



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 27, Issue 8

May 17, 2019

Vegetable Crops

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

Potatoes

Colorado potato beetle adults are active and laying eggs in potato fields. Most of the insects observed this week were confined to the edge of the field, in part because beetles do not fly when temperatures are below 80 degrees. Sample a field from 10 locations. At each location, count beetle adults and larvae per stem from 1 stem on each of 5 adjacent plants. Thresholds are 50 adults, 75 large larvae, and 200 small larvae per 50 stems. There are many non-neonicotinoid options available that can be used in a rotation strategy to ease selection pressure off of neonicotinoids. They can be found here: <https://cdn.extension.udel.edu/wp-content/uploads/2012/03/23152414/Potato.pdf>.

Sweet Corn

Scout for cutworm injury. Thresholds are similar to field corn. Trapping data can be found here for European corn borer and corn earworm; trap data is updated by Tuesday and Friday mornings: <https://agdev.anr.udel.edu/trap/trap.php>.

Watermelons

Continue scouting for cucumber beetles, especially on transplant trays that are hardening off on wagons. Recent cool, wet weather has slowed beetles down, but the weather is warming back up. This year, the Extension

entomology team is looking to collect several hundred beetles from individual farm sites throughout Delaware and Maryland to conduct insecticide bioassays. If you have a cucumber beetle infestation, feel free to contact me at owensd@udel.edu. We'd love to take some beetles off your hands!

Yellowing in Peas - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Pea harvest is nearing and we are seeing yellowing and poor growth in many pea fields due to wet conditions. Peas do not perform well in soils that are worked when they are too wet or when they receive heavy rainfall after planting. Compaction and crusting over will lead to poor emergence and reduced growth. This is evident in many Delmarva pea fields in 2019.

Recently, heavy rains have caused some pea fields or parts of fields to turn yellow, particularly where there was compacted soil or poor drainage. Peas are effective at fixing nitrogen; however, we normally apply 40-80 lbs/a of fertilizer nitrogen (N) prior to planting thus reducing N fixation contributions from Rhizobium nodules on the roots. With the frequent rainfall, some fields have remained saturated and denitrification has occurred, reducing available N from the initial fertilizer application. In addition, root function and Rhizobium nodulation is further impaired in saturated soils, thus limiting any potential N fixation contributions.

In pea fields that have had a past history of root rot, we have the potential to see problems in 2019. According to the Crop Profile for Peas in Delaware: "Aphanomyces root rot, or common root rot, is one of the most destructive diseases of peas. It occurs in most pea producing regions of the U.S., including the Mid-Atlantic. In the Northeast, average annual yield loss to this disease is about 10%, though losses in individual fields may be up to 100%. Wet soil conditions and poor drainage are associated with higher rates of infection. The disease is most damaging in years when a cool, wet spring is followed by an early, warm summer with low rainfall."



Good pea growth and development.



Yellowing in peas in wet soils

Allium Leafminer Moving South in Maryland

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

The new pest of onion, leek and garlic, the Allium leafminer, is moving south in Maryland. It was first observed in Maryland in Cecil Co. in 2017, but now the fly's tell-tale marks (Figs. 1 and 2) have been found in a Baltimore City chives planting. This new pest was first found in Lancaster County, Pennsylvania in December 2015. Unfortunately, it is my guess that the pest is now probably in many northern/central areas of Maryland. New transplants or seedlings of onions or leeks should be watched closely for the tell-tale signs of the fly's damage which are several very small white dots in a row along the leaf of an allium plant (Figs. 1 and 2).



Figures 1 and 2. Tell-tale marks on allium leaf made by Allium leafminer females

Penn State has a great deal of good information about the new pest which can be found at: [Penn State Allium Leafminer Pest Alert page](#). Growers should look for these tell-tale signs on any newly planted allium species, but especially on leeks. You can cover any Allium planting with row

cover to keep the flies off or if needed treat with insecticides as found in the [2019 Mid-Atlantic Commercial Vegetable Recommendations](#) guide.

Flea Beetle Feeding and Tomato Early Blight – Jerry Brust, *IPM Vegetable Specialist*, University of Maryland; jbrust@umd.edu

I visited a few tomato fields this week and found 2 to 4-week-old tomato plants with some early blight (*Alternaria solani*) and in some cases bad early blight lesions. This is very early in the season to be seeing this level of early blight. Many of the plants had a few flea beetle adults on the plant (Fig. 1) and in the areas where the early blight was found also had moderate to high flea beetle feeding (Fig. 2). In some cases I could not find any flea beetles after the rains we have had and in other cases I could find a few of them. Normally the amount of flea beetle feeding I saw would not have been of much concern, but flea beetles can cause increased infections of *Alternaria* leaf blight in tomatoes and potatoes and possibly other early blight susceptible crops. I found that there was a strong relationship between the amount of flea beetle feeding and the amount of early blight on tomato plants in different fields of a few farms. If you have moderate flea beetle feeding damage to your Solanaceae plants and you see any early blight starting you'll need to control both the beetle and the disease. Pyrethroids should work well in controlling flea beetles. There is not much organically that will control flea beetles **once they are causing economic damage** (there are some things that can be done though, to reduce flea beetle problems before flea beetles cause damage, more at: <https://attra.ncat.org/attra-pub/download.php?id=135>). Using kaolin clay (Surround) before beetles begin to feed on plants is one organic possibility as is using spinosad on beetles after they start to feed.

Flea beetle adults are generally small and range in size from 0.05 to 0.15 inch. They overwinter as adults on weed hosts surrounding the field, on residues of a previous tomato crop, or in the soil if the previous crop was a flea beetle host. Some

flea beetles (*Systema blanda* – the pale striped flea beetle being one) can feed on amaranths or pigweeds (Fig. 3) and will readily move from them over to your crops. Other flea beetles are more host specific (the eggplant, potato and tobacco flea beetles feed on Solanaceous plants while others prefer broccoli, cabbage and other cole crops). However all adult flea beetles have similar damage patterns, they chew small round holes in leaves, which make them look as if they have been damaged by fine buckshot, called "shot-holing". The white larvae feed on underground parts of the plant, but this damage is usually not economically significant. There is normally a second generation during the summer and at times even a third depending on species. Normally foliar damage to larger plants is not considered to be economically important but feeding damage to small plants or seedlings can reduce stand or vigor of the plant. The other exception about flea beetles not being economic pests is when *Alternaria* is associated with their feeding on smaller tomato plants.

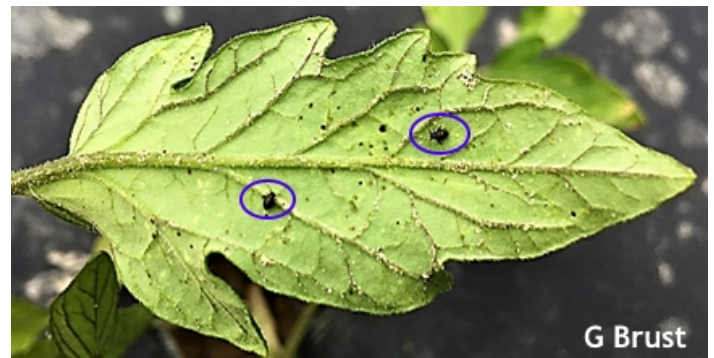


Figure 1. Underside of tomato leaflet with two flea beetles (*Epitrix* sp)



Figure 2. Tomato leaf with old flea beetle feeding and early blight



Figure 3. Pale striped flea beetle feeding on amaranthus weed

Fruit Crops

Missshapen Strawberry Fruits - Gordon Johnson, *Extension Vegetable & Fruit Specialist*; gcjohn@udel.edu

Most commonly, misshapen strawberries during spring result from poor pollination. Strawberries are aggregate fruits. They have multiple ovules per receptacle where the fruit is formed. The strawberry receptacle may have up to 500 ovules per berry. You will see these as "seeds" on the outside of the strawberry fruit which are called achenes. To have the largest berry possible, you need as many of these ovules to be successfully pollinated as possible. To avoid misshapen fruits the achenes need to be pollinated evenly and fully. With pollination, the receptacle tissue around the achenes will develop to form the strawberry fruit.

Strawberries have both male and female flower parts on the same flower and can self-pollinate. Wind and rain can move pollen within the flower. However this usually does not allow for full pollination of all the ovules. Bees, such as honey bees or bumblebees, are usually necessary to allow for complete pollination. Some flowers actually produce bigger berries when cross pollinated with pollen from other flowers.

Incomplete pollination will often result in smaller or misshapen berries.

Strawberry flowers are not heavy nectar producers. However, bees do visit the flowers and studies have shown that where native bees are limited, adding hives of honey bees or bumble bees increased productivity. It is recommended that each flower receive 16-25 bee visits. This is particularly true of the king berries, which form from the first flower to open on a fruiting truss.

You can distinguish poor pollination from other types of damage because fruit will have variable achene (seed) size. Large seeds received pollination, while small seeds did not. Poor pollination is common when plants have been under row covers during bloom and when the bloom period has been rainy, stormy, or cold. Frost damage that does not kill the whole flower will also cause berry deformities because some achenes have been damaged.

Lygus bugs (Tarnished Plant Bugs) can also cause misshapen fruit by feeding on the flower. To distinguish between Lygus bug damage and poor pollination look at the seed size on the fruit - seeds on fruit affected by Lygus will be similar in size.

Boron deficiencies are another potential cause of misshapen strawberries.



Strawberry deformities caused by poor pollination and cold injury.

Agronomic Crops

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

Early Season Moth Activity

Trap Location	True Armyworm per night	Black Cutworm per night
Willards, MD	0	1.7
Salisbury, MD	0.1	2.0
Laurel, DE	0.1	6.0
Seaford, DE	0.7	1.3
Bridgeville, DE	0	---
Harrington, DE	0.1	1.7
Smyrna, DE	0.3	13.3
Kenton, DE	0.1	2.6
Pearson's Corner, DE	0	1.6
Sudlersville, MD	0	0.3

Black cutworm larvae have been observed in some fields cutting plants. Most infestations are well below economic thresholds. Cutworms are large enough to cut plants once 300 DD have passed from a 'significant moth flight'. This is defined as a trap catch of 9 moths or more for 2 consecutive nights. Since we only check our traps once a week, it is more difficult to determine when this happens, but a trap would have to catch at least 18 moths in a week. We had a large number of moths in Seaford and Laurel the week of April 10, spreading to Smyrna the following week. We have now accumulated enough degree days to see large worms. Scout your fields, and especially fields that had living cover crop or living weeds in the middle to end of April. Remember, moth counts in a trap do not mean that your field will have a damaging level of black cutworms. Also, black cutworm, while notorious, is not the only cutworm species present. Whether or not cutworms develop into large worms will depend, in part, on the Bt trait package present in your corn. Trait packages with Cry1F or Vip3A proteins should control cutworm. You can find all of the trait packages effective on cutworm and true armyworm here: <https://lubbock.tamu.edu/files/2018/11/BtTraitTableNov2018.pdf>

True armyworm developing in cover crop has been observed feeding on corn in nearby states, including Maryland's eastern shore. Threshold are pretty high, 25% infested plants. True armyworm is only going to be controlled by Vip3A containing traits.

Soybeans

Be sure to watch emerging soybean stands like a hawk. There are three pests that we have to think about when planting soybean: seedcorn maggot, slugs, and bean leaf beetle. The first two do not have good rescue treatment options. We are at generation 1's peak seedcorn maggot flight activity now. They are favored by cool, wet conditions with very recent cover crop incorporation (within the last few days). You can either delay planting about a week to avoid maggots or plant with an insecticidal seed treatment. With slugs, recent cool weather and rains will favor their activity. Early in the morning or at night, kick some field residue around and you may find them, or you can place a square foot shingle or board or cardboard out in location and count slugs underneath it the next morning. Generally, a good level of concern is 3 or more slugs. This doesn't mean you will have problems, because slug activity is heavily influenced by environmental conditions. Hot, dry conditions are not favorable for slug activity. Slug bait is an option, but by the time stand loss is observed, damage has already been done. Vertical tillage or turbo-tilling can help disrupt the slugs. By the time a field is replanted, weather conditions may change and then it becomes a question of did the intervention work or the weather is just better? Planting without a neonicotinoid seed treatment can help preserve beneficial, slug-feeding ground beetles. Closing furrows and removing residue around the furrow with row cleaners can also help protect the seed and encourage faster germination. Once seedlings emerge from the soil, they become harder for slugs to kill. Bean leaf beetle are also active. Most feeding is cosmetic; the soybean plant will recover. Thresholds prior to 2nd trifoliolate are 2 per foot AND 25% stand reduction. After this stage, thresholds increase dramatically to 2-3 per plant and 30% defoliation.

Scouting Fields for Fusarium Head Blight -

Alyssa Koehler, Extension Field Crops

Pathologist; akoehler@udel.edu

We had quite a few rain events during the flowering windows for barley and wheat, which kept us at high risk for Fusarium Head Blight (FHB). Once wheat has flowered, symptoms of FHB are visible in 18-24 days. Heads with FHB will have bleached florets or bleached sections of the head (Figure 1) and may have pink growth on spikelets. (Glume blotch typically has more of a grey appearance). You can follow these steps to assess the level of FHB present in your field.



A Koehler, University of Delaware

Figure 1: Wheat heads with symptoms of Fusarium Head Blight

1. For every 10 acres of field, randomly select one spot to survey.
2. Keeping your line of sight above the wheat heads, walk 40-50 yards and randomly pick 10-20 heads to place into a bag. (You don't want to be looking down and biasing the heads you select).

3. Once you have randomly collected the heads, rate them for the percent of FHB on each head by looking at the visual symptoms (bleaching or pink growth on spikelets).

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

(Ex. You rate 10 heads with severity values: 0, 10, 30, 0, 0, 20, 10, 0, 0, 0. These add up to 70. $70/10$ heads = 7% FHB severity)

Higher levels of FHB are typically associated with elevated levels of DON and possible issues with yield and test weight.

5. Repeat this assessment as needed to get an overall rating for the field. Fields with greater than 10% FHB severity are at higher risk for yield losses or elevated DON. Fields with elevated DON should be harvest as early as possible and you may want to consider increasing combine fan speeds and shutter openings to reduce the amount of scabby kernels harvested.

Growing Degree Days (GDD) and Rainfall through May 14th - *Jarrod O. Miller, Extension Agronomist, jarrod@udel.edu*

Since the rainfall this weekend, cooler temperatures have slowed the accumulation of growing degree days. Since April 14th we had observed a steady trend in GDD accumulation, keeping emergence on track between 7-10 days. Any planting done since May 6th may see delayed emergence, compared to previously planted fields. For those fields planted mid-April you may be at V4-V5. As temperatures warm back up, be prepared to sidedress between V6-V8.

The cooling trend is more apparent when you look at statewide temperatures and rainfall. Compared to nighttime lows, daytime temperatures had a significant drop since the weekend. Rainfall accumulation was between 1.5-2 inches, with the Harrington area still leading the state with 8 inches since April 14th. However, compared to last year these intermittent rainfalls are allowing fields to drain and not leaving all the duck ponds we had in 2018.

General

Guess the Pest! Week 6 Answer: Soil Compaction - David Owens, Extension Entomologist, owensd@udel.edu and Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Congratulations to Will Carlisle for correctly answering soil compaction. Will will receive a sweep net and be entered along with all correct guessers for the end of season raffle. Unfortunately, this is one case where a sweep net is not going to do much to alleviate the problem, unless you put a shovel or soil corer on the end of the handle.

This from Gordon Johnson:

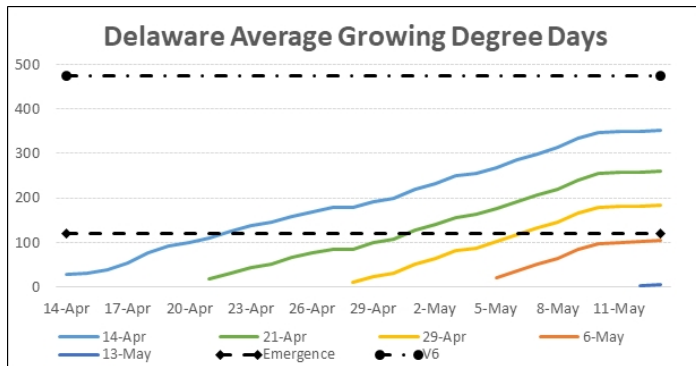


Figure 1. Growing degree days in the Dover area since April 14th.

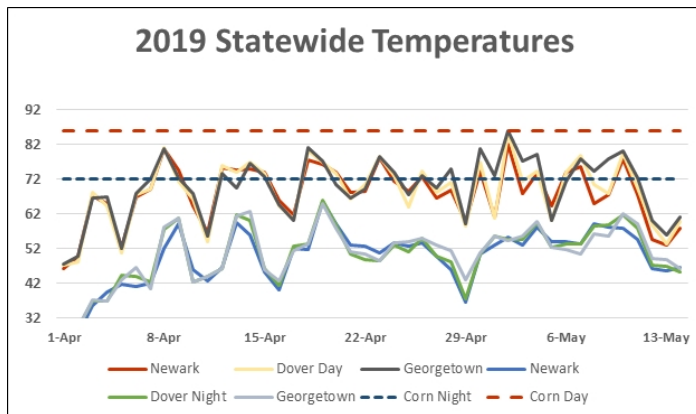


Figure 2. Statewide temperatures since April 14th.

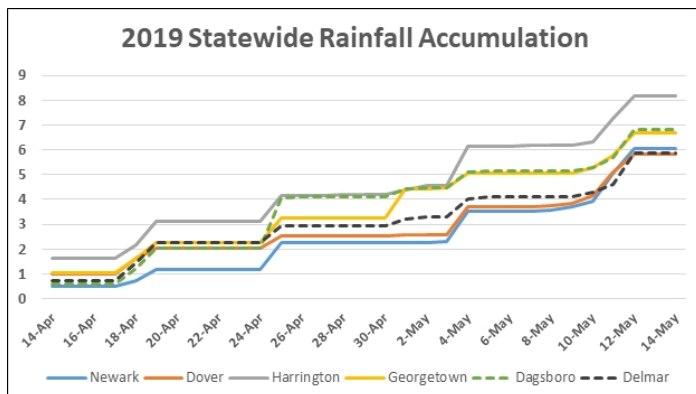


Figure 3. Statewide rainfall accumulation since April 14th.

Peas do not perform well in soils that are worked when they are too wet. Compaction will lead to poor emergence and reduced growth. Wet soil conditions, compaction, and poor drainage are also associated with higher rates of infection of root rots in peas such as *Aphanomyces* root rot, or common root rot. Soil compaction limits root development and root function and will reduce yield potential in vegetable crops such as peas.

There are two processes at play when soils are compacted by equipment. The first is destruction of soil structure. In most Delaware soils, our surface soil structure is granular or crumb in nature and consists of small aggregates. It takes considerable time and good cropping practices to build up soil structure.

When compacted by equipment, structure is destroyed, making soils denser. Excessive tillage also destroys soil structure.

A second compaction process is the compression of soil particles, pushing them closer together. This happens with equipment traffic across fields. The heavier the loads carried by equipment passing over soils, the more the compaction. With large equipment and heavy axle loads, significant soil compaction is expected; the heavier the weight on an axle, the more the compaction. Other equipment factors affecting compaction include tire size, tire pressure and operating speeds. Wider tires or dual tires will distribute weight over larger areas, reducing deep compaction but increasing the amount of area with shallow compaction. Higher tire pressures will result in more deep soil compaction and slower speeds will also result in more compaction.

In wet soil, there is less resistance to soil particle movement and soil is more "plastic". This means that potential for compaction is greater in wet soils than dry soils. It is important to wait until soil conditions are favorable for tillage. Waiting a day or two for soils to dry will improve yield potential by reducing compaction.

Subsoiling in the fall is a short-term solution to deep compaction. The use of forage radish cover crops has shown great potential to reduce shallow and deep compaction. Research in Delaware has shown that peas can be no-tilled after a winter-killed radish cover crop successfully with equivalent or better yields than conventionally tilled peas.



Guess the Pest! Week 7 - David Owens,
Extension Entomologist, owensd@udel.edu

What is affecting this field corn (top) and sweet corn (bottom)? Think carefully, they are otherwise robust, happy looking plants.

To submit your answer, please go to:
https://docs.google.com/forms/d/e/1FAIpQLSfUPYLZnTRsol46hXmggj8fvt5f8-JI0eEUHb3QJaNDLG_4kg/viewform



Announcements

Spring Pasture Walk

Thursday, May 21, 2019 6:00 - 8:00 p.m.
Whitehead Cattle Company
1303 Dexter Corner Rd, Townsend, DE 19734

Credits: Nutrient Management (0.75) Pesticide credit(1.0)

Come and see how Whitehead Cattle Company uses pasture to effectively feed their beef herd. Learn how to identify weeds and how to control them in a pasture setting. In addition, learn about soil health and how healthy soil is the key to making farms more productive, profitable and resilient—and better prepared to meet the challenges of the 21st century. Learn how to take a hay sample and visually evaluate hay. The workshop will also feature a talk on Pesticide safety - responsible decision-making and actions to protect pesticide users, public health, plant and animal health, and the environment

The meeting is free and everyone interested in attending is welcome. If you have special needs in accessing this program, please call the office two weeks in advance.

To register or request more information, please call our office at (302)831-2506. Please call to register by Friday, May 10.

AGENDA

Welcome and Introductions

6:00-6:05

Dan Severson, University of Delaware Cooperative Extension

Tour of Pastures and Pasture Management

6:05-6:20

George and Lynda Whitehead, Whitehead Cattle Company

Weed Identification and Control in Pastures

6:20-6:50

Quintin Johnson, University of Delaware Cooperative Extension

Pesticide Safety

6:50-7:15

Dr. Kerry Richards, University of Delaware Pesticide Safety Education Program

Soil Health

7:15-7:40

Jayne Arthurs, NRCS Research Conservationist

Proper Hay Sampling and How to Visually Evaluate Hay

7:40-7:55

Dan Severson, University of Delaware Cooperative Extension

Wrap up and Evaluations

7:55-8:00

Dan Severson, University of Delaware Cooperative Extension

DSU Blueberry Field Day

Tuesday, June 18, 2019 8:30 a.m. to 2:30 p.m.
Delaware State University
Outreach & Research Center
884 Smyrna-Leipsic Road, Smyrna, DE

Speakers

Dr. Dharma Pitchay, Associate Professor, Tennessee State University

A representative from USDA local office, DE

Open to the public. Commercial and Residential Producers are welcomes to this FREE Event.

Blueberries can be a profitable, specialty crop that commercial and backyard growers can produce successfully. Participants will be guided through the soil and water testing process as well as discuss production aspects of blueberries. Participants will gain hands-on knowledge of proper planting and pruning techniques to maximize disease prevention and insect control, thus maximizing plant health and productivity.

Interested participants are requested to bring soil sample (1/2 lb) from their plot where they plant blueberries and water sample (30 ml) they apply during irrigation to test pH.

Class space is limited - registration is required: Register by contacting Lekha Paudel, at 302-857-7796 or email Lnpaudel@desu.edu.

New Castle County's Marl Pit Tailgate Session

Tuesday, June 4, 2019 6:00 – 8:00 p.m.
UD Cooperative Extension Research Demonstration Area
¾ Mile east of Armstrong Corner, on Marl Pit Rd. – Road 429, Middletown

Bring a tailgate or a lawn chair

Join your fellow producers and the UD Extension team for a discussion of this year's demonstration trials and 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 2019. An overview of ongoing research in New Castle and state-wide will also be included.

We will wrap up with the traditional ice cream treat.

Credits: Nutrient Management (1), Pesticide (1)

The meeting is free and everyone interested in attending is welcome. Mark your calendar and call (302) 831-2506 to register by Friday, May 24. If you have special needs in accessing this program, please call the office two weeks in advance.

Welcome and Introductions

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

Overview of Small Grains Variety Trials at Marl Pit

6:05-6:10
Victor Green, University of Delaware Extension

Weed and Cover Crop Update

6:10-6:30
Mark VanGessel, University of Delaware Cooperative Extension Weed Specialist

2019 Insect Pest Outlook

6:30-6:50
David Owens, University of Delaware Extension Entomologist

*Each year brings different pest management challenges. Issues from 2018 will be reviewed, and stakeholders advised what to be on the lookout for in 2019. Current projects include cover crops, slug management research, *Diabrotica* stem borer, and prophylactic insecticides.*

Nutrient Management Update

6:50-7:10
Amy Shoher, University of Delaware Extension Nutrient Management Specialist

Agronomy Update

7:10-7:30
Jarrod Miller, University of Delaware Extension Agronomy Specialist
Agronomic updates over the last year include cover crop impacts on cash crop stands, tissue tests for critical nutrients, and some research into planting populations for wheat.

Plant Pathology Update

7:30-7:50
Alyssa Koehler, University of Delaware Plant Pathologist Specialist
Discussion will cover common disease symptoms, growth stages most susceptible to disease, fungicide application methods and associated costs, as well as in season scenarios that may affect fungicide decisions.

Conclusion and Evaluations

7:50-8:00
Dan Severson, University of Delaware Cooperative Extension

Small and Mid-Size Farm Equipment Sharing Survey

Future Harvest: Chesapeake Alliance for Sustainable Agriculture is seeking input from small to mid-scale farms located on the Delmarva Peninsula to gauge interest in -- and feasibility of -- a Delmarva-based equipment sharing program!

Equipment sharing programs can provide access to tools and equipment that might otherwise be too specialized, too costly, or not needed frequently enough to justify purchase by an individual farm. Other potential benefits of tool sharing include the ability to:

- Try before you buy
- Experiment with new crops
- Improve cover crop performance
- Adopt better soil health management

Please take the survey below by Monday, May 20th to help us determine interest in and feasibility of a tool and equipment sharing program. If access to a pool of

shared tools and equipment were available, would you participate? To [take the survey](https://www.surveymonkey.com/r/L75C5M5) go to:
<https://www.surveymonkey.com/r/L75C5M5>

Questions? Contact Lisa Garfield at
lisa@futureharvestcasa.org

www.futureharvestcasa.org

Integrated Pest Management Implementation Workshop

Monday, July 8, 2019

Delaware State University, Smyrna Outreach Research
Center

884 Smyrna-Leipsic Road, Smyrna, 19977-3440

The workshop will cover:

- Integrated Pest Management Strategies
- Insect and Mites: life cycles, detection methods, monitoring thresholds and control options
- Experience with predatory mites
- Housing pests and control
- Weed management and cover cropping for specialty crop growers

Speakers include;

Lerman Dion Lewis
Penn State Center

David Owens
University of Delaware

Cerruti Hooks
University of Maryland, College Park

Brian Kunkel
University of Delaware

Registration is Open and Free. To register—please contact Rose Ogutu rogutu@desu.edu- Phone number 302-857-6397

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of May 9 to May 15, 2019

Readings Taken from Midnight to Midnight

Rainfall:

0.22 inch: May 11
0.50 inch: May 12
0.88 inch: May 13

Air Temperature:

Highs ranged from 80°F on May 10 to 56°F on May 13.

Lows ranged from 62°F on May 10 to 44°F on May 15

Soil Temperature:

66.0°F average

Additional Delaware weather data is available at
http://www.deos.udel.edu/monthly_retrieval.html
and
<http://www.rec.udel.edu/TopLevel/Weather.htm>

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

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