

A REPORT FROM THE EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

April 2024

Rutgers Tests Vertical Racking System for Agrivoltaics Project on Cook Campus Farm



Sunzaun's racking system installed at the Rutgers Animal Farm.

Rutgers Animal Farm, a 'hybrid' of production farm, research facility and teaching operation in support of the school and experiments station activities, has installed Sunzaun's vertical racking system, one of the first agrivoltaics systems utilizing vertical racking in the Northeastern U.S. The farm cares for a wide variety of animals, including sheep, goats, and cattle, and placement of an agrivoltaics system in this environment creates a unique opportunity for researching livestock interaction with solar installations. Results from this innovative project will contribute to the Dual-Use Solar Energy Pilot Program that is administered by the New Jersey Board of Public Utilities (NJBPU). Rutgers

Agrivoltaics Program is led by a multidisciplinary group of faculty

and staff committed to designing and conducting the applied agrivoltaics research and outreach necessary for New Jersey farmers to make informed decisions about adopting this technology.

33rd Annual Rutgers Turfgrass Symposium

Rutgers Center for Turfgrass Science hosted its <u>33rd Annual Turfgrass Symposium</u>, drawing close to 90 attendees to the hybrid event, including participants via Zoom from France, Finland, United Kingdom, and several U.S. states, like Oregon, Virginia, Texas, Maryland, Tennessee, and North Carolina. The keynote speaker was John Sorochan, Distinguished Professor in the Department of Plant Sciences, University of Tennessee – Knoxville, Institute of Agriculture. His presentation covered his research and testing program for field consistency and uniformity at World Cup 2026, which will be the largest ever World Cup hosted at 16 venues across North America. Eight Rutgers faculty, staff, and graduate students provided 12 oral and 16 poster presentations on modern approaches to research in turfgrass science, funded by the Rutgers Center for Turfgrass Science. Abstracts of all presentations are archived at the center's website.

RCE Team Supports Nationwide Launch of Fertilizer Recommendation Support Tool

The Fertilizer Recommendation Support Tool (FRST), a decision-aid that provides an unbiased, science-based interpretation of soil test phosphorus and potassium values for crop fertilization, has.been.launched.nationwide. The new web-based tool represents a significant advancement in soil testing for phosphorus and potassium and nutrient management that uses data from across the U.S. with the hope of potentially saving farmers millions of dollars annually while reducing excess nutrient losses to the environment. **Stephanie Murphy**, director of Rutgers Soil Testing Laboratory, and **Joseph Heckman**, extension specialist in soil fertility in the Department of Plant Biology, were among more than 100 soil science and agronomic professionals representing nearly 50 universities, four divisions of the USDA, several not-for-profit organizations, and one private sector partner.

Of Interest

The following new or updated fact sheets are available on NJAES Publications:

FS1120: Physical Activity - One of Life's Necessities

Zellers, C. and Cirignano, S.

FS1357: Fescue Grasses as Permanent Cover Between Rows of Blueberry

Brown, K., Besancon, T., Oudemans, P. and Rodriguez-Saona, C.

NJAES Co-funded Film Shows Why Creativity is an Essential Tool of Science

In a new educational film, <u>scientists are using a Rutgers-led experiment to illustrate the creativity involved in real-life scientific investigations</u>. The researchers have put together a short film showing how biologists, chemists, physicists, mathematicians and engineers converge and brainstorm at every stage of the scientific effort to better understand the carbon cycle in the ocean. <u>Tools of Science:</u> <u>Creativity</u>, includes scenes shot at the <u>Rutgers University Marine Field Station</u> in Tuckerton, N.J., and at sea on oceanographic research vessels. The educational video is the eighth in the Rutgers-produced <u>Tools of Science</u> series, aimed at middle school, high school and early college students. The goal is to convey a more realistic view of science and engineering practices, such as how to devise testable questions, how to use data and models and what collaboration means. And it does so from the point of view of practicing scientists conducting real-life lab and field experiments as part of several different National Science Foundation-funded awards.

Grants

Nilgun Tumer, Distinguished Professor, Department of Plant Biology, is the principal investigator of a five-year National Institute for Health R01 grant of \$3,494,012 for the project, "Small molecule inhibitors targeting the ribosome binding site of ricin and Shiga toxin." The grant period is March 1, 2024 to Jan 31, 2029.

Changlu Wang, extension specialist in entomology and Alvaro Toledo, assistant professor, Department of Entomology; Robert Corrigan, RMC Pest Management Consulting and Josephine Bartlett, Pest Management Department, New York City Housing Authority, are investigators on a \$973,893 grant from the U.S. Department of Housing and Urban Development Healthy Homes Technical Studies program. The three-year grant is for the project, "Health Risks of Norway Rats (*Rattus norvegicus*) and Developing IPM Strategies to Address Interior Invasions of Norway Rats in Low-Income Housing in New York City."

Events

New Jersey FoodTech 2024 Conference, in partnership with Rutgers Food Innovation Center, the New Jersey Economic Development Authority, and Middlesex County, will be held on Wednesday, June 26, at the Rutgers College Avenue Student Center from 8 am. to 4:30 pm. The conference costs \$50 with registration by June 24. Registration is free for Rutgers faculty, staff, students and conference partners, by emailing avg6@njaes.rutgers.edu. The conference, which was inaugurated last year to great success, is designed to help promote the growth of New Jersey's food technology sector by building awareness of its strength in food innovation.

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