

HAMPTON ROADS

Agricultural Research and Extension Center



Jayesh Samtani is investigating soil solarization and anaerobic soil disinfestation as alternative pest management strategies to methyl bromide fumigation in annual plasticulture strawberry production. He hosts field days at the AREC to demonstrate these techniques to growers.

The Hampton Roads AREC addresses water management, pest control, and production practices for horticultural crops and landscapes.

A plant pathologist addresses nursery diseases and tactics to reduce disease inoculum in recycled irrigation water. One horticulturist maximizes irrigation and fertilizer efficiency in container nursery production, while another utilizes rain gardens and other sustainable techniques to demonstrate water management in landscape settings.

Modeling and managing urban stormwater for cities and watersheds in Virginia is a top priority for the AREC's water engineer. An entomologist addresses new insect pests that target nursery crops, while a weed scientist conducts research to control troublesome weed species in ornamentals, turfgrass, and fruit production. The evaluation of new strawberry and blackberry varieties for the region, along with alternatives to methyl bromide fumigation, are under the purview of the AREC's small fruit specialist.

Faculty members work closely with the Virginia Nursery and Landscape Association, the Virginia Turfgrass Council, and the Virginia Strawberry Growers Association, among others. Master Gardener volunteers help maintain the arboretum, butterfly garden, and 10 other demonstration gardens which are open to the public.

PARTNER WITH US

1444 Diamond Springs Road Virginia Beach, VA 23455
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"I collaborate across U.S. and international institutions and agencies in concert with state and national stakeholders to identify system-based basic and applied research that will lead improved resource efficiency and profitability in specialty crop production, namely ornamentals. This information is translated and disseminated to scientific colleagues and industry stakeholders through on-farm evaluations, webinars, podcasts, social media, and traditional Extension products."

JIM OWEN
ASSOCIATE PROFESSOR
OF PLANT AND
ENVIRONMENTAL SCIENCE



"David Sample developed a complex stormwater model of the Kellam site and several others throughout the city. He was instrumental in improving our understanding of runoff water quality and treatment in the City of Virginia Beach."

GREG JOHNSON
FORMER STORMWATER
PLANNING DIVISION
DIRECTOR
CITY OF VIRGINIA BEACH

HAMPTON ROADS AREC AT A GLANCE



DISCIPLINES

- Nursery crops
- Pest management
- Small fruit production
- Stormwater management
- Turfgrass maintenance

INNOVATIVE TECHNOLOGIES

- Anaerobic soil disinfestation
- Digital image analysis
- Solar-heated greenhouse
- Stormwater modeling
- Use of drones

FACILITIES

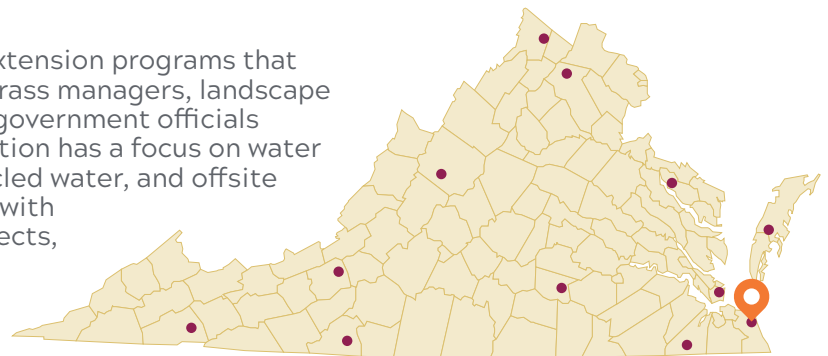
- 7 laboratories
- 7 greenhouses
- 3 classrooms
- Container and field research areas

INDUSTRY PARTNERS

- Nursery industry
- Lawn care
- Landscape industry
- Strawberry producers
- City governments

ABOUT THE HAMPTON ROADS AREC

The Hampton Roads AREC conducts research and extension programs that benefit container and field nursery producers, turfgrass managers, landscape maintenance firms, small fruit producers, and local government officials addressing urban stormwater management. The station has a focus on water use, including irrigation efficiency, diseases in recycled water, and offsite movement of nutrients. Faculty members also work with horticultural crops, addressing disease, invasive insects, and weed pests.



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