields early to find when the weeds begin emerging and be sure to spray based on weed size rather than relying on calendar dates.

True Armyworm and Black Cutworm Trap Report – *David Owens, Extension Entomologist,* owensd@udel.edu

Moth counts declined dramatically this week due in part to cooler weather. Many thanks to Maryland extension agents Emily Zobel and Maegan Perdue and UD extension entomologist emeritus Joanne Whalen.

Location	Number of Nights	Total Catch TAW	Total Catch BCW
Willards, MD	7	1	2
Salisbury, MD	7		
Laurel, DE	7	0	3
Seaford, DE	7	2	4
Sudlersville, MD	7	0	1
Harrington, DE	7	1	15
Smyrna, DE	7	33	18
Middletown, DE	7	19	12

Guess The Pest! Week 7 Answer: Pseudomonas Leaf Spot – *David Owens, Extension Entomologist,* owensd@udel.edu

There was less guessing activity on last week's pest challenge. Remember, you cannot win Guess The Pest if you do not enter. The disease on last week's melon transplants may have been seen earlier in the year, but conditions no longer favor it.

This from Jill Pollok:
Here's a sample of watermelon with Pseudomonas leaf spot, caused by *Pseudomonas* spp. Not to be confused with bacterial fruit blotch--another, more severe, bacterial disease. This disease has tricky symptoms in watermelon, because we're used to seeing angular leaf lesions with a bacterial disease in cucurbits, but these lesions are more circular. Cool, wet weather favors this pathogen, and it generally isn't much of an issue after plants are moved into the field unless cool, rainy weather persists.

Guess The Pest! Week 8 – *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!

There are two things going on with this corn seedling. Slugs are feeding on the leaves, causing the irregular rasping holes in the leaves. But what is causing the leaf yellowing? A hint: the whorl leaf has also wilted, and this is not due to slugs.

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

COVID-19 Vaccination Protects Your Employees and Your Business- *Kali Kniel, Professor of Microbial Food Safety, University of Delaware,* kniel@udel.edu

Keeping up with the latest COVID-associated news can sometimes feel like a roller coaster ride. The CDC announced on May 16 that *fully vaccinated people* can resume activities without wearing a mask or physically distancing, except where required by federal, state, local, tribal, or territorial laws, rules, and regulations, including local business and workplace guidance. First note that *fully vaccinated* means it has been at least two weeks' time since your second dose in a two-dose series, such as the Pfizer or Moderna vaccines, or two weeks after a single-dose vaccine, such as Johnson & Johnson's Janssen vaccine. If you don't meet these requirements, regardless of your age, you are NOT fully vaccinated. In this case, you should keep taking all precautions until you are fully vaccinated. Also, that exception where masks and distancing are required by some states or businesses is to protect individuals and families where vaccines are not allowed due to age or in some cases immune-deficient individuals may not be able to be vaccinated at this time. In other cases, states may be waiting until more people are vaccinated in that area. This CDC guidance comes as the science is now clearer on the incredible level of protection we get from these vaccines.

The benefit to encouraging your employees to be vaccinated is that this is the best way to get *back to normal*. Vaccination helps to protect the health of your workforce, visitors, and patrons. It also reduces the risk of downtime from illness or quarantine after exposure to COVID-19 in the busiest season of the year. While the number of individuals with COVID-19 in the United States continues to decrease, the disease is still circulating, people are still being hospitalized and tragically some are dying due to COVID-19. In countries with lower vaccination rates compared to the US, COVID-19 cases are rising. It is obvious that vaccines are a game changer.

Still uncertain about vaccines in your workplace? According to Dr. Daniel Griffin (one of my COVID heroes, and active clinical physician, scientist, and educator) 99% of the patients admitted to the hospital at this time are those who never received a vaccine. This is a great reason to encourage your friends, family, employees, and team members to get their shot. You might also like to know that serious side effects that would cause a long-term health problem are extremely unlikely following COVID-19 vaccination. Historically, if vaccine side effects are going to happen, they occur within six weeks of receiving a vaccine dose. At this point >100 million doses of the Pfizer vaccine alone have been given and scientists continue to actively follow a large cohort of these people who have been vaccinated to confirm vaccine safety and effectiveness. This way, rare effects, such as those that occur in 1 person in a million, can be identified early. In our area of the US it is easier than ever to find a vaccine location and children ages 12-15 are now eligible to receive the two-dose Pfizer vaccine.

Many of us rely on scientific evidence to provide proof that one crop variety or fertilizer type is superior to another and at this time there is ample scientific evidence to support how incredible these vaccines are at providing protection from COVID-19.

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, June 23, 2021
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.

Extension302 Podcast

Episode 18: Cicada Mania!

With Dr. Brian Kunkel and Dr. David Owens

You've heard rumors about the impending Brood X emergence...but what is Brood X, and what does that mean for us here in Delaware?

To listen, go to:
https://www.udel.edu/academics/colleges/canr/cooperative-extension/about/podcast/

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, June 11, 2021 9 a.m.–3 p.m.
Register by May 15
https://www.pcsreg.com/mental-health-first-aid-training-june-21

Friday, July 30, 2021 9 a.m.–3 p.m.
Register by June 30
https://www.pcsreg.com/mental-health-first-aid-training-july-2021

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 ExtensionThese organizations are equal opportunity providers.

University of Delaware's Spring Twilight Crop Update

Thursday, June 10, 2021 6:00-8:15 p.m.
Online via Zoom

Join your fellow producers and the UD Agriculture Extension team with a timely virtual update of this year's current production practices and topics as well as timely issues. Delaware nutrient management and pesticide credits will be available.

Please pre-register and a Zoom link will be sent to you the day before the meeting.
https://www.pcsreg.com/university-of-delaware-2021-spring-twilight-crop-update-session

AGENDA

Welcome and Introductions 6:00-6:05
Dan Severson, University of Delaware Cooperative Extension

Weed and Cover Crop Update 6:05-6:25
Mark VanGessel, University of Delaware Cooperative Extension Weed Specialist

2021 Insect Pest Outlook 6:25-6:45
David Owens, University of Delaware Extension Entomologist

Nutrient Management Update 6:45-7:05
Amy Shober, University of Delaware Extension Nutrient Management Specialist

Agronomy Update 7:05-7:25
Jarrod Miller, University of Delaware Extension Agronomy Specialist

Plant Pathology Update 7:25-7:45
Alyssa Koehler, University of Delaware Plant Pathologist Specialist

Plant Diagnostic Update 7:45-8:05
Jill Pollok, University of Delaware Plant Diagnostician

Conclusion and Evaluations 8:05-8:10
Dan Severson, University of Delaware Cooperative Extension

This program is brought to you by University of Delaware Cooperative Extension, a service of the UD College of Agriculture and Natural Resources, a land-grant institution. University of Delaware Cooperative Extension in accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

This institution is an equal opportunity provider. If you have special needs that need to be accommodated, please contact the office two weeks prior to the event.

Vegetative Buffers Demo Days

By using native plants, Delmarva poultry growers can:
- capture dust
- shade chicken houses
- deter Canada geese
- absorb excess nutrients before they reach local waterways
- reduce maintenance costs & time

We are inviting poultry growers out to see vegetative BMPs (best management practices) installed on two independent growers' properties. There will be two opportunities for poultry growers to come see what

they can do to save time and money while supporting pollinators.

Nutrient management credits available.
Tasty lunch provided.
Event held rain or shine.

Two Dates/Locations

Thursday, June 3, 2021 11:00 a.m.-1:00 p.m.
Minh Ma's Farm
11686 San Domingo Road, Sharptown, MD 21837

Wednesday, June 9, 2021 11:00 a.m.-1:00 p.m.
Terry Baker's Farm
26073 Hidden Acres Lane, Millsboro, DE 19966

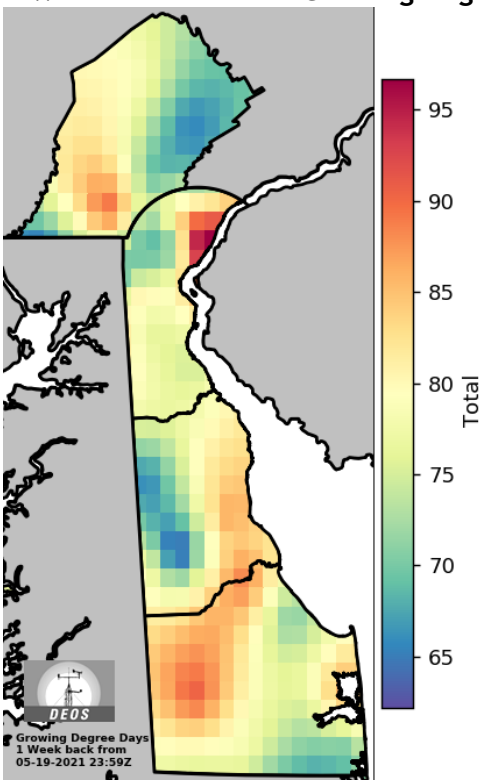
Due to COVID-19 registration is limited and required. Register at:
www.NanticokeRiver.org/Chicken
or call the Delmarva Chicken Association:
302-856-9037

Biosecurity boots will be provided. Please be sure to adhere to any biosecurity practices before and after visiting the farm.

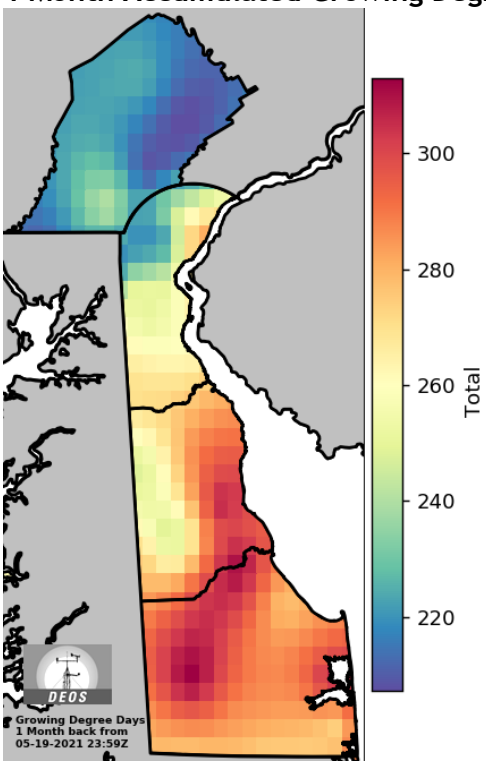
Funding provided by the Chesapeake Bay Trust, Delaware Department of Natural Resources and Environmental Control, and National Fish and Wildlife Foundation.

New Weather Summary!

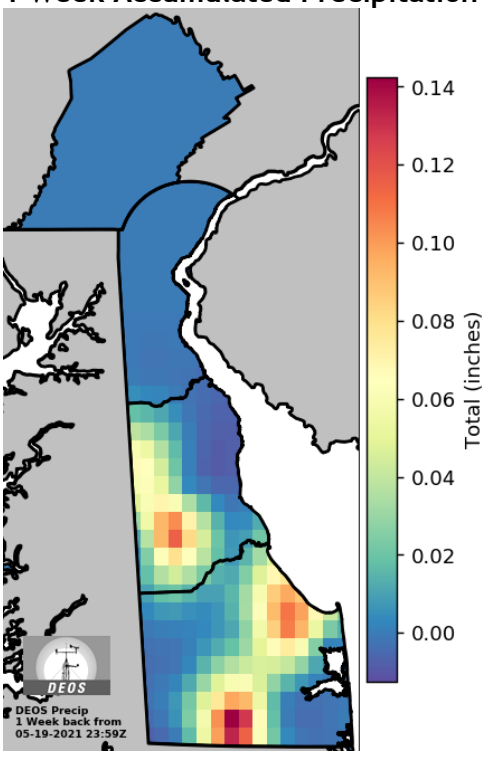
1 Week Accumulated Growing Degree Days



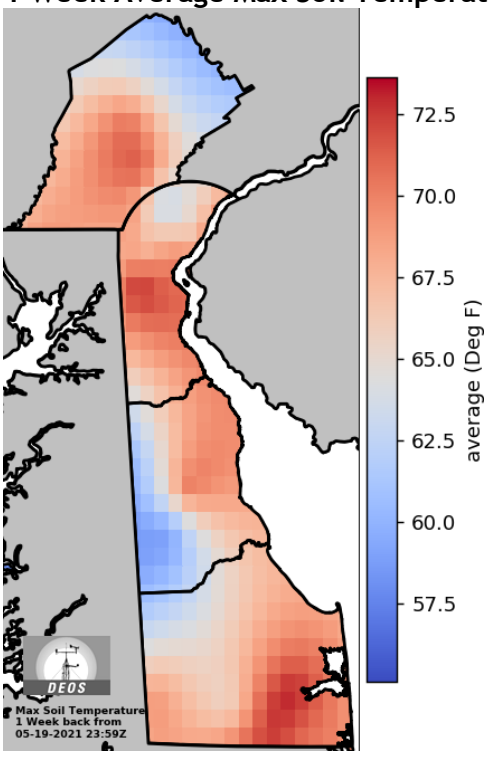
1 Month Accumulated Growing Degree Days



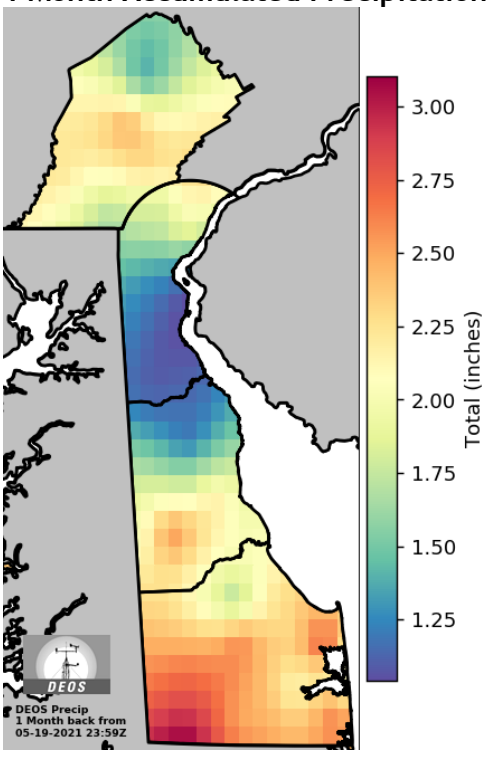
1 Week Accumulated Precipitation



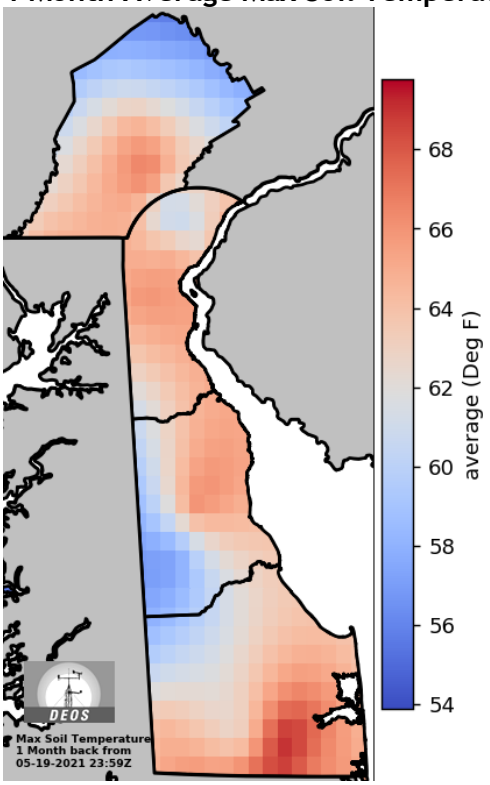
1 Week Average Max Soil Temperature



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