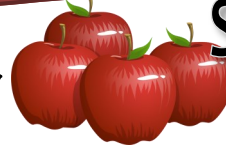


Ag Notes

Harford County Newsletter

UNIVERSITY OF
MARYLAND
EXTENSION

September 2023



*The Extension office will be closed
on September 4 for Labor Day*

University of
Maryland Extension

Harford County
Agricultural Center

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M—F 8:00 a.m.—4:30 p.m.

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Andrew Kness

Ag Extension Educator

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Hello, Harford County!

I hope this newsletter finds you well and at least somewhat recovered from county and state fair! Once again the Harford County Livestock Sale broke records with over \$700,000 in sales! We couldn't do this without the generous support from our outstanding agricultural community. Funds raised will help support the various projects that our 4-H and FFA youth work hard on all year.

Maryland State Fair continues to run on the weekends through September 10; hopefully you are able to attend!

As the growing season winds down, we can't fall asleep on pest issues; we have two alerts to report: downy mildew in cucurbits and tar spot in corn. More information is found inside the newsletter.

We also have an opening for a part-time SNAP-Ed program assistant in our office. Please contact Charae Harris for more information, or see the last page of the newsletter.

Lastly, I've had a few inquiries regarding pesticide licensing and recertification. A two-hour recertification class will be offered here at the Extension office on November 7 from 1-3:00 p.m. Details will be in next month's newsletter,

but feel free to call or email to register. As a reminder, if your private applicator pesticide license expires in December of this year, you will have to renew your license on MDA's webpage (<https://www.egov.maryland.gov/mda/pesticides>). The website should allow you to renew beginning sometime in November and you should receive a postcard and/or email from MDA notifying you that it's time to renew. You will need your 4 credit-hours of training (4 CEUs= 2 hours of training) and your \$7 payment to renew your license.

If you are a new pesticide applicator seeking certification, we have an exam scheduled for November 7 from 9-11 a.m. at the Extension office. Call or email me to RSVP. Additional information will be in the October issue.

If you have any other questions or concerns regarding your pesticide license, contact me and I can help assist you or get you in contact with the appropriate MDA employee.

As we get into the busy harvest season, remember to stay safe!

Until next time,
-Andy



*Jerry Brust, Vegetable IPM Specialist
University of Maryland Extension*

On a recent visit to a farm, I saw bright yellow leaves in a pumpkin field (Fig. 1) and wondered if this could be cucurbit yellow vine decline that was first seen several years ago in Maryland. However, upon closer inspection of the plants it was found to be an old nemesis of pumpkins and squash – the squash vine borer.



G. Brust, University of Maryland
Figure 1. Pumpkins with bright yellow leaves damaged from squash vine borer.

Borer moths lay most of their eggs at the base of pumpkin and squash plants starting in mid-June and going through the first few weeks of July. Eggs hatch and borers quickly move their way into the base of the pumpkin stem where they feed inside the stem (Fig. 2) disrupting water and nutrient flow to the rest of the plant (Fig. 3). Insecticide sprays need to be directed to the base of the plant for several weeks when the moths are active. Usually, the best method of control is a cultural one, rotation. Squash vine borer overwinter in the same field they fed in. Come next spring and summer they emerge and look for the nearest cucurbit field.

The question is how far away does the next field have to be from this year's? In this case the grower rotated

to a field that was $\frac{1}{4}$ mile from their other pumpkin field that was lightly infested the year before with squash vine borer (there are no other pumpkin fields around this farm for at least 3 miles). I know growers often do not have enough land to rotate much further than a $\frac{1}{4}$ mile. Last year's field was not plowed or worked this spring, so the overwintering pupae survived in large numbers and upon emergence were able to locate this year's pumpkin field. How much of a yield decrease is not known at this time. I guess the bottom line is a $\frac{1}{4}$ mile is probably not far enough of a rotation from even a lightly infested field and pumpkin fields that had even a light infestation of squash vine borer need to be worked in the fall and spring to destroy as many overwintering squash vine borers as possible.



G. Brust, University of Maryland
Figure 2. Damage to the base of pumpkin plant from squash vine borer.



G. Brust, University of Maryland
Figure 3. Squash vine borer inside damaged pumpkin stem.



Strawberry Plug Planting Issues to Avoid

Gordon Johnson, Retired Vegetable & Fruit Specialist
University of Delaware



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

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

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

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

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

The following are recommendations from a past article by Kathy Demchak, Penn State Extension and Dr. Mengjun Hu, University of Maryland: Disease management recommendations for fall-planted strawberry plug plants <https://sites.udel.edu/weeklycropupdate/?p=19318>. "Remove any leaves with symptoms and all runners while the plants are still in their trays, starting with the cleanest-appearing trays. Watch for brown blotches on leaves and brown sunken lesions on petioles in particular. Collect and dispose of this material. If you cannot complete this operation before you plant, do so right afterwards, and remove this foliage from the field. Diseases sporulate on plant tissue even after it is removed, so dropping plant tissue in the row middles does not eliminate the problems – though this is an improvement over doing nothing. Wash hands and tools frequently, or use hand sanitizer, as diseases can be moved from plant to plant on hands, clothing, and tools. Do not plant any plug plants that are wilted and fail to recover quickly once watered."



Cucumber Downy Mildew Alert

University of Maryland Fruit & Vegetable News

Cucurbit downy mildew (CDM) has been confirmed on cucumbers in Central Maryland and on the Eastern Shore. It was recently confirmed on cantaloupe in New Castle, Delaware. It was found on butternut squash and cucumber in Lancaster County, PA, on August 18, 2023. CDM has been confirmed on pumpkin, butternut, and spaghetti squash in Northern New Jersey.

For more information on the specific fungicides recommended for CDM control on cucurbit crops, please see the [2022/2023 Mid-Atlantic Commercial Vegetable Production Recommendations](#) (or contact the Extension office for a hard copy). Always read and follow the label, as not all fungicides are listed for all cucurbit crops, and they might have a limited number of applications.

Cucurbit downy mildew is a significant disease that affects all cucurbits. Commercially important species of cucurbits include:

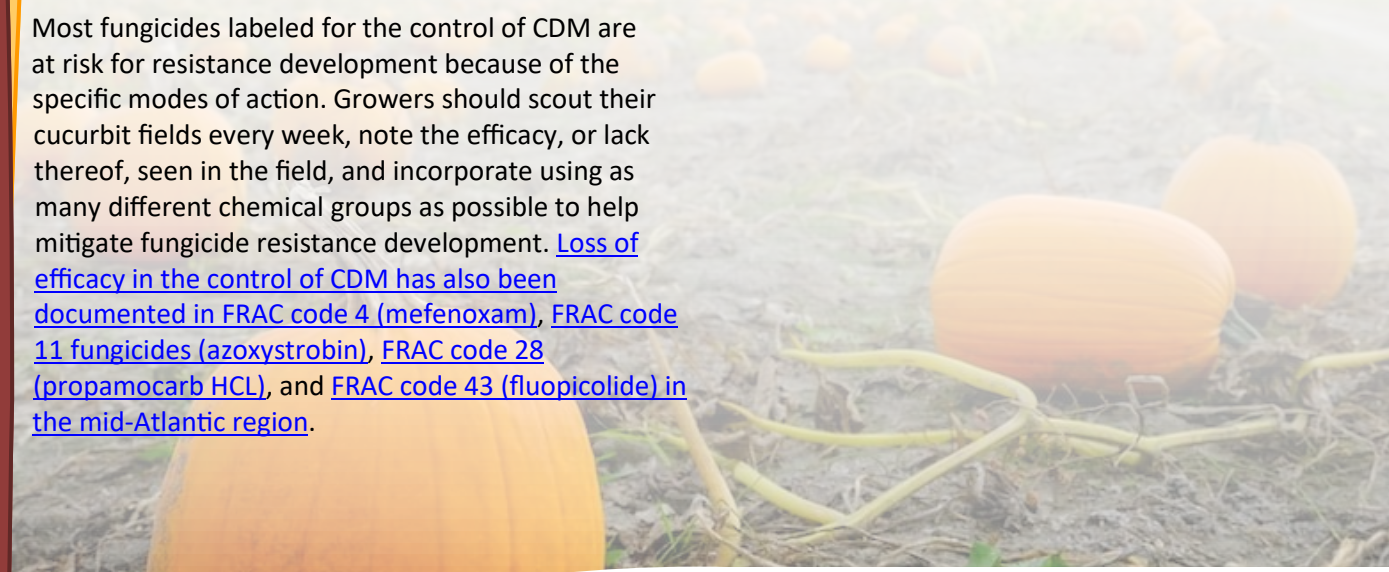
- Watermelon (*Citrullus lanatus*)
- Muskmelon (*Cucumis melo*)
- Cucumber (*Cucumis sativa*)
- Squash (*Cucurbita pepo*, *Cucurbita moschata*)
- Pumpkin (*Cucurbita maxima*)

The causal agent is the fungal-like organism (oomycete) *Pseudoperonospora cubensis*. CDM falls into two separate clades: Clade I and Clade II. Clade I predominately infects watermelon, pumpkin, and squash, and Clade II predominately infects cucumber and cantaloupe. Research suggests that isolates in Clade II can quickly become resistant to specific fungicides.

Most fungicides labeled for the control of CDM are at risk for resistance development because of the specific modes of action. Growers should scout their cucurbit fields every week, note the efficacy, or lack thereof, seen in the field, and incorporate using as many different chemical groups as possible to help mitigate fungicide resistance development. [Loss of efficacy in the control of CDM has also been documented in FRAC code 4 \(mefenoxam\), FRAC code 11 fungicides \(azoxystrobin\), FRAC code 28 \(propamocarb HCL\), and FRAC code 43 \(fluopicolide\) in the mid-Atlantic region.](#)



Cucumber downy mildew symptoms on upper leaf surface. Common symptoms include pale green to yellow spots forming on the upper surface of leaves. The leaf spots are angular and bounded by leaf veins. They later turn brown. Photo by Nancy Gregory, University of Delaware, Bugwood.org



Pumpkin Twilight Tour

September 21 | 4-6 PM

Wye Research & Education Center

211 Education Dr., Queenstown, MD 21658

Register at: <http://bit.ly/pumpkintwilight23>.



Scan me

Tar Spot Reported in Cecil County

Andrew Kness, Senior Agriculture Agent
University of Maryland Extension, Harford County

Tar spot of corn has been confirmed in Maryland from a grower's field in Cecil County. This is the first confirmed report in Maryland for the 2023 growing season.

Tar spot is a relatively new fungal disease of corn in the United States and it was confirmed for the first time in Maryland in August of 2022. As daytime and nighttime temperatures begin to decline, now is a good time to look for symptoms in your corn fields. Tar spot is favored by cooler temperatures (60-70s), as well as prolonged periods of leaf wetness from rainfall, dew, or humidity. Tar spot can cause infected plants to senesce prematurely, which can adversely affect yield, especially if infection occurs early in the reproductive stages. Yield losses are not as severe if infection occurs later in the reproductive stages.

Tar spot spores overwinter in old corn crop residue and are deposited onto corn leaves via splashing rain or wind (spores are only wind-blown for very short distances). Once a spore lands on corn tissue, it will germinate and infect the plant as long as the environmental conditions remain conducive. After an incubation period of about 14-21 days, black reproductive structures called stroma are visible on the leaf surface (Figure 1). These structures resemble black paint or tar, hence the name "tar spot."

If you find tar spot in your field, you may want to take precautions to prevent it's spread during harvest, as you could potentially inoculate new fields by bringing infected residue into the next harvested field. If you're harvesting an infested field, it would be a good idea to

try to remove as much corn fodder off of the equipment before moving to the next field.

Preparations for managing tar spot in 2024 should start in the winter with good seed selection. If possible, choose hybrids with good tar spot resistance (there is no complete resistance); seed companies are starting to rate hybrids for their tar spot resistance/tolerance.

If you find tar spot in your field, I would be interested in knowing about it. We have a grant from the Maryland Grain Producer's Utilization Board and one objective of the study is to determine the distribution of tar spot in Maryland. Call (410-638-3255) or email me (akness@umd.edu); or submit a report at corn.ipmpipe.org.



A. Kness, Univ. of Maryland

Figure 1. Tar spot of corn. The black dots on the leaf are stroma, the reproductive structures of the fungus.

Cooperators Needed for On-Farm Research

The Agronomy Program is looking for volunteers to participate in our on-farm trials for Fall 2023 and Spring 2024. With funding provided by the Maryland Grain Producers Utilization Board, we have developed three protocols to implement on farm. The University of Maryland On-Farm Trials Coordinator will assist with all aspects of implementing the protocols (linked below) and compensation will be provided. Please complete [this form](https://bit.ly/TrialsForm) (<https://bit.ly/TrialsForm>) to indicate your willingness to participate in the trials. Questions can be directed to Dr. Nicole Fiorellino (nfiorell@umd.edu, 443-446-4275), Extension Agronomist, or Mr. Gene Hahn (ghahn@umd.edu), On-Farm Trials Coordinator.

[Fall 2023/Spring 2024 - Wheat Nitrogen Trial](#)

[Spring 2024 - Corn Nitrogen Trial](#)

[Spring 2024 - Biological Product Evaluation](#)

Nutrient Management Reminder & Update

*Erika Crowl, Senior Agriculture Agent Associate
University of Maryland Extension, Baltimore County*

On July 17, during the Nutrient Management Summit, the Maryland Department of Agriculture (MDA) announced new changes and ways they would like to "re-image" the nutrient management program.

Here are some take-aways:

- University of Maryland will continue writing nutrient management plans at no cost to farmers.
- MDA and UMD will enter into a 3-year MOU to continue funding UMD Nutrient Management plan writers to be renewed annually, contingent upon funding.
- As of September 29th, the program will now fall under Extension; whereas, before it was under the Department of Environmental Sciences and Technology. This will allow for improved management and oversight of the program.
- UMD is currently working with partners to seek permanent funding for the program.
- All current plan writers who choose to stay on board will receive a new contract by September 29th.
- We will be hiring a new Program Manager who will be under Dr. Jarboe, the current AgFS program leader.
- There will be a new nutrient management farmer task force committee. This committee will provide guidance to MDA and UMD regarding the ways to improve the program and the overall plan. Some of you may be on this task force already. THANK YOU for stepping up.

As I remind everyone, Rome was not built in a day; this will be a long-term process as we turn this ship in the right direction. I think with the help from MDA and community partners we will meet the goals set out by the new Nutrient Management Oversight Committee.

If you have any questions or concerns, please reach out to the Extension office.



SAVE THE DATE!

MARYLAND GRAZING SCHOOL

September 21-22, 2023

Western Maryland REC, Keedysville, MD

<https://go.umd.edu/mdgrazingschool>

Nutrient Management

Livestock

MAEF Fundraiser



September 11 | 6-9 PM | Hopkins Farm Brewery

Monday, September 11, 2023 | 6 p.m. – 9 p.m.
(rain date 9/12/23)

Hopkins Farm Brewery

Enjoy your Hopkins Farm Brew favorites and support the building of the new lab by trying a SPECIAL BREW developed and named especially for this fundraiser!

\$50/person (\$5 discount for First Responders and Active Duty Military)
Dinner by Mission BBQ



Bookings since 2021 have exceeded past requests. MAEF wants to meet this demand with a NEW Mobile Lab. YOU can help!



Music by the Mayo Family Band

Hopkins Farm Brewery

3833 Rider Lane
Havre De Grace, MD 21078

More information online: maefonline.com



Join the Board of Directors and Friends of Maryland Agricultural Education on Monday, Sept. 11 from 6 p.m. – 9 p.m. at Hopkins Farm Brewery for food, fiddles, and FUND Raising!

General Interest

Farmers On The Rise

Horizon Farm Credit



Are you a beginning farmer with 3 to 10 years of experience working hard to be outstanding in your field? At Farm Credit, we believe in honoring the next generation of agriculturalists, which is why we created the Farmers on the Rise award program. After an application and interview process, up to ten beginning

farmers will be selected to win \$10,000 based on their efforts in agriculture, financial character, leadership and community involvement, and environmental stewardship.

Ready to Apply?

To learn more about eligibility and the program, visit horizonfc.com/rise. Applicants must reside within Horizon Farm Credit's territory and can apply either as an individual or with their business partner. Both current and non-Farm Credit customers are eligible to apply. Applications are open from **August 25** through **October 6, 2023** at 4:00pm.

Join Our Team: SNAP-Ed Assistant

The University of Maryland SNAP-Ed program in Harford County is hiring a program assistant to support the nutrition educator in program efforts. This position is part time and hours are flexible. Please see the full position announcement for [details here](#).

Applicants may send resumes directly to Charae Harris (charae@umd.edu) by **September 15th**. Contact Charae Harris with any questions at charae@umd.edu or call (410) 638-3255.

Maryland SNAP-Ed is an Equal Opportunity Employer.



MARYLAND
SNAP-ED

Great resources are just a click away!

Andrew Kness

Andrew Kness
Senior Extension Agent,
Agriculture and
Food Systems



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Back-issues can be found at: <https://extension.umd.edu/locations/harford-county/agriculture-and-nutrient-management>

akness@umd.edu



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If you need a reasonable accommodation to participate in any event or activity, please contact your local University of Maryland Extension Office.

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Ag Notes

Harford County Newsletter

Dates to remember

- 31 Aug-4 Sept & 7-10 Sept.** Maryland State Fair
- 13 Sept.** Women in Ag Webinar: Ag Taxes. 12 noon. Online via Zoom. Free Register [online](#).
- 21 Sept.** Pumpkin Twilight Tour. 4 PM. Wye Research & Education Center, Queenstown. Register [online](#).
- 21-22 Sept.** Maryland Grazing School. Western Maryland Research & Education Center, Keedysville. \$125-\$150 Register [online](#) or call (301) 432-2767.
- 01 Oct.** LEAD Maryland applications due.

September 2023