



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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July 9, 2021

Vegetable Crops

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

Peppers

Scout peppers for **beet armyworm** now. Beet armyworm can be a significant defoliator. Eggs are laid in masses, and often a few plants in a row and a few across are damaged most heavily. Look for holes in upper canopy leaves and webbing. The caterpillar is green with a small black spot right above the second pair of true legs (not the abdominal prolegs). Beet armyworm is resistant to pyrethroids but there are a number of other products that will provide good control.

Watermelon

Continue scouting for **spider mites** on vine leaves. While looking for mites, keep in mind that our next generation of **cucumber beetles** are due to emerge from the soil very soon. **Rindworms** of various species are active. In the last couple of days I have been sent pictures of less commonly encountered caterpillars doing a number on the rinds. Look for signs of fresh feeding injury on melon fruit. We have begun catching **beet armyworm** moths in our pheromone trap, and a report of caterpillars on pigweed came in this week. They can be easily scouted for on pigweeds. We have also seen an uptick in **corn earworm** moths in pheromone traps this week. They will lay eggs in watermelon and the caterpillars can also be

aggressive on the rinds. As a reminder, beet armyworm and corn earworm might not be controlled well with a pyrethroid. Good worm products to consider include diamides, indoxacarb, and spinetoram. Spinetoram and diamides will also control thrips. There is a Zee recommendation for the use of Verimark on cucumber beetle, and Harvanta has a full section 3 label for them. In a spray trial last year, Harvanta provided some control of cucumber beetles, though not as great as acetamiprid. It did however, result in melons with equal rind protection to acetamiprid. Regarding acetamiprid, there are generics available now.

Sweet Corn

I wrote that we captured a single male **fall armyworm** in a pheromone trap at the research station last week. This week there have been reports from Cape May, NJ of scattered, below-threshold whorl infestations of FAW. Typically in our area, whorl infestations show up around mid-July. The remnants of Hurricane Elsa may drag up additional moths from the South. If you have whorl infestations greater than 20-30% or tassel-push infestations greater than 15% a treatment is warranted. Scout carefully, often by the time FAW damage is clearly visible, the worms are large and moving out of the corn. If a field is deemed to be above threshold, it would be better not to use a diamide insecticide because we only have a limited amount of the active ingredient that can be used due to label restrictions. We need all of that active ingredient for corn earworm later.

The corn earworm flight has also increased significantly this week at many locations. We

have been able to resume vial tests. As of this writing, we completed assays on 30 moths, but have another 40 in vials that will be evaluated after this update. We are seeing signs of decreasing pyrethroid susceptibility, which is a bit earlier than in previous years. Do not rely on pyrethroids alone for earworm management. Premixes with chlorantraniliprole (Besiege and Elevest) are excellent products but only have 3-4 applications with them. Other materials to consider tank-mixing are Lannate and Radiant. Of the pyrethroids, the last two years we have had better efficacy out of beta-cyfluthrin (Baythroid XL) than others evaluated. However, this advantage was not observed in Tom Kuhar's evaluations last year from the Eastern Shore.

Earworm Trap counts from Thursday are as follows:

Trap Location	BLT - CEW	Pheromone CEW
	3 nights total catch	
Dover	4	59
Harrington	0	7
Milford	0	24
Rising Sun	1	9
Wyoming	1	39
Bridgeville	0	8
Concord	2	44
Georgetown	0	21
Greenwood	0	36
Laurel	3	76
Seaford	1	---
Lewes	---	25
Millsboro	16	7

Sunburn in Fruiting Vegetables and Fruit Crops and Sunburn Protection - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

With the recent hot temperatures and more predicted, there is high potential for sunburn in fruits and fruiting vegetables. Growers may need to consider ways to protect against sunburn. Sunburn is most prevalent on days with high temperatures, clear skies and high light

radiation. We commonly see sunburn in watermelons, tomatoes, peppers, eggplants, cucumbers, apples, strawberries, and brambles (raspberries and blackberries).

There are three types of sunburn which may have effects on the fruits. The first, **sunburn necrosis**, is where skin, peel, or fruit tissue dies on the sun exposed side of the fruit. Cell membrane integrity is lost in this type of sunburn and cells start leaking their contents. The critical fruit tissue temperature for sunburn necrosis varies with type of fruit. Research has shown that the fruit skin temperature threshold for sunburn necrosis is 100 to 104°F for cucumbers; 105 to 108°F for peppers, and 125 to 127°F for apples. Fruits with sunburn necrosis are not marketable. Injury may be white to brown in color.



G Johnson, University of Delaware
Sunburn necrosis and photooxidative sunburn on pepper fruit. Note secondary disease infections on damaged tissue.

The second type of sunburn injury is **sunburn browning**. This sunburn does not cause tissue death but does cause loss of pigmentation resulting in a yellow, bronze, or brown spot on the sun exposed side of the fruit. Cells remain alive, cell membranes retain their integrity, cells do not leak, but pigments such as chlorophyll, carotenes, and xanthophylls are denatured or destroyed. This type of sunburn browning occurs at a temperature about 5°F lower than sunburn necrosis (i.e. 115 to 120°F in apples). Light is required for sunburn browning.

Fruits may be marketable but will be a lower grade.

The third type of sunburn is **photooxidative sunburn**. This is where shaded fruit are suddenly exposed to sunlight as might occur with late pruning, after storms where leaf cover is suddenly lost, or when vines are turned in drive rows. In this type of sunburn, the fruits will become photobleached by the excess light because the fruit is not acclimatized to high light levels, and fruit tissue will die. This bleaching will occur at much lower fruit temperatures than the other types of sunburn. Damaged tissue is often white in color.

Recent storms have caused canopies in some vegetable crops to be more open, exposing fruits to a high risk of both sunburn necrosis and photooxidative sunburn.

Genetics also play a role in sunburn and some varieties are more susceptible to sunburn. Varieties with darker colored fruit, those with more open canopies, and those with more open fruit clusters have higher risk of sunburn. Some varieties have other genetic properties that predispose them to sunburn, for example, some blackberries are more susceptible to fruit damage from UV light.

Control of sunburn in fruits starts with developing good leaf cover in the canopy to shade the fruit. Fruits most susceptible to sunburn will be those that are most exposed, especially those that are not shaded in the afternoon. Anything that reduces canopy cover will increase sunburn, such as foliar diseases, wilting due to inadequate irrigation, and excessive or late pruning. Physiological leaf roll, common in some solanaceous crops such as tomato, can also increase sunburn.

In crops with large percentages of exposed fruits at risk of sunburn, fruits can be protected by artificial shading using shade cloth (10-30% shade). However, this is not practical for large acreages.

For sunburn protection at a field scale, use of film spray-on materials can reduce or eliminate sunburn. These materials are kaolin clay based, calcium carbonate (lime) based, or talc based and leave a white particle film on the fruit (such

as Surround, Screen Duo, Purshade and many others). There are also film products that protect fruits from sunburn but do not leave a white residue, such as Raynox. Apply these materials at the manufacturer's rates for sunburn protection. They may have to be reapplied after heavy rains or multiple overhead irrigation events.

While particle films have gained use in tree fruits, their usefulness in vegetables is still unclear. Research at UD and the University of Maryland has shown reduced fruit disorders such as sunburn in peppers and white tissue in tomatoes when applied over those crops. Watermelon growers have used clay and lime-based products for many years to reduce sunburn in that crop in southern states.

There are some drawbacks to the use of particle films. If used for sunburn protection on fruits, there is added cost to wash or brush the material off at harvest. Where overhead irrigation is used, or during rainy weather, the material can be partially washed off of plants, reducing effectiveness and requiring additional applications. Produce buyers can also have standards relating to the use of particle films and may not accept products with visible residues. For example, some watermelon brokers will accept watermelons where calcium carbonate protectants have been used but will not accept watermelons sprayed with clay-based products.

Pumpkin Disease Control - *Gordon Johnson, Extension Vegetable & Fruit Specialist;*
gcjohn@udel.edu

I was recently asked about disease control programs for pumpkins. The following was modified from an article by Dr. Kate Everts in 2019 that I have added updated fungicide recommendations and additional information about certain diseases.

A frequent question that I get from growers is “what is the best spray program for my pumpkin crop (and other ornamental squashes)?”. It is a challenging question to answer, in part because each field/farm may have different disease pressure, and Ag Chem suppliers may only stock

some fungicides. With that in mind, I have come up with the following step by step procedure to use as a guide in designing an individualized pumpkin program. The numbers in parenthesis that follow the fungicide name are the Fungicide Resistance Action Committee (FRAC) code for the product. Except for the broad- spectrum fungicides chlorothalonil, mancozeb and copper, always alternate other fungicides with different FRAC codes to avoid disease resistance buildup.

Step 1

Use all available cultural practices to reduce disease pressure, including planting disease resistant varieties when possible, using good rotations, and using no-till mulch based systems. If possible, modify your spray equipment to get excellent fungicide coverage on both the upper and lower surfaces of leaves.

Step 2

Learn to identify key diseases: powdery mildew, downy mildew, Plectosporium blight, gummy stem blight/black rot and bacterial leaf spot.

Step 3

Begin a basic preventative spray program with a chlorothalonil or mancozeb product. Spray every 7 to 14 days, beginning when vines run. (Organic alternative: copper). This will give protection against most foliar diseases.

Step 4

Use predictive models or scout for disease presence and if the following diseases occur or are predicted, use the following guidelines:

Gummy Stem Blight/Black Rot and Anthracnose

Alternate chlorothalonil with Rally (3), tebuconazole (3), Procure (3), Proline (3), Rhyme (3), Inspire Super (3+9), Aprovia Top (3+7), Switch (9+12), or Miravis Prime (7+12).

Bacterial Leaf Spot

Add a copper product to the basic preventative program (applied every 7 to 10 days).

Powdery Mildew

Powdery mildew control is critical to maintain quality of pumpkins and maintain strong “handles”. Some varieties have resistance or tolerance to powdery mildew and should be used when possible. Powdery mildew generally occurs from mid-July until the end of the season.

Development on tolerant varieties will vary from year to year. Planting tolerant varieties will help delay the development of powdery mildew and improve the performance of fungicides.

Make first application when powdery mildew is observed in the area or is detected by scouting (one lesion on the underside of 45 old leaves per acre). Add powdery mildew specific products to basic preventative program. Alternate FRAC codes.

Select one of these: Vivando (50), Luna Experience (3+7), Torino (U06), or Quintec (13).

And alternate with one of the following: Rally (3), tebuconazole (3), Proline (3), Rhyme (3), Inspire Super (3+9), Luna Experience (3+7), Aprovia Top (3+7), Magister(39), Miravis Prime (7+12) or Pristine (7+11).

(Organic alternative: Regalia, Micronized Wettable Sulfur)



B Gugino, Penn State
Powdery mildew on pumpkin leaves.



Michigan State University
Shriveled pumpkin handles are common with powdery mildew infections.

Downy Mildew

Only apply if the disease is predicted in the region. Strains of downy mildew that infect cucumbers and cantaloupe may not affect pumpkins and winter squash. If found in the region, add downy mildew specific product to the basic preventative program. Select two downy mildew products with different FRAC codes and alternate them. *Downy mildew products include:* Orondis Ultra (U15+40), Orondis Opti (M5+U15), Ranman (21), Previcur Flex (28), Presidio (43), Elumin (22), Zing! ((M5+22), Ariston (M5+27), Tanos (11+27), Curzate (27), Forum (40), and Zampro (40+45).

Plectosporium Blight

Chlorothalonil is good on Plectosporium blight. Full coverage will be needed for control.



UMass Extension Vegetable Program

Plectosporium lesions on pumpkin fruit.

Step 5

Special cases:

Phytophthora Fruit Rot.

Avoid planting pumpkins in a field with a history of this disease. To manage *Phytophthora* fruit rot, select two of the following *Phytophthora* products that are in different FRAC code groups and rotate them. *Phytophthora* fruit rot products include Orondis Ultra (U15+40), Orondis Opti (M5+U15), Ranman (21), Presidio (43), Elumin (22), Zing! ((M5+22), Forum (40), and Zampro (40+45).

Fusarium Fruit Rot

This disease is especially destructive in fields where pumpkins are grown every year. Once the

pathogen is established in a field, loss can be significant. Fruit rot is caused by several *Fusarium* spp., and fungicide applications are not effective. Hard rind cultivars are less susceptible to *Fusarium* fruit rot than other cultivars. Production of pumpkin on a no-till cover crop mulch layer such as winter rye plus hairy vetch has been shown to help reduce disease incidence. Greater disease reductions will occur when the mulch layer is thicker.

Viruses (WMV, PRSV, ZYMV, and CMV)

The most prevalent virus in the mid-Atlantic region is WMV, followed by PRSV, ZYMV, and CMV. For control use varieties with virus resistance whenever possible. Reduce aphid transmission of viruses with insecticide programs.

This information was adapted from <https://sites.udel.edu/weeklycropupdate/?p=14260> by Kate Everts, Vegetable Pathologist, University of Maryland and the MidAtlantic Commercial Vegetable Production Recommendations:

<https://www.udel.edu/content/dam/udelImage/s/canr/photography/extension/sustainable-ag/NFP-2020-F-Pumpkin.pdf>

Clubroot Found in Brassica Crops - Jerry Brust, IPM Vegetable Specialist, University of Maryland; jbrust@umd.edu

It is odd that we would have a couple reports of an unusual disease of brassicas turn up in the same week, but we did. Clubroot, caused by *Plasmodiophora brassicae*, is a major disease of brassica, i.e., broccoli, cabbage, turnip, rutabaga, and radish. It can also infect weeds in the mustard family as well as some grasses. This soil-borne fungus infects susceptible plants through their root hairs. Diseased roots become swollen, misshapen and deformed (clubbed or galled) often cracking and rotting (Fig. 1). As a result, plants have difficulty absorbing water and nutrients. The symptoms can at times look similar to root knot nematode damage and you would need to send a sample into a diagnostic lab to be sure.

Infected roots enlarge to form galls that differ in size and shape depending on the host plant. On crops with fleshy roots such as rutabaga and turnip, galls form on the taproot or secondary roots (Fig. 1). Crops with fibrous roots such as cabbage and broccoli produce club-like, spindle-shaped swellings on individual roots (Fig. 2). The disease can be well established in the roots before any above ground symptoms are apparent. At first plants will grow poorly and wilt during the heat of the day but recover at night. Outer leaves may turn yellow or brown. Root galls are often invaded by secondary organisms causing root decay and the death of the plant. Clubroot can reduce yields and at times cause total crop failure.

Disease development occurs over a wide range of conditions, but is favored by excessive moisture, low soil pH (below 6.5) and soil temperatures between 64 and 77 °F (warmer soils increase disease severity with a minimum soil temperature of 57 °F being needed). The repeated production of brassica crops in the same field can lead to a rapid build-up of the pathogen. Spores can survive in the soil for as many as 10-20 years. The disease is spread by drainage water, infested soil on equipment and tools and infected transplants.

Clubroot can be difficult to manage because the pathogen produces thick-walled, long-lived spores. Although there are reports that suggest clubroot spores can live for as long as 20 years, enough spores are expected to die within 5 to 7 years to make this (5-7 years) a more realistic rotation period. Even so, the pathogen is unlikely to be eradicated once established in a field. Some things that can be done culturally to help reduce its severity are to maintain a 'high' pH (>7.1) using calcitic lime instead of dolomitic, except where magnesium levels are very low. While liming will not eliminate clubroot problems in the field, it can significantly reduce infection rate and disease severity. Because a high pH can lead to boron deficiency in sandy soils, boron may be needed as a foliar spray. In addition to pH changes, growers can improve soil drainage, so there is little waterlogging or run-off, reduce any brassica weeds both during the growing season and between seasons and make sure transplants

are clean. Although resistant cultivars are available they might not fit into a grower's production practices. Resistant cultivars should be used in combination with other methods of clubroot control.

Because infected plants may show no obvious aboveground symptoms or yield loss when disease severity is low or moderate it is recommended to randomly dig a few plants up and inspect their roots for galls if your farm has any history of clubroot.

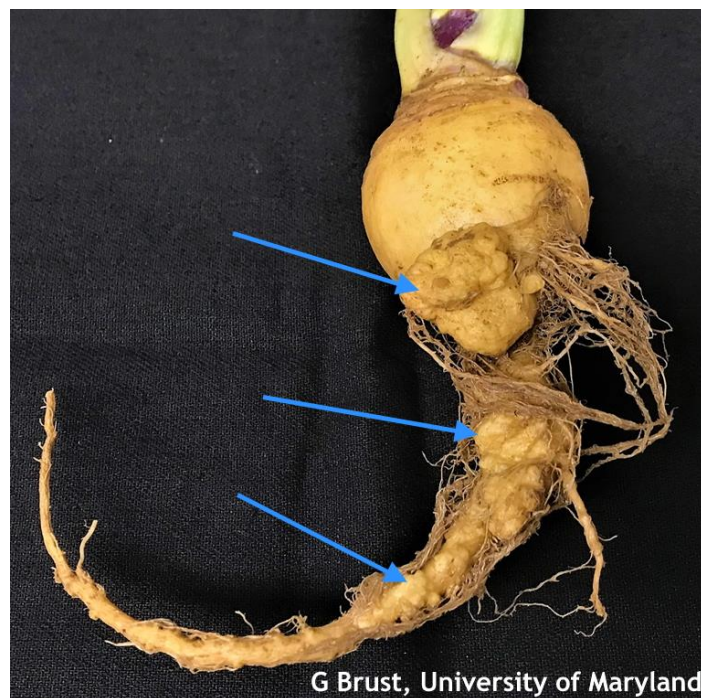


Figure 1. Club root disease on rutabaga, galls on main tap root (arrows)



Figure 2. Club root disease on fibrous crucifer roots

Fruit Crops

Blackberry Damage and Disorders - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Blackberries are being harvested throughout the region currently. The blackberry is a composite fruit with many tiny berries (druplets) attached to a receptacle. These drupelets are subject to damage during the ripening period.

The following are some common problems with blackberries during fruiting:

Stink Bug Damage

Stinkbugs feed on the fruit receptacle (the white part at the center of the fruit) and in doing so damage drupelets as they insert their mouthparts. Stinkbugs may feed on green, red or black fruit.

Feeding results in only localized damage to one or two drupelets most commonly. A secondary type of damage can occur if the stink bug injects its "stink" into the fruit while it is feeding. This may result in a blackberry fruit that can "taste like a stink bug smells".



G Johnson, University of Delaware

Stinkbug damage in blackberry.

Sunscald

Sunburn of fruit is commonly seen when daytime temperatures exceed 90 °F. At these temperatures fruit in direct sunlight may reach temperatures that exceed the air temperature by several degrees. When this occurs the fruit is essentially boiled by the sun. Symptoms include drupelets that look "blanched" or "cooked".

Most commonly, symptoms are present on only the side of the fruit exposed to the sun and the shaded side of the fruit will not have any damage.

Prevention methods include closely picking berries every few days, encouraging good plant health so that there is sufficient leaf cover to protect berries from the sun and orienting the trellis to shade the fruit for most of the day.



Sunscald in blackberries

White Druplet

White drupelet is associated with a drop in humidity and an increase in temperature. As this happens there is less moisture in the air to deflect solar radiation from directly contacting the berries. This increased solar radiation is blamed on individual or groups of drupelets turning first white and then later brown in color.

This disorder is often a problem early on in the season and may lessen as the season progresses. Orienting the trellis to shade the fruit for most of the day is a method to prevent this disorder on susceptible varieties.



G Johnson, University of Delaware

White drupelet disorder.

Information in this article is from *What Is Going On With My Blackberry Fruit?* by Amanda McWhirt - June 22, 2017, University of Arkansas <https://www.uaex.edu/farm-ranch/crops->

Agronomic Crops

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

Alfalfa

Scout for **potato leafhopper**. There are reports from states to our north that potato leafhopper are causing significant hopperburn. Remember, if you see yellowing, yield has ALREADY been impacted. There are dynamic thresholds for potato leafhopper in our alfalfa insect control guide (adapted from Penn State): https://www.udel.edu/content/dam/udelImage/canr/pdfs/extension/sustainable-agriculture/pest-management/Insect_Control_in_Alfalfa_-2020_-David_Owens.pdf.

Field Corn

Pay attention to field edges for **brown stink bugs**, especially those around drainage ditches and previous small grain fields. Thresholds for them start increasing as we move into the silk stages. Concentrate your scouting activity around the ear zone. Count the number of bugs per 100 plants. Thresholds can be found here: <https://corn.ces.ncsu.edu/stink-bug-management-in-corn/>.

Japanese beetles are active and may be seen clipping silks or feeding on foliage. Silk clipping is only a concern if silks are clipped to less than ½ inch before 50% pollination and there are 1-2 beetles per plant. It is very unusual for all three of these conditions to be met.

Soybean

Dectes stem borer has begun emerging and will be active for the next 5 weeks. Full season fields planted early are in the early reproductive stages. Scout for **stink bugs**, thresholds are 5 bugs per 15 sweeps. I will hold a virtual soybean insect identification review Monday, July 19 starting at 7:30. You can connect by zoom: <https://udel.zoom.us/j/5682701927>. Also, if you insect identification questions, you can send them ahead of time to owensd@udel.edu.

Soil Moisture, Rainfall and Soil Types -

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

When looking at soil moisture levels and comparing rainfall events, soil texture, infiltration, and drainage become very important. If you don't have soil moisture sensors, you can track regional values from DEOS (<http://www.deos.udel.edu/>). Soils higher in clay have greater volumetric water holding capacity (VWC) than sandy soils, although sandier soils will drain faster after high rainfall events.

When observing rainfall since April across Delaware, the advantage of certain soil types is clearer. Georgetown's sandier soils hold less overall water, which is apparent on April 1st, where Georgetown VWC is 0.2 and Newark is 0.38 (Figure 1). They have not always received the same rainfall events but did steadily dry out from May until early June. Once rain returned to the region, Newark quickly regained soil moisture, while 1 inch rainfalls barely filled Georgetown soils. It took up to 2 inches of rain mid-June to significantly impact VWC in Georgetown soils.

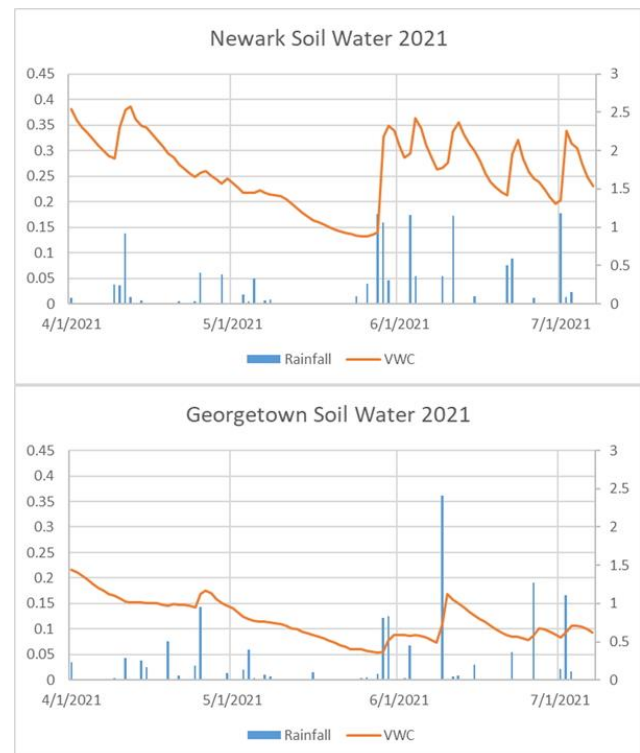


Figure 1. Soil moisture and rainfall in Newark and Georgetown

It is important to remember that finer textured soils hold more water, but less is available to the plants. This means that Georgetown may hold less, but a lot more of what is there can be absorbed by crops. Besides adding organic matter, it is very hard to change your soil VWC, since it is tied to soil texture. However, you can improve soil water by maintaining good infiltration, by reducing compaction and maintaining surface pore space through no-till where it works in your cropping system. Poor infiltration even occurs in our sandier soils, where one year of no-till cover crops has much less runoff and more infiltration (Figure 2).



Figure 2. Poor drainage is present in a nearby conventional tilled sandy soil.

General

Guess The Pest! Week 14 Answer: Japanese Beetle - David Owens, Extension Entomologist, owensd@udel.edu

Congratulations to Richard Wilkins and many others for correctly identifying last week's pest as Japanese beetles. They started coming out in the last couple of weeks. Although they feed on numerous hosts, they do have their preferences, as you can see by the photo. Grapes are also highly susceptible to skeletonization. Corn may be at risk if they are clipping silks below a half inch, less than 50% pollinated, and there are 1-2 beetles per ear. Soybean leaf skeletonizing looks eye catchy, but rarely is significant.



Guess The Pest! Week 15 - 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!

Summer is here and it is time to harvest pickles. As you walk through the field admiring all the lovely pickles, you start noticing these. What is going on?



A Koehler, University of Delaware

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

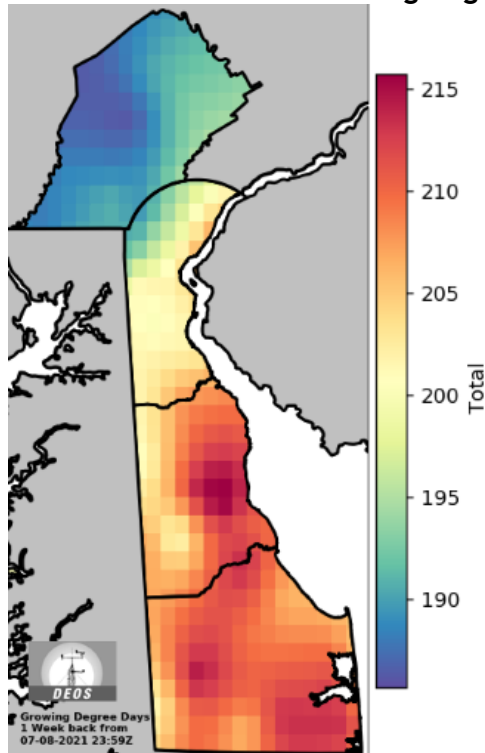
David Owens will hold a virtual soybean insect identification review on Monday, July 19 starting at 7:30. If you have insect identification questions, you can send them ahead of time to owensd@udel.edu.

Zoom meeting link is

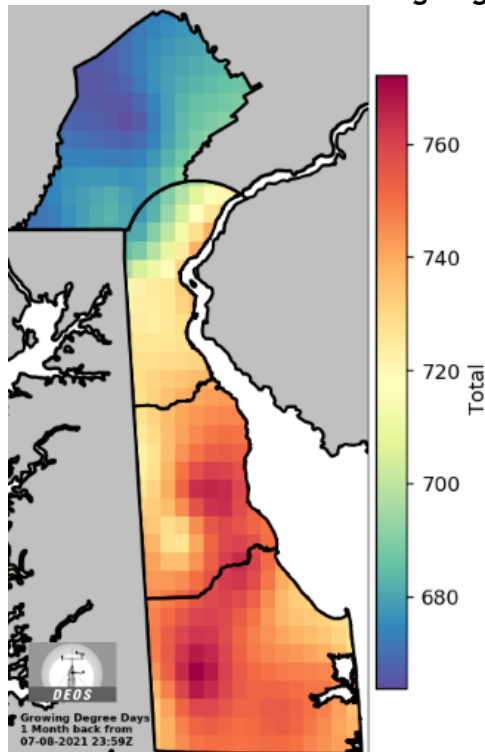
<https://udel.zoom.us/j/5682701927>.

New Weather Summary!

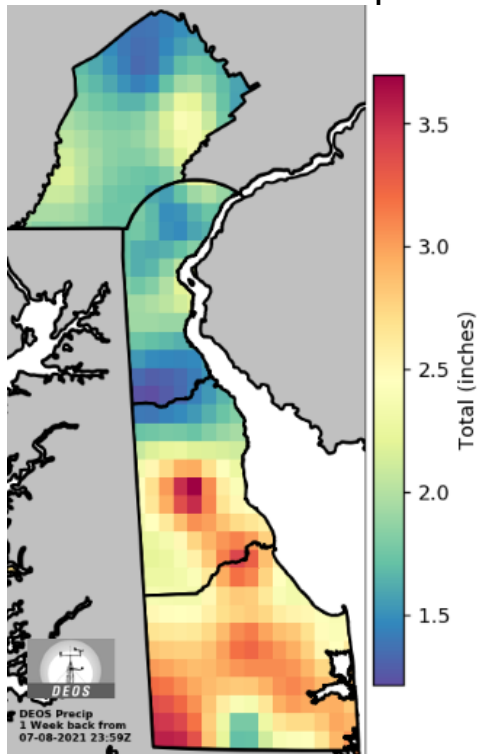
1 Week Accumulated Growing Degree Days



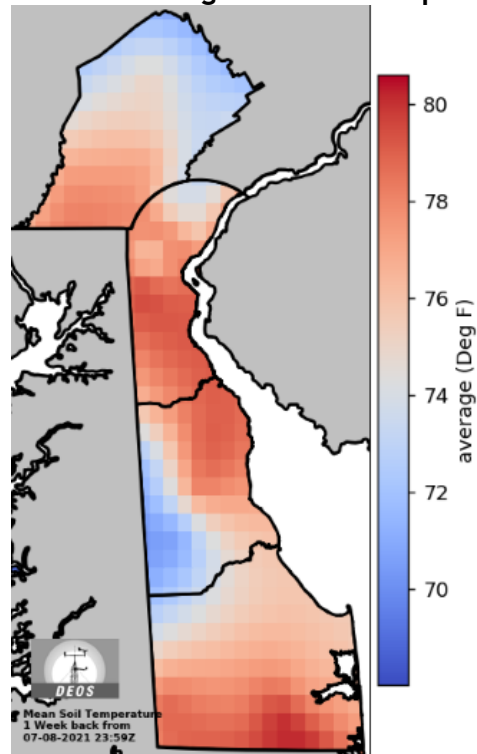
1 Month Accumulated Growing Degree Days



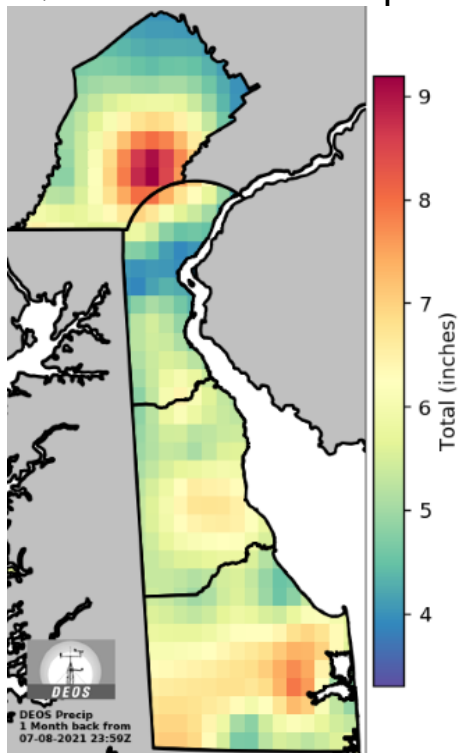
1 Week Accumulated Precipitation



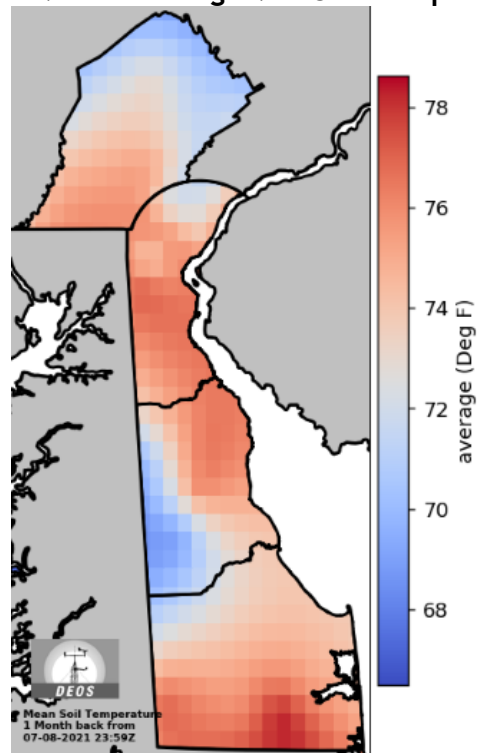
1 Week Average Max Soil Temperature



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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