



**Facilitating regulatory approval of pest management technology for specialty crops/specialty uses to promote public wellbeing**



# **2019 Year End Summary**

**Major funding provided by Special Research Grants and Hatch Act Funds from USDA-NIFA, in cooperation with the State Agriculture Experiment Stations, USDA-ARS, and USDA-FAS**

Dear Friends

It seems like yesterday everyone was panicking about Y2K and now we are entering into the third decade of this century. The purpose of this Year End Summary is to report on the successes and challenges for IR-4 in 2019 as well as to outline goals and plans for 2020 and beyond.

#### Success at a Glance

IR-4's Food Program produced a **RECORD BREAKING** number of successes in 2019: **1545** based on **24** actions by EPA.

EPA proposed that the crops in the current "Crop Group 19: Herbs and Spices Group" will be separated into two new crop groups: "Crop Group 25: Herb Group" and "Crop Group 26: Spice Group".

IR-4 initiated **six** Integrated Solutions research projects in 2019. This new initiative combines the best aspects of chemical and bio-based pesticides into a program approach

IR-4's Environmental Horticulture Program prepared and submitted **22** research project summaries. IR-4 implemented **673** field trials. US EPA issued **three** registrations supporting 2665 crop uses.

#### Food Program

- IR-4's main accountability matrix, the number of potential pesticide use registrations on specialty crops and specialty uses was at an all-time high of 1545. IR-4's previous one-year high mark was 1175 in 2015. Other performance milestones include:
  - 72 residue studies/414 residue study field trials
  - 43 product performance projects/89 product performance field trials.
- IR-4 launched its first research with the Integrated Solutions initiative in 2019. Integrated Solutions (IS) research has the goal of developing a system of one or more chemical or bio-based pesticides to solve a critical pest management situation. This includes 1) development of products for managing pest resistance to pesticides, 2) screen products to manage hard to control pests, 3) residue reduction/residue mitigation, and 4) organic production.
- Progress has been made to reduce the backlog of unanalyzed residue samples in the five core IR-4 analytical laboratories (Michigan State University, University of Florida and University of California-Davis, USDA-ARS labs in Tifton, GA and in Wapato, WA). This was accomplished with a combination of implementing processes to improve efficiency in the laboratories and utilizing contract research laboratories to temporarily reduce workload at the IR-4 laboratories and reduce the backlog.
- IR-4 submitted 22 petitions to EPA that address 130 specific requests.
- There has been unprecedented expansion of hemp production in 2019. EPA and USDA has solicited IR-4's involvement in efforts to register pesticides. IR-4 has funded several studies for chemical and bio-based pesticides to manage critical pests on hemp. Additionally, IR-4 is proposing extrapolation models to expedite provide much-needed products for hemp pest management.
- IR-4 continues to cooperate with Canada on joint research projects. Canada contributed 29 field trials to the joint program that supports registrations in the U.S. and Canada. IR-4 estimates this cooperative research save IR-4 approx. \$500,000 annually.
- IR-4 remains involved in global capacity building; the development of expertise to conduct field and laboratory pesticide residue studies under Good Laboratory Practices in Asia, Africa and Latin America. The last report from IR-4 initial involvement in the Global Residue Data Generation Project was submitted in 2019 to various global regulatory authorities. New projects are being considered for 2020 and beyond.

## Environmental Horticulture Program

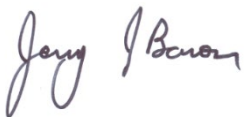
- The EHC compiled 22 research project summaries. In addition to the research project summaries, the IR-4 EHC Program also posted a final project summary for the Downy Mildew Biology and Management Project funded by USDA-APHIS
- During the third year of the SCRI Protecting Pollinators Project, the research team continued to examine bee visitation to common annuals and herbaceous perennials. They also studied the movement of systemic insecticides into pollen and nectar of treated model EHCs. The initial findings were presented to EPA to assist with the neonicotinoid pollinator risk assessments and have developed updated recommendations for growers and landscape managers.

## General/ Plans for 2020 & Beyond

- IR-4 is entering into a second decade of static funding and has had to scale back new research to match increased expenses. The Commodity Liaison Committee continues to advocate for increased federal funding while IR-4 explores opportunities to compete for resources from new sources.
- In July 2019, The IR-4 Project Management Committee approved a proposal submitted by North Carolina State University to host IR-4 Project Headquarters from October 1, 2019 to September 30, 2029. Rutgers University could no longer afford to contribute to the cost to host the IR-4 Headquarters unit. A Memorandum of Agreement was signed by Rutgers University and NC State to begin the transition of IR-4 Headquarters to the new institution by September 30, 2021.
- In September 2019, IR-4 conducted a listening/input workshop to gain feedback from stakeholders to help develop a new five-year strategic plan. Additional input from stakeholders will be solicited. IR-4's goal is to have a new strategic plan approved by October 1, 2020 with implementation shortly thereafter.
- Every five years, IR-4 is formally assessed by the Directors of the State Agricultural Experiment Stations. IR-4 has submitted a proposal/management plan for the renewal National Research Support Program-4 to maintain IR-4's involvement with the Land-Grant University system.
- Rutgers University also declined to continue to host the IR-4 Northeast Region business operations. IR-4 is having dialogue with other institutions in the Northeast/Mid-Atlantic area to find a suitable host institution.
- IR-4 successfully merged its stand-alone priority setting workshops for the Food Use Program (including residue research, product performance, Integrated Solutions) and Environmental Horticulture Program into a multiday "Week of Workshop". This new format encouraged more crossover and integration between programs as well as substantial cost savings.
- Research plans for 2020 include:
  - 65 New Residue Studies/448 Field trials
  - 44 Product Performance projects/93 field trials
  - 15 Integrated Solutions projects/36 field trials
  - 25 Environmental Horticulture protocol/650 greenhouse and field trials

Please see the IR-4 2019 Annual Report for more information and full details.

All the best,



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