



---

20  
23

YEAR-END  
SUMMARY

---

Pest management solutions for  
specialty crops and specialty uses



Dear Friends,

The year 2023 was a celebratory one, marking 60 years of The IR-4 Project. True to our legacy, it was also a year of meaningful results, when we took important strides towards modernizing processes and engaging new stakeholders. While regulatory challenges abound, IR-4 keeps evolving—thanks to our purpose-driven community.

To commemorate IR-4's 60th year, we launched a communications campaign focused on IR-4's impacts. Thanks to our social network for amplifying our message, the content generated thousands of impressions and video views. We also celebrated together at events; from near and far, many of you helped make this milestone memorable.

We kicked off the 60th year at the National Education Conference in San Juan, Puerto Rico, where teammates from IR-4's nationwide research network gathered. Along with two days of training and networking, we toured the Corozal Agricultural Experiment Station. The spirit and hospitality of our Puerto Rican colleagues was unmatched as they guided us through pineapple fields and starfruit orchards, connecting us with a delicious slice of the specialty crops we serve.

This year, we took on new projects with progress and longevity in mind. We created a Network Expansion Task Force to engage more researchers from minority-serving institutions and Cooperative Extension in IR-4's research. New instructional videos were made to guide newcomers through our project request and nomination processes. Continuing to implement the Path Forward 2.0, we launched a pilot program to test IR-4's new electronic Field Data Notebook (eFDB). As eFDB training continues, we look forward to seeing our teams benefit from digitized data collection in 2024.

In the fall, we came together in Raleigh, NC for the Food Use Workshop and in Little Rock, AR for the Environmental Horticulture Workshop. Finally, Headquarters hosted the National Research Planning Meeting. These events helped chart our next research cycle and served as bookends to the 60th year campaign.

It has been said that "it takes a village." Behind this year's results are the people who conduct and manage IR-4's research, including: Field Research Directors, Regional Field Coordinators, analytical laboratory chemists, Study Directors, the Quality Assurance Unit, biologists, and numerous support teams. The dedication and skills of these teams make IR-4 successful.

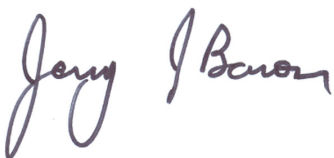
Many thanks to the IR-4 Project Management Committee for guiding the project forward, and to the Commodity Liaison Committee/Friends of IR-4 who help connect IR-4 to the crops we serve while advocating for appropriate federal funding. IR-4 could not facilitate new registrations without the collaboration of our crop protection industry partners. Thanks also to the Canadian Pest Management Centre, the Minor Use Foundation and other international partners. Finally, we appreciate the multifaceted support IR-4 receives from federal partners, including the U.S. Department of Agriculture (NIFA, ARS, FAS and APHIS) and the U.S. Environmental Protection Agency.

While successful and celebratory, this year has presented unique challenges. Complex regulatory issues—such as compliance with the Endangered Species Act and the continuing reassessment of traditional pesticides—are leading IR-4 to transition towards emerging pest management options. Now more than ever, the specialty crop community needs the services of the IR-4 Project. Unfortunately, government funding remains an ongoing concern.

It is clear that IR-4 has the expertise and vision to continue delivering on our mission—even if new tools and approaches are needed. Because we have a 60-year track record of results guided by the needs of growers, we are confident that we can evolve and respond as needs change.

As I reflect on the accomplishments of our 60th year, I applaud the community that makes it possible. Milestones like these matter because they remind us of our shared purpose, bring us together, and inspire us to look thoughtfully towards the future. While complex challenges lie ahead, I am optimistic about the next 60 years of IR-4.

Cheers to 60 Years,



Jerry Baron  
Executive Director  
The IR-4 Project



# 2023 At a Glance

## FOOD USE PROGRAM

### Successes

- **211** new tolerances for **18** active ingredients were established by U.S. Environmental Protection Agency (EPA) resulting in **1613** potential new product uses on food crops.

### Regulatory Actions

- **12** tolerance petitions were submitted to EPA and **2** Final Reports to the registrant for Label Expansion or Conditional Registration. These covered **92** unique requests for assistance and crop group tolerance updates.

### Research

- **384** residue trials contributing to **52** Magnitude of the Residue studies
- **143** efficacy/crop safety trials contributing to **65** Product Performance projects
- **72** field trials contributing to **35** Integrated Solutions projects

## ENVIRONMENTAL HORTICULTURE PROGRAM

### Successes

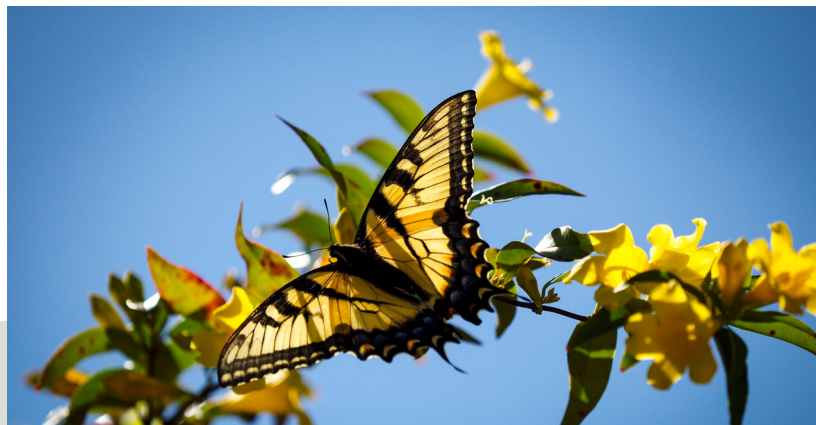
- BotryStop was registered in California, contributing to **500** new crop uses.

### Regulatory Actions

- **22** research summaries were written to support new or update existing registrations.

### Research

- **657** field and greenhouse trials (**275** efficacy, **379** crop safety) that contributed to **57** projects



## INTERNATIONAL ACTIVITIES

- Technical leadership and project collaboration with the Minor Use Foundation
- Capacity building on biopesticide regulations and Good Laboratory Practices
- Assisted with a new international database
- Advised development of an import MRL program promoting export of U.S. commodities to Southeast Asia
- Hosted four USDA FAS Borlaug Fellows for training

Find the full Annual Report at [ir4project.org](https://ir4project.org).





# 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

### Contact Us:

919-515-1552  
ir-4\_project@ncsu.edu

**NC STATE**

## 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. Alice Axtell (*Interim*)  
919-515-3055  
aaxtell@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  
mbrave@njaes.rutgers.edu

### Manager, Environmental Horticulture Program

Dr. Cristi Palmer  
609-286-9338  
clpalmer@njaes.rutgers.edu

## 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

Kristen Searer-Jones (*Interim*)  
Regional Field Coordinator  
University of Florida  
P.O. Box 110720  
1642 SW 23rd Dr. Bldg 685  
Gainesville, FL 32611-0720  
352-294-3979  
k.searerjones@ufl.edu

## 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  
843-402-5307  
alvin.simmons@ars.usda.gov

## CONNECT WITH US

[IR4project.org](http://IR4project.org)



*This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award numbers 2022-79111-38469 and 2021-34383-34848 with substantial cooperation and support from the State Agricultural Experiment Stations, USDA-ARS and USDA-FAS. In accordance with Federal Law and U.S. Department of Agriculture 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.*