

## **USDA SCRI Awards a \$5.4 Million Grant to Combat a Destructive Pest of Fruit Crops in the United States**

September 21, 2020

The U.S. Department of Agriculture, National Institute of Food and Agriculture through the Specialty Crop Research Initiative (SCRI) has awarded a \$5.4 million grant to develop long-term sustainable methods for controlling the spotted wing drosophila (SWD). Extension Specialist, Dr. Cesar Rodriguez-Saona (Entomology, Rutgers University), is a co-principal investigator in this grant.

Spotted wing drosophila is a tiny fly native of Asia. It was first detected in California in 2008 and has since emerged as a devastating pest of small and stone fruits throughout the U.S., valued at \$5.8 billion annually. This project builds on previous work where the goal was to urgently develop control strategies to respond to the crisis situation created after the detection and widespread distribution of this devastating invasive pest in all fruit growing regions throughout the United States. The multi-regional team composed of researchers from ten major Land-Grant Universities and USDA-ARS made substantial progress by refining monitoring tools, developing effective insecticide-based management programs, identifying effective cultural controls, and screening native and exotic biological control agents to address the crisis phase of SWD invasion.

The goal of this project is to pivot away from crisis response to build a long-term, integrated and systems-based approach to managing SWD. In this new project, the team will work with region- and crop-specific teams of grower influencers to implement best management programs for sustainable SWD management in collaboration with grower stakeholders, develop economics-based decision aid tools to increase profitability, evaluate sustainable alternatives to insecticides for long-term SWD management, assess and reduce the risk of insecticide resistance development, and develop and disseminate actionable recommendations that enable producers to optimize pest management decisions, and evaluate their impact. Dr. Rodriguez-Saona leads the objective on the development of economically-viable behavioral management tools as sustainable alternatives to insecticides.

Ultimately, the team hopes to develop and deliver systems-based integrated management programs to berry and cherry growers that are cost-effective and environmentally-sustainable for long-term management of SWD in the U.S. Implementation of these sustainable solutions will directly contribute to the long-term profitability and sustainability of farms and farmers nationwide.