

EASTERN VIRGINIA

Agricultural Research and Extension Center



One of the current research projects at the Eastern Virginia AREC involves the development of soybean varieties and germplasm with added values. Soybean meal is widely used in animal feed; however, soybean has several anti-nutritional factors that prevent animals from digesting protein efficiently. The most economic and reliable way to improve animals' protein digestibility is to feed them with meal made with soybeans that contain naturally low concentrations of anti-nutritional factors. Currently, few commercial soybean varieties possess these characteristics. Fortunately, with the support of the Virginia Soybean Board, our group has made great progress in meeting this important market need.

In 2014, we started to combine multiple traits such as implemented multiple breeding lines in order to provide stakeholders with soybean varieties that contain significantly improved feed efficiency.

Ultimately, these projects can position us to make a major impact on the soybean industry by adding value to current soybeans, expanding market share, and enhancing U.S. soy value proposition in key feed markets in the world. Moreover, this project particularly helps to increase Virginia soybean growers' feed market share since Virginia farmers will have first access to the value-added varieties adapted to Virginia.

Bo Zhang, assistant professor in the School of Plant and Environmental Sciences, works on ways to bring a new strain of edamame to Virginia.

PARTNER WITH US

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 **VTEVAREC**

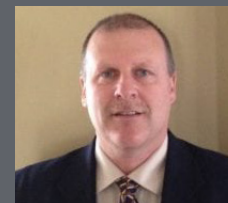
 **@VT_EVAREC**

"At the Eastern Virginia AREC, we are examining the use of aerial imagery from drones to help us with fertility decisions in wheat. By using data from aerial images, we now have the potential to make more economically and environmentally sound fertility decisions during the growing season."



JOSEPH OAKES
SUPERINTENDENT, EASTERN VIRGINIA AREC

"JoMar and our customers have greatly benefitted from our relationship with the Eastern Virginia AREC. Year to year, this is one of the best (if not the best) wheat trials that we have. We trust the data and it assists us in making proper advancements. The execution of excellence is a staple of the Eastern Virginia AREC."



BRYAN GERARD
PRESIDENT, JOMAR SEEDS

EASTERN VIRGINIA AREC AT A GLANCE



DISCIPLINES

- Small grain breeding and variety testing
- Soybean breeding and variety testing
- Disease and pest management
- Fertility management

INNOVATIVE TECHNOLOGIES

- Drones to assist in nutrient management and assess disease progression
- Weather station with real-time weather data

FACILITIES

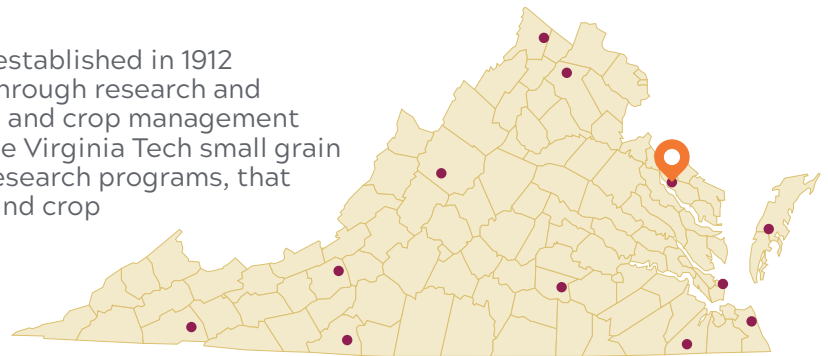
- 215 acres of crop land (53 acres owned by Virginia Tech, 162 acres leased)
- Modern seed lab and shop space

INDUSTRY PARTNERS

- Small grain and soybean industries
- Small grain and soybean commodity boards

ABOUT THE EASTERN VIRGINIA AREC

The Eastern Virginia AREC in Warsaw, Virginia, was established in 1912 and serves Virginia's grain and soybean industries through research and educational programs leading to improved varieties and crop management practices. Our research objectives are to support the Virginia Tech small grain and soybean breeding programs, along with other research programs, that contribute to economically and environmentally sound crop production in Virginia and across the nation.



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



VIRGINIA AGRICULTURAL
EXPERIMENT STATION
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Virginia Tech • Virginia State University

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