

SOUTHERN PIEDMONT AGRICULTURAL RESEARCH AND EXTENSION CENTER VIRGINIA TECH.

NEWSLETTER **APRIL 2025**



Greetings From Our Director

Greetings! We are excited to transition from our biannual newsletter to a quarterly publication bringing you updates, research highlights, and news from the Southern Piedmont AREC more frequently.

The beginning of a new season is always a time for planning and looking ahead. Our commitment to our land grant mission through generating and delivering research-based knowledge that addresses the needs of our stakeholders and creating signature educational programs and opportunities to train future generations of professionals and educators is the foundation of our success.

Here, we will showcase our ongoing research and outreach initiatives and the exemplary work of our team members. We welcome your feedback, questions, and ideas as we continue this journey together. On behalf of the Southern Piedmont AREC, I thank you for your support.

-Arash

In This Issue

- Announcements
- Meetings & Conferences
- Research & Staff Spotlights
- Ag Awareness Days
- Publications & More



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VIRGINIA AGRICULTURAL EXPERIMENT STATION DEWATER AGRICULTURAL RESEARCH AND EXTENSION CENTER

JOIN US FOR 2025 AREC FIELD DAYS

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. Find a field day happening near you!

Read more here: https://bit.ly/4hVaz35



Photo by Craig Newcomb for Virginia Tech.





Photo by Sam Dean for Virginia Tech.

SUMMER INTERNS NEEDED!

We are accepting applications for summer internships for the following programs:

- ENTOMOLOGY
- PLANT PATHOLOGY
- **TOBACCO AGRONOMY**

For more information and to apply, please visit: https://bit.ly/SPARECintern



WORK WITH US - AVAILABLE POSITIONS

- AG TECHNICIAN
- **AGRICULTURAL SPECIALIST III**

For more information and to apply, please visit: https://bit.ly/4dkqwx2







We've had a busy start to 2025 with a packed schedule of meetings and conferences! Thank you to everyone who has been involved with the following events:

January 10 - Crop Management Meeting, SPAREC

January 21 - Tobacco Production Meeting, SPAREC

January 12-15 - AFGC Annual Conference, Florida

January 29 - VFGC Winter Forage Conference, SPAREC

February 7 - Leadership Council Meeting - SPAREC

March 3-4 - Dept. Head/ AREC Directors Meeting - SPAREC

March 20 - Apr 9 - Agribusiness Producer Meetings (statewide) April 9 - Technology, Economy, & Wellness Workshop - TAREC

















Photos by Margaret Kenny, Katie Payne, and Suzanne Pruitt for Virginia Tech.



LEADERSHIP COUNCIL

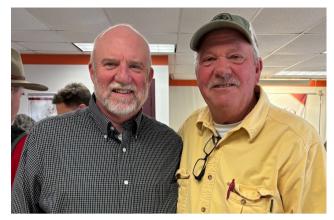


Photo by Suzanne M. Pruitt.

Leadership Council members pictured left to right: C.Taylor Clarke, Gregg Gordon, Jennifer Atkins, Whit Morris, Jay Jennings, Robert Mills, Richard Hite, J.B. Daniel, Tony Banks, and Edward Baskerville.

Leadership Council members not pictured: Jennifer Morris, Stewart Livesay, Dalton Bennett, and Chuck Arnason.

Our Leadership Council most recently met on February 7th. The agenda covered CALS updates from VAES Director Mary Burrows, SPAREC updates from Director Arash Rashed, and program updates from our faculty members.

Congratulations to Edward Baskerville - pictured here (right) with Council Chairman Whit Morris (left) - on his recent retirement! We are grateful for his many years of service to our Council and wish him the best in this new chapter!



Photo by Margaret Kenny.

RESEARCH SPOTLIGHT

KAMAL CHHETRI

Inspired by a passion for plant pathology, Ph.D. student Kamal Chhetri joined the Zeng Lab at SPAREC in 2023 and is making strides in sustainable disease management for crops with a focus on corn foliar disease epidemiology.

Chhetri uses do-it-yourself, low-cost, solar-powered spore trap samplers and a high-throughput sequencing approach to monitor airborne fungal pathogens in corn fields. High-throughput sequencing enables scientists to quickly and efficient read the DNA sequences of numerous samples simultaneously using advanced technology.

Funded by the Virginia Corn Board, Chhetri's study holds significant potential for the development of more innovative tools for pathogen monitoring, early disease warning, and informed fungicide decision-making.

Read the full VT News story here: https://bit.ly/kamalchhetri















Top row, L to R: Take home day for the SPAREC heifer development program, Graduate Student Shirin Parizad samples winter wheat, Visiting Scholar Hadi Farrokhzadeh works with cotton plants in the greenhouse Bottom row, L to R: Planting soybeans, Charlotte County VCE Agent Joanne Jones at the 2025 Crop Management Meeting, CALS department heads and AREC directors enjoy dinner break together during March meetings

STAFF SPOTLIGHT: LAURA DEBUSK, AG SPECIALIST

How long have you been at SPAREC and how has your role changed during that time?

"I started working at SPAREC in 2018 as a lab/field technician for. Dr. Charles Johnson, helping with data collection and preparing and analyzing samples for tobacco cyst nematode research. I then moved to the Field Crew as an Ag Specialist in spring of 2020."

What do you enjoy most about your job?

"I love the physical nature of it, being able to get out and work with my hands. I also like that I do something different every day – one day may be forages, the next may be tobacco in the morning and cattle in the afternoon. The diversity of the work we get to do keeps it interesting and encourages versatility."

What is the most challenging aspect of your job?

"Keeping up with the details of so many different programs, which all have multiple projects in the works, is extremely challenging. We can be out working in the field and receive an email with a question of what fertilizer we used and when we used it for a different PI or test or remembering year to year the different details of tests from the past."

What personal interests or hobbies do you enjoy outside of work?

"In addition to my current full-time role, I am working on a Master's degree in environmental sciences through the OMALS program. When not working or studying, I enjoy spending time with my dogs, working on my family farm, gardening, and reading."



This is our 17th year of hosting Ag Awareness Day events! This year, third grade students from Nottoway and Lunenburg counties experienced 15 different learning stations, engaging in hands-on activities like paper making, vermicomposting, working with simple machines, and milking dairy cows. This successful event was made possible by the invaluable support of volunteers, staff, and community partners including: Virginia Agricultural Experiment Station, Virginia Farm Bureau Federation, Virginia Department of Military Affairs, Fort Barfoot, Virginia Cooperative Extension, Nottoway FFA Chapter, Virginia Department of Forestry, Virginia Department of Wildlife Resources, Piedmont Soil & Water Conservation District, USDA Natural Resources Conservation Service, Agrium, Brickland Hatchery, Rocky Hill Farm LLC, The Dairy Alliance, WestRock, Richlands Dairy & Creamery, and Triple R Dairy. Fifth graders from Nottoway, Lunenburg, Amelia, Brunswick, Mecklenburg, and Prince Edward counties enjoyed learning the math and science of baking bread thanks to King Arthur Baking Company's Bake For Good program. Additional presentations and hands-on activity stations (including animal cells,

enjoyed learning the math and science of baking bread thanks to King Arthur Baking Company's Bake For Good program. Additional presentations and hands-on activity stations (including animal cells, DNA, Oobleck, and the apple/earth) were made possible by collaborations with the Society of St. Andrew - Virginia, Virginia Cooperative Extension, Virginia Department of Military Affairs, Department of Defense Starbase-Blackstone, Crown Orchard, Triple R Diary, Colonial Farm Credit, and Nottoway FFA Chapter. Thank you to everyone who makes our annual event possible!













Ag Awareness Day programs are free for students!
Please consider a donation to help us continue offering these impactful experiences! https://crowdfund.vt.edu/SPAREC

(*Graduate students and scholars)

Nikoukar, A.*, Sadeghi, R., Eigenbrode, S. D., Price, W. & A. Rashed. 2025. <u>Wireworms (Coleoptera: Elateridae) Swipe Right on Their Hostplant Using Root Volatiles and CO2</u>. *Scientific Reports*, 15:10227.

Parizad, S.* & A. Rashed. 2025. Can barley yellow dwarf virus (BYDV) incidence in winter wheat be influenced by endophyte-tall fescue association in grazing lands? *Entomologia Generalis*, in press.

Farrokhzadeh, H.*, Jaronski, S. & A. Rashed. 2025. Reduced survivorship, host preference, and feeding damage by Helicoverpa zea (Lepidoptera: Noctuidae) on cotton plants colonized by the endophyte Beauveria bassiana (Ascomycota: Hypocreales). *Journal of Economic Entomology*, in press.

FARM & FACILITY UPDATES

Recent upgrades & repairs completed: pond repairs, new roof on irrigation pumphouse, and new plastic on greenhouse





FOLLOW VIRGINIA TECH FORAGE EXTENSION

The Virginia Tech Forage Extension Team aims to provide producers with program updates and research-based information on all topics related to forage production in Virginia.

- https://www.facebook.com/virginiatechforages
- https://www.instagram.com/virginiatechforages/



Virginia Tech has 11 Agricultural Research and Extension Centers (ARECs) across Virginia which play a pivotal role in connecting the university to local communities around the state. Have you wondered what research and outreach is happening at ARECs across the state?

The AREC Seminar Series is a place to find out more about the research and Extension programs happening at ARECs across Virginia. The series aims to promote collaborations between the ARECs, with each seminar being recorded and shared.

https://bit.ly/arecseries

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