

The Stalk

Eastern Shore Agricultural
Research & Extension
Center

Accomack & Northampton
County Virginia
Cooperative Extension

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Tommy Custis Retires after 38 Years of Service

Tommy Custis, Farm Manager, is retiring after more than 38-years of service to the Eastern Shore AREC, Virginia Tech, commonly called the Experiment Station to the local community. During his tenure at the Experiment Station,



Tommy assisted with countless applied research experiments that were used to gather innovative datasets to improve the efficiency and economics for Virginia growers in the fields of soils, nutrient management, weed science, plant pathology, entomology, horticulture, food safety, and biological systems engineering. Tommy managed a farm crew that was well versed and managed

to keep older equipment running and juggled multiple tasks within a day to ensure effective research was conducted; which is now published and utilized to positively impact farm practice and regulation around the Commonwealth. Tommy faithfully tracked the weather, as any good farmer does, and is responsible for helping the Eastern Shore AREC become a centennial member for weather observations and reporting for the National Weather Service.



We wish Tommy well as he effectively retires on February 28, 2023 to begin his new journey with a focus on family, especially his grandchildren. We will miss Tommy and his 38+ years of legacy Eastern Shore and Experiment Station knowledge as we transition to this new stage of farm crew leadership, but as always, time marches on and we will still be here to serve our growers on the Eastern Shore and beyond!





Agent's Corner

Ursula Deitch- Northampton County ANR Agent
Theresa Pittman- Accomack County ANR Agent



Happy March! Spring is on the way! Northampton County has already seen potatoes going in the ground and up and down the Shore we see land being prepped for the upcoming season. Below you will find some updates on the “going-ons” in our offices.

Commercial Pesticide Recertification Recap

Sixteen applicators attended the Commercial Pesticide Recertification in categories 3A, 3B, 6, 10 and 60 on February 28, 2023 at the Eastern Shore AREC. A welcome new addition was meeting our new VDACS Pesticide Investigator Christine Haslam. If you have any question for the new Pesticide Investigator she can be contacted at: Christine.Haslam@vdacs.virginia.gov



Paraquat Training

We will be hosting an in-person Paraquat (Gramoxone) Training on Thursday, March 23 at 8:30am at the Eastern Shore AREC. During this short 1 hour training, participants will gain credits for 2 more years of licensure to apply Paraquat. If you would like to attend this event please contact your county ANR Agent to RSVP: Theresa Pittman – tpittman@vt.edu or Ursula Deitch – ursula@vt.edu

Dicamba Training

Unfortunately, we had to cancel the in-person paraquat/dicamba training we had planned for February. This is an annual requirement/certification for using Engenia, Xtendimax, and Tavium herbicide products. Other dicamba products do not require this training. Training is not product specific- any company's training works for any product. As of now, we encourage those who need the training to take advantage of the online training modules.

Online training is available at the following links.

BASF: <https://www.engeniaherbicide.com/training.html>

Bayer: <https://www.roundupreadyxtend.com/stewardship/pages/default.aspx>

Private Pesticide License Training Course

We are planning to host a training course for those seeking a private pesticide license on March 20. This short course will teach basics of pesticide application and follow along with the CORE MANUAL which is the study book for the Private Pesticide Test. If you have yet to speak to Ursula or Theresa about this course and you feel that you need a refresher or have some crew that need training, please call/text/email your County Agent. We will be sending out more details via email as we get closer to the 20th, please make sure your county office has an updated email address for your business.

General Assembly Updates

While the General Assembly was originally scheduled to adjourn at the end of February, unfortunately, that did not happen. The House of Delegates and the Senate have been unable to produce a budget conference committee report, therefore the bodies have yet to vote on final adoption of a budget. This means that the General Assembly session will be extended; however, it is unclear for how long. We will keep you updated as new information comes out about the extended Session and what regulations we will see in the upcoming year.

49th Annual Northeastern Society of Agricultural Research Managers Meeting

Early in February, the Hampton Roads AREC in conjunction with the Eastern Shore AREC hosted the 49th Annual Northeastern Society of Agricultural Research Managers meeting in Virginia Beach. This Society brings together research farm managers along the northeast to discuss new and trending topics and discussions of what is currently working on society members' farms. The meeting was attended by Farm Managers and Research Managers from multiple states along the northeast to learn about topics affecting the research farming community. Topics of discussion included, the history of Virginia Beach agriculture, farm

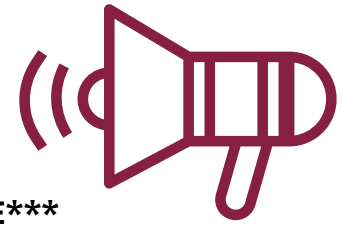


management software programs, updates from Cold Spring Harbor Laboratory in Long Island, the history of the Hampton Roads AREC, and a keynote address from the Commissioner of VDACS, Joe Guthrie, on the role of VDACS in Virginia Ag. This meeting also included a tour of Virginia Beach and the Eastern Shore points of interest. Our first stop was a brief tour of the Hampton Roads AREC given by the Farm Manager Rob Holtz, discussing the new equipment additions and explaining the layout of the Farm. The next stop was a tour of the Chesapeake Bay Bridge-Tunnel Given by Jeff Holland in which everyone was able to see "Chessie" the tunnel boring machine before it set off on its 14-month journey, and learned about the logistic hurdles involved with a project on this scale. The first stop on the Eastern Shore was Cherrystone Aqua Farms where Will Leland talked about the history of the farm and gave a tour of the facility, even stopping to shuck a few clams and oysters for the NeSARM guests. After an incredible tour of Cherrystone Aqua Farms, the group embarked towards The Eastern Shore AREC where the Farm Manager, Tommy Custis, and Assistant Farm Manager, Andrew Fletcher, guided everyone around the farm to talk about current methods of operation and new implement acquisitions. The final stop on the Eastern Shore was The Barrier Islands Center where the guests learned about the history of the barrier islands communities. The Eastern Shore AREC and Hampton Roads AREC would like to thank all of the producers and agencies that made this tour possible and look forward to having NeSARM back to visit again soon.





UPDATE



VDACS PESTICIDE BUSINESS LICENSE UPDATE

For currently licensed businesses, renewals forms have been mailed!

Currently licensed pesticide businesses now have the option to renew their pesticide business license via an online portal. Businesses may also submit change of information forms and update their Certificates of Insurance online. Included on the renewal form are step-by-step instructions on how to use the new online system. Businesses electing to use the online system will have all their pesticide business license and other similar correspondence sent electronically. Businesses electing to continue to use the paper-based process will continue to have their pesticide business license and other correspondence sent via regular mail. All applications and other submissions will continue to be processed based on the date of receipt in OPS. This includes both paper and online submissions. Should you have any questions, or, if you did not receive your pesticide business license renewal form, please contact the Office of Pesticide Services at opsclrt.vdacs@vdacs.virginia.gov.

New Administrative and Office Specialist at the Eastern Shore AREC



My name is Belinda Sterling, and I am extremely excited to be joining the Eastern Shore AREC team in Painter on March 10, 2023, as the Administrative and Office Specialist. I have lived on the Eastern Shore my entire life and currently reside in Bloxom with my son Robbie. I am a graduate from the Eastern Shore Community College with an associate's degree in Business Administration. I am an associate member of my local volunteer fire company in Bloxom, a member of the Elks Lodge in Accomac, and a die-hard Pittsburgh Steelers fan!

2023 Ag in the Classroom

National Ag week is celebrated March 19-25 with National Ag Day celebrated on March 21. Virginia Agriculture in the Classroom's annual Agriculture Literacy Week is March 13-17, which aims to give students and educators a better understanding of agriculture. The book selected this year is "I Love Strawberries" by Shannon Anderson and illustrated by Jaclyn Sinquett. To celebrate Ag in the Classroom, Virginia Farm Bureau Board Members from both Accomack and Northampton Counties and the Northampton County ANR Agent will read to students during Agriculture Literacy Week.



Get the Timing Right to Protect your Wheat Against Fusarium Head Blight

Dr. Doug Higgins, Plant Pathologist, Eastern Shore AREC, Painter, VA

It is a bit early yet to worry about Fusarium head blight (FHB) in your field, but it is not too early to have a fungicide picked out. A warm day in the second half of March is also a good time to calibrate your sprayer. Fusarium head blight can cause yield losses and more importantly the contamination of wheat with mycotoxins that are harmful to humans and animals. Warm, wet weather (59° to 86° F) before, during or after flowering are optimal condition for Fusarium head blight outbreaks. You will want to pay close attention starting in mid-April to the Fusarium Head Blight Prediction Center and Risk Assessment Tool (<https://www.wheatcab.psu.edu/>). This tool can help predict when conditions are favorable for Fusarium head blight based on cultivar susceptibility and weather patterns. It can be used as a guide to help determine when a fungicide application will be most useful, but also be sure to pay close attention to local weather conditions.



There are no silver bullets for controlling Fusarium head blight. However, a well-timed fungicide application can help reduce disease and lower mycotoxin levels, especially in susceptible wheat varieties. See the table below for a list of preferred fungicides. For the fungicide to be effective, it needs to be applied right at early flowering when about half of your plants have flowers coming out in just the center of the head (Feekes 10.5.1). There is very little wiggle room, so be ready!

| Preferred Fusarium Head Blight Fungicides ^w | | | | |
|--|--------------------------------|------|----------------|----------------------------------|
| Product ^x | Active Ingredient ^y | FRAC | Rate/A (fl oz) | Pre-Harvest Interval |
| Caramba 0.75 SL | Metconazole 8.6% | 3 | 10.0 – 17.0 | 30 days |
| Proline 480 SC | Prothioconazole 41.0% | 3 | 5.0 – 5.7 | 30 days |
| Prosaro 421 SC | Prothioconazole 19.0% | 3 | 6.5 – 8.2 | 30 days |
| | Tebuconazole 19.0% | | | |
| Sphaerex | Metconazole 10.91% | 3 | 4.0 – 7.3 | 30 days |
| | Prothioconazole 18.19% | | | |
| Miravis Ace SE | Propiconazole 11.4% | 3/7 | 13.7 | Do not apply after Feekes 10.5.4 |
| | Pydiflumetofen 13.7% | | | |

Table derived from national trials and efficacy ratings published by the Crop Protection Network. The full report can be found here: <https://cropprotectionnetwork.org/publications/fungicide-efficacy-for-control-of-wheat-diseases>.

^x Read and follow all use restrictions before applying any fungicide.

^y Do not use fungicides that contain QoI (strobilurin; FRAC 11) to manage FHB, they can increase mycotoxin (deoxynivalenol) levels.

^z FRAC = fungicide resistance action committee codes (<https://www.frac.info/>).

Potato Insect Control - What's New?

Helene Doughty, Research Specialist, Entomology & Dr. Tom Kuhar, Entomology, Virginia Tech

Everyone is gearing up and planning for potato planting to begin soon! With two primary insect pests of great economic importance: Colorado potato beetles and wireworms, growers are sometimes perplexed on what the best option may be or looking for that new product that will solve all their insect problems.

COLORADO POTATO BEETLES:

No new products have been registered for Colorado potato beetle control for 2023. However, at-planting neonicotinoid insecticides are still working well in our area (thankfully!). Field trials at the ESAREC in 2021 comparing labeled at-planting insecticides yielded great results for Colorado potato beetle control, up to 56 DAP (Figure 1 and 2). Similar residual efficacy has been shown on commercial farms on the Shore as well based on previous assays from 2021.

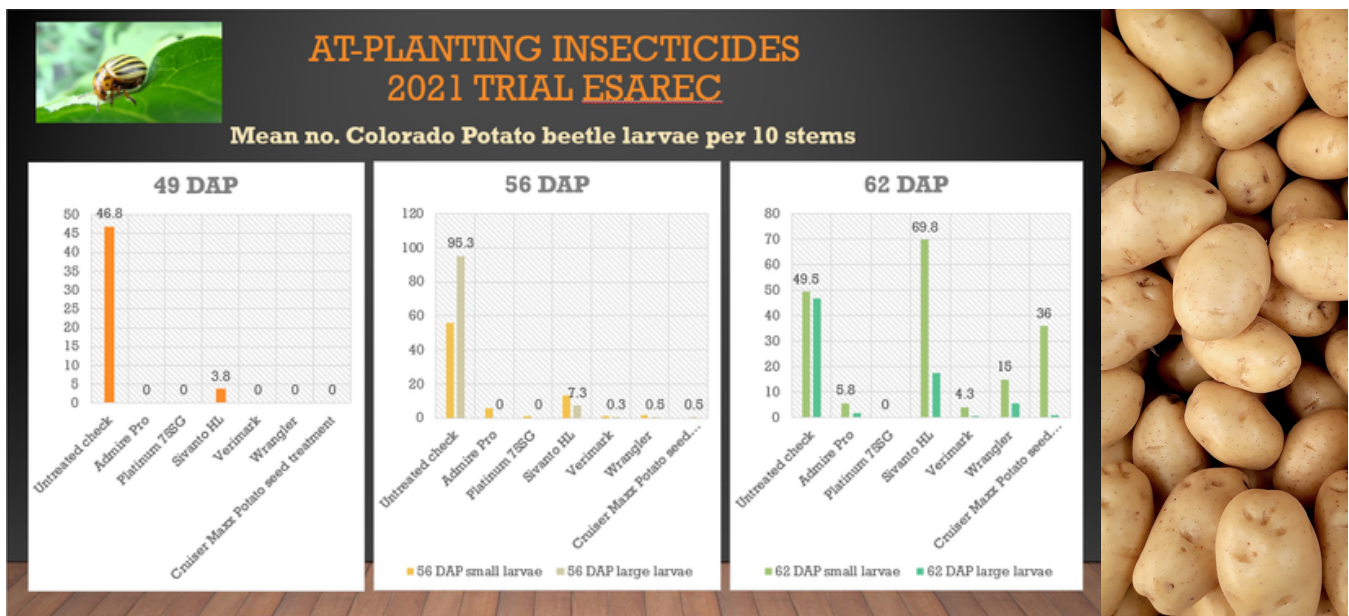


FIGURE 1

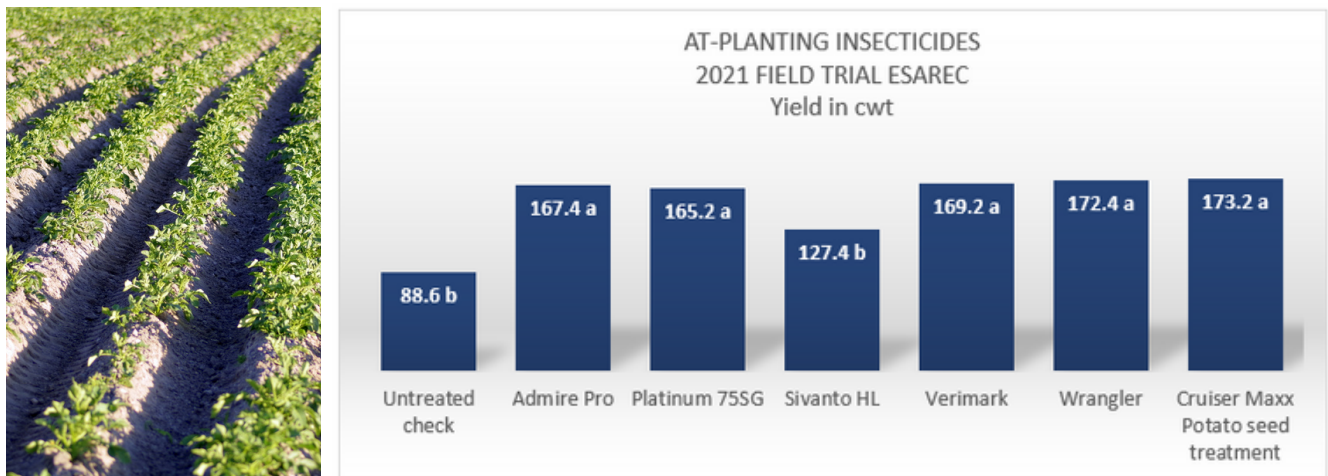


Figure 2

And for those pesky beetles infesting fields later in the season (likely from neighboring potato fields from the previous year) once the at-planting insecticide has worn off, there are still numerous options for foliar control (being mindful to rotate to a foliar insecticide in a different IRAC group) (Figure 3). A couple new insecticides with new mode of actions should be available later in 2023 or 2024, which have performed very well in our CPB efficacy trials; these include plinazolin a new Group 30 mode of action, and Calantha (a new RNAi insecticide that is highly specific to CPB and not toxic to any other organisms).

| Group | Insecticide | Rate / Acre | Active Ingredient | PHI | REI | Bee TR* | Efficacy |
|---------|---|---------------------|--|-----|-----|---------|-----------|
| 1B | Imidan 70W | 1.33 lb | phosmet | 7 | 120 | H | Good |
| 4D | Sivanto 200SL | 10.5 to 14.0 fl. oz | flupyradifurone | 7 | 4 | M | Good |
| 5 | Blackhawk 36WG | 1.7 to 3.3 oz | spinosad | 7 | 4 | M | Good |
| 5 | Delegate WDG | 2.25 to 4 oz | spinetoram | 7 | 4 | M | Good |
| 5 | Entrust (OMRI) | 1.0 to 2.0 oz | spinosad | 7 | 4 | M | Good |
| 5 | Radiant SC | 4.5 to 8.0 fl oz | spinetoram | 7 | 4 | H | Good |
| 6 | Agri-Mek 0.75SC | 1.75 to 3.5 fl oz | abamectin | 14 | 12 | H | Good |
| 15 | Rimon 0.83EC | 6.0 to 12.0 fl oz | novaluron | 14 | 12 | H | Good |
| 17 | Trigard 75WSP | 2.66 to 5.32 oz | cyromazine | 17 | 12 | H | Good |
| 21A | Torac (+PBO) | 14.0 to 21.0 fl oz | tolfenpyrad | 14 | 12 | H | Excellent |
| 22 | Avaunt 30WDG, Avaunt eVo (+ PBO) | 3.5 to 6.0 oz | indoxacarb | 7 | 12 | H | Good |
| 28 | Coragen 1.67SC | 3.5 to 7.5 fl oz | chlorantraniliprole | 14 | 4 | L | Excellent |
| 28 | Vantacor | 1.2 to 2.5 fl. oz | chlorantraniliprole | 14 | 4 | L | Excellent |
| 28 | Exirel | 5.0 to 13.5 fl oz | cyantraniliprole | 7 | 12 | H | Excellent |
| 28 | Harvanta | 10.9 to 16.4 fl oz | cyclaniliprole | 7 | 4 | H | Excellent |
| 28 + 3A | Besiege | 5.0 to 9.0 fl oz | chlorantraniliprole + lambda-cyhalothrin | 14 | 24 | H | Excellent |
| 28 + 6 | Minecto Pro | 5.5 to 10.0 fl oz | cyantraniliprole + abamectin | 14 | 12 | H | Excellent |
| UN | Azatin O, Aza-Direct, Ecozin, Neemix (OMRI) | See label | azadirachtin (biopesticide) | 0 | 4 | L | Fair |
| UN + 3A | Azera (OMRI) | 2.0 to 3.0 pt | azadirachtin + pyrethrins (biopesticide) | 0 | 12 | H | Fair |
| UN | Trident (OMRI) | 3 to 6.0 qts | <i>Bacillus thuringiensis</i> subspecies <i>tenebrionis</i> strain | 0 | 4 | L | Fair |

*Bee toxicity rating: High, Medium, Low

Figure 3

WIREWORMS:

Questions about wireworm control come back every year. With recurring problematic fields, growers are always in search of new options. Based on 15 years of research at the ESAREC, the combination of Regent (fipronil) with a neonicotinoid (thiamethoxam or imidacloprid) at planting still offers the best control for seedpiece protection. A new option is available in 2023 with a group 30 insecticide, broflanilide, currently marketed under the trade name Nurizma. We are looking forward to testing it as an at-planting insecticide in our potato field trials in the upcoming season. We are also interested in assessing the wireworm suppression ability of this same insecticide applied as a seed treatment to wheat cover crops. Research has shown that this can significantly reduce wireworm populations in a field for subsequent crops like potato.

More research work in the upcoming years will continue to focus on understanding the biology of this pest in its larval and adult stage as well as reduction of wireworm population in fields for potato production through seed treatments in rotational crops.

VCE & ESAREC Contact Information

| | Faculty/Staff | Title | Email | Work/Cell Phone |
|---|-------------------------------------|--|----------------------|----------------------------------|
| Northampton County Cooperative Extension 16392 Courthouse Rd PO Box 457 Eastville, VA 23347 | Ursula Deitch | ANR Agent | ursula@vt.edu | 757/678-7946 |
| | Erin Morgan | 4-H Agent | emorgan2@vt.edu | 757/678-7946 |
| | Amanda Hurley | Unit Support Staff | amandalh@vt.edu | 757/678-7946 |
| | Faculty/Staff | Title | Email | Work/Cell Phone |
| Accomack County Cooperative Extension 23185 Front St. PO Box 60 Accomac, VA 23301 | Theresa Pittman | ANR Agent | tpittman@vt.edu | 757/787-1361 |
| | VACANT | 4-H Agent | | 757/787-1361 |
| | Rachel Barnes | Unit Support Staff | mrbarnes@vt.edu | 757/787-1361 |
| | Faculty/Staff | Title | Email | Work/Cell Phone |
| Eastern Shore Agricultural Research & Extension Center 33446 Research Dr. Painter, VA 23420 https://www.arec.vaes.vt.edu/arec/eastern-shore.html | Mark Reiter | Director/Professor, Soils & Nutrient Management | mreiter@vt.edu | W 757/807-6576 C 757/693-2556 |
| | Vijay Singh | Assistant Professor, Weed Science | v.singh@vt.edu | W 757/807-6579 C 479/713-0094 |
| | Emmanuel Torres | Assistant Professor, Horticulture | etorres@vt.edu | C 352/682-0708 |
| | Doug Higgins | Assistant Professor, Plant Pathology | doughiggins@vt.edu | C 517/803-0636 |
| | Lorena Lopez | Postdoctoral Associate, Entomology | lorelopezq257@vt.edu | C 954/529-9042 |
| | John Mason | Research Specialist, Soils & Nutrient Management | masonje@vt.edu | W 757/807-6582 |
| | VACANT | Research Specialist, Weed Science | | W 757/807-6596 |
| | RC Cooley | Research Specialist, Horticulture | robertc42@vt.edu | W 757/807-6583 |
| | Hélène Doughty | Research Specialist, Entomology | hdoughty@vt.edu | W 757/807-6592 C 757/999-0780 |
| | VACANT | Farm Manager | | W 757/807-6596 |
| | Andrew Fletcher | Asst. Farm Manager | alf20007@vt.edu | W 757/807-6596 |
| Belinda Sterling | Administrative & Office Specialists | belindas@vt.edu | W 757/807-6586 | |



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.

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and local governments. Its programs and employment are open to all, regardless of age, color, disability, gender, gender identity, national origin, political affiliation, race, religion, sexual orientation, genetic information, military status, or any other basis protected by law.

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