

A REPORT FROM THE EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

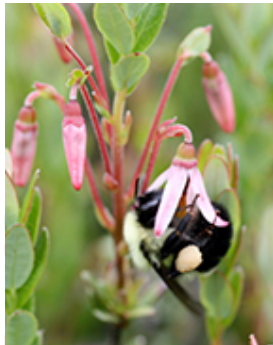
Report to the New Jersey State Board of Agriculture
October 2018



Inaugural class of Ag Scholars and program leaders (l-r): Max Blatt, Steve Komar, Will Habermann, Scott Taylor, Ameen Lotfi, Ira Polk, Maryann Zielinski and Brian Schilling.

The Clearing Corporation Charitable Foundation (CCCCF) Agribusiness Scholars program provides selected students matriculating at the School of Environmental and Biological Science with the applied knowledge, leadership qualities, analytical skills, and experiences required for successful careers in the domestic and global agribusiness sector. Instituted in the spring of 2017 from a \$1 million endowment from CCCC, the first group of students was welcomed to the program during the inaugural class on September 26. Five students have embarked on this two-year program, which comprises 15 credits of coursework as well as participation in academic enrichment activities. In addition to developing an

in-depth understanding of the issues driving agricultural markets and the performance of the agribusiness sector, the students will gain many soft skills to help build their careers. The inaugural meeting began on that note – introducing the students to the key people who will guide and mentor them through the program, along with providing sage advice to establish a strong foothold on the career ladder: associate professor **Stephen Komar**, Rutgers Cooperative Extension director **Brian Schilling**, and CCCC director Ira Polk. The special emphasis of the curriculum provides students with the unique opportunity to interface with leaders in the academic, business, and corporate worlds. The program is designed to give students the practical experience of knowing how to get things done—how to interact with people; how to resolve conflict; and how to work with people in order to achieve organizational goals.



Bees are the main pollinators of cranberry and are thus critical to fruit production.

Honey bees pollinate New Jersey's \$90-\$100 million blueberry and cranberry crops. During the last 5-6 years, beekeepers have seen a decrease in hive strength, reduced brood, and queenless and dead colonies. Commercial beekeepers calculate losses this year of about \$1 million in various commercial crops. One New Jersey beekeeper reported 90% mortality of his colonies used for New Jersey pollination, while colonies kept in Florida had about 20% mortality. Both cranberry and blueberry crops have required a high degree of pesticide use, which beekeepers attribute as the major cause of colony decline. As colony losses increase, so do pollination fees while the quality of pollinating hives decreases. Total number of hives required exceed 18,000 from New Jersey-based and migratory commercial beekeepers. Because of the cost and need for bees, both commercial fruit growers and beekeepers have a vested interest in the continued health of honey bees. The Fruit IPM program project, *Area-Wide Pest Management Program to Improve Honey Bee Health in*

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Blueberry and Cranberry Pollination Services, will focus on examining pesticide residues in pollinating hives, correlating residues with colony health measurements, and standard beekeeper practices; and changing fruit grower pest management practices that can reduce residues, thereby improving colony health. The project evolved from meetings that beekeepers organized with fruit growers and extension researchers. Three grower clientele groups have funded pilot investigations: blueberry growers, cranberry growers, and beekeepers. In commercial hives and hives managed by Rutgers, colonies will be measured for brood growth, queen presence, diseases, parasitism, and pesticide residues. Bee Informed Partnership (BIP) measurement protocols will be used for measuring hive health, along with BIP management recommendations. Fruit growers will adhere to known bee safety and pesticide use recommendations, and supply pesticide records. Resulting data will form the basis for changes in pesticide use, while other analyses of hive health may lead to changes in colony management. The grant, which started this spring, will run through September 2021. Lead principal investigator **Dean Polk**, Fruit IPM coordinator, and extension specialist in entomology **Cesar Rodriguez-Saona** are working with a University of Maryland colleague, and Tim Schuler, New Jersey state apiarist, with input from New Jersey blueberry growers and the New Jersey Beekeepers Association. Soils and plant technician **Chelsea Abegg** will work on beekeeping duties, data collection, IPM scouting, and clientele education on honey bee health.

Of Interest:

The following fact sheet has been translated into Chinese, Haitian Creole, Khmer, Korean, and Spanish: FS1261 What Is On-Farm Food Safety? **Melendez, M.** and **Kline, W.** <https://njaes.rutgers.edu/fs1261>

Events:

2018 Evening of Science & Celebration

This event highlights the Equine Science Center's work in advancing equine health, horse management practices, and solutions to equine industry issues.

Thursday, Nov. 8, 2018 6:00 – 9:30 p.m.

Cook Student Center

59 Biel Rd.

New Brunswick, NJ 08901

Contact: **Kyle Hartmann**, kylehart@njaes.rutgers.edu or 848-932-9419.

Innovations in Transforming Waste to Value-Added Products

Rutgers and AIChE Institute for Sustainability are sponsoring a technical symposium focused on transforming waste to value-added products, with emphasis on sustainability and innovation. It will be held December 5-7 at Rutgers–New Brunswick. The conference is chaired by Rutgers EcoComplex director **Serpil Guran**. Faculty on the steering committee include Department of Environmental Sciences professors **Donna Fennell** and **Uta Krogman**, who is also an extension specialist in solid waste management. Discussions on organic waste and food waste will focus on food supply chain waste, agricultural waste and feed waste, food processing waste and other pre- and post-consumer wastes. More information is available at www.AIChE.org/Sps18.

