



**TIDEWATER AGRICULTURAL
RESEARCH AND EXTENSION CENTER
VIRGINIA TECH.**

NEWSLETTER

SEPTEMBER 2025



In This Issue

- AREC Field Days
- Around the AREC
- 2025 Staff Award
- Research Spotlight
- Helpful Tools & More!

Greetings From Our Director

Agricultural producers across all commodities are facing tough times, with rising input costs and stagnant or falling commodity prices tightening margins. In the Tidewater region, this financial squeeze is on for our friends, family, and colleagues who rely upon farm revenue to support a rural lifestyle that reflects our values and principles. I'm often asked the question, "What can I do to be more profitable in this farm economy?"

That's where Tidewater AREC comes in. Alongside your local Extension agents, our team of 35+ faculty members, technicians, and graduate students is committed to helping you thrive. We offer expert guidance, community-based consultations, and applied research across a wide range of agricultural disciplines—from cotton, soybeans, and peanuts to soil fertility and livestock. Supporting our producers isn't just our mission—it's our passion.

As harvest season begins, we extend our best wishes for strong yields and favorable market prices. Your continued support means the world to us. We hope this newsletter showcases the depth of our community engagement and the incredible individuals and initiatives that make Tidewater AREC a cornerstone of our farming community. **-Matthew**



**MATTHEW CHAPPELL,
DIRECTOR**

6321 HOLLAND ROAD | SUFFOLK, VA 23437

PHONE : 757-807-6535

<https://www.arec.vaes.vt.edu/arec/tidewater.html>

*Follow
-US-*



Tune in!

New Podcasts



Eastern Virginia Crop Talk is a podcast by Eastern Virginia Agricultural Research and Extension Center and Virginia Cooperative Extension. Each episode will feature current research and extension discussion on crops in Eastern Virginia.

Listen here: <https://bit.ly/EVCropTalk>



CabCast is your go-to podcast for timely insights into Virginia agriculture, brought to you by the Accomack and Northampton County Virginia Cooperative Extension offices in partnership with the Virginia Tech Eastern Shore Agricultural Research and Extension Center.

Listen here: <https://bit.ly/CabCastESarec>



Framework in the Field - Visit the Blog



Field Crops Agronomist Hunter Frame is now sharing his thoughtful, research-based and practical insights on the new 'FrameWork in the Field' monthly blog.

Read the September blog post here: <https://bit.ly/43o7lcY>



New Faces at Tidewater AREC



Alec Davis
Technician
Crop Physiology



Allen Savage
Field Research Specialist
Field Crops Agronomy



Apply now: <http://bit.ly/4oLRIkw>



AMERICAN PEANUT RESEARCH AND EDUCATION SOCIETY MEETING

The 57th annual American Peanut Research and Education Society (APRES) meeting took place in Richmond, Virginia from July 15 - 17th. Attendees enjoyed a fantastic start to the week with a day of field tours, including a visit to Wakefield Peanut Company, followed by field tours and a delicious lunch at Ben-Gar Farms. The field day wrapped up with a scenic stop in Jamestown before heading back to meetings in Richmond.

The Tidewater AREC team was proud to participate in this event, which brought together leading researchers, industry professionals, and educators to share innovative research, discuss emerging challenges, and strengthen collaborations across the peanut industry. We're grateful for the opportunity to contribute to the advancement of agricultural science and to connect with national and international colleagues.

Congratulations to Professor Maria Balota, who has been elected APRES President and Graduate Student Ranadheer Reddy Vennham, who has been elected as the APRES GSO (Graduate Student Organization) President. Both will serve for 2025 - 2026.

Extension Peanut Specialist Jacob Forehand won 2nd place in the Ph.D. student poster competition. Well done!



CORN & SOYBEAN TWILIGHT TOUR

July 23, 2025



The inaugural Corn & Soybean Twilight Tour, organized by soybean agronomist Carrie Ortel and field crops agronomist Hunter Frame was a tremendous success! We were fortunate to enjoy beautiful weather for an amazing afternoon and evening of connecting with growers, researchers, industry professionals, and our Extension partners.

Field stops included:

Plant Pathology Update - David Langston, Plant Pathologist

Corn Irrigation - Julie Shortridge, Irrigation Specialist and Hunter Frame, Field Crops Agronomist

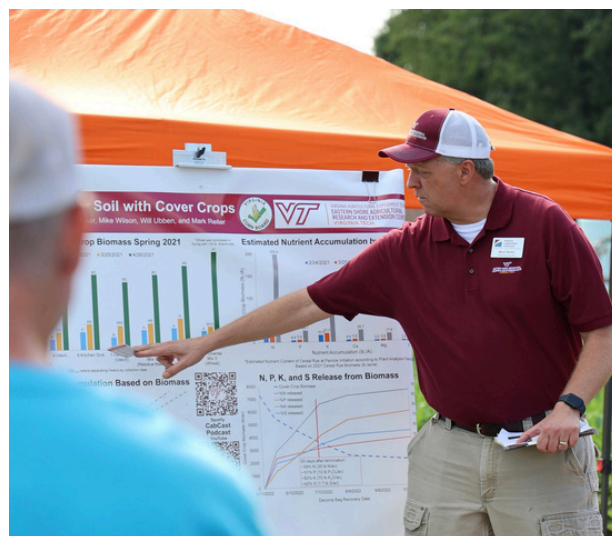
Corn OVT - Olga Walsh, Small Grain & Corn Specialist

Soybean Nutrition - Carrie Ortel, Soybean Agronomist and Mark Reiter, Soils & Nutrient Management Specialist

Entomology Update - Tim Bryant, Entomologist

Herbicide Injury - Michael Flessner, Weed Specialist and Jacob Forehand, Peanut Specialist

A huge shoutout to our dedicated faculty, staff, and students for making the tours happen—we couldn't have done it without you! And of course, this event wouldn't have been possible without the generous support of our sponsors: Virginia Soybean Association, Virginia Grain Producers Association, Mixon Seed Service, Colonial Soil & Water Conservation District, and Colonial Farm Credit (thanks for keeping us hydrated!).



AROUND THE AREC



VIRGINIA AGRICULTURAL EXPERIMENT STATION
TIDEWATER AGRICULTURAL
RESEARCH AND EXTENSION CENTER
VIRGINIA TECH.



Top row, left to right: CALS staff and faculty examine peanut plants in the field during the AREC tour • Research scientist Mychele Batista da Silva examines the leaf of a cotton plant in the plant diagnostic clinic • Entomology interns use sweep nets in cotton fields

Bottom row, left to right: PhD student Ranadheer Reddy Vennam prepares a drone for flight to collect leaf wilting data from a PVQE trial at Tidewater AREC • Entomology students and faculty during a visit at the Tidewater AREC • Field crops agronomy team harvesting corn

Photos by Suzanne Pruitt, Ranadheer Reddy Vennam, and C. Brandt Tate.



GIVING BACK

Faculty, staff, students, and summer interns came together in July to harvest and pack a surplus of sweet corn – all for a great cause! Thanks to their hard work, we were able to donate the corn to Healthy Chesapeake, which prepares meals for the Suffolk and Chesapeake locations of ForKids. The field crops agronomy team also made a delivery of cantaloupes in August. We're proud to support such a meaningful mission! Photo by Hunter Frame.



Congratulations

LINDA BYRD-MASTERS

Lead Technician,
Plant Pathology and Nematode Diagnostic Laboratory

2025 TIDEWATER AREC STAFF MEMBER OF THE YEAR

Photo by Suzanne M. Pruitt



We had a fantastic time at this year's VA AG EXPO! Thanks to Brooke Farms in Locust Grove for hosting the event this year, Virginia Soybean Association, Virginia Grain Producers Association, Virginia Cooperative Extension, Virginia Corn Checkoff Board, Virginia Small Grains Checkoff Board, Virginia Soybean Checkoff Board, and all of the amazing exhibitors and sponsors! We enjoyed seeing everyone and look forward to the event next year! Photos by Suzanne M. Pruitt for Virginia Tech.

FABA RESEARCH ANNUAL MEETING - August 7, 2025

The multi-state team of faba bean researchers and graduate students convened at the Tidewater AREC to share project progress and chart future directions across breeding, agronomy, pest protection, food science, and advanced genotyping.

Key priorities for the next phase include international collaborations for genetic exchange, expanded herbicide trials, and multi-location disease and insect control studies in 2025. Plans also include launching sensory analysis for consumer acceptance and implementing a newly developed enterprise budget template.

A grower and Extension Agent from the Faba Bean Advisory Committee also participated in the meeting and provided the group with useful insight into the potential implementation of the faba bean as a winter crop in the mid Atlantic.



Photo courtesy of Maria Balota



VA COTTON GROWERS FIELD DAY & TIDEWATER AREC PEANUT TOUR

August 15, 2025

A tremendous THANK YOU to our dedicated faculty, staff, administration, sponsors, growers, and all visitors who made this year's Cotton Field Day and Tidewater AREC Peanut Tour a true success. We had a record turnout this year and truly appreciate your support, partnership, and participation!

Tour stops included:

Cotton Foliar Disease Update - David Langston, Plant Pathologist

Insect Management - Tim Bryant, Entomologist & Sean Malone, Research Associate

Irrigating Cotton - Hunter Frame, Field Crops Agronomist

Fertilizer Placement Methods - Hunter Frame, Field Crops Agronomist

Crop Insurance - Jon Clarke, RCIS

Current/New Cotton Varieties - Industry Partners

Defoliation Demo Using UAV - Vijay Singh, Extension Weed Specialist

Disease Management in Peanuts - David Langston, Plant Pathologist

Weed Management in Peanuts - Jacob Forehand, Extension Peanut Specialist

The day also included private pesticide recertification credit and lunch. We greatly appreciate the support of Virginia Cotton Board, Virginia Cotton Growers Association, and Virginia Cooperative Extension for helping us organize the event!



ENTOMOLOGY FIELD DAY - August 28, 2025

On August 28, the first annual southeastern Virginia Entomology Field Day was held at Brickhouse farms in Chesapeake. While insect pest management is routinely discussed as part of field days and Extension meetings throughout the year, this event was an opportunity to go more in-depth on a variety of insect related topics in corn and soybean.



Photo by Tammy Mas

Speakers included entomologists Alejandro Del-Pozo (Hampton Roads AREC), Kemper Sutton (Eastern Shore AREC), and Tim Bryant (Tidewater AREC). Each speaker currently has a different primary crop focus, but all have a wealth of experience in various facets of insect pest management. It was a unique opportunity for growers to interact with all of them in one place and address questions.

Topics covered included the use of drones and beneficial insects as alternative management strategies, stink bug pest status and insecticide efficacy, and corn seed treatments and Bt technologies. A large portion of the program was spent in the field with a hands on demonstration of insecticide efficacy for pests of soybean, including corn earworm and soybean loopers. Proper sweep net technique, pest and beneficial insect identification, and economic thresholds were all discussed while attendees scouted the plots themselves.

RESEARCH SPOTLIGHT : WATERMELON ANTHRACNOSE

Emma Nieland, Graduate Student - Plant Pathology



Watermelon anthracnose is becoming an increasing concern for Mid-Atlantic growers, reducing yield and fruit quality. Nieland's research project (with plant pathologists David Langston and Doug Higgins) is focused on better understanding how this disease develops in Virginia and identifying the most effective management strategies to combat it. Laboratory work is in progress to establish baseline sensitivities to commonly used fungicides. This information will help detect shifts in fungicide sensitivity that may affect disease control in the field. Various molecular tools are also being utilized to study pathogen diversity, providing a clearer picture of how anthracnose populations may change over time.



In the field, trials are in progress to test various fungicides under natural disease pressure, while weekly scouting in Southeastern Virginia watermelon fields is underway to collect anthracnose isolates and track disease patterns. By combining laboratory and field research with similar efforts from 2024, the aim is to monitor fungicide sensitivity trends and strengthen management recommendations. Ultimately, this work aims to provide growers with practical, research-based advice to protect yield and extend the effective life of available fungicide tools.

Photos courtesy of Emma Nieland

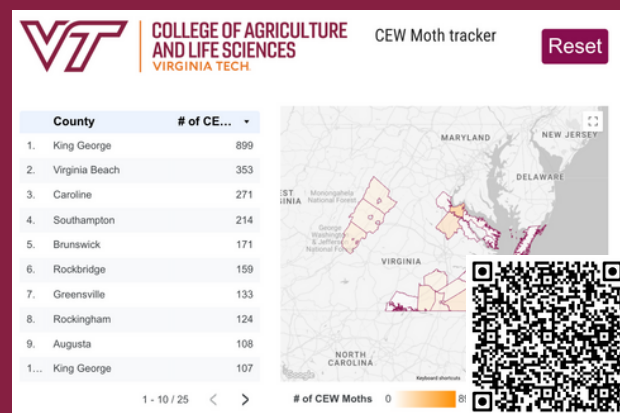
Corn Earworm Moth Tracker

Corn earworm threatens crops like soybeans, cotton, peanuts & specialty produce across Virginia. Most arrive via annual migrations from the South.

Thanks to 2025 support from the Virginia Soybean Board, pheromone traps were deployed statewide to track moth flights.

 Local monitoring helps pinpoint when & where to scout.

 View results using the new tool!



<https://cals.vt.edu/redirect/cew-moth-tracker>



Updated Submission Form

Nematode Diagnostic Lab

The Tidewater AREC Plant Pathology program offers nematode diagnostic services. For sampling and submitting details, please see our recently updated instructions and submission form here:

<https://bit.ly/43DHzbm>

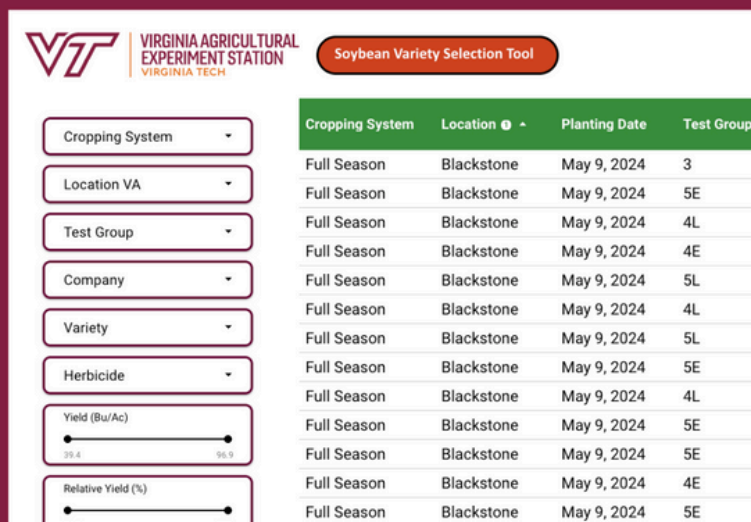


Soybean Variety Selection Tool

A new sortable tool is now available online. You can now sort by cropping season, location, test group, variety, and more!



<https://tinyurl.com/3tvwakxz>



Cropping System	Location	Planting Date	Test Group
Full Season	Blackstone	May 9, 2024	3
Full Season	Blackstone	May 9, 2024	5E
Full Season	Blackstone	May 9, 2024	4L
Full Season	Blackstone	May 9, 2024	4E
Full Season	Blackstone	May 9, 2024	5L
Full Season	Blackstone	May 9, 2024	4L
Full Season	Blackstone	May 9, 2024	5L
Full Season	Blackstone	May 9, 2024	5E
Full Season	Blackstone	May 9, 2024	4L
Full Season	Blackstone	May 9, 2024	5E
Full Season	Blackstone	May 9, 2024	5E
Full Season	Blackstone	May 9, 2024	4E
Full Season	Blackstone	May 9, 2024	5E

NEW WEBTOOL


TIDEWATER AGRICULTURAL
RESEARCH AND EXTENSION CENTER
VIRGINIA TECH

AGROCLIMATE VIEWER & PLANNER APP

FROM THE DIGITAL AG TECHNOLOGIES LAB



SCAN ME

<https://datl-chandel.github.io/Agroclimate/>

AGROCLIMATE VIEWER & PLANNER APP Key Features

Field Selection & Data Management:
Up to 5 fields per session

Vegetation Index (VI) Analysis:
NDVI for crop health tracking

Climatic Data Trends:
Field and soil climate, and water use trends

Weather Forecasting:
16-day hourly weather for crop planning

Soil Data:
Composition, pH, and
other characteristics down to 2 m

Growing Degree Days (GDD):
For 45+ crops using temperature-based
heat accumulation



VIRGINIA AGRICULTURAL EXPERIMENT STATION
TIDEWATER AGRICULTURAL
RESEARCH AND EXTENSION CENTER
VIRGINIA TECH

FROM THE DIGITAL AG TECHNOLOGIES LAB

Supported by: USDA, NIFA, NAPDC, Cotton Incorporated, Virginia Tech Tidewater Agricultural Research & Extension Center (TAREC), College of Agriculture and Life Sciences, and Department of Biological Systems Engineering.

The VA Peanut Hotline Report has begun for this season!

The number is 1-800-795-0700 and
the recording is updated mornings
Monday - Friday.

Growers can call in to get Last
Effective Spray Dates for leafspot
control (and Sclerotinia when
applicable) which is gathered from our
6 weather stations across southeast
VA, plus any other related info that
may be necessary.

The VA Peanut Cotton Infonet is also
available online at
<https://infonet.ext.vt.edu>

SCAN ME



Peanut - Cotton InfoNet



UPCOMING EVENTS

2025 Peanut Variety and Quality Evaluation (PVQE) Field Day



Wednesday, September 17, 2025
10:30 AM



1500 Slade Farm Road
Williamston, NC 27892



NC STATE UNIVERSITY



Join Us For:

- Industry/Crop Updates
- Breeder Updates
- Field Tours of Variety Trials

This is a free event and lunch is provided!

AGRICULTURAL TECHNOLOGY PROGRAM

Do you know a student who's passionate about agriculture, landscaping, or turfgrass—and ready to turn that passion into a career? Virginia Tech's Agricultural Technology Program offers a fast-paced, hands-on education that prepares students for success in just two years.



Join us for an information session on **October 9 at 6:30 PM at the Tidewater Agricultural Research and Extension Center (AREC) to learn more!** Attendees will discover how students can earn an Associate of Agriculture degree while gaining real-world experience and leadership skills. With specialization options in agribusiness, crop production, landscape management, livestock production, and turfgrass management, there's a path for every interest. Please share with educators, students, families, and members of the agricultural and green industry.

Visit agtech.vt.edu to learn more - registration link coming soon. We look forward to welcoming you!

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture (USDA), and local governments, and is an equal opportunity employer. For the full non-discrimination statement, please visit ext.vt.edu/accessibility.

If you are a person with a disability and desire any assistive devices, services, or other accommodations to participate in this activity, please contact Matthew Chappell, Tidewater AREC Director at (757) 807-6537/TDD 800-828-1120 during business hours of 8:00 a.m. to 4:30 p.m. to discuss accommodations five days prior to the event.

Recently Published:



VIRGINIA AGRICULTURAL EXPERIMENT STATION
TIDEWATER AGRICULTURAL
RESEARCH AND EXTENSION CENTER
VIRGINIA TECH.

Arinaitwe, Unius; Thomason, Wade; Frame, William Hunter; Reiter, Mark S.; Langston, David. Optimizing Maize Agronomic Performance Through Adaptive Management Systems in the Mid-Atlantic United States. *Agronomy*, 2025, 15(5), 1059, <https://doi.org/10.3390/agronomy15051059>

Chhetri, Kamal; Langston, David; Zeng, Yuan. *Tar Spot of Corn*. Virginia Cooperative Extension, SPES-726NP, 2025, https://www.pubs.ext.vt.edu/content/pubs_ext_vt_edu/en/SPES/SPES-726/SPES-726.html

Estienne, Mark J. *Enhancing Reproductive Performance by Boars Used for Pasture Mating*. Virginia Cooperative Extension, APSC-231, 2025, <https://www.pubs.ext.vt.edu/APSC/apsc-231/apsc-231.html>

Estienne, Mark J. *Swine Production in Virginia: A Summary Using Data from the 2022 Census of Agriculture*. Virginia Cooperative Extension, APSC-211NP, 2025, <https://www.pubs.ext.vt.edu/APSC/apsc-211/apsc-211.html>

Estienne, Mark J. *Using Artificial Insemination for Mating Sows to Heritage Breed Boars to Produce Crossbred Hogs Suitable for Niche Market Pork: A Demonstration Study*. Virginia Cooperative Extension, APSC-212, 2025, <https://www.pubs.ext.vt.edu/APSC/apsc-212/apsc-212.html>

Geiss, L., Ortmeier-Clarke, H. J., Zubieta, A. S., Conley, S. P., McNeal, J., Moseley, D., Naeve, S., Ortel, C., Preza Fontes, G., Ross, W. J., Vann, R., & Matcham, E. G. (2025). Understanding green stem in soybeans. *Crop, Forage & Turfgrass Management*. <https://doi.org/10.1002/cft2.70065>

Lindsey, L. E., Lopez-Nicora, H. D., Lindsey, A. J., Francisco, E. A. B., Lee, C. D., Matcham, E. G., Moseley, D., Ortel, C. C., Plumblee, M. T., ... See all authors. (2025). Effect of Hurricane Helene on US soybean production. *Crop, Forage & Turfgrass Management*. <https://doi.org/10.1002/cft2.70060>

Ofori, B., Frame, W. H., Stewart, R. D., Raper, T. B., Lewis, K. L., & Harris, G. (2025). Ammonia volatilization from conventional and enhanced-efficiency fertilizers under surface and subsurface placement. *Agricultural & Environmental Letters*. <https://doi.org/10.1002/agg2.70190>

Ortel, Carrie; Reiter, Mark; Haymaker, Joseph. *Considerations for Successful Tissue Testing in Soybeans*. Virginia Cooperative Extension, SPES-716P, 2025, https://www.pubs.ext.vt.edu/content/pubs_ext_vt_edu/en/SPES/spes-716/spes-716.html

Vennam, R. R., Beard, K. M., Haak, D. C., & Balota, M. (2025). Evaluation of peanut physiological responses to heat and drought stress across growth chamber and field environments. *Plants*, 14(17), 2687. <https://doi.org/10.3390/plants14172687>