

# WEEKLY CROP UPDATE



UNIVERSITY OF DELAWARE  
COOPERATIVE  
EXTENSION

Volume 30, Issue 20

August 5, 2022

## Vegetable Crops

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

### Cucurbits

If watermelons haven't been treated for cucumber beetles, but have been treated with pyrethroids earlier this season, be sure to scout for aphids. This year at the research station we have had very low levels of cucumber beetle or worm feeding on rinds, but I treated my melons with a pyrethroid to flare up mites. Aphids are now present in larger numbers than the previous couple of seasons. Continue scouting for mites, paying attention to areas with yellow blotches on leaves.

Pumpkins and late summer squash that have been treated with pyrethroids (often used for squash bug and squash vine borer) need to be scouted for aphids. We have numerous aphid products available. Assail will also pick up cucumber beetles and squash bug; Torac will pick up worms, Exirel, Verimark, Harvanta will pick up worms and beetles, Minecto Pro will pick up mites in addition to the worms and have some effect on beetles. Other products listed in the guide are aphid specific.

### Sweet Corn

Scout whorl stage sweet corn for fall armyworm NOW. Look for windowpaning and small sawdust looking frass pellets in the whorl. By the time you see large holes and large frass pellets the worms may be so deep in the whorl that they will be difficult to kill with insecticides. In

addition, fall armyworm kicks feeding into high gear the last handful of larval development days. Thus, often when large holes are observed, the larvae are leaving or have left. Keep in mind also that windowpaning with green frass pellets is more indicative of spotted cucumber beetle.

Many if not most of our trap sites are indicating a 3-day spray schedule either by blacklight or by pheromone trap counts. Corn earworm Thursday trap counts are as follows:

Trap Location	BLT - CEW	Pheromone CEW
	3 nights total catch	
Dover	2	93
Harrington	1	39
Milford	4	73
Rising Sun	2	43
Wyoming	2	87
Bridgeville	1	33
Concord	2	20
Georgetown	1	78
Greenwood	3	14
Laurel	4	---
Seaford	1	---
Lewes	---	30 (1 night)

### Pepper

Scout for signs of worm feeding on pepper fruit and beet armyworm feeding in the upper canopy leaves. If defoliation is a threat, remember beet armyworm are resistant to pyrethroids.

### Tomato

Continue scouting for spider mites and also consider preventative fruitworm treatments. For spider mites, the threshold is 2-4 mites on an upper canopy leaflet.

## Cole Crops

Diamondback moth activity has increased markedly the last week or so with hot dry weather. In Georgetown so far, we have not had much cabbage looper activity. It is very important to check plantings for cabbage looper, as Torac does not have cabbage looper on its label, but it is quite good on other worms and aphids. Harlequin bugs are very active and are best controlled with foliar neonicotinoid or pyrethroid applications. Be sure to use a spreader-sticker adjuvant to counter the effect of the waxy leaves on spray droplets.

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## Important Cover Crop Decisions for Vegetable Growers - Gordon Johnson, Extension Vegetable & Fruit Specialist; [gcjohn@udel.edu](mailto:gcjohn@udel.edu)

With cover crop season coming up, vegetable growers will have decisions to make on what cover crops to plant and how best to grow and use them. The following is a repeat of an article revisiting this topic.

Cover crop acreage has been growing in the region, largely due to nutrient management efforts, cost share programs and recent programs encouraging farmers to grow cover crops for soil health benefits and soil improvement.

Nutrient management goals and soil health goals are not necessarily the same. In nutrient management-based cover crop programs, the goals are to have crops that can take up residual nitrogen and provide cover to reduce soil erosion losses. Non-legumes predominate, with most of the acres planted in small grains such as rye and some recent use of radishes. Limited or no fertilizer can be used with cover crops in these programs. In this case the answer to the question above is that a cover is being grown. While there will be soil health benefits, they are not maximized.

In contrast, when soil improvement is the primary goal, the cover crops are grown as crops. You are growing plants to maximize the benefits they provide. To increase organic matter and improve soil health the main goal is

to produce maximum biomass above ground and below ground. A second important goal is to provide different types of organic matter (such as with cover crop mixtures) to support a diverse soil microbial environment.

Cover crops can also be important to break soil borne pest cycles. Certain cover crops such as some rye varieties can reduce root knot nematode levels because they are non-hosts. Other cover crops such as hairy vetch can reduce Fusarium levels in watermelon rotations. Cover crops also can be an important part of weed management programs through the production of allelopathic chemicals that inhibit weed seed germination.

In other cases, the goals will be different. With leguminous cover crops a goal may be to maximize the amount of nitrogen fixed. With soil compaction reducing crops such as radishes, the goal is to maximize the amount of “biodrilling” (i.e. the amount of tap roots being produced). With biofumigant crops, the goal is to maximize the production of fumigant-like chemicals by the crops. With mulch-based systems, the goal is to maximize above-ground biomass.

What these soil improvement and specific use goals have in common is the need to treat the cover crop as a crop to optimize plant growth. This includes **seeding at the proper rate** to achieve optimal stands, **planting at the right time**, using **best seeding methods** to get maximum seed germination and plant survival, **having sufficient fertility** to support good plant growth, **providing water** during dry periods, **managing pests** (insects, diseases, weeds), and **inoculating legumes**. If cover crop mixtures are being used, the ratios of seeds being planted must be considered to have the **best balance of plants** in the final stand.

The best cover crop stands are obtained with a drill or seeder that places the seed at the proper depth, at the proper seeding rate, with good soil to seed contact. Fertilization and liming programs should be used to support season-long growth - fertilizers and other soil amendments will be necessary in most cases. Nitrogen will need to be added for non-legumes.

When the crop is terminated is also key. The cover crops should be allowed to grow to the stage that maximizes the benefits they have to offer before killing the crops. Allowing a winter cover to grow for an extra week in the spring can make a large difference in the amount of biomass but may cause water deficits in dry years.



G Johnson, University of Delaware

Rye cover crop used as a mulch.

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### **Winter Killed Cover Crops for Vegetable Cropping Systems** - Gordon Johnson, *Extension Vegetable & Fruit Specialist*; [gcjohn@udel.edu](mailto:gcjohn@udel.edu)

Cover crops that put on significant growth in the fall and then die during the winter can be very useful tools for vegetable cropping systems. These winter killed cover crops add organic matter, recycle nutrients, improve soil health, and allow for earlier spring vegetable planting.

Winter killed cover crops that are late-summer and early-fall planted include spring oats, several mustard species, and forage and oilseed radish. Earlier planted summer annuals (millets; sorghums, sudangrasses, and hybrids; annual legumes such as cowpeas or forage soybeans;

buckwheat and many others) can also be used as winter killed species. Timing of planting will vary according to the species being used and winter killed species selection will depend on when fields will be available for seeding. Summer annuals should be planted in August for use in a winter killed system to obtain sufficient growth.

Spring oats and mustard species can be planted from late August through September. For best effect, forage and oilseed radishes should be planted before the middle of September. Spring oats, radishes and mustards are not suited for October or later planting because they will not produce adequate fall growth.

The winter killed non-legumes mentioned above will benefit from the addition of 30-60 lbs of nitrogen.

The following are several options for using winter killed species with vegetables:

1) *Compaction mitigation for spring planted vegetables.* Where there are compacted fields, the use of forage radish has worked very well as a winter killed cover crop by “biodrilling”. The extremely large taproot penetrates deep into the soil, and after winterkilling, will leave a large hole where future crop roots can grow. Oilseed radish also provides considerable “biodrilling”. Winter killed radishes works well with spring planted crops such as spinach, peas, early sweet corn, and early snap beans. One issue with radishes is that on mild winters they may not fully winter kill. A potential winter kill mix would include a radish, a mustard, and spring oats.

2) *Early planted vegetables.* A wide range of early planted vegetables may benefit from winter killed cover crops. For example, peas no-till planted or planted using limited vertical tillage after a winter killed cover crop of forage radish, oilseed radish, or winter killed mustard have performed better than those planted after conventional tillage. Early sweet corn also has potential in these systems as do a wide range of spring vegetables including spinach, potatoes, and cabbage. Winter killed radishes and mustards also have the advantage of outcompeting winter annual weeds leaving

relatively weed free fields and recycling nutrients from the soil so that they are available in the spring for early crops (decomposition has already occurred).

3) *Mixed systems with windbreaks for plasticulture*. By planting planned plasticulture bed areas with winter killed cover crops and areas in-between with cereal rye you can gain the benefits of these soil improving cover crops and eliminate the need make tillage strips early in the spring. The winter killed areas can be tilled just prior to laying plastic.

4) *Bio-strip till*. By drilling one row of forage or oilseed radish and other adjacent rows with rye or other small grains, you can create a biodrilled strip that winter kills and that can be no-till planted into the spring without the need for strip-till implements. This presents dozens of options for strip tilling (seed or transplanted) spring vegetables.

One challenge with milder winter temperatures, is that many cover crops may not fully winter kill, including fall planted spring oats, forage radish, and some mustard species. For vegetable growers seeking to have early areas for spring planting, this will require that these cover crops be killed by non-selective herbicides or tillage. This will also limit the potential to plant no-till vegetables into these areas.



Radish cover crop that did not winter kill.

Another concern is with higher risk of seed corn maggot damage to early planted vegetables if these cover crops do not winter kill. There are

no rescue treatments for maggots, once damage is found it is too late to control them. Cultural control options to consider include avoiding planting into fields where a cover crop was recently incorporated (this will be an issue with cover crops that did not winter kill) and early disking or plowing under of crop residues to ensure that they are completely decomposed before planting - this should take place 2-4 weeks before planting.

## Fruit Crops

**Vole Damage in Orchards** - Gordon Johnson, *Extension Vegetable & Fruit Specialist*; [gcjohn@udel.edu](mailto:gcjohn@udel.edu)

Voles may cause extensive damage to fruit trees and orchards as a result of girdling seedlings and trees and damaging roots. Damage occurs primarily during winter when other types of food are scarce. It is important to determine which species of vole occurs in your crop production sites. Vole species most commonly associated with depredation issues in the Mid-Atlantic region are the meadow vole (*Microtus pennsylvanicus*) and the woodland or pine vole (*Microtus pinetorum*). Meadow voles, also called meadow mice, are about 5½ to 7½ inches long, with fur that ranges from gray to yellow-brown with black-tipped hairs; they also display a bi-colored tail. Woodland voles are about 4-6 inches long.



Meadow Vole



Woodland Vole (*public domain*)

The most common form of tree injury caused by meadow voles is trunk girdling at or near the ground surface. Since voles burrow in the snow, they may damage tree trunks as high as snow accumulates. Young trees are especially susceptible to attack. Occasionally, meadow voles will burrow in the soil and damage roots, resulting in weak, unhealthy trees.

Damage from woodland voles (pine voles) is harder to detect because it occurs underground as they consume small roots, girdle large roots, and eat bark from the base of trees. By the time orchardists note weak, unhealthy trees, the damage is already extensive.

Meadow voles spend much more time above ground than do woodland voles, but both species inflict serious damage. Meadow voles construct surface runways (approx. 1½ to 2 inches wide) under or within the accumulated organic matter and duff layer that exists in fields; these runs often terminate at a 1" diameter wide hole that drops into an underground burrow network. In contrast, pine voles remain underground. Both species are known for constructing burrows that follow trickle irrigation lines or areas where the soil has been loosened by mechanical planters.

Cultural practices and habitat modification measures are helpful in deterring vole populations. Voles avoid areas with few food resources and little protective cover. Control of ground vegetation with herbicides, mowers, or disking is effective, although voles will travel under snow cover in these areas. Herbicides are the preferred method to eliminate sod. Cultural practices that reduce the amount of organic

litter around plants are essential. A final close mowing of the row middles, after harvest, should be utilized annually to further reduce habitat and cover for rodents and to enhance the effectiveness of natural predators (such as hawks and owls).

Exclusion methods are feasible only at small scales. Hardware cloth or woven wire fences ( $\leq \frac{1}{4}$  inch) can be installed to a height of 1 ft above ground and buried to completely contain the rooting system of the plant. There are some newer products composed of sharp-edged rock or pumice granules that can be used to line the planting hole and will act much like a barrier against digging. This requires significant hand installation, so an analysis of cost-effectiveness is necessary before considering such methods.

Toxicants are used to control large vole populations and most are classified as Restricted Use Pesticides (RUP); these products can be applied only by a pesticide applicator who possesses both a general applicator certification and the advanced certification for vertebrate application (Category 7D). In most cases, voles must feed on treated baits multiple times to sustain a lethal dose. Therefore, bait stations must be stocked and maintained to ensure success. Zinc phosphide is a single-dose RUP available as a concentrate or in pelleted or grain bait applications. Because of its noticeable garlic odor and taste, voles eventually may shy away from or avoid bait stations stocked with ZP. Pre-baiting stations with untreated food for 2 to 3 days prior to applying the pesticide may increase success.

Anticoagulants may also be effective in controlling vole damage. However, anticoagulant baits are slow acting and may take up to 15 days to be successful. Furthermore, most anticoagulants require more than one feeding for maximum effectiveness.

To avoid danger to non-target species, the use of bait stations is recommended and may be required in some states. Hand placement of baits directly in enclosed runways and burrow openings within the tree drip line is essential for woodland vole control because of their subterranean behavior. To ensure the legality of a particular toxicant in your state, information

can be obtained by calling your Pesticide Control Program. As with all use of toxicant products, follow the product's labeling guidelines.

Information is from Orchard Wildlife - Integrated Management of Voles in Orchards from Penn State and the Mid-Atlantic Commercial Vegetable Production Recommendations.

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**Broad Mites Found in Maryland Raspberry Fields** - Jerry Brust, *IPM Vegetable Specialist*, University of Maryland; [jbrust@umd.edu](mailto:jbrust@umd.edu)

Broad mites *Polyphagotarsonemus latus* have been found in a couple of raspberry fields in Maryland in the last week or so. Most fields had light to moderate infestations of broad mites. The problem is recognizing whether or not you have broad mites because they are so small, they are very difficult to find even with a 10x hand lens and their feeding can look very similar to the damage caused by some environmental problems or by viruses (which are usually the causes of the damage symptoms).

Damage by broad mites usually consists of a distortion of young leaves (Fig. 1) or flower buds as the mites show a preference for young, developing plant tissue. This feeding preference will result in the lower leaves of the plant remaining unaffected while the younger leaves are damaged. Mites feed on the underside of foliage near the leaf stalk. This feeding often causes the growing tips to become misshapen with distorted leaves that curl up and have irregular brown discoloration. A light infestation of mites can result in bronzing of the leaves (Fig. 2). A more serious infestation causes a loss of green tissue, with the veins remaining green and necrotic spots developing on leaves (Fig. 2). On the leaf stalks brown, corky patches can appear. What exactly causes the leaf tissue distortion and necrosis is not known, although it is thought that the mites release enzymes and other substances when they feed that disrupt localized plant growth. These distortions remain for weeks even after the mites have been eliminated and is the reason why extensive damage can be caused by a relatively low population of mites. Flowers that are fed upon will become discolored and

deformed while fruit will develop corky areas and also become deformed.

When I look for broad mites I look for their eggs which are very distinctive, relatively large and are not moving around as adults and immatures are. The eggs are clear with a symmetrical pattern of white dots on their surface (Fig. 3). Even with a 20X hand lens it is still difficult to find the mites as they are often wedged down into folded or curled plant tissue. It really is important though to verify their presence as there are other causes of similar looking symptoms on raspberries.

When mite numbers reach 5 mites per leaflet (granted it will be difficult to see) or leaf deformities are found then treatments should begin. Horticultural oils are recommended when temperatures are below 88 °F. Using the oils at temperatures above this may cause phytotoxic problems. Agri-Mek with a NIS has been found to be an effective product to control the motile stages of broad mites but it does not control the eggs so you'll need to make two applications. There are other miticides that are available and can be used, but the key to any of them and the oils is to get good coverage of the curled and distorted plant tissue especially the underside of the leaf.

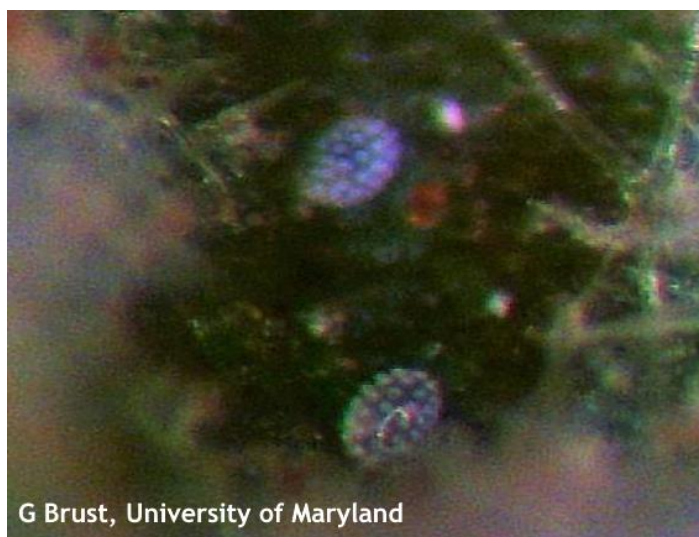


**Figure 1.** Broad mite damage to raspberry leaves



G Brust, University of Maryland

**Figure 2.** Broad mites causing interveinal bronzing and necrotic spots on raspberry leaves



G Brust, University of Maryland

**Figure 3.** Two broad mite eggs greatly magnified

## Agronomic Crops

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

### Soybean

Continue scouting for defoliation, stink bugs, and podworms. Generally, stink bug threshold is 5 bugs per 15 sweeps (nymphs and adults,

brown, green, brown marmorated and dusky all combined). I suspect that a lower threshold may be justifiable in Plenish soybean, perhaps ~ 4 bugs per 15 sweeps.

For worms, check out NCSU’s handy threshold calculator. Keep in mind that good efficacy among pyrethroids is not guaranteed. I have smoked earworms with pyrethroids in soybean before, and I have also had poor efficacy in spray trials. I generally think of Hero and Baythroid providing greater efficacy than others. Please note though that I have not tested lower rates of Hero (rate range is 4-10.3 fl oz). If you are at or above a threshold for a more expensive “worm” product (examples in no particular order include Intrepid Edge, Steward, Vantacor, Besiege, Radiant, Blackhawk).

### Sorghum

Scout heads for earworm. Beat 50 heads into a container and count earworms, fall armyworm, and sorghum webworm. Webworms are not very common, small, and have a higher threshold than the earworm and armyworm. Texas A&M has a headworm calculator:

<https://extensionentomology.tamu.edu/sorghum-headworm-calculator/>.

In previous years, earworms have been spotty, apparently depending heavily on when the sorghum is pollinating in relation to when moths are flying; much in a similar way to sweet corn. Unlike in sweet corn, there is a high level of mortality in first and second instars.

## General

**Considerations for Fall Seeding of Cover Crops Related to Herbicide Use and Weed Control** - Mark VanGessel, *Extension Weed Specialist*; [mjv@udel.edu](mailto:mjv@udel.edu)

It’s time to be thinking about planting fall cover crops and here are a few things to consider related to weed control and herbicide use (there are other considerations as well).

***What is the reason for planting the cover crop or what do you want to achieve by planting a cover crop?*** There are a lot of reasons for planting cover crops (i.e., erosion control, nutrient management, improving soil structure,

adding nitrogen, improve weed management) and cover crops vary in their effectiveness in achieving these objectives. Select the cover crop species (or mixture) based on your intended objectives. The Northeastern Cover Crop Council has developed excellent tools to help select the best species for your goal and your field conditions (<https://covercrop.tools/species-selector>).

**What herbicides were sprayed this summer and when?** Typically, microorganisms break down herbicides and they need warm soils, moisture, and time to do so. Consequently, herbicides applied at planting in early May are at less risk of impacting your cover crop than herbicides applied postemergence in early July. Also, the timing of cover crop planting influences how much herbicide residue will be present (for instance early September versus mid October). In general, broadleaf cover crops species are more sensitive to herbicide carryover than grass species. For soybean herbicides, fomesafen (Reflex, FlexStar), pyroxasulfone (Zidua and others), acetochlor (Warrant), chlorimuron (Classic), and sulfentrazone (Authority products) are of highest concern. Corn herbicides at the highest risk for injury are topramezone (Impact), mesotrione (Callisto), isoxaflutole (Balance), and nicosulfuron (Accent). Cover crops like cereal rye, hairy vetch and wheat tend to be the least sensitive to herbicide carryover. The more sensitive species are tillage/forage radish, Austrian winter pea, crimson clover and annual ryegrass.

**Will the cover crop be used for grazing?** If you intend to use the cover crop for anything other than leaving it on the field and killing before next cropping season, you need to check the herbicide labels for any potential issues. For instance, if you intend to graze the cover crop, the herbicides may have restrictions on how much time there needs to be between application and grazing.

**When will the cover crop be terminated?** Also consider termination timing in the spring. If you are killing your cover in March, chances are the weather is not going to be as favorable for control than if you spray in late April. Likewise, annual ryegrass is always difficult to control. If you intend to kill your cover crop late in the

spring, it is likely to have produced seed, so will that cover crop become a problem in rotation? For instance, hairy vetch can be an issue to control in small grains.

Check out the Northeastern Cover Crop Council website for more information on cover crop management (<https://northeastcovercrops.com/>)

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**Cultivating Resilience Podcast** - Maria Pippidis, Extension Educator Family & Consumer Sciences; [pippidis@udel.edu](mailto:pippidis@udel.edu)

Please take a moment to enjoy the Cultivating Resilience podcast, where *farm care starts with self-care*. In Cultivating Resilience, you'll hear from real independent farmers on the struggles they face every day, and how they are overcoming them. We'll provide resources to strengthen your mental health and survive uncertain times. Guests discuss specific stresses that farmers face such as family farm succession, economic burdens, and rural isolation.

Let's build a community where farmers and ranchers can support each other through the shared experiences of joy and struggle that come hand in hand with working and cultivating land. Be sure to listen, share, and review so that we may continue building this community and cultivate the resilience in the agricultural community. Listen while you're washing carrots or taking a walk or whenever your favorite podcast time may be. Share it with farmers, service providers, and your friends and co-workers. The podcast is hosted by FRSAN Network members Hans Hageman and Kay-Megan Washington. All episodes streaming.

Episode 1: [Farm Finances](#) features Cultivemos Network members Valerie Woodhouse from Honey Field Farms, and Maria Pippidis and Jesse Letterman from Cooperative Extension



Episode 2: [Climate Change Anxiety](#) hears from Wichie Artu from Magnetic Fields Farm and Dr. Nadine Burton from Tallawah Farms

Episode 3: [Community](#) featuring Ashanti Williams and Arian Rivera of the Black Yard Farm Collective, and Eustacio Mil Quino

Episode 4: [Family Farming & Legacy](#) featuring Thelma Kiernan, Amanda Dotterer Condo, and Candice Dotterer White.

Episode 5: [Warning Signs and How to Help](#) with Extension educators Maria Pippidis and Jesse Ketterman and Keith Ohlinger, owner of Porch View Farm in Maryland.

Episode 6: [Resilience](#) with Matt & Stefanie Barfield of Chesterfield Heirlooms, Jeff Sale from Centurion Farm, Anne Devin from Chase Stream Farm and Rhyne Cureton (@pork.rhyne)

## Announcements

### 2022 Beginning Farmer Training Program

The Delaware Beginning Farmer Program is for new and beginning farmers working in small-scale vegetable and/or fruit production. Through hands-on training, demonstrations, workshops, field trips and farm tours, as well as self-study, growers will learn and grow with Delaware Cooperative Extension, and other invited agriculture industry professionals.

Although not limited to the following topics, this training will explore the fundamentals of soil fertility and health, basic crop production, integrated pest management, and business planning and development. This training will also provide an excellent networking opportunity.

Sessions are covered by one affordable registration fee of \$75. Sessions are held at Fischer Greenhouse on the College of Agriculture and Natural Resources' campus in Newark, unless otherwise noted.

Wednesday, September 14, 6-8 pm, Course Orientation, Soil Health

Wednesday, September 28, 6-8 pm, Variety Selection

Saturday, October 1, 9-11 am, Hands-On Planting, Setting up an Indoor Seed Starter Unit

Wednesday, October 12, 6-8 pm, Small Farm Business Planning

Saturday, October 15, 9-11 am, Field Trip to Against the Grain Farm at William Penn Farm

Wednesday, October 26, 6-8 pm, Weed Identification and Management, Small Scale Irrigation

Wednesday, November 2, 6-8 pm, Integrated Pest Management: Insect and Disease Pests

Saturday, November 12, 9-11 am, Field Trip to Worrilow Hall Labs, UD Fresh to You

Wednesday, November 16, 6-8 pm, Delaware Beginning Farmer Resource Panel with DDA, NRCS, Farm Bureau and others

Register online at: <https://www.pcsreg.com/2022-beginning-farmer-training-program>

### National AgrAbility Training Webinars

Each webinar begins at 2:00 p.m. EDT on the given Thursday. For session descriptions and more information, visit <http://www.agrability.org/ntw-encore/>.

August 18: "Vision Solutions for Farmers"

September 1: "Working with Capstone Students to Augment AgrAbility Services"

September 15: "Managing Stress on the Farm"

September 29: "Making Lemonade When Outreach Events Hand You LEMONS!"

October 13: "Build Resilience into Your Farm: Let Nature do the Heavy Lifting"

October 27: "Low Stress Marketing for Farmers"

A question & answer period is scheduled for each presentation.

To participate in any of these free webinars, [click here to access the online registration form](#). Please pass on this invitation to others you believe may be interested. Contact AgrAbility at 800-825-4264, visit [www.agrability.org/ntw-encore](http://www.agrability.org/ntw-encore), or email [agrability@agrability.org](mailto:agrability@agrability.org) if you have questions.

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### Field Tour of Carvel Crops Research

Wednesday, August 10, 2022 3:00-6:00 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 2022 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. There will be a boxed BBQ dinner after the tour.

Delaware Pesticide, Delaware Nutrient Management and CCA credits have been assigned:

**Agronomic Tour** – DE Pesticide – 1.0; DE Nutrient Management – 0.5; CCA – NM 0.5 and PM 1.0

**Fruit and Veg Tour** – DE Pesticide – 1.0; DE Nutrient Management – 0.5; CCA – NM 0.5, PM 0.5, PD 0.5

*Please RSVP by calling 302-856-7303.*

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### Nematode Field Day

Thursday, August 18, 2022 3:00-6:00 p.m.  
University of Delaware  
Carvel Research & Education Center  
16483 County Seat Hwy, Georgetown, DE

Covered topics will include soybean cyst nematode seed treatments and resistance genes, updates on lima bean resistance breeding for root knot nematodes, RKN in cucurbits, summary of nematode survey results conducted in recent years, and management strategies. Demonstrations will be set up for digging SCN root samples, collecting and sending soil samples, and viewing examples of root knot nematodes in vegetable crops.

Pesticide credits will be available for both Delaware and Maryland.

Registration information can be found at [udel.edu/009690](http://udel.edu/009690). A boxed dinner will be included for those registered by August 12.

Please contact Alyssa Koehler [akoehler@udel.edu](mailto:akoehler@udel.edu) with any questions.

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### Soil Health Field Day

Tuesday, August 16, 2022 9:00 a.m.-1:00 p.m.  
Baxter Farms, 23073 Zoar Rd, Georgetown, DE

The Delaware Soil Health Partnership will hold an in-person soil health field day on Tuesday, Aug. 16, at 9 a.m.

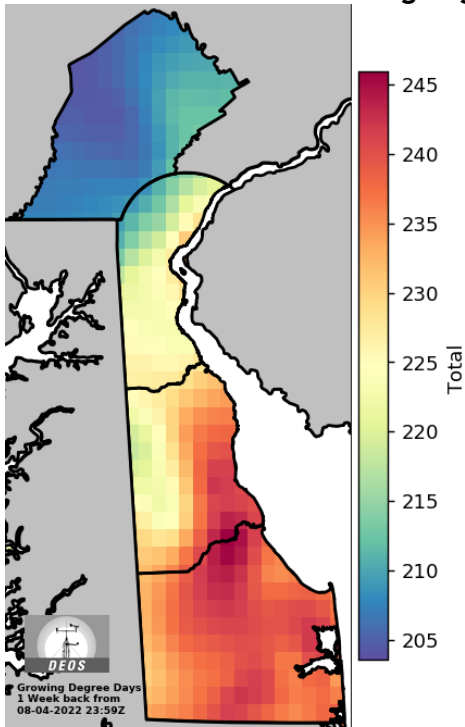
Rick Clark, a fifth-generation farmer from Williamsport, Ind., will discuss farming green and his experience with organic no-till on nearly 7,000 acres. University of Delaware Extension agents will provide the latest research updates while Jay Baxter, owner of Baxter Farms, will discuss experiences in the field.

The field day will be held at Baxter Farms, 23073 Zoar Rd, Georgetown, DE 19947 in Georgetown, Del. Lunch will be provided. Nutrient management credits are pending, and preregistration is required.

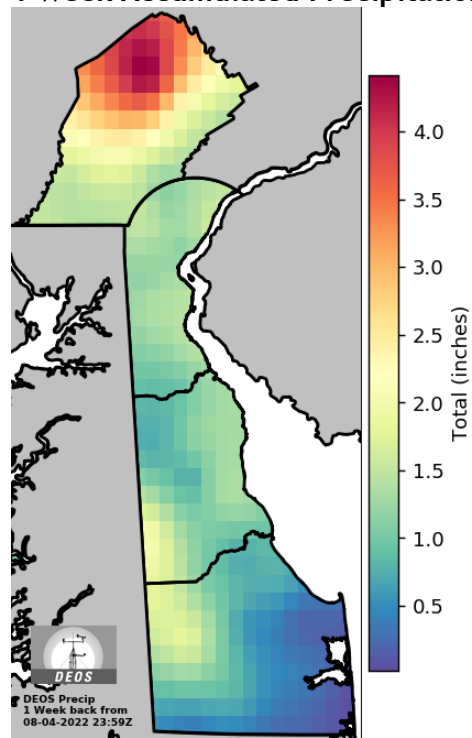
For more information or to register go to <https://www.sussexconservation.org/events/field-day.html>.

# Weather Summary

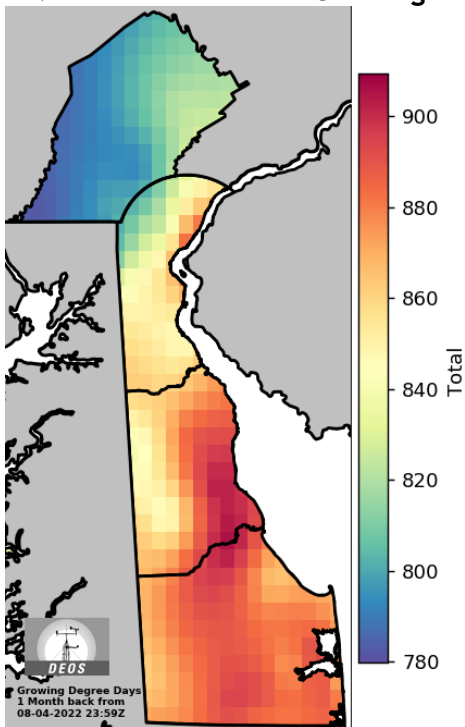
## 1 Week Accumulated Growing Degree Days



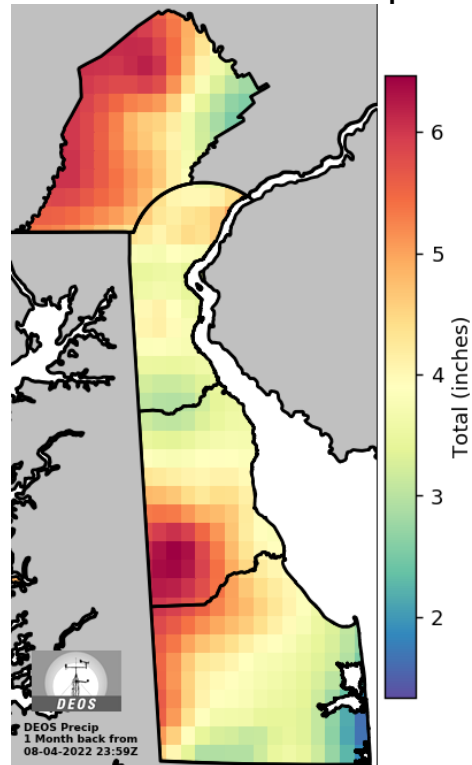
## 1 Week Accumulated Precipitation



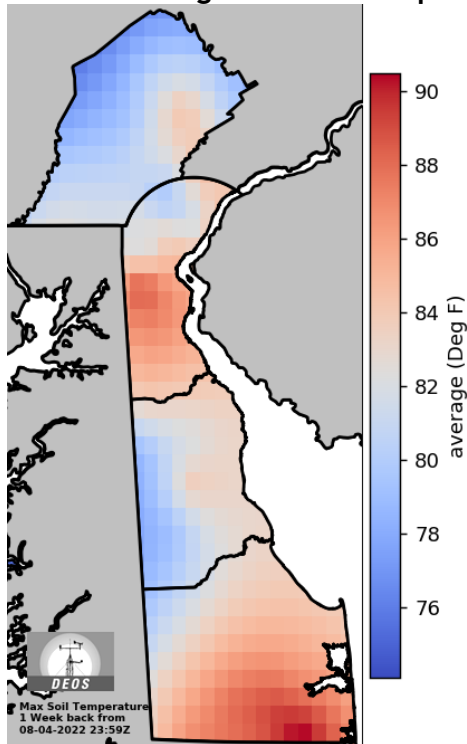
## 1 Month Accumulated Growing Degree Days



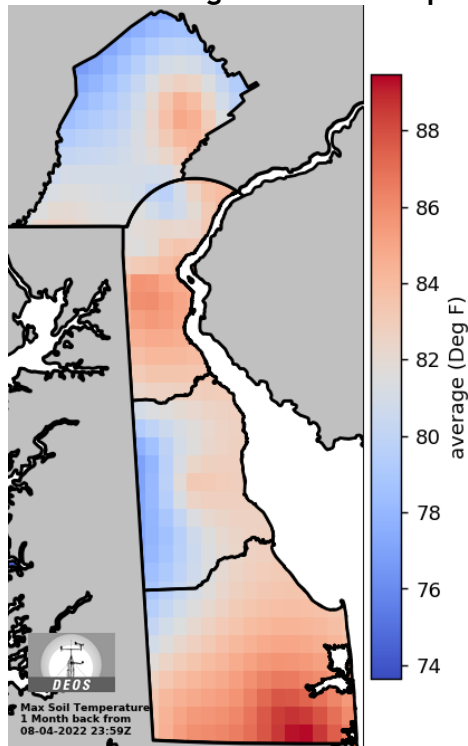
## 1 Month Accumulated Precipitation



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](mailto:emmalea@udel.edu) )

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

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