

EASTERN VIRGINIA Agricultural Research and Extension Center



Variable potash being applied to a grower's field in Virginia Beach, VA before soybean planting.

Variable rate technology is an expensive transition for farmers, requiring a large up-front cost with the intent to improve efficiency on the farm over time. While research in the Midwest has found that variable rate technology has the potential to reduce fertilizer by up to 41% through precise recommendations, little research has been done in Virginia to determine the return on investment (ROI) to growers. Through a series of listening sessions with producers across the state, growers indicated that their number one need is a breakdown of ROI for variable rate lime, potash, and seeding prescriptions.

With funding from an integrated internal competitive grant from the College of Agriculture and Life Sciences, the AREC is working with several growers across the state to evaluate the ROI when implanting pre-plant variable rate fertility applications on Virginia grain farms. This research is a collaboration between Joseph Oakes, EVAREC Superintendent; Carrie Ortel, Extension Soybean Agronomist; and Robbie Longest, Essex County ANR Extension Agent. The main potential impact is to provide Virginia growers and extension agents with unbiased, research-based ROI information as to how long or what farm size is needed to break-even or turn a profit when using variable rate technology.

PARTNER WITH US

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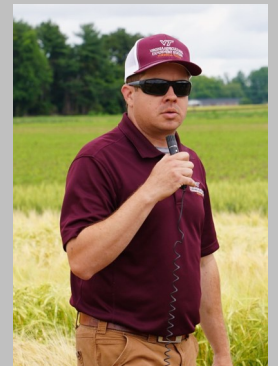
"JoMar and our customers have greatly benefitted from our relationship with the Eastern Virginia AREC. Year to Year, this is one of the best (if not the best) wheat trials that we have. We trust the data and it assists us in making proper advancements. The execution of excellence is a staple of the Eastern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



Bryan Gerard

President, JoMar Seeds

"We are thrilled to be partnering with local extension agents and growers to tackle some of their biggest questions, one of them being the profitability of variable rate fertility. As we look forward to 2030, we aim to focus on ROI, applied research, and real solutions focused on meeting the needs of growers in Eastern Virginia."



Joseph Oakes

Superintendent, Eastern Virginia AREC

Eastern Virginia AREC



SMALL GRAIN BREEDING

- Soft red winter wheat
- Malt barley
- Focus of program is high-yielding, disease resistant lines adapted to Mid-Atlantic and Southeast

AGRONOMY

- Soybean and wheat agronomics, production practices, intensive management, ROI
- ROI for variable rate fertility

SOYBEAN BREEDING

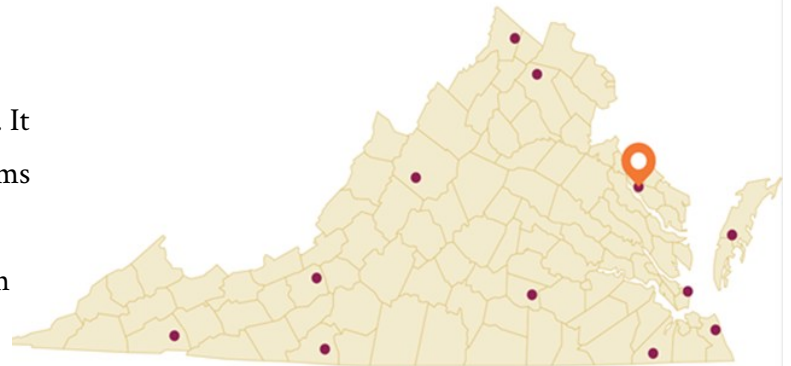
- Feed grade: GMO, early maturity and high yield
- Food grade: Non-GMO, soyfood

SPECIALTY CROPS

- Agronomics of faba bean production

ABOUT EASTERN VIRGINIA AREC

Eastern Virginia AREC in Warsaw, Virginia, is one of 11 AREC's under the Virginia Agricultural Experiment Station. It was established in 1912 and serves Virginia's grain and soybean industries through research and educational programs leading to improved varieties and crop production practices. Our research objectives are to support Virginia's grain and soybean producers through applied agronomic research that enhances their bottom line, and to support the Virginia Tech small grain and soybean breeding programs.



Check our Eastern Virginia Crop Talk, a podcast brought to you by Eastern Virginia AREC and Essex County Cooperative Extension. The podcast features discussion on current research and management of grain crops in the Northern Neck and Middle Peninsula. Listen and subscribe on Spotify.



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