

Accomack & Northampton County Cooperative Extension Eastern Shore Agricultural Research & Extension Center



### VA AG EXPO is in Virginia Beach!

"Agriculture: Bringing Promise to Our Future" is the theme for this year's Virginia Agricultural Expo. The VA AG EXPO, as we like to call it, is an annual event and the largest agricultural field day held in Virginia, and always takes place on the first Thursday of August. As an educational, marketing and social event, farmers and agribusinesses look forward to the VA AG EXPO each year as it moves from one working farm to another to showcase the diversity of the different areas of the state. This year the event heads to southeast Virginia at Land of Promise Farms in Virginia Beach, VA on Thursday, August 3, 2023.



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## THE AGENT'S CORNER

### Theresa Pittman - Accomack County ANR Agent







Summer is in full swing, the Shore is buzzing with activity in the field and out. Wheat, rapeseed, potatoes, and green beans are being harvested and double crop soybeans are being planted. Everyone is busy!

#### **Bug Traps**

Bug Traps are installed in both Northampton and Accomack Counties. Counts have shown a large presence of Corn Earworm in lower Northampton County already this year so please scout your fields. Corn

Earworm can not only affect your corn crop but also your soybean crop so monitoring is key to know when you are at threshold for a spray application. Many thanks to Hélène Doughty for continuing the pest monitoring in Northampton County this year.



Slug infestation poses a significant challenge to soybean crops, and addressing this issue is crucial for ensuring a successful harvest. Slugs are common pests that thrive in moist and cool conditions, often causing extensive damage to soybean plants. These voracious feeders consume leaves, stems, and pods, leading to stunted growth and reduced yields. Over 500





acres of Eastern Shore soybeans have been replanted due to slug damage this year. To combat slug infestation, farmers can employ several strategies. Integrated pest management techniques, such as crop rotation, can disrupt slug life cycles and reduce their populations. Implementing cultural practices like proper tillage and removing crop residue can also create unfavorable conditions for slugs. Additionally, targeted slug baits and natural predators can be utilized as part of a comprehensive control approach. Dr. Tom Kuhar, entomologist at Virgina Tech, says "Baits with metaldehyde or iron phosphate are still the only control measure for slugs. These are not always practical for growers. Some growers have gotten control with Lannate (methomyl) sprays in the evening. The issues with Lannate are that if it is dry, then the slugs won't come out and contact the short-lived Lannate insecticide spray while it is still active (about 24 hours). Also, if you get too much rain, then it washes it away and doesn't kill them. Lannate can work if the conditions are right." By promptly identifying and addressing slug infestation, soybean growers can safeguard their crops and ensure optimal productivity.

#### WE ARE HIRING - Northampton County Agriculture & Natural Resources Associate Extension Agent

Are you passionate about agriculture and eager to make a meaningful impact in the agricultural community? Virginia Cooperative Extension is currently seeking a dedicated individual to join our team as an Associate Extension Agent, Agriculture & Natural Resources in Northampton County, Virginia. As an Agriculture Extension Agent, you will play a vital role in providing valuable resources, expertise, and guidance to local farmers, ensuring the success and sustainability of their agricultural endeavors. Your responsibilities will include conducting educational programs, workshops, and demonstrations on best practices in crop production, and sustainable agriculture techniques. Collaborating with producers, community organizations, and government agencies, you will offer personalized consultations and develop innovative solutions to address agricultural challenges. This is a unique opportunity to foster growth, enhance productivity, and strengthen the agricultural sector in Northampton County. Please see the job ad in this newsletter for more info and how to apply.

#### **FARM USE Placard Reminder**

Keep in mind that changes to the "Farm Use" placards in Virginia have been delayed. Enforcement will not take effect until July 1st, 2024. Full details are available via Virginia Farm Bureau (PDF): <a href="https://www.vafb.com/.../member.../farm-use-2023-changes.pdf">https://www.vafb.com/.../member.../farm-use-2023-changes.pdf</a>



## UPDATES

#### FROM THE ESAREC DIRECTOR

Dr. Mark Reiter, Director, Extension Specialist





## New Director of the Virginia Agricultural Experiment Station is Hired

We are pleased to announce that Dr. Mary Burrows has accepted an offer to become our new Director of Virginia Agricultural Experiment Station and Associate Dean for Research and Graduate Studies. Dr. Burrows will be moving from her position at Montana State University where she was Professor and Associate Director of the Montana Agricultural Experiment Station and Research Development. Dr. Burrow's research and Extension expertise focus on field crop diseases, wheat and pulses, fungi and viruses, and epidemiology. She will begin her

new role at Virginia Tech on July 10, 2023. We look forward to working with Dr. Burrows as she begins leading Virginia Agricultural Experiment Station into the future. Until Dr. Burrows begins her position, Dr. Saied Mostaghimi will return to lead and support ARECs and assist with transitioning Dr. Burrows into her role at Virginia Tech.



Dr. Mary Burrows, new Director of Virginia Agricultural Experiment Station and Associate Dean for Research and Graduate Studies

#### VT-REEL Interns Learning Ag Locally

This summer, we are hosting two VT-REEL students within our research programs at the Eastern Shore AREC. Virginia Tech's Research and Extension Experiential Learning (VT-REEL) program has a focus on Securing Our Food in a research-intensive, 10-



week summer experience. The VT-REEL program engages undergraduate students in translational plant science research via a combination of hands-on laboratory and field-based experiences. VT-REEL fellows spend the first half of the program on-campus, working in molecular labs, and spend the second half of the program at Agricultural Research and Extension Centers (ARECs), working in applied labs. Four undergraduate students from diverse academic institutions across the United States were chosen to participate in the 2023 summer program. Faculty mentors are affiliated with the Eastern Shore AREC, Tidewater AREC, School of Plant and Environmental Sciences, Department of Biological Sciences, Department of Entomology, and Department of Biological Systems Engineering. Funding was obtained through the USDA-NIFA. The VT-REEL program on Securing Our Food will continue through 2025.

# WHAT'S THAT BUG?

Hélène Doughty, Research Specialist Sr., invites you to test your entomology knowledge. Take a guess on the pest and email her your answer! <a href="mailto:hdoughty@vt.edu">hdoughty@vt.edu</a>



Click to play video

**June's Answer:** An adult Eastern Flower Thrips (Frankliniella tritici (Fitch)). This insect is known to be a primary pest of many crops, including tomatoes, snap beans, cotton, etc... Its feeding and oviposition (egg laying) leads to cosmetic damage to fruit in tomatoes and pods in snap beans as well as loss of vigor of young plants in cotton.

## Insect Activity Update for the Eastern Shore

Hélène Doughty, Research Specialist Sr., Eastern Shore AREC

Every year is different but with a warm winter and a cooler than normal spring, we are observing some oddities in the insect world already!

**Corn earworm:** I spotted some moths on potato plants very early on (April). This likely indicates that some pupae survived the winter and emerged in April when we had warm temperatures. We set out CEW traps earlier and caught moth numbers over the threshold very quickly.

**Stink bugs:** Stink bug activity seems to be slow. In May, we typically see the first flight of the native green stink bug. We did not observe that (but we had a difficult bird attempting to make a nest in the black light trap on many occasions!). Only a handful of green stink bugs has been recorded. Brown stink bugs began to appear in the light trap the week of June 26th but no brown marmorated stink bugs yet.

**Thrips:** A large number of thrips have been observed in tomatoes the week of June 20th with an average of 145 flower thrips per 20 blossoms.



Figure 1. Potato aphids on tomato plant

**Potato aphids in tomatoes:** There was a report of commercial tomato plants infested with aphids and I have observed a couple of plants on the station with heavy aphid infestation. This is unusual to see aphids present at this time of the year as we typically encounter populations in the fall when night temperatures are cooler. The infestations seem very spotty though and predators and parasitoids were present, taking care of the pests.

**Beneficial insects:** Certain beneficial insects have been observed in larger than usual quantities as well. As with insect pests, beneficials (predators/parasitoids) can suffer from harsh winters. Our past mild winter may have been favorable to lady beetles and predatorial stink bugs as observed in potato and tomato fields on the station. A large amount of Colorado potato beetle egg mass predation by lady beetles was observed.

Please share your observations/photos/comments on insect activity by emailing <a href="mailto:hdoughty@vt.edu">hdoughty@vt.edu</a> or texting (757) 999-0780



Figure 2. The two-spotted stink bug, a specialized predator of Colorado potato beetles

## Weed Science Research and Updates

Dr. Vijay Singh, Assistant Professor & Weed Specialist, Eastern Shore AREC

#### **EPA/USDA/IR-4 Educational Agricultural Tour**

University of Maryland and University of Delaware organized a field tour for Environmental Protection Agency, United States Department of Agriculture, and IR-4 project on June 21, 2023. Dr. Vijay Singh, Assistant Professor and Extension Weed Specialist at Eastern Shore AREC, Virginia Tech, was invited as a speaker at LESREC, Salisbury, MD. Dr. Singh discussed weed management issues, and how advanced robotic technologies can assist in providing effective control of weeds, especially herbicide-resistant weed species. There was a lot of interest and excitement in the audience for research ongoing at Eastern Shore AREC, Painter, VA.



EPA/USDA/IR-4 Educational Agricultural Tour June 21st

#### **Weed Science Field Day**

Virginia Tech – Eastern Shore AREC, organized a weed science field day on June 27, 2023 at Painter, VA. Highlights of Weed Science Field Day include research and demonstrations of herbicide products in corn, soybean, edamame, herbicide-resistant Italian ryegrass studies, and unmanned aerial system (drone)-based herbicide applications.

Demonstration plots showcased herbicide efficacies in corn and soybean that included crop safety, weed control, and comparison of tankmixes and premixes with reduced rates of atrazine. Studies also highlighted how growers can manage herbicide-resistant weeds using recently commercialized products.

Vijay Singh, Assistant Professor and Extension Weed Specialist, indicated that fall applied residual herbicides (e.g. Zidua, metribuzin, Dual Magnum) in combination with crimson clover and cereal rye provided excellent control of Italian ryegrass. This way Italian ryegrass can be managed in soybean cropping system. He also discussed results of herbicide-resistant studies, and emphasized that most of the Italian ryegrass in eastern shore region are resistant to ACCase- (Group 1 herbicides) and ALS-inhibitors (Group 2 herbicides). However, no Italian ryegrass population was found resistant glyphosate in Virginia. Therefore, glyphosate is still a reliable herbicide to control Italian ryegrass at the time of burndown.

Singh also discussed that the Environmental Protection Agency (EPA) proposed a reduction in the allowable use rates for atrazine in watersheds where elevated levels of atrazine have been detected. Most of the corn growing areas in Eastern shore region will be affected by these changes. Consider this, Singh and his collaborators at University of Delaware and University of Maryland have conducted several studies, where many tankmixes with reduced rates of atrazine have shown promising results, and excellent weed control even at 45 days after applications.



Non-treated



Atrazine (20 fl oz/A) + Dual II Magnum (1.5 pt/A)



Atrazine (20 fl oz/A) + Callisto (5.3 fl oz/A)



Atrazine (20 fl oz/A) + Zidua (3.5 fl

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## Weed Science Research and Updates

Dr. Vijay Singh, Assistant Professor & Weed Specialist, Eastern Shore AREC

Michael Flessner, Associate Professor and Extension Weed Specialist, discussed cover crop studies, their termination timings, and herbicide options. He also discussed studies where his team is evaluating the effect of residual herbicides on cover crops.

Dhiraj Srivastava, weed science master's student, demonstrated aerial drone operations for herbicide applications. Dhiraj indicated that aerial drone can spray one acre in 5-6 mins with a spray altitude of 2.5-3 m. Speed of the drone can be configured and they have experimented with a speed as high as 20 mph. Dhiraj also demonstrated how spot spray applications with drones can save significant amount of herbicide. Singh added here that drone-based herbicide sprays provide greater control at late-POST stage in comparison with backpack or tractor sprayer. At PRE-stage, aerial drone can provide excellent control comparable to backpack sprayer.

Other students/researchers, Milos Viric (Master's student), Akash Brar (PhD student), helped in organizing the field day at Painter, and contributed to herbicide-efficacy studies.

#### Weed Science Field Day- June 27, 2023













#### Associate Extension Agent, Agriculture & Natural Resources - Northampton County (Job no: 526046)

The Extension Agent works closely with producers, agri-business, community leaders, Extension Leadership Councils and appropriate agents and specialists to identify and prioritize issues, problems and opportunities and provides current research-based information to citizens; uses farm and business visits to understand local needs and problems related to agricultural production, marketing, and environmental protection; collaborate with county, state, and federal departments and agencies to support the goals of agricultural producers; work with Farmer's Market vendors to develop a larger market presence in the community. Master's degree preferred; Bachelor's degree required. A master's degree and promotion to Extension Agent are required no later than the sixth year of employment. Full-time position with Virginia Tech benefits package, including graduate tuition waiver. For more information and to apply online, visit: <a href="https://tinyurl.com/NorthamptonANR">https://tinyurl.com/NorthamptonANR</a>



#### Agricultural Farm Manager (Job no: 526080)

Provides direct support and managerial oversight for farm operations at Virginia Tech's Eastern Shore Agricultural Research and Extension Center (AREC) in Painter, VA. In this role, the Farm Manager coordinates farm operations and maintenance on the 220-acre Center with four resident faculty members, graduate students, post-docs, and technical support staff conducting research for crops economically important to the Eastern Shore of Virginia that includes fresh market tomato, snap beans, potato, soybean, wheat, corn, among others. Must have an agricultural degree (AA or BS) in agronomy, horticulture, or similar discipline and/or extensive experience with production farming practices. Full-time position with benefits. For more information and to apply online, visit: <a href="https://careers.pageuppeople.com/968/cw/en-us/job/526080/agricultural-farm-manager">https://careers.pageuppeople.com/968/cw/en-us/job/526080/agricultural-farm-manager</a>

#### **Communications Associate (Job no: 525797)**

Responsible for telling the story of the Eastern Shore and Hampton Roads ARECs to a local, state, and international audience. Can be based in Painter, VA at the Eastern Shore AREC. Experience working in communications, public relations, journalism or related field and have experience in writing about scientific issues for non-scientific audiences is required. Full-time position with benefits. For more information and to apply online, visit:

https://careers.pageuppeople.com/968/cw/en-us/job/525797/communications-associate-esarechrarec

#### Research Specialist, Sr. (Job no. 521473)

Conducts weed science research leading to efficient and effective weed control in grain, oilseed, fiber, and vegetable crops. A BS in weed science, a closely related field, or significant experience demonstrating proficiency in weed science research tasks is required. Full-time position with benefits. For more information and to apply online, visit:

<a href="https://careers.pageuppeople.com/968/cw/en-us/job/521473/research-specialist-sr">https://careers.pageuppeople.com/968/cw/en-us/job/521473/research-specialist-sr</a>





#### Join us for a CALS Alumni and Friends Social

Wednesday, Aug. 2 from 6 to 9 p.m.

Mermaid Winery

4401 Shore Drive, Virginia Beach, VA 23455

Join us to network with CALS alumni, faculty, and friends.

#### Registration is required by July 24.

\$25 registration includes a \$5 gift to the CALS Annual Fund.

Hokies 21 and under are free!

Registration includes heavy hors d'oeuvres and open bar.

Current and incoming fall 2023 students are welcome to attend!

Questions: calsadvancement@vt.edu or 540-231-9666

Visit the CALS/Virginia Cooperative Extension exhibit Aug. 3 at the <u>Virginia Ag Expo</u>



## SAVE THE DATE



REGISTER

### Accomack County Farm Tour Day - September 19, 2023

Hosted by: Accomack County Cooperative Extension, Accomack County Farm Bureau and Duncan Farms in New Church

### Northampton County Farm Tour Day - September 20, 2023

Hosted by: Northampton County Cooperative Extension, Northampton County Farm
Bureau and Shore Breeze Farms in Cheriton



# Join a **GROW Farmer Forum**

**Topic:** Cover Crop Seeding

Farmer Panel:

- Jay Baxter, Georgetown, DE
- · Donn Branton, Le Roy, NY
- · Matt Ensor, Thorndale, TX

Moderator: Jodie McVane, Texas A&M

## **BRING YOUR QUESTIONS!**

The panel will discuss their varied experiences with cover crop species and mixes, seed sources, seeding rates, seeding methods and timing.

CEU Credits Available

## WHEN:

July 18, 2 to 3:30 p.m. ET

### WHERE:

### Zoom Webinar:

https://virginiatech.zoom.us/j/88338778900? pwd=OUtxRk9zMXoxNEszdFF4UEVKMy84dz09

Meeting ID: 883 3877 8900

Passcode: 150333

Register for free here:





## 2023 EASTERN SHORE Household Water Quality Clinic

Does your water come from a well, spring, or cistern?

Do you want to learn more about the quality of your water and how to care for your water system?

#### How does it work?

- 1. Pick up a sample kit from your local County Extension office and get instructions on how to collect your household water sample.
- 2. Collect a sample from your tap at home and complete a short questionnaire.
- 3. Drop off sample at your local County Extension office.
- 4. About 4 weeks later, receive your confidential test results, an explanation of what the numbers mean, and information about how to handle any problems that are present. For more information, visit: http://www.wellwater.bse.vt.edu/clinics.php



#### What does the water test include?

#### Limited kits available ● sign up today!!!

Iron	Manganese	Sulfate	Hardness	рН	Total Dissolved Solids	Fluoride
Sodium	Copper	Nitrate	Arsenic	Lead	E. coli bacteria	Coliform bacteria

#### How much does it cost?

Scholarships are available from a partnership with SERCAP through the Eastern Shore Water Quality Improvement Project grant (Environmental Protection Agency Environmental Justice Program). Sample kits are \$65 each or with scholarship, \$10 each, limit one \$10 kit per household.

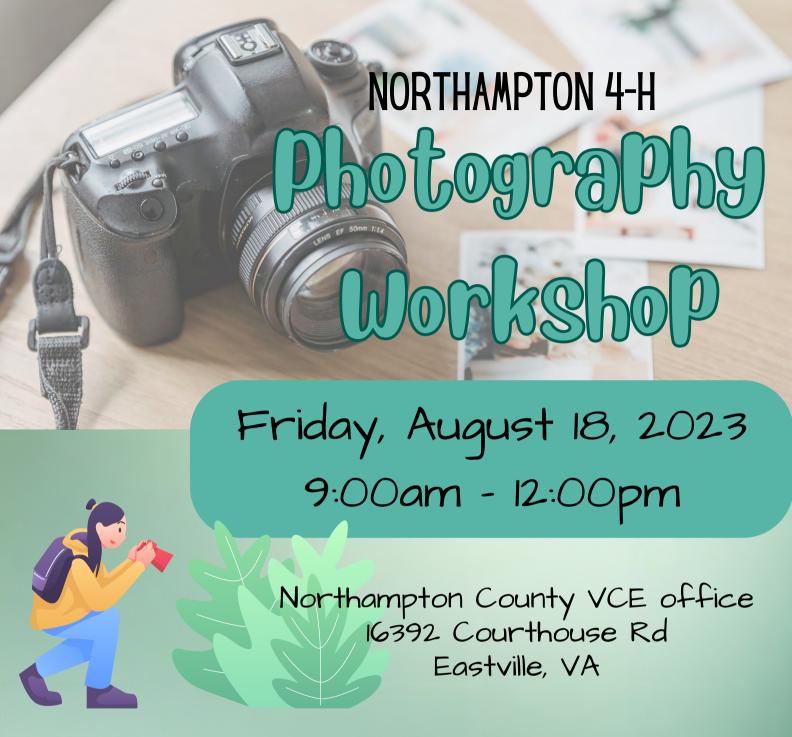
Registration is required — Please visit <a href="https://tinyurl.com/VCE-EasternShore-VAHWQP">https://tinyurl.com/VCE-EasternShore-VAHWQP</a>, to pre-pay for your sample kit with a credit card. A registration receipt will be required for pick-up of your sample kit on Monday, August 28<sup>th</sup>. If you would like to purchase your sample kit via check, please visit your local Extension Office.

Date	Location (Accomack County)	Location (Northampton County)
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Pick up sample kit	August 28 <sup>th</sup>	Accomack Cooperative Extension 23185 Front St Accomac, VA 23301 8:30am – 4:00pm	Northampton Cooperative Extension 16392 Courthouse Rd Eastville, VA 23347 8:00am – 4:30pm		
Instructions for Sampling	View on your own	https://www.youtube.com/watch?v=a2wqzuzvbK4			
Drop off samples	August 29 <sup>th</sup>	Accomack Cooperative Extension 23185 Front St Accomac, VA 23301 8:30am – 4:00pm	Northampton Cooperative Extension 16392 Courthouse Rd Eastville, VA 23347 8:00am – 4:30pm		
Receive Results via mail/email	A few weeks after testing	ONLINE	ONLINE		

Contact: Northampton County Extension Office: 757-678-7946 or Accomack County Extension Office: 757-787-1361

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Amanda Hurley at 757-678-7946 during business hours of 8:00 a.m. and 4:30 p.m. to discuss accommodations 5 days prior to the event. \*TDD number is (800) 828-1120.



Come gain an understanding of using the principal of three, creating interest in your photograph and many other techniques. No equipment or experience is necessary! Youth are welcome to bring a camera from home to learn on or use one of the cameras we will have available. For ages 10 and up.

To sign up, email emorgan2@vt.edu or call (757) 678-7946



## Virginia Cooperative Extension Virginia Tech. • Virginia State University



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If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Erin Morgan at 757-678-7946 x15 during business hours of 8:00a.m. and 4:30p.m. to discuss accommodations 5 days prior to the event. \*TDD number is (800) 828-1120.

VCE & ESAREC Contact Information						
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Cooperative Extension 16392 Courthouse Rd	Erin Morgan	4-H Agent	emorgan2@vt.edu	757/678-7946		
PO Box 457 Eastville, VA 23347	Amanda Hurley	Unit Support Staff	amandalh@vt.edu	757/678-7946		
	Faculty/Staff	Title	Email	Work/Cell Phone		
Accomack County Cooperative Extension	Theresa Pittman	ANR Agent	tpittman@vt.edu	757/787-1361		
23185 Front St. PO Box 60	VACANT	4-H Agent		757/787-1361		
Accomac, VA 23301	Rachel Barnes	Unit Support Staff	mrbarnes@vt.edu	757/787-1361		
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VIRGINIA AGRICULTURAL EXPERIMENT STATION EASTERN SHORE AGRICULTURAL RESEARCH AND EXTENSION CENTER VIRGINIA TECH

Virginia Cooperative Extension brings the resources of Virginia's land-grant universities, Virginia Tech and Virginia State University, to the people of the commonwealth. VCE provides education through programs in Agriculture and Natural Resources, Family and Consumer Sciences, 4-H Youth Development and Community Viability.

The Virginia Tech, Eastern Shore AREC is committed to supporting commercial vegetable, grain, oilseed, and fiber production throughout the Commonwealth of Virginia. Centrally located on Virginia's Eastern Shore, the center conducts basic and applied research on more than 25 agricultural crops.