October 2023

Innovative "Tossed" Competition Emphasizes the Importance of NJAES Research and Extension

A "Tossed" cooking competition brought together students, faculty, and researchers from NJAES and the School of Environmental and Biological Sciences, along with food industry experts. The event highlighted the importance of the university's research and extension programs in food science and agriculture. Students competitors were tasked with preparing a gourmet salad in under 30 minutes, using mystery ingredients provided by NJAES research farms and the Rutgers **Food Innovation Center**. The competition also served to highlight the university's mission of giving back to the community through the cultivation and donation of Rutgers-grown produce.

Rutgers Innovators Named Edison Patent Award Recipients in Agriculture

L-R: Andy Wyenandt and Jim Simon examine downy mildew resistant basils in NJAES field trials.

Distinguished Professor **Jim Simon** and Extension Specialist **Andy Wyenandt**, in the Department of Plant Biology, will be recognized with Edison Patent Awards by the Research & Development Council of New Jersey in November. They utilized innovative and traditional plant breeding technologies to identify particular genes in basil that they later used to breed disease- and climate-resistant varieties. Certain varieties, including Rutgers Devotion DMR (downy mildew resistant), Rutgers Obsession DMR, and Rutgers Passion DMR, were each bred to withstand the deadly pathogen BDM (basil downy mildew). Their work is highlighted in the science-in-action film *Fields of Devotion*, which focuses on the process of identifying the genes for disease resistance in commercial basil and the impact Simon and Wyenandt's research has had on the New Jersey basil industry. The film is being streamed on Kanopy and is free for anyone with a public library card.

Rutgers EcoComplex's WindIgnite Program Welcomes Start-up Innovator Nuvvon Inc.

Rutgers EcoComplex, the university's Clean Energy Innovation Center, and Nuvvon Inc., a start-up innovator in the development of solid state battery materials, announced a new partnership that integrates the company for Offshore Wind (OSW) applications. Nuvvon Inc. is developing solid-state energy battery materials and batteries, which are ideally suited for energy storage applications due to cheaper cost per unit energy compared to current technology lithium-ion batteries. Through the EcoComplex's WindIgnite Offshore Wind Supply Chain Accelerator Program, Nuvvon Inc. and Rutgers will advance their shared goals and objectives in the fields of renewable energy storage and sustainable development. Support for the WindIgnite program is provided by Atlantic Shores LLC.

Rutgers Helps to Develop New DEP Mapping Tool to Coordinate NJ Coastal Resilience Projects
The Department of Environmental Protection announced the launch of an online mapping tool to help bolster the resilience of New Jersey's coastal areas to climate change. The Coastal Ecological Restoration and Adaptation Planning Tool (CERAP), developed in partnership with **Rutgers Center for Remote Sensing and Spatial Analysis**, provides the locations of at-risk areas, coastal resource restoration sites, and other data. CRSSA partnered with the **NJAES Office of Research Analytics** (ORA) in developing the CERAP application, utilizing ORA's experience in developing these types of interactive tools for public stakeholders. CERAP enables the state to strategically develop and coordinate projects that are needed to help communities adapt to rising sea levels, increased flooding, and more severe storms associated with climate change. The development of the mapping tool was funded through a U.S. Environmental Protection Agency Region 2 Wetlands Programmatic Grant.

New Peach Varieties Available
Rutgers' stone fruit breeding program, led by **Joseph Goffreda**, associate professor in the Department of Plant Biology, continues to create and release exciting new peach varieties. Read about the new available peach varieties in a **Rutgers Plant and Pest Advisory** article, which is available at this link: https://plant-pest-advisory.rutgers.edu/?s=peach

Grants

Rutgers Gardens Awarded Trees for Schools Grant to Help Mitigate Climate Change
Rutgers Gardens, the university's 180-acre botanical garden, is among the grant recipients awarded a total of $4.55 million under the Trees for Schools program. Funded by the Regional Greenhouse Gas Initiative, the initiative will help reduce climate change by planting 3,000 trees across the state. Planting more trees in overburdened urban and rural areas will sequester carbon, thus reducing the amount of carbon in the atmosphere. The grant allows Rutgers Gardens to participate in this climate change mitigation effort by planting 100 trees on site in 2024 and enable the gardens to expand its educational impact for Rutgers students, local residents, and New Jersey's green industry. **Lauren Errickson**, Director of Rutgers Gardens and Campus Stewardship, will lead the project, which will focus on planting trees that are native to the mid-Atlantic region as well as to the southeastern U.S. The inclusion of southeastern native trees will allow Rutgers Gardens to demonstrate species that might adjust well to New Jersey's changing climate as temperatures are projected to rise in the years ahead.

James Simon, Distinguished Professor in the Department of Plant Biology, is principal investigator, and **Beverly Tepper**, professor in the Department of Food Science, is co-principal investigator of the Soli Organics *(formerly Shenandoah Growers),* Harrisonburg, VA. Shenandoah – Rutgers Collaborative Agreement. The three-year award totals $1,386,000. The sensory research project, "Chemical Correlates of Flavor Perception in Plants Grown Indoors with Controlled Agriculture," received a sub-award in the sum of $101,700.

Events

Food Safety Modernization Act (FSMA) Produce Safety Rule Training, sponsored by NJDA and the National Association of State Departments of Agriculture, will be held on December 13-14. Attendance on both days is required to receive FDA certification. The registration deadline for the two-day training is December 1. Contact Jennifer Matthews at jmatthews@njaes.rutgers.edu or call 609-675-4221.

Rutgers New Jersey Agricultural Experiment Station is an equal opportunity program provider and employer.