# SOUTHERN PIEDMONT

Agricultural Research and Extension Center

Tobacco has been the backbone of agriculture in southern Virginia for generations and remains the most valuable field crop in the region today. Research and extension programs at the Southern Piedmont Agricultural Research and Extension Center are addressing production practices and pest management factors that may impact resiliency in yield. Our weather patterns have changed over the last decade with periods of excessive rainfall and extended dry periods within the same season and the result has negatively impacted both yield and cured leaf quality.

Research is underway to identify yield-limiting factors of flue-cured tobacco. Producing consistently high yields of marketable tobacco is the key to profitability. Much progress has been made in increasing the yield potential of our varieties and pest management programs continue to evolve to protect potential yield. A primary area of research interest is promoting a robust root system to enable a tobacco crop to withstand multiple environmental stresses. Biological root stimulant products have been demonstrated to have positive impacts on other crops and we are presently evaluating potential benefits with tobacco. New soil moisture monitoring technology is being used to better understand tobacco rooting patterns and evaluate potential new irrigation practices to better examine the water utilization needs of a tobacco crop.

OptRx Crop Sensor units are used to map plant health and nutrient status over an entire field to develop guidelines for variable rate applications of plant nutrients to fluecured tobacco.

### PARTNER WITH US

2375 Darvills Road Blackstone, VA 23824 (434) 292-5331 www.arec.vaes.vt.edu/arec/ southern-piedmont

"As a new faculty member, I look forward to working with the forage and livestock producers of Virginia to build a forage research and extension program that will support their current needs and growing interests to advance the production potential,



environmental sustainability, and success of their operations."

**KATIE PAYNE** APPLIED FORAGE SYSTEMS SPECIALIST "Chuck Johnson's research with disease management test plots helped my farm stay profitable throughout my career. His dedication to help tobacco producers with disease management was very important in making tobacco grown in



Virginia known as the best in the world. The many years of his professional research are truly one of the industry's greatest assets."

JIM JENNINGS MECKLENBURG CO. TOBACCO PRODUCER

## SOUTHERN PIEDMONT AREC AT A GLANCE



#### DISCIPLINES

- Tobacco agronomy
- Tobacco curing technology and efficiency
- Tobacco disease management
- Forage production and management
- Ruminant livestock
- Small fruit disease management

#### **INNOVATIVE TECHNOLOGIES**

- Tobacco curing, monitoring, and automation
- Sucker control application technologies
- $\boldsymbol{\cdot}$  Drones to assess crop development
- Silvopasture

#### FACILITIES

- 1,180-acre farm with 130 acres of crop research plots, 120 acres of research grazing, and a 40acre silvopasture area
- Specialized tobacco curing facilities
- Extensive greenhouse facilities and high tunnels
- $\cdot$  150-person auditorium
- Cox Road Lab

#### **INDUSTRY PARTNERS**

- Tobacco industry and growers
- Agrichemical industry
- $\boldsymbol{\cdot}$  Forage and livestock industry
- Virginia Farm Bureau, SWCD, NRCS, VDACS

#### ABOUT THE SOUTHERN PIEDMONT AREC

The Southern Piedmont AREC near Blackstone, Virginia was established in 1974 and conducts strong commodity-oriented research and Extension programs to provide information and technology to the agricultural industry. Programs enhance the economic viability and environmental stewardship of tobacco, forage crops, beef cattle, small fruit, and other field and specialty crops.

#### A COLLABORATIVE NETWORK

The ARECs are a network of 11 centers strategically located throughout the state that emphasize close working relationships between Virginia Agricultural Experiment Station, Virginia Cooperative Extension,

and the industries the work with. The mission of the system is to engage in innovative, leading-edge research to discover new scientific knowledge and create and disseminate science-based applications that ensure the wise use of agricultural, natural, and community resources while enhancing quality of life.

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg





