



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

NEWSLETTER

JUNE 2025



Greetings From Our Director

As we transition into summer at Tidewater AREC, we welcome several graduate students and summer workers (most from our local high schools). As the average age of TAREC employees drops precipitously, the activity level ramps up tremendously. This summer, we have over 100 field research projects ongoing including projects at TAREC and with our generous producer-collaborators. Approximately 40% of our funding for these projects comes from USDA research and extension programs. Continued investments in these programs and others that support the Tidewater AREC directly and substantively benefit the farms we serve. While there is great uncertainty surrounding federal funding, as we approach the first day of summer, we at TAREC remain committed to meeting the needs of our stakeholders and community. We appreciate your continued support and hope that you have a productive, safe, and joyful summer.

-Matthew

In This Issue

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

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-US-*



Join us!

2025 AREC Field Days



Photo by Craig Newcomb for Virginia Tech.

Each year, Virginia Tech's 11 Agricultural Research and Extension Centers invite the public in for an in-depth look at the discoveries and practices propelling the future of agriculture, Virginia's largest private industry. Spread throughout the commonwealth, the Agricultural Research and Extension Centers (AREC) bring the expertise of Virginia Tech College of Agriculture and Life Sciences researchers directly into the communities they serve. **Join us for a field day here at the Tidewater AREC or find a field day happening near you in the 2025 calendar:**

Read more: <https://bit.ly/4hVaz35>



FrameWork in the Field Blog



Visit the New 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 more: <https://bit.ly/43o7lcY>



Welcome

New Faces at Tidewater AREC



Janessa Fiorenza
Lab & Research Specialist
Field Crops Agronomy



Arun Manimozhian
Postdoctoral Associate
Precision Ag & Data
Management



Mike Wilson
Graduate Research Assistant
Soybean Agronomy



Frank Erukainure
PhD Student
Biological Systems
Engineering

CORN AND SOYBEAN TWILIGHT TOUR



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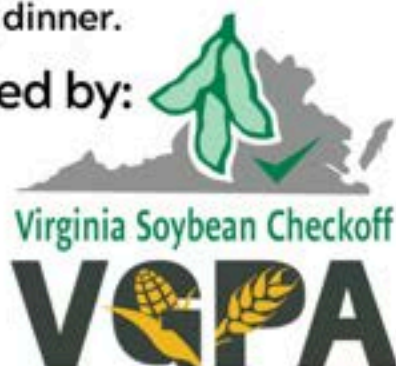
1045 Hare Road
Suffolk, VA 23437



Wednesday,
July 23, 2025

Join us at the Tidewater AREC for the
inaugural Corn and Soybean Twilight Tour!
We will begin with field tours at 3 PM
followed by dinner.

Sponsored by:



HIGHLIGHTS

- ✓ Corn Irrigation
- ✓ Herbicide Injury
- ✓ Soybean Nutrition
- ✓ Entomology Update
- ✓ Plant Pathology Update
- ✓ Corn OVT

[Register Here](#)



Virginia Cooperative Extension
Virginia Tech • Virginia State University

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 at (757) 807-6537/[TDD number is 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.



2025 Soil Fertility Workshop and Cover Crop Field Day

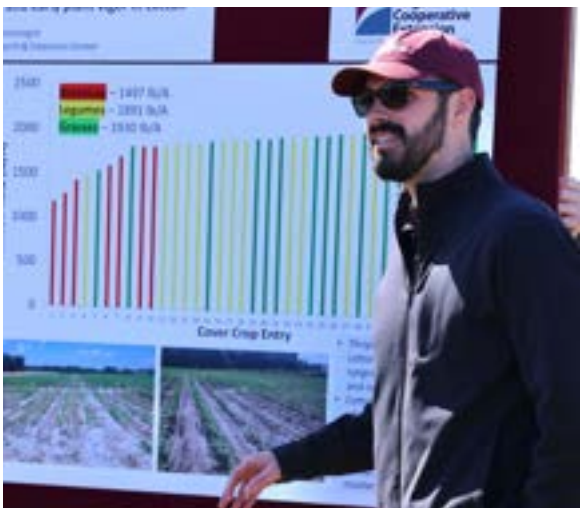
This year's Soil Fertility Workshop and Cover Crop Field Day on March 21st featured speakers from Virginia Tech, Virginia Cooperative Extension, Virginia Farm Bureau, University of Arkansas, and Oklahoma State University. Topics covered in the morning session included:

- In-season Potassium Management in Soybeans
- Insight in to Grain Markets & Profitability in Today's Marketplace
- Herbicide Interactions with Cover Crops
- Planting Corn Green into Hairy Vetch
- Changes in Soil Health After 8 Years of Cover Crops & No-Till
- Biological & Biostimulant Products in Row Crops

The afternoon session included demonstrations of the Soil Warrior strip-till implement, Montag dry fertilizer applicator, and Hooper precision ag demo with UAV & cover crop seeding.

Additional presentations were delivered in the field by Field Crops Agronomist Hunter Frame, Entomologist Tim Bryant, and Postdoctoral Researcher Joseph Haymaker.

Thank you to our sponsors, speakers, demonstrators, and attendees for another successful field day!



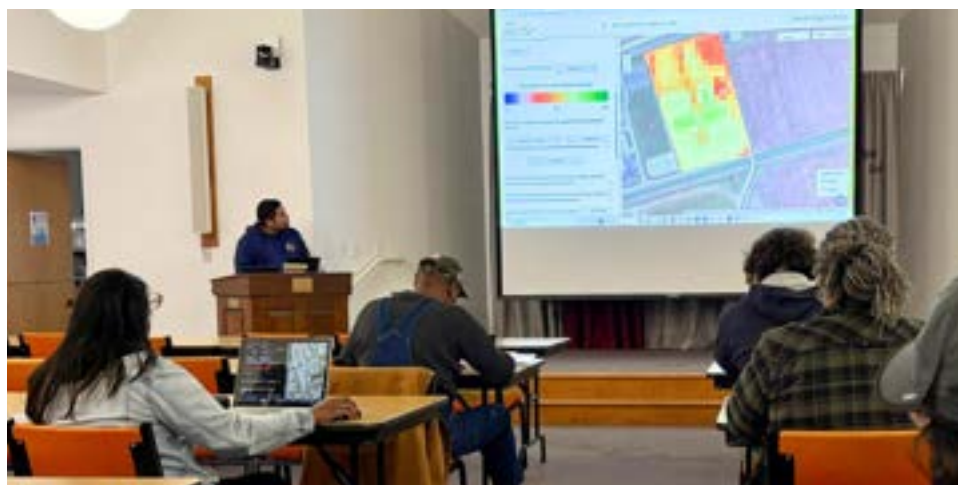


Technology, Economy, and Wellness Workshop

On April 9th, growers and Extension agents took part in a workshop presented by the Virginia Tech Digital Technologies Lab and Virginia State University's Small Farm Outreach Program. Sessions included:

- Using the new Agroclimate Viewer & Planner App
- Financial empowerment strategies for farmers
- Holistic wellness strategies for farmers
- Evaluating economic returns
- Precision technologies for weed management

Thank you to everyone who participated!





Top row, left to right: Ph.D. student C. Brandt Tate and summer intern Jenna Cain collect soil samples; Entomologist Tim Bryant during the Mid-Atlantic Wheat Tour; Postdoctoral researcher Rahul Raman collecting measurements from faba plants · Bottom row, left to right: Soybean agronomy technician Erin Myers; Precision ag specialist Abhilash Chandel demonstrates the new AgroClimate Viewer App for Joe and Shelley Barlow; PVQE team planting at the Hare Road farm - Tidewater AREC.

Staff Spotlight: Zoe Dunlow

Agricultural Supervisor, PVQE

How long have you been at TAREC and how has your role changed throughout that time?

I started here in the summer of 2015 as a summer intern for the plant pathology program. I then became a 1500-hour technician for the same program from 2016-2018. I left in 2018 for a full-time position with VDACS and later returned to TAREC as an agriculture supervisor for the PVQE program from 2020 to now.

What do you enjoy most about your job?

I enjoy getting to work within the PVQE and testing the different peanut varieties in a wide range of locations within the VCE region for later release as commercial cultivars. I also enjoy the collaborations we have with other ARECs and getting to interact with farmers.

What is the most challenging aspect of your job?

I'd say the most challenging aspect will always be planning around the weather when it comes to planting and harvest season. That's the current situation we are dealing with, especially when having tests in VA and NC, plus two dig dates each test. Fingers crossed always!!

Are there any personal interests and/or hobbies that you enjoy outside of work that you would like to share with readers?

While I have many interests and hobbies, a few of my favorites are softball, the beach, and yearly trips with some of my friends.





My IPM for Row Crops

MyIPM for Row Crops provides Integrated Pest Management (IPM) information for conventional and organic production of important row crops including corn, peanut, soybean, cotton, and sorghum.

DOWNLOAD THE APP



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>

Soybean Variety Selection Tool				
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	



We were pleased to welcome Virginia Tech College of Agriculture and Life Sciences Dean Mario Ferruzzi on his first visit to the Tidewater AREC on May 30th! Joined by CALS Associate Dean Mary Burrows, he connected with our faculty, staff, and students for meaningful discussion. The visit included a tour of our farm and lab facilities to more thoroughly explore the innovative research and impactful programs happening at our Center.

AREC Seminar Series

JOIN US FOR ON JULY 27TH AT 12:30 PM TO LEARN MORE ABOUT THE TIDEWATER AGRICULTURAL RESEARCH AND EXTENSION CENTER!

The Tidewater AREC in Suffolk, Virginia, was established in 1914 and is committed to applied research and educational programs that support profitable agriculture while improving the quality of life in the Tidewater region of Virginia and North Carolina and beyond. Research and Extension programs include row crop agronomy, soil fertility/health (including cover crops), variety trials, pest/pathogen management, precision agriculture and data management, as well as swine production.



<https://viriniatech.zoom.us/j/89625059534>

Meeting ID: 896 2505 9534



MORE INFORMATION AND PREVIOUS SEMINAR RECORDINGS AVAILABLE ONLINE:
<https://www.arec.vaes.vt.edu/arec/seminar-series.html>

Estienne, M.J.; Lee, J.W.; Niblett, R.T.; Humphrey, B.D.; Monegue, H.J.; Lindemann, M.D. Reproductive Performance and Milk Composition of Sows Fed Diets Supplemented with an Immunomodulator. *Animals* 2025, 15, 1427. <https://doi.org/10.3390/ani15101427>

Balota, M., Boote, K., Dean, L. L., Sanz-Saez, A., Pilon, C., Cazenave, A., Zurweller, B., and Payton, P. (2025) “Peanut Physiology and Tolerance to Abiotic Stresses”, *Peanut Science* 52(2), p.17-56. doi: <https://doi.org/10.3146/0095-3679-52.2-PS1632>.

Balota, Maria. *Does Prohexadione Calcium Increase Peanut Yields?* Virginia Cooperative Extension, SPES-675NP, 2025, <https://www.pubs.ext.vt.edu/SPES/spes-675.html>.

Vennam, Ranadheer Reddy; Balota, Maria. *The Toll of Mid-Season Heat and Drought on Peanut Yield and Grade in Virginia*. Virginia Cooperative Extension, SPES-672NP, 2025, https://www.pubs.ext.vt.edu/content/pubs_ext_vt_edu/en/SPES/spes-672/spes-672.html.

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Sahayaraj, S.R.E., Chandel, A.K., Balota, M., Chappell, M. and Sridhar, V., 2025, May. Leveraging stacked generalization for peanut maturity mapping using aerial multispectral imagery and growing degree days. In *Autonomous Air and Ground Sensing Systems for Agricultural Optimization and Phenotyping X* (Vol. 13475, pp. 202-212). [SPIE](#).

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Chandel, A.K., Khot, L.R., Stöckle, C.O., Kalcsits, L., Mantle, S., Rathnayake, A.P. and Peters, R.T. 2025. Canopy transpiration mapping in an apple orchard using high-resolution airborne spectral and thermal imagery with weather data. *Agriengineering*, 7(5), p.154. <https://doi.org/10.3390/agriengineering7050154>.

Kothawade, G.S., Khot, L.R., Chandel, A.K., Molnar, C., Harper, S.J. and Wright, A.A., 2025. Feasibility of Little Cherry/X-Disease Detection in *Prunus avium* Using Field Asymmetric Ion Mobility Spectrometry. *Sensors*, 25(7), p.2034. <https://doi.org/10.3390/s25072034>.

Halder, S., Banerjee, S., Youssef, Y.M., Chandel, A., Alarifi, N., Bhandari, G. and Abd-Elmaboud, M.E.[©], 2025. Ground-Surface Water Assessment for Agricultural Land Prioritization in the Upper Kansai Basin, India: An Integrated SWAT-VIKOR Framework Approach. *Water*, 17(6), p.880. <https://doi.org/10.3390/w17060880>.

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