WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Vegetable Crops

Vegetable Crop Insect Scouting

David Owens, Extension Entomologist, owensd@udel.edu

Sweet Corn

Corn earworm trap counts are high, and for only the second time this summer, we have caught a European corn borer in a pheromone trap! They do exist!

During the first 10 days of silking with temperatures above 82 degrees, a 2-day spray schedule following a pyrethroid and a 3 day spray schedule following a chlorantraniliprole application is advisable, especially at sights with very high moth activity. Last week's Weekly Crop Update had a very in-depth article on earworm management. With frequent applications such as these, be sure to scout for aphids, especially about 10 days before harvest so that if a population begins developing, a high rate of Assail can be used (7 day pre harvest interval). We are in the process of conducting adult vial pyrethroid resistance tests, and so far, cyfluthrin is showing a greater level of activity against corn earworm than lambda cyhalothrin, similar to field trial results from the last couple of seasons. While I recommend the same spray schedule regardless of the pyrethroid used, it may be that cyfluthrin in the spray program might prevent a couple of misses and provide just a little bit more efficiency.

Trap counts can be found at http://agdev.anr.udel.edu/trap/trap.php, and thresholds can be found at: https://www.udel.edu/academics/colleges/canr/cooperative-extension/sustainable-production/pest-management/insect-trapping/silk-stage-sweet-corn/.

Thursday trap counts are as follows:

Trap Location	BLT CEW	Pheromone CEW
	3 nights total catch	
Dover	6	156
Harrington	2	71
Milford/Canterbury	4	165
Rising Sun	9	65
Wyoming	8	153
Bridgeville/Redden	1	93
Concord	7	44
Georgetown	2	82
Woodenhawk	2	78
Laurel	10	117
Lewes	-	-

Snap Beans and Lima Beans

Scout beans for worms or consider a treatment if a lot of moths are observed in the crop. Unlike sweet corn and unlike European corn borer, no threshold is available for timing sprays on either crop for this pest, except a black light threshold that to be honest, we have not reached or exceeded in years upon years. In lima bean fields, a beat sheet or shaking plants and counting earworm on the ground can be used to estimate population. Thresholds in lima beans are 1 earworm per 6 row feet. Labeled insecticides include IPM and bee friendly materials such as Avaunt, Vantacor, Coragen, Blackhawk, Bt, and high rates of Intrepid. Of these, Coragen and Vantacor are going to provide the longest residual control.

Stink bugs may also require treatment and complicate matters a bit. Stink bugs are tanks. The best pyrethroid is bifenthrin. Elevest is a chlorantraniliprole and bifenthrin premix which may be handy.

Tomatoes
Brown stink bugs are still active in tomatoes and can be controlled with either a bifenthrin application or a dinotefuran application. Begin incorporating worm materials in a spray program. Earworms and tobacco budworm are actively laying eggs in flowering tomatoes.

Cucurbits
Squash bug continues to increase population. Use high pressure to get spray droplets to where adults are hiding under leaves, near the base of the plant, and remember, fi you are targeting mostly adults and egg masses are present, a follow-up spray about 7-10 days later may be necessary.

Spinach
There is quite a bit of webworm activity in Georgetown this year. If growing spinach, scout for webworm. If growing spinach, scout for small caterpillars.

Considerations with Later Fall Vegetable Planting Dates

Emmalea Ernest, Extension Fruit & Vegetable Specialist; emmalea@udel.edu

As we get warmer fall weather conditions people often wonder if the planting dates for fall harvested vegetables can be pushed later in the season. Three things to think about when considering later plantings are the first frost and hard freeze dates, average fall temperatures and decreasing daylight hours. The frost/freeze dates and average fall temperatures will be impacted by climate change. Daylength will not be affected by climate change, however wildfire smoke has potential to decrease available light to crops and this will have a more acute affect in the fall when light becomes a limiting factor in crop growth.

The most recently calculated fall frost and hard freeze probabilities for four locations in Delaware are shown below in Table 1. The growing season for warm season crops ends with the first frost event. This typically occurs before early November and certain sites will be inclined to frost earlier in the season.

Table 1. Freeze and Hard Freeze Probabilities for Four Locations in Delaware for 1991-2020.

	Freeze/Frost (32 °F)		
	Rare Before*	Uncommon Before	Typical Before
Georgetown	Oct 23	Oct 27	Nov 11
Dover	Oct 23	Oct 27	Nov 3
New Castle	Oct 22	Oct 26	Nov 2
Wilmington	Oct 28	Nov 1	Nov 9
	Hard Freeze (28 °F)		
	Rare Before	Uncommon Before	Typical Before
Georgetown	Nov 4	Nov 8	Nov 16
Dover	Nov 4	Nov 8	Nov 17
New Castle	Nov 3	Nov 6	Nov 11
Wilmington	Nov 4	Nov 10	Nov 20

* Rare = 1 year in 10; Uncommon = 2 years in 10; Typical = 5 years in 10
Data is courtesy of Kevin Brinson, Associate State Climatologist and DEOS Director

Growing degree days are one way to account for temperature affects on crop growth. Figures 1 shows August through November Base 50 °F and Base 40 °F growing degree day accumulation at UD's Georgetown research farm from 2018 through 2022. Growth rates for warm season adapted vegetables can be approximated with the Base 50 GDD model. These crops will slow or stop growth in early October when average temperatures are no longer above 50 °F. Cool season adapted crops will slow or stop growth in early November when average temperatures are no longer above 40 °F. The annual variation in base 50 GDD accumulation occurs mainly in September and variation in base 40 GDD accumulation occurs mostly in October. In the five years included in the Figure 1 charts there was more variability in base 50 GDD accumulation which would be observed as more variability in the fall growth of warm season adapted crops.

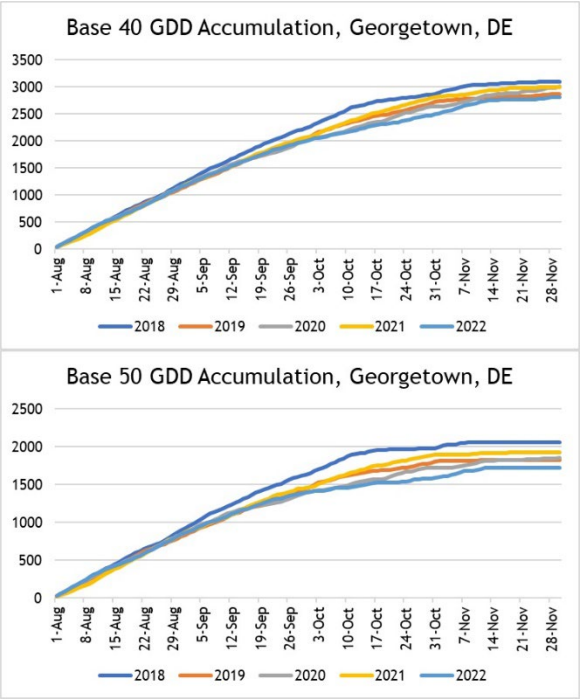


Figure 1. Base 40 °F and Base 50 °F growing degree day accumulation at the Georgetown, DE research farm from Aug 1 to Nov 30, 2018-2022

Daylength decreases in the fall, with less than 11 hours per day of light by mid-October. Decreasing daylength reduces hours of photosynthesis and thus potential growth. Even in warm years, crop growth rate will be lower in the fall because of reduced daylength. Periods of cloudy (or smokey) weather will have more impact on crop growth in the fall compared to the summer because of the already lower available light.

The trend toward warmer fall conditions means that later vegetable plantings will be successful in some years, but continued variability in temperature means that such plantings will still be a gamble. Also, warmer temperatures and later freeze dates will not overcome the slower fall crop grow that results from less light. There are more daylight hours on March 1 (with subsequent increasing daylength) than on November 1 (with subsequent decreasing daylength).

Feeding Damage by Blister Beetles

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

Normally at this time of year when I talk about any insect problems in crucifers, I talk about harlequin bugs that feed by sucking out plant juices and inject toxins into the plant. But I have seen several fields and even some high tunnels with blister beetles feeding and defoliating several different vegetables such as tomato (including the fruit), leafy greens, crucifers, spinach and especially Swiss chard (Fig. 1). Blister beetles begin feeding on the edges of leaves eventually leaving only stems (Fig. 1). The presence of blister beetles now is not unusual as they are often found in large clusters in late summer-early fall. They can arrive in large groups, seemingly overnight and can do a great deal of damage in a short period of time.

Adults are large, oblong beetles with relatively large heads, long 'necks' and usually with some stripes (but not always) (Fig. 2). Striped blister beetles are shades of gray or brown with yellow stripes running lengthwise on their wing covers (Fig. 2B). The ash-gray blister beetle is gray, the black blister is completely black, and the margined blister beetle is black with a grayish band around the edge of each wing cover (Fig. 2A). Blister beetle abdomens usually extend past their leathery wings. Striped blister beetles hide beneath plants during the hotter periods of the day, becoming active when temperatures are more suitable for them. If disturbed when on plants beetles will immediately fall to the ground and run. Adults begin laying eggs in late spring or early summer and continue through most of the season. A female can lay one to two hundred eggs just beneath the soil surface and eggs hatch within a couple of weeks.

If you look up blister beetles most of the literature deals with the beetles as a threat to horses and livestock. The beetles secrete and contain within them a blistering agent called cantharidin. Cantharidin is toxic if ingested and it persists in beetles long after they are dead. Humans who ingest the beetle can suffer severe damage to the urinary tract and gastrointestinal lining.

Pyrethroids can be used to control blister beetles on most vegetable crops. Pyrethroids will reduce the damage, but there is often a 7-day pre-harvest interval (phi) with some of the chemicals depending on what the crop is. So be sure to check the label to find the correct phi for the particular product you are using on the particular crop you are using it on. It should be noted that once established, beetles are difficult to eliminate completely.

Organic growers have an even more arduous task of managing them. Row covers will keep this pest as well as harlequin bugs off your plants. However, if row covers are not used then I often see diatomaceous earth (DE) recommended for beetle control. If it rains DE does not work very well and overall, I have not had much luck with DE controlling the beetles. Spinosad alone or mixed with other products such as neem or kaolin clay have been found to reduce feeding damage in 24-48 hours. Having large numbers of grasshoppers near your vegetable fields over the years can increase blister beetle numbers greatly in the general area because the larvae feed on grasshopper eggs.

Figure 1. Blister beetle feeding resulting in defoliation

Figure 2. Margined (A) and Striped (B) blister beetles

Utilizing Bundling Strategies to Increase Sales Revenue

Nate Bruce, Farm Business Management Specialist, nsbruce@udel.edu

Direct-to-consumer marketing often involves selling various products that have both high profit margins and low profit margins. A useful pricing strategy to promote sales of both high profit margin items and low profit margin items is to use bundling strategies. Bundling is a useful pricing strategy for complimentary, overstock, or older products. Bundling can result in increased total sales revenue and enable items in inventory that remained unsold to be purchased.

Bundling enables both revenue maximization and quantity maximization by providing extra value to the product the customer really wants, increasing the amount they are willing to spend. Bundling can reduce profit margins because overstocked or older inventory items being sold in the bundle will be at a reduced-price rate to trigger sales of the high demand product it is being bundled with. However, bundling can easily make up for it by increasing total sales and reducing marketing expenses such as labeling and packaging. On the other end of the spectrum, customers may not want the other item being offered in the bundle but will be content with the purchase option that was offered to them. Bundling can promote customer retention.

Bundling can help simplify marketing, especially if you are producing multiple different products. Bundling enables you to sell multiple products in one single package, reducing potential marketing expenses. Some examples of this are CSA boxes, value-added product pairings, meal kits, multiple meat cut packages, etc.). By using bundling strategies such as those listed, you can sell items in inventory that have sold at slower rates. A partial cost recovery occurs when you can sell products that would have gone unsold that you have already invested the expenses in to produce. Although the items are being sold at a discount, bundling them allows for you to recover a fraction of the production expenses that were needed for their production.

If implementing bundling within your marketing strategy, ensure the items being offered are complimentary. Consider what your customer base would purchase together. For example, if your customer base is looking to purchase pumpkins for fall decorations, mums may be a good bundling option. At the same time, offer the items in the bundle individually as well so the customer can see the bundle is a great purchase.

If bundling both high and low margin items, consider the price of the bundle itself represents the average of all its components. If bundling low margin items decreases the overall average price of the bundle, the customer may pass on the bundle as there is a perception of decreased value. Always consider the bundle price as an average price of all the components within. Ensure the bundle is attractive and simple. You can bundle as many items together as you want, however it is easiest for customers to see value in smaller item bundles.

Bundling is a fantastic marketing strategy to increase sales revenue. Make sure to use multiple marketing channels to ensure your customer base is aware of the bundle.

Fruit Crops

Ripening Problems in Peaches; Cold Storage Do's and Don'ts in Stone Fruit

Gordon Johnson, Retired Extension Specialist; gcjohn@udel.edu

I was asked earlier this year what could cause peaches not to ripen properly after harvest. Peaches will ripen off the tree if harvested when the background color has changed from green to yellow in yellow peaches or from green to white in white peaches. Other signs of ripening are a reduction in density, increase in size, increase in red color in some varieties, increase in soluble solids (sugars), and decrease in organic acids.

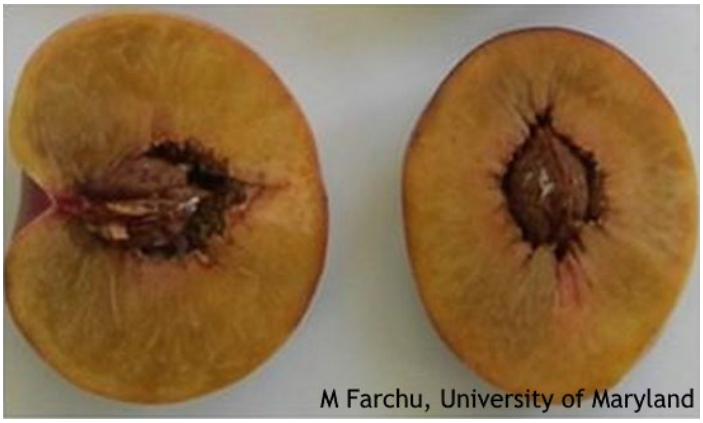
If a peach is picked too early (green) it will not ripen properly. Other factors that could affect ripening would be a loss of leaves due to diseases such as bacterial spot; certain fruit diseases such as bacterial spot, rusty spot, or scab: damage to limbs from heavy fruit loads or storms; drought stress; soil waterlogging; excessive fruit loads; or excess shading of fruit.

Another major factor affecting fruit ripening and quality is storage temperature. Peaches, plums,

cherries, and apricots are susceptible to chilling injury when fruit are held at temperatures in the range of 36 to 50°F. This is often known as the "danger zone". The flesh can become translucent, turn brown, lose flavor, bleed, turn leathery or become mealy. These symptom occur when customers put the fruit out to ripen at room temperature.

To prevent this injury, store stone fruit colder at temperatures in the range of 29 to 34°F. It is also advised to precondition peaches before they go into cold storage by storing at 68 F for 1 to 2 days after picking but prior to cold storage at 32°F. Peaches taken out of cold storage should also be held at 68 F for 1-2 days before sales.

For short term storage, keep stone fruit at temperatures above 50 F to avoid quality problems and avoid the danger zone temperatures.



Symptoms of flesh browning and mealiness in peaches as a result of chilling injury.

Parts of this article were adapted from Keeping it Cool: Cold Storage Recommendations for Apples and Peaches and Determining Peach Fruit Maturity from the University of Maryland and Cold Storage Conditions: Harvest & Storage of Maine Tree Fruits from the University of Maine.

Strawberry Plug Planting Issues to Avoid

Gordon Johnson, Retired Extension Specialist; gcjohn@udel.edu

Plasticulture strawberry planting season will start in 2-3 weeks and most growers will used plug plants for planting. Plug plants are produced from rooting strawberry tips in plug trays filled with growing media, most commonly in 50 cell trays. Plant losses often arise from issues with plug plants and how they are planted.

One common issue is when strawberry tips are not fully rooted. When pulled during transplanting the strawberry roots are then damaged and plants often die or are stunted. Check all trays for rooting before transplanting and if plants have not fully rooted, put them in a greenhouse, tunnel, or nursery area to continue to root until they can be pulled without damage.

In contrast, another problem occurs when plugs are root bound. Root bound plants often cannot be watered adequately as plugs cannot absorb water well. They often are too dry at transplanting and desiccate before they can establish new roots. In addition, root bound plugs are often slow to root into the soil because roots are old and growing in a circle. Once roots circle in the plug they do not grow out properly.

During transplanting, particularly with water wheel transplanters and transplanting crews, there is a tendency to plant plugs too deep. If soil covers the crown of the strawberry plant the plant will often rot and die. In contrast, if plugs are planted so that part of the plug is out of the ground, the plug will often dry out and die before rooting in. Plugs should be planted at soil level with a small amount of soil covering the plug without covering the crown of the plant. It may be necessary to have workers follow the transplanter to properly set plant depth.

All plug trays should be inspected for signs of disease both in the foliage in in the roots and suspect trays should not be planted. Unfortunately, many diseases may be asymptomatic and appear later when strawberries are growing.

The following are recommendations from a past article by Kathy Demchak, Penn State Extension and Dr. Mengjun Hu, University of Maryland: Disease management recommendations for fall-planted strawberry plug plants https://sites.udel.edu/weeklycropupdate/?p=19318 "Remove any leaves with symptoms and all runners while the plants are still in their trays,

starting with the cleanest-appearing trays. Watch for brown blotches on leaves and brown sunken lesions on petioles in particular. Collect and dispose of this material. If you cannot complete this operation before you plant, do so right afterwards, and remove this foliage from the field. Diseases sporulate on plant tissue even after it is removed, so dropping plant tissue in the row middles does not eliminate the problems – though this is an improvement over doing nothing. Wash hands and tools frequently, or use hand sanitizer, as diseases can be moved from plant to plant on hands, clothing, and tools. Do not plant any plug plants that are wilted and fail to recover quickly once watered."

Strawberry plug plant fully rooted but not yet root bound.
Photo from https://www.archiexpo.com/prod/jiffy/product-139036-2060133.html

Agronomic Crops

Agronomic Crop Insect Scouting

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Soybean
Corn earworm moths are active in some double crop soybean fields. Although earworm tends to be attracted to, and have picked up in, double crop soybean, we have only found rather limited numbers of larvae. That could easily change next week. The next 3 weeks are critical for soybeans

Sorghum
We picked up a couple more isolated sugarcane (or sorghum) aphids in fields. Thresholds are 30% infested plants through he soft dough stage. While checking for aphids, we did flush quite a few moths out of the crop. Just as in soybean, the next 3 or so weeks are critical to ensure large populations do not build up in the late planted sorghum.

Curious about Nitrogen Modeling Tools? DE, MD, and PA Corn Farmers Can Participate in a Short Online Study and Earn Money

Many corn farmers in DE, MD, and PA can expect to receive an invitation in the mail to participate in a university study this month. The study is being conducted by researchers with the University of Delaware, University of Maryland, and Penn State University.

The goal of this study is to understand farmer interest in using an in-season nitrogen modeling tool to guide nutrient management decisions. During the study participants will have the opportunity to learn about and engage with in-season nitrogen modeling tools. Results from this study will help us develop strategies to better serve farmers in this region.

Eligible farmers may participate from home on a computer, tablet, or smartphone. Internet access is required. In the online activity, participants will be asked to make in-season nitrogen management decisions for a simulated

corn field. In addition to a $50 participation payment, participants will earn additional money (up to $100 extra) based on decisions during the 30-35 minute activity. Participants will receive their payment as a Walmart or Amazon gift card or via PayPal within one week of completing the online activity.

Participation requires a unique participant code, which can be found on the mailed invitation letter. If you do not receive a letter in the mail but you would like to participate, you may contact the research team to receive a login code and instructions. Please contact Badri Khanal at the University of Delaware (302-455-7555; bkhanal@udel.edu).

Diseases in Soybean

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

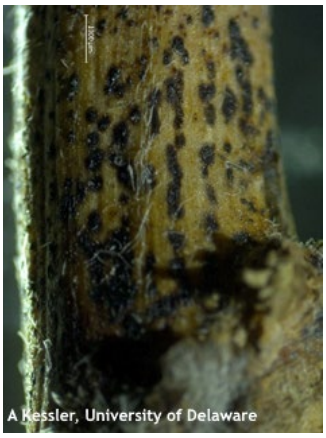
We are reaching the time of year when we begin to see leaf symptoms developing in soybean. Soybean diseases can look very similar to one another and to add complication, there can be multiple diseases occurring in the field at the same time or abiotic factors that look similar.

Fields with nematode pressure are often more susceptible to fungal diseases such as soybean sudden death (SDS) or brown stem rot (BSR). For SDS, infection by the causal fungus *Fusarium virguliforme* usually occurs within the first 2 to 3 weeks after germination, but we don't typically see symptoms until the plant is in reproductive phases and the level of symptom development varies greatly from year to year. Infection is favored by early planting into cool and wet soils and often is in combination with infection by soybean cyst nematodes (SCN) or RKN. Symptoms of SDS are typically worse in years with heavy early rainfall (or in irrigated fields).

So far this season I have not seen many fields with SDS. Symptoms begin in the roots where the vascular tissue of the taproot becomes brown. These symptoms are usually below the soil line and the symptoms that really stick out are the patchy yellow lesions in the leaves that expand between the veins to brown lesions surrounded by chlorotic areas. While this can look very distinctive, it is important to remember that this leaf symptom can actually appear following multiple causes. Other diseases with similar symptoms include various stages of infection by the fungus *Diaporthe* (stem canker, pod and stem blight, seed decay), BSR, charcoal rot, and others. While there are often exceptions to the rules or cases where multiple diseases can be present at the same time, the table below can be a starting point for separating some of our common fungal soybean diseases (Table 1).

This year I have also received calls from intensively managed fields that have leaf symptoms from application of fungicide in hot weather (Figure 1). Triazole (DMI) fungicides can have phytotoxicity injury that varies based on adjuvant, fungicide rate, soybean genetics, and environmental conditions at the time of planting. Injury will be on the leaves in the upper canopy that are expanding when the application is made. The key is that leaves do not tell the whole story, so it is important to look closely at the base of the stem, at roots, and to split stems to see what is happening within. One of the diagnostic signs for SDS are the blueish structures (sporodochia) at the base of the plant near the soil line. These can turn white once exposed to air, so it is best to look for them right as you are digging plants or if you have had plants incubating. Splitting stems is another way to sort out SDS, BSR, and charcoal rot. When splitting stems, SDS usually has brown outer vascular tissue (cortex), while BSR is brown in the center (pith) and the vascular tissue is usually still healthy looking. Charcoal rot will have numerous black dots called microsclerotia that are present on the outer stem and within the stem (Figure 2). Diseases from *Diaporthe* spp. will tend to have healthy looking vascular and pith tissue, but you may see black zone lines.

Table 1: Sorting out soybean diseases with similar foliar symptoms

	Diaporthe species	Sudden Death Syndrome	Brown Stem Rot
Leaves	Leaves typically stay attached.	Leaves fall off, can look like deer browsing.	Leaves typically stay attached.
Symptom	 Foliar symptoms from stem canker/pod and stem blight caused by *Diaporthe* species	 Foliar symptoms from SDS caused by *Fusarium virguliforme*	 Foliar and stem symptoms of brown stem rot. Photo: https://cropprotectionnetwork.org/resources/articles/diseases/brown-stem-rot-of-soybean
Sign	 Small black dots (pycnidia) may be in rows on stem tissue	 Blue sporodochia at the base of a soybean plant with SDS. Blue will often fade to white after exposure to air, so check soon after pulling up the plant.	none
Taproot	 Split stem has limited discoloration and may have zone lines.	 Browning on either side of the interior. Roots will be discolored.	 Browning in the pith. BSR does not affect roots.

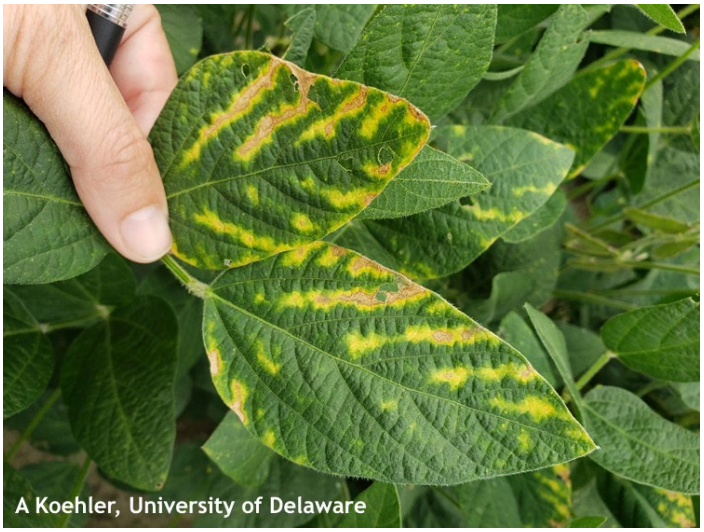


Figure 1. Soybean leaves with triazole phytotoxicity

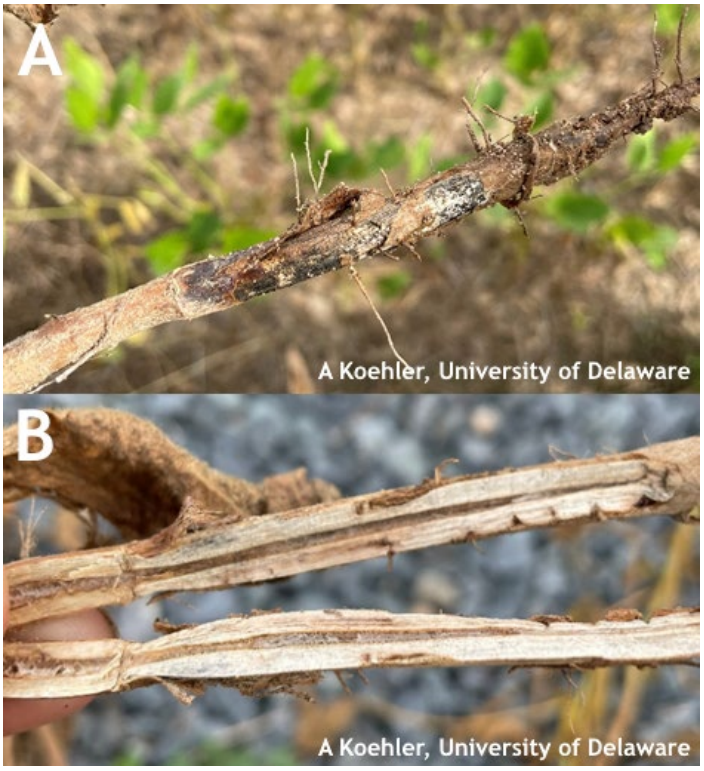


Figure 2. Microsclerotia of the fungus *Macrophomina phaseolina* causing charcoal rot in soybean. On the outside (A) and within a soybean stem (B)

As we approach late August and September, damage from root-knot nematodes can also become more visible. Often we will see plants with stunting, leaf symptoms, or patches of dead plants. These areas with RKN will usually drop leaves early and really stick out compared to healthy green plants nearby (Figure 3). When these plants are pulled from the ground, root systems will often have very notable galling (Figure 4).

Figure 3. Field with patches of yellow and dying soybeans due to root knot nematode.

Figure 4. Soybeans from the same field with height differential due to various levels of root galling from root-knot nematode. (Photo: A. Koehler)

Soybean Planting Population Survey

Jarrod O. Miller, Extension Agronomist,
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Please answer this 5-question survey on soybean population decisions:

https://delaware.ca1.qualtrics.com/jfe/form/SV_4SkJWOkiDzcpQO2

General

Guess the Pest! August 11 Answer: Sorghum Anthracnose

David Owens, Extension Entomologist,
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Congratulations to Richard Wilkins for identifying sorghum anthracnose. Anthracnose is probably the most important and common disease of sorghum. It can destroy stalks, heads, or leaves. Sorghum is not a plant and forget crop.

Guess the Pest! August 18

David Owens, Extension Entomologist,
owensd@udel.edu

For this week's Guess the Pest, I thought we could switch gears and jump into a hobby of some folks. This week, I visited two beehives in the process of being destroyed by this critter. What is it?

Click on the link to log your answer!
https://forms.gle/AjQxxk9QzhegzCw48

Applications for the 2023-2024 Producers Growth Program Are Now Open

CAIC program gives growth-ready local producers tools and resources to scale their businesses

The Chesapeake Ag Innovation Center (CAIC) is excited to announce that applications are now open for the second cohort of our Producers Growth Program. Over the course of six months, the program gives value-added producers and consumer packaged goods (CPG) entrepreneurs the knowledge, resources, and tools they need

to scale their businesses. Through one-on-one work with an advisor, classes taught by subject matter experts, and hands-on assignments, each producer will develop and execute their own scaling strategy.

"This program is uniquely valuable because it gives participants the chance to talk about the future of their business in a way that's both realistic and aspirational," said CAIC Program Director Emiliano Espinosa. "Everyone is assigned an industry advisor who's already been there—who has a proven track record of building and leading successful companies. As you develop your growth strategy, your advisor will help you mitigate a lot of the risks that founders often encounter." Participants will meet with their advisors on a weekly or biweekly basis, and will be given hands-on assignments challenging them to apply what they learn in their program classes to their scaling plan. "Our nine-module curriculum is developed and taught by subject matter experts, with the overall goal of giving producers everything they need to know to scale," Espinosa explained. This includes a class on working with institutional and wholesale buyers taught by a consultant with more than 40 years of experience in the specialty food industry, while a founder of three successful companies will teach a session on attracting and securing investors. Other expert-taught topics will include risk assessment and management, supply chain and logistics, and legal considerations, among others. During each class, the small group size allows for personalized attention and interaction with lecturers.

In addition to their classes, tours of local companies, and advisor sessions, producers will have access through CAIC to essential professional services that will facilitate their business growth: five hours of legal consulting, 15 hours of graphic design services, 20 hours of bookkeeping and accounting services, and 23 hours of marketing consulting. Said Espinosa, "This gives everyone a chance to develop some of the aspects of their business that they might have neglected, whether that's business plans, pitch decks, balance sheets, or promotional materials." Producers Growth Program participants will also have preferred access to a $3.5 million loan fund through a CAIC partner; after working with their advisors to perfect their presentation and business plan, they'll have a greater likelihood of securing funding from other sources, too. "The program is perfect for people who want to scale their businesses, but haven't been able to access the resources and knowledge that they need in their communities," Espinosa said. "That's where we come in. And as these small businesses grow and scale, you end up seeing the economic impact on entire communities."

CAIC launched an eight-company pilot cohort of the Producers Growth Program last year, with founders from Delaware and Maryland taking classes, networking, and touring innovative local companies. The program culminated in the inaugural Producers Unveiled showcase, where participants presented their business growth plans and products to prospective buyers, service providers, and other stakeholders. One cohort success story was Gayle Galbraith, the founder of Federalsburg, Maryland-based Federal Brewing Company. "During the cohort, I was introduced to and accepted into the Union Kitchen Accelerator in Washington, D.C.," Galbraith said. "Participation in the Union Kitchen Accelerator is a natural progression from the CAIC cohort, and will give me access to proven strategies for successfully scaling my kombucha business and further develop[ing] my business skills—so that the business is no longer reliant solely on me for every decision or for its long-term success." Alumni also appreciated the insights and contacts that instructors shared with them. "I love the program," said Brady Shuert, co-founder of the Claymont, Delaware-based Hope's Caramels. "The connection to insiders and their knowledge is by far the best part."

The 2023-2024 program will begin on October 4, 2023, and applications are currently being accepted. Eight places are available on a first-come, first-served basis, with a tuition discount available for value-added producers. Producers operating in Delaware, Maryland, Virginia, and the District of Columbia who meet the qualifications can fill out the first part of the application online; if selected to move on to the next round, they'll be asked to interview with the program advisors. "We invite everyone to

see if they qualify," Espinosa said. "It's a very straightforward application, and it could end up being the first step in your scaling journey."

For more information on the Producers Growth Program go to https://caic.org/caic-producers-growth-program/. To view the highlights of last year's Producers Unveiled event, click here. You can learn more about CAIC and our other initiatives here.

Announcements

Farmland Preservation Program
Tuesday, August 22, 2023
6:00-8:00 p.m.
Delaware Department of Agriculture Building at the State Fairgrounds
18500 S Dupont Hwy, Harrington, DE 19952

Delaware's Farmland Preservation Program received $20 million for farm preservation this past year, the highest state funding in the program's history. This program will explain how the Delaware Department of Agriculture's Farmland Preservation program works and discuss the tax implications of preserving farmland. Light dinner will be provided to registrants. Space is limited.

To register, please contact Karen Adams.

E: adams@udel.edu

P: 302-831-3328

Please contact Nate Bruce nsbruce@udel.edu with any questions.

Farmland Preservation Program
Thursday, August 24, 2023

6:00-8:00 p.m.
University of Delaware
Paradee Center
69 Transportation Circle, Dover, DE

Delaware's Farmland Preservation Program received $20 million for farm preservation this past year, the highest state funding in the program's history. This program will explain how the Delaware Department of Agriculture's Farmland Preservation program works and discuss the tax implications of preserving farmland. Light dinner will be provided to registrants. Space is limited.

To register, please contact Karen Adams.

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Please contact Nate Bruce nsbruce@udel.edu with any questions.

Small Grain Grower Meeting
September 5th
Carvel from 6:30-8:30 pm.

Weed, disease, insect management, fertility, and crop budgets. Also, there will be malted barley updates by Proximity Malt.

Marl Pit Farm Tailgate Session
Thursday August 31, 2023 5:00-7:00 p.m.
UD Cooperative Extension Research Demonstration Area
617 Marl Pit Road, Middletown DE 19709

Join your fellow producers and the UD Extension team for an in-person discussion of this year's current production issues. Other topics will include nutrient management, pest management and weed management. This session will inform producers of timely topics observed and occurring in 2023.

Pesticide and Nutrient Management Credits will be available.

The meeting is free, and everyone interested in attending is welcome.

To request more information, please call Nick Adams at (302) 476-1136.

Farmland Rental Rate Study

Nate Bruce, Farm Business Management Specialist, nsbruce@udel.edu

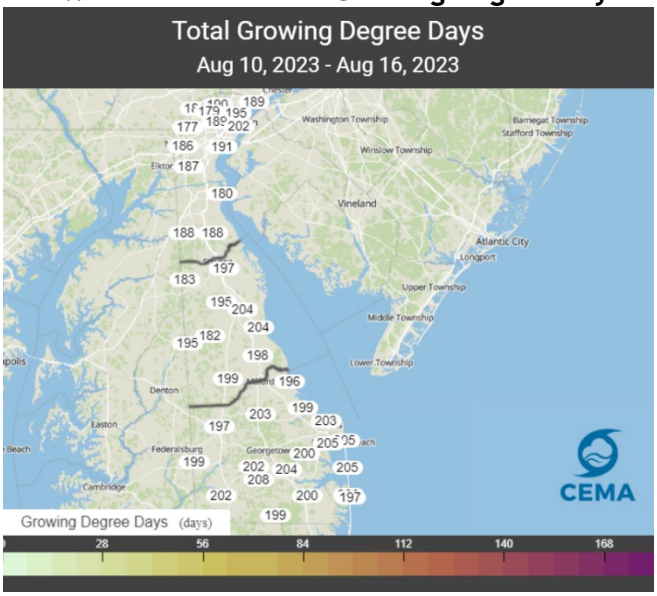
University of Delaware Cooperative Extension is conducting a farmland rental rate survey. The purpose of this project is to evaluate various farmland rental rates and how they impact a farming operations ability to cash flow. You must fill out the survey for each farm that is rented. Land that is owned, does not need to be included in the survey. Your local county agent can assist you in filling out the survey. Your response to the survey is greatly appreciated. Each individual response to this survey will not be shared to anyone in the public and kept private. If you have any questions about this project or survey, feel free to contact Nate Bruce at nsbruce@gmail.com. Below is a URL link and QR code to the survey.

Survey URL:
https://survey123.arcgis.com/share/c5fa508a182044359393b2a5e5251c47

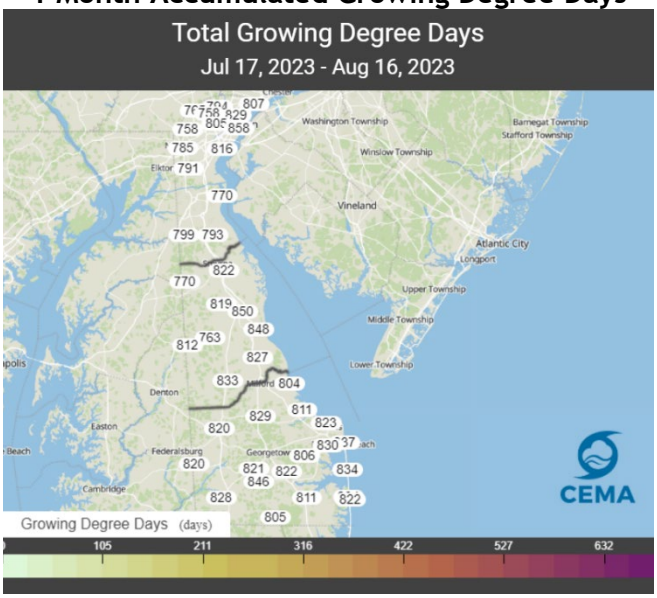
Survey QR Code:

Weather Summary

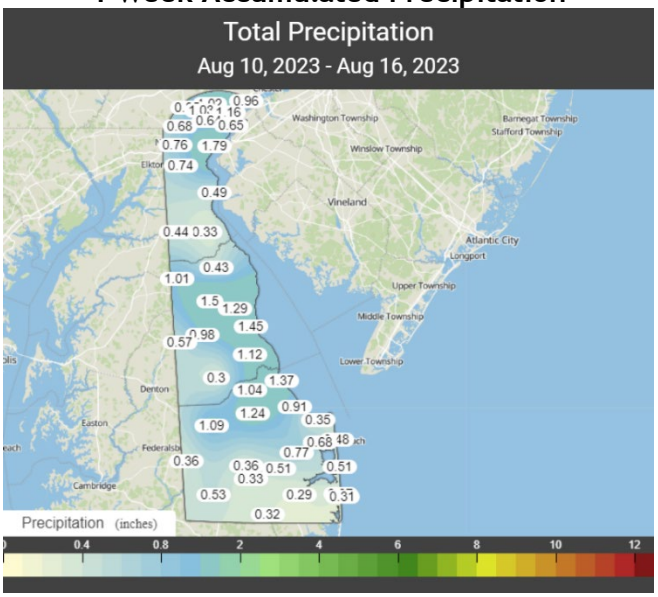
1 Week Accumulated Growing Degree Days



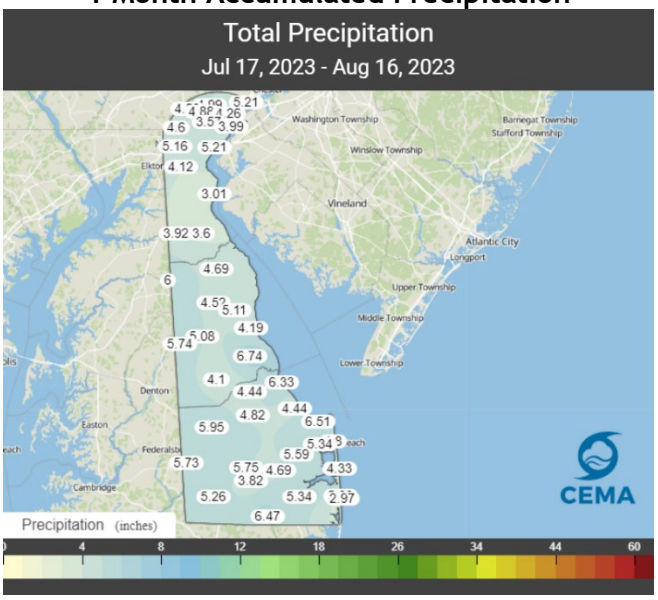
1 Month Accumulated Growing Degree Days



1 Week Accumulated Precipitation



1 Month Accumulated Precipitation



These weather maps are generated from DEOS weather station data and are part of a new Ag Weather website that is under development: http://deos.udel.edu/almanac/ Your feedback is welcome!

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Fruit & Vegetable Specialist and Drew Harris - Kent Co. Ag Agent