



2021 Annual Report

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This report is compiled by the
IR-4 Northeast Region Field Coordinator's Office

Sponsor Acknowledgements

Recognizing The IR-4 Project's primary sponsor:



United States Department of Agriculture
National Institute of Food and Agriculture

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Special thanks to our land grant universities for their partnership with IR-4:

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EASTERN SHORE



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NATURAL RESOURCES



The Personnel section outlines further involvement and contributions made by land grant institutions and cooperators.

Program Summary

2021 Trials At-A-Glance

Food Use MOR Trials - Summary	2020	2021	2022
Trials Placed	34	26	23
Canceled Trials	6	1	0
Completed Trials	28	25	0
FDB's Received at RFC Office	28	19	0
Completed QC Reviews	27	12	0

Food Use Performance Trials - Summary	2020	2021	2022
# of Trials	12	20	10
Completed Trials	10	20	0
Reports Submitted	10	17	0

Env. Hort Efficacy - Summary	2020	2021	2022
# of Protocols	5	4	6
Projects Placed	6	4	6
Canceled Projects	1	0	0
Reports Submitted	4	4	0

Env. Hort Crop Safety - Summary	2020	2021	2022
# of Protocols	5	4	1
Trials Placed	37	47	21
Canceled Trials	3	0	0
Reports Submitted	34	45	0

Integrated Solutions- Summary	2020	2021	2022
# of Trials	8	9	10
Completed Trials	8	8	0
Reports Submitted	8	8	0

Overview of the Northeast Region IR-4 Program

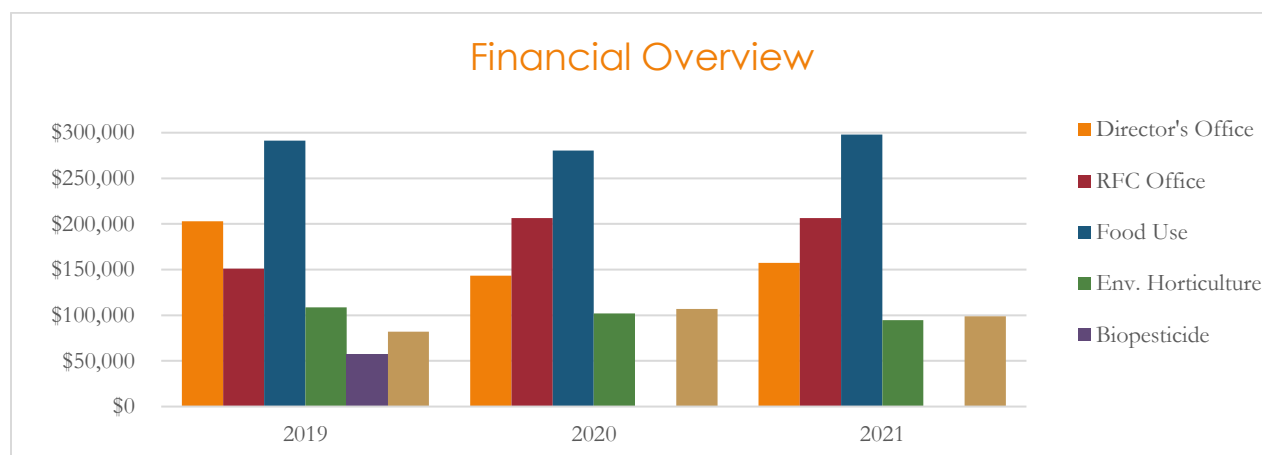
The Northeast Region of The IR-4 Project is a collaboration between the University of Maryland College Park (UMCP), University of Maryland Eastern Shore (UMES), and North Carolina State University (NC State).

The Regional Field Coordinator's (RFC) office is at the University of Maryland's Lower Eastern Shore Research and Education Center (LESREC) in Salisbury, MD. The Regional Director's office is located at UMES in Princess Anne, MD. The IR-4 Project Headquarters (HQ) is located at NC State in Raleigh, NC. Following is a summary of Northeast Region (NER) activities from January 1, 2021 through December 31, 2021.

Budget

In 2021, Food Use allocated \$298,100, Environmental Horticulture allocated \$94,500 and Integrated Solutions allocated \$99,000 to field trials. The Regional Director's office received \$157,486 to support the administration of the region. The RFC office received \$206,387 to support operations and outreach.

Depicted below is an overview of the Northeast Region's financial infrastructure and a comparison of funds specific to our region throughout the past three years.



Update from the Regional Director's Office

Except for one, all the 20 researchers from the NER have signed the service agreement. Nineteen purchase requisitions service agreements were completed, and 12 checks were already issued. Penn State settled the IDC issue by internally paying the IDC for year-1 and signing the service agreement. We are still waiting for one service agreement to be signed by Rutgers.

Dr. Kairo is discussing the IDC pass-through and the potential of maximizing the direct cost with UMES officials.

Concerning the budget, 89% of the 2020/2021 FY budget and ~50% of the 2021/2022 FY budget have been used for the proposed activities. The remaining 11% budget from 2020/2021 FY includes travel, operational, and outstanding invoices. The 2020/2021 FY budget will expire on August 31, 2022.

Simon gave a virtual presentation about IR-4 NER to the Northeast Integrated Pest Management Center (NEIPM) Center Advisory Council on December 7, 2021. Moreover, Simon highlighted some of the IR-4 NER activities at the Northeast Region Technical Committee on Integrated Pest Management (aka., NEERA 2104).

At UMES, the in-person learning continues, and the university offers a mandatory two times a week free regular COVID-19 testing for nonvaccinated students, faculty, and staff. And once a month, COVID-19 compulsory testing for vaccinated students, faculty, and staff. Overall, schooling is going well.

It's always great to work with Marylee, Megan, Jane, and John. In addition, we are all grateful to Josh Shockley from the UMES Office of Research and Sponsored Programs for helping us facilitate all service agreements.

Update from the Regional Field Coordinator's Office

First and most importantly, our team and our cooperators in the Northeast are healthy and active after another year of COVID concern. Almost every trial placed was completed and most reports are in. QC is rolling along quickly now.

Several new Field Research Directors (FRDs) experienced their first year as Good Laboratory Practice (GLP) Researchers. We developed and provided detailed GLP training in three virtual sessions. We covered everything from receiving a Field Data Book (FDB) to answering eQA questions. It was very well attended by new and experienced FRDs across all regions. We have received a good deal of positive feedback and have shared this training tool upon request. GLP is quite demanding and not everyone's cup of tea. Once immersed in GLP one of the new FRDs decided it does not fit well with already rigorous work demands.

Tom Freiburger, one of our longest serving FRDs retired. We plan to bring at least one new person into our team in 2022 so we can offer quality GLP training in preparation for 2023.

We have continued hosting meetings of the RFCs approximately every other month or as desired. I genuinely look forward to the conversations we have. We are always striving for improvement and clarity. We have revived the RFC/HQ meetings by helping to organize quarterly meetings to include people at HQ as appropriate to the topics of discussion.

For the Food use program, we hosted virtual regional meetings by discipline in late July. Participation was good for all three sessions. It was especially helpful to have the biology leads from HQ on our calls. RFCs have coordinated our schedules for 2022 so that our meeting dates are convenient for all.

After an abundance of virtual meetings, it was refreshing to attend the National Research Planning Meetings in person at the new home of IR-4 Headquarters at North Carolina State University in Raleigh, NC. It was great to join with colleagues to do our work. This was our first experience with a hybrid meeting and it went

well with only a few technical glitches. The hybrid setting enabled many people to join the meeting that were unable to attend in person. It was a struggle to ensure each site across all regions received enough funding to continue to operate. I am proud that our RFCs worked so closely together to help make that happen. It gets harder every year as costs go up and funding remains relatively flat.

On September 22nd we hosted a regional call prior to the virtual Environmental Horticulture Workshop. The workshop went well, but again there was a challenge to meet research needs under a limited budget.

Through much of the year, we held weekly virtual meetings with Simon Zebelo and John Ellis at University of Maryland Eastern Shore. It went much smoother this year getting the funding documents out to the researchers. However, we are facing increasing resistance from universities concerning Indirect Cost. I hope that this will improve in 2022.

Unfortunately, we did not resume travel in 2021 as expected because COVID was still curtailing meeting with people in person. Only one site visit occurred when we went to University of Delaware to see multiple IR-4 trials being conducted by Mark VanGessel. I kept in touch with the other cooperators mostly by phone or email.

Since we could not travel we were unable to utilize our outreach materials designed for setting up a booth at meetings. Instead, we sent IR-4 logo adorned polo shirts and hats to our cooperators. We received a few pictures of people in their new garb and much expression of appreciation.

We were able to complete all Quality Assurance Field In-Life audits in person thanks to Jane Forder.

The last two years have been challenging. The first year of COVID had everyone scrambling to invent new ways to do old things. The second year we had a few new tools and some experience with virtual meetings. It was equally difficult for the folks who have been with IR-4 for years and those just beginning. We have all stood up to the plate and faced the challenges together. I look forward to 2022 with optimism.

'til next time,

marylee

Meetings Attended

- Northeastern Plant, Pest and Soils Conference (NEPPSC) online meeting, January 4-7, 2021
- IR-4 “All Hands” Meetings via Zoom, January 25, 2021
- IR-4 Western Region Training Webinar, February 2, 2021
- Maryland/Delaware Commercial Applicator’s Pesticide Conference via Zoom, February 2, 2021
- IR-4 Northeast Region New FRD GLP Training Session I via Zoom, February 4, 2021
- IR-4 Northeast Region New FRD GLP Training Session II via Zoom, February 9, 2021
- IR-4 Northeast Region New FRD GLP Training Session III via Zoom, February 11, 2021
- IR-4 “All Hands” Meeting via Zoom, February 22, 2021
- Guest Lecture on IR-4 Process and Northeast Region at Delaware Valley Univeristy via Zoom, April 23, 2021
- IR-4 “All Hands” Meeting via Zoom, April 26, 2021
- IR-4 Western Region Training Webinar, May 4, 2021
- Field Visit to Murphy John’s Wholesale Greenhouses, Sudlersville, MD, June 8, 2021
- RFC Visit to new IR-4 Headquarters, Raleigh, NC, June 21, 2021
- Field Site Visit to Carvel Research and Education Center, Georgetown, DE, July 1, 2021
- IR-4 Industry New Technology Session via Zoom, July 20, 2021
- IR-4 Northeast Region Priority Setting for Pathology via Zoom, July 22, 2021
- IR-4 Northeast Region Priority Setting for Entomology via Zoom, July 27, 2021
- IR-4 Northeast Region Priority Setting for Weed Science via Zoom, July 29, 2021
- IR-4 “All Hands” Meeting via Zoom, July 29, 2021
- IR-4 Western Region Training Webinar, August 3, 2021
- IR-4 Project’s Virtual Crop Tour of Hemp, August 26, 2021
- IR-4 Food Use Workshop via Zoom, September 13-16, 2021
- IR-4 Northeast Region Environmental Horticulture Priority Setting via Zoom, September 22, 2021
- IR-4 Environmental Horticulture Biennial Workshop via Zoom, September 28-30, 2021
- IR-4 National Research Planning Meeting, Raleigh, NC, October 25-27, 2021
- Mid-Atlantic Crop School virtual format, November 15 – December 12, 2021
- IR-4 Project’s Virtual Crop Tour of Coffee, December 14, 2021

Program Report

Food Use Program

Magnitude of Residue

In 2021, twenty-six magnitude of residue (MOR) trials were conducted in the Northeast Region. Of the Food Use funding in the Northeast Region, \$169,000 went to residue work. Activities involved 17 chemical/crop combinations.

MOR field trials were conducted in five locations, including:

- Lower Eastern Shore Research and Education Center, Salisbury, MD (University of Maryland)
- Rutgers Fruit and Ornamental Research Extension Center, Cream Ridge, NJ (Rutgers University)
- Rutgers Snyder Research and Extension Farm, Pittstown, NJ (Rutgers University)
- UMass Cranberry Experiment Station, East Wareham, MA (University of Massachusetts)
- A.C.D.S. Research Inc. North Rose Facility, North Rose, NY (Contract Research Facility)

There was one trial canceled in 2021. This was due to a late decision made by the registrant to no longer support the project.

Also, sample collection occurred (per protocol requirements) in 2021 for 12831 Pyrifluquinazon/Blueberry which completed the last 2020 trial.

Samples from all (26) completed trials have been shipped. Nineteen Field Data Books (FDBs) have been received at the RFC office. Twelve Quality Control (QC) reviews have been completed and the FDBs sent to Quality Assurance (QA).

Performance

In 2021, twenty performance trials were conducted in the Northeast Region. Of the Food Use funding in the Northeast Region, \$129,100 went to performance work. The Efficacy and Crop Safety trials were conducted at six locations.

Efficacy and Crop Safety trials were conducted at:

- The New York State Agricultural Experiment Station, Geneva, NY (Cornell University)
- Carvel Research & Education Center, Georgetown, DE (University of Delaware)
- Philip E. Marucci Center for Blueberry & Cranberry Research, Chatsworth, NJ (Rutgers University)
- A.C.D.S. Research Inc. North Rose Facility, North Rose, NY (Contract Research Facility)
- University of Maryland College Park, College Park, MD (University of Maryland)
- Long Island Horticultural Research Lab, Riverhead, NY (Cornell University)
- Cornell Cooperative Extension Orleans Education Center, Albion, NY (Cornell University)
- University of Massachusetts, Amherst, MA (University of Massachusetts)

All of the trials are complete and seventeen reports have been submitted.

Environmental Horticulture Program

In 2021, the Environmental Horticulture program funded \$94,500 of research in the Northeast Region. There were four efficacy protocols and four crop safety protocols. Under these protocols, we placed four efficacy projects and forty-seven crop safety trials. This work was done by four different researchers at two locations.

The four efficacy projects were conducted at:

- Long Island Horticultural Research Lab, Riverhead, NY (Cornell University)

The forty-seven crop safety trials were conducted at:

- Long Island Horticultural Research Lab, Riverhead, NY (Cornell University)
- University of Maryland College Park, College Park, MD (University of Maryland)

There are no outstanding reports for the efficacy projects and two outstanding reports among the crop safety trials.

Integrated Solutions Program

In 2021, the Integrated Solutions program funded \$99,000 of research in the Northeast Region.

The trials are being conducted at five locations, including:

- The New York State Agricultural Experiment Station, Geneva, NY (Cornell University)
- Carvel Research & Education Center, Georgetown, DE (University of Delaware)
- Penn State Horticulture Research Farm, Pennsylvania Furnace, PA (Pennsylvania State University)
- Long Island Horticultural Research Lab, Riverhead, NY (Cornell University)
- Philip E. Marucci Center for Blueberry & Cranberry Research, Chatsworth, NJ (Rutgers University)

Eight trials were completed and eight reports have been submitted.

Quality Assurance (QA)

During the period of this report, NER QA [Jane Forder] conducted 13 in-life inspections, 70 audits of field data books, 8 final report audits, performed a second review on 37 final reports and conducted 1 facility audit.

Jane played an integral role in the headquarters move from Rutgers to NC State. She performed numerous closing report checks and generated many QA statements as well. During the first two weeks of October her position formally transitioned to NC State and she spent a number of hours training on the NC State systems, and taking mandatory training classes.

Personnel

Administration

	Title	Location	Address	Phone	Email
Simon Zebelo	Regional Director	University of Maryland Eastern Shore	1117 Trigg Hall Princess Anne, MD 21853	410-651-6163	sazebelo@umes.edu
Marylee Ross	Regional Field Coordinator	University of Maryland	27664 Nanticoke Rd. Salisbury, MD 21801	410-742-8788 ext. 310	mross@umd.edu
John Ellis	Program Coordinator	University of Maryland Eastern Shore	1115 Trigg Hall Princess Anne, MD 21853	410-621-3031	jellis@umes.edu
Jane Forder	Regional Quality Assurance	North Carolina State University	1730 Varsity Drive Venture IV, Suite 210 Raleigh, NC 27606	919-515-1683	jforder@ncsu.edu
Megan James	Assistant Regional Field Coordinator	University of Maryland	27664 Nanticoke Rd. Salisbury, MD 21801	410-742-8788 ext. 317	mjames14@umd.edu

Field Personnel by State

DELAWARE	Title	Location	Email	Area of Involvement
Alyssa Koehler	FRD	University of Delaware	akoehler@udel.edu	Food Use
David Owens	FRD	University of Delaware	owensd@udel.edu	Integrated Solutions
Mark VanGessel	FRD	University of Delaware	mjv@udel.edu	Food Use

MARYLAND	Title	Location	Email	Area of Involvement
Diana Cochran	FRD	University of Maryland College Park	cochrand@umd.edu	Environmental Hort
Menguin Hu	FRD	University of Maryland College Park	mjhu@umd.edu	Food Use
Megan James	FRD	University of Maryland – LESREC	mjames14@umd.edu	Food Use
Marylee Ross	FRD & RFC	University of Maryland-LESREC	mross@umd.edu	Food Use

MASSACHUSETTS	Title	Location	Email	Area of Involvement
Sue Scheufele	FRD	University of Massachusetts	sscheufele@umext.umass.edu	Food Use
Marty Sylvia	FRD	University of Massachusetts	martys@umass.edu	Food Use
Leela Uppala	FRD	University of Massachusetts	suppala@umass.edu	Food Use

NEW JERSEY	Title	Location	Email	Area of Involvement
Thierry Besancon	FRD & SLR	Rutgers - Chatsworth	thierry.besancon@rutgers.edu	Food Use
Jennifer Fisher	FRD	Rutgers – Snyder R&E Farm	jlf229@njaes.rutgers.edu	Food Use
Tom Freiberg (Retired)	FRD	Rutgers – Cream Ridge	freiberg@njaes.rutgers.edu	Food Use

NEW YORK	Title	Location	Email	Area of Involvement
Nora Catlin	FRD	Cornell – Suffolk County	njc23@cornell.edu	Environmental Hort
Cody Dickinson	FRD	ACDS Research Inc.	cdickinson@acdsresearch.com	Food Use
Daniel Gilrein	FRD	Cornell – Suffolk County	dog1@cornell.edu	Integrated Solutions & Environmental Hort
Christy Hoepfing	FRD	Cornell	cah59@cornell.edu	Food Use
Grant Jordan	FRD	ACDS Research Inc.	gljordan@acdsresearch.com	Food Use
Tessa Lessord	FRD	ACDS Research Inc.	tlessord@acdsresearch.com	Food Use
Margaret McGrath	FRD	Cornell	mtm3@cornell.edu	Food Use & Integrated Solutions
Brian Nault	FRD & SLR	Cornell	ban6@cornell.edu	Food Use
Andrew Senesac	FRD	Cornell – Suffolk County	afs2@cornell.edu	Environmental Hort
Lynn Sosnoskie	FRD	Cornell	lms438@cornell.edu	Food Use
Alan Taylor	FRD	Cornell	agt1@cornell.edu	Food Use & Integrated Solutions

PENNSYLVANIA	Title	Location	Email	Area of Involvement
Kari Peter	FRD	Penn State University	kap22@psu.edu	Integrated Solutions

State Liaison Representatives

Name	State	Email
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Heather Faubert	RI	hhf@uri.edu
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*Position vacant July-December 2021 due to Liaison retirement.