



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Vegetable Crops

Vegetable Crop Insect Scouting - David Owens, Extension Entomologist,
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Peas

We have reached peak seedcorn maggot degree days for predicting fly emergence from the soil. Any fields with recently incorporated organic matter are going to be at elevated risk for seedcorn maggot damage for the next three weeks. I incorporated manure in a field at Carvel for seedcorn maggot trials, and the field is practically buzzing with flies on warm days. Insecticide seed treatments are highly recommended in plantings with higher risk during the next 3 weeks. Please be aware that while seed treatments help greatly, extremely high populations of maggots can overwhelm seed treatments. The next generation typically starts flying in early May.

Thrips Damage to Greenhouse and High Tunnel Vegetables Widespread and Serious This Year - Jerry Brust, IPM Vegetable Specialist, University of Maryland;
jbrust@umd.edu and Karen Rane, Plant Diagnostician, University of Maryland
rane@umd.edu

Over the past few weeks, we have seen several greenhouse (GH) and high tunnel (HT) vegetable (basil and tomato mostly, but also lettuce,

pepper and spinach) operations from around Maryland having problems with thrips. There are several species of vegetable thrips with the most common being the Eastern flower thrips, *Frankliniella tritici*, Tobacco thrips *Frankliniella fusca*, Western flower thrips, *F. occidentalis* and Onion thrips *Thrips tabaci*. The last three species are the ones most likely to transmit tomato spotted wilt virus (TSWV). Thrips are tiny, thin yellowish-orange insects the size of metal filings with fringed wings. They feed by puncturing the outer layer of plant tissue and sucking out the cell contents, which results in stippling or discolored flecking (Fig. 1a) that is usually accompanied by black flecks of frass on the damaged areas of the leaf surface (Figs. 1b and 3a). Other feeding responses include scar formation and distorted growth (Fig. 2a). Thrips hatch from an egg and develop into two larval stages and then the 'prepupa and pupa' stages, before becoming an adult. Females lay their kidney-shaped eggs into plant tissue. Thrips have several generations (up to eight) a year. When the weather is warm, the life cycle may be as short as 2 weeks.

In most of the cases where we found thrips problems growers did not follow good sanitation practices. They allowed weeds such as prickly lettuce, chickweed, spiny amaranth, lambsquarters, black nightshade and shepherd's purse to overwinter in their GH or HT. These weed species not only act as hosts for thrips they also can act as hosts for TSWV. In addition to weeds some growers kept bedding plants in their greenhouse before and at the same time as their vegetable transplants. Bedding plants are

notorious for harboring thrips -- never grow vegetable transplants in the same greenhouse with bedding plants. These things may seem unimportant but they allowed the thrips to overwinter and get a head start on the new plantings. Sanitation is one of the most important things that can be done to reduce or eliminate thrips and mite problems from a GH or HT before planting.

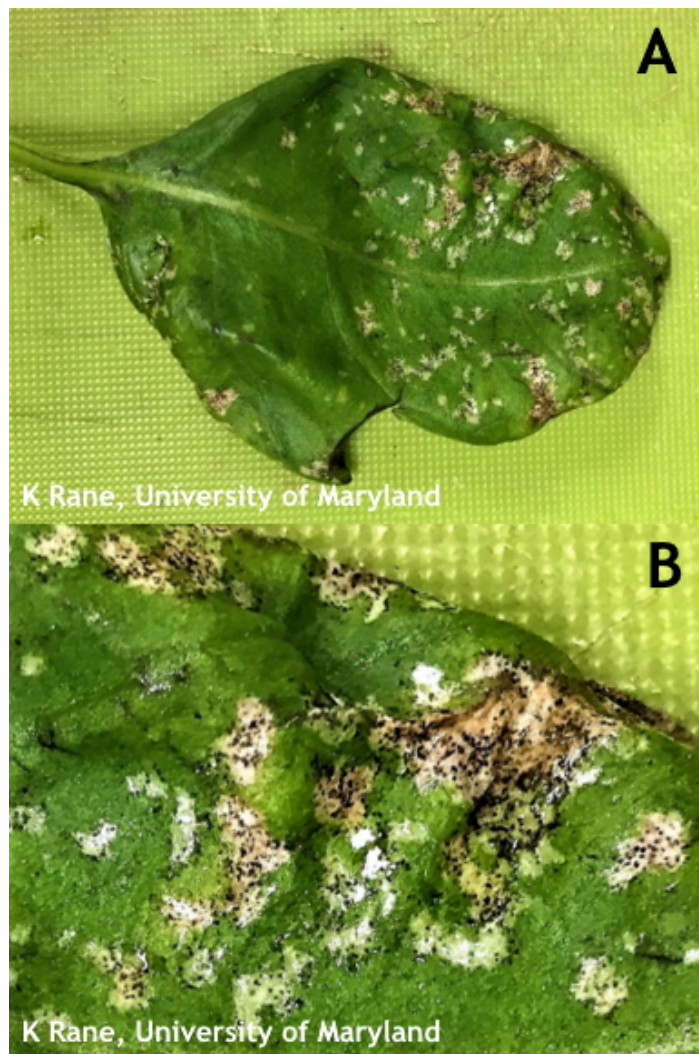


Figure 1. Thrips feeding damage to basil (A) with flecks of black feces associated with feeding scars (B)

Besides the physical damage to leaf and plant tissue, several of the thrips can transmit TSWV (Western flower thrips are good at it while Onion thrips and Tobacco thrips are not quite as good at it and Eastern flower thrips cannot transmit the virus). Tomato spotted wilt virus is an obligate parasite, e.g., it must have a living host

and must be moved from one plant to another by thrips or through cuttings or possibly seed. This disease can affect tomato and other Solanaceae crops as well as lettuce, beans, cucumber and 170 other plant species. TSWV may occur in the field but tends to affect greenhouse and high tunnel crops more severely. It may take 2 - 4 weeks from when adult thrips first fed on a plant to see initial symptoms occur. Because of this, TSWV appears to spread and worsen in plantings over time. TSWV infected leaves may show deformities and mottling (Fig. 2b) or reddish-brown spots or streaks on leaves (Fig. 3b) or stems. Growing tips are usually affected with systemic necrosis and potentially stunted growth.



Figure 2. Pepper plant with thrips feeding (A) and TSWV symptoms (B)

We tested for both INSV and TSWV on tomatoes and bedding plants. Only TSWV was found in both, no INSV was found in any sample. A few growers had some TSWV resistant (or tolerant) tomato varieties (BHN 444 and 640, Dixie Red and Primo Red) and those plants showed no symptoms. However, research shows that the flowers of resistant plants may NOT be resistant, so plants could possibly still become infected with TSWV if thrips feed on the flowers. Several high tunnel vegetable growing operations as well as some GH operations we have seen or that have been reported to us have 20-30% of their plants showing signs of TSWV infection. These plants will not produce much of anything in the way of a harvest and will need to be removed and replaced.

Growers can monitor for thrips using yellow sticky cards that are placed at the same height as the vegetable plants and checking them 2-3 times a week. Early detection can mean using horticultural oils or biological controls for thrips management rather than relying on synthetic chemicals. The biological control agents work best in greenhouse situations and have had mixed results in high tunnel conditions. Predatory mites such as *Amblyseius cucumeris* or *A. swirskii* are two good thrips predators. *A. swirskii* works better in warmer temperatures (77-85° F) while *A. cucumeris* is better in cooler temperatures. *A. cucumeris* feeds only on first instar larvae so must be released early before thrips populations increase. *Orius insidiosus* the insidious flower bug, is best used on crops that are producing pollen or by releasing the bugs onto flowering ornamental pepper plants that are in flower which serve as banker plants. *Beauveria bassiana*, an entomopathogenic fungus that attacks thrips can control thrips problems before they get started by applying weekly applications very early on in the crop cycle in the GH or HT. However, once thrips populations start to rapidly increase a recommended chemical for GH or HT use on the particular vegetable crop should be used. Be sure you know how your state regulates pesticide use in greenhouses and high tunnels. It should be noted that transmission of TSWV may have already taken place by the time even an effective pesticide is used if TSWV infected weeds or

plants are present. The [2020-2021 Mid-Atlantic Commercial Vegetable Production Recommendations](#) guide has recommendations for management of thrips in many vegetables in both GH and HT situations.

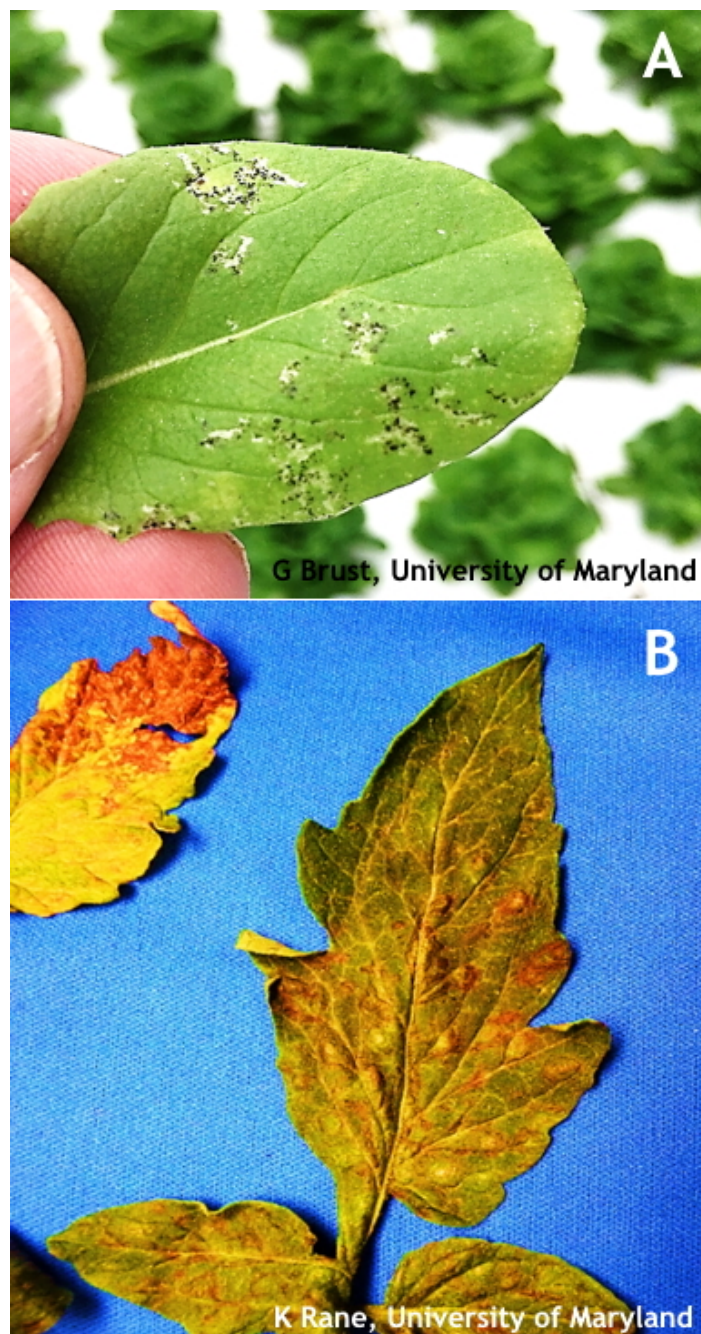


Figure 3. Lettuce leaf with thrips feeding (A) notice how the black flecks follow the feeding scars on the leaf and TSWV symptoms on tomato leaves (B)

Vegetable Seed Germination in Direct Seeding - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Many vegetables are commonly direct seeded in the field. There are many factors that affect seed germination but soil temperature and moisture are the most critical. Other factors include seed quality (age, conditioning, handling), seed treatments, and seeding depth.

Early Spring Planted Crops

The table below shows the average days to germination for cold season crops. For example, peas will take over a month to germinate with soil temperatures at 41°F, two weeks with soil temperature of 50°F, and one week with soil temperature in the 70s. Spinach, onions, and radish will germinate at the lowest temperatures. Some crops (celery, lettuce, and spinach) stop germination at high soil temperatures.

| | Average Days to Germination | | | | | | | |
|-------------|-----------------------------|------|------|------|------|------|------|------|
| Crop | 32°F | 41°F | 50°F | 59°F | 68°F | 77°F | 86°F | 95°F |
| Beets | --- | 42 | 17 | 10 | 6 | 5 | 5 | 5 |
| Cabbage | --- | --- | 15 | 9 | 6 | 5 | 4 | --- |
| Collards | --- | --- | 15 | 9 | 6 | 5 | 4 | --- |
| Carrots | none | 51 | 17 | 10 | 7 | 6 | 6 | 9 |
| Cauliflower | --- | --- | 20 | 10 | 6 | 5 | 5 | --- |
| Celery | none | 41 | 16 | 12 | 7 | none | none | none |
| Kale | --- | --- | 15 | 9 | 6 | 5 | 4 | --- |
| Lettuce | 49 | 15 | 7 | 4 | 3 | 3 | 3 | none |
| Onions | 136 | 31 | 13 | 7 | 5 | 4 | 4 | 13 |
| Parsley | --- | --- | 29 | 17 | 14 | 13 | 12 | --- |
| Parsnips | 172 | 57 | 27 | 19 | 14 | 15 | 32 | none |
| Peas | --- | 36 | 14 | 9 | 8 | 6 | 6 | --- |
| Radishes | none | 29 | 11 | 6 | 4 | 4 | 3 | --- |
| Spinach | 63 | 23 | 12 | 7 | 6 | 5 | 6 | none |
| Turnips | none | none | 5 | 3 | 2 | 1 | 1 | 1 |

Warm Season Crops

Most warm season crops will not germinate until soil temperature is above 50°F. Sweet corn will take over 3 weeks to germinate at 50°F but less than a week at 68°F. Snap beans will take over 2 weeks at 59°F but only one week at 77°F. Cucumbers are similar.

| | Average Days to Germination | | | | | | | |
|-------------|-----------------------------|------|------|------|------|------|------|------|
| Crop | 32°F | 41°F | 50°F | 59°F | 68°F | 77°F | 86°F | 95°F |
| Lima Beans | none | none | none | 31 | 18 | 7 | 7 | none |
| Snap Beans | none | none | none | 16 | 11 | 8 | 6 | 6 |
| Sweet Corn | none | none | 22 | 12 | 7 | 4 | 4 | 3 |
| Cucumbers | none | none | none | 13 | 6 | 4 | 3 | 3 |
| Eggplant | none | none | none | none | 13 | 8 | 5 | 5 |
| Melons | none | none | none | none | 8 | 4 | 3 | 3 |
| Okra | none | none | none | 27 | 17 | 13 | 7 | 6 |
| Peppers | none | none | none | 25 | 13 | 8 | 8 | 9 |
| Tomatoes | none | none | 43 | 14 | 8 | 6 | 6 | 9 |
| Watermelons | none | none | none | none | 12 | 5 | 4 | 3 |

This information came from UC Davis research over 60 years ago. Since that time, some crops have been bred for better cold germination such as sweet corn.



G Johnson, University of Delaware

Spinach direct seeded on March 14 germinated in 10 days.

Check for Allium Leaf Miner in Onions and Leeks Over the Next Few Weeks - Jerry Brust, IPM Vegetable Specialist, University of Maryland; jbrust@umd.edu

If you grow leeks or onions or other *Allium* species, now and for the next few weeks is the time to watch for the tell-tale marks left by Allium leaf miner. Allium leaf miner, *Phytomyza gymnostoma*, tell-tale marks consist of several small round white dots (made by the female's ovipositor) in a row that appear on the middle towards the end of leaf blades (Fig. 1) of their preferred hosts of leeks, onions, garlic and other *Allium* species. Spring crops are usually not as hard hit as fall crops especially when looking at leeks, but this pest has been steadily increasing its geographical range each year and its damage potential. If you had some infestation last year

you will especially want to be looking for the signs of this pest.

To go over recommendations for this pest: New transplants or seedlings of onions, leeks or garlic should be watched closely for the tell-tale signs of the fly's damage. When eggs hatch the larvae at first mine leaves and then move down to the bulbs and leaf sheaths where they feed and eventually pupate. Pupae will undergo a summer aestivation (type of hibernation because temperatures are too warm for them to be active) and only emerge again in late September. You can cover any just-transplanted *Allium* planting with a row cover (but don't wait too long after transplanting) to keep the flies off or if needed treat with insecticides. Penn State has found efficacy using neonicotinoids (Scorpion, Assail), diamides (Exirel), spinosyns (Entrust, which is OMRI-labelled), and pyrethroids. A spreader-sticker is recommended when applying insecticides to any *Allium* crop. Penn State has good information about the pest which can be found at [Penn State Allium Leafminer](#).



Figure 1. Onion leaf blades on their side showing round white dots made by female Allium leaf miners

Fruit Crops

Freezing Temperatures and Fruit Bloom -
Gordon Johnson, Extension Vegetable & Fruit
Specialist; gcjohn@udel.edu

Freezing temperatures are expected the night of April 2 throughout Delmarva. Cold damage in fruits is a concern.

Stone Fruits

Many peach, nectarine, apricot, pluot and plum trees are in in pink to full bloom currently. Research has shown that when these stone fruits are in the First Pink (or white) stage (flower petals coming out of bud but not open), the temperatures required to cause 10% and 90% kill at this bud development stage were 25°F and 15°F, respectively. At First Bloom, the temperatures required to cause 10% and 90% kill were 26°F and 21°F, respectively. At Full Bloom Stage the temperatures required to cause 10% and 90% kill were 27°F and 24°F, respectively and at Post Bloom Stage the temperatures required to cause 10% and 90% kill were 28°F and 25°F, respectively.



G Johnson, University of Delaware

Peach from pink to full bloom stage.



G Johnson, University of Delaware

Plum in full bloom.

Strawberries

For strawberries the critical temperature during bloom at the blossom level is 28°F. Below 28°F, there is a progressively higher risk of flower damage, and below 26°F most blooms will be damaged or killed. Flowers that are not open and just emerging from the crown can tolerate temperatures down to 22°F and once fruit has formed temperatures down to 26°F can be tolerated for short periods of time. Flower acclimation is also important. Plants with flowers exposed to several cold days before a frost will be more tolerant than those exposed to warm days before a frost. In addition, not all flowers in a field will have equal risk of damage. Flowers under leaves or near the soil will often be warmer than those higher on the plant or those more exposed.

Agronomic Crops

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

Alfalfa

Alfalfa weevil eggs are just beginning to hatch, and by mid to late next week we will be at peak egg hatching thresholds. If you have not already, begin weekly sampling for alfalfa weevil larvae. Examine 10-20 stems on your first visit for the presence of weevil larvae or feeding injury. If you see injury, collect 30 stems from 5-6 locations throughout the field, place them top down in a bucket and beat the stems vigorously to dislodge weevil larvae. Thresholds depend on control cost, plant height, and value of the hay; depending on these factors, they range between 20 and 120 larvae per 30 stems. You can find threshold tables at our University of Delaware alfalfa insect control fact sheet:

https://www.udel.edu/content/dam/udelImage/s/canr/pdfs/extension/sustainable-agriculture/pest-management/Insect_Control_in_Alfalfa_-2020_-David_Owens.pdf. Labeled products include

Baythroid, Warrior, Perm-Up, Mustang Maxx, Steward, Imidan, and Lorsban. Carbaryl 4L is labeled but does not control adults. Dimethoate has performed well in VA trials. Be sure to use high pressure and good water volume to ensure good canopy penetration.

Small Grains

Aphid numbers have been quite low in the fields we are monitoring. Natural enemies (parasitic wasps, lady beetles) are also active. Aphid thresholds are very high in the spring, between 100-300 per row ft, but if natural enemies are present, thresholds are even higher. Wet weather also promotes fungal pathogens of aphids.

Corn

We are seeing gray garden slug eggs hatching now. Recent published research from Pennsylvania suggests a corn threshold of 1 per square foot with defoliation injury present and slug-favorable weather conditions.

Cover Crop Termination for 2021 - Jarrod O. Miller, Extension Agronomist, jarrod@udel.edu, Jamie Taraila, MS Student and Amy Shober, Extension Nutrient Management and Environmental Quality Specialist; ashober@udel.edu

With April and warmer temperatures finally here, it is time to think about cover crop termination. This spring, we expect lower cover crop biomass at burndown due to the cool, wet winter conditions that delayed growth, particularly small grains. Therefore, termination timing decisions are very important this year. We must recognize that there are pros and cons of early and late cover crop termination and make decisions that maximize benefits.

Early termination is typically the easiest option. With early termination, growers benefit from the lower C:N ratio of small grains and even the legumes. Generally, termination of a cover crop with a C:N ratio less than 25 means the cover crop can supply N to the soil to feed the spring crop. Results of our 2018 USDA-NRCS supported field trials showed that delaying termination by two weeks resulted in an increase in the C:N ratio of a rye cover crop from 23:1 to 33:1. If terminated when the C:N ratio is higher than 25:1, there is a possibility that soil microbes can tie up (immobilize) N as microbes work to break down high C:N ratio residues. This can reduce N availability in early spring when cash crops are being planted. It is also more difficult to plant into heavy cover crop biomass that results from delaying termination. When planting green (into standing cover crops) we have observed a reduction of up to 10,000 plants/acre for corn when planter settings were not corrected. It is important to get out and check seed placement and depth during planting when planting green. This will allow you to make any necessary adjustments to the planter to ensure good seed to soil contact, improving emergence and reducing stand variability.

Despite potential planting and nutrient management challenges related to later termination, farmers who terminate cover crops later often see a reduction in weed pressure. In 2020 NRCS supported UD field trials, weed pressure was significantly reduced in plots with a cover crop when compared with the no-cover

crop plots, regardless of termination timing (Figure 1). Greater cover crop biomass is known to reduce weed competition for grain crops which can be achieved by delaying termination.

Ultimately, the final decision on when to terminate cover crop simply be related to springtime weather variability and finding a time when conditions allow you to get into the field and spray.



Figure 1. Fall 2020 post-corn harvest weeds in plots with no cover crops.

Fusarium Head Blight Management - Alyssa Koehler, Extension Field Crops Pathologist;
akoehler@udel.edu

Fusarium Head Blight (FHB), caused by the fungus *Fusarium*, is typically the most important

disease of small grains in our region. *Fusarium* species that cause FHB can infect both corn and small grains. Walking through fields with corn stubble, you may see orange growth on old debris (Figure 1). Since much of our small grain acreage is planted into corn fodder, FHB inoculum is maintained over winter. Wet spring conditions favor fungal sporulation that can lead to infected wheat or barley heads. As the fungus grows on corn fodder or other debris, spores are released that are then rain dispersed or moved through air currents. As the grain crop is flowering, spores land on the head or anthers, colonize these tissues, and move into the grain. Once inside the grain, water and nutrient movement is disrupted which results in the bleached florets we associate with FHB (Figure 2). Shriveled and wilted “tombstone” or “scabby” kernels can reduce yield and result in grain contaminated with mycotoxins (Figure 3). Deoxynivalenol (DON), also referred to as vomitoxin, is a health hazard to humans and animals. Wheat heads colonized later in development may not show dramatic symptoms but can still have elevated DON.



Figure 1. Corn stubble with *Fusarium* sporulation that can contribute to FHB in wheat.



A Koehler, University of Delaware
Figure 2. Wheat heads showing bleached florets from FHB.



A Koehler, University of Delaware
Figure 3. Healthy kernels (left) White, shriveled, scabby kernels from FHB (right).

It has been an interesting winter with a lot of moisture. Overall, growth is behind where we were this time last year, but we can begin to plan for in-season FHB management decisions that will occur as we approach heading. The Fusarium Risk Assessment Tool (www.wheatcab.psu.edu) is a forecasting model that uses current and predicted weather forecasts to predict FHB risk. Historically about 70% accurate, this tool aids in assessing FHB risk as wheat approaches flowering and fungicide

application decisions are made. The pathogen that causes FHB infects through the flower and rainfall 7 to 10 days prior to flowering favors spore production and increases risk of infection. Optimal wheat fungicide application is at early flowering (10.5.1) to about 5 days after. A well-timed fungicide application can help to reduce disease severity and DON levels. It is important to remember that fungicides help to reduce disease levels and DON (traditionally around 50% reduction on a susceptible variety), but they do not eliminate all FHB or DON. To try to maximize the efficacy of fungicides, it is important to apply at the correct timing. Fungicides for FHB are most effective when applied during flowering in wheat and at head emergence in barley. Although new products like Miravis Ace can be applied earlier, it is still best to wait for main tillers to be at 10.5.1 or a few days beyond so that secondary tillers have a greater chance of being at 10.3-10.5.1. If you spray too early, heads that have not emerged will not be protected by the fungicide application. When wheat heads begin to flower, look for yellow anthers in the middle of the wheat head. When at least 50% of main stems are flowering, you will want to initiate fungicide applications. As the flowering period continues, anthers will emerge from the top and then the bottom of the wheat heads. Anthers can stay attached after flowering, but usually become a pale white (Figure 4). Triazole (FRAC group 3) fungicides that are effective on FHB include Caramba (metconazole), Proline (prothioconazole), and Prosaro (prothioconazole + tebuconazole). Miravis Ace (propiconazole + pydiflumetofen) offers a triazole + SDHI, FRAC group 7. As a reminder, fungicides containing strobilurins (Qol's, FRAC 11) should not be used past heading because these fungicides can result in elevated levels of DON. Flat fan nozzles pointed 90° down are great at covering foliage, but they do not provide good coverage on heads, which is the target for FHB management. Nozzles that are angled forward 30-45° down from horizontal (30 degrees is better than 45) or dual nozzles angled both forward and backward give better contact with the head and increase fungicide efficacy. For ground sprays, fungicides should be applied in at least 10 gallons of water per acre.



Figure 4. From left to right Feekes 10.3, Anthesis, Feekes 10.5.1 (yellow anthers beginning flowering), 4 days after anthesis (white anthers post flowering).

Thinking beyond this season, an integrated approach can improve management of FHB and help to keep DON levels low. In your field rotation plan, avoiding planting small grains into corn residue will help to reduce the amount of initial inoculum in your field. If you have soybean fields that can be harvested early enough for a timely wheat planting, this rotation helps to break up *Fusarium* inoculum. In addition to rotation considerations, seed selection is another important piece of FHB management in wheat. There is no complete host resistance against FHB, but you can select wheat varieties with partial resistance. The University of Maryland sets up a misted nursery to compare FHB index and DON levels across local wheat varieties to aid in variety selection decisions. We will notify when results become available later this summer. Unfortunately, barley does not have any resistance to FHB.

UMD and UD Seeking Farmer Cooperators for N Study in Corn

The University of Maryland and University of Delaware are looking for farmers throughout both states to participate in a research project evaluating decision making surrounding adoption

of nitrogen management tools (commercially available N models, drone imagery, PSNT). We will implement a field trial in the 2021 growing season that contains six nitrogen rates applied to corn in four replicates in strips (~15 ft wide by 300 ft long) requiring about 2.5 total acres. Participants will be trained on the use of various nitrogen management tools and will be paid for their participation in the trial (W9 submission to UMD required for payment) pending eligibility to receive EQIP funding. Participants must have the ability to apply prescribed nitrogen rates and record yield at harvest using a calibrated yield monitor. We require participants to participate in a pre-season interview (in April 2021), a one-on-one post-harvest debrief session, and a focus group in November or December, all likely taking place virtually due to COVID restrictions. Farmers who have not previously partnered with Extension on research projects are encouraged to participate. If interested, please contact Dr. Nicole Fiorellino at University of Maryland at nfiorell@umd.edu and Dr. Amy Shober at University of Delaware at ashober@udel.edu.

The project title, “A solutions-based evaluation of barriers to farmer adoption of in-season nitrogen decision support tools”, is funded through Natural Resource Conservation Service Conservation Innovation Grant On-Farm

Conservation Innovation Trials grant program awarded to University of Maryland, University of Delaware, and Pennsylvania State University in 2020.

General

True Armyworm and Black Cutworm Trap Report - David Owens, Extension Entomologist, owensd@udel.edu

We will be trapping for True Armyworm and Black cutworm during the early growing season. Numbers from this week are very low. Many thanks to Maryland county ag agents Emily Zobel and Maegan Perdue and to UD Extension entomologist emeritus Joanne Whalen for assistance with some of the trap locations.

| Location | Number of Nights | Total Catch TAW | Total Catch BCW |
|------------------|------------------|-----------------|-----------------|
| Willards, MD | 8 | 5 | 2 |
| Salisbury, MD | 5 | 1 | 0 |
| Laurel, DE | 6 | 0 | 6 |
| Seaford, DE | 6 | 0 | 3 |
| Sudlersville, MD | 7 | 3 | 1 |
| Harrington, DE | 7 | 2 | 0 |
| Smyrna, DE | 7 | 2 | 0 |
| Middletown, DE | 7 | 4 | 2 |

Sign Up for Delmarva Pest Alerts - David Owens, Extension Entomologist, owensd@udel.edu

This year, Sally Taylor at Virginia Tech, myself, and Sudeep Matthew with Syngenta are providing pest patrol messages for the Delmarva. These are 1-3 minute audio recordings of a current and urgent pest situation. You can sign up for the free text alert here: <https://www.syngenta-us.com/pest-patrol/delmarva>. When one of us posts a message, the system sends subscribers a text alert that there is a new audio post that you can listen to anytime. You can also select updates from other participating states at the pest-patrol website.

Guess The Pest! Week 1 - David Owens, Extension Entomologist, owensd@udel.edu

Get out your field guides and practice your pest management knowledge by clicking on the link below and submitting your best guess. For the 2021 season, we will have an “end of season” raffle for a scouting toolkit for one lucky winner, and five winners will be sent a small jar of locally produced honey.

What sort of beetle is this and why is it of interest?



I Grettenberger, Penn State

Go to <http://www.udel.edu/008255> to Guess the Pest!



NRCS Accepting Applications for Conservation Stewardship Program

Sign-up deadline of April 30, 2021

The USDA Natural Resources Conservation Service (NRCS) in Delaware is encouraging farmers and forest landowners to sign up by April 30 for financial and technical assistance to expand existing conservation activities on their agricultural land. Assistance is now available

through the updated Conservation Stewardship Program (CSP), to help agricultural producers take conservation activities to the next level.

“CSP continues to be an effective tool for helping producers achieve their conservation and management goals,” said Kasey Taylor, NRCS State Conservationist in Delaware. “Together, we can develop a plan to build on your existing conservation efforts while strengthening your operation.”

Through CSP, agricultural producers and forest landowners earn payments for actively managing, maintaining, and expanding conservation activities like cover crops, ecologically-based pest management, buffer strips, and pollinator and beneficial insect habitat - all while maintaining active agriculture production on their land.

CSP is for working lands including cropland, pastureland, nonindustrial private forest land and agricultural land under the jurisdiction of a tribe. Participating farmers will further address priority resource concerns related to soil quality, water quality, air quality, and plant health. On-farm benefits include increased crop yields, decreased inputs, wildlife population improvements; and better resilience to weather variables.

The 2018 Farm Bill made some improvements to the program that will benefit Delaware farmers, including:

- Higher payment rates for certain conservation activities, including cover crops and resource conserving crop rotations.
- Provides specific support for organic and for transitioning to organic production activities.

While applications are accepted throughout the year, the deadline is April 30, 2021 for funding in fiscal year 2021. Producers interested in CSP should contact their local USDA service center to complete an application. In Delaware’s Sussex County, call 302-856-3990, ext. 3; in Kent County, call 302-741-2600, ext. 3; and in New

Castle County, call 302-832-3100, ext. 3. Or visit www.de.nrcs.usda.gov for more information.

Delaware NRCS works with the Delaware Conservation Districts to address resource concerns on privately-owned agricultural and forest lands.

Small Steps to Health and Wealth Program

This year, University of Delaware Cooperative Extension’s Small Steps to Health and Wealth Worksite Wellness program is offering businesses or community groups a chance to boost the health and wellbeing of their employees or group members at no cost for a limited time! Small Steps to Health and Wealth is a worksite wellness program that is made up of 6 online modules that focus on easy, do-able strategies that employees/group members can use to identify and reach their health and financial-related goals.

Each module provides employees or group members with access to a fillable pdf, audio recording, and video. Employees/group members are encouraged to choose whatever resources work best for them and their schedule. The goal is for employees/group members to complete the corresponding worksheets that will best help them achieve their goal. Employees/group members will be able to receive a certificate for completing the program!

This program is flexible and employees/group members can complete the modules at their own pace, so there is no strict time limit for completing the modules. However, we recommend that the program is implemented for a period of 6-weeks with 1 module sent every week or 12-weeks with 1 module sent within 2 weeks. You can find more information and a registration link in the brochure found [here](#) or directly access the registration link by clicking [here](#). If you have any questions feel free to reach out to Hope Vega at hopevega@udel.edu.

Announcements

Pesticide Safety Exam Reviews

Beginning in March the Delaware Department of Agriculture Pesticide Section will provide a Pre-Certification Pesticide Core Exam Review. This review will provide essential information, covering laws, equipment, personal safety and more to help you prepare for the core certification exam.

The core exam is for private pesticide applicators and a prerequisite for all commercial pesticide applicators.

2021 Pesticide Exam Dates

Wednesday, May 5, 2021

Wednesday, June 23, 2021

Wednesday, August 11, 2021

Wednesday, September 29, 2021

Wednesday, November 17, 2021

Schedule for Exam/Review Dates

Core Exam Review: 9 – 11:30am

Lunch Break

Pesticide Testing for ALL: 1 – 4pm

You may choose to test in the afternoon of the review or on another testing date.

Sign up is free!

Log into your account on dda.force.com/pesticide then click on Exam Registrations.

For more information on this training course and testing please contact Amanda Strouse at amanda.strouse@delaware.gov or 302-698-4575.

Extension302 Podcast

Episode 15: Camping Out with 4-H

4-H summer camps are an incredible opportunity for Delaware's youth to have fun, explore various interests and grow into the leaders of tomorrow! Listen to learn all about Delaware 4-H's annual camp opportunities.

To listen, go to:

<https://www.udel.edu/academics/colleges/canr/cooperative-extension/about/podcast/>

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of March 25 to March 31, 2021

Rainfall:

0.06 inch: March 25

0.64 inch: March 28

0.28 inch: March 31

Air Temperature:

Highs ranged from 77°F on March 26 to 51°F on March 29.

Lows ranged from 53°F on March 25 to 38°F on March 30

Soil Temperature:

52.7°F average

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

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

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