

YEAR-END SUMMARY

Pest management solutions for specialty crops and specialty uses

Dear Friends.

Reflecting on IR-4's accomplishments in 2022, it is easy to be encouraged about our future. The Headquarters, Regional, and field teams remain focused and resilient, in spite of COVID-19 challenges and organizational change. IR-4 remains true to its roots, developing and submitting quality data to support new registrations of chemical and biobased pesticides on specialty crops (including food and environmental horticulture crops).

While the "new normal" is a moving target, IR-4 continues to evolve. To help IR-4 prepare for the future, we asked a group of specialty crop pest management visionaries to provide recommendations to strengthen and modernize IR-4's operations. The Path Forward 2.0 Committee recommended that IR-4 develop detailed "IR-4-centric" performance expectations, increase funding reimbursement for field trials, enhance communications, improve employee training, embrace technology, and resolve the analytical laboratory backlog. The Path Forward 2.0 Committee was chaired by Dan Rossi with contributions by Rob Hedberg, Ray Ratto, Janis McFarland, and Barbara Madden.



In late 2022, we began implementing initiatives that address many of their recommendations. One is the upcoming launch of an electronic field data notebook (eFDB), which was vetted, developed, and tested in 2022. This technology has the potential to save IR-4 significant time in our residue studies. Other steps forward included naming Debbie Carpenter as National Laboratory Director, and significant improvements to IR-4's digital presence and brand through the leadership of IR-4's new National Information and Communications Officer, Hannah Ross.

For the first time in two years, many of us were able to gather in person. The Food Use Workshop was held in September in Minneapolis, MN with attendance rivaling pre-COVID numbers. Recognizing not all can or are willing to travel, IR-4 will continue to hold workshops (for food and environmental horticulture crops) in a hybrid format.

IR-4 Headquarters at North Carolina State University achieved a huge milestone in 2022. After a few transitional years and significant hiring of new team members, we are now fully staffed. We are really proud of the group— a talented mix of experienced and early-career people. They have jelled as a team and are quickly becoming highly proficient, bringing our office to life. With the opening of the George M. Markle Conference Room, and our first time hosting colleagues in the fall, this space now feels like home to IR-4.

We also applaud IR-4 Regional Field Coordinators, state/ARS Field Research Directors, and researchers across our programs— they are IR-4's connecting thread to growers and stakeholders nationwide who are the heart of our work. IR-4's Analytical Laboratory personnel within the University of California-Davis, University of Florida and USDA labs continue to work diligently to analyze residue samples using complex analytical methods. Kudos to the IR-4 Quality Assurance team for ensuring that our data is of acceptable standards. My personal gratitude extends to the members of our Project Management Committee for their continued guidance and support.

Thanks to our friends at the Canadian Pest Management Centre, the Minor Use Foundation, the U.S. Environmental Protection Agency, and the U.S. Department of Agriculture (notably USDA-NIFA and USDA-ARS) for their ongoing partnership. I'd also like to offer a special shout-out to members of the IR-4 Commodity Liaison Committee, whose advocacy efforts encouraged Congress to provide IR-4 with our first funding increase in over a decade, which was sorely needed and appreciated.

Finally, did you know that 2023 marks sixty years of IR-4? This will be an opportune time to celebrate the meaningful impacts of the work we do together. We truly look forward to what's to come.

With appreciation,

Jerry Baron
Executive Director

The IR-4 Project

2022 At A Glance

FOOD USE PROGRAM

Successes

 694 new tolerances for 13 active ingredients established by U.S. Environmental Protection Agency (EPA) resulting in 750 potential new product uses on food crops

Regulatory Actions

 13 tolerance petitions submitted to the EPA covering 101 unique requests for assistance and crop group tolerance updates

Research

- 347 residue trials contributing to 47 Magnitude of the Residue studies
- 93 efficacy/crop safety trials contributing to 41 Product Performance projects
- 60 field trials contributing to 28 Integrated Solutions projects



Successes

 IR-4 submitted data to expand one EPA registration, supporting 41 additional environmental horticulture crop uses

Regulatory Actions

 20 submissions of data reports to companies to support new or update existing registrations

Research

 626 field and greenhouse trials (321 efficacy, 305 crop safety) that contributed to 50 projects

INTERNATIONAL ACTIVITIES

- Provided technical leadership in international priority setting workshops, project planning and implementation
- Conducted capacity building on biopesticide regulations and GLP
- Assisted with a new international database
- Promoted harmonization of residue data development and MRLs in Europe and beyond
- Gave technical guidance to an import MRL program promoting the export of US specialty crop commodities to Southeast Asia













Contact the IR-4 Project

IR-4 Project Headquarters

Mailing Address:

IR-4 Project Headquarters NC State University 1730 Varsity Drive, Venture IV Suite 210 Raleigh, NC 27606

IR-4 Project Leadership

Executive Director

Dr. Jerry Baron 919-515-3166 jjbaron@ncsu.edu

Associate Director for Regulatory Sciences & National Laboratory Director

Dr. Debbie Carpenter 919-515-1162 dcarpen3@ncsu.edu

Assistant Director for Research Planning and Product Performance

Dr. Venkat Pedibhotla 919-515-3020 vkpedibh@ncsu.edu

Manager, National Quality Assurance Unit

Dr. Johanna Mazlo 919-515-3066 jmazlo@ncsu.edu

Manager, Biopesticide Regulatory Support Program

Dr. Michael Braverman 609-200-5456 (office) mbrave@njaes.rutgers.edu

Manager, Environmental Horticulture Program

Dr. Cristi Palmer 609-286-9338

Contact Us:

Phone: 919-515-1552 Email: ir-4_project@ncsu.edu Website: www.ir4project.org

IR-4 Regional Contacts North Central Region

Nicole Soldan Regional Field Coordinator Michigan State University 1066 Bogue St, Room A440 East Lansing, MI 48824 517-712-8441 schroe65@msu.edu

Northeast Region

Marylee Ross Regional Field Coordinator University of Maryland 27664 Nanticoke Road Salisbury, MD 21801 410-742-8788 ext. 310 mross@umd.edu

Southern Region

Dr. Janine Spies Regional Field Coordinator University of Florida P.O. Box 110720 1642 SW 23rd Dr. Bldg 685 Gainesville, FL 32611-0720 352-294-3991 jrazze@ufl.edu

NC STATE

Regional Contacts continued

Western Region

Dr. Kari Arnold Regional Field Coordinator University of California Davis One Shields Avenue Meyer Hall Room 4218 Davis, CA 95616 530-752-7634 klarnold@ucdavis.edu

USDA-ARS

Dr. Alvin Simmons Regional Field Coordinator U.S. Vegetable Laboratory 2700 Savannah Highway Charleston, SC 29414 Phone: 843-402-5307 alvin.simmons@ars.usda.gov





This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2021-34383-34848 and 2020-34383-32455 with substantial cooperation and support from the State Agricultural Experiment Stations, USDA-ARS, USDA-APHIS, and USDA-FAS. In accordance with federal law and USDA policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age or disability.

NC State University promotes equal opportunity and prohibits discrimination and harassment based upon one's age, color, disability, gender identity, genetic information, national origin, race, religion, sex (including pregnancy), sexual orientation and veteran status.