

CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 27, Issue 20

August 9, 2019

Vegetable Crops

<u>Vegetable Crop Insect Scouting</u> - David Owens, Extension Entomologist; owensd@udel.edu

Lima Beans

Be on the lookout for corn earworm and beet armyworm. Earworm thresholds are 1 larvae per 6 row-ft. Beet armyworm are defoliators, pre pod defoliation thresholds are 20% defoliation. Non-pyrethroid options for worm management include Radiant and Blackhawk (group 5 insecticides), Intrepid (group 18; should target small worms), Coragen (group 28), and Lannate (group 1A).

Watermelon

Beet armyworm were observed feeding on pigweed last week in a watermelon field. Beet armyworm prefer pigweed over just about anything else and will defoliate it first. Adult moths lay egg masses on pigweed leaves. When the eggs hatch, larvae will disperse by hanging on a silk thread until a passing breeze catches them. Other larvae will remain on the plant and defoliate it. If you see larvae on pigweed, there's a chance that they are in the main crop as well. In watermelon, they will aggressively feed on the rinds. Beet armyworm are resistant to pyrethroids, including a worm specific product will aid in control. Examples include Coragen, Harvanta, Radiant, Intrepid, and Avaunt.

Sweet Corn

This year's moth flight has begun earlier than

usual. Insecticide vial testing is resuming, and results will be in next week's edition of WCU. Fall armyworm are also quite active. A recent sweet corn test in Georgetown was harvested and a sizeable proportion of larvae in ears were fall armyworms. This species will also infest whorls. Large worms developing in whorls are fairly well protected by frass accumulation. Worms will be pushed out of whorls with the developing tassel, but these worms will then go to the side of the developing ear and bore in through the husk. If a pre-silk treatment is needed, Radiant and Avaunt (indoxacarb) are good options. Avaunt is not labeled for use during or after silking. Diamides will also do a good job but watch label restrictions on the amount of product that can be used. We have a limited number of applications we can make of diamide containing products, and this depends on the product and rate used.

Traps are checked on Mondays and Thursdays, trapping data is posted by the next morning on our website:

https://agdev.anr.udel.edu/trap/trap.php. Moth counts from Thursday are as follows:

Trap Location	BLT - CEW	Pheromone
		CEW
	3 nights total catch	
Dover	4	85
Harrington	1	21
Milford	7	123
Rising Sun	6	83
Wyoming	2	56
Bridgeville	2	84
Concord	5	62

Georgetown	6	106
Greenwood	1	
Laurel	7	87
Seaford	2	52
Trap Pond	7	4
Lewes	5	128

Cover Crops Provide Important Services for Vegetable Growers - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Vegetable growers should take time to revisit their rotations and plans for the next growing season. Decisions on fall rotational crops or cover crops will need to be made soon.

Services that cover crops provide:

- Returning organic matter to the soil to maintain soil health. Vegetable rotations are tillage intensive and organic matter is oxidized at a high rate. Cover crops help to maintain organic matter levels in the soil, a critical component of soil health and productivity. Brassicas and winter legumes provide the most biomass followed by ryegrasses and then rye.
- Providing winter cover. By having a crop (including roots) growing on a field in the winter you recycle plant nutrients (especially nitrogen), reduce leaching losses of nitrogen, reduce erosion by wind and water, and reduce surface compaction and the effects of heavy rainfall on bare soils. Cover crops also compete with winter annual weeds and can help reduce weed pressure in the spring.
- Providing fall and early winter cover and then winter killing. The use of winter killed cover crops are very useful when early spring (March or April) plantings of vegetable crops such as potatoes, peas, cole crops, early sweet corn, or early snap bean crops are being planned. By winter killing, cover crop residue is more manageable and spring tillage and planting can proceed more quickly.
- Reducing certain diseases and other pests. Cover crops help to maintain soil organic matter. Residue from cover crops can help increase the diversity of soil organisms and reduce soil borne

disease pressure. Some cover crops may also help to suppress certain soil borne pests, such as nematodes, by releasing compounds that affect these pests upon decomposition. One system would be planting mustards in August or early September, tilling them into the soil to provide some biofumigation in October, and then planting a small grain crop for winter cover. Spring planted mustards can also work ahead of later spring planted vegetables.

- Providing nitrogen for the following crop. Leguminous cover crops, such as hairy vetch or crimson clover, can provide significant amounts of nitrogen, especially for late spring planted vegetables. Hairy vetch is particularly well suited for no-till systems and can provide full nitrogen requirements for crops such as pumpkins and partial requirements for crops such as sweet corn, tomatoes, or peppers.
- Improving soil physical properties. Cover crops help to maintain or improve soil physical properties and reduce compaction. Roots of cover crops and incorporated cover crop residue will help improve drainage, water holding capacity, aeration, and tilth. The use of large tap rooted cover crops such as forage radish or oilseed radish are particularly well adapted to these uses.
- Setting up windbreaks in the fall for spring planted vegetables. Small grain crops will overwinter and grow tall enough in to provide wind protection for spring planted vegetables. Rye has been the preferred windbreak because tall types are still available, and it elongates early in the spring. While barley is also early, tall varieties are not generally available. Wheat and triticale are intermediate and later.
- Developing no-till, bio-strip-till, and bio-bed preparation systems. There is much opportunity to increase the use of no-till and bio-tillage systems. The key will be selecting the right cover crop for the desired system. Rye, crimson clover, subclover, tillage radish, spring oats, and other cover crops have been used successfully for no-till vegetables. One innovative system that uses a combination of winter killed covers and standard covers is bio-strip-till. In this system, a high biomass cover crop such as rye or vetch is planted with strips of forage or oilseed

radish in rows where spring planting will occur. Another system uses rye strips with forage radish planted where the beds will be next year.

Cover crop planting windows vary with crop and timely planting is essential to achieve the desired results. There are many cover crop options for late summer or fall planting including:

Small Grains

Rye is often used as a winter cover as it is very cold hardy and deep rooted. It has the added advantage of being tall and strips can be left the following spring to provide windbreaks in crops such as watermelons. Rye makes very good surface mulch for roll-kill or plant through no-till systems for crops such as pumpkins. It also can be planted later (up to early November) and still provide adequate winter cover. Wheat, barley, and triticale are also planted as winter cover crops by vegetable producers.

Spring oats may also be used as a cover crop and can produce significant growth if planted in late August or early September. It has the advantage of winter killing in most years, thus making it easier to manage for early spring crops such as peas or cabbage. All the small grain cover crops will make more cover with some nitrogen application or the use of manure.

To get full advantage of small grain cover crops, use full seeding rates and plant early enough to get some fall tillering. Drilling is preferred to broadcast or aerial seeding.

Ryegrasses

Both perennial and annual ryegrasses also make good winter cover crops. They are quick growing in the fall and can be planted from late August through October. If allowed to grow in the spring, ryegrasses can add significant organic matter to the soil when turned under, but avoid letting them go to seed.

Winter Annual Legumes

Hairy vetch, crimson clover, field peas, subterranean clover, and other clovers are excellent cover crops and can provide significant nitrogen for vegetable crops that follow. Hairy vetch works very well in no-till vegetable systems where it is allowed to go up to flowering and then is killed by herbicides or with a roller-

crimper. It is a common system for planting pumpkins in the region but also works well for late plantings of other vine crops, tomatoes and peppers. Hairy vetch, crimson clover and subterranean clover can provide from 80 to well over 100 pounds of nitrogen equivalent. Remember to inoculate the seeds of these crops with the proper Rhizobial inoculants for that particular legume. All of these legume species should be planted as early as possible - from the last week in August through the end of September to get adequate fall growth. These crops need to be established at least 4 weeks before a killing frost.

Brassica Species

There has been an increase in interest in the use of certain Brassica species as cover crops for vegetable rotations.

Rapeseed has been used as a winter cover and has shown some promise in reducing the levels of certain nematode in the soil. To take advantage of the biofumigation properties of rapeseed you plant the crop in late summer, allow the plant to develop until early next spring and then till it under before it goes to seed. It is the leaves that break down to release the fumigant-like chemical. Mow rapeseed using a flail mower and plow down the residue immediately. Never mow down more area than can be plowed under within two hours. Note: Mowing injures the plants and initiates a process releasing nematicidal chemicals into the soil. Failure to incorporate mowed plant material into the soil quickly, allows much of these available toxicants to escape by volatilization.

Turnips and mustards can be used for fall cover but not all varieties and species will winter over into the spring. Several mustard species have biofumigation potential and a succession rotation of an August planting of biofumigant mustards that are tilled under in October followed by small grain can significantly reduce diseases for spring planted vegetables that follow.

More recent research in the region has been with forage radish. It produces a giant tap root that acts like a bio-drill, opening up channels in the soil and reducing compaction. When planted in late summer, it will produce a large amount of

growth and will smother any winter annual weeds. It will then winter kill leaving a very mellow, weed-free seedbed. It is an ideal cover crop for systems with early spring planted vegetables such as peas. Oilseed radish is similar to forage radish but has a less significant root. It also winter kills. Brassicas must be planted early to mid-August through mid-September for best effect.

Mixtures to Provide the Best Range of Services It is important to choose cover crops that provide the maximum service benefits. Research in the regions has shown that generally mixtures of 3 cover crops providing different services maximizes benefits and creates conditions that favor soil microbial diversity.

Mixtures of rye with winter legume cover crops (such as hairy vetch) have been successful and offer the advantage, in no-till systems, of having a more rapidly decomposing material with the longer residual rye as a mulch. Other winter legume-small grain, winter legume-Brassics, small grain-Brassica, and small grain-winter legume-Brassica combinations have been successful.

Fruit Crops

When to Plant Plasticulture Strawberries, New Varieties to Trial - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

In some years, later planted 'Chandler' strawberries have out-yielded earlier plantings. This illustrates the dramatic effects that fall and winter temperatures can have on plasticulture production.

'Chandler' has been our main plasticulture berry and has shown consistently high yields. For most of Delaware, the recommendation has been to plant 'Chandler' the second week in September. However, 'Chandler' is more sensitive to fall and winter temperatures than other varieties and in warmer conditions 'Chandler' will put on too much growth, leading to small berries the following spring; therefore, knowing when to plant is difficult. If you could accurately predict fall and winter temperatures, you could adjust planting dates, but of course this is not possible.

One strategy has been to make multiple plantings of 'Chandler' one week apart starting the second week in September. This will insure that a part of the crop will come out of winter with the proper number of crowns (not too many, not too little). Unfortunately, this means that part of the crop will be low yield and part will have small berries.

Another strategy is to switch to varieties that are less susceptible to putting on too much growth. This is where the variety 'Camarosa' may have a fit, as it is less temperature sensitive than 'Chandler' in the fall and is not prone to putting on excessive growth. 'Camarosa' can increase mid-to-late season spring sales when 'Chandler' quantity and quality declines as the temperatures increase.

'Sweet Charlie', the early berry that also can put on a second late crop, is normally planted 7-10 days ahead of 'Chandler'. It is not an option to replace 'Chandler'.

Another strawberry that should be considered by growers is Albion, a day-neutral variety. It too is not sensitive to when it is planted in the fall. While much less productive in the main 'Chandler' season, it has some unique properties that make it valuable to growers. First, it will give some early production, ahead of 'Chandler'. Second, even though production is lower, it produces evenly over an extended period of time from April through early July. In general it will give 5-6 weeks more production than 'Chandler'. It is a large, firm berry that, while not as sweet early in the season, has good quality in May and June. It requires much more nitrogen than 'Chandler' to produce adequately sized plants and production.

New Varieties

Many other varieties have trialed in the region; however, we still do not have enough research in our region to know if they can be replacements for 'Chandler'. One with great promise is 'Flavorfest'. This variety was developed at USDA, Beltsville and is well adapted to our region. 'Flavorfest' has a prolonged growing season when compared to most other commercial varieties. It is similar to 'Chandler' when grown in plasticulture, but its yield is higher and berries larger. The plants are also

vigorous and require less nitrogen than 'Chandler'. 'Rutgers Scarlet' is another strawberry developed in the Mid-Atlantic. It has good flavor but moderate yields in regional trials. Two new North Carolina State varieties also have been released for 2019. 'Rocco' is an early season, medium-large, medium soft berry, with excellent flavor and is a very high yielder. It is best for pick your own and on farm sales. Consider it as a 'Sweet Charlie' alternative. 'Liz' is a mid-late season, medium-large, firm berry. It has good flavor and is a high yielder. It produces a large plant which covers berries and can make it hard to pick. It is best for pick your own and short distance shipping. Consider it as a 'Camarosa' alternative.



'Flavorfest' Strawberry



'Rutgers Scarlet' Strawberry



'Rocco' and 'Liz' Strawberries

Agronomic Crops

<u>Agronomic Crop Insect Scouting</u> - David Owens, Extension Entomologist; owensd@udel.edu

Soybean

Corn earworm moth flight has started a little earlier this year, and moth flight this year has generally been a bit higher than in recent years. Podworms have been sighted in the region beginning to infest soybean. Fields (or portions of fields) at risk for above threshold podworm infestation are open canopied, drought stressed, and flowering fields. As a reminder, podwoms generally have a greenish or dark striped color pattern. Head capsules are orange, and they have 4 pairs of abdominal prolegs. Unfortunately, this year much of our double crop soybean falls under this category. Fields should be scouted for weekly using a series of sweep samples. Thresholds can be calculated using

https://www.ces.ncsu.edu/wp-content/uploads/2017/08/CEW-calculator-v0.006.html. Using some ballpark estimates, a sweep threshold is going to be between 1.4 and 2.2 worms per 15 sweeps.

NCSU's threshold calculator:

Sorghum

Flowering sorghum is extremely attractive to earworms (aka sorghum headworm) as well. Fields should be scouted for during the month of August, especially those that are heading out and those that are currently flowering. Heads that are at the end of or past the milk stage are

much less likely to be infested. A good sampling method for sorghum is called the 'beat bucket' technique. About halfway down the webpage of the following link is a good description and video of the beat bucket:

https://betteryield.agrilife.org/category/sorghu m/. Basically, you beat the sorghum head into a bucket to dislodge worms. In general, 1 earworm per head is associated with a 5% yield loss. You can use that to work through the appropriate decision calculations: Control cost - estimated yield loss potential x estimated yield x value of sorghum. Note, both fall armyworm and corn earworm will feed on the heads and are about equally damaging. Also note that thresholds assume the insecticide has greater than 80-90% efficacy. There is potential that we do not realize that level of control with a pyrethroid. If using an insecticide, use a higher volume and high pressure to drive material into the head as much as possible.

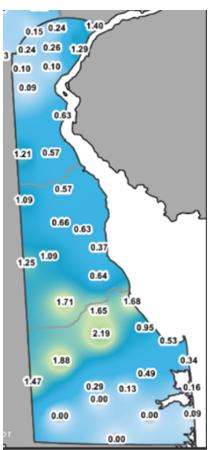
General

<u>Irrigation Management</u> - James Adkins, Agricultural Engineer; <u>adkins@udel.edu</u>

Wednesday night brought at rain to most farms north of Rt 9. Those located in the 1" plus band of rain from Bridgeville/Harrington through Milford to Slaughter Beach should be close to field capacity provided that the soil was able to absorb all of the rain. Fields at 100% of available water (field capacity) will have 3-4 days before irrigation will be needed for both corn and soybean. Full season corn is nearing black layer and the daily water usage is starting to fall from the 0.25+"/day peak into a more manageable 0.17"/day average. Full season soybeans are near their peak water use which will continue until the leaves start to yellow. If the weather forecast holds, corn is predicted to use around 0.18" per day next week and full soybean will need 0.24"/day.

The information presented below is an example of the soil moisture status at University of Delaware's Warrington Irrigation Research Farm. Actual field values will vary greatly depending on crop stage, soil type and local rainfall. There are many tools available that provide field by field values to assist farmers in making irrigation

scheduling decisions including paid services through local crop consultants, irrigation equipment manufacturer's, Climate Corp, etc and free tools like KanSched and the Delaware Irrigation Management System (DIMS) http://dims.deos.udel.edu/



24-hour rainfall map from http://www.deos.udel.edu/ Aug 8, 2019.

Field Corn

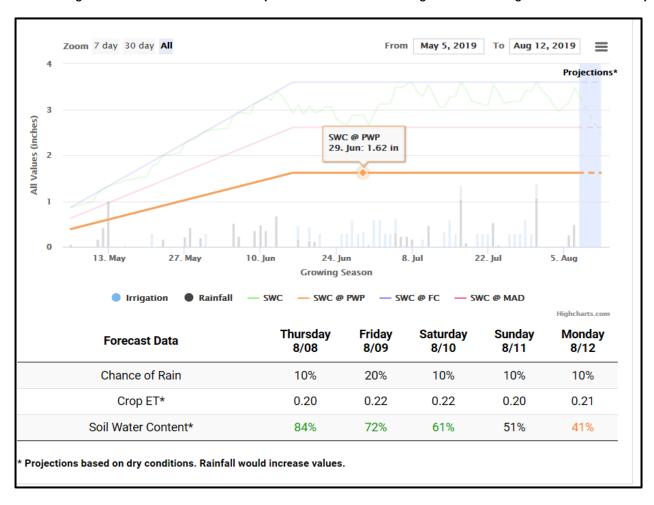
Daily corn evapotranspiration (ET) rates for April 25 planted 114 day corn at R3/R4 averaged 0.18"/day for the past week. Soil moisture sensors in the field are in line with the model predictions and have been a good confirmation that our estimated soil moisture values are correct. This field received 0.8" of rain in 3 events over the past week and zero irrigation (1.08" of rain on 7/31 equaled 100% of available water to start the week). This field is predicted to use 0.20", 0.22", 0.22", 0.20", 0.21" for Thursday 8-8 to Monday 8-12 for an estimated daily usage of 0.21" per day for the upcoming week. These are estimated values and are no

substitute for daily ET use models and field level soil moisture data.

At this point in the growing season most corn fields are at least into the R3+ stage. UD research on when irrigation can be stopped has been largely inconclusive. Farmers should

continue to intensively irrigate through the R3 stage and gradually taper off through R4 until black layer. Historically, crop water use after R4 has been light (less than ½") to get to the black layer stage. With pumping costs averaging \$4.5 per acre inch, the cost of applying water up to black layer is worthwhile insurance.

Irrigated Corn Soil Moisture Report for the UD Warrington Farm Stage R3/R4 - DIMS Report



Full Season Soybeans

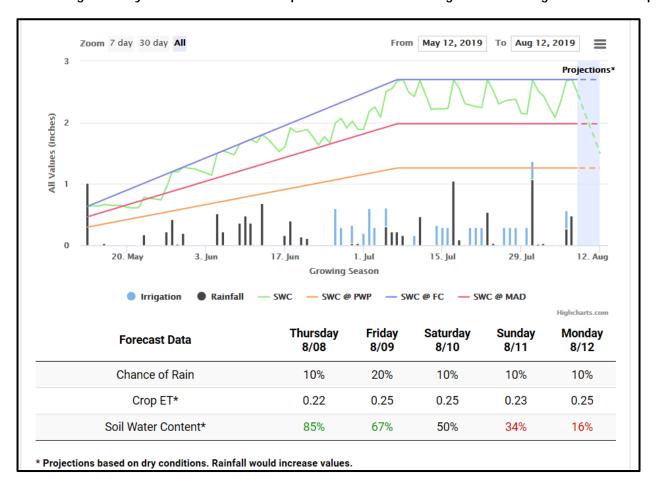
May 2 planted soybeans at the UD Warrington Irrigation Research Farm are into the R5 stage as of Aug 8. The average daily crop water use for the past week was 0.17" per day and the predicted daily ET for next week is 0.24" per day (At this point soybeans are using more water than corn nearing maturity). We have observed high rate of water use from the shallow profile; Remember to irrigate in small but frequent

doses to avoid pushing water beyond the root zone. Multiple years of soil moisture sensor data show so use water primarily from the shallow (0-8") soil profile.

Double Crop/Late Season Soybeans

At this point double crop soybeans full canopied. Once full canopy is achieved, late soybeans will use the same amount of water as the full season beans above.

Irrigated Soybean Soil Moisture Report for the UD Warrington Farm Stage R5 - DIMS Report



Guess the Pest! Week 17 Answer: Stink Bug

- David Owens, Extension Entomologist, owensd@udel.edu

Congratulations to Travis Kinnison for correctly identifying one of the major causes for sunken, discolored kernels as stink bug damage. Travis won a new sweep net with which he can scout for stink bugs in other crops (sorry, it's not easy using a sweep net in corn!). All other correct entries will be entered into an end of season raffle.

Stink bugs generally are present along edges of fields, numbers typically drop off quickly going into the interior of a field. Browns are our most common corn infesting species, and can be a bit more difficult to control with pyrethroids. Bifenthrin is generally thought to be a better pyrethroid versus stink bugs, but I do not know if the difference is great enough that would notice

a treatment effect given the number of sprays applied to protect ears from corn earworm.



This from Nancy Gregory: Feeding probes by stink bugs may not show up on closed husks. During seed formation, kernels become

shriveled, deformed, and ears may show a bend. Feeding on more mature kernels will result in only minor discoloration. Yield and market value may be affected, especially in sweet corn. Secondary microorganisms such as bacteria, yeasts, and Fusarium can colonize damaged tissue.



Stink bug blemished kernels and secondary pathogen attack.



'Banana-boat' corn that has bent and growing outside of the husk; most likely caused by stink bug feeding early in the ear development process.

<u>Guess the Pest! Week 18</u> - David Owens, Extension Entomologist, owensd@udel.edu

Test your pest management knowledge by clicking on the GUESS THE PEST logo and submitting your best guess. For the 2019 season, we will have an "end of season" raffle for a \$100.00 gift card. Each week, one lucky winner will also be selected for a prize and have their name entered not once but five times into the end of season raffle. A lucky winner will also receive a heavy duty sweep net.

This week's guess the pest challenge comes from a sorghum field near you. While looking for headworms and aphids, this leaf discoloration was observed on lower and some mid-canopy leaves of boot stage to head stage sorghum. What is causing it?



To submit your answer, please go to: https://docs.google.com/forms/d/e/1FAIpQLSfU PYLZnTRsoI46hXmgqj8fvt5f8-JI0eEUHb3QJaNDLG_4kg/viewform



Announcements

Job Opportunities with UD Extension Nutrient Management Program

The University of Delaware Nutrient Management Program is seeking applicants for two positions:

A Nutrient Management Program Coordinator for Turf

https://careers.udel.edu/en-us/job/494085/program-coordinator-cooperative-extension

A Nutrient Management Program Coordinator for Agriculture

https://careers.udel.edu/en-us/job/494177/program-coordinator-cooperative-extension

Both positions are entry level positions and close on Friday, August 16, 2019.

Pesticide Container Recycling for DE and MD

Delaware Pesticide Container (HDPE) Recycling

Third Thursday of the month, Apr-Oct 9:30 a.m.-1:00 p.m.

Containers will be collected at the SCD Maintenance Yard (23818 Shortly Rd., Georgetown) on the following dates for 2019:

August 15 September 19 October 17

All containers must be triple rinsed or equivalent, with labels and all foil wrapping removed (if not glued).

Sponsored by Delaware Department of Agriculture for further information contact Jimmy Hughes @ 302-698-4569 or check the website:

https://agriculture.delaware.gov/pesticide-management/calendar/

Maryland Pesticide Container Recycling

Various date and locations, details are at: https://mda.maryland.gov/plants-pests/Documents/2019RecycleBrochure.pdf

Or contact the Maryland Department of Agriculture, Pesticide Regulation Section at 410-841-5710

Field Tour of Carvel Crops Research

Wednesday, August 14, 2019 3:30-5:30 p.m.
University of Delaware
Carvel Research & Education Center
16483 County Seat Hwy
Georgetown, DE 19947

Please mark your calendars and save the date to join us for the 2019 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. Dinner will be provided.

Please RSVP to Kim Lewis at 302-856-7303 or <u>kimlewis@udel.edu</u> by Monday, August 12 if you plan to attend.

Ag Horizons Conference

Thursday, August 15, 2019 9:00 a.m.-1:00 p.m. Carvel Research & Education Center 16483 County Seat Highway Georgetown, DE 19947

A lot can happen on a farm and in the farm community over the course of a year. When a new farm bill is introduced, it can be doubly eventful. In order to take stock of the past crop year and to plan for future ones, the <u>Ag Horizons Conference</u> aims to serve as a State of Agriculture meeting for Delmarva producers and ag influencers.

Organized by University of Delaware Cooperative Extension and the USDA Risk Management Agency, the <u>Ag Horizons Conference</u> will feature sessions appealing to producers of a variety of commodities, including poultry, grain, and specialty crops, and will focus on changes brought about by new farm policy.

Agenda

8:45 a.m. Registration

9:00 a.m. **Welcome**Laurie Wolinski, Extension Agent, University of
Delaware

9:05 a.m. **Delaware Department of Agriculture Update**

Michael Scuse, Secretary of Agriculture

9:30 a.m. Farm Service Agency

- ARC/PLC changes in farm bill
- Increases in farm loan limits
- Dairy Margin Coverage Program
- 2019 Market Facilitation Program

Sean McKeon, State Executive Director

10:00 a.m. Risk Management Agency

- Farm Bill updates
- Double Cropping
- Unit Identification

Alex Sereno, Director, Raleigh Regional Office

10:45 a.m. Break

11:00 a.m. **Delaware Poultry Industry**

• Updates on Market Trends, Production and Environmental Challenges James Fisher, Communications Manager

11:15 a.m. Natural Resources Conservation District

• 2018 Farm Bill updates to Conservation Programs Brooke Jones, District Conservationist

11:30 a.m. USDA/UD Extension Risk Management Education Partnership

- Recap of How Crop Insurance Performed in 2018
- One Farmer's Experience with Supplemental Coverage Option (SCO)

Don Clifton, Program Specialist, Farmers First Services, Inc.

12:15 p.m. Lunch & Networking

Register for the <u>Ag Horizons Conference</u> by emailing lgw@udel.edu or decrophelp@gmail.com or by calling 302-831-2538. Registration is encouraged to ensure proper resources are available to each attendee.





Open House at UD's Genaurdi Food Innovation Lab

Wednesday, August 21, 2019 6:00-8:00 p.m. Genaurdi Food Innovation Lab 529 S. College Ave. Newark, DE.

We welcome you to visit our Open House and learn how Cooperative Extension and the UDairy Creamery are partnering to offer seminars in Value-Added Dairy and Agriculture Products.

While you visit, please take the opportunity to tell us your interests and needs by filling out our survey. Some future sessions include Food Safety Planning, Pasteurization, Marketing your Ag Product, Cheese Fermentation & more!

- Let us know how we can assist you & your interest in value-added agriculture & dairy products.
- Explore the Genaurdi Food Innovation lab and the UDairy Creamery production facilities
- Learn about new educational opportunities and seminars coming up in the future

Light refreshments and UDairy Creamery product samples available.

To RSVP, please email mlit@udel.edu or call 302-831-1364

Please park behind Townsend Hall and enter through the rear entrance of Worrilow Hall. 529 S. College Ave. Newark, DE.

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

Upcoming MidAtlantic Women in Ag Events

Fall Farm Tour - September 4

Laurel Farmers Auction Market • Covered Bridge Inn Historic Farmhouse and Wedding Venue • Hopkins Farm Creamery • Dogfish Head Brewery https://www.extension.umd.edu/womeninag/farm-tours-0

Wednesday Webinars

https://www.extension.umd.edu/womeninag/webinars

Women in Ag Conference – save the dates Feb 12 & 13, 2020

https://www.extension.umd.edu/womeninag/annual-conference/2020-conference

Cut Flowers 2: Advanced Annuals, Post-Harvest Handling & Season Extension

Saturday, September 28, 2019 1:00–4:00 p.m. Masterpiece Flower Farm 7945 Old Ocean City Road, Whaleyville, MD 21872

Join us at Masterpiece Flower Farm and learn how to grow advanced annuals such as Dahlias, Ranunculus, and Lisianthus. Special focus will be given to post-harvest handling practices. We will also discuss tips for season extension. All experience levels are welcome. (Rain Date: September 29th, same time, same place.)

This workshop will be led by farmer/owner Crystal Giesey, who is deeply committed to growing flowers sustainably and organically. Thanks to Crystal and to the organizers Future Harvest CASA and the University of Delaware.

https://www.eventbrite.com/e/cut-flowers-2-advancedannuals-post-harvest-handling-season-extensiontickets-64194508503

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of August 1 to August 7, 2019
Readings Taken from Midnight to Midnight

Rainfall:

0.72 inch: August 1 0.60 inch: August 2 0.02 inch: August 5 0.29 inch: August 7

Air Temperature:

Highs ranged from 89°F on August 7 to 82°F on August 2.

Lows ranged from 71°F on August 5 and August 6 to 66°F on August 1.

Soil Temperature:

80.9°F average

Additional Delaware weather data is available at http://www.deos.udel.edu/

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

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