



**IR-4 Project Management
Committee and Commodity
Liaison Committee Spring Meeting**

March 3-5, 2026
Agenda and Handouts



AGENDA

**Joint IR-4 Commodity Liaison Committee/Project
Management Committee Spring 2026 Meeting
Residence Inn – National Mall**
333 E St SW, Washington, DC, 20024, Capitol Room
Hybrid Meeting

Zoom Link: <https://ncsu.zoom.us/j/98173063773?pwd=LV3DZqQHfkiZpB5muCA9N1GLgmU7gk.1>
Meeting ID: 981 7306 3773 **Passcode:** 123456

Tuesday, March 3, 2026

- **8:30 am - Friends of IR-4 Business Meeting (Friends of IR-4 Members only)**
- **9:30 am - Joint Project Management Committee/Commodity Liaison Committee**
 1. Welcome and comments from the current Chairs (Hengel & Scholz)
 2. [Approval of minutes; new agenda items](#) (Hengel)
 3. Presentation by New IR-4 Project Executive Director Dr. Lina Quesada- Ocampo
 4. [2025 IR-4 Year-End Summary and Update](#) (Carpenter)
 5. CLC Report and Friends of IR-4 Update (Scholz and Beaudreau)
 - a) [CLC Membership renewal of Track "C" Members](#)
 - b) New CLC Members
 - c) CLC Officer Elections
 - d) Advocacy Plans
- **Working Lunch**
 6. Comments from USDA-OPMP (Julie Van Alstine) - 12:00 Noon
 7. Comments from US EPA Office of Pesticide Programs (Billy Smith) - 12:30 pm
 8. Comments from Cindy Smith, Ag Relations Director at Gowan (Invited) -1:00 pm
- **1:15 pm Joint Project Management Committee/Commodity Liaison Committee, continued**
 9. Priority Setting/New Research (Axtell et. al.)
 - a. 2026 Industry Technology Session
 - b. [Debrief from 2025 Priority Setting Workshop](#)
 - c. Discussion of 2026 Food Use Workshop Format
 - i. Lab Analysis Difficulty
 - ii. Future Hemp Projects
 - d. [Key dates associated with 2026 priority setting](#)
 10. Awards
 - a. [Renaming the SOAR Award to the Jerry Baron SOAR Award](#)
- **3:00 pm – Adjourn**
- **5:00 pm – 7:00 pm Congressional Staffer Reception - Rayburn House Office Building, Room 2075, 45 Independence Avenue SW, Washington, DC 20515**

Wednesday, March 4, 2026

- 8:30 am - Joint Project Management Committee/Commodity Liaison Committee, continued
 11. Management Reports
 - a. Administrative Advisors (Buhler, et.al)
 - b. NIFA Report (Philips)
 - c. Regional/ARS Reports ([Zebelo](#), [Hausbeck](#), [Gu](#), [Hengel](#), and Simmons)
 - d. HQ Report (Carpenter)
 12. Program/Platform Reports
 - a. Food Program
 - i. Residue Research
 1. [Field Program and Submissions](#) (Marconi and Pike)
 2. [Laboratory Analysis](#) (Carpenter)
 3. [Quality Assurance Unit](#) (Mazlo)
 - ii. [Product Performance Research](#) (Axtell)
 - iii. [Biopesticide Regulatory Support](#) (Barney)
- Noon – Lunch
- 1:00 pm - Joint Project Management Committee/Commodity Liaison Committee, continued
 - b. [Environmental Horticulture](#) (Kindel)
 - c. [Communications](#) (Ross)
 - d. [Education and Training](#)
 - i. Re-cap of the 2026 National Education Conference
- 13. Global Harmonization of Pesticides/Minor Use Foundation (Drost)
- 14. [Electronic Field Data Book](#) (Byrtus)
 - a. Revisiting the practice of regional Quality Control
- 15. [Status of funding/grants](#) (Chojnacki)
 - a. NIFA
 - b. Integrated Solutions and Lab Allocations
 - c. Closing 2022 NIFA grant for subs on 4/30/2026
 - d. Use of Remaining Integrated Solution/Performance Budget
- 16. Upcoming Meetings and Conflicts (Chojnacki and Carpenter)
 - a. Summer PMC meeting: virtual
 - b. 2026 Food Program Workshop: September 15-17, Austin, TX
 - c. [NRPM: October 26-28, Raleigh, NC](#)
 - d. [Fall PMC meeting: October 28-30, Raleigh, NC](#)
 - e. 2027 Joint CLC/PMC meeting: *Proposed* March 2-4, Washington DC
- 17. Other topics/Adjourn
- 5:30 pm – 7:30 pm LC/PMC Reception at: Residence Inn – National Mall
333 E St SW, Washington, DC, 20024, breakfast area just outside of Capitol Room/Meeting Room

Thursday, March 5, 2026

- 8:30 am - Executive Session (PMC Only)
- 11:30 am - Adjourn & lunch on your own

PMC Meeting Minutes for Approval

Presenter: Matt Hengel





MINUTES
Project Management Committee
Fall 2025 Meeting
October 8-10, 2025
Hybrid Meeting - Kansas City, MO

MOTIONS AND ACTION ITEMS

Motions/Consensus Items:

1. A motion to approve the 2025 PMC Summer Meeting minutes with typographical corrections as suggested was made by Jerry Baron, seconded by Simon Zebelo; **approved (2 absent – L. Gu & A. Simmons).**
2. **Consensus:** The Regions would like to maintain the option to perform a quality control (QC) review of field databooks. It was agreed that further QC reviews would be performed at the discretion of the Regions and any cost for the QC would come from the Region Core budget. (2 absent – L. Gu & A. Simmons).
3. A motion was made to recess the meeting for the evening by Matt Hengel; seconded by Mary Hausbeck; **approved (2 absent – L. Gu & A. Simmons).**
4. A motion was made by Todd Scholz to add Atticus Finger, from the American Sugar Cane League, to the Commodity Liaison Committee, seconded by Jerry Baron; **approved (1 absent – A. Simmons).**
5. A motion was made to not refill residue studies dropped at or after the National Research Planning Meeting (NRPM) but instead reallocate funds to contract labs to help with the backlog, was made by Matt Hengel, seconded by Liwei Gu; **approved (1 absent – A. Simmons).**
6. A motion was made that: starting with new uses, IR-4 will move forward with requiring all hemp requests split into seed/grain hemp, industrial/fiber hemp, and cannabinoid hemp; each request will require their own priority & residue study protocol; and that stakeholders recognize that limited IR-4 resources should only go to seed/grain hemp, and empower IR-4 HQ to make adjustments as needed to existing requests was made by Jerry Baron, seconded by Todd Scholz; **approved (1 absent – A. Simmons).**
7. A motion was made for IR-4 Headquarters to have the discretion to put projects rated as “orange” during the EPA stop light analysis on hold and not have them part of the prioritization process by Todd Scholz, seconded by Mary Hausbeck; **approved (1 absent – A. Simmons).**
8. **Consensus:** to move forward with a joint meeting with Ag- Food Canada’s Pest Management Centre for the Summer PMC Meeting in Canada.
9. A motion was made to:
 - 1) Reduce total funding for the IS priorities established at the 2024 Milwaukee Food Use Workshop by \$100,000 + IDC which will be distributed evenly to the two IR-4 Analytical Labs, with priority given to remaining IS priorities that are bio based/organic projects for the remaining funds; and
 - 2) Eliminate funding for IS priorities established at the 2025 Denver Food Use Workshop with \$150,000 moved to H+ and \$450,000 split evenly to each of the two regions who have Analytical labs; and
 - 3) that this motion is being brought forth to address the additional lab capacity needed to respond to the closure of the Michigan and Wapato Labs; and
 - 4) Future IS funding will be revisited once budgetary pressures are lessened,by Jerry Baron; seconded by Liwei Gu; **approved (1 absent – A. Simmons).**

10. A motion to adjourn the regular session meeting at 11:50 am on October 10, 2025 was made by Todd Scholz; seconded by Simon Zebelo; **approved (1 absent – A. Simmons).**
- 11.

Votes Made Between Regular Meetings:

1. Matt Hengel made a motion to nominate and approve Jerry Baron as a recipient of the prestigious Hall of Fame Award; seconded by Alvin Simmons. **Approved by majority via written consent (1 absent: Jerry Baron).**

Members:

Jerry Baron; IR-4 Executive Director
Doug Buhler; Administrative Advisor-NCR
Liwei Gu; Regional Director-SOR
Mary Hausbeck; Regional Director - NCR
Matt Hengel; PMC Chair; Regional Director-WR

Marcel Holyoak; Administrative Advisor - WR
Moses Kairo; Administrative Advisor-NER
Todd Scholz; CLC Chair
Simon Zebelo; Regional Director - NER

Presenters:

Alice Axtell, IR-4 HQ
Bill Barney; IR-4 HQ
David Beaudreau; DCLRS
Donna Bouffard; IR-4 HQ
Jimmy Byrtus; IR-4 HQ
Debbie Carpenter; IR-4 HQ

Krystal Chojnacki; IR-4 HQ
Josh Kindel; IR-4 HQ
Johanna Mazlo; IR-4 HQ
Philip Moore; IR-4 HQ
Thomas Pike; IR-4 HQ
Hannah Ross; IR-4 HQ

Wednesday, October 8, 2025 3:30 pm to 4:30 pm ET

Matt Hengel called the meeting to order at 3:31 pm.–

1. Welcome and Introductions approval of minutes (Handout) and new agenda items.
 - M. Hengel welcomed the group, noted that we will move around agenda items to accommodate travel schedules, and initiated introductions around the room and on Zoom.
 - M. Hengel asked the PMC if there were any additional changes to be made to the minutes, several typos were corrected; none additional offered.
 - **A motion to approve the 2025 PMC Summer Meeting minutes with typographical corrections as suggested was made by Jerry Baron, seconded by Simon Zebelo; unanimously approved.**
2. Path Forward 2.0 Check-in
 - New Technology
 - eFDB & Quality Control for the 2026 eField Databook (Handout)
 - P. Moore provided an update on: a proposal to improve national communications by using a ticketing system called ServiceNow; iAdvantage software bugs and improvements to the system for the upcoming year; eSignatures; and the transition of lead eFDB administrator to Jimmy Byrtus.
 - A discussion was held regarding: the objective of the ticketing system; if the system would achieve the level of service intended; if folks from the field have given feedback on a ticket system; if the glitches with the eFDB this year correlate to the uptick on the incoming inquiries; having quality checks

on the outgoing eFDB's; keeping the ability for direct calls in the case of time sensitive issues; and ways to keep the costs down.

- P. Moore further reported on QC for eField Databooks reporting: the re-occurring question of whether or not to maintain QC; reviewed the seven steps involved in the field databook review process; and outlined the options associated with maintaining QC, modifying it or discontinuing it.
- A discussion was held regarding: if QC is removed, would funding for QC be pulled back from the region from core funding (no), and the need to review budgets before making cuts; the intent was to be an early warning system for QA to reduce costs; whether or not the field staff is ready to cut QC; discontinuing – or not- the use of contract QC; and a proposal to decide to end QC, or moved to a random sampling, when the issues noted are reduced. Several PMC members expressed interest in keeping QC for the time. PMC asked the RFCs in attendance to share their thoughts and those included: struggles with the change to eFDB's; staffing changes impacting QC; tracking findings and revisiting in Fall of next year; and regional QA would like QC to continue as they look for different errors than QC.
- **Consensus:** The Regions would like to maintain the option to perform a quality control (QC) review of eFDB's. It was agreed that future QC reviews would be performed at the discretion of the Regions and any cost for the QC would come from the Region Core budget. (2 absent – L. Gu & A. Simmons).
- Updating Databases (Handout)
 - J. Byrtus provided an update on the Technology Team including: database updates on hold right now; recommended using a paid eSignature; assisting with a new master contact list; and improvements to the Environmental Horticulture database.
- **A motion was made to recess the meeting for the evening by Matt Hengel; seconded by Mary Hausbeck; approved (2 absent – L. Gu & A. Simmons).**

Thursday October 9, 2025 8:00 am to 5:00 pm CT

Matt Hengel reconvened the meeting at 8:04 am.

- eQA (Handout)
 - J. Mazlo provided an update on the eQA Software update, what changes the update included, and that the validation SOP is complete.
 - A discussion was held regarding if the look was going to change (no) and all materials will still be in there for the labs.
 - Communications
 - H. Ross reported on: latest news stories released and upcoming stories; social media engagement and growth; event information; updated one-pagers; award updates; intranet updates; and transition of items off the main website.
 - Analytical backlog
 - It was noted that this topic will be covered in a later agenda item.
3. CLC & Friends of IR-4 Update
- T. Scholz reported: there is one new member of the CLC up for nomination, Atticus Finger of the American Sugar Cane League, who was recommended by Herman Waguespack for approval to the CLC; the CLC voted to add Atticus Finger as a CLC member and recommended approval by the PMC; and that Todd will be retiring in the summer next year and has formed a committee to help determine a new Chairperson for the CLC.

- A discussion was held regarding adding a CLC member from Crop Life, as well as from NASDA.
- **A motion was made by Todd Scholz to add Atticus Finger, from the American Sugar Cane League, to the Commodity Liaison Committee, seconded by Jerry Baron; approved (1 absent – A. Simmons).**
- D. Beaudreau reported: most offices are still operating on the Hill; thinks a week from now they will be closer to finding a solution for the budget with a short term continuing resolution; the farm bill is still in a holding pattern and likely won't be passed this year; the plans for 2026 the Friends of IR-4 will get requests into the OMB office to meet with staff and speak to them about getting a line item in the President's budget request for next year; early 2026 will submit appropriation requests to key offices where Friends of IR-4 have a presence; and planning for March visit and will try and get the same room for a reception when government opens back up.

4. Management Reports

- Administrative Advisors
 - D. Buhler reported that: IR-4 successfully got the NRSP funding renewed for the next 5 years although the budget took a bit of a cut; and that a priority for the new Executive Director will be to reach out and continue the good relationship with the research station directors.
 - Marcel Holyoak reported that; there is a new dean who is settling in and is supportive of IR-4; new opportunities at UC Davis including a new AI in agriculture center and a very large facility with green house, processing and laboratory facilities has been donated to UC Davis; and are keeping an eye on what the government is doing including changes in IDC and how it impacts the work of UC Davis.
 - M. Kairo reported that: they are near completion of a new facility that will add 7,000 sq.ft. of greenhouse space; senior UMES has been advocating for IR-4 during Hill visits showing the strong commitment to the partnership with IR-4 Project; and is looking forward to meeting with the new Ag Innovation chair and is happy to discuss the importance of IR-4 with them.
- NIFA Update
 - J. Baron reported: that he has consistent meetings with the NIFA National Program Leader (Chris Philips); that the CLC and Friends of IR-4 were instrumental in getting the release of the 2025 Grant as well as other program grants; and some food production systems grants did not get funding, and the funds were returned to the US Treasury. Due to the government shutdown, Chris Phillips could not be present.
- ARS Update
 - Due to the government shutdown, ARS representatives could not be present.
- Regional/ARS Updates
 - S. Zebelo (Handout) reported: thanked Marylee and the team at UMES; updated on the status of field research and reports submitted for the food and environmental horticulture program; subawards are working well underway and new 2025 subawards will be released in the next few weeks; sample bags continue to increase and asked the regions to provide their sample bag needs quickly; updated on events and priority setting meetings in the region; and meetings were held regarding partnerships with Lange Research and ACDS trucking.
 - M. Hausbeck reported: the North Central Region has been busy with EPA inspections; Interesting b/c the South Dakota site was already decommissioned; the status QC in the region; status of QA inspections; status of field research underway for the food and environmental horticulture programs; the success of regional visits

from Jerry Baron and Josh Kindel; the positive result of Jerry and Nicole attending the ginseng field day; exploring new ways to provide recognition to people in the regions who contribute to the work of IR-4; and the change in the host department at MSU for the NCR for both funding and employee placement.

- A discussion was held regarding team recognition and building community among IR-4 contributors.
- L. Gu (Handout) reported: on tracking of eFDB submissions for 2024 and 2025; the field site at Homestead has been decommissioned; new personnel at the analytical lab and a new instrument; status of laboratory analytical summary reports; and that QA is preparing for EPA audits.
 - A discussion was held regarding the decommissioning of the Homestead site.
- K. Arnold reported: on the priority setting preparation and the success of the Food Use Workshop; strengthening the relationship with CDPR; two new SLR's; working on planning trials; tours and conferences attended to educate about IR-4; upcoming retirements; UC Davis sponsored programs is under new leadership; and the environmental horticulture workshop was a success. M. Hengel reported: that QA in the WR has been helping with EPA inspections; seismic retrofits are still underway in Sprocket Hall where the lab is located; the status of ASRs; and Bronson will retire next summer, there is a new hire Jeff Eichler, and other staffing changes.
 - A discussion was held regarding the seismic retrofits and to retain test substances for upcoming EPA audits.
- J. Baron reported on behalf of ARS: the Wapato lab will be decommissioned; there were a few findings from the Wapato Lab audit by EPA; Salinas field site wants to perform field trials in 2026 in spite of issues with completing trials; Wooster site can accommodate early greenhouse work; 3 year Cooperative Agreement with NC State for QA support; and there are unknowns when the government shutdown will end.
 - A discussion was held regarding future work with the Salinas site, using the Salinas site for CRO work, and issues scheduling in-life inspections at Salinas.
- Headquarters Report
 - J. Baron reported: that Roger Batts announced he is retiring on March 1; operating under NC State's salary and hiring cap limits; the study director team is stretched thin with taking on additional duties and are considering blocking time each week to focus on writing reports; Steve Lommel is retiring November 1 and co-interim leads have been named; David Monks is now the North Carolina Cooperative Extension Director; Frank Louws, Head of Horticultural Science, is stepping down at the end of the year; and there is new leadership in the CALS Business Office and complications with processes.
 - K. Chojnacki reported that the search committee has identified 3 candidates that we will be bringing in for in-person interviews in mid to late October.

Break at 10:00 am. The meeting reconvened at 10:20 pm.—

5. Program Discussions

- Food Residue/Product Performance Research (Handout)
 - Field Research/Field Data book completions
 - T. Pike reported: three new uses and six submissions in 2025; new uses are down due to the EPA and the change in administration as well as submissions due to gaps in pollinator data required and the laboratory

backlog; crop grouping on cucurbit vegetables information submitted to EPA but no timeline on when it will be updated; reviewed field research projects over the last three years; status of outstanding field data notebooks for 2023 and 2024; regulatory challenges including completion of field data books, report writing, safety finding issues, ESA, registration status in Europe, need for pollinator data, uncertainty with EPA; and improvement on communications with EPA.

- Laboratory Research/ARS (Handout)
 - Decommissioning/Recommissioning of Wapato
 - J. Baron reported: plan is to decommission the site and close the books on it and when recommissioned it will start anew; and that EPA has recently audited the site.
 - D. Carpenter reported: they have transferred most studies and samples that are not being worked on prior to the government shutdown; the EPA audit findings; mapped out how to correct the data with the QA unit; the WR lab has been helping to close out studies; and need to figure out how to handle studies that are not completed before the end of the year.
 - i. A discussion was held regarding a past PMC action to develop a working group to develop a process for the recommissioning of the Wapato Lab.
 - Limitations at Tifton
 - D. Carpenter reported that researchers there are doing a great job in spite of limitations of staff and funding.
 - Backlog report (Handout)
 - D. Carpenter reported: on the backlog status of each of the analytical laboratories; the status of backlog over time; and that the backlog is unsustainable.
 - Discussion of backlog policy changes
 - Ranking potential projects for FUW, advisory or mandatory
 - HQ's ability to redlight chemicals
 - Matching the number of priorities assigned at FUW to laboratory capacity.
 - i. D. Carpenter reported: on the history of the backlog; successes and failures of strategy for preventing future backlog; consequences of backlog and what is actually happening and the causes of the diversion from the plan; the need to address how the capacity of the labs fits the capacity of the field; whether or not the backlog policy should be revised; the laboratory guidance document has been updated and is ready for signature and if we include the backlog policy; and suggestions for revising the policy.
 - ii. A discussion was held regarding: since 2022 communication and updates to the National Laboratory Director has improved and the current policy is different from the 2022 written document; labs have been consulting with each other if there is a problem; the difficulty in climbing out of the backlog; some projects are very complicated and in spite of pivots, are still not resolved; should first discuss how to get out of the

backlog; the fundamental problem is that we are producing more from the field than the lab can handle; prioritization of samples coming into labs and color coding; limitations of lab capacity; being strategic about storage stability; it is a question of how you tell the study; communications around the issue; and lab capacity.

- iii. A discussion was held: to evaluate projects coming into the FUW on their impact on the labs in a short time frame include complexity of commodity, how many ai's or process fractions how many A's they are worth; and if projects drop off, we shouldn't go back and replace them.
- iv. Look at the 2026 projects and evaluate them as a test pilot.

Break at 12:30 pm. The meeting reconvened at 1:13 pm.—

- v. An idea is to keep the number of priorities reduced for an additional 2 years and come up with a project complexity rating system on what was prioritized at the last FUW (# fractions, #ai and ai complexity itself); and increasing capacity at the labs (additional personnel and addressing technology lapses). Dollar figure on what labs need to support one more chemist at each lab and one lease for a higher performing instrument.
 - vi. **A motion was made to not refill residue studies dropped at or after the National Research Planning Meeting (NRPM) but instead reallocate funds to contract labs to help with the backlog, was made by Matt Hengel, seconded by Liwei Gu; approved (1 absent – A. Simmons).**
- o Discussion of Hemp Requests (Handout)
 - P. Moore reported: the projects IR-4 has taken on with hemp both for Integrated Solutions projects and residue/product performance projects; reviewed what IR-4 is submitting to EPA; outlined an issue that EPA only accepts residue data to create a new tolerance for food uses while requests are made for all use sites; USDA has updated their definition of hemp to split it into food hemp from cannabinoid hemp; and proposed several options for solutions.
 - A discussion was held: as to if we are currently allowing food and cannabinoid uses; permits required for planting; will only get food uses on registrations until FDA approves cannabinoid as food; and if new hemp projects should be for seed only.
 - **A motion was made that: starting with new uses, IR-4 will move forward with requiring all hemp requests split into seed/grain hemp, industrial/fiber hemp, and cannabinoid hemp; each request will require their own priority & residue study protocol; and that stakeholders recognize that limited IR-4 resources should only go to seed/grain hemp, and empower IR-4 HQ to make adjustments as needed to existing requests was made by**

Jerry Baron, seconded by Todd Scholz; approved (1 absent – A. Simmons).

- QA Activities/EPA Audits (Handout)
 - J. Mazlo reported: on EPA inspections conducted since summer and those upcoming; QA updates on ARS audits; 2025 audit inspection data to date; and eQA & eQA updates.
- Results of Food Use Workshop (Handout)
 - IR-4 Policy on EPA coded orange nominations
 - A. Axtell reported: 140 attendees of which 25% were first time participants; post meeting survey results were positive; H+ projects combined and submitted as IS as well as two orange projects; reduced priorities to divert funding to support contract lab work; 248 nominated projects whittled down to 35 “A” priorities, 2 “A’s” sponsored by other companies; and Integrated solutions projects had 86 nominated and ended with 4 regional, 5 national and 2 sponsored projects.
 - A discussion was held regarding: how many residue projects result from product performance data or Integrated Solutions results; when should IR-4 step in to say orange or above EPA coded projects we need to not move forward with; EPA puts forth effort to give us a clear path forward and we should heed their guidance; and being good stewards of public funds.
 - **A motion was made by Todd Scholz for IR-4 Headquarters to have the discretion to put potential researchable projects assessed as “orange” during the EPA Stop Light analysis on hold and not have them part of the prioritization process, seconded by Mary Hausback; approved (1 absent – A. Simmons).**

Break at 3:16. The meeting reconvened at 3:30 pm.—

- Integrated Solutions (IS) Platform (Handout)
 - Integrated Solutions projects – future?
 - A. Axtell reported: on the history of the IS Platform noting that funding came from the Biopesticide Regulatory Platform; the platform evolved because most of the requests received were directed product screening research (PPWS); while data was generated it was mostly product screening rather than systems based; challenges that lead to IS reboot including , limited resources, outcomes have not reached the broader community and gaps in database tracking; stakeholder feedback obtained in 2024; outcomes of the reboot; the IS outcomes of the 2025 FUW when IS projects were used for lumped together H+ projects; and proposed questions to the PMC on the future of the platform.
 - A discussion was held regarding: background of the 2025 FUW H+ IS project; with herbicides there are not biological options so maybe more money should be moved back to product performance for herbicide; whether or not IS should include screening or not; timing of delaying IS projects and if that will align with screening; constraints of innovation within our budget within a single year; various definitions of innovation; lack of clarity still in the program and its contributions to registration; pivoting to biobased projects only; should residue be included in IS; could these funds

- be used to address the backlog; and reduce the project allocation in future years to save money.
 - This item was tabled for discussion at Executive Session.
- Biopesticide Regulatory Support Platform (Handout)
 - B. Barney reported: on five projects submitted or under EPA review; waiting on a Draft label for the Alum project; AF36 Prime is looking to expand their label to a national label; 6 packages in development for submission; updated on the new vetting process; a request from USDA on a genetically engineered female lethal system of new Worl screwworm; and Alice Axtell has offered to provide support to the Biopesticide Regulatory Program, which is greatly appreciated.
 - A discussion was held as to if the need comes up for Biopesticide data (only in public health situations).
- Environmental Horticulture Program (Handout)
 - J. Kindel reported: on the 2025 grower & extension survey results; workshop changes going into the workshop and what actually happened in terms of needs (efficacy/crop safety); pre-workshop meetings held; reviewed results of the workshop; next workshop will hold the regional project selection later in the workshop; will push to use the project request more after making refinements to the form; working to clean up outstanding data; the future vision of the program; and potentially rebranding the program name.
 - A discussion was held as to the success of the EH workshop.
- Training Committee (Handout)
 - D. Carpenter presented: registration is open for the 2026 NEC; an optional field tour will be included; there are three SOPs in progress and where they are in the approval process; reviewed advisories to National SOPs in process; and reviewed upcoming virtual trainings.

Recessed for the evening at 5:30 pm.

Thursday October 10, 2025 7:30 am to 12 noon CT

6. Update of IR-4 Archives
 - J. Baron reported: on the issue of missing boxes from the off-site storage facility in NJ; it turns out that there may not be that many missing but the accounting of the boxes may be the issue; taken corrective actions and made Donna Bouffard the Lead Archivist and working with current off-site storage company to perform an inventory with photos to reconcile what we have and don't; the hope is to get this resolved prior to the end of the year prior to the new Executive Director starting; find out what is missing and do a risk assessment; and if there are vulnerabilities, notify EPA.
 - D. Bouffard reported: there are a total of 3,300 boxes and Storr has committed to completing the audit later this month and Donna will compare with lists we have to see what is missing.
 - A discussion was held regarding study dates that may be vulnerable (1973-2020).
7. Assisting Specialty Crop Exports opportunities - Minor Use Foundation (MUF)
 - J. Baron reported: MUF has received some funds from ASCE program; in the past they have asked that we share our old data to help get registrations abroad; they have

proposed looking at our project list and fund additional field trials or lab analysis for those additional studies to get CODEX or EU approval; issue may be if our labs are asked to analyze additional sample sets; and would we be interested in doing some residue mitigation studies with MUF in 2027.

8. Funding opportunities vs project limitations

- J. Baron reported: internally we struggle with getting opportunities coming our way that we feel conflicted with because of staffing limitations, backlog; at some point the opportunities won't exist anymore and we would have missed out; and down the line we need to think about making that shift and take advantage of some of these opportunities.
- A discussion was held regarding current staffing limitations and workload issues at HQ and analytical reports are different in Canada.

9. Orientation strategy for the new Executive Director

- J. Baron reported: not having overlap with current Executive Director we will need to pivot; Jerry will be available if needed to answer questions; many parts of the job are relationship and so visits with folks and attending meetings will be critical; attending the specialty crop meetings (Minor Crop Farmer's Alliance, Crop Life) and visit the regions; and research station regional director meetings;
- A discussion was held regarding interviews with candidates and the priority of connecting with stakeholders.

10. Awards for NEC (Handout)

- K. Chojnacki reviewed the three awards typically issued at the National Education Conference from the regions and the PMC's role in selecting three recipients of the National Recognition of excellence.

11. Future Meetings

- Schedule a date to decide on National Recognition of Excellence Award recipients after November 5, to be issued at the NEC.
 - The date was determined to be Friday, November 7 at 2:00 pm EST.
- Summer PMC: Remote or try and connect with PMRA.
 - **Consensus:** to move forward with a joint meeting with the with Ag- Food Canada's Pest Management Centre for the Summer PMC Meeting in Canada.
 - A discussion was held regarding the proposed date and not conflicting with Cultivate, (does not); July 7-9, 2026.

The regular session meeting convened into Executive Session at 8:20 am.

Break 8:20. The meeting reconvened to Executive Session at 8:35 am.

12. Executive Session

Break at 10:22 am. The meeting reconvened at 10:40 am.—

The members reconvened into regular session at 11:48 pm and shared the following reportable action:

- **A motion was made to:**
 - 1) reduce funding for the IS priorities established at the 2024 Milwaukee Food Use Workshop by \$100,000 + IDC which will be distributed evenly to the two IR-4 Analytical**

Labs, with priority given to remaining IS priorities that are bio based/organic projects for the remaining funds; and

2) Eliminate funding for IS priorities established at the 2025 Denver Food Use Workshop with \$150,000 moved to H+ and \$450,000 split evenly to each of the two regions who have Analytical labs; and

3) that this motion is being brought forth to address the additional lab capacity needed to respond to the closure of the Michigan and Wapato Labs; and

4) Future IS funding will be revisited once budgetary pressures are lessened.

Jerry Baron; seconded by Liwei Gu; approved (1 absent – A. Simmons).

A motion to adjourn the regular session meeting at 11:50 am on October 10, 2025 was made by Todd Scholz; seconded by Simon Zebelo; approved (1 absent – A. Simmons).



MINUTES
Project Management Committee
Special Meeting
November 7, 2025
Virtual

MOTIONS AND ACTION ITEMS

1. A motion was made to nominate Matt Hengel to a second and final three year term by unanimous consent by Todd Scholz, seconded by Liwei Gu; **approved by majority. (1 absent - A. Simmons and 1 abstention - M. Hengel).**

CONSENSUS ITEMS

1. **Consensus:** To present the National Recognition of Excellence Awards to Megan James Hickman, Leona Horst, and Susan Bierbrunner.

Members: _____

Jerry Baron; IR-4 Executive Director
Liwei Gu; Regional Director - SOR
Mary Hausbeck; REgional Director- NCR
Matt Hengel; Regional Director-WR/PMC Chair
Todd Scholz; CLC Chair
Simon Zebelo; Regional Director – NER

Staff: _____

Deborah Carpenter; IR-4 HQ
Krystal Chojnacki; IR-4 HQ

Friday, November 7, 2025 2:00 pm EST

-- Dr. Matt Hengel called the meeting to order at 2:02 pm --

1. PMC Chair
 - M. Hengel stated that the PMC chair position was up for determining the PMC Chair for the next three year period.
 - **A motion was made to nominate Matt Hengel to a second and final three year term by unanimous consent by Todd Scholz, seconded by Liwei Gu; approved by majority. (1 absent - A. Simmons and 1 abstention - M. Hengel).**
2. National Recognition of Excellence Award Recipient Selection
 - M. Hengel introduced the item noting that each of the nominated parties were very deserving of the recognition, each nominated party was reviewed and discussed, and the need for a team award.
 - **Consensus:** To present the National Recognition of Excellence Awards to Megan James Hickman, Leona Horst, and Susan Bierbrunner.
3. TASC Grant
 - J. Baron reported that the North America Blueberry Association submitted and received a Technical Assistance for Specialty Crop (TASC) grant for a product to get the export to Japan and the trials are on the 2026 research plan.

4. IR-4 Project Executive Director
 - A discussion was held regarding each of the candidates merits and thoughts were shared with members of the PMC who serve on the search committee to relay on.
5. Federal shutdown implications
 - A discussion was held regarding NC State University not processing subaward invoices effective November 3rd due to the government shutdown.

The meeting adjourned at 2:47 pm.



MINUTES
Project Management Committee
Special Meeting
December 18, 2025
Virtual

MOTIONS AND ACTION ITEMS

1. A motion to approve Debbie Carpenter to serve as Acting Executive Director until a new Executive Director is hired was made by Todd Scholz, Seconded by Mary Hausbeck. **Approved by Majority, 1 abstention - A. Simmons.**
2. A motion was made to suspend the policy that limits IR-4 from starting additional new studies in 2026 was made by Todd Scholz, seconded by Alvin Simmons; **unanimously approved.**
3. A motion was made by Liwei Gu to approve the IR-4 Governance Document as proposed, to amend it as needed with the majority approval of the PMC, and for it to be signed by the Executive Director, Project Management Committee Chair and Administrative Advisor Chair, seconded by Todd Scholz. **Approved by Majority, 1 abstention - A. Simmons.**

ACTION ITEMS

1. **Action Item:** J. Baron to add language to the IR-4 Governance document that will allow amendments as needed by majority approval of the PMC.

Members:

Jerry Baron; IR-4 Executive Director
Doug Buhler; Administrative Advisor NCR
Liwei Gu; Regional Director - SOR
Mary Hausbeck; Regional Director- NCR
Matt Hengel; Regional Director-WR/PMC Chair
Joseph Munyaneza; Administrative Advisor ARS
Chris Phillips; USDA-NIFA
Todd Scholz; CLC Chair
Alvin Simmons; USDA- ARS
Simon Zebelo; Regional Director – NER

Staff:

Deborah Carpenter; IR-4 HQ
Krystal Chojnacki; IR-4 HQ

Thursday, December 17, 2025 2:00 pm EST

-- Jerry Baron called the meeting to order at 2:02 pm --

1. Approving Acting Executive Director to sign off on GLP Documents
 - J. Baron introduced the item, asked K. Chojnacki to provide an Executive Director update, and provided a background on why the request is being made to approve an acting Executive Director to comply with GLP requirements and keep work moving forward.
 - A discussion was held regarding the delays in hiring an Executive Director and if some of Debbie's other duties will be diverted to others while she is taking on these additional duties.
 - **A motion to approve Debbie Carpenter to serve as Acting Executive Director until a new Executive Director is hired was made by Todd Scholz, Seconded by Mary Hausbeck. Approved by Majority, 1 abstention - A. Simmons.**

2. Suspending the Policy that limits IR-4 from starting additional new studies in 2026.
 - J. Baron reported: at the October 2025 PMC a policy decision was made that any study that was lost coming out of the National Research Planning Meeting (NRPM) would not be replaced in order to provide additional resources for contract research laboratories to address the analytical backlog; however they are noticing that studies that have been done in the past are requiring additional data to move forward and that these were former "A" priorities; that this request is for permission to add these to the 2026 project list and not wait until 2027 to do this work; they have lost one study due to a manufacturer decision.
 - A discussion was held as to the number of trials terminated due to this manufacturer decision (7) and that this is the only one terminated after the NRPM thus far; funding will be coming from another project having a new funding source (TASC) and freeing up NIFA dollars; one trial would help complete projects currently under way; the high shipping costs associated with shipping samples to processing facilities; that the policy applies to 2026 trials only; the importance of getting results to the growers as fast as possible; and some larger studies may need to be spread over two years.
 - **A motion was made to suspend the policy that limits IR-4 from starting additional new studies in 2026 was made by Todd Scholz, seconded by Alvin Simmons; unanimously approved.**

3. Approval of IR-4 Governance Document
 - J. Baron reported: that this body requested he draft/compile a Governance document to pass long to the next Executive Director; comments were integrated into the most recent version
 - A discussion was held regarding if sections of the document were previously signed off on; expressed gratitude for Jerry's efforts to develop the document; and to add a sentence in the document that it can be amended .
 - **A motion was made by Liwei Gu to approve the IR-4 Governance Document as proposed, to amend it as needed with the majority approval of the PMC, and for it to be signed by the Executive Director, Project Management Committee Chair and Administrative Advisor Chair, seconded by Todd Scholz. Approved by Majority, 1 abstention - A. Simmons.**
 - **Action Item:** J. Baron to add language to the IR-4 Governance document that will allow amendments as needed by majority approval of the PMC.

A motion to adjourn the meeting at 2:55 pm was made by Alvin Simmons, seconded by Todd Scholz. Approved by Majority (1 absent Matt Hengel).

2025 Annual Report and Year-End Summary

Presenter: Debbie Carpenter





**Pest management solutions
for specialty crops and
specialty uses**

2025 YEAR-END SUMMARY

*Prepared by IR-4
Headquarters*



Dear colleagues and friends,

As we review IR-4's accomplishments of 2025, it is important to note the unique external challenges that defined this year's operating environment. They included significant funding delays, a lengthy federal government shutdown, hiring freezes, and other disruptions to IR-4's usual processes.

Despite these hurdles, the dedicated IR-4 team continued to develop critical data and support specialty crop growers this year, facilitating new registrations and conducting research guided by stakeholder priorities. For example:

- The Food Crop Program conducted residue trials for effective products to manage mites on greenhouse pepper and tomato, weeds in stone fruit, and *Alternaria* on almonds.
- The Environmental Horticulture Program welcomed a new manager and conducted efficacy work for Nantucket pine tip moth and European corn borer
- Biopesticide submissions were made for bacteriophages of Varroa mites on honeybees

We also hosted the Industry Technology Session, Food Use Workshop, and Environmental Horticulture Workshop. Each time we convene our stakeholders to prioritize projects for the next research cycle, we are inspired by what this community can accomplish through collaboration, compromise, and shared purpose. Our event sponsors are key partners in this success.

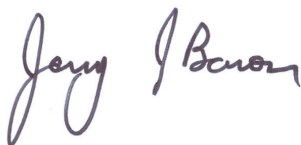
The Friends of IR-4 and Commodity Liaison Committee were invaluable allies this year, advocating for continued federal funding during this volatile season. We appreciate their time and generosity in sharing stories of IR-4's impacts to help lawmakers understand the practical importance of investing in this work.

While external constraints slowed regulatory outcomes, our lab, field, quality assurance, and research management teams served our stakeholders admirably, with remarkable professionalism and resilience. The Project Management Committee also provided sound guidance to help IR-4 navigate the turbulence of 2025.

This marks my final update as Executive Director, as I retire on January 1, 2026. It has been my profound honor to serve alongside my IR-4 colleagues for the past 40 years, helping to advance crop protection for the specialty crop community.

I have complete confidence in the team's strength and readiness to guide IR-4 into its next chapter with an unwavering commitment to our mission. We are fortunate to have such a strong, dependable network of collaborators.

Thank you for your collaboration and support,



Jerry Baron
Executive Director, The IR-4 Project
(through January 1, 2026)



IR-4 2025 Summary

FOOD CROP PROGRAM

Successes

- **3** new tolerances for **3** active ingredients were established by the U.S. Environmental Protection Agency (EPA), resulting in **3** potential new product uses on food crops.

Regulatory Actions

- **9** tolerance petitions were submitted to EPA, and **1** non-PRIA submission of two data packages. These covered **44** unique requests for assistance and crop group tolerance updates.
- **2** biopesticide submissions were made, with one addressing bacteriophages of *Varroa* mites of honeybees and the other addressing Huanglongbing (citrus greening).

Research

- **346** residue trials contributing to **37** new Magnitude of the Residue studies
- **149** efficacy/crop safety trials contributing to **79** Product Performance projects
- **15** field trials contributing to **17** Integrated Solutions projects

ENVIRONMENTAL HORTICULTURE PROGRAM

Successes

At this time, IR-4 does not have an accurate assessment of new registrations achieved in 2025. This information will be obtained during the second quarter 2026 with responses to inquiries from cooperating registrants.

Regulatory Actions

- **13** research summaries were written and/or updated to support new or update existing registrations; **4,435** field and greenhouse trials contributed to these summaries.

Research

- **602** field and greenhouse trials (**157** efficacy, **445** crop safety) that contributed to **21** projects

OPERATIONAL UPDATES

- **12** EPA inspections, **125** in-life field inspections, and **68** in-life lab inspections completed by QA
- Implemented **4** new National Standard Operating Procedures
- Made progress in reducing the analytical lab backlog
- Hired an Environmental Horticulture Program Manager
- Launched an intranet website to support our team across locations and job functions

The Year End Summary is a synopsis of our Annual Report. Scan to find the full report on 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 (through 1/1/26)

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

Research Planning Manager and Integrated Solutions Platform Lead

Dr. Alice Axtell
919-515-3055
aaxtell@ncsu.edu

Manager, National Quality Assurance Unit

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

Biopesticide Regulatory Manager

Bill Barney
919-515-3541
wpbarney@ncsu.edu

Manager, Environmental Horticulture Program

Josh Kindel
919-515-3771
jtkindel@ncsu.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
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



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**Pest management solutions
for specialty crops and
specialty uses**

2025 ANNUAL REPORT

*Prepared by IR-4
Headquarters*



ANNUAL REPORT OF THE IR-4 PROJECT

January 1, 2025 - December 31, 2025

1. Introduction

Founded by the U.S. Congress in 1963, the IR-4 Project supports specialty crop growers through its mission of securing legal access to essential pest management tools to manage insects, diseases, weeds, and other pests in production agriculture. IR-4 facilitates the registration of chemical and bio-based pesticides as well as emerging and novel pesticides for use on specialty crops such as fruits, vegetables, nuts, herbs, and ornamentals, as well as minor use cases for major commodities like corn, cotton, soybeans, and wheat. Because registrations on specialty crops and minor uses often don't provide enough profit incentive for private-sector research and development, IR-4 works to facilitate these registrations and bridge this gap. This is accomplished by generating critical data and collaborating with various specialty crop stakeholders, including government and non-government organizations (see Attachment 1: Participants in the Process). IR-4 ensures farmers have the tools they need to combat pests and produce healthy harvests. IR-4's research projects/activities include:

- Conducting U.S. Environmental Protection Agency (EPA) guideline "Magnitude of the Residue Studies." This gives EPA accurate exposure data needed to perform dietary risk assessments associated with potential product registrations.
- Product performance testing (efficacy/crop safety projects) on food and non-food ornamental crops. This provides assurances that the use of a crop protection product is safe and effective.
- Submitting proposals to the EPA and other regulatory authorities to expand crop groups/subgroups that allow data from a few representative crops to cover many crops.
- Performing Integrated Solutions Platform research projects, which explore a wide range of available crop protection tools (chemical pesticides, biopesticides and emerging technologies) to identify solutions for hard-to-manage pests, prevent or better manage pest resistance to pesticides, and mitigate pesticide residues in the final food product. Integrated Solutions Platform projects also address the management of pests in organic crop production systems.
- Assisting with the registration of biopesticides and other emerging technologies discovered/developed by public sector scientists.
- Facilitating harmonization of global pesticide regulations to assist domestic specialty crop growers' ability to export fruits, vegetables and other specialty crops to international markets.

2. Successes in 2025

Food Crop Program:

EPA publication of actions that established **3** new tolerances for **3** active ingredients. These tolerances support **3** potential new uses on food crops (Attachment 2).

This number of potential new registrations supported by IR-4 data represents a fairly significant reduction compared to previous years. A number of items contributed to the reduced number of new tolerances/uses that were published in 2025. Disruptions in items moving through EPA are typical of any change in administration, but the issue was compounded by a significant loss of staff followed by a reorganization that resulted in the loss of the Minor Use Branch. Additionally, a lengthy government shutdown in the latter half of the year also impacted EPA activities.

Environmental Horticulture Program:

At this time, IR-4 does not have an accurate assessment of new registrations achieved in 2025. This information will be obtained during the second quarter 2026 with responses to inquiries from cooperating industry registrants.

3. Registration Support Actions in 2025

Food Crop Program:

- IR-4 submitted to EPA **9** tolerance petitions and **1** non-PRIA submission of two data packages - these covered **44** unique requests (PR #s) for assistance and crop group tolerance updates (Attachment 3).
- **12** data packages containing results of an EPA Magnitude of the Residue study were completed but not submitted.
- **20** draft final reports of Magnitude of the Residue studies were submitted to IR-4's Quality Assurance Unit for Good Laboratory Practice compliance auditing.
- **32** Product Performance reports and **1** Integrated Solutions report were posted and provided to cooperating companies.

Biopesticide Regulatory Support actions and activities included:

- Biopesticide submissions were made for (1) bacteriophages of *Varroa* mites of honeybees and (2) Experimental Use Permit and tolerance petition exemption for Five Generation 2 CTV-SoD2* Constructs to suppress the symptoms of Huanglongbing (Citrus greening).
- Follow-up documentation was submitted to EPA for previous submissions for (1) attenuated Cucumber Green Mottle Mosaic Virus Strain ON-BM3 vaccine; (2) CarriCea T1 Citrus Rootstock with resistance or tolerance to Huanglongbing (citrus greening); (3) Citrus tristeza virus Expressing Spinach Defensin Protein SoD 2 in citrus fruits for resistance or tolerance to Huanglongbing (citrus greening); (4) sterile *Helicoverpa zea* moths and (5) storage stability and corrosion data were submitted as terms of registration for FourSure (a mixture of four atoxigenic strains of *Aspergillus flavus*).
- For CarriCea T1 resistant citrus rootstock, the exemption from the requirement of a tolerance for residues of the SpCas9 protein when used as a plant-incorporated protectant was published in the Federal Register on December 16, 2025.
- For the attenuated Cucumber Green Mottle Mosaic Virus Strain ON-BM3 vaccine, the notice of receipt was published in the Federal Register on December 16, 2025.

Environmental Horticulture Program:

Thirteen research summaries were written and/or updated to support new or existing registrations, provided to registrants, and posted on the IR-4 website (see summaries in Attachment 6); **4,435** field and greenhouse trials contributed to these summaries; trials came from the following IR-4 Units:

- North Central Region: 645 trials
- Northeast Region: 615 trials
- Southern Region: 1936 trials
- Western Region: 1021 trials
- ARS cooperative sites: 192 trials
- Canadian partners: 26 trials

4. Research in 2025

Food Crop Program - Summary of Research Studies / Projects

- **37** new Magnitude of the Residue Studies (Attachment 4); **346** total field trials (309 New/37 Carryover)
- **79** Product Performance projects (Attachment 5; 28 carryover projects; 51 new projects) involving **149** efficacy/crop safety trials (53 carryover trials; 96 new trials)
- **17** field trials that contributed to **15** Integrated Solutions carryover projects
- IR-4 Quality Assurance Unit performed activities to help ensure that IR-4 remained compliant with EPA's Good Laboratory Practice Regulations; activities include:
 - 0 Protocol audits
 - 8 Facility audits

- 125 In-life Inspections of field sites
- 68 In-life Inspections of analytical laboratories
- 198 Field Databook audits
- 47 Analytical Summary Report audits
- 28 Final Report audits
- 4 Amended Report audit
- 22 Second Final Report audit
- 4 Amended Second Final Report audit
- IR-4 successfully completed **12** inspections by EPA, and QA audited **3** contributing scientist reports. The Quality Assurance unit also completed a total of 2 validation in-life inspections, 2 final report audits and 2 second final report audits for the eFDB and eQA software systems. **Eleven** people were trained to utilize the eQA/eDocs system.

Environmental Horticulture Program - Summary of Research Studies / Projects

- The Environmental Horticulture Program conducted **602** field and greenhouse trials (157 efficacy, 445 crop safety) that contributed to **21** projects (see research trial details in Attachment 7).

Comprehensive Summary - 2025 Research Trial Distribution

Cooperating Region	Food Use Residue Trials ¹	Food Use Product Performance Trials ¹	Integrated Solutions Trials ²	Environ. Hort. Product Performance Trials
North Central Region	67 (2)	18 (3)	3	79
Northeast Region	31 (3)	12 (8)	1	76
Southern Region	69 (10)	26 (16)	4	208
Western Region	123 (20)	40 (26)	9	146
ARS Sites	41 (2)	0	0	93
Canadian Sites	15 (0)	0	0	0
TOTAL	346 (37)	149	17	602

Analytical Laboratory Status - Number of Studies

Laboratory	Awaiting Analysis	Analysis in Progress	Waiting on Storage Stability	Analysis Complete Preparing Report
Southern Region Lab	11	6	5	9
Western Region Lab	14	9	10	18

¹ Data presented as total number of trials with number in parenthesis being the number of carryover trials.

² Only carryover IS trials were conducted in 2025.

ARS Tifton Lab	10	1	4	4
ARS Wapato Lab ³	0	0	0	6
Other Labs	16	1	3	16
TOTAL	51	17	22	53

5. Impacts of IR-4 Activities

The IR-4 Project delivers measurable results to both food and non-food specialty crop growers by assisting in the registration of safe, effective pest management tools. As the nation's sole publicly-funded program dedicated to generating the necessary regulatory data, IR-4 serves a unique and vital role in the U.S. agricultural landscape. IR-4's work generates many positive impacts, including:

- New pesticide registrations help producers grow high-quality food and ornamental crops while respecting the environment. This also has significant economic benefits, helping farmers remain profitable and boosting rural economies. Food processors and food retailers benefit from having a consistent supply of high-quality produce and/or raw materials to meet consumer demand and keep their processing facilities open and operational. The public benefits from having an abundant choice of healthy vegetables, fruits, nuts and other foods available at reasonable prices, as well as having ornamental horticulture plants to enhance the environment and contribute to our well-being. Specialty crops are a vital part of American dietary recommendations. IR-4's actions also prevent food waste throughout the supply chain from the farm to the consumer.
- The IR-4 Project has been a major contributor to the advancement of Integrated Pest Management (IPM) tactics through the approval of crop protection tools that give producers suitable options to manage destructive pests that disrupt advanced IPM systems.
- IR-4's Integrated Solutions Platform evaluates diverse pest management strategies and technologies that specialty crop growers can incorporate into existing crop protection programs to meet their complex needs. Goals of this work include reducing chemical residues in food, supporting organic growers, addressing pest resistance, and, in some cases, developing lower-risk solutions to unsolved pest problems.
- IR-4 continues to work with the EPA to expand and enhance US crop grouping regulations. Crop groups allow the collection of residue data on a small number of representative crops and extend the use of the exposure values to a much larger number of similar crops in the crop group or subgroup. There are huge cost savings, as crop-grouping extrapolation allows IR-4 and others in the regulated community to use resources smartly and efficiently. In 2025, no new Final Rules for US crop grouping updates were approved, although efforts are underway for the next phase of revisions. IR-4 has completed its efforts with the Codex Committee on Pesticide Residues (CCPR) to revise and expand the Codex Classification of Food and Animal Feeds.
- The Environmental Horticulture Program continues to support an industry valued at nearly \$19.2 billion in annual sales (Horticulture Census, 2019, NASS). This industry is quite complex because growers cover diverse markets including flowers, bulbs, houseplants, perennials, trees, shrubs and more. These plants are grown and maintained in greenhouses, nurseries, commercial/residential landscapes, interiorscapes, Christmas tree farms and sod farms—all of which have unique pest management needs.

6. Congressional Appropriations and Other Funding

³ ARS Wapato Lab was closed at the end of 2025. Remaining reports are being prepared elsewhere.

Summary of IR-4 Funding (\$20 million)

Source	Amount	Administration	Activities covered
USDA-Minor Crop Pest Management (IR4) grant	\$15.0 million	Competitive four-year grant to NC State, renewed in 2025	All core IR-4 research program and activities
USDA-ARS	\$3.5 million	Contribute to and supports IR-4 research priorities	Funding of USDA-ARS scientists and activities
National Research Support Program (NRSP-4)	\$0.5 million	Competitive five-year grant awarded to NC State, renewed in 2025	Salaries and research coordination activities of IR-4 Headquarters
Various industry contributions	\$1.05 million	Unrestricted donations to IR-4 Project	All IR-4 Project activities and expenses

In-Kind Contributions Estimates (\$20,168,127)

Estimate	Source
\$2,774,800	SAES/land grant universities by hosting IR-4 field research centers, analytical laboratories and management offices throughout the United States
\$2,143,327	EPA Pesticide Registration Improvement Act fee waivers
\$15,000,000	Crop protection industry
\$250,000	The government of Canada via joint research projects

Expenditures supported by USDA-Minor Crop Pest Management (IR4) funds⁴

Amount	Use
\$5,593,915	Distributed to the four IR-4 Regional offices and Headquarters for non-laboratory personnel, supplies, equipment and other core expenses
\$3,127,958	Distributed to the analytical laboratories for personnel, supplies, equipment and other expenses associated with laboratory analysis.
\$2,563,217	Allocated to field trials for residue studies
\$1,199,448	Allocated to field trials for product performance research
\$331,111	Allocated for field trials that develop data in IR-4 Integrated Solutions research

⁴ All values include 11.1 % indirect costs that are shared with the various institutions involved with IR-4.

\$792,085	Allocated for field trials that develop product performance data in ornamental crops
\$1,125,600	Kept by NIFA to help fund their operations

Additional Expenditures Supported by Industry Contributions

Amount	Use
\$356,734	Salary and Fringe
\$127,085	Travel
\$110,363	Meetings
\$119,905	Additional Research
\$24,404	Indirect/fees to cover NC State operations

7. New Requests for Assistance / Plans for the Future

Food Crop Program

- New Requests
 - 161 new requests were entered into the IR-4 food use database, of which 150 were new stakeholder requests and 11 were created by HQ for crop group tolerance revisions, referencing old PR#s, eFDB & eQA System Validations etc. The comprehensive total at the end of 2025 was 13,992.
 - The IS program received 26 new requests.
- Priority Setting
 - IR-4 stakeholders prioritized “researchable” Requests for Assistance at the 2025 Food Use Workshop and identified 36 Magnitude of the Residue Studies. One more Magnitude of Residue Studies was prioritized by IR-4 HQ/RFCs after the FUW. About 92% of these studies also require efficacy and crop safety data (33 studies out of 36 “A” priorities require product performance testing). The stakeholders also identified 8 product performance-only projects (H+ projects) and an additional 6 projects were selected by IR-4 HQ/RFCs after the FUW.
 - Eleven IS projects were selected as the highest priority for research in 2026. Two studies will be sponsored by third parties. Due to the pausing of the IS platform, the remaining 9 studies not be funded for the time being.
 - Biopesticide Regulatory Support - New biopesticide regulatory support projects, including (1) MAGNET, an insect attractant; (2) US-812, a CRISPR-edited citrus rootstock with improved resistance to Huanglongbing (citrus greening) and (3) genetically engineered (GE) New World Screwworm (NWS), developed by USDA, ARS were approved utilizing the biopesticide vetting process.
- Future Research
 - In the 2026 Food Crop Program, IR-4 will be focusing on the new research priorities, as well as some carryover projects (280 Magnitude of the Residue trials, 126 Product Performance trials, and an estimated 27 Integrated Solutions trials).

Environmental Horticulture Program

- IR-4 will conduct the planned first year of data development for priorities from the 2025 Environmental Horticulture Workshop. These research projects will be the focus of 2026:

- National Priorities - Weed Science
 - o Hydrangea (not macrophylla) pre-emergent herbicide crop safety
 - o Herbicide-resistant weed control in Christmas tree production; early post-emergent, semi-directed
 - o Cut flower pre-emergent (transplant)
 - o Perennial weed (thistle, bindweeds, nutsedges) control in cut peony
- National Priorities - Plant Pathology
 - o Phytophthium Efficacy
 - o Phytophthora Efficacy
 - o Botrytis Efficacy
- National Priorities - Entomology
 - o Thrips (parvispinus, chili and western flower) Efficacy
 - o Red-headed flea beetle (1st / 2nd instar larvae) efficacy—container nursery
 - o Root aphid efficacy
- Regional Priorities - Northeast Region
 - o Balsam gall midge efficacy on Christmas trees
 - o Bacterial leaf spot efficacy
- Regional Priorities - North Central Region
 - o Powdery mildew (outdoors) efficacy
 - o Lewis mite efficacy
- Regional Priorities - Western Region
 - o Symphylans efficacy
 - o Armored scale efficacy—woody ornamentals
- Regional Priorities - Southern Region
 - o Two-spotted cotton leafhopper (cotton jassid) efficacy
 - o Herbicides in container, fruit-bearing plant (pre-sale to retail) crop safety

Summary of Planned 2026 Food Program Research Trial Distribution:

Cooperating Region	Food Use Residue Trials⁵	Food Use Product Performance Trials⁶	Integrated Solutions Trials⁷	2026 Environmental Horticulture Product Performance (Crop Safety/Efficacy)
North Central Region	56 (6)	17 (2)	4	2/9
Northeast Region	22 (2)	14 (1)	3	2/9
Southern Region	57 (4)	22 (5)	7	7/17
Western Region	119 (9)	43 (22)	13	3/12
ARS Sites	28 (1)	0	0	1/1
Canadian Sites	9 (0)	0	0	0/0
TOTAL	291 (22)	96 (30)	27	15/48

⁵ Data presented as total number of trials and the number of carryover trials in parenthesis.

⁶ 2026 product performance trial allocations may be subject to change.

⁷ These trials have been deferred by one year following the 2025 priority selection at the Milwaukee Food Use Workshop. These trial allocations may be subject to change.

PRESENTATIONS/POSTERS

Axtel, A. 2025. Biosolutions Conference and Expo. The IR-4 Project: Helping Specialty Crop Growers Address Pest Management Issues. February 18-20, 2025, Fresno, CA.

Axtel, A. 2025. Pest Management Center Priority Workshop. Advancing Crop Protection through IR-4 and AAFC-PMC Collaboration. March 24-26, 2025, Ottawa, Canada.

Axtel, A. & Moore, P. Hemp IPM Virtual Workshop. An Update on the IR-4's Efforts in Support of Hemp Growers. April 16, 2025 (virtual presentation).

Axtel, A. 2025. Annual Cumberland Shenandoah Fruit Workers Conference. An Update from the IR-4 Project. December 4, 2025, Shenandoah, WV.

Batts, R. B., J. Patel, A. Axtell, J. J. Baron, D. Carpenter, and H. Ross. 2025. IR-4 Project: Success and Benefits to Specialty Crop Growers. Proc. Northeast Weed Science Society annual meeting. Annapolis, MD, January 2025. (poster)

Batts, R.B. 2025. IR-4: Weed Control Project Updates – Food Crops. Proc. Northeast Weed Science Society annual meeting. Annapolis, MD, January 2025 (presentation).

Batts, R. B., J. Patel, A. Axtell, J. J. Baron, D. Carpenter, and H. Ross. 2025. IR-4 Project: Success and Benefits to Specialty Crop Growers. Southeast Regional Fruit & Vegetable conference, Savannah, GA Jan 2025 (poster).

Batts, R. B., J. Patel, A. Axtell, J. J. Baron, D. Carpenter, and H. Ross. 2025. IR-4 Project: Success and Benefits to Specialty Crop Growers. Proc. Weed Sci. Soc. America/Canadian Weed Science Society joint meeting. Vancouver, BC. February 2025 (poster).

Batts, R.B. 2025. IR-4: Weed Control Project Updates – Food Crops. Proc. Weed Sci. Soc. America/Canadian Weed Science Society joint meeting. Vancouver, BC. February 2025 (presentation).

Batts, R.B. 2025. Registration Support for Pest Management Tools in Specialty Crops. Guest lecture at NCSU in CS 428/CS528, Advanced Regulatory Science in Agriculture. April 2025 (presentation).

Batts, R., L. Ortega, A. Goetz, J. Overmeyer. ESA Compliance in Agricultural Regulatory: Challenges and Strategy. Panel discussion, North Carolina Biotechnology Center. October 30, 2025 (presentation).

Batts, R.B. 2025. IR-4: Weed Control Project Updates – Food Crops. Proc. North Central Weed Sci. Soc. annual meeting. Grand Rapids, MI. December 2025 (presentation).

Batts, R. B., J. Patel, P. Moore, A. Axtell, D. Carpenter, and J. Baron. 2025. IR-4 Project: Success and Benefits to Specialty Crop Growers. Proc. North Central Weed Sci. Soc. annual meeting. Grand Rapids, MI. December 2025 (poster).

Beran, M. The Joy of Presenting. National Alliance of Independent Crop Consultants, Monterey, CA. January 23, 2025.

Forder, J. To the Point....Diplomatically Clear, Concise, and Constructive Audit Writing. National Alliance of Independent Crop Consultants, Monterey, CA. January 23, 2025.

Patel, J. 2025. The IR-4 Project. Crafting Integrated Pest Management Strategies for Specialty Crops, International IPM Symposium, San Diego, CA. March 2025 (presentation).

Patel, J., Batts, R., Moore, P., Axtell, A., Ross, H. & Baron, J). 2025. The IR-4 Project. Securing Pest Management Solutions for Growers of Specialty Crops. Plant Health 2025, Honolulu, HI (poster).

Pike, T. 2025. The IR-4 Project. CropLife America Registration Committee Meeting, December 11, 2025.

Pike, T. & Marconi, C. 2025. The IR-4 Project. U.S. Environmental Protection Agency (EPA), August 25, 2025 (virtual presentation).

VanGessel, M., B. Scott, K. Vollmer, and R. Batts. 2025. Herbicide carryover trials: The search for NS. Proc. Northeast Weed Science Society annual meeting. Annapolis, MD, January 2025 (presentation).

VanGessel, M., B. Scott, K. Vollmer, and R. Batts. 2025. Reducing herbicide rotation studies: Not glamorous but important. Proc. Weed Sci. Soc. America/Canadian Weed Science Society joint meeting. Vancouver, BC. February 2025 (presentation).

PUBLICATIONS

Ceseski, A., T. Guan, R. Vulchi, R. Batts, K. Arnold, C. Baez Vega, W. Brim-DeForest. (2025). Herbicide options for cultivated wild rice (*Zizania palustris*) in California. *Weed Technology*.

<https://doi.org/10.1017/wet.2025.10067>

McFall, A., Reyes-Punongbayan, R. L., & Hengel, M. (2025). Analysis of flutianil and OC56635 residues in hemp *Cannabis* matrices by LC-MS/MS. *Journal of Agricultural and Food Chemistry*.

<https://doi.org/10.1021/acs.jafc.4c05103>

Massie, S. T., Richardson, B. J., Patel, J. S., & Gent, D. H. (2025). Evaluation of fungicides for hop powdery mildew, Toppenish, Washington, 2024. *Plant Health Progress*.

<https://apsjournals.apsnet.org/doi/10.1094/PHP-12-24-0145-PDMR>

Miranda, J.W.A, L. M. Sosnoskie, B. D. Hanson, T. E. Besancon, S. Chaudhari, R. B. Batts, and M. L. Moretti. (2025). Differential quinclorac tolerance in grapevines depends on precipitation and edaphic factors. *Weed Technology*. <https://doi.org/10.1017/wet.2025.10065>.

Searer-Jones, K. (2025, March). IR-4 working behind the scenes for specialty crop growers. *Specialty Crop Grower*. <https://specialtycropgrower.com/specialty-crop-grower-magazine-ir-4/>

Shrestha, G., Merkle, A., Pandey, S., & Axtell, A. (2025). Evaluation of biological and synthetic insecticides for control of Lepidopteran caterpillar complex in CBD hemp, 2024. *Arthropod Management Tests*, 50(1), tsaf032.

<https://doi.org/10.1093/amt/tsaf032>

Sosnoskie, L.M., R. B. Batts, and T. Besancon. 2025. An evaluation of targeted spraying for reducing herbicide use in highbush blueberry. *HortTechnology*, 35:214-222. <https://doi.org/10.21273/HORTTECH05555-24>.

VIDEOS

[IR-4 HQ]. (2025, April 10). *Intro to the IR-4 Intranet*. <https://youtu.be/hcBLKqOF3ds>

December 31, 2025

Approved by:

A handwritten signature in black ink that reads "Debbie Carpenter". The signature is written in a cursive, flowing style.

**Debbie Carpenter, Acting Executive Director
IR-4 Project, North Carolina Agriculture Research Service
North Carolina State University**

A handwritten signature in black ink that reads "Matt Hengel". The signature is written in a cursive, flowing style.

**Matt Hengel, Chair,
IR-4 Project Management Committee
University of California, Davis**

A handwritten signature in blue ink that reads "Douglas Buhler". The signature is written in a cursive, flowing style.

**Douglas Buhler, Chair,
IR-4 Administrative Advisers
Michigan State University**

ATTACHMENT 1 – Participants in the Process

A. Commodity Liaison Committee (CLC) - This advisory group provides input to the IR-4 Project Management Committee on overall operations and program direction. Members include:

Michael Aerts, Florida Fruit and Vegetable Association
Mark Arney, National Watermelon Promotion Board
Zack Bagley, California Tomato Research Institute
Michael Bledsoe, Village Farms, L.P.
John Walt Boatright, American Farm Bureau Federation
Jennifer Clarke, California Leafy Greens Research Program
James R. Cranney, California Citrus Quality Council
Maggie Elliot, Hops Growers of America
Atticus Finger, American Sugar Cane League
William Frantz, The Cranberry Institute
Michele Grainger, NC SweetPotato Commission
Bob Jones, The Chef’s Garden
Bob Kaldunski, Ginseng Board of Wisconsin
Kevin Kudsk, National Onion Association
Michael Martin, Horticulture Research Institute
Armando Monterroso, Brooks Tropicals, LLC
Pete Nelson, Cherry Marketing Institute
Keith Pitts, Bioceres Crop Solutions
Kam Quarles, National Potato Council
Amy Plato Roberts, Lallemand Plant Care
Rachel Roberts, American Mushroom Institute
Steven Salisbury, Mint Industry Research Council
Todd Scholz, USA Dry Pea & Lentil Council and CLC Chair
Jonathan Sarager, Western Growers
Alan Schreiber, Agriculture Development Group, Inc.
Laura Shumow, American Spice Trade Association
Michelle Starke, CoverCress, Inc.
Berry Tanner, National Watermelon Association
Amy Upton, Michigan Nursery & Landscape Association
Lee Van Wychen, Weed Science Society of America
Ryan Wysocki, Michigan Blueberry Commission

B. Cooperating Government Departments and Agencies

- U.S. Department of Agriculture: National Institute of Food and Agriculture (NIFA); Agricultural Research Service (ARS); Foreign Agriculture Service (FAS);
- U.S. Environmental Protection Agency (EPA)
- State of California Department of Pesticide Regulation (DPR)
- agInnovation (State Agricultural Experiment Stations/Land Grant Universities)
- Agriculture and Agri Food Canada-Pest Management Centre (Canada-PMC)
- Health Canada-Pest Management Regulatory Authority (PMRA)

C. Crop Protection Industry – Companies with products involved in IR-4’s research in 2025 include:

Company	Food Residue Study	Food Crop Product Performance	Integrated Solutions	Environmental Horticulture
Adama	X	X		

Company	Food Residue Study	Food Crop Product Performance	Integrated Solutions	Environmental Horticulture
Active Cross			X	
Agbiome			X	
AgroVentures			X	
Albaugh	X	X		
Ascribe BioScience				X
AMVAC	X		X	
BASF Corporation	X	X	X	X
Bayer Crop Science	X	X	X	
Belchim Crop Protection	X	X		
Biosafe Systems				X
Bioworks				X
Certis USA			X	
Corteva Agrisciences	X	X	X	X
Drexel		X		
DSM			X	
ENVU				X
Fine Americas		X		
FMC Corporation	X	X	X	
Gowan Company	X	X	X	X
ICL Specialty Fertilizers				X
ISK Biosciences	X	X	X	X
Kemin Crop Technologies			X	X
Koppert			X	
Lallemand				X
Landis International	X	X		X

Company	Food Residue Study	Food Crop Product Performance	Integrated Solutions	Environmental Horticulture
Loveland		X		
MustGrow Biologicals			X	
NanoCrops				
Nichino America	X	X	X	
Nisso	X	X	X	X
Neudorff				X
NuFarm America	X			X
OHP				X
Plant Health Care		X	X	
Profarm				X
Rainbow Treecare Scientific				X
SAN Agrow				X
SePRO Corporation		X		X
Stepan				X
Summit Agro			X	
Syngenta Crop Protection	X	X	X	X
TDA				X
Tidal Grow AgriScience			X	
Trece			X	
TKI Novasource	X	X		
TLC Products				X
Valent Bioscience		X		X
Valent USA, LLC	X		X	

D. Project Management Committee

Dr. Jerry Baron*, IR-4 Project Headquarters – IR-4 Project Executive Director

Dr. Douglas Buhler, Michigan State University – Administrative Advisor, North Central Region

Dr. John Davis, University of Florida - Administrative Advisor, Southern Region
Dr. Liwei Gu*, University of Florida – Regional Director, Southern Region
Dr. Mary Hausbeck*, Michigan State University – Regional Director, North Central Region
Dr. Matt Hengel*, University of California, Davis - Regional Director, Western Region and PMC Chair
Dr. Marcel Holyoak, University of California, Davis – Administrative Advisor, Western Region
Dr. Moses Kairo, University of MD Eastern Shore - Administrative Adviser, Northeast Region
Dr. Steven Lommel, North Carolina State University – Advisor
Dr. Joseph Munyaneza, USDA-ARS - Administrative Advisor
Dr. Chris Philips, USDA-NIFA-National Program Leader for IR-4
Mr. Todd Scholz*, USA Dry Pea and Lentil-CLC Chair
Dr. Alvin Simmons*, USDA-ARS – Director Minor Use Program
Dr. Simon Zebelo*, University of MD, Eastern Shore - Regional Director, Northeast Region
*Voting member

E. IR-4 Project Headquarters (HQ)

Dr. Alice Axtell - Research Planning Manager and Integrated Solutions Platform Lead
Ms. Raven Baez - Communications Assistant
Ms. Allison Ballantyne – Senior Operations Associate
Mr. Bill Barney – Biopesticide Regulatory Manager
Dr. Jerry Baron – Executive Director
Mr. Roger Batts - Principal Weed Scientist
Ms. Susan Bierbrunner – Data Administrator
Ms. Donna Bouffard - Program Operations Coordinator
Dr. Michael Braverman – Senior Manager Associate - Biopesticide Regulatory
Mr. Jimmy Byrtus – Study Director
Dr. Debbie Carpenter – Assoc. Director for Regulatory Sciences and National Laboratory Director
Dr. Krystal Chojnacki - National Chief of Staff
Ms. Christina Dineen – Chemist and Study Director
Ms. Jane Forder – Lead Quality Assurance Auditor - Northeast and North Central Region
Ms. Shiayi Huang - Data Applications Manager
Mr. Josh Kindel - Environmental Horticulture Program Manager
Ms. Grace Lennon – Senior Regulatory Associate
Ms. Jessica Macari – Study Director
Ms. Cristina Marchesan Marconi - Registration Manager and Senior Study Director
Dr. Johanna Mazlo - National Quality Assurance Unit Manager
Mr. Philip Moore - Lead Entomologist
Mr. Scott Muir - Lead Quality Assurance Auditor - Analytical Chemistry
Ms. Sherita Normington, Senior Quality Assurance Auditor
Dr. Jaimin Patel – Principal Plant Pathologist
Mr. Josh Peterson - Quality Assurance Auditor
Mr. Thomas Pike – Submission Manager and Senior Study Director
Ms. Hannah Ross – National Information and Communications Officer
Mr. David Schnatter - Research Assistant
Dr. Van Starner – Senior Management Associate
Ms. Juliet Thompson – Research and Audit Specialist, Quality Assurance
Mr. Robert Welker - Study Director

F. Regional/ARS Field Coordinators and Staff

Dr. Kari Arnold, Regional Field Coordinator - Western Region
Ms. Megan James Hickman, Assistant Regional Field Coordinator - Northeast Region
Ms. Mika Pringle Tolson, Assistant Regional Field Coordinator - Western Region
Ms. Marylee Ross, Regional Field Coordinator – Northeast Region

Ms. Kristen Searer-Jones, Regional Field Coordinator - Southern Region
 Dr. Alvin Simmons, Regional Field Coordinator- USDA-ARS
 Ms. Nicole Soldan, Regional Field Coordinator - North Central Region

G. Laboratory Coordinators (Regional and ARS)

Dr. Matt Hengel, University of California, Davis – Western Region
 Dr. Gail Mahnken, University of Florida – Southern Region
 Ms. Tamara Snipes, USDA-ARS – Tifton, GA
 Mr. T. Todd Wixson, USDA-ARS – Wapato, WA

H. Quality Assurance Unit

Mr. Martin Beran, University of California, Davis
 Ms. Jane Forder, North Carolina State University
 Ms. Laurel Hsieh, University of California, Davis
 Ms. Kathleen Knight, University of Florida
 Dr. Johanna Mazlo, North Carolina State University
 Mr. Scott Muir, North Carolina State University
 Ms. Sherita Normington, North Carolina State University
 Mr. Josh Peterson, North Carolina State University
 Ms. Juliet Thompson, North Carolina State University
 Dr. Yavuz Yagiz, University of Florida

I. IR-4 Researcher & State Liaison Representatives⁵

North Central Region

State	State Liaison Rep.	Research Area
IA	S. Slack	
IL	M. Babadoost	
IN	S. Meyers	S. Meyers (P)
KS	R. Cloyd	
MI	N. Soldan	M. Hausbeck (P), (IS), (EH), T. Miles (P), N. Rothwell (P), D. Saha (EH), N. Soldan (R) (P), C. Wheeler (R)
MN	Vacant	
MO	I. Valmorbida	T. Mueth (P)
ND	B. Jenks	Q. Jia (R), T. Gauderman (R)
NE	N. Lawrence	
OH	A. Leach	L. Canas (EH), L. Horst* (R), M. Ivey (P), A. Leach (P) (IS), A. Robinson (R), F. Hand (EH), M. Reding*(EH), A. Sanabria-Velazquez (P), C. Taylor (IS), R. Yadav (P), H. Mathers (EH)
SD	G. Reicks	S. Solanki (P)

⁵ R= Residue Field Trials/Food Program, P= Product Performance/Food Program, IS= Integrated Solutions, EHC= Environmental Horticulture Program, *= USDA - Agriculture Research Service Researcher

WI	D. Heider	S. Chapman (R), D. Heider (R) (P), R. Werle (P)
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Northeast Region

State	State Liaison Rep.	Research Area
CT	S. Kodati	C. Krasnow (EH)
DE	D. Owens	D. Owens (P), A. Betts (P)
MA	S. Scheufele	M. Sylvia (R)
MD	D. Joseph	D. Cochran (EH), M. Hickman (R), M. Hu (P), M. Ross, (R), V. Yurchak (P)
ME	L. Calderwood	
NH	Vacant	
NJ	T. Besancon	T. Besancon (P), J. Fisher (R)
NY	L. Sosnoskie	N. Catlin (EH), D. Gilrein (EH) (P), D. Heck (P), K. Handley (R), A. Green (R), B. Nault (P), L. Sosnoskie (P), Jared Dyer (EH)
PA	G. Krawczyk	C. Brunharo (P), K. Peter (IS)
RI	Vacant	
VT	A. Hazelrigg	
WV	C. Quesada	M. Rahman (P)

Southern Region

State	State Liaison Rep.	Research Area
AL	E. Vinson	D. Held (EH)
AR	H. Wright-Smith	A. Bowden(EH), N. Burgos (P), A. Cato (P)
FL	P. Dittmar	A. Hajihassani (P), D. Carrillo (P), A. Dale (EH), P. Dittmar (P), N. Dufault (P), R. Gazis (P) (IS), S. Lahiri (P), M. Long (R), C. Marble (EH), D. Norman (EH), N. Peres (P), K. Stauderman (P), D. Sutherland (R), D. Thomas (R), G. Vallad (P), S. Zhang (P), P. Dafoe (R)
GA	S. Culpepper	B. Dutta (P), B. Fraelich* (R), (EH), E. McCarty (EH), P. Yu (EH)
KY	R. Bessin	R. Villanueva (P), C. Wilson(EH)
LA	T. Watson	D. Wright (R), D. Miller (P)
MS	A. Henn	P. Knight (EH), T. Ayankojo (P)
NC	D. Monks	R. Batts (P), S. Frank (EH), A. Gorny (P), K. Jennings (P), R. Leon (P), L. Lopez (P) (IS), L. Lux (P), I. Meadows (EH), W. Mitchem (P), J. Neal (EH), C. Smith (R), J. Walgenbach (IS)

OK	C. Luper	
PR	W. Robles Vazquez	D. Rivera (EH), W. Robles Vazquez (R) (P)
SC	M. Cutulle	M. Cutulle (P), P. Wade* (R) (EH)
TN	M. Gireesh	K. Adesso (EH), F. Baysal-Gurel (EH) (P), A. Witcher (EH)
TX	M. Matocha	K. Cochran (R), T. Jones (R), R. Khan (EH), K. Ong (EH)
VA	D. Frank	J. Derr (EH), D. Higgins (P)(IS)

Western Region

State	State Liaison Rep.	Research Area
AK	P. Kaspari	
AZ	A. Hu	A. Hu (P)
CA	J. Adaskaveg, K. Arnold, B. Hanson, C. Nansen	J. Adaskaveg (P), B. Aegerter (P), A. Babu (P), K. Blauer (P) (IS), S. Benson* (R), N. Clark (P), O. Daugovish (P), D. Ennes (R), A. Eskalen (EH), B. Hanson (P) (IS), C. Kron (IS), N. Leach (R), P. Lazicki (IS), P. Mauk (P), I. Mokwunye (P), C. Nansen (P) (EH), J. Sidhu (P), S. Stoddard (IS), T. Turini (IS), B. Uber (EH), S. Watkins (R), B. Wheeler-Dykes (P), S. Zukoff (P), B. Turner (R)
CO	B. Tonnessen	C. Oman (R), A. Sczpaniec (IS)
GU	R. Miller	
HI	J. Kam	Z. Cheng (EH), Z. Zhang (R) (P), J. Kam (R)
ID	M. Dimase	A. Adjesiwor (IS), W. Meeks (R)
MT	Z. Miller	
NM	C. Robbins	C. Robbins (R)
NV	Vacant	
OR	D. Rendon	A. Becerra-Alvarez (P) (EH), J. Dung (P), N. Kaur (P), M. Moretti (EH) (P), L. Nackley (EH), J. Weiland* (EH), A. Rasmussen (R), M. Robinson (R), T. Hoskins (EH), N. Wiman (P)
UT	C. Ransom	
WA	D. Walsh	D. Larson* (R) (EH), R. Liu (P), W. Peng (R)
WY	C. Beiermann	

ATTACHMENT 2 – 2025 Tolerance Successes; Permanent Tolerances Published in the Federal Register

Pest Control Agent	Registrant	Type*	Date	Commodity or Crop Group	Note*	PR#	# of Uses	# of Tolerances
Fludioxonil	SYNGEN	F	02/25/2025	Cranberry		11937	1	1
Cyprodinil	SYNGEN	F	02/26/2025	Cranberry		11937	1	1
Afidopyropen	BASF	I	07/23/2025	Lettuce (GH)		11695	1	1
2025 Totals							3	3
*F=fungicide, H=herbicide, I=insecticide/acaricide, M=molluscicide, N=nematicide, P=plant growth regulator								
<p style="text-align: center;">** Note Code</p> <p>1=Update of established tolerance on old crop group or subgroup 2=Conversion of established tolerance(s) on representative commodities to a crop group or subgroup tolerance 3=Conversion of established tolerance(s) on representative commodities to a crop group or subgroup tolerance <u>and</u> submission of new data to complete the requirements for a crop group or subgroup 4=Individual commodity tolerance established in response to crop group revision 5=Response to EPA request for Codex harmonization 6=Revised tolerance 7=Tolerance for indirect or inadvertent residues</p>								

ATTACHMENT 3 – 2025 Submissions to EPA, unless otherwise noted as submitted to Registrants, Codex or State Departments of Agriculture

Completed Petitions or Final Reports Submitted to EPA in 2025						
Pest Control Agent	Registrant	Type*	Date	Commodity or Crop Group	PR#	Reduced Risk**
Acetamiprid	NISSO, UPL NA	I	1/31/25	Dragon fruit (pitaya)	13057	
				Safflower	12032	
				Sunflower	12668	
				Vegetable, legume, bean, edible podded, subgroup 6-22A	13924	
				Vegetable, legume, bean, succulent shelled, subgroup 6-22C	13926	
				Vegetable, legume, pea, edible podded, subgroup 6-22B	13925	
				Vegetable, legume, pea, succulent shelled, subgroup 6-22D	13927	
Sulfur Dioxide	DELTA, SNOWDEN, TEDMRK, TESSARA	F	3/28/25	Fig	12404, 13183	
Cycloate***	HELMAG	H	6/19/25	Spinach	13409	
				Beet, garden	13411	
Clomazone	FMC	H	6/26/25	Dill	11640	
Benzovindiflupyr	SYNGEN	F	9/18/25	Beet, garden, leaves	12351	
				Berry, low growing, except strawberry, subgroup 13-07H	11811	
				Stevia	12532	
				Strawberry	12373	
				Vegetable, legume, pulse, bean, dried shelled, except soybean, subgroup 6-22E	14066	
				Vegetable, legume, pulse, pea, dried shelled, subgroup 6-22F	14067	
2,4-DB	ACETO, ALBAGH	H	9/26/25	Clover (seed crop)	11842	
				Guar bean	00275	

				Lentil, dry seed	08992	
Fenpropathrin	VALENT	I	10/24/25	Barley subgroup 15-22B	14068	
				Brassica, leafy greens, subgroup 4-16B	09266	
				Cherry subgroup 12-12A	11333	
				Cottonseed subgroup 20C	12775	
				Kohlrabi	12774	
				Nut, tree, group 14-12	11332	
				Peach subgroup 12-12B	11334	
				Plum subgroup 12-12C	11335	
				Tropical and subtropical, small fruit, edible peel, subgroup 23A	12776	
				Tropical and subtropical, small fruit, inedible peel, subgroup 24A	12777	
				Turnip, roots	09517	
				Vegetable, brassica, head and stem, group 5-16	12773	
				Vegetable, legume, pea, edible podded, subgroup 6-22B	14069	
				Vegetable, legume, pea, succulent shelled, subgroup 6-22D	14070	
				Vegetable, tuberous and corm, except potato, subgroup 1D	07946	
Clothianidin	VALENT	I	12/9/25	Fruit, citrus, group 10-10	10167, 10168, 10169, 13862, 13863, 13864	
Cycloate	HELMAG	H	12/17/25	Quinoa	11828	
Mefentrifluconazole	BASF	F	12/22/25	Hop, dried cones	13505	
*F=fungicide, H=herbicide, I=insecticide/acaricide, N=nematicide, P=plant growth regulator						
**"Yes" indicates that a request for reduced risk status was included by IR-4 with this submission						
***Non-PRIA submission to EPA						

ATTACHMENT 4 – 2025 Food Use Research Projects, New Residue Studies

Chemical	Crop	PR #
AZOXYSTROBIN + BENZOVINDIFLUPYR	BASIL (GH TRANSPLANT)	13866
AZOXYSTROBIN + BENZOVINDIFLUPYR	MINT (GH TRANSPLANT)	13856
BIFENTHRIN	ONION (DRY BULB)	13778
BIFENTHRIN	BASIL	13843
BROMOXYNIL	CANOLA	13854
BROMOXYNIL	PEA (DRY)	13874
BROMOXYNIL	SUNFLOWER	13875
CYANTRANILIPROLE	CLOVER (SEED CROP)	13830
FENAZAQUIN	PEPPER (GH)	12482
FENAZAQUIN	TOMATO (GH)	12484
FENAZAQUIN	STRAWBERRY (GH)	12518
FENAZAQUIN	CUCUMBER (GH)	12516
FENPYROXIMATE	FIG	13735
FLAZASULFURON	HOPS	13879
FLONICAMID	HEMP	13966
FLUAZINAM	CHERRY	13813
FLUAZINAM	ALMOND	09095
FLUAZINAM	DRAGON FRUIT (PITAYA)	13639
FLUAZINAM	CRANBERRY	13829
GLUFOSINATE	CANEBERRY	12051
GLUFOSINATE-P	SUGARCANE	13821
LINURON	PEA (EDIBLE PODDED & SUCCULENT SHELLLED)	11774
LINURON	BASIL	13831
LINURON	SWEET POTATO	13832
LINURON	BEAN (DRIED SHELLLED)	13833
MEFENTRIFLUCONAZOLE	LETTUCE (GH)	12703
ORTHOSULFAMURON	POMEGRANATE	13820
OXATHIPIPROLIN	APPLE	13683

Chemical	Crop	PR #
OXATHIPIPROLIN	PEAR	13814
PHENMEDIPHAM	SPINACH	12529
PYRIDABEN	DILL	13809
PYRIDATE	TOMATO	06529
QUINCLORAC	PEACH	12572
QUINCLORAC	PLUM	12573
QUINCLORAC	CHERRY	12574
SPIDOXAMAT	BLUEBERRY (HIGHBUSH)	13825
TERBACIL	PEACH	13847

ATTACHMENT 5 – 2025 Food Use Product Performance Research Program

Chemical	Crop	PR#	Research Trial location
1-aminocyclopropane-1-carboxylic acid (acc)	Olive	13828	CA (3)
1-aminocyclopropane-1-carboxylic acid (acc)	Cherry	13334	CA (2), MI (1)
Acetamiprid & cyantraniliprole	Dragon fruit	13057	FL (1)
Afidopyropen	Safflower	13459	CA (1)
Azoxystrobin	Mint (GH transplant)	13108	TN (1)
Azoxystrobin + benzovindiflupyr	Basil (GH transp.)	13866	FL (1), MI (1), VA (1)
Azoxystrobin + benzovindiflupyr	Mint (GH transp.)	13856	MI (1), TN (1), OH (1)
Azoxystrobin + benzovindiflupyr	Mint	13273	OR (3)
Bifenthrin	Basil	13843	CA (1)
Bifenthrin	Onion	13778	CA (1), NY (1)
Chlorantraniliprole & zeta-cypermethrin	Hemp	13000 & 13011	KY (1)
Copper hydroxide + copper oxychloride	Miracle fruit	12596	FL (1)
Difenoconazole + azoxystrobin	Avocado	13771	FL (1)
Epyrifenacil	Blueberry (hiGHbush)	13888	IN (1), NJ (1), OR (1)
Epyrifenacil	Safflower	13892	CA (3)
Epyrifenacil	Apple	13889	NY (1), PA (1), WA (1)
Ethalfluralin + clomazone	Squash	13529	CA (1), FL (1), NJ (1)
Ethephon	Ginseng	12613	WI (1)
Fenazaquin	Tomato (GH)	12484	NC (1)
Fenazaquin	Pepper (GH)	12482	NC (1)
Fenazaquin	Cucumber (GH)	12516	NY (1)
Fenazaquin	Strawberry (GH)	12518	FL (1)
Fenpyroximate	Fig	13735	CA (1)
Flazasulfuron	Hops	13879	OR (2), WA (1)
Florpyrauxifen	Pomegranate	13331	CA (1)
Fluazaindolizine	Banana	13222	PR (1)
Fluazinam	Cherry	13813	CA (2), MI (1)

Fluazinam	Almond	09095	CA (3)
Fluazinam	Stevia	13893	DE (1), FL (1), NC(1)
Fluazinam	Grapes	13905	MD (2), MI (1)
Fludioxonil + pydiflumetofen	Basil	13078	NY (1)
Fluridone	Sweetpotato	13482	NC (2), LA (1)
Fluroxypyr	Blueberry	13709	IN (1), NJ (1), OR (1)
Flutianil	Mint (GH transplant)	13869	MI (1), TN (1), VA (1)
Flutriafol	Pistachio	13664	AZ (1)
Fluxapyroxad + pyraclostrobin	Asparagus (fern)	13493	CA (1)
Fluzaindolizine	Onion (dry bulb)	12770	FL (1)
Glufosinate	Strawberry	13455	CA (1)
Indaziflam	Banana	11088	PR (3)
Indoxacarb	Clover (seed crop)	13718	OR (2)
Indoxacarb	Cacao bean	13817	HI (2)
Inpyrfluxam	Tomato (processing)	13511	CA (1)
Inpyrfluxam	Tomato	13600	FL (1), GA (1), WV (1)
Isocycloseram	Safflower	13496	CA (1)
Isocycloseram	Snap beans	12800	MD (1)
Isocycloseram	Sweet corn	12798	DE (1), MD (1), OH (1)
Linuron	Pea (edible podded & succulent shelled)	11774	NY (1), WI (1)
Linuron	Stevia	13733	NC (1)
Maleic hydrazide	Tomato (field)	13884	CA (2)
Mefenoxam	Strawberry (GH transplant)	13716	FL (1)
Mefentrifluconazole	Lettuce (GH)	12703	AZ (1), MI (1), MS (1)
Novaluron	Caneberry	13502	AR (1)
Oxathiapiprolin	Peach	13633	FL (1)
Oxathiapiprolin	Plum or french prunes	13632	CA (1)
Oxathiapiprolin	Apple	13683	CA (3)
Oxathiapiprolin	Pear	13814	CA (3)

Oxathiapiprolin + mandipropamid	Cacao bean	13635	HI (1)
PHC68949	Sweet potato	13755	NC (1)
Prohexadione calcium	Hazelnut	13880	OR (3)
Prothioconazole + fluopyram	Field pennycress (oil seed)	13929	OH (2), MO (1)
Pydiflumetofen + fludioxonil	Guava	13776	FL (1)
Pyraziflumid	Lettuce (GH)	12975	NY (1)
Pyridate	Tomato	6529	CA (1), NC (1), SC (1)
Pyroxasulfone	Carrot	13723	CA (1), NY (1)
Quinclorac	Strawberry	11611	OR (1)
Saflufenacil	Field pennycress	13522	WI (1)
S-metolachlor	Carinata	13631	NC (1)
Spidoxamat	Blueberry (highbush)	13825	CA (3)
Terbacil	Caneberry	11128	Ar (1), NC (1), OH (2), OR (1)
Terbacil	Camas	13915	OR (3)
Tiafenacil	Blueberry	13487	MI (1), NJ (1)
Tiafenacil	Cucumber	13498	FL (1)
Tolpyralate	Blueberry	13682	NC (1), NJ (1), OR (1)
Tolpyralate	Hazelnut	13679	OR (1)
Tryfloxystrobin + fluopyram	Avocado	13074	CA (2), FL (1)
Uniconazole	GH mint (multi-crop protocol with GH basil)	13530	MI (1)
Zeta-cypermethrin	Beet greens (garden)	13648	CA (1)
Zeta-cypermethrin	Dragon fruit	13305	FL (1)

Attachment 6 - 2025 Environmental Horticulture Program Research Summaries

Aphid Efficacy - In the past, IR-4 had conducted Ornamental Horticulture Surveys to poll growers, landscape care operators, researchers, extension personnel and others affiliated with the ornamental industry on needs and issues related to disease, insect, and weed management. In 2013, aphids were identified as one of the top five important insects of concern. In a literature review from 2015, there were insufficient data for definitive conclusions, many of the older registered active ingredients, including, acephate, acetamiprid, bifenthrin, chlorpyrifos, dimethoate, flonicamid, imidacloprid, lambda-cyhalothrin, malathion, pymetrozine, spirotetramat, and thiamethoxam generally provided effective control. Similarly, several relatively new products, including cyantraniliprole, pyrifluquinazon, sulfoxaflor, and tolfenpyrad were effective.

Borer & Beetle Efficacy - In the past, IR-4 had conducted Ornamental Horticulture Surveys to poll growers, landscape care operators, researchers, extension personnel and others affiliated with the ornamental industry on needs and issues related to disease, insect, and weed management. In 2013, aphids were identified as one of the top five important insects of concern. In a literature review from 2015, there were insufficient data for definitive conclusions, many of the older registered active ingredients, including, acephate, acetamiprid, bifenthrin, chlorpyrifos, dimethoate, flonicamid, imidacloprid, lambda-cyhalothrin, malathion, pymetrozine, spirotetramat, and thiamethoxam generally provided effective control. Similarly, several relatively new products, including cyantraniliprole, pyrifluquinazon, sulfoxaflor, and tolfenpyrad were effective.

Mite Efficacy - From 1999 to 2016, 34 active ingredients were tested mainly as foliar applications against several genera and species of mite pests on ornamentals and vegetables. Mite species tested included: broad mite, *Polyphagotarsonemus latus*, Eriophyid mites including *Aceria* sp., *Aculops lycopersici*, *Aculus ligustri*, *Aculus schlechtendali*, *Epitrimerus pyri*, spider mites including *Tetranychus urticae*, *Oligonychus ilicis* and *Panonychus citri*, and the red palm mite *Raoeilla indica*. Although there were insufficient data for definitive conclusions, Akari/Fujimite (fenpyroximate), Magus (fenazaquin) and Pylon (chlorfenaphyr), generally performed well on various species. Kontos/Movento/BYI 08330 (spirotetramat) looked promising on the Eriophyids *Aceria* sp. and *Aculus ligustri* and on the spider mites *P. citri* and *T. urticae*. Proclaim (emamectin benzoate) was promising on the Eriophyids *Aceria* sp. and *Aculus ligustri* and on *P. latus*. Mesa/Ultiflora (milbemectin) looked promising on the Eriophyids *A. ligustri*, *Aculus schlechtendali*, *Epitrimerus pyri* and *Aculops lycopersici*, and on the spider mites *T. urticae*. Shuttle (acequinocyl) looked promising on Southern red mite. On red palm mite, limited data indicated that Forbid/Judo (spiromesifen), Pylon, Sanmite (pyridaben), Shuttle (acequinocyl) and Sulfur/Thiolux (sulfur) performed well while Avid (abamectin), Hexagon (hexythiazox) and Tetrasan (etoxazole) were less effective. Tank-mix combination with oils generally improved mite control.

Scale & Mealybug Efficacy - Managing mealybugs and scale insects presents unique challenges. Products with contact modes of action must be applied at specific timings in order to reach the most susceptible crawler stages often targeting stems or leaf petioles not readily accessible due to dense foliage. Products with systemic modes of action may work well for certain species and not others based on application timing and whether the insect feeds within phloem or xylem. In 2003, IR-4 initiated a high priority project to determine efficacy of insecticides for mealybugs to add additional species to existing registrations and screen new active ingredients. Over time, mealybug efficacy has been re-established as high priority at subsequent workshops (2019, 2021). This research was conducted between 2004 and 2022. This summary contains outcomes from 32 experiments established to screen new active ingredients for impact on mealybugs. Across crop and mealybug species, the products with the most impact on populations include ISM-555, TriStar, Orthene, Pradia, Safari, Talus, Flagship, Rycar, A169018, Aria, Kontos, and Ventigra. MBI 205, TetraCURB Concentrate, and SP3014 also provided acceptable reductions in populations. Seven different mode of action groups are represented. There is the opportunity to include mealybugs on active ingredients that are not yet registered for mealybugs and expand currently registered labels with additional mealybug species.

Thrips Efficacy - For the last 16 years, the IR-4 Environmental Horticulture Workshop has ranked developing efficacy data on new products to manage thrips as a High Priority Project either nationally or regionally. Thrips remain an important threat for several reasons: 1) the damage thrips cause to environmental horticulture plants, decreasing the value of the infested crops; 2) the tospoviruses (tomato spotted wilt, impatiens necrotic ringspot) they can vector; 3) the newly arrived invasive species which impact at least 250 different environmental horticulture species; and 4) growers lack the ability to rotate among 3 to 4 different modes of actions to effectively manage resistance development in the thrips populations they must control to maintain economic viability. From 2005 through 2021, 78 products representing 67 different active ingredients were tested for thrips management. These products represented both biological and chemical tools. Some products were already registered, but more data were needed particularly with the newly invasive thrips species, or they were considered standards to measure the level of efficacy achieved with other materials. Other products were in development but have not yet been registered with the EPA. The five thrips species tested in the IR-4 program were Chilli Thrips (*Scirtothrips dorsalis*), Gladiolus Thrips (*Thrips simplex*), Privet Thrips (*Dendothrips ornatus*), Weeping Fig Thrips (*Gynaikothrips uzeli*), and Western Flower Thrips (*Frankliniella occidentalis*).

Botrytis Efficacy - At the IR-4 Environmental Horticulture Program Workshop in 2011, Botrytis Efficacy was selected as a high priority project to expand the knowledge and list of fungicides available to growers for these diseases. In addition to research collected through the IR-4 Program, this summary includes a review of experiments conducted from 1998 to 2022 on environmental horticulture crops. During this time period, numerous products representing 56 active ingredients were tested as foliar applications against several Botrytis species causing blight and gray mold on multiple environmental horticulture crops. Most products are now registered and commercially used. Almost all trials were conducted on Botrytis cinerea; however, other species tested were B. elliptica, and B. tulipae. For B. cinerea, across all crops and rates screened, Affirm, Picatina Flora, Astun, Spirato/Medallion, Mural, Tourney, Pageant Intrinsic, Decree, and Postiva provided good to excellent efficacy routinely as did two not-yet-registered tools for Botrytis management: XDE-659 and Trinity. Orkestra Intrinsic, PreStop, S2200, Broadform, and Regalia generally provided good reduction in disease; however, some variability was seen among experiments. S2200 also was variable in performance but could be registered and be part of an overall management program. For Botrytis elliptica, fewer experiments have been conducted. The best performing tools with at least 3 trials are Orchestra Intrinsic, Mural, and S2200. ZeroTol, and the copper products (Badge X2, Camelot, Phytan 27, STBX-304) generally performed poorly under the conditions of these experiments.

Fusarium Efficacy - From 2001 to 2020, numerous products representing 40 active ingredients were evaluated in greenhouse and field trials as soil drench, soil incorporation, foliar, in-furrow, drip irrigation or tuber soak applications against several Fusarium species causing rots (crown, stem and tuber rots) and wilt on environmental horticulture crops, and wilt and root rot on vegetables. Fusarium species tested included: F. avenaceum, F. commune, F. oxysporum, F. solani and F. sp. Most trials were conducted on F. oxysporum on larkspur, lirioppe, lisianthus and watermelon. Although there were insufficient data for definitive conclusions, several relatively new products showed promising, though inconsistent, efficacy comparable to the standards. These include Astun (isofetamid), BAS 750 (mefentriconazole), Picatina (pydiflumetofen), Heritage (azoxystrobin), Compass (trifloxystrobin), Hurricane (fludioxonil+mefenoxam), Insignia (pyraclostrobin), Insimmo (acibenzolar), MBI-121, Orkestra (fluxapyroxad + pyraclostrobin), SP2169, Tourney (metconazole) and Trinity (triticonazole)., Broadform (fluopyram + trifloxystrobin), BW240/RootShield Plus (Trichoderma harzianum & T. virens), (BWI161N), CG100 (caprylic acid), Mural, Pageant (boscalid+pyraclostrobin), Palladium (cyprodinil+fludioxonil), SP2550, SP2770 and TCX2020 provided no to mediocre efficacy. Postiva (pydiflumetofen + difenoconazole) provided excellent efficacy on F. oxysporum on various environmental horticultural crops in greenhouse experiments. Proline (prothioconazole) provided consistently good control of F. oxysporum in watermelon trials. The established standards 3336, Medallion and Terraguard generally provided inconsistent efficacy.

Bacterial Disease Efficacy - From 2008 to 2022, 83 products were tested through the IR-4 Environmental Horticulture Program as foliar or drench applications against bacterial pathogens. In addition to research collected through the IR-4 program, this summary includes a review of experiments conducted from 2005 to 2017, mainly on tree crops. Species tested included: *Agrobacterium tumefaciens*, *Erwinia amylovora*, *E. chrysanthemi*, *Pseudomonas cichorii*, *P. marginalis*, *P. syringae*, *Pseudomonas* sp., *Xanthomonas axonopodis*, *Xanthomonas campestris*, and *Xanthomonas* spp. In general, all products, including the standard copper containing bactericides (Camelot, CuPRO, Cuprofix, Cuprofix MZ, Junction, Kocide, MasterCop, Phytan 27, ReZist, etc.), mancozeb (Dithane, Penncozeb, Protect) and biologicals (Cease, Regalia, Rhapsody and Serenade), provided variable efficacy on these bacterial pathogens. Several new products that looked promising based on their efficacy relative to standards including, CG100, Citrex, HM0736, Insimmo, Postiva, Proud 3, Stargus, Taegro, Tril-21 and ZeroTol. Further research is needed to obtain additional efficacy data to recommend actions to register or amend labels for these pests.

Powdery Mildew Efficacy - Powdery mildew is a highly recognizable disease with pronounced colonies of white on foliage and, for some species, on petals. Due to the high number of spores produced, powdery mildews often develop resistance quickly to fungicides. Starting in 2012, IR-4 initiated a series of regional projects to examine new fungicides and biofungicides for powdery mildew management. In addition, we performed a literature review. Contained in the project summary are outcomes from 96 experiments conducted in greenhouses and outdoors. Specific powdery mildew pathogens included: *Erysiphe azaleae*, *Erysiphe knautiae*, *Erysiphe lagerstroemia*, *Erysiphe lonicerae* var. *lonicerae*, *Erysiphe monardae*, *Erysiphe polygoni*, *Erysiphe pulchra*, *Golovinomyces cichoracearum*, *Golovinomyces orontii*, *Oidium* spp., *Podosphaera pannosa*, and *Podosphaera xanthii*. Across species, the best performing products and actives included Aveylo, Bayleton, Broadform, Gatten, Heritage, Magus, Mural, NF-149 (cyflufenamid), SP2478, and XDE-659.

Phytophthora Efficacy - Root rots caused by *Phytophthora* species are often not noticed until foliar symptoms of wilting and stunting are observed. There are multiple species with differential sensitivities to fungicides, making them difficult to manage. Plus, they are classified as Oomycetes in the kingdom Chromista, commonly known as water molds, and can have a propensity to develop resistance to single site mode of action fungicides. Thus, *Phytophthora* diseases have been prioritized for research periodically at IR-4 workshops since 2003. From 2003 to 2015, 74 products representing 65 active ingredients were tested through the IR-4 Program as drench or foliar applications against eleven *Phytophthora* species causing root rots and stem/leaf blights in a total of 926 trials. *Phytophthora* species tested included: *P. cactorum*, *P. cinnamomi*, *P. citricola*, *P. cryptogea*, *P. drechsleri*, *P. nicotianae/parasitica*, *P. palmivora*, *P. plurivora*, *P. ramorum*, *P. syringae*, and *P. tropicalis*. For certain more prevalent and well-studied species, multiple products within several modes of action exhibited good to excellent management: *P. cinnamomi*, *P. cryptogea*, *P. drechsleri*, *P. nicotianae*, *P. palmivora*, *P. ramorum*, and *P. tropicalis*. For *P. cactorum*, none of the experiments provided separation among the treatments and controls. Control of *P. cinnamomi* root rot was achieved primarily with drench applications onto azaleas. When this pathogen was tested on rhododendrons, the data were either inconclusive or the products did not perform as well as on azaleas with the exception of Magellan and Fenamidone. For *P. citricola*, Adorn and the phosphorus acid generators provided good to great efficacy, but none of the typical oomycete fungicides were acceptable. For *P. drechsleri* root rot, the good to excellent efficacy was achieved with several products including BioPhos, Segway, Stature DM, and Terrazole. For *P. nicotianae*, consistent efficacy across crops was difficult to achieve, but the best performers included Adorn, Aliette, Alude, Biophos, Fenamidone, Insignia, Micora Segway, Stature DM, Subdue MAXX, and Vital. For *P. ramorum* blights, Subdue MAXX provided the most consistent control. Adorn, Fenamidone, Insignia, Segway, and Stature also provided good control. For *P. plurivora*, seven products provided good to excellent activity, but only two experiments have been completed so far. For *P. syringae*, only the phosphorous acid generators provided acceptable reduction in disease in two experiments. For *P. tropicalis*, the best control was achieved with Adorn and Stature. Several products have good to excellent efficacy across multiple *Phytophthora* species: Adorn, Disarm,

Fenstop, Micora, Orvego, Segway, Stature, and Subdue Maxx, plus certain phosphorous acid generating products.

Nutsedge & Sedge Efficacy - Nutsedges and sedges (*Cyperus* sp.) are difficult to manage during the production of perennial environmental horticulture crops grown in containers or in the field. During the 2006 IR-4 Environmental Horticulture Workshop, a project was prioritized to screen for efficacious products to manage sedge and nutsedge in container or field grown environmental horticulture crops. Between 2007 and 2023, IR4 evaluated a diverse group of products for pre- and post-emergent control of several sedges and nutsedges. During this time, IR-4 sponsored 84 research trials on 28 products or product formulations with 20 actives to manage sedges and nutsedge. Most research was conducted with pre-emergent herbicides. The most effective options across these studies where IR-4 has at least 3 experiments include Pennant Magnum, SedgeHammer, Tower, and V-10142 for yellow nutsedge management. However, the IR-4 dataset is limited, and several products tested show promise for managing annual sedges, rice flatsedge, purple nutsedge or compressed sedge.

Spurge Efficacy - Nursery growers have had a longstanding battle to control weeds in environmental horticulture crops. Spurge (*Chamaesyce maculata*), is one of the most difficult weeds to control in container grown ornamentals. It grows aggressively in containers and can outcompete ornamental crops for water, nutrients, and light. Several chemical tools are available for preemergent control. However, there remains a need for effective control of emerged weed seedlings. At the 2007 Environmental Horticulture Workshop, IR-4 initiated a study to determine whether preemergent herbicides could provide efficacy for spurge, and other weeds, up to the 2-4 leaf stage. Research was conducted from 2008 through 2019. This report is a brief summary of available data from 18 experiments received through the IR-4 Environmental Horticulture Program. Early postemergence applications of Casoron, Certainty, Gallery, Marengo/Indaziflam, Pendulum, SP 1770, Tower and V-10142 provided significant control of emerged spurge. These findings benefit growers by identifying select preemergence herbicides which control specific weeds at early emergence stages in container grown ornamental horticulture crops.

Attachment 7 - 2025 Environmental Horticulture Program Research Activities

Discipline	Project	Researchers	Crops	Products	Trials
Entomology	European Corn Borer Efficacy	1	1	5	1
	Nantucket Pine Tip Moth Efficacy	1	1	5	1
	NER Regional Root Aphid/Aphid Efficacy	2	2	8	2
	New Pest Products Crop Safety - Foliar	17	29	10	82
	New Pest Products Crop Safety - Soil	12	13	7	39
	Scale Efficacy	3	5	11	3
	Thrips Efficacy	2	1	10	2
	WSR Regional Lygus Efficacy	1	1	10	1
Plant Pathology	Boxwood Foliar Disease Efficacy	2	1	10	2
	Cylindracarpon in Conifers Efficacy	1	1	6	1
	NCR/WSR Regional Botrytis Efficacy	1	1	10	1
	New Disease Products Crop Safety - Foliar	15	29	12	96
	New Disease Products Crop Safety - Soil	9	17	7	30
	Phytophthora Efficacy	3	1	7	3
	Pythium & Phytopythium Efficacy	1	1	7	1
	SOR Regional Vascular Streak Dieback Efficacy	1	1	9	1
Weed Science	NCR Regional Equisetum Efficacy	2	N/A	5	2
	Postemergent Herbicide Crop Safety	1	1	2	2
	Preemergent Herbicide Crop Safety for Container Production	15	39	17	128
	Preemergent Crop Safety for Field Production	8	27	4	44
	SOR Regional Pollinator Plant Herbicide Crop Safety	7	6	6	24

For a detailed list of research activities visit <https://www.ir4project.org/ehc/>.

CLC Membership

Presenter: Todd Scholz



Aerts	Michael	FFVA	2001-	2028	A
Bledsoe	Michael	Village Farms	2008-	2028	A
Clarke	Jennifer	California Leafy Greens	2020-	2028	A
Kalendaski	Bob	WI Ginseng	2008	2028	A
Tanner	Berry	National Watermelon Board	2006 -	2028	A
Wysocki	Ryan	Michigan Blueberry	2022	2028	A
Nelson	Peter	Michigan Cherry	2023-	2028	A
Starke	Michelle	Covercress	2024-	2028	A
Arney	Mark	National Watermelon Board	2005 -	2029	B
Cranney	James	California Citrus Quality	2009-	2029	B
Frantz	William	Cranberry Institute	2013 -	2029	B
Roberts	Rachel	American Mushroom Institute	2019 -	2029	B
Roberts	Amy	Lallemand Plant Care	2021 -	2029	B
Scholz	Todd	USA Dry Pea & Lentil	2005-	2029	B
Schreiber	Alan	Agriculture Development Group	2009	2029	B
VanWychen	Lee	Weed Science Society of America	2021	2029	B
Monterraso	Armando	Brooks Tropicals	2013	2026	C
Sarager	Jonathan	Western Growers	2022	2026	C
Elliot	Maggie	US Hops	2022-	2026	C
Quarles	Kam	National Potato Council	2020-	2026	C
Grainger	Michelle	NC Sweetpotato Commission	2021	2026	C
Bagley	Zach	California Tomato Research Institute	2022	2026	C
Martin	Michael	AmericanHort/HRI	2020-	2026	C
Boatright	John Walt	American Farm Bureau	2019-	2027	D
Shumow	Laura	American Spice Trade Association	2025	2027	D
Jones	Bob	The Chef's Garden	2019-	2027	D
Pitts	Keith	Biopesticide Industry Alliance	2015-	2027	D
Salisbury	Steven	Mint Industry Research Council	2014-	2027	D
Kudsk	Kevin	National Onion	2022-	2027	D
Upton	Amy	MI Nursury Growers Assoc	2019	2027	D
		LA Sugar Cane League	2019	2027	D

Past members

Ahrens	Don	Twin Gardens Farms	1992 - 1995
Alberts	Tim	Kemin Industries	2017-2018
Allman	George	Mint Industry Research Council	1991 - 1992
Balling	Steve	Del Monte	1993 - 2000
Bardenbagen	Chris	Michigan Cherry	2022-2023
Berger	Lori	AgBusiness Resources	2008-2020
Bischoff	Joe	AmericanHort	2013 -2015
Bonanno	Rich	Pleasant Valley Gardens	1992 - 2016
Botts	Dan	FFVA	1991 - 2000
Buurma	Bruce	Grower	2005 -2019
Calabro	Jill	AmericanHort	2013-2020
Davenport	Thomas	National Grape Cooperative	2006 - 2010
DeLucia	Aline	NASDA	2017-2022
DeYoung	Alan	Van Drunen Farms	2015-2024
Downing	Jere	Cranberry Institute	1991 - 1998
Elworth	Larry	PA Apple Marketing	1991 - 1994
Ewart	Wally	CA Citrus	1991 - 2009

Flood	Brian	Del Monte	2001 - 2016
Gandhi	Amy	Kemin Industries	2016-2017
George	Ann	US Hops	1991 -2022
Giclas	Hank	Western Growers	2005 -2019
Grey	Jennifer	HRI	2020-2021
Humfeld	Terry	Cranberry Institute	2013 -2019
Jewett	Valerie	United Fresh Fruit & Vegetable	1993 - 1996
Kesner	Chuck	Cherry Marketing Institute	1993 - 1995
Keeling	John	National Potato Council	2006-2019
Kodet	Todd	Bruce Church	1991 - 1996
Korson	Phil	Cherry Marketing Institute	1995-2019
Kurtz	Ed	CA Lettuce	1992 - 2005
Lister	Art	MI Cherry Committee	1991 - 1993
Lundy	Rocky	Mint Industry Research Council	1992 - 2014
McCloud	Susan	Almond Board	1991
Melban	Ken	CA Pepper	2005 - 2007
Mize	Allen	Del Monte	2016 -2018
Montoian	Richard	CA Grape & Tree Fruit	1991
Murphy	Linda	Society of America Florists	1991 - 1993
Nuxoll	Dennis	Western Growers	2014-2022
Obenauf	Gary	CA Prune, Raisin, Walnut	1991 - 1995
Olszack	Reed	Grower	1991 - 2010
Phelps	Laura	American Mushroom Institute	2009 - 2019
Pitts	Matt	Cranberry Institute	2002 - 2004
Prewett	Ray	TX Vegetable Assoc.	1994 - 2015
Ratto	Ray	Grower	1993 -2018
Rawlins	Scott	Farm Bureau	1992 - 2001
Regelbrugge	Craig	ANLA	1992 - 2004
Romang	Ron		
Sharp	Janice	CA Strawberry	2001 - 2003
Schlegel	Paul	American Farm Bureau	2013-2019
Schmale	Lin	Society of America Florists	1993 -2020
Seetin	Mark	US Apple	2017-2020
Simerly	Bob	National Onion	2015-2022
Spencer	Bill	AZ Citrus	1999 - 2002
Teffeau	Mark	ANLA	2005 - 2013
Traino	Phil	NJ Vegetable	1991 - 1998
Trinka	Dave	MBG Marketing	1997 - 2022
Tristao	Dennis	JG Boswell	2015-2018
Waguespack	Herman	LA Sugar Cane League	2019-2024
Wegmeyer	Tyler	American Farm Bureau	2010- 2013
Williams	Ron	Coca-Cola	2017-2018
Zellers	Richard	MI Vegetable	1991 - 1996
Zuleger	Dean	WI Potato & Vegetable Assoc.	1995 - 2002

Product Performance Research Planning

Presenter: Alice Axtell





2026 Product Performance & IS Research Planning

A. Axtell, Ph.D.

Product Performance

Total Number of PP Studies & Trials

- IR-4 stakeholders prioritized **37** Magnitude of the Residue Studies.
- About **89%** of these studies also require efficacy and crop safety data (**33** studies out of **37** “A” priorities require product performance testing).
- The stakeholders also identified **8** product performance-only projects (H+ projects) and an additional **6** projects were selected by IR-4 HQ/RFCs after the FUW.
- **120** trials are planned to be conducted in 2026

Resource Allocation

Total 2025 NIFA budget for Product Performance Trials: \$1,170,000

- Allocated (includes IDC¹): \$1,051,111
- **Leftover: \$118,889**

Third Party budget (w/IDC): \$57,778 (BASF, TKI)

Average cost per trial:

$$(1,051,111 + 57,778)/120 = 9,241$$

¹IDC= Indirect cost (11.111%)





Integrated Solutions

Integrated Solutions Updates

- The Integrated Solutions Platform was **paused** in the fall of 2025 due to funding limitations.
- Funding for IS research priorities established at the 2024 FUW were reduced by **\$111,110**, which left **\$400,000** to complete this research. A total of **\$331,111** was utilized and is currently being disbursed to the regions. About **\$69,000** is left for alternative uses.
- **2026 trials** have been allocated and research protocols are in the process of being finalized.
- IR-4 will complete **7** NIFA-funded projects and **4** CDFR-funded projects in 2026. Project IS00447 (avocado / parthenium weeds) was withdrawn by stakeholders.
- **Two** sponsored projects stemming from the 2025 FUW are currently pending. With the IS platform on hold, sponsors are required to cover both FTE support and the associated trial costs. Discussions are ongoing.
- **The IS database** has been updated to reflect study goals and associated accomplishments for projects where this information was readily available.



Thank you!

2026 Events and Key Dates

Presenter: Alice Axtell





2026 Events & Key Dates

A. Axtell, Ph.D.



Industry Technology Session

JOIN US VIRTUALLY

**2026 IR-4 Industry
Technology Session**

**February 19, 2026
Approx. 11:30 a.m. to 4:00 p.m. ET***

**Schedule subject to change*



IR-4 

21 Presenters

280 Registered
attendees

**If you missed this event, you can find the recorded presentations on our website under the Event page

IR-4
Project 

Thank You, IR-4 Event Sponsors!

Platinum



Gold



Silver



Bronze



2026

GOAL: \$60K

As of Feb 10th: \$24K



Food Use Workshop (FUW)

Save the Date!



Save the date
& join us in
Austin, TX

IR-4
Project 

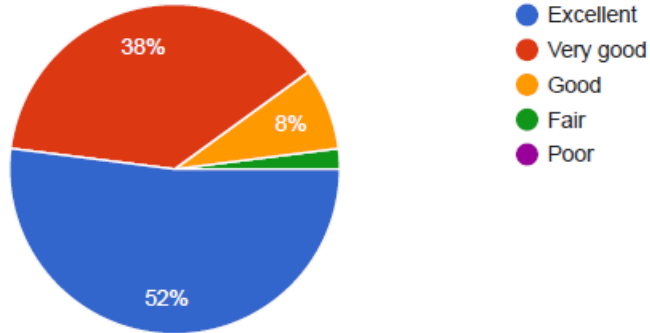
**FOOD USE
WORKSHOP**
September 15 -17, 2026

IR-4
Project 

Overall Stakeholders' Feedback is Very Positive

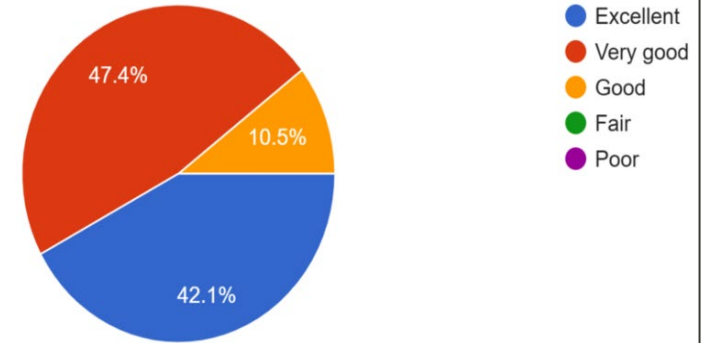
How would you rate the 2024 Food Use Workshop?

50 responses



How would you rate the 2025 Food Use Workshop?

19 responses



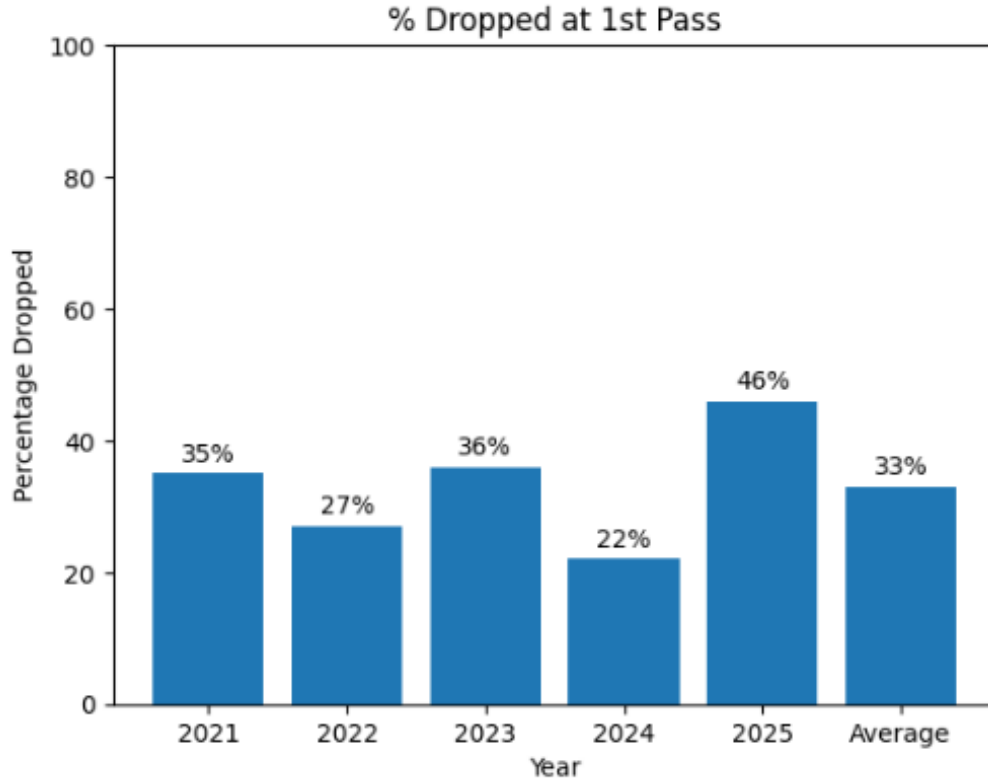
Post-Event Survey Outcomes:

Early-Stage Prioritization

The general feedback is that the 1st pass is too time-consuming and leaves too many projects in play, with stakeholders wanting to make in-person workshop time more focused and efficient.

- *“One whole day was wasted in the first pass - couldn’t this be done virtually? Then assemble for 1.5 days to finalize.”*
- *“Consider doing first pass ahead of in person meetings.”*
- *“1st round of prioritization needs to be more refined... too many projects left after 1st round”*
- *“The tendency for the last few years has been to wait until the very end to make the hard choices for prioritizations. This seems very inefficient and risks choosing poorly when the time constraints kick in. I wonder if more pre-work within the regions could help narrow the initial list (this year 249!), down to something more proportional to the final targets for A, H+, etc. Maybe let the regions vote, then have the Regional Field Coordinators meet and trim the list to 100 PRs before the workshop to make Workshop deliberations more substantive.”*
- *“I think the workshop was very well run and efficient this year. The only frustration is the number of projects that were still under evaluation by the registrants”*

A Close Look at the 1st Pass



- The initial average number of projects eligible for nomination is about **200**
- About **33%** of projects are dropped during the 1st pass.

What is the 1st Pass Used for?

- The 1st pass provides a structured opportunity to:
 - Gather **updated information** on nominated projects (e.g., project status, data availability, regulatory considerations, etc.).
 - **Ask questions** and clarify key project details.
 - Share existing **data** and relevant information that may influence companies' decisions.
 - Allow crop protection companies to address projects coded as “**Under Evaluation**” based on stakeholder feedback.
 - On average, about **22%** of projects are coded “Under Evaluation,” and only **50%** of these projects change status before the end of the 1st pass.
 - **Engage stakeholders** and registrants in discussion around updated information and begin formulating final selections.

Pausing Integrated Solutions (IS) & Revamping the FUW

As of October 2025, IR-4's Integrated Solutions (IS) Platform research has been paused. Due to funding uncertainties and limitations, resources are being redirected to support the core program capacity, including addressing the backlog in IR-4 analytical laboratories.

Fall 2025 PMC Decisions: A Letter from Executive Director Jerry Baron

Posted on October 21, 2025



Executive Director Update

On one hand, stakeholders are requesting a more efficient and streamlined process. **On the other hand**, pausing the IS Platform will free up time during the 2026 FUW, creating a need to fill that time to avoid incurring additional fees.

This presents an **opportunity** to consider adjustments that could enhance the event—both in the short term and over the long term.



- Do PMC and CLC members see a need to modify the 1st pass process?
 - If so, what potential approaches could be explored?

Please note that in previous years' FUWs, the 1st pass has taken approximately **6 hours, while only **3 hours** were allocated for the 2nd pass, causing priority selections to be rushed.

This year, prioritization of IS projects will not take place because the IS platform has been placed on pause. As a result, approximately **4.5 hours can be reallocated, which could extend the 2nd pass.

Post-Event Survey Outcomes: *Stakeholder Engagement*

The general feedback suggests that while the process is efficient, there may be opportunities to encourage broader participation and dialogue, with more emphasis on grower needs and diverse perspectives.

- *“I think the process has become too streamlined. Sometimes it almost seems like it would be okay if only the regional coordinators were there to talk amongst themselves. I miss having more interaction/discussion at the meeting between colleagues within a discipline. It has almost become too dry - seems like we are missing dialogue”*
- *“The discussion is mostly regional coordinators and commodity liaisons. Little opportunity for others to contribute”*
- *“I enjoyed the event. However, I felt that my in-person participation was unnecessary [Registrant]”*
- *“Spend more time on Grower needs, connection to issues affecting minor use industry (e.g., MRL's, Resistance Management, etc.). Also would be great to hear from USDA, various grower groups, etc. to understand where companies (both large & small) should focus resources”*

- **How do PMC and CLC members assess the current level of stakeholder engagement and participation during the FUW?**
 - What opportunities or approaches could be considered to further enhance engagement and participation?

Option 1: Transparency on Project Complexity

Some proposals require complex analytical work (an example includes hemp projects), while others involve lower levels of effort. Sharing this information could help stakeholders better understand feasibility and make more informed prioritization decisions.

Questions for discussion: Should this information be disclosed? If so, what is the best way to present it, and how might it influence prioritization outcomes?

Option 2: Strengthening the Nomination Rationale

Stakeholders making a nomination at the FUW would be asked to briefly explain the rationale supporting their proposal to encourage more substantive discussion. Considerations may include, but are not limited to:

- Lack of available alternative pest management tools
- Challenging pest ecology and associated economic impact
- Resistance management needs
- Other relevant factors

Question for discussion: Would this approach improve the quality of dialogue and prioritization decisions?

Option 3: Organize the 1st pass by crop group

- Currently, the 1st pass is organized by discipline (Entomology, Plant Pathology, and Weed Science), while the 2nd pass proceeds crop group by crop group.
- **PROS:** Organizing the first pass by crop group rather than by discipline may allow stakeholders to see all available options for a given crop in one place from the outset, facilitating dialogue and possibly a more efficient selection of priorities.
- **CONS:** On the other hand, proceeding crop group by crop group may unintentionally favor more vocal participants, potentially limiting input from those who are less vocal.

Questions for discussion: Should we continue to treat the disciplines separately in the 1st pass?

Option 4: Onboarding New Participants Through a Lunch & Learn Session and/or by Offering a Pre-Event Webinar

In 2025, an unexpectedly large number of new attendees participated in the FUW, and a similar trend is anticipated in 2026.

Questions for discussion: What approaches could help new attendees engage more effectively?

A couple of ideas for consideration:

- Offer a “lunch & learn” on day 1
- Prepare a webinar

Key Dates & Deadlines

What?	When
Company meetings	April - June
EPA crop tour	Wednesday, June 10 th [Tentative]
Deadline to submit a new PCR	Wednesday, July 1 st
PMC Meeting	Tuesday, July 7 th – Thursday, July 9 th
EPA stoplight analysis is due	Friday, August 10 th [Tentative]
Project requests are eligible for nomination online	Friday, August 14 th – Monday, August 24 th
The list of nominated project requests is posted on the public website	Friday, September 4 th by 12:00 pm ET
Food Use Workshop	Tuesday, September 15 th – Thursday September, 17 th



Thank you!

SOAR Award Renaming

Presenter: Krystal Chojnacki





STAFF REPORT

Prepared by Krystal Chojnacki

BACKGROUND

The IR-4 Project established the SOAR Award to recognize external partners who excel in serving growers of specialty crops. Recipients have demonstrated clear dedication to the crop protection industry in the areas of Service, Outreach, Altruism, and Research while supporting IR-4's mission to provide specialty crop growers with new and expanded pest management tools.

The SOAR Award is given to a limited number of individuals annually, but no award will be given if there are no eligible nominees during a particular year. Nominees can be anyone associated with the IR-4 Project except active PMC members and full-time IR-4 personnel. Any IR-4 team member may submit nominations.

Selected recipients will demonstrate excellence in three of the following four areas:

Service, for example:

- Participates in ad hoc and standing committees
- Participates in advisory panels
- Participates in similar activities which enhance the direction and mission of IR-4

Outreach, for example:

- Consistent vocal supporter of IR-4 with growers and/or lawmakers
- Contributes toward recognition of IR-4 in media, elevating IR-4's profile in the grower community

Altruism, for example:

- Donates time, extra research, plant materials, etc

Research, for example:

- Participates in IR-4 Program for a minimum of 3 years
- Consistently produces stellar and timely research that contributes to new or enhanced product labels

RECOMMENDATION FROM STAFF

To honor the legacy and contributions made in his 40 years with the IR-4 Project, staff is recommending to re-name the SOAR Award to the **Jerry Baron SOAR Award**. This award aligns with the values of Jerry Baron and his commitment to fostering partnerships and participation with stakeholders and researchers to carry out the mission of IR-4.

ADDITIONAL INFORMATION

Past Recipients

2025 – Dr. Thierry Besançon and Armando Monterosso

2024 – Dr. Rich Bonanno, Julie Coughlin, Kimberly Nesci, Dr. Mark VanGessel

2023 – Dr. Ricardo Bessin, Dan Gilrein, Ronda Hirnyck

2022 – Dr. Stanley Culpepper, Ann George, Dr. Joseph Neal & Dr. Edward Peachey

2017 – Barbara Madden & Laura Phelps

2016 – Brian Flood, David Monks, & Andrew Senesac

2015 – Mary Hausbeck, Robin Bellinder

2014 – Joe DeFrancesco, Meg McGrath

2013 – Mike Benson

2012 – Dan Botts

2011 – John Ahrens, Lori Berger

IR-4 Northeast Region Update

Presenter: Simon Zebelo





2025 Annual Report

Contributors: Marylee Ross, Megan James Hickman, Simon Zebelo, Jane Forder

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Sponsor Acknowledgements

Recognizing The IR-4 Project's primary sponsor:



United States Department of Agriculture
National Institute of Food and Agriculture

This work is supported by project award nos. 2025-79111-45234 and 2022-79111-38469, from the U.S. Department of Agriculture's National Institute of Food and Agriculture, with substantial cooperation and support from the State Agricultural Experiment Stations, USDA-ARS and USDA-FAS. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and should not be construed to represent any official USDA or U.S. Government determination or policy. 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.

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



**UNIVERSITY OF MARYLAND
EASTERN SHORE**



**COLLEGE OF
AGRICULTURE &
NATURAL RESOURCES**



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

Program Summary

2025 Trials At-A-Glance

Food Use MOR Trials	2024	2025	2026
Trials Placed	26	31	20
Canceled Trials	1	4	0
Completed Trials	25	27	0
FDB's Received at RFC Office	18	11	0
Completed QC Reviews	18	0	0

Food Use Performance Trials	2024	2025	2026
# of Trials	18	20	15
Completed Trials	15	16	0
Reports Submitted	15	6	0

Env. Horticulture – Efficacy	2024	2025	2026
# of Protocols	5	4	TBD
Projects Placed	5	4	TBD
Canceled Projects	0	0	0
Reports Submitted	0	0	0

Env. Horticulture – Crop Safety	2024	2025	2026
# of Protocols	3	5	TBD
Trials Placed	19	48	TBD
Canceled Trials	0	0	0
Reports Submitted	0	16	0

Integrated Solutions Trials	2024	2025	2026
# of Trials	8	1	2
Completed Trials	8	1	0
Reports Submitted	8	1	0

Overview of the Northeast Region

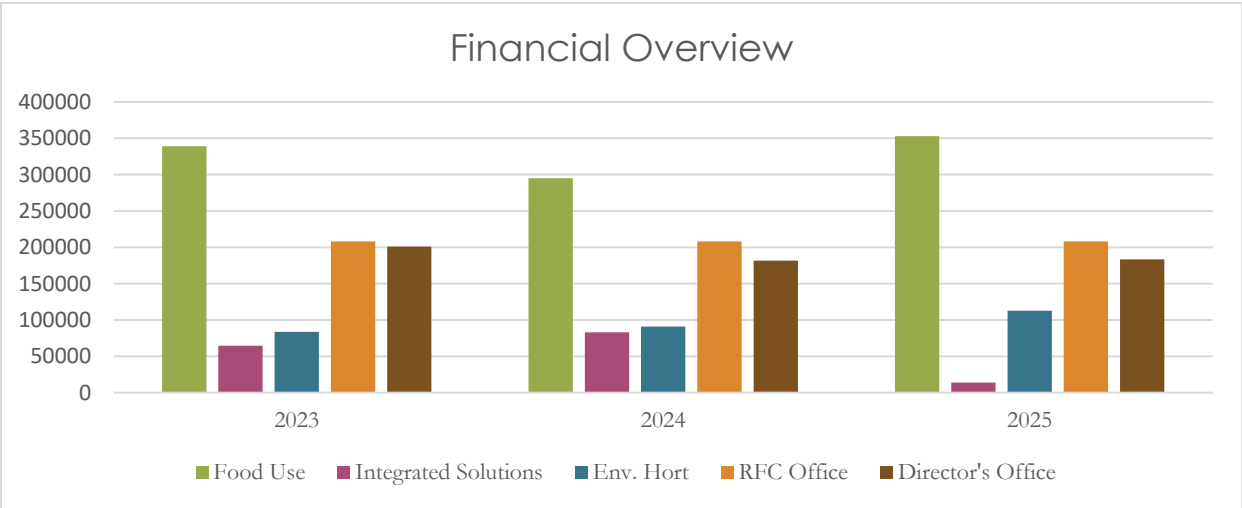
The Northeast Region of the IR-4 Project is a collaboration between the University of Maryland College Park (UMCP/UMD), University of Maryland Eastern Shore (UMES), and North Carolina State University (NC State).

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, 2025 through December 31, 2025.

Budget

In 2025, Food Use allocated \$352,900, Environmental Horticulture allocated \$112,800 and Integrated Solutions allocated \$14,000 to field trials. The Regional Director’s office received \$183,400 to support the administration of the region. The RFC office received \$208,139 to support operations and outreach. All of these figures do not include indirect cost.

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

This report provides an overview of administrative progress, financial processing, operational support, and program engagement activities within the IR-4 Northeast Region (NER) for fiscal years 2024–2025 (Year 4) and 2025–2026 (Year 1).

The processing status of sub-sub award contracts for FY 2024–2025 and FY 2025–2026 is summarized below:

Activities	2024-2025 (Year 4)	2025-2026 (Year 1)
Subawards completed	21	26
Number of Sub awards Signed	20	20
PR completed	N/A*	N/A*
PO processed	N/A*	N/A*
Invoices received	15	1
Checks issued	15	1
NCE Requested	12	0

*PR and PO transactions are not required in the new University of Maryland financial system because budgets are transferred internally.

Twelve researchers requested no-cost extensions (NCEs) for the FY 2024–2025 budget cycle. All NCE requests were reviewed and approved by UMES to ensure continuity of research activities and appropriate use of allocated funds. Processing and fund disbursement for FY 2024–2025 (Year 4) sub-sub awards are proceeding efficiently. For FY 2025–2026 (Year 1), most sub-sub award agreements have already been executed, positioning projects for timely initiation.

UMES has continued to support regional research operations by procuring and distributing residue sample bags to all regional offices and USDA-ARS collaborators. To ensure uninterrupted research workflows, UMES has also expanded its on-site inventory and maintains a reserve stock of residue bags to address urgent or unexpected regional needs. This proactive inventory management strengthens logistical readiness across the network.

During 2024, the Director actively participated in multiple IR-4-related meetings and professional events, including:

- Project Management Committee (PMC) meetings
- Food Use Workshop and Priority Setting meetings
- National Education Conference
- National Expanding Force meetings
- SLR update meetings
- Priority Setting Meetings
- Entomological Society of America (ESA) national and branch meetings

The IR-4 Northeast Region team conducted regular virtual coordination meetings throughout the year. These meetings facilitated communication, troubleshooting, and progress monitoring across projects. The Director extends sincere appreciation to Marylee, Megan, Jane, John, Josh (UMES Research Office), the State Liaison Representatives (SLRs), and the participating researchers for their dedicated efforts. Their collaboration and commitment continue to drive steady progress and operational success within the NER.

Regards,

Simon Zebelo

Update from the Regional Field Coordinator's Office

Greetings from the Northeast,

We had another successful year. It started with a blizzard and ended with very cold temperatures.

January included Delaware Ag Week where Megan sponsored a table presenting IR-4. It is a great place to network with many of the people already involved with IR-4 and others who may be interested. We also kicked off a series of eFDB trainings and planning for the annual IR-4 EPA/USDA tour.

February saw us continue with eFDB training. We conducted SOP reviews for the coming year. We enjoyed the Industry Technology Sessions and a Headquarters/RFC meeting. We also participated in an initiative to “reboot” the Integrated Solutions Program. As well we hosted our Northeast Region Annual State Liaison Representatives Meeting.

March brought Megan a brand-new beautiful person with the birth of her daughter and she went out on maternity leave. eFDB training continued. We began planning the first training webinar of the year and the first Town Hall Meeting was held.

April found me missing Megan very much. She is such an integral part of our region. We had our first National GLP training webinar.

In May I was honored with a University of Maryland Off-Campus Professional Track Faculty Excellence award. The nomination was submitted by Alan Leslie (our Center Director) and was presented by Dean Craig Beyrouthy.

June brought Megan back! We met IR-4's new Environmental Horticulture Manager. It was a productive meeting with many ideas exchanged. The EPA/USDA tour took place. It was a long day with multiple amazing and educational stops. We held our Northeast Region Priority Setting calls for Entomology, Pathology and Weed Science in preparation for the Food Use Workshop. We hosted a visit to LESREC for the Associate Dean of UMD Ag. & Natural Resources, Puneet Srivastava. And we participated in an HQ/RFC call.

In July there was a Town Hall meeting and a Training Webinar. I attended an EPA Inspection at our Cranberry Station in Wareham, Massachusetts. I had also planned a visit to Snyder farm in New Jersey for an EPA inspection, but that was cancelled by EPA. We are anticipating EPA inspections of Snyder Farm and LESREC sometime in 2026.

August was when we had our first EH Priority Setting call with the new manager. Methods used to operate the EHC program are changing in a positive way. Nominations opened for the Food Use Workshop.

September took us to Denver, Colorado for the Food Use Workshop. This FUW was more of a challenge than years past due to reduced funding allocated for research and no ability to carry forward the Integrated Solutions nominations we had received. I made a site visit to Lange Research in New York. I spent the day observing their facility and their potential for IR-4 trials with a GLP trained researcher that had not done IR-4 trials before. Everything looked promising. It was a difficult transition year because of many ongoing trials from 2024 and 2025 that were transferred to the new researcher. It got off to a rocky start since the new FRD was not trained in eFDB nor

eQA. I am still hopeful that we have a solid site for trials going forward in 2026 despite some of the mistakes that were made and the lack of time we had to get the new FRD on board with the IR-4 expectations. I also stopped in to see Ken Trammel. It is bittersweet that he is handing over the reins to Lange. The trucking part of the business will remain ACDS and operations will remain the same.

October took us to Kansas City, Missouri for the EHC Workshop. It went very well. We are still in the process of placing trials for 2026. Another Town Hall meeting was held. Next, we attended the National Research Planning meeting in Raleigh, NC. We watched the interviews that were conducted for the IR-4 Executive Director position.

In November Megan presented at the Salisbury Christian School Career Fair about IR-4. I attended the Entomological Society Meetings in Portland, OR. We had our 4th quarter National Training Webinar. Megan attended Crop School in Ocean City, MD.

In December, Megan went to the UMD AGNR Holiday Luncheon and Strategic Initiatives Meeting and met the new Dean, Wendy Powers.

Throughout the year we held regular team meetings with The Regional Director's Office as well as RFC meetings.

marylee

Notable Meetings

The RFC office participated in approximately 250 hours of virtual meetings throughout 2025. The list below represents some notable meetings that the RFC Office actively participated in and captures the highlights of in person and virtual meetings.

- Delaware Ag Week, January 14-15, 2025 in Harrington, DE
- IR-4 NER Annual SLR Meeting, February 18, 2025 via Zoom
- IR-4 Industry Technology Session, February 20, 2025 via Zoom
- IR-4 HQ/RFC Call, February 27, 2025 via Zoom
- IR-4 Town Hall Meetings, March 19, 2025 via Zoom
- GLP Training Webinar, April 29, 2025 via Zoom
- IR-4/EPA Specialty Crop Tour, June 11, 2025 in Northern Delmarva and New Jersey

- IR-4 NER Weed Science Priority Setting Call, June 23, 2025 via Zoom
- IR-4 NER Entomology Priority Setting Call, June 24, 2025 via Zoom
- IR-4 NER Pathology Priority Setting Call, June 24, 2025 via Zoom
- IR-4 HQ/RFC Call, June 26, 2025 via Zoom
- IR-4 Town Hall Meeting, July 16, 2025 via Zoom
- IR-4 Quarterly Training Webinar, July 22, 2025 via Zoom
- EPA Inspection at University of Massachusetts Cranberry Station, July 23-25, 2025 in East Wareham, MA
- IR-4 NER Environmental Horticulture Priority Setting, August 20, 2025 via Zoom
- IR-4 Food Use Workshop, September, 9-11, 2025 in Denver, CO
- Site Visit to Lange Research, September 16-18, 2025 in North Rose, NY
- IR-4 HQ/RFC Call, October, 1, 2025 via Zoom
- IR-4 Ornamental Horticulture Workshop, October 7-8, 2025 in Kansas City, MO
- IR-4 Town Hall Meeting, October 15, 2025 via Zoom
- IR-4 National Research Planning Meeting, October 27-29, 2025 in Raleigh, NC
- Salisbury Christian School Career Fair, November 6, 2025 in Salisbury, MD
- Entomological Society of America Meeting, November 10-12, 2025 in Portland, OR
- Mid-Atlantic Crop School, November 18-20, 2025 in Ocean City, MD
- IR-4 Quarterly Training Webinar, November 18, 2025 via Zoom
- University of Maryland College of Agriculture and Natural Resources Christmas Luncheon and Strategic Initiatives Meeting, December 3, 2025 in College Park, MD

Program Report

Food Use Program

Magnitude of Residue

In 2025, thirty-one magnitude of residue (MOR) trials are being conducted in the Northeast Region. MOR field trials were conducted in four locations, including:

- Lange Research, Inc., North Rose, NY (Contract Research Facility)
- Lower Eastern Shore Research and Education Center, Salisbury, MD (University of MD)
- Rutgers Snyder Research and Extension Farm, Pittstown, NJ (Rutgers University)
- UMass Cranberry Station, Wareham, MA (University of Massachusetts)

Twenty-seven sets of samples have been shipped and eleven electronic Field Data Books (eFDBs) have been completed. No Quality Control (QC) reviews have been completed for 2025 yet.

Quality Assurance (QA)

During the period of this report, I [Jane Forder] conducted 30 audits of field data books, 8 final report audits. I performed a second review on 5 final reports, performed 3 closing report checks and typed up 4 QA statements. I conducted 29 field in-life inspections, 13 in the northeast region and 15 in the northcentral region and one in the southern region. I performed 1 facility inspection in the northeast region and attended one EPA inspection in the northeast region. I performed data reviews on 5 trials targeted for EPA inspections. Administratively I made all travel plans prior to my field critical inspections and I uploaded all travel related documents including receipts for my field critical phase inspections after traveling. I attended the electronic field data book meetings as allowed by my travel schedule. I attended all zoom meetings conducted by the executive director candidates.

Performance

In 2025, twenty performance trials are being conducted in the Northeast Region. The Efficacy and Crop Safety trials are being conducted at eight locations.

Efficacy and Crop Safety trials are being conducted at:

- Rutgers Center for Blueberry and Cranberry Research and Extension, Chatsworth, NJ

(Rutgers University)

- Agricultural Experiment Station, Geneva, NY (Cornell University)
- Long Island Horticultural Research Lab, Riverhead, NY (Cornell University)
- University of Maryland Main Campus, College Park, MD (University of Maryland)
- Carvel Center for Agricultural Research, Georgetown, DE (University of Delaware)
- Wye Research and Education Center, Wye Mills, MD (University of Maryland)
- WVU Plant Diagnostic Clinic, Morgantown, WV (West Virginia University)
- Penn State Horticulture Research Farm, State College, PA (Pennsylvania State University)

Sixteen trials have been completed and six reports have been submitted.

Environmental Horticulture

In 2025, there are four efficacy protocols and five crop safety protocols. Under these protocols, we placed four efficacy projects and forty-eight crop safety trials.

The four efficacy projects are being conducted at:

- Long Island Horticultural Research Lab, Riverhead, NY (Cornell University)
- WVU Plant Diagnostic Clinic, Morgantown, WV (West Virginia University)

The forty-eight crop safety trials are being conducted at:

- Long Island Horticultural Research Lab, Riverhead, NY (Cornell University)
- University of Maryland College Park, College Park, MD (University of Maryland)
- University of Connecticut Agricultural Research Station, Storrs, CT (University of Connecticut)

To date, sixteen crop safety reports have been submitted.

Integrated Solutions

In 2025, one Integrated Solutions carry over trial is being conducted.

The trials are being conducted at:

- Penn State Horticulture Research Farm, State College, PA (Pennsylvania State University)

To date, this trial has been completed and the report submitted.

Personnel

Administration

	Title	Location	Email
Simon Zebelo	Regional Director	University of Maryland Eastern Shore	sazebelo@umes.edu
Marylee Ross	Regional Field Coordinator	University of Maryland	mross@umd.edu
Megan James Hickman	Assistant Regional Field Coordinator	University of Maryland	mjames14@umd.edu
John Ellis	Program Coordinator	University of Maryland Eastern Shore	jellis@umes.edu
Jane Forder	Regional Quality Assurance	North Carolina State University	jforder@ncsu.edu

Field Personnel by State

Connecticut	Title	Location	Email	Area of Involvement
Charles Krasnow	FRD	University of Connecticut	Charles.krasnow@uconn.edu	Environmental Hort

DELAWARE	Title	Location	Email	Area of Involvement
David Owens	FRD & SLR	University of Delaware	owensd@udel.edu	Food Use & Integrated Solutions
Alyssa Betts	FRD	University of Delaware	akoehler@udel.edu	Food Use

MARYLAND	Title	Location	Email	Area of Involvement
Diana Cochran	FRD	University of Maryland College Park	cochrand@umd.edu	Environmental Hort
Megan James Hickman	FRD	University of Maryland – LESREC	mjames14@umd.edu	Food Use
Mengjun Hu	FRD	University of Maryland College Park	mjhu@umd.edu	Food Use
Marylee Ross	FRD & RFC	University of Maryland-LESREC	mross@umd.edu	Food Use
Veronica Yurchak	FRD	University of Maryland - WyeREC	Vjohnso4@umd.edu	Food Use

MASSACHUSETTS	Title	Location	Email	Area of Involvement
Marty Sylvia	FRD	UMass – Cranberry Station	martys@umass.edu	Food Use

NEW JERSEY	Title	Location	Email	Area of Involvement
Thierry Besancon	FRD & SLR	Rutgers – Marucci	thierry.besancon@rutgers.edu	Food Use
Jennifer Fisher	FRD	Rutgers – Snyder R&E Farm	jlf229@njaes.rutgers.edu	Food Use

NEW YORK	Title	Location	Email	Area of Involvement
Nora Catlin	FRD	Cornell – Suffolk County	njc23@cornell.edu	Environmental Hort
Jared Dyer	FRD	Cornell – Suffolk County	jd852@cornell.edu	Environmental Hort
Daniel Gilrein	FRD	Cornell – Suffolk County	dog1@cornell.edu	Food Use & Environmental Hort
Aaron Green	FRD	Lange Research & Consultants Inc.	aaron@langerc.com	Food Use
Daniel Heck	FRD	Cornell	dwh237@cornell.edu	Food Use
Brian Nault	FRD	Cornell	ban6@cornell.edu	Food Use
Lynn Sosnoskie	FRD & SLR	Cornell	lms438@cornell.edu	Food Use

PENNSYLVANIA	Title	Location	Email	Area of Involvement
Caio Brunharo	FRD	Penn State	brunharo@psu.edu	Food Use
Kari Peter	FRD	Penn State	kap22@psu.edu	Integrated Solutions

WEST VIRGINIA	Title	Location	Email	Area of Involvement
Mahfuz Rahman	FRD	West Virginia University	mm.rahman@mail.wvu.edu	Food Use

State Liaison Representatives (SLRs)

Name	State	Email
Srikanth Kodati	CT	srikanth.kodati@uconn.edu
David Owens	DE	owensd@udel.edu
Susan Scheufele	MA	sscheufele@umext.umass.edu
Dwayne Joseph	MD	dwaynej@umd.edu
Lily Calderwood	ME	lily.calderwood@maine.edu
Vacant	NH	
Thierry Besancon	NJ	thierry.besancon@rutgers.edu
Lynn Sosnoskie	NY	lms438@cornell.edu
Greg Krawczyk	PA	gzk13@psu.edu
Vacant	RI	
Ann Hazelrigg	VT	ann.hazelrigg@uvm.edu
Carlos Quesada	WV	carlos.quesada@mail.wvu.edu

IR-4 North Central Region Update

Presenter: Mary Hausbeck





IR-4 NORTH
CENTRAL REGION
RESEARCH CENTER

MICHIGAN STATE UNIVERSITY

M. Hausbeck
N. Soldan



2025 ANNUAL REPORT

(January 1 – December 31, 2025)

A. Mission and Goals of the North Central Region IR-4 Program

The mission of the North Central Region (NCR) IR-4 program is to ensure that safe and effective pest management tools are available for growers of specialty crops, including ornamental crops, and for minor uses on major crops through the generation of high-quality field data.

The goals of the program are to identify pest management needs for these crops in the region, to participate in the prioritization of these needs at the national level, to conduct field research that develops the information to obtain clearances and label additions from USEPA to meet these needs and, finally, to make information available on the status and progress of these studies and their final outcome to growers and other interested parties.

B. Background and Justification

The IR-4 Minor/Specialty Crop Pest Management Project (IR-4 Project) is a comprehensive, national program that consists of six units working together on a common mission to meet the nationally defined goals and objectives presented above. The national program is currently comprised of: IR-4 National Headquarters (IR-4 HQ), four Regional IR-4 Centers (Northeast, North Central, Southern, and Western), and the USDA Agricultural Research Service (USDA-ARS) Office of Minor Uses. The NCR program is responsible for the operations of the program in the 12 states of the region (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD and WI) and has been located at Michigan State University (MSU) since the inception of the regional programs in 1967. The NCR program has developed multiple field research centers in the region, and works with other field research cooperators and, in response to the Good Laboratory Practice (GLP) requirements of EPA, has access to Quality Assurance personnel to serve the region. The NCR program also works co-operatively with the USDA-ARS IR-4 field research unit located at Wooster, OH. The NC Region strives to maintain one or more State Liaison Representatives per state to help identify research needs and transmit back the activities of the program to interested parties.

In the NCR program, needs are identified and prioritized by research and extension personnel, farmers, grower organizations, and others at a regional meeting, and prioritized at a National Food Use Workshop. Field trials in which pest management chemicals are applied to food crops are conducted, and crop samples are collected and analyzed for the magnitude of residues. All residue food use research is conducted under the requirements for Good

Laboratory Practice issued by the USEPA. The analytical reports, after Quality Assurance checks, are forwarded to USEPA as petitions for the development of clearances for these materials. Efficacy (performance) studies on key pests that are currently difficult to control are also funded where this is deemed necessary to obtain later clearances for these pests. Like food uses, ornamental projects are prioritized at a specific workshop and assigned to collaborators in the NCR. The ornamentals projects focus on efficacy and crop safety (phytotoxicity) with primary emphasis on pests for which no satisfactory controls currently exist. The reports are sent to the registrants of the chemicals to assist in obtaining label amendments to include new crops and pests.

The plant protection industry has limited economic incentives to conduct the research necessary to obtain registrations for most specialty crops. To fill this pest management gap, IR-4 develops the data that provide legal, effective, safe, and IPM-compatible pest control agents. Without this program, many specialty crops could no longer be produced in the USA with severe economic implications for American agriculture, food processors, and consumers. Specialty crop growers and food processors are the primary beneficiaries of the IR-4 Project by having legal access to effective pest management products, but the public also benefits by having a safe, healthy, and reasonably priced food supply.

C. Budget

Funding for the NCR IR-4 program comes primarily from USDA/NIFA as an annual competitive research grant. We received \$1,307,001 for FY25-26. The starting date for the FY25-26 funding was September 1, 2025.

D. Overview of Productivity in 2025

This was a productive year for the IR-4 North Central Region. As is the case each year, Field Research Directors (FRD) effectively worked around weather-related events to carry out field trials to completion. The regions collaborated to provide tools to support FRD adaptation to the electronic field databook (eFDB), including updating the eFDB Guidance Document. The regions worked with HQ to provide feedback on the new IR-4 Intranet. NCR assisted in reviewing and revising advisories to become national SOPs. NCR hosted their first regional annual Environmental Horticulture (EH) priority setting meeting ahead of the biennial EH Workshop. The regions continued to support the national GLP training webinars with NCR hosting a webinar to contribute information on the EPA inspections, QA audits, and eFDB updates. Six EPA inspections were successfully completed at research facilities in the NCR. Outputs and positive impacts of IR-4 continue to be highly valued by U.S. specialty crop growers.

E. Challenges

In 2025, the current IR-4 grant entered a final year under a no-cost extension, and a new grant was awarded to continue funding IR-4 trials. There was a delay in receiving the award which caused an additional delay in distributing funding to researchers with trials completed prior to the award being received. As funding for the 5-year award is processed in one-year increments, this delay occurs every year. Funding to researchers is distributed after work has been completed, and it can be a challenge to front costs for multiple trials and receive payment months later, especially for newer faculty who may not have a large resource pool to draw from. Efforts to increase funding as costs to conduct the trials increase is an additional ongoing challenge. Field research directors retiring or leaving the program need to be replaced

to ensure the program’s future. Recruitment for these positions can be difficult with the current trial funding system.

F. Personnel Changes/Additions in 2025

Michigan State University has hired a new Weed Scientist, Dr. Joshua Miranda. At Ohio State University, in January of 2026 Allison Robinson will be leaving her position as FRD, with Dr. Ram Yadav assuming the role of OSU FRD. In this capacity, Dr. Yadav plans to hire a technician in the future to support IR-4 GLP residue trials. In addition, Dr. Yadav has expanded his research program to include Environmental Horticulture research alongside performance and residue research. At South Dakota State University, the official letter for decommissioning Graig Reicks’ GLP field site has been sent, and the decommissioning process is nearing completion.

G. Regional IR-4 Activities:

Field Research

(Ms. Nicole Soldan)

Food Uses: As a result of the 2024 NC Regional IR-4 Priority Setting Meeting, the subsequent IR-4 Food Use Workshop, and the National Research Planning Meeting, the NC Region conducted 66 food crop field residue trials, 21 product performance trials, and 4 Integrated Solutions projects (Table 1).

Table 1. 2025 NCR FOOD USE (GLP) RESIDUE AND EFFICACY/CROP SAFETY PROJECTS

2025 Studies	FRD
11 GLP	Chapman, Scott (WI)
3 GLP	Gauderman, Tom (ND)
13 GLP	Heider, Daniel J. (WI)
7 GLP	Jia, Quan Zai (ND)
20 GLP	Robinson, Allison (OH)
2 GLP	Soldan, Nicole (MI)
10 GLP	Wheeler, Celeste (MI)
6 E/CS	Hausbeck, Dr. Mary (MI)
1 E/CS	Heider, Daniel J. (WI)
1 E/CS	Ivey, Melanie (OH)
1 E/CS	Leach, Ashley (OH)
2 E/CS	Meyers, Stephen L. (IN)
1 E/CS	Miles, Dr. Timothy (MI)
1 E/CS	Mueth, Tyler (MO)
2 E/CS	Rothwell, Nikki (MI)
1 E/CS	Sanabria-Velezquez, Andres (OH)
1 E/CS	Solanki, Shyam (SD)
1 E/CS	Soldan, Nicole (MI)

1E/CS	Werle, Rodrigo (WI)
2 E/CS	Yadav, Ram (OH)

The NCR has made good progress in completing their QC reviews from their 2024 projects with 96% complete as of late February. Out of 67 trials, 64 QC reviews have been completed. Three pending reviews are waiting for responses and with an expectation that these will be completed in March. These reviews have been delayed as Allison Robinson has taken a new position.

For the 2025 trials assigned to the NCR, 82% have been reviewed or partially reviewed. Out of 62 trials, 31 QC reviews have been completed. Twenty pending reviews require responses and are listed below. It is expected that some of these will be completed by early March.

- Scott Chapman– 3 pending
- Tom Guaderman – 3 pending
- Allison Robinson – 10 pending
- Nicole Soldan – 2 pending
- Celeste Wheeler– 2 pending

Eleven trials are yet to be completed so the review process can be initiated and include the following:

- Scott Chapman – 6 (4 greenhouse trials ongoing)
- Allison Robinson – 5 (due to new position)

Environmental Horticulture: As a result of the 2023 Environmental Horticulture Prioritization workshop, the NCR conducted eight trials to assess the safety of pesticides on ornamental crops and five efficacy studies in 2025. The outcomes of these projects will help to deliver new pesticide registrations in ornamentals, expand registrant labeling through positive performance data, and enhance their adoption through demonstration of their effectiveness in controlling pests. See Table 2 below for additional details.

Table 2. 2025 NCR ENVIRONMENTAL HORTICULTURE PROJECTS

Project Title	Protocol	State	Cooperator
European Corn Borer Efficacy	25-024	OH	Canas, Luis
New Pest Products Crop Safety - Foliar	25-004	OH	Canas, Luis
New Pest Products Crop Safety - Soil	25-005	OH	Canas, Luis
New Disease Products Crop Safety - Foliar	25-010	OH	Hand, Francesca
New Disease Products Crop Safety - Soil	25-011	OH	Hand, Francesca
Phytophthora Efficacy	24-006	OH	Hand, Francesca
New Disease Products Crop Safety - Foliar	25-010	MI	Hausbeck, Mary
Phytophthora Efficacy	25-006	MI	Hausbeck, Mary
Botrytis Efficacy	25-018	MI	Hausbeck, Mary

Preemergent Herbicide Crop Safety for Container Production	25-012	OH	Mathers, Hannah
New Pest Products Crop Safety - Foliar	24-004	MI	Saha, Debalina
New Pest Products Crop Safety - Soil	24-005	MI	Saha, Debalina
Equisetum Efficacy	25-021	MI	Saha, Debalina

Integrated Solutions: As a result of the 2024 Integrated Solutions Prioritization Workshop, in 2025 NCR cooperators conducted four Integrated Solutions projects (Table 3). With the outcomes of these projects, we expect to better service the needs of the IR-4 stakeholders by integrating products. It will take advantage of the considerable increase in the development of efficacious biopesticides that are increasingly playing a more significant role in both conventional and organic agricultural production systems.

Table 3: Integrated Solutions Projects in the NC Region in 2025

Title	Principal Investigator
<i>Phytophthora capsici</i> / Pepper	Hausbeck, Mary
Flea Beetle in Brassicas	Leach, Ashley
Camelina Desiccation	Reicks, Graig
Nematode (Root-Knot)/ Tomato	Taylor, Christopher

Outreach and Collaborative Activities: Extension and outreach activities included increasing awareness of IR-4 to stakeholders through zoom calls, phone calls, email, and in person meetings and events. One of the key meetings where the IR-4 has a presence in the form of a booth is the Great Lakes Fruit, Vegetable and Farm Market EXPO. The Michigan Greenhouse Growers EXPO is held concurrently. This EXPO is a premier show with over 4,500 attendees. We have gained several new IR-4 stakeholders that are currently involved with the North Central Region.

NCR State Researchers Participating in the IR-4 Program for 2025

(* indicates State Liaison Representative)

<u>MICHIGAN</u>	<u>OHIO</u>	<u>KANSAS</u>	<u>MISSOURI</u>	<u>SOUTH DAKOTA</u>	<u>NORTH DAKOTA</u>
M. Hausbeck	A. Leach*	R. Cloyd*	I. Valmorbida*	G. Reicks*	B. Jenks*
N. Soldan*	L. Canas			S. Solanki	Q. Jia
T. Miles	F. Hand	<u>WISCONSIN</u>	<u>INDIANA</u>		T. Gauderman
N. Rothwell	A. Robinson	D. Heider*	S. Meyers*	<u>IOWA</u>	
D. Saha	C. Taylor	S. Chapman		S. Slack*	<u>ILLINOIS</u>

C. Wheeler

R. Yadav

R. Werle

NEBRASKA

M. Babadoost*

H. Mathers

N. Lawrence*

K. Gage

M. Ivey

Current State Liaison Representative vacancy: Minnesota

NC Region Administrative Advisor

D. Buhler - Administrative Advisor

MSU Leader Lab

M. Hausbeck - NC Regional Director

N. Soldan - Regional Field Coordinator

Field Research Center Directors

MI: N. Soldan

MI: C. Wheeler

WI: S. Chapman and D. Heider

OH: A. Robinson

IR-4 Southern Region Update

Presenter: Liwei Gu



Southern Region Report for PMC and CLC
Liwei Gu, Kristen Searer-Jones, Gail Mahnken, and Yavuz Yagiz
February 23, 2026

1. Field program and QC

QC of FDBs: Two paper field data books are in the process of being QC-ed by Kristen Searer-Jones. Contract QC has been located and is undergoing training before beginning QC for the remaining 2024 electronic field data books, as well as 2025 electronic field data books, once they are received.

Tracking of field databooks:

Year	FRD	RFC	QA	HQ	SOR total	% completion
2023	0	2	0	75	76	97%
2024	21	30	0	32	83	38%
2025	40	18	0	15	73	20%

SOP review: SOPs were reviewed in 2025, and revisions were submitted and approved as needed. All sites are in the process of updating SOPs to reflect and include electronic data entry, which will be reviewed and approved as completed.

2025 GLP assignments: 73 residue trials were assigned at the beginning of the year. As of June, 10 trials had been cancelled due to the manufacturer's decision or ChemSAC. Seven trials have been placed with contract researchers, including sugarcane, peach, and sweet potato. Five trials were terminated throughout the year, with four being replaced at the same field site.

Food Crop Product Performance Trials: 41 trials have been assigned for 2025. Fifteen reports have been received thus far. Forty-six of forty-eight 2024 reports have been received.

Integrated Solutions (IS) trials: Three integrated solutions trials were assigned for 2025, and reports have been received for two. Seven additional 2025 trials were assigned in early 2026. All 2024 reports have been received.

Environmental Horticulture Trials: 42 environmental horticulture trials were assigned in 2025. Fifteen reports have been received. Thirty-six of thirty-seven 2024 reports have been received.

2025 SOR Priority Setting: Three discipline-specific calls were held June 10-12, 2025, followed by a final priority-setting call on August 19, 2025. June and August calls were well attended, and

approximately 20 southern region researchers attended the Food Use Workshop in Denver, Colorado, in September, either in person or virtually. Additionally, a virtual Southern Region Environmental Horticulture Priority Setting Call was held on August 25 and attended by approximately 30 southern region researchers. Nineteen southern region researchers attended the Environmental Horticulture Workshop in Kansas City, MO, in October.

2026 Trial Assignments: Fifty-five residue trials have been assigned to the southern region for 2026. Twenty-three performance trials have been assigned, and seven 2025 Integrated Solutions projects were assigned to be conducted in 2026.

Training: All FRDs continue to train on eFDB and attend quarterly training sessions.

Extension and outreach activities:

- Attended talks at the Southeast Regional Fruit & Vegetable Conference in Savannah, GA, January 9-11, 2025.
- Attended Florida Fruit & Vegetable Spring Regulatory Tour, March 10-14, 2025.
- Hosted Coffee Hour promoting IR-4 at UF Entomology & Nematology Department April 11, 2025.
- Hosted virtual Southern Region State Liaison Representative Meeting on April 16, 2025.
- Attended Stone Fruit Field Day in Citra, FL, May 7, 2025.
- Hosted virtual Southern Region priority setting meetings June 10-12, 2025.
- Virtually attended Southeast Vegetable Extension Workshop July 14-15, 2025.
- Attended Florida Blueberry Growers Meeting in Newberry, FL, July 17, 2025.
- Hosted the final virtual southern region priority setting session on August 19, 2025.
- Hosted the virtual southern region EH priority setting session on August 25, 2025.
- Attended the Food Use Workshop, Denver, Colorado, September 9-11, 2025.
- Attended Environmental Horticulture Workshop, Kansas City, Missouri, October 7-8, 2025.
- Virtually attended Southern IPM Center Advisory Council Meeting, October 14, 2025.
- Attended NRPM, Raleigh, NC, October 27-29, 2025.
- Hosted virtual quarterly training on November 18, 2025.

2. Analytical Lab

A new chemist, Joel McCray, started in June 2025. Another new chemist, Vronica Wittington, will start on April 10th, 2026, to replace Victor Bauder, who will retire in June 2026. A new Agilent HPLC/MS/MS was installed in June 2025. We plan to add a new HPLC/MS/MS in 2026 to replace an obsolete instrument. A microwave extraction unit has been ordered and should be installed by May 2026.

Projects and reports completed: 16 analytical summary reports (ASR) were completed and submitted in 2025. Twelve of them were from the backlog list.

#	Submission Date	PR No	Pesticide	Commodity	Trial	
					Year	Number
1	03/25/25	13682	Tolpyralate	Blueberry	2024	8
2	05/23/25	13511	Inpyrfluxam	Tomato	2023	17

3	07/07/25	13498	Tiafenacil	Cucumber	2023	8
4	08/11/25	13541	Fluazifop-p-butyl	Pea	2023	9
5	08/19/25	07883	Pyridate	Corn (sweet)	2023	14
6	09/04/25	13078	Fludioxonil	Basil	2023	5
7	09/04/25	13078	Pydiflumetofen	Basil	2023	5
8	09/26/25	13407	Isocycloseram	Strawberry	2023	5
9	11/06/25	13500	Tiafenacil	Tomato	2023	13
10	11/12/25	13504	Isocycloseram	Pomegranate	2023	4
11	11/13/25	13538	Isocycloseram	Sunflower	2023	9
12	11/20/25	13489	Fludioxonil	Asparagus	2023	6
13	11/20/25	13489	Pydiflumetofen	Asparagus	2023	6
14	12/08/25	13405	Isocycloseram	Pepper	2023	5
15	12/08/25	13545	GF-4031	Pepper	2024	5
16	12/15/25	13289	GF-4031	Tomato	2024	5

Ongoing Projects and Goals:

23 projects are currently in progress, of which 9 are backlogged.

The status of the ongoing projects is as follows:

- 2 are being corrected following QA review.
- 1 is in QA review.
- 2 are ready for QA review.
- 5 in ASR writing/preparation
- 5 have pending storage stability intervals
- 2 are in field trial analysis
- 5 are in method development.
- 1 is in method re-evaluation.

Nine 2025 projects for which samples have been received remain to be started.

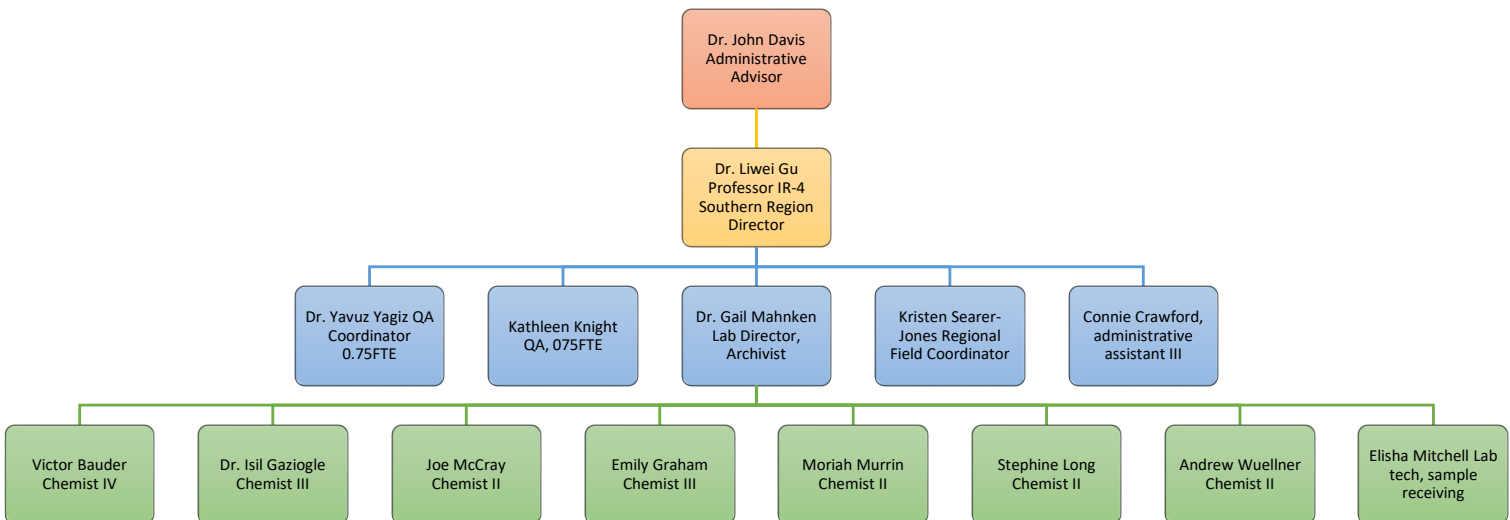
We aim to complete 20 ASRs in 2026, which includes seven backlogged projects.

3. Quality Assurance Unit

The Quality Assurance Unit achieved an overall completion rate of 98% (168 of 172 planned tasks). Field Data Book Audits and Lab Critical Point Audits exceeded targets at 103% and 108% respectively, while Field/Lab Facility Inspections met expectations at 100%. However, Field Critical Point Audits reached 73% completion, with remaining audits either terminated or rescheduled to 2026. Analytical Summary Report Audits achieved a 76% completion rate in 2025, with 16 of 21 audits completed. No Final Petition Audits, EPA Audits, or Contributing Scientist's Report Audits were conducted during this period.

QA items	Assigned Or planned	Completed	Completion %
Final Petition Audits	0	0	0%
Field Data Book Audits	110	113	103%
Field Critical Point Audits	15	11	73%
Lab Critical Point Audits	25	27	108%
Field/Lab Facility Inspections	1	1	100%
EPA Audits	0	0	0%
Analytical Summary Report Audits	21	16	76%
Contributing Scientist's Report Audits	0	0	0%

4. Southern Region Chart



IR-4 Western Region Update

Presenter: Matt Hengel





COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES
AGRICULTURAL EXPERIMENT STATION
TELEPHONE (530) 752-1142
FAX (530) 752-3394

DEPARTMENT OF ENVIRONMENTAL TOXICOLOGY
ONE SHIELDS AVENUE
DAVIS, CALIFORNIA 95616-8588

**Western Region IR-4 Report
March 2026 PMC Meeting
January – December 2025
Matt Hengel – Regional Director & Laboratory Research Director
Kari Arnold – Regional Field Coordinator
Martin Beran – Quality Assurance Coordinator
Marcel Holyoak – Administrative Adviser**

Field Report

The KARE facility consisting of approximately 45 to 50 residue field trials per year is closing. Both David Ennes and Keri Skiles have officially retired, and we are working toward decommissioning the site. Trials are now allocated in part to increase capacity to Nathan Leach, which was a desire of the UC Riverside station, as well as opening trials up to Lange Research, SynTech, and Qualls Research. Mika and Kari visited Lange and SynTech in January and their sites are impressive. QA will be performing facility audits soon. As a result, we need additional eFDB iAdvantage licenses, making the 100 licenses limit a potential issue for 2026.

We welcome a new State Liaison Representative for University of Idaho, Marcelo Dimase who is now managing our research station and a few performance studies for IR-4.

Kari Arnold's presence at extension meetings and conferences has led to an increase in interest in IR-4. New participants are added to the contact database often and priority submissions are coming in. Furthermore, researchers new to the program are excited to be involved.

Kari Arnold, SJ Yoon and Karla Avila are developing efficient funding processes to better serve regional research sites and UC Davis Sponsored Programs.

Extension, Outreach, Needs (Priority) Assessments, Network Development, Site Visits, General Programmatic Travel, and Publications

- Kari Arnold
 - Priority Assessments/Developments
 - SLR/CLC Meeting, UC Riverside, CA, 3/17-3/20/2025
 - Priority setting/nominations zoom calls
 - Additional contacts/discussions provided via zoom calls, phone calls, emails, in person discussions, farm visits, etc.
 - IR-4 Introduction and Update Presentations
 - UC ANR Pomology Advisory Committee Meeting, Davis CA 1/7/2025
 - National Assoc. for Independent Crop Consultants, Monterey, CA, 1/20/2025
 - Plant and Soils Conference, Visalia, CA, 2/6/2025

- Carnegie Institution, Stanford University, RoundTable-Technology Transfers Seminar. 3/7/2025
- American Phytopathological Society Pacific Division Meeting, Davis, CA, 3/25/2025
- BPIA Conference, Sacramento, CA, 3/31-4/3/2025
- Desert Ag Conference, Maricopa, AZ, 4/30-5/1/2025
- Salinas Biological Summit, Woodland, CA, 6/23-6/25/2025
- CA State Beekeepers Association, Temecula, CA, 11/18-11/20/2025
- Conferences Attended
 - CA Weed Science Society Meeting, Sacramento, CA, 1/22/2025
 - BioSolutions Conference and Expo, Fresno, CA, 2/17/2025
 - Western Plant Health Association Regulatory Conference, Sacramento, CA, 7/29-7/30/2025
 - CA Specialty Crop Tour, CA, 8/4/-8/8/2025
 - Merced Orchard Crop Cooperative Extension Meeting, Merced, CA, 10/21-10/21/2025
- Site Visits
 - Environmental Horticulture trials and Performance trials visit to the Nansen Lab UC Davis March 2025, Mika Tolson and Kari Arnold
 - Carnegie/USDA Research Facility Tour, Newark/Benicia, CA, 3/6-3/7/2025
 - Western Growers Crop Tour, Denver CO, 9/12/2025
 - KARE closure, Parlier, CA, 1/22/2026
 - Lange Research, SynTech, 1/22/2026
 - UC Davis/Wonderful Orchards Tour, Wasco, CA, 1/23/2026
- General Programmatic Travel
 - Food Use Workshop, Denver, CO, 9/9-9/11/2025
 - Environmental Horticulture Workshop/Program Management Committee Meeting, Kansas City, MO, 10/6-10/10/2025
 - National Research Planning Meeting, 10/27-10/29/2025
- Publications
 - Peer Reviewed
 - **IS00402:** Ceseski, A., Guan, T., Vulchi, R., Batts, R., Arnold, K., Baez Vega, C., & Brim-DeForest, W. B. (2025). Herbicide options for cultivated wild rice (*Zizania palustris*) in California. *Weed Technology*, 39, e114. doi:10.1017/wet.2025.10067
 - Non-Peer Reviewed
 - Rhoades, P., Khadduri, N., Senegal-Thyroff, E., Stevens, T., Tolson, M. (2025). How IR-4 can be a tool for nursery growers. *Tree Planters Notes*. 68, 1.

Field Training and Program Development

- Kari Arnold, Mika Tolson, Quality Control/GLP/Field training development committee members
 - Committee facilitates quarterly zoom trainings
- Quality Control/GLP in person meetings
 - Oregon State University Station Training, Davis CA, 4/15-4/17/2025
- National Education Conference, 2/6-2/10/2026
- Mika Tolson, committees:

- Education and Training Committee member
- National SOP Committee
- Advisories Committee
- Protocol Committee

Field Program – Food Use Residue Program

- In 2025, 109 field trials were initiated in the Western Region.
- The Western Region utilized CFDA funding to co-fund some performance, residue, environmental horticulture and integrated solutions studies in 2025.
- Status of field trial data is summarized in the following table:

Year	Notebooks received	QC assigned	Data sent to QA/HQ	Total Number of Field Trials	Percent Complete
2021	127	127	127	127	100%
2022	108	108	108	108	100%
2023	119	119	119	119	100%
2024	101	97	89	130	68%
2025	46	28	18	109	17%
Total	501	479	461	593	78%

Field Program – Performance (Crop Safety and Efficacy)

- In 2025, 65 new WR field trials were conducted

Year	Trial reports not yet received	Trial reports sent to HQ	Total Number of Crop Safety / Efficacy Trials	Percent Complete
2022	0	34	34	100%
2023	0	54	54	100%
2024	4	46	50	92%
2025	45	20	65	31%
Total	50	98	148	78%

Field Program – Environmental Horticulture

- The 2024 and 2025 WR Environmental Horticulture work consisted of fungicide, insecticide, and herbicide projects.
- In 2025 we added a new researcher in Oregon, a grower collaborator who works with woody ornamentals and cut flowers. We also added a new pathologist extension specialist in California and entomologist in Oregon who will work on future IR-4 research. We collaborated with the USFS

personnel on putting a publication into Tree Planter’s Notes on how IR-4 can be a tool for nursery growers that was published in 2025, volume 1 <https://rngr.net/publications/tpn/68-1>.

Year	Trial reports not yet received	Trial reports sent to HQ	Total Number of Environmental Horticulture Trials
2025	140	23	163
2024	76	53	129
Total	216	76	292

Integrated Solutions Program

- In 2025, there were 10 Integrated Solutions projects initiated with funds from USDA NIFA grant and the CDFA grant

Year	Reports to HQ	Total Number of Integrated Solutions Projects
2022	6	6
2023	30	33
2024	16	21
2025	5	10
Total	57	70

Lab Report

The lab continues to operate at a slightly reduced capacity due to lab move and there were 17 backlogged projects. Of those 17, 13 were waiting for storage stability and the remaining 4 were in report preparation.

Lab Summary (1/2025 -12/2025)

Project Year	ASRs Completed	Work in Progress	Awaiting Storage Stability	ASR Preparation	ASR in QA
2021	1	0	0	0	0
2022	3	0	0	3	1
2023	3	0	5	4	1
2024	3	1	7	0	1
2025	0	1	1	2	0
Total	10	2	13	9	3

Laboratory Staff Outreach and Collaborative Activities

- During the Spring Quarter (April-June), the LRD lectured and taught laboratory experiments for the core analytical course in the Department of Environmental Toxicology entitled “Quantitative Analysis of Environmental Toxicants” (ETX-102B) to ~50 students.
- LRD co-chaired Memorial Symposium for Professor Jim Seiber for during Spring ACS meeting in San Diego.
- LRD participated in Food Use and Ornamental workshops.
- LRD attended Pest Management Advisory Committee of the California Department of Pesticide Regulation meetings.
- RD/LRD and RFC, along with Jerry Baron, met with new Dean of College (Ashley Stokes) to introduce the IR-4 Project.
- Met with representatives from Suterra and provided a tour of lab facilities.
- Salvador “Chava” Torres retired and Jeff Eichler will be new Asst. Sample Control Officer.
- Alex McFall was promoted to Lab Manager.
- LRD and Lab personnel successfully published:
 - McFall, Alexander S., Reyes-Punongbayan, Riza L. and Hengel, Matt J. Analysis of Flutianil and OC56635 Residues in Hemp Cannabis Matrices by LC-MS/MS. J. Agric. Food Chem 2024 <https://doi.org/10.1021/acs.jafc.4c05103>
- Laboratory personnel attended online laboratory training.
 - Bronson Hung, Jeff Eichler, Alex McFall and LRD presented during several sessions.
- Lab move (part II, remastered for 2025)
 - Wet lab operations were successfully moved from Sprocket Building to Meyer Hall during the spring. Instrument room remains up and running during the renovation.
 - Current status of project is on track for completion in summer of 2026.
 - Additional renovation will occur during 2026 to accommodate the conversion of the first floor of Sprocket to anatomy lab facilities. May add another year before wet lab operations can return.
- Wrapping up remaining MSU projects:

- Flonicamid/Sugar Beet: Awaiting long-term storage stability (3/2026)
- Sulfosulfuron/Tomato: ASR in QA
- Wapato Closure:
 - Lab will write the following reports:
 - Ethaboxam/Lemon
 - Ethaboxam/Grapefruit
 - Bicyclopyrone/Pineapple
 - Fludioxonil/Peach
 - Lab will complete analysis on Ethaboxam/Orange and conduct storage stability on processed fractions. All stability analysis set to complete by 9/2026.

Quality Assurance Report

We conduct study-based in-life inspections (field, laboratory, and processing activities), paper-based audits (field, laboratory, and study data and reports), and facility-based inspections (field, laboratory, and processing sites). Another of our jobs is to assist our field and lab researchers with EPA inspections.

The role of the Quality Assurance Unit is to identify GLP compliance issues within studies and facilities, and if any are found, report them promptly to the study director and management. QA also plays a key role in assisting researchers in addressing compliance concerns. It is management's responsibility to ensure that corrective actions are taken and documented.

During the January through December period of 2025 the WSR QAU received only 5 Final Reports for audit. Also, during the January through December period our office received 17 lab reports (ASR) for audit.

We have had four EPA inspections in the Western Region in 2025. In early February, EPA performed an inspection at the OSU North Willamette Research and Extension Center in Aurora, OR and in early April EPA inspected the IR-4 Field Center at New Mexico State in Las Cruces. There were no findings (observations) at either of those inspections. Our ARS lab and field sites in Wapato, WA were also inspected in late September. The inspector found that an evaporation temperature recorded during sample work-up did not match the one analytical method. Also, she found that the mobile phase between what was recorded and what was presented in the Final Report did not match. The crop destruct statement was not adequately recorded was the single finding for the field site.

In the past twelve months, Laurel has shown proficiency in auditing Analytical Summery Reports. She audited six ASRs during that time. In doing so, she became more familiar with how our lab generates raw data and how it is presented in the lab report. Laurel has not had any problem with auditing reports that included multiple metabolites and she has not been deterred by those with a large number of sets.

Meetings and Training

Martin served on the National SOP Committee, Zoom meetings are twice monthly. Our committee finalized four SOPs during 2025. Martin also shot and edited two videos showing how the Western Region Leader Lab processes field samples. The QAU met monthly over Zoom to address issues regarding the eFDB and electronic facility records. We also assembled via Zoom in February to select our annual target field trials for the year. Martin joined a small committee to revise and format the eFDB Guidance Document. This document will ready in spring 2026. Laurel served as the QA representative during the monthly Western Region office hours to assist researchers navigating the eFDB. She also converted our QA inspection Log into Excel. Laurel and I went to HQ at the end of October to train on the eFDB and Final Report.

Presentations

Martin spoke at the National Alliance for Independent Crop Consultant annual meeting in January about effective Power Point Presentations. He conducted a GLP training session with a new FRD at OSU in March. Martin gave two lectures to the ETX 102B class in early April. One on the history of the GLPs and another on the Regulations. He also presented slides on Understanding Nominal Concentration and on Field Inspections at the April and July webinars.

Audits & Inspections

The status of audits, inspections, and reports within the region for the period 1/1/25 – 12/31/25 follows:

Critical Phase Inspections completed

Field	53
Lab	36
Processing	<u>4</u>
Total	93

Facility Inspections completed

Field	6
Lab	0
Processing	<u>0</u>
Total	6

Raw Data Audits completed

Field Databooks	8
Analytical Smry. Rpts.	11
Study Final Reports	<u>2</u>
Total	21

Total Inspections and Audits in 2025: 120

IR-4 Food Program Update: Residue Research—Field Program and Submissions

Presenters: Cristina Marconi and Thomas Pike



Food Program March, 2026

Thomas Pike, Cristina Marconi

Outline

New Uses - 2025

Submissions – 2025

Crop Group update

Residue Research Program (10-year history)

Outstanding Field Notebooks

Timeline Summary

Regulatory Challenges



2025 New Uses

3 Actions (new uses)

- **Cyprodinil (1)**
- **Fludioxonil (1)**
- **Afidopyropen (1)**

**Total = 3 new uses,
3 tolerances**

2025 Submissions - 9

- Acetamiprid
- Sulfur Dioxide
- Cycloate
- Clomazone
- Benzovindiflupyr
- 2,4-DB
- Fenpropathrin
- Clothianidin
- Mefentrifluconazole
- Provided to EPA as a non-PRIA action
 - Cycloate/Spinach and Garden Beet

Sources of Reduction in New Uses/Submissions

New Uses

Only three tolerance actions associated with IR-4 work published in 2025

- *Delays associated with change in administration*
- *Increased hurdles at EPA related to posting items in the Federal Register*
- *Substantial reductions in staff at EPA to process new uses*

Indications that this may change going forward

- *One tolerance action published in January (permethrin), representing 21 new uses and 7 tolerances*
- *Large number of Notices of Filing for IR-4 actions posted in latter half of 2025*



Sources of Reduction in New Uses/Submissions

Submissions to EPA

Fewer tolerance petitions submitted to EPA in 2025 compared to historic averages

- *Lack of pollinator data now a significant hurdle to submissions*
 - *Using company meetings to prompt registrants to investigate data gaps*
 - *Many registrants waiting for DCI to generate data = delays to submission*
 - *Working with EPA to define data needs in cases where the registrant does not know*
- *Need to amend final reports delaying some submissions*
- *Backlog of studies to be completed from both laboratory and HQ*
 - *Ongoing efforts to address laboratory backlog (including IS platform pause)*
 - *Backlog of studies to be written being addressed through rebalancing of workloads among study directors,*

2026 Submissions – 4 (as of 2/20/26)

- **Trifloxystrobin**
- **Fluopyram**
- **Pyrimethanil**
- **Tebuconazole**

Crop Group Update

- **Crop Grouping Initiative**
- **All Commodity Classes have been approved by the Codex Alimentarius Commission.**
- **Remain to be published (IR-4 work is completed)**
 - **Phase VII: CG 17, Grass Forage, Fodder, and Hay Group; CG18, Nongrass Animal Feeds and CG9, Cucurbit Vegetables. Timing TBD.**
 - **CG1, Root and Tuber Vegetables and CG2, Leaves of Root and Tuber Vegetables expected Q2 2026**
- **Analysis for sweet sorghum/sugarcane and CG18 provided to EPA for purposes of harmonizing with Codex.**

Field Research

2024 Residue Program

- **53 New Studies**
- **394 Residue Field trials**
- **32 Carryover trials**

2025 Residue Program

- **37 New Studies**
- **349 Residue Field trials**
- **37 Carryover trials**

2026 Residue Program

- **37 New Studies**
- **291 Residue Field trials**
- **22 Carryover trials**

Field Research Program

Region	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
NER	27/11*	34	39	36	33	26	28	34	26	31	56
NCR	67/4	66	61	39	50	51	49	81	65	67	22
SOR	78/19	85	78	90	100	95	90	73	84	69	57
WSR	162/16	167	149	164	140	151	128	129	149	123	119
ARS	52/15	67	55	49	62	49	46	56	52	41	28
Canada	32/3	31	19	29	31	10	6	11	18	15	9
TOTAL	418	450	401	407	416	382	347	384	394	349	291

* Indicates 2016 dropped trials, mostly due to study changes.
Other dropped trials not included in numbers reported



Field Data Notebooks, 3/26

Year	Total	FRD	RFC	QA	HQ
2023	384	0	3	0	381
2024	394	84*	31	22	250
2025	349	39**	38	19	89

*Not included: 4 trials completed in/after Nov/2025 and 3 trials missing tentative dates

**Not included: 150 trials completed in/after Nov/2025 and 14 trials missing tentative dates

Field Data Notebooks - 3/26

Timeline Summary

Completion of FDB is critical to meeting timelines.

- *2023 Field Data Books: ~ 99% at HQ;*
- *2024 Field Data Books: ~ 63% at HQ; ~23% still with FRDs (5% change from October)*
- *2025 Field Data Books: ~25% at HQ; almost 60% still with FRDs (at least 43% still to be completed)*
- *RFCs are moving Field Data Books along once received, there are still 3 books outstanding from 2023.*

It is crucial to move the Field Data Books along.



Outstanding FDB, 3/26

Notebooks with FRD

Year	ARS	WSR	NER	SOR	NCR	CAN
2023	0	0	0	0	0	0
2024*	10	27	3	38	5	1
2025**	4	11	9	13	2	0

*Not included: 4 trials completed in/after Nov/2025 and 3 trials missing tentative dates

**Not included: 150 trials completed in/after Nov/2025 and 14 trials missing tentative dates

Notebooks with RFC

Year	ARS	WSR	NER	SOR	NCR	CAN
2023	0	0	0	3	0	0
2024	3	9	2	13	3	1
2025	0	12	10	1	15	0

Regulatory Challenges

Internal challenges

Timeline: Completion of FDB is critical to meeting timelines.

- One outstanding book holds up the whole study, just like analytical backlog and data quality
 - Recent increase in number of amended final reports.
- Concern that if we miss a submission, it could be years before it can go in.
- We are getting close to being able to evaluate if eFDB helps ease field data book completion

About sixty studies in final report process (Writing/QA etc)

More than 100 studies are TBD for submission. Most are signed and ready to submit.

- Many cannot be submitted as a safety finding cannot be made or registrant is holding submissions.



Regulatory Challenges

External issues

Impacts from Endangered species act still a concern

- *Concern about mitigation proposals and how they will impact stakeholders*
- *Once in compliance, will not want to be out of compliance*

Registration status in Europe and impact on support from companies for stakeholder requests.

Lack of submission documents for new submissions until previous labels have issued from EPA, compounded by loss of personnel at EPA

Need for pollinator before registration of new uses may be an obstacle to submissions until current cycle of registration review is completed.



Elimination of the Minor Use Branch

Loss of dedicated resources as personnel are shuffled into other teams

- Due to federal cutbacks and retirements, Minor Use and Emergency Response teams no longer large enough to justify stand-alone branch

IR-4 activities now coordinated through existing Project Management teams at EPA

- Individual discipline contacts to help facilitate submissions (herbicides, fungicides, insecticides)
- Expectation that this will eventually lead to a more efficient, streamlined system

EPA is committed to maintaining its services to specialty crop stakeholders



**Thank
You!**



IR-4 Food Program Update: Laboratory Analysis

Presenters: Debbie Carpenter



Laboratory Update/Backlog March 2026

Debbie Carpenter

Outline

Backlog

Current status at each lab

Plans to address backlog

Use of contract labs

Summary

Other

Backlog Details - TIR

TIR PR	Chemical	Matrix	ASR Due Date	ASR Est.	Note	Backlogged	ss	
13094	Difenoconazole + Azoxystrobin	Spinach	Mar-23		Sample analysis complete. Waiting only for SS (01/27). Difen only.	1		1
13353	Difenoconazole + Azoxystrobin	Mint	Oct-23		TIR sample analysis is complete. ASR/CSR to be written.	1		9/23/25 Triazole analyses going to contract lab.
13218	Ethaboxam	Almond	Nov-23		Analysis complete. ASR prep ongoing.	1		
11331	Difenoconazole + Azoxystrobin	Tomato	Mar-24		TIR sample analysis is complete. ASR/CSR to be written.	2		9/23/25 Triazole analyses going to contract lab.
13256	Cymoxanil	Strawberry	Aug-24		Sample analysis complete. SS will go to 10/27.	1		1
13390	Fenpyroximate	Lychee	Sep-24		Sample analysis complete. SS will go to 12/27.	1		1
13485	Bifenthrin	Onion	Nov-25		Sample analysis is complete. ASR to be written.	1		
13679	Tolpyralate	Hazelnut	Nov-25		Not yet started	1		
11473	Pyriofenone	Lettuce	Dec-24		Sample analysis complete. SS will go to 12/27.	1		1
					Total	10		4

Plans for Moving Forward - TIR

10 studies are backlogged:

4 are awaiting storage stability

4 are ready to be written (analyses completed.)

Concern about funding/personnel

Personnel did not attend the NEC

Plans for Moving Forward - YAR

The Wapato lab closed at the end of the year, with the retirement of the LRD.

Will work with Wapato personnel to address some studies that were not completed.

Many studies were transferred to CRO or CAR.

Thanks to Sherita for all her efforts.



Plans for Moving Forward - CAR

18 studies are backlogged –

11 are awaiting storage stability (includes samples inherited from other labs, not counted in total.)

3 are in ASR preparation (all samples analyzed)

6 are with QA or ready to ship

CAR in the process of moving labs, lots of back and forth

Hemp studies take much time, many crop fractions

Many ASRs are close to completion



Backlog Details - FLR

PR	Chemical	Matrix	ASR Due Date	ASR Est.	Note	Backlogged	SS
12752	Fluazaindolizine	Mint	Nov-23		Method development; redo analysis based on method.	1	
11568	Thiophanate Methyl	Radish	Feb-24		Ready for QA review	1	
13169	Fluazaindolizine	Radish	Feb-24		Waiting on SS (4/27).	1	1
13360	Thiophanate Methyl	Carrot	Mar-24		Ready for QA review	1	
13304	2,4-D Choline	Strawberry	Jan-25		Waiting on SS (4/26).	1	1
13449	Inpyrfluxam	Coffee	Mar-25		Method dev/validation	1	
8037	Pyridaben	Pepper (Bell & Nonbell) 9GH)	Oct-25		In QA	1	
13293	Fludioxonil + Pydiflumetofen	Mint	Sep-25		Through QA, making final corrections.	2	
					Total	9	2

Plans for Moving Forward - FLR

9 studies are backlogged

2 are awaiting storage stability

5 are ready for QA, or have been reviewed, and
corrections being made

Studies with many crop fractions

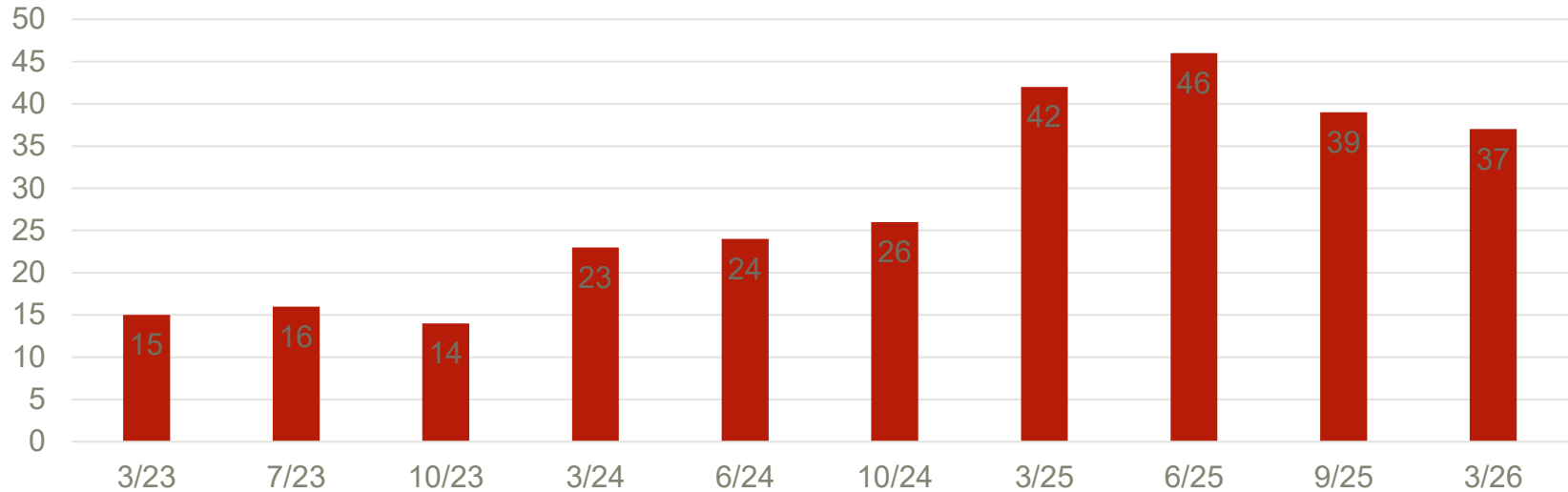
Complex analyses – fluazaindolizine study

Studies at Outside Labs

CRO	Chemical	Matrix	Original Lab		
PR	Chemical	Matrix	Original Lab		
9102	Flutolanil	Strawberry	GPL		1
9520	Flutolanil	Beet (Garden)	MIR (GPL)		1
11148	Glufosinate	Sesame	Adpen		1
11195	Flutolanil	Pepper (Bell & nonbell)	FLR (GPL)		1
11331	Difenoconazole + Azoxystrobin	Tomato (GH)	TIR (STR)		1
11772	Linuron	Bean (edible podded & succulent shelled)	FLR (GPL)		1
11774	Linuron	Pea (Edible podded and succulent shelled)	Adpen		1
12028	Uniconazole-p	Basil (GH Transplant)	YAR (GPL)		1
12051	Glufosinate	Caneberry	EUR		1
12564	Abamectin	Miracle Fruit	MIR (GPL)		1
12675	Emamectin Benzoate	Bean, lima (Succulent)	MIR (GPL)		1
12757	Abamectin	Beet (Sugar)	MIR (GPL)		1
12816	Linuron	Onion (Dry bulb)	Adpen		1
12902	Flutolanil	Carrot	MIR (GPL)		1
12903	Flutolanil	Radish	YAR (GPL)		1
12904	Flutolanil	Tomato	YAR (GPL)		1
13027	Metribuzin	Potato	Adpen		1
13092	Norflurazon	Clover (Seed Crop)	GPL		1
13165	S-Metolachlor/Metolachlor	Perennial Peanuts	YAR (EUR)		1
13179	Benzovindiflupyr + Difenoconazole	Coffee	Adpen		1
13295	GF-4031	Cherry	EUR		1
13311	Flupyradifurone + spidoxamat	Hops	STR		1
13353	Difenoconazole + Azoxystrobin	Mint	TIR (STR)		1
13355	GF-4031	Strawberry	EUR		1
13463	Glufosinate	Peanut	Adpen		1
13530	Uniconazole-p	Mint (GH Transplant)	YAR (GPL)		1
13732	Linuron	Mint	Adpen		1
13733	Linuron	Stevia	Adpen		1
13734	Linuron	Onion (Green)	Adpen		1
13741	Mefentrifluconazole	Broccoli	BASF		1
13779	Mefentrifluconazole	Cabbage	BASF		1
13821	Glufosinate-P	Sugarcane	EUR		1
13831	Linuron	Basil	Adpen		1
13832	Linuron	Sweet potato	Adpen		1
13833	Linuron	Bean (Dried Shelled)	Adpen		1
13928	Abamectin	Sugar beet storage stability	GPL		1
			Total		36

Backlog Graph Post MIR

Backlog Post MIR, YAR



Further Actions

Backlog (ASR not signed one year after last field sample arrived at the lab)

-Does not include 36 studies sent to contract labs for completion.

No further studies going to contract labs.

-Total backlog = 37, but no longer includes YAR.

-PMC allocated funds in the Oct 2025 meeting

From 2025 IS budget - \$50k + IDC to two labs for equipment

From 2026 IS budget - \$450K split between two labs for personnel

Laboratory training (including NEC) is ongoing to bring analysts to same baseline level.

Resources still being used to address quality of data for MIR and YAR and will continue for foreseeable future



**Thank
You!**



IR-4 Food Program Update: Quality Assurance

Presenter: Johanna Mazlo





QA Update

March 2026 PMC Meeting

Overview

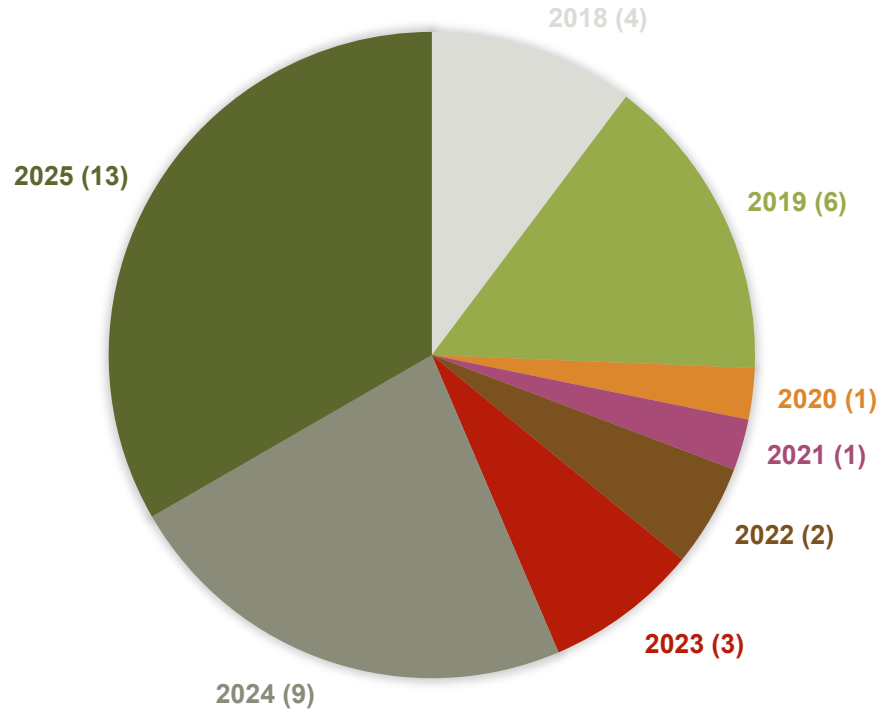
- **EPA Compliance Monitoring Update**
- **GLP Training Activities**
- **NEC Activities**
- **QA Update**
- **QA Audit\Inspection Data**
- **eQA and eDocs Update**

EPA Compliance Monitoring

- EPA inspectors not traveling for past 5 months due to travel funding issues
- Organizations that are part of the PRIA 6 Coalition will be sending a letter to EPA to detail importance of EPA inspections
- EU is requesting US companies have inspections every 3 years
- Decommissioned sites
 - S. Dakota State University Field Site
 - Feb 2026

EPA Inspections

NUMBER OF INSPECTIONS



Key
Year (# inspections)



* One inspection in 2025 was a desktop audit and counted in a different category for EPA

2024 EPA Inspections

Year of Inspection	Location
2024	University of California – Davis Lab University of California – Davis Field Dragon Run Ag (VA) Turner Ag Research (CA) NC State University - Field Pest Management Enterprises, Inc (LA) SD State University Field Michigan State University –Trevor Nichols Field University of Florida – Citra Field

2025 EPA Inspections

Year of Inspection	Location
2025	Oregon State University – Field Texas A&M, Weslaco, TX – Field (desktop audit) AdPen Jacksonville, FL - Lab New Mexico State University - Field Ohio State University - Field USDA ARS Wooster OH - Field University of Wisconsin (D. Heider) – Field University of Wisconsin (S. Chapman) – Field University of Massachusetts - Field

2025 EPA Inspections

Year of Inspection	Location
2025	Michigan State University (N. Soldan) – Field North Dakota State University (Minot) – Field USDA ARS Wapato, WA - Lab USDA ARS Wapato, WA - Field

GLP Training Activities

- QAU is working to provide increased training to IR-4 members
- Quarterly Webinars
 - GLP Refresher Presentation - Mar 2025
 - A GLP topic during each webinar
- NEC – Feb 2026
 - GLP in Practice (Scenario Based)
 - GLP Reboot – Strengthening Your Compliance Skills
- One-on-one GLP training
 - Examples include Tifton Lab, biologists, new assistants, etc.



NEC Activities

- 2 GLP training opportunities
- 5 of 6 auditors at NEC presented. Presentation Titles below.
 - QA's Role in a Life of a Study (S. Muir)
 - National SOPs (M. Beran)
 - Workflow of Document Transfer to IR-4 HQ (J. Thompson)
 - QA Findings in eQA (S. Muir)
 - Beyond Compliance: Catching Errors and Improving Laboratory Data Quality (Y. Yagiz)
 - Reducing QA Findings Tips & Tricks (S Normington)

QA Update - Participation on Committees

Committee	QA participants	Comments
2026 Protocol	S. Normington	QA team reviewed/provided feedback on draft versions
National SOP	M. Beran	QA team reviewed/provided feedback on draft versions Provided verbiage on specific SOPs
IR-4 Advisory Committee	J. Mazlo	Reviewed Advisories to be moved to National SOPs
eFDB Guidance Document	M. Beran	Assist with updating the document

QA Update - Participation on Committees

Committee	QA participants	Comments
HQ SOP	J. Mazlo J. Thompson J. Peterson	QA team reviewed/provided feedback on draft versions
ACAC	Y. Yagiz S. Muir	Provide GLP feedback for analytical issues
Education Training Committee	S. Muir J. Mazlo	Provide ideas and topics for the national meeting

* As one committee member commented: Having QA on the committees has increase efficiency because we can more forward more quickly because QA will immediately interject if the GLPS will be affected.



QA Update - Additional QA Efforts

- **ARS Wapato Lab**
 - S. Normington - lead reviewer
 - 12 analytical data, 12 analytical summary reports, 4 contributing reports and 1 final report in 2025
- **ARS Tifton Lab**
 - L. Smith has retired as contract QA
 - S. Normington auditing analytical data\summary reports
 - Y. Yagiz performing in-life inspections

QA Update - Additional QA Efforts

- **ARS**
 - Perform ARS field in-life & facility inspections
 - Assist Tifton lab with SOPs, GLP questions, audits, etc.
- **Increasing engagement with RFCs/LRDs/FRDs**
 - Reaching out early and often to new FRDs/LRDs
i.e. Tifton Lab, Uvalde Texas, NCSU field, etc.
 - Responding to GLP questions about eFDBs, SOPs, etc.

QA Update – Ways of Working

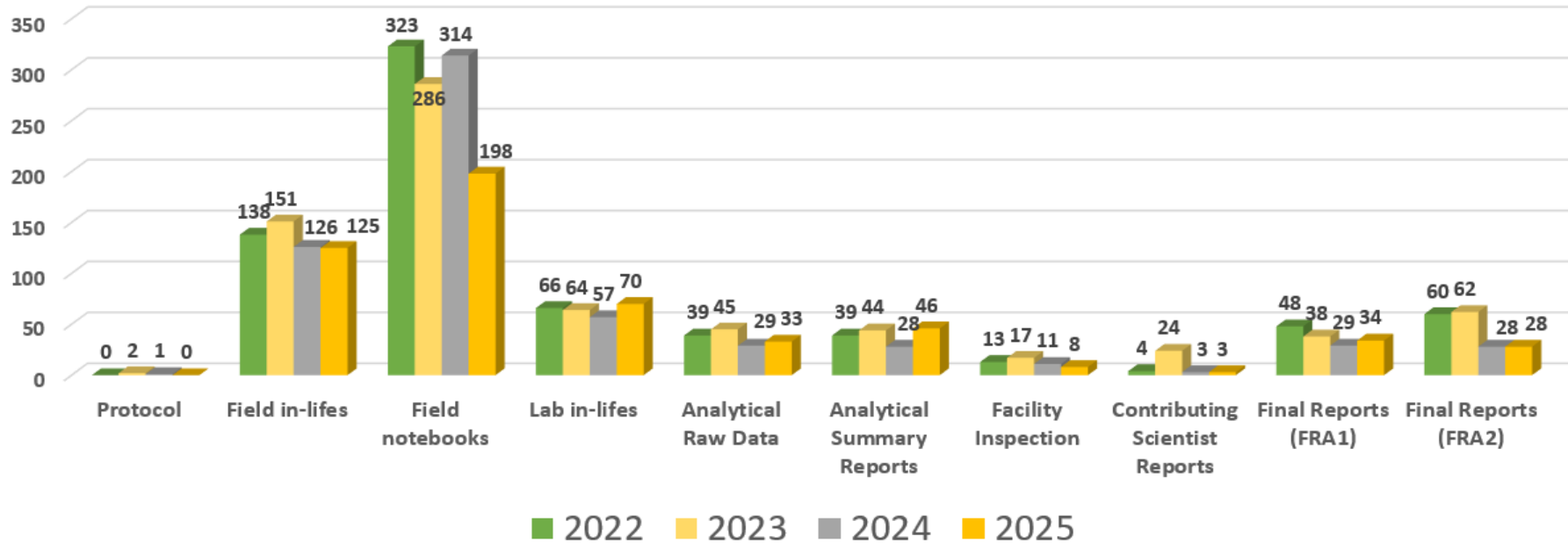
- QA functions as a National Team
 - Working across regions to complete tasks
 - Increasing consistency in messaging
 - Leveraging existing strengths
 - Identifying new opportunities for success
 - i.e. Engaging with new FRDs/LRDs to prevent development of poor GLP habits
 - Exploring ways to leverage AI

QA Update – eFDB and eQA

- eFDB
 - QA has audited the 2025 eFDB validation
 - Contributed to eFDB guidance document committee
 - Attend QC\QA\eFDB Administrator meetings
 - Bring questions to the eFDB Administrator
- eQA
 - Reviewed updated version released prior to validation
 - Validated the new eQA system (J. Peterson)
 - Performed verification of NCSU backup system
 - Currently, updating associated SOPs

Comparison of Audit/ Inspection Data from 2022 -2025

Number of Audit/Inspections Completed by QA
January to December Timeframe



Audit/Inspection Data from 2022 - 2025 Converted to Equivalent Days

	Audit Type	Protocol	ASR	LCPI	LFI	FDB	FCPI	FFI	CSR	FnI Rpt	Close Rpt (FRA2)		Total
	Days Equiv	1	6	1.5	3	1	2.5	2.5	5	5	1.5		
2022	Audit Type	0	39	66	1	323	138	12	4	48	60		691
	Days Equiv	0	234	99	3	323	345	30	20	240	90		1384
2023	Audit Type	2	44	64	2	286	151	15	24	38	62		688
	Days Equiv	2	264	96	6	286	377.5	37.5	120	190	93		1472
2024	Audit Type	1	28	57	0	314	126	11	3	29	28		597
	Days Equiv	1	168	85.5	0	314	315	27.5	15	145	42		1113
2025	Audit Type	0	46	70	1	198	125	7	3	34	28		512
	Days Equiv	0	276	105	3	198	312.5	17.5	15	170	42		1139

* Historically the analytical data audits are not included and therefore not included in the table



Field Notebooks Audited

Trial Year	2021	2022	2023	2024	2025
# of Notebooks Audited in 2024	2	32	249	31	-
# of Notebooks Audited in 2025	-	3	32	148	15

eQA and eDoc Update

- eQA
 - Trained 11 people in 2025
 - 609 audits added in 2025
 - 18,359 total audits
- eDocs
 - 7373 total documents
 - Analytical methods 400
 - Working methods 74
 - Certificates of Analysis 203
 - National SOPs 6





Thank you

Product Performance Research

Presenter: Alice Axtell





2025 Report: Product Performance

A. Axtell, Ph.D.

Recent Retirement

Roger Batts, Biology Lead for Weed Science Projects, retired on March 1st, 2026, after more than 40 years of service. He will be missed!



Product Performance - Recap

- **79** Product Performance projects (28 carryover projects; 51 new projects)
- **149** efficacy/crop safety trials (53 carryover trials; 96 new trials)
- As of February 11, 2026, about **50** final reports were received

Cooperating Region	Food Use Product Performance Trials ¹
North Central Region	18 (3)
Northeast Region	12 (8)
Southern Region	26 (16)
Western Region	40 (26)
TOTAL	149

Data presented as total number of trials with number in parenthesis being the number of carryover trials.



Thank you!

IR-4 Biopesticide Regulatory Support Platform Update

Presenter: Bill Barney





The IR-4 Project, Biopesticide Regulatory Support

Pest management solutions for specialty crops and specialty uses

Bill Barney



Biopesticide Regulatory - Submissions to EPA

- 1070B, Bacteriophages of *Hafnia* sp. and *Bacillus* sp. targeting the gut microbiome of Varroa mite of honeybees, submitted November 21, 2025
- USDA's genetically engineered female lethal system of the New World screwworm, *Cochliomyia hominivorax*. Project had high priority because of report of occurrence 70 miles from the southern US border. Biweekly meetings were held with USDA and EPA for comments and feedback. The Section 3, Inert ingredient and Section 18 submissions were made by USDA's deadline on January 30, 2026.

Biopesticide Regulatory - Submitted / Under EPA Review

- 1071B, American chestnut, EPA requested withdrawal and resubmission to correct a labelling error of the transgenic trees (change D58 to D54). A number of additional follow-up meetings have been held with EPA; registrant considering pursuing EUP or 25b exemption [chestnut blight]
- 1072B, Nudivirus, sterile *Helicoverpa zea* moths, currently working on response to a 75-day letter from EPA
- 1081B, Cucumber green mottle mosaic virus vaccine, re-submitted application to remove references to human studies; additional documentation submitted (inert ingredients), under review at EPA
- 1084B, Citrus tristeza virus, budwood expressing spinach defensin proteins, re-submitted as requested in separate submissions for the three defensin variants CTV-SoD2, SoD2-1, CTV-SoD2* as separate active ingredients. EPA has requested additional documentation for variants (allergenicity, manufacturing, deposition); 75 day letter received 18 Sept, additional documentation submitted, recently revised label submitted at request of EPA, close to registration [Citrus greening]
- 1087B, Citrus CRISPR HLB resistant rootstock. Additional documentation submitted, as requested by EPA to meet deadline for Federal Register publication, notice of filing published, risk assessment almost complete, close to registration [Citrus greening]

Biopesticide Regulatory - Submission packages in development

- ***Aspergillus flavus* AF36 Prevail and Prime, Pre-submission meeting held with EPA to discuss data requirements to remove crop and geographical restrictions for a national label. Label changes, data volumes and registration forms in development [aflatoxins]**
- **Magnet [food grade plant volatiles to be used as attract and kill for *Helicoverpa zea* in sweet corn; Pre-submission meeting held with EPA, meeting minutes recently submitted to EPA.**
- **1075B, *Pseudomonas soli*, pre-submission meetings held; Section 18 proposed for FL, meeting held with FDACS, additional documentation needed [Fireblight, Citrus canker, Citrus greening]**

Biopesticide Regulatory - Submission packages in development

- 1086B, *Pseudomonas fluorescens* M18, pre-submission meeting held [fungal and viral diseases]
- *Verticillium nonalfalfae* [Tree of heaven] EPA determined that an EUP was not required for an EUP for field testing; will also pursue Section 3
- *Streptomyces nourseii* var. *xichangensis*: EPA Pre-submission meeting held [numerous plant viruses]
- AtNPR1 Transgenic Citrus Lines Tolerant to Citrus Greening Disease, reviewing draft data volumes [citrus greening, U. FL]

IR-4 Environmental Horticulture Program Update

Presenter: Josh Kindel





Environmental Horticulture Program

Josh Kindel

March 4, 2026

Outline

- Outstanding data
- October 2025 workshop review
- 2026 research program and budget
- Study reporting updates
- Prior PMC updates

Outstanding Data

Year	Data Type	Ongoing	% Ongoing	Cancelled	% Cancelled	Complete	% Complete	Total Studies
2024	Efficacy*	37	12%	33	14%	169	74%	239
	Phytotoxicity	117	27%	34	8%	277	65%	428
2025	Efficacy*	117	74%	2	1%	39	25%	158
	Phytotoxicity	306	69%	8	2%	130	29%	444

* Data presented is on PR numbers only – not individual trials

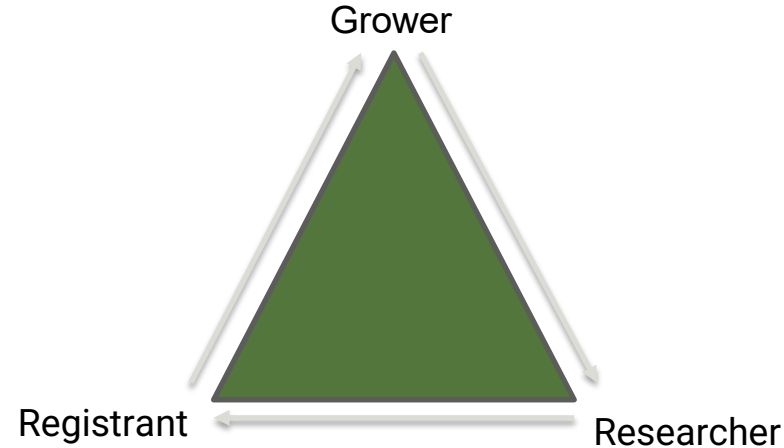
Outstanding Data – By Region

Year	Data Type	Region	Ongoing	Cancelled	Complete	Total Studies
2024	Efficacy*	NorthCentral	4	10	46	60
		Northeast	13	1	25	39
		Southern	7	19	68	94
		USDA-ARS	0	0	8	8
		Western	13	3	22	38
	Phytotoxicity	NorthCentral	0	25	34	59
		Northeast	21	0	1	22
		Southern	0	1	159	160
		USDA-ARS	23	0	67	90
		Western	73	8	16	97
2025	Efficacy*	NorthCentral	13	0	22	35
		Northeast	28	0	0	28
		Southern	38	0	16	54
		USDA-ARS	8	0	0	8
		Western	31	2	0	33
	Phytotoxicity	NorthCentral	19	1	24	44
		Northeast	31	0	17	48
		Southern	91	2	61	154
		USDA-ARS	67	1	17	85
		Western	98	4	11	113

* Data presented is on PR numbers only – not individual trials

EH Workshop Review

- Elimination of sticker caucus for priority selection
- Instead, pre-workshop meetings were held leading up to the workshop
 - Three national prep meetings
 - One prep meeting per discipline
 - One prep meeting per region
- Start of the transition to utilizing **Research Requests** to identify solutions to **Grower's Survey**



EH Workshop Review

National Priorities (10):

- Weed Science – 4
- Plant Pathology – 3
- Entomology – 3

Regional Priorities (8):

- Northeastern Region – 2
- North Central Region – 2
- Western Region – 2
- Southern Region – 2

2026 Research Program

Changes to study program

- 2026/2027 program utilizing efficacy research heavily vs. crop safety
- Study allocation is per protocol instead of per PR number
 - 15 priorities are efficacy driven – leading to 48 studies
 - 3 priorities are crop safety driven (weed science) – leading to 15 studies

2026 Research Program

Partnering with **industry** to find real world solutions

- 13 registrants interacted in the protocol creation process
- Many registrants gave 2-3 solutions to include (both test formulations and current labels for expansion)
- Worked closely with registrants to include only the top 1-2 choices with the best path forward

2026 Research Program - National

- Weed Science
 - Hydrangea (not macrophylla) pre-emergent herbicide crop safety
 - Herbicide-resistant weed control in Christmas tree production; early post-emergent, semi-directed
 - Cut flower pre-emergent (transplant)
 - Perennial weed (thistle, bindweeds, nutsedges) control in cut peony
- Plant Pathology
 - Phytophthium Efficacy
 - Phytophthora (cambivora, cinnamomic and nicotianae) Efficacy
 - Botrytis Efficacy
- Entomology
 - Thrips (parvispinus, chili and western flower) Efficacy
 - Red-headed flea beetle (larvae) efficacy—container nursery
 - Root aphid efficacy

2026 Research Program - Regional

- Northeast Region
 - Balsam gall midge efficacy on Christmas trees
 - Bacterial leaf spot efficacy
- North Central Region
 - Powdery mildew (outdoors) efficacy
 - Lewis mite efficacy
- Western Region
 - Symphylans efficacy
 - Armored scale efficacy—woody ornamentals
- Southern Region
 - Two-spot cotton leafhopper (Cotton Jassid) efficacy
 - Herbicides in container, fruit-bearing plant (pre-sale to retail) crop safety

2026 Budget Allocation

	North Central	Northeast	South	West		
	Budget \$	Budget \$	Budget \$	Budget \$	Sum	W/ IDC
2026	\$ 112,400	\$ 112,600	\$ 231,200	\$ 145,000	\$ 601,200	\$ 667,933.20
2025	\$ 122,300	\$ 112,800	\$ 257,200	\$ 194,900	\$ 687,200	
2024	\$ 128,100	\$ 90,900	\$ 221,700	\$ 145,100	\$ 585,800	
2023	\$ 97,300	\$ 85,900	\$ 243,600	\$ 195,700	\$ 622,500	
Average	\$ 103,921	\$ 97,764	\$ 208,821	\$ 173,100		

Study Reporting Changes

- Studies were historically reported as individual PR numbers
 - 1 treatment against 1 plant / pest species with 1 researcher = 1 study reported
 - This leads to a potential of overinflation of study reporting as well as difficulty tracking reports
- Future reporting will be as 1 protocol with 1 researcher = 1 study

Year	Data Type	Region	Ongoing
2024	Efficacy*	NorthCentral	4
		Northeast	13
		Southern	7
		USDA-ARS	0
		Western	13
		NorthCentral	0

Example of how reporting “7” ongoing studies, when in reality it is one trial we are still waiting for a report from one researcher

Prior Study Reporting - Example

- Protocol 24-002, Scale Efficacy
- 10-17 treatments in the protocol for the researcher to choose from
- 3 researchers were selected to run the protocol in 2024
- Final results gave 36 PR numbers i.e., **36 “studies”** for this one protocol

Treatments:

Priority	#	Product
A	1	BAS 310 KT I
	2	
	3	
	4	EpiShield (NI02ES-1)
	5	ISM-555 + Capsil@0.05%
	6	MBI-203 SC2 + Non-Ionic surfactant at 0.5%
	7	
	8	OAT-1401 EC (former RM-1963K) + Silwet L77 0.015% v:v
	9	TetraCURB MAX
	10	V-10433 (greenhouse only, substitute with an optional second rate or B priority if experiment is outdoors)
B		Acelepryn
		EI00WP-1
		Mainspring GNL
		NI00OD-1
		Rycar (mealybug only)
		Velifer (<i>Beauveria bassiana</i> strain PPRI 5339)
	Ventigra + Capsil@0.05%	
Standards		Distance
		Water

Future Study Reporting - Example

- Protocol 26-003, Thrips parvispinus Efficacy
- 10 treatments in the protocol (all treatments required to be tested in each study)
- 3 researchers selected to run the protocol in 2026
- Final results will give **3 studies** for this one protocol

Treatments List with rates and special ap

	Product	
1	Vykenda	
2	Xxpire	
3	NI000D-1	
4	TetraCURB MAX (0.5-1%) + AlliCURB MAX (0.25%)	
5	Botanigard 22WP	
6	Editol	
7	ESTC686	
8	Ventigra	
9	Untreated	
10	Positive Control -	

Prior PMC updates

Program Future Vision Updates:

- How priorities are set during workshops
 - ✓ This was implemented in the 2025 workshop (with success)
- How protocols are created, including data needs
 - ✓ Implemented for 2026 protocols (both crop safety and efficacy)
- Report writing clarity for efficacy studies
 - ❑ Ongoing – not fully implemented
- Study selection portal
 - ✓ All actions were performed using web-based system outside of MS Access
- Database backend updates
 - ❑ Requires major work – still ongoing



Thank you!

IR-4 Communications Update

Presenter: Hannah Ross





Communications Update

Hannah Ross | Spring 2025



External Comms Updates

*Stories, social media, print materials,
newsletter, awards + more*

NEW DIRECTOR ANNOUNCEMENT



*Authored joint announcement with NC State CALS (out 2/23).
Working with university communications on a short video to
introduce Lina to our stakeholders (coming in March).*



Pest management solutions
for specialty crops and
specialty uses

2025 ANNUAL REPORT



*Prepared by IR-4
Headquarters*

The annual report and year-end summary have been published. Find both on IR-4's annual reports webpage. The YES is available in print. Thank you to all the team members who worked to write, review and finalize this report!

Save the date
& join us in
Austin, TX



**FOOD USE
WORKSHOP**
September 15 -17, 2026

JOIN US VIRTUALLY

IR-4 



**2026 IR-4 Industry
Technology Session**

**February 19, 2026
Approx. 11:30 a.m. to 4:00 p.m. ET***

**Schedule subject to change*

A SUCCESSFUL NEC



IR-4 AWARDS AT THE NEC

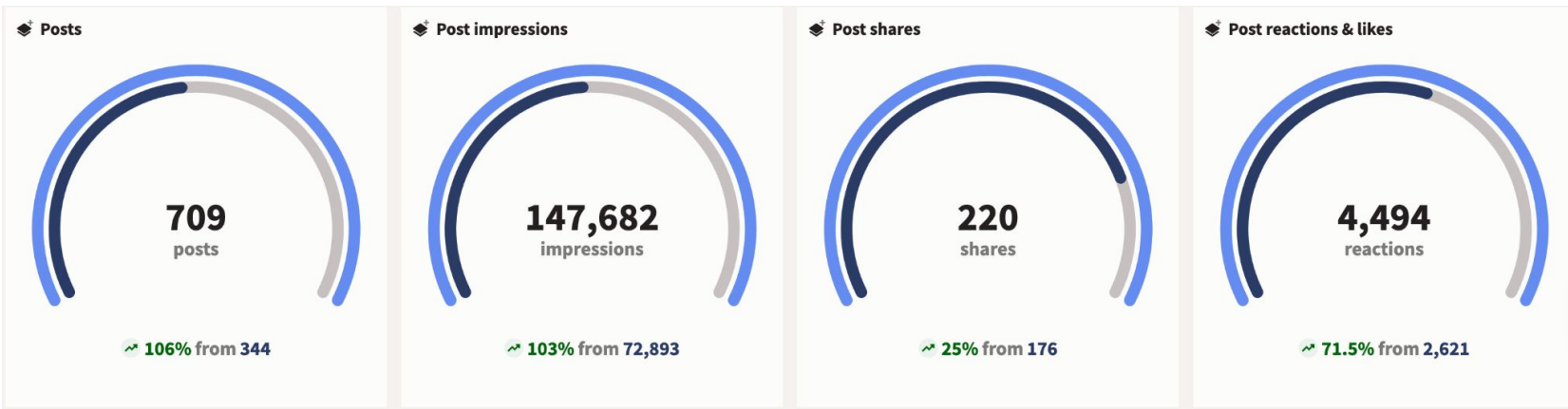
NATIONAL RECOGNITION OF EXCELLENCE	Susan Bierbrunner, Leona Horst, Megan James Hickman
MERITORIOUS SERVICE AWARD	Nazmoon Sheikh, Joe Heil, Gail Mahnken, Matt Hengel, Philip Moore
TECHNICAL SERVICE AWARD	Duane Larson, Celeste Wheeler, Cole Smith, Nathan Leach, Hannah Ross
SPECIAL RECOGNITION - INDIVIDUAL	Connie Crawford (presented by Southern Region)
SPECIAL RECOGNITION - TEAM	Western Region Analytical Lab: Jeff Eichler, Bronson Hung, Paul Kuzmicky, Alex McFall, Tey Montalvo, Riza Punongbayan, Salvador Torres & Fabiola Zuno (presented by WR & Matt Hengel)

SUCCESS STORIES

Over the past 2 years we have contracted with writer Robin Siktberg through Meister Media for 3-4 success stories per year. Her writing is high caliber and her expertise in the field is deep, which has strengthened the quality of these stories as well as decreased the time spent editing compared to writers engaged in the past. We plan to continue utilizing her services in 2026. We have a mint success story currently in the editing phase (thank you Steve Salisbury for being interviewed!). Topic suggestions are welcome!

Read the latest stories at ir4project.org > About IR-4 > News

SOCIAL MEDIA SNAPSHOT



Highlights from IR-4's 2025 Year in Review from our scheduling tool, Hootsuite.

Room to grow = more varied content and follower engagement



December 17, 2025



News and Updates

Pest Management Solutions for Specialty Crops and Specialty Uses

Happy Holidays from the IR-4 Project

— A Letter from IR-4 Executive Director Jerry Baron —



- Newsletter open rate holding steady at 35%
(healthy rate = 20-40%)
- Maintaining 3% click rate
(industry average 2%)
- **2,250 contacts**



INTERNAL COMMS UPDATES

Recent & Upcoming IR-4 Awards

Intranet Updates

Explore recent updates to this new library of resources designed to support the IR-4 team in our daily work.

NEW!!



Nellie Mae
and Freya



Pets of IR-4

Meet team pets on the IR-4 intranet homepage!

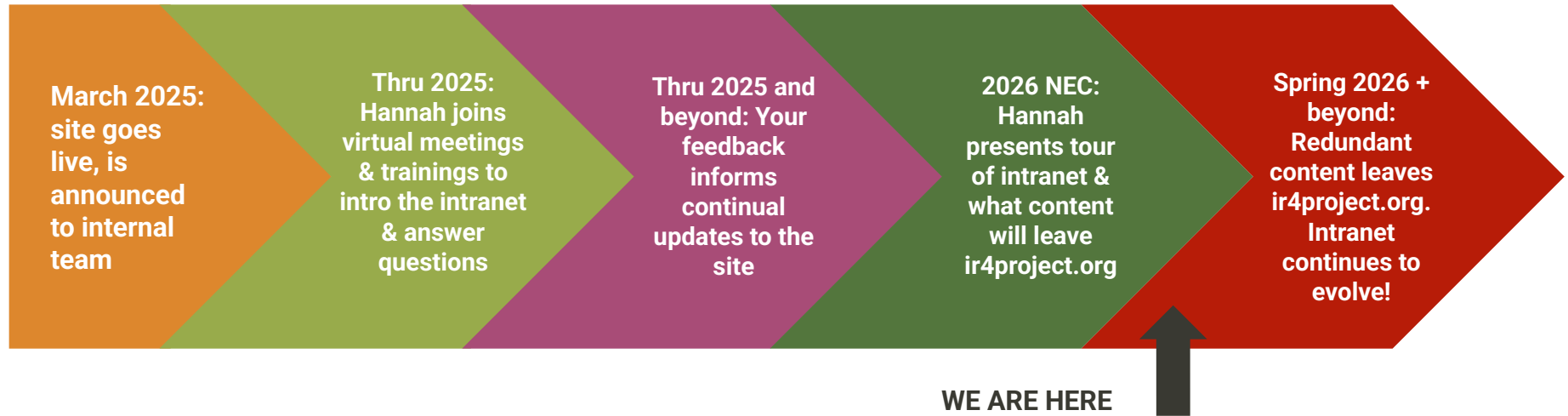
Under “General,” the **National Resources page** is a helpful touchpoint for materials important to ALL team members. It has several newly added resources, including:

- *Award Nomination Guidelines*
- *Document Review Tracker*
- *Travel Plans Tracker*
- *GLP org chart & regional leads document*
- *Regional website links*
- *& more!*



The screenshot displays the IR-4 Project Intranet website. At the top, the logo for IR-4 Project (a red '4' with a green leaf) and the word 'Project' are on the left, and 'INTRANET' is on the right. Below the logo is a navigation menu with links for 'General', 'Food Program', 'EH Program', 'Lab', 'QA', and 'Training'. On the far right of the menu is a link 'VISIT IR4PROJECT.ORG' with a green leaf icon and a right-pointing arrow. The main content area features a large green box with the heading 'National Resources' in white. Below the heading, the text reads: 'The following resources are important for all IR-4 personnel. Don't hesitate to contact HQ or your regional office—we are here to help!'. At the bottom of the green box, a caption states: 'Pictured: Headquarters and Regional team members with Ms. Wuf during the 2024 NRPM meeting at NC State.' To the left of the green box is a photograph of a large group of people, including a mascot character, posing for a group photo in an office setting.

2025-2026 Intranet Launch Timeline



I gave a thorough tour of the intranet at the National Education Conference ensuring team members are confident navigating the site and providing feedback. I also explained what will transition off of ir4project.org in 2026.





Leaving ir4project.org this year because they have a home on the intranet and serve an internal audience:

- Food Crop Researcher Resources
- Environmental Horticulture Researcher Resources
- eFDB Resources
- Quality Assurance materials specific to internal team
- Guidance Documents & Advisories
- Other internal only documents that arise during content clean-up
- Downloadable logos and team-oriented outreach materials (will keep some public facing outreach info for stakeholders on Outreach page)



Staying on ir4project.org because they serve our public stakeholders:

- About IR-4 info
- All research info that helps stakeholders understand our research and view outcomes
- Documents that support our public program transparency like PMC meeting minutes and annual reporting
- Events & Training
- Stakeholder Resources
- & more!

What's next?

- **Internal content that has been moved to the intranet but is not needed by the public or external stakeholders will gradually be phased OFF of ir4project.org and will ONLY reside on the intranet.**
- **Both websites will see continual improvements for clarity and user friendliness.**
- **Continual updates to intranet based on team needs & feedback**

Next on my to-do list

- **Making a plan for the migration of ir4project.org to NC State University hosting after successful process with intranet**
- **Collaborative work on orientation materials for new employees introducing them to IR-4, our mission, and their important role within the organization**
 - *This project was passed to me with some technical content already created, but some guidance needed on weaving the technical content into the bigger picture of our mission, our team & our brand identity*
 - *I'll be collaborating across teams to further develop the technical content*
- **2026 events & getting the word out about our new director**

Thank you!



Education and Training Update

Presenter: Christina Dineen





Education & Training Committee Update

IR-4 PMC Meeting

March 2026

Christina Dineen

2026 NEC is Complete!



**NATIONAL
EDUCATION
CONFERENCE**
February 3-5, 2026

- **Overview/Highlights (Agenda Attached)**
 - Tues, Feb 3rd – Wed, Feb 4th: Conference Style

General Session	GLP Training, Intranet, National SOPs, Life of a Project
Field Breakout Session	eFDB Discussions, Application Types, Lessons Learned
Lab Breakout Session	Improving Data Quality, Method Development, ASR Prep



2026 NEC is Complete!

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Lab Breakout Session	Improving Data Quality, Method Development, ASR Prep

Guest Speakers

Kahoot Interactive Games

Extra GLP Training

Real-Life Examples

Photo Superlatives Contest

Awards & Closing Ceremony

Reception +
Bingo Game

Token Prizes
for Engagement

Follow Up
Questions

Participation &
Networking



2026 NEC is Complete!



**NATIONAL
EDUCATION
CONFERENCE**
February 3-5, 2026

- **Overview/Highlights (Agenda Attached)**
 - Thurs, Feb 5th: Local Agricultural Tour in Charleston

Bohicket Farms	Local farm with Clemson Extension
Charleston Tea Garden	Trolley, GH, tea fields, processing site
USDA-ARS US Vegetable Lab	Lunch + ARS researcher updates, hydroponic pods, & Cole Smith spray truck tour
Boone Hall	Farm Tour + Bee Talk; Garden Talk



2026 NEC is Complete!

- **Overview/Highlights (Agenda Attached)**

- Thurs, Feb 5th: Local Agricultural Tour in Charleston

Bohicket Farms	Local farm with Clemson Extension
Charleston Tea Garden	Trolley, GH, tea fields, processing site
USDA-ARS US Vegetable Lab	Lunch + ARS researcher updates, hydroponic pods, & Cole Smith spray truck tour
Boone Hall	Farm Tour + Bee Talk; Garden Talk

ARS IR-4 Site

Networking at sites

Wishing for more
time at stops

Good variety
of locations

Brutally cold +
windy!

Bus mechanical
issues

Donna + Ops Team =
grace & professionalism



2026 NEC is Complete!

Post-NEC Survey Results & Feedback (Results Attached)

- Overall positive feedback
 - Quality of presentations continues to improve
 - Good opportunities for engagement & questions
 - Swag & prizes were excellent
 - Focus on impact that IR-4 has for specialty crops
 - Great job from presenters & MCs
- Attendees would like to see local agriculture tours continue in future

2026 NEC is Complete!

Things to Work on for 2029 NEC

- Continue to work on introduction & networking ideas
- More opportunities for lab/field to interact & understand struggles from each end
- Timing – ensure extra time is given for thoroughness & Q&A
- Picking another great location!



National SOPs Update

Committee Members:
Leona Horst
Martin Beran
Mika Tolson
Alex McFall

- **Complete & Effective Now**

SOP #	Revision #	Title
N-01.1	0	Guidelines for IR-4 National SOPs
N-01.2	0	EPA Inspection Procedures
N-01.3	0	QA Inspections/Audits
N-02.1	2	iAdvantage eFDB Use
N-03.1	0	Test Substance Container Disposal Approval
N-03.2	0	Application Type Definitions



National SOPs Update

Committee Members:
Leona Horst
Martin Beran
Mika Tolson
Alex McFall

- **In Progress & Upcoming**

Title	Review Stage
Inventory & Transfer of GLP Raw Data to IR-4 HQ	Addressing All-Hands Comments
Adjuvants for Use in IR-4 Field Residue Trials	Addressing Training Committee Comments
Test & Reference Substance Container Labels	Being written
IR-4 Guidelines for National SOPs REV 1	To be updated in 2026
Training & Documentation	To be written
Completion of Advisories Transition	To be written

- **Potential?**

Title
Decommissioning Sites (Transfer from HQ SOP 3.3)
Amending Analytical Summary Reports



Advisories to National SOPs

Committee Members:
Mika Tolson
Nicole Soldan
Robert Welker
Johanna Mazlo

- Progress of Transition**

Advisory #	Title	Status
2005-01	TS Container Disposal Website Approval Procedure	Retired
2018-01	TS characterization results vs nominal concentration	Retired
2003-03	Conflicting Chemistries in IR-4 Studies	Retired
2003-02	TS Container Disposal	Retired
2004-02	IR-4 Application Type Definitions	Ready to Retire
2006-01	Inventory & Transfer of GLP Raw Data to IR-4 HQ	Ready to Retire when SOP signed

Advisories to National SOPs

Committee Members:
Mika Tolson
Nicole Soldan
Robert Welker
Johanna Mazlo

- Progress of Transition**

Advisory #	Title	Status
2015-01	Storing & Maintaining Adjuvants for use in IR-4 Field Trials	Working on SOP
2003-04	Test/Reference Substance Container Labels	Working on SOP
2014-01	Maintaining Freezer Storage Systems	Working on SOP
2007-01	Shipping via Commercial Carrier with Dry Ice & Training	Waiting
2003-05	Weighing Field & Processing Trial Residue Samples	Waiting
2003-01	Responding to FDB QA Findings	Waiting
2005-02	FRD Disposal of FDB Copies	Waiting
2004-01	Foliar Broadcast Spray Swath vs Plot Width	Ready to Retire?

Virtual Trainings – Plans for 2026



- **Field Training (RFCs)**
 - March 17th – WSR
 - July 21st – NER/NCR
 - November 17th – SOR
- **Lab Training (LRDs)**
 - Continue with training every 2 months
- **Any Other Opportunities for Training**

What's Next for E&TC?

- **Rotation of Members: 3-year term is complete after NEC**

**Thank you to all members for all of your hard work
over the last 2.5-3 years!**

Christina Dineen (HQ – SD, Chair)	Liwei Gu (SOR – PMC)	Nicole Soldan (NCR – RFC)
Alex McFall (WSR - LRD)	Scott Muir (HQ - QA)	Chanz Robbins (WSR – FRD)
Leona Horst (ARS – FRD)	Philip Moore (HQ – SD)	Dan Heider (NCR – FRD)
Megan James Hickman (NER – RFC/FRD)	Johanna Mazlo (HQ – Management)	Faradeh Rehfield (ARS – Lab)
Kristen Searer-Jones (SOR – RFC)	Mika Tolson (WSR – RFC)	Wilfredo Robles (SOR – FRD)

Tuesday, February 3	
7:00 am - 8:40 am	GLPs in Practice (Optional, Pre-registration required)
8:00 am - 9:00 am	Registration and Breakfast (starts at 6:30 am for Embassy Suites patrons)
9:00 am - 9:05 am	Opening and Welcome
9:05 am - 9:15 am	USDA-ARS Update
9:15 am - 9:45 am	State of IR-4
9:45 am - 10:15 am	Workplace Communication: Best Practices
10:15 am - 10:30 am	BREAK
10:30 am - 11:00 am	Intranet Update
11:00 am - 11:20 am	IR-4 Impact on Growers: Prior to Request
11:20 am - 12:00 noon	The Life of a Project: Request to Registration (Part 1)
12:00 noon - 1:00 pm	LUNCH
1:00 pm - 1:40 pm	The Life of a Project: Request to Registration (Part 2)
1:40 pm - 2:00 pm	IR-4 Impact on Growers: After Registration
2:00 pm - 2:30 pm	National SOPs
2:30 pm - 3:00 pm	BREAK
3:00 pm - 5:00 pm	Lab/Field Breakout Sessions
5:30 pm - 7:30 pm	Hors d'Oeuvres Reception
Wednesday, February 4	
8:00 am - 10:00 am	Lab/Field Breakout Sessions
10:00 am - 10:30 am	BREAK
10:30 am - 12:00 noon	Lab/Field Breakout Sessions
12:00 noon - 1:00 pm	LUNCH
1:00 pm - 3:00 pm	GLP Reboot: Strengthening Your Compliance Skills
3:00 pm - 3:30 pm	BREAK
3:30 pm - 5:15 pm	Awards and Closing Ceremony
Thursday, February 5	
Optional Charleston Field Tour (<i>pre-registration was required; fully booked</i>)	



NATIONAL EDUCATION CONFERENCE

February 3-5, 2026

SCHEDULE

Embassy Suites Charleston Convention Center - Charleston, SC

Agenda Key

Time of Session*	General Session (Ballroom C1/C2/C3)	
	Field Session	Lab Session
	▼	▼

*Times are all Eastern Standard Time

Tuesday, February 3, 2026

7:00 am - 8:40 am	<p>GLPs (Good Laboratory Practices) in Practice <i>(Optional; pre-registration was required.)</i></p> <p>Speakers: IR-4 Quality Assurance Unit</p> <p>Description: An overview of different situations that you may come across and how to properly address them according to GLP standards.</p> <p>Location: Meeting Rooms 6 & 7</p>
8:00 am - 9:00 am	<p>Registration Open & Breakfast (Breakfast service begins at 6:30 a.m. in the hotel Atrium for Embassy Suites patrons)</p>
9:00 am - 9:05 am	<p>Opening and Welcome (Ballroom C1/C2/C3)</p>
9:05 am - 9:15 am	<p>USDA-ARS Update</p> <p>Speakers: Joe Munyaneza, PhD</p> <p>Description: An update from ARS National Program Leader.</p> <p>Location: Ballroom C1/C2/C3</p>
9:15 am - 9:45 am	<p>State of IR-4</p>

	<p>Speakers: IR-4 Management</p> <p>Description: Gain an understanding of the current landscape and direction of the IR-4 Project. This talk will cover recent accomplishments, key challenges, and strategic priorities across research, regulatory, and funding initiatives. Discover how IR-4 is adapting and supporting specialty crop growers, and understand the vital role this team plays in IR-4's mission.</p> <p>Location: Ballroom C1/C2/C3</p>
9:45 am - 10:15 am	<p style="text-align: center;">Workplace Communication: Best Practices</p> <p>Speaker: Donna Bouffard</p> <p>Description: This session will focus on communication etiquette in a digital workplace. We will cover best practices for email and chat, as well as tips for active listening, respecting time, and being a productive participant in both physical and virtual meetings.</p> <p>Location: Ballroom C1/C2/C3</p>
10:15 am - 10:30 am	<p style="text-align: center;">– Break and Refreshments (Ballroom Foyer C)</p>
10:30 am - 11:00 am	<p style="text-align: center;">Intranet</p> <p>Speaker: Hannah Ross</p> <p>Description: Tour the IR-4 Intranet, learn what's new since the site's launch, and hear what intranet content will soon migrate off of ir4project.org. Time for questions, feedback, and content ideas will be provided.</p> <p>Location: Ballroom C1/C2/C3</p>
11:00 - 11:20 am	<p style="text-align: center;">IR-4 Impact on Growers: Prior to Request</p> <p>Speakers: Mike Bledsoe, PhD, Village Farms, CLC Representative</p> <p>Description: Hear about the work that growers must put in behind the scenes before a project is prioritized, and why the IR-4 Project is so important to the specialty crop industry.</p> <p>Location: Ballroom C1/C2/C3</p>
11:20 am - 12 noon	<p style="text-align: center;">The Life of a Project: Request to Registration (Part 1)</p> <p>Speakers: Dr. Kari Arnold; Jimmy Byrtus; Will Meeks; Alex McFall, PhD</p> <p>Description: A panel of IR-4 Team members will showcase their roles in the life of an IR-4 residue project. This section will highlight developing priorities, protocol writing, conducting field trials, and the analytical phase.</p>

	Location: Ballroom C1/C2/C3	
12 noon - 1:00 pm	Lunch (Ballroom C4)	
1:00 pm - 1:40 pm	<p align="center">The Life of a Project: Request to Registration (Part 2)</p> <p>Speakers: Jimmy Byrtus, Scott Muir, Tom Pike, Cristina Marconi</p> <p>Description: A panel of IR-4 Team members will showcase their roles in the life of an IR-4 residue project. This section will highlight QA audits, final report writing, the submission process, and the project timeline.</p> <p>Location: Ballroom C1/C2/C3</p>	
1:40 pm - 2:00 pm	<p align="center">IR-4 Impact on Growers: After Registration</p> <p>Speakers: Berry Tanner, National Watermelon Association, CLC Representative</p> <p>Description: Hear how the IR-4 Project has impacted U.S. watermelon growers, and why the work done by IR-4 is critical to helping support specialty crop growers.</p> <p>Location: Ballroom C1/C2/C3</p>	
2:00 pm - 2:30 pm	<p align="center">National SOPs</p> <p>Speaker: Martin Beran</p> <p>Description: A crash course on everything IR-4 National SOPs: where to find them, the review process for new and updated SOPs, training, and how to incorporate these at individual sites.</p> <p>Location: Ballroom C1/C2/C3</p>	
2:30 pm - 3:00 pm	– Break and Refreshments (Ballroom Foyer C)	
3:00 pm - 4:00 pm	<p>Application Types (& eFDB)</p> <p>Speakers: Rob Welker, Jennifer Fisher, Wilfredo Robles, Jimmy Byrtus, Philip Moore</p> <p>Description: An overview of different application types used in IR-4 residue field trials, including concept, how to make accurate calculations, and how to enter application data in the eFDB.</p>	<p>Method Adaptations from Reference to Working Method</p> <p>Speaker: Alex McFall, PhD</p> <p>Description: Guidelines and best practices for building robust, efficient methods from accepted references. Tips and tricks for common equipment substitutions, increasing sample throughput, and incorporating the latest analytical chemistry</p>

	Location: Ballroom C1/C2/C3	techniques. Location: Meeting Rooms 6 + 7
4:00 pm - 5:00 pm Lab Session 4:00 pm - 4:45 pm Field Session	Trials Saved & Lessons Learned Speakers: Leona Horst, Marylee Ross, Tom Pike Description: Ways FRDs have learned to save trials and helpful tips learned over the years on conducting trials in the greenhouse or field, as well as providing insight into how Study Directors evaluate the impact of issues in the field on the integrity of a study. Location: Ballroom C1/C2/C3	Beyond Compliance: Catching Errors and Improving Laboratory Data Quality Speaker: Yavuz Yagiz, Debbie Carpenter, PhD, Sherita Normington Description: This session will focus on strategies to strengthen data integrity and prevent issues that could jeopardize our studies, including good documentation practices, common QA findings, document control, and how to address problems when they arise. Location: Meeting Rooms 6 + 7
4:45 pm - 5:00 pm Field Session	Workflow of Document Transfer to IR-4 HQ Speakers: Juliet Thompson Description: Discussion of GLP paperwork associated with field trials transferred to HQ. Location: Ballroom C1/C2/C3	
5:30 pm - 7:30 pm	Reception (2nd Floor Foyer and Meeting Rooms 4 & 5)	


Wednesday, February 4, 2023

7:00 am - 8:00 am	Registration & Breakfast (Breakfast service begins at 6:30 a.m. in the hotel Atrium for Embassy Suites patrons)	
8:00 am - 10:00 am Field Session 8:00 am - 9:00 am Lab Session	Electronic Field Data Book (eFDB) General Training Speakers: Philip Moore, Jimmy Byrtus, Jane Forder Description: The iAdvantage	Chromatography Strategies for Pesticide Testing: Choosing the Right Column and Cleanup Approach Speaker: Nicole Saikin, Account Manager, Phenomenex

	<p>eNotebook system will be discussed in depth for the 2026 field season, including topics such as what is new for 2026, common QA findings, eFDB Guidance Document updates, and time for Q&A.</p>	<p>Description: A look at pesticide testing chromatography using HPLC, focusing on selecting the optimal column phase and dimensions, along with effective sample cleanup strategies for accurate pesticide testing.</p>
<p>9:00 am -10:00 am Lab Session only</p>	<p>Location: Ballroom C1/C2/C3</p>	<p>Location: Meeting Rooms 6 + 7</p> <p>Trace Level Quantitation of Pesticide Residues using LC-MS/MS</p> <p>Speaker: Mengyuan Zhu, Sr. Field Application Scientist, Thermo Fisher Scientific</p> <p>Description: This presentation will demonstrate the outstanding performance of the LC-MS/MS workflow featuring the Thermo Scientific™ TSQ Quantis™ Plus mass spectrometer for trace-level quantitation of pesticide residues in agricultural crops. Optimizing the MS parameters and troubleshooting MS problems for targeted pesticide analysis will be highlighted.</p> <p>Location: Meeting Rooms 6 + 7</p>
<p>10:00 am - 10:30 am</p>	<p align="center">– Break and Refreshments (Ballroom Foyer C) –</p>	
<p>10:30 am - 12:00 pm Field Session</p> <p>10:30 am - 11:30 am Lab Session</p>	<p>Electronic Facility Files Discussion</p> <p>Speakers: Philip Moore, Jimmy Byrtus</p> <p>Description: Open discussion regarding electronic facility files, forms, and what will be helpful moving forward for FRDs.</p> <p>*Please note the Facility Files aspect of eFDB is only provided to IR-4 FRDs (and is currently optional for those users). It is not provided to Canadian or Contract Research FRDs, who have few IR-4 sponsored trials annually;</p>	<p>Method Development - Roundtable Discussions</p> <p>Speakers: Joel McCray; Alex McFall, PhD; Stephanie Long; Fabiola Zuno</p> <p>Description: Hear from fellow IR-4 chemists on difficult projects/methods and the strategies used to work through them. Time for group discussion and feedback will be provided.</p> <p>Location: Meeting Rooms 6 + 7</p>
<p>11:30 am - 12 noon Lab Session</p>		<p>Analytical Summary Report (ASR) Prep</p>

	<p>therefore, those attendees may not benefit from this session.</p> <p>Location: Ballroom C1/C2/C3</p>	<p>Speakers: Riza Punongbayan, Tey Montalvo</p> <p>Description: Using templates, databases, and automated software shortcuts for efficient report writing.</p> <p>Location: Meeting Rooms 6 + 7</p>
12:00 pm - 1:00 pm	Lunch (Ballroom C4)	
1:00 pm - 3:00 pm	GLP Reboot: Strengthening Your Compliance Skills	
	<p>Speakers: IR-4 Quality Assurance Unit</p> <p>Description: An interactive discussion on GLP compliance.</p> <p>Location: Ballroom C1/C2/C3</p>	
3:00 pm - 3:30 pm	– Break and Refreshments (Ballroom Foyer C) –	
3:30 pm - 4:15 pm	Awards	
	<p>Speakers: IR-4 Management and RFCs</p> <p>Description: Presentation of Regional/National Awards, winner of bingo card, and winners of superlatives contest(s).</p> <p>Location: Ballroom C1/C2/C3</p>	
4:15 pm - 5:15 pm	Closing Ceremony	
	<p>Speakers: Matt Hengel, Martin Beran, Leona Horst, Nicole Soldan</p> <p>Description: Carefree and Comical Comprehension Competition on Crops, Chemistries, and Compliance Among Cool Colleagues</p> <p>Location: Ballroom C1/C2/C3</p>	

Thursday, February 5, 2023

6:30 am - 7:15 am	<p>Breakfast</p> <p>Breakfast service begins at 6:30 a.m. in the hotel atrium for Embassy Suites patrons; we encourage participants to get there early!</p>
7:15 am - 5:00 pm	<p>Charleston Field Tour</p> <p> Pre-registration was required. Transportation and lunch will be provided.</p>
*Buses to depart promptly at 7:30 am!	

Description: Dive into the rich agricultural heritage of the Lowcountry on this field tour. We'll start by exploring the revival of the region's culinary staple, heirloom rice seed production, at Bohicket Farms. Next, explore America's only major tea farm guided by an agronomist at the historic Charleston Tea Garden. The midday stop features presentations and lunch at the U.S. Vegetable Laboratory, complete with a demonstration of spray truck technology. Finally, enjoy an educational talk on beekeeping and the vital role of pollinators in our food system at Boone Hall Farm.

Notes:

👁️ Don't Miss This 👁️

📶 **Conference Wifi**
Network: **CACCC3**
Password: **nec2026**

🕒 **Breakfast** begins at 6:30 a.m. daily in the Atrium (for Embassy Suites patrons).

📱 **Posting to Social Media?** We encourage you to follow and tag IR-4, and use **#IR4NEC** to share your experiences.



🚜 **Field, Lab and QA Stickers**

Identify lab teammates by flask stickers on their nametags, field teammates by tractors and QA teammates by magnifying glasses.

🎀 **First Timers Ribbon**

Be sure to greet the first-time attendees, identified by ribbons on their name tags.

🍷 **Claw Machine**

Answer questions in sessions and win tokens to use in the claw machines on the registration desk!

Vote for Photo Superlatives

Don't forget to vote for your teammates' photos in categories like Best Critter, Coolest Crop, Best Work Photo, and Emergency Photo! Scan to vote:



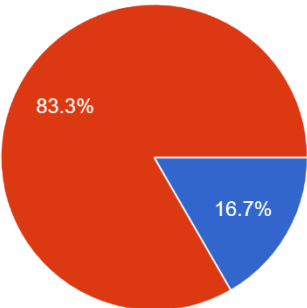
Post-Conference Survey

Scan to complete our post-conference survey. Your feedback helps us plan future events. Thank you in advance for submitting your survey!



Please select one:

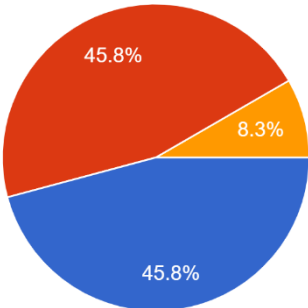
48 responses



- This is my first time attending the National Education Conference
- I've attended more than one National Education Conference

How would you rate the 2026 National Education Conference?

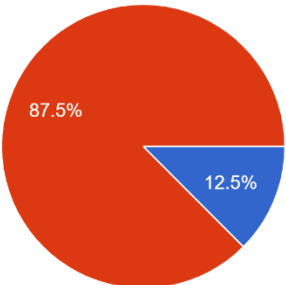
48 responses



- Excellent
- Very good
- Good
- Fair
- Poor

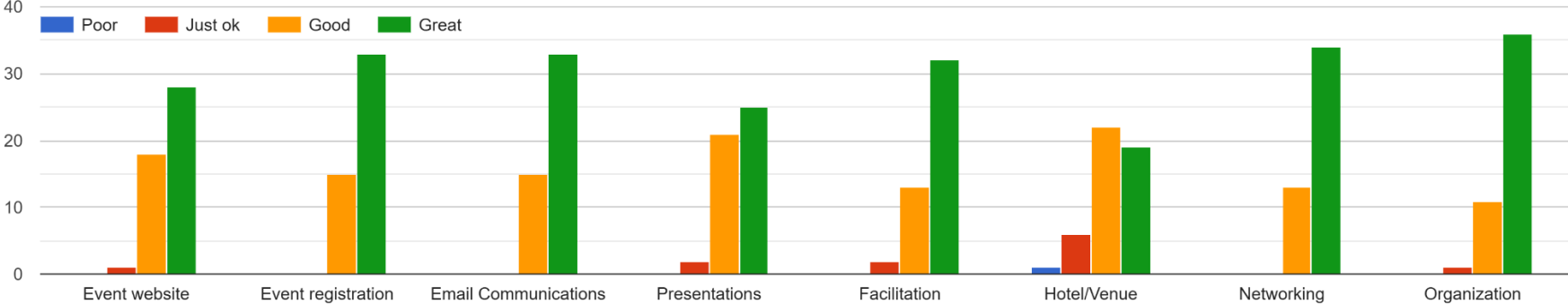
Was there any information that was not communicated prior to the conference that would have been helpful?

48 responses

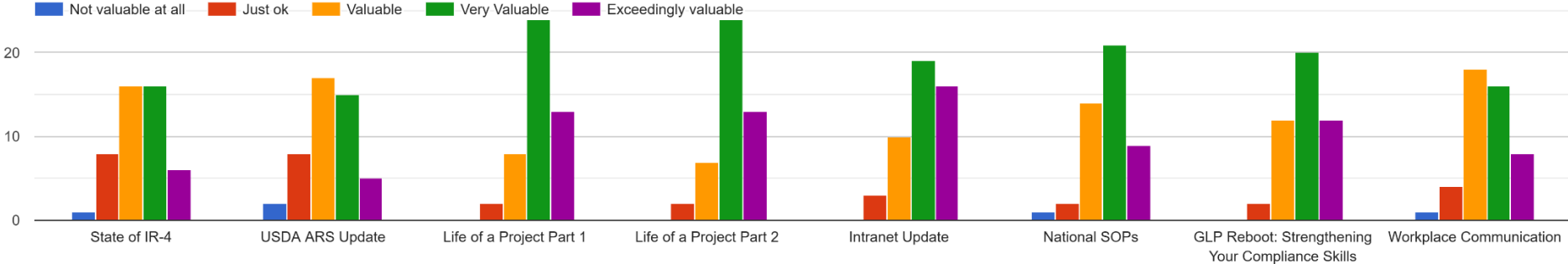


- Yes
- No

For the NEC overall please rate the following:

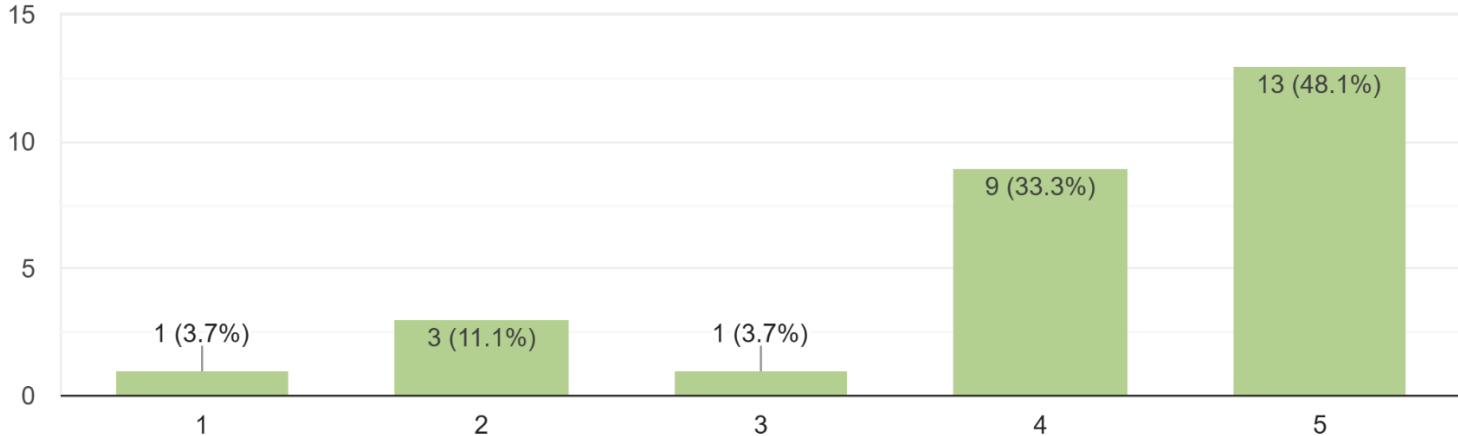


Thinking back to the General Sessions, to what extent did you feel that you gained value from each session?



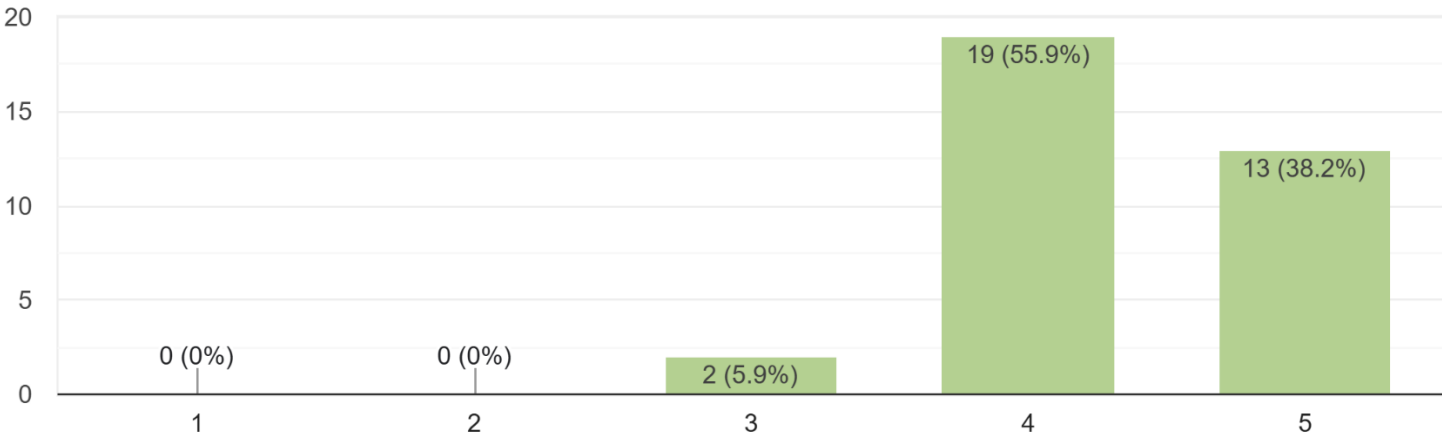
If you attended the Optional GLPs in Practice training, to what extent did you feel that you gained value from the session? (Please respond only if you attended the session)

27 responses



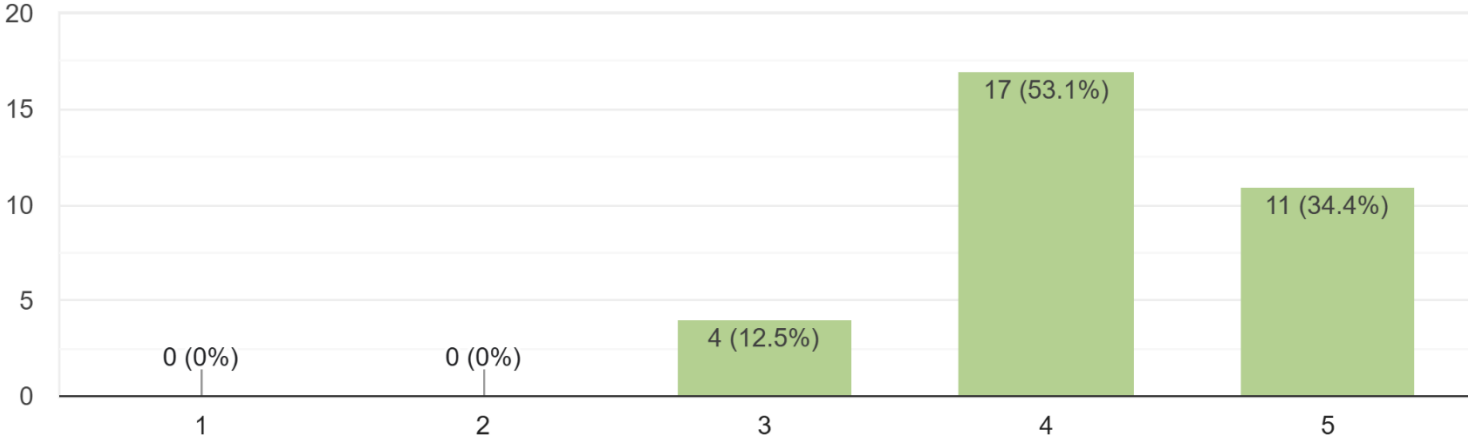
If you attended the Agricultural Tour, to what extent did you feel that you gained value from the session? (Please respond only if you attended the session)

34 responses



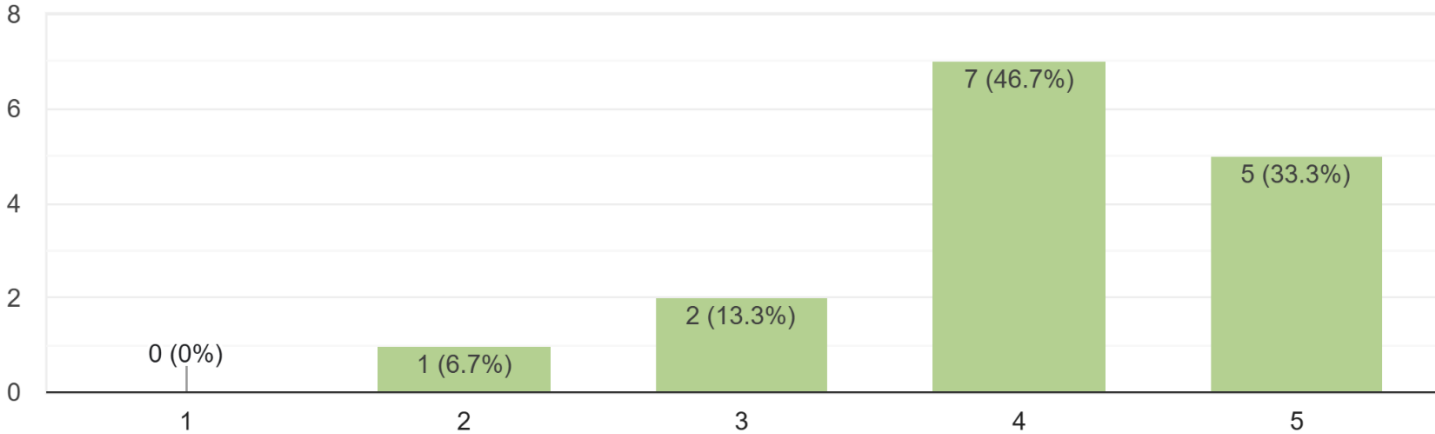
If you attended the Field Breakout Sessions, to what extent did you feel that you gained value from the session? (Please respond only if you attended the session)

32 responses



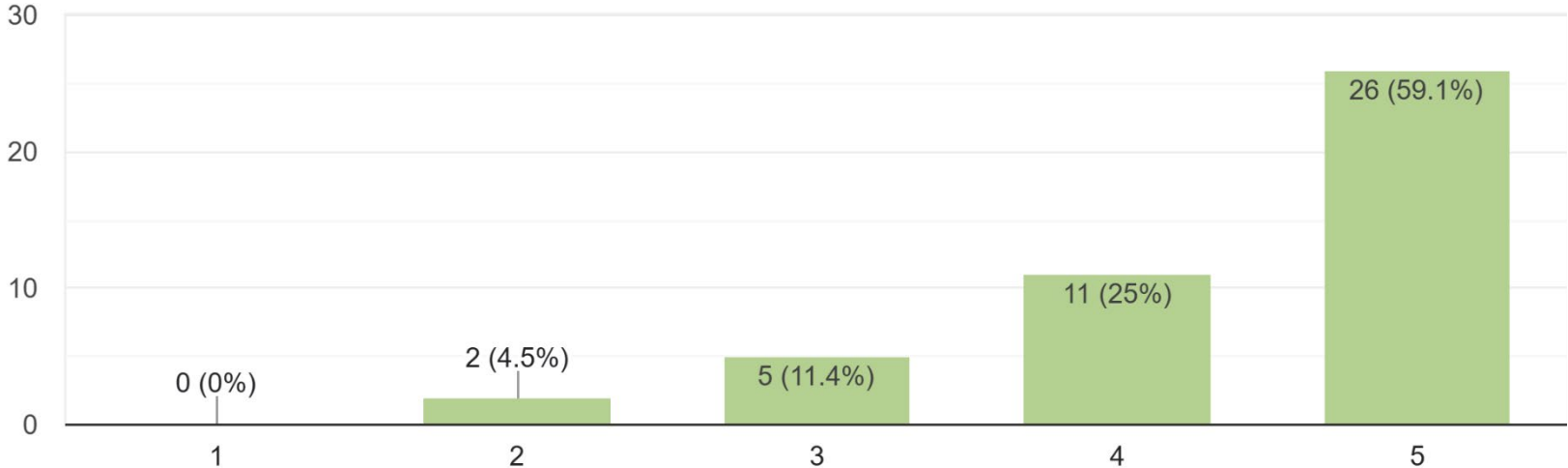
If you attended the Lab Breakout Sessions, to what extent did you feel that you gained value from the session? (Please respond only if you attended the session)

15 responses



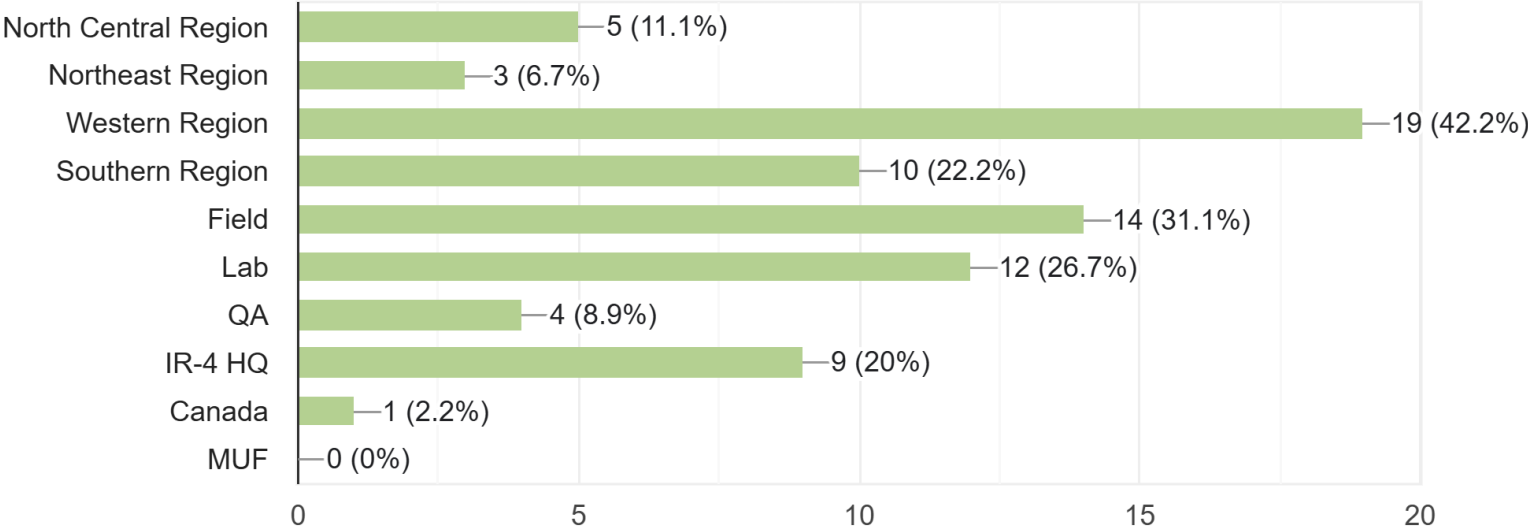
Were you able to contribute questions/comments at the meeting with ease?

44 responses



Before you go: Please select the IR-4 aspect you are associated with or all that apply.

45 responses



PLEASE PROVIDE COMMENT/FEEDBACK FOR ANY ITEMS LISTED ABOVE (WEBSITE, REGISTRATION, COMMUNICATIONS, PRESENTATIONS, NETWORKING, ORGANIZATION, ETC.)

Everything was awesome the addition of games to GLP things helped keep me engaged and made things more fun!
Excellent
heard some feedback from new attendees that they would have liked more mixed time/networking between lab and field. We used to do more "roundtable" situations where it was a mix of lab, field, QA, HQ discussion in small groups. Organizing talks by tying presentations to the entire registration process was very helpful.
Tour was excellent and hope there continues to be an optional tour day going forward
Everything was great except for the venue because the room was freezing (I know this is out of your control, but maybe something you can give feedback on to them). The bingo was a great icebreaker to get people interacting. Introduce hosts do not assume we know who they are. Have meat options at lunch.
The location was extremely limited for food options near the venue. I strongly suggest finding a location closer to a downtown area in the future even if the cost is higher. The availability of restaurants to walk to provide for further networking and interest for participants to attend. The restaurant at the hotel was lowly rated and closed for a portion of the meeting making it difficult to find dinner options. If funding is needed to support the conference room rentals/food, require a registration cost that can be reimbursed by the regions.
The first two days we were sitting a lot (but I understand). I really loved the comradery on the last day with the trivia, it was refreshing and fun! The organization of the list of attendees was a game changer for me to make the correct connections with the participants. The hotel had a few issues, but all in all I enjoyed the breakfast, evening receptions and networking time outside of the daily schedule.
Well organized meetings. Really appreciate the training members and the HQ folks put all these together to give each of us a very successful meetings and trainings. They did not receive enough credits for doing all these work.
The only thing I would recommend is when we were in a smaller group, please ask them to introduce themselves and what they do. Ask them to rotate and sit with someone else after 30 mins. Most people just sit with the ones they work with. This will further help the networking in the evening mixer.
Hotel far from downtown. It would have been nice to have each participant present themselves at the start, especially since there were many new participants.
The hotel facility was nice but the customer service at the hotel was not good. My requests were ignored or I got abrupt or rude responses more than half the time from the front desk staff, the bar, the breakfast venue and the shuttle. For example, one front desk person gave a hotel room to the first person in our party but the other front desk associate told the next person they never had any rooms ready early and we had to come back after 4pm. The omelet maker admonished me for standing at the wrong end of the counter when there were no signs indicating where to stand. The shuttle driver left early despite me checking in with the front desk and confirming that I was waiting for the 9am shuttle. This happened to others as well.
Presentations - most were excellent, but some didn't seem to have much to do with and "education" component. Maybe the Training Committee had some training objectives and met them, but I don't know. The hotel was difficult to navigate - especially for the lab session - while the main ball room had water/coffee/tea available and restrooms nearby, the lab sections were not as accomodating.
The temperature (AC) in the rooms that we took the training was super low. The first GLP training was really early (4:00 am) for people from California.
NA
I didn't use the website much.
The food was pretty bad, in the hotel and the conference center
Good!
Works perfect

WAS THERE ANY INFORMATION THAT WAS NOT COMMUNICATED PRIOR TO THE CONFERENCE THAT WOULD HAVE BEEN HELPFUL?

A free shuttle from the airport to the hotel was available.
I think most information about the hotel mentioned that the shuttle was only from the hotel to the airport and that other transport would be needed from airport to hotel. The shuttle did end up going both ways which made more sense. not sure if that was updated in more recent emails
Information regarding parking. While it was included, it still required action by the guests to ensure that their vehicle was not ticketed, but this was not communicated.
Restroom availability at tour stops.
More information about the food options and transportation at the hotel site would have been helpful for planning.

PLEASE PROVIDE ANY COMMENTS OR FEEDBACK REGARDING THE OPTIONAL GLPs IN PRACTICE TRAINING:

The scenarios were really good and I learned things which was awesome
It was too early and could have been more advanced.
Excellent and very educative with a real life scenarios
excellent
Very glad that this was interactive. The scenarios were helpful.
heard it was great, wish I had gone!
The session with scenarios allowed the attendees to see all the different levels of information in GLP studies. If someone stated 2 reasons...there was always a third that we all thought...oh yeah that too! Great Job QA team. Loved the kahoot format, the optional training would fit this format as well in the future.
Very practical scenarios on going through many different GLP incidents. Please ask everyone introduce themselves and sit with someone that they do not know after go through a few scenarios.
This was the best session of the conference imo. Would have liked to have more sessions in this format.
For me, the optional GLP training session was where I learned the most, and was the most worthwhile training.
The non-mandatory GLP refresher training was not clear what it would be (some people thought it would be a GLP refresher, literally). The name was misleading and confused people when it was listed as "not mandatory, must register". Perhaps naming it a "GLP training exercise" or something similar would have made it more clear.
The required participation from QA was not explicitly stated to us until really close to the NEC. And even then, it was not clear if it was mandatory for QA to show up or not. We showed up anyways to support Johanna, but it would have been nice if we got a clear answer prior to the NEC.
I really liked how it was handled as scenarios. It put many of the GLP concepts into real-life situations, which I find very helpful.
It was scheduled too early and really basic. I did not learn anything new.
I liked the scenarios
Good for refreshing GLP knowledge.
time was wasted by having to pass out papers in between scenarios. There could've been more material covered

PLEASE PROVIDE ANY COMMENTS OR FEEDBACK REGARDING THE GENERAL, FIELD AND/OR LAB SESSIONS:

Pretty solid some parts were more helpful than others, but everything was pretty good

Invite Agilent to speak during the lab session.

excellent

The field session had a lot of good information, and I think we had to cut short the efacity files information. Hopefully we can get a webinar or something to go over this missed info. Otherwise, I really appreciated the kahoot game part and that kept everyone engaged and having fun.

think it did a good job providing info to both new and longterm people

The interactive role play between Martin and Mika made the subject much more interesting. Thanks!

It felt like the overall quality of general/lab presentations this NEC was very good. I really enjoyed hearing the grower perspective, and the energy was mostly positive and focused on the impact of IR-4 and the importance of the work we do. It was also very nice to have multiple speakers from industry in the lab section, and the lab group was much more interactive compared to previous NEC's.

I really liked the presentation of things gone wrong in the field and the creative way the FRDs fixed them

The conference room was too big for the field break out sessions-discussion was limited due to room size.

Really appreciate The Life of the Project, I think it should be included in every NEC as we have so many new folks. This really show that everyone must work together to obtain the final label for our growers.

The lab session on difficult matrices, and how each lab handle the problem project was very interesting. I'm wondering if we should do some cross training in the future and present this in a shortened version for the field people, so the field people understand why we will have some more limits at the Food Use Workshop. Each project is not the same for the labs.

Lab session MC did not always keep track of time.

I loved the "difficult projects" portion of the lab breakout session. I think it was really valuable hearing how others have tackled difficult situations, but I think this session could stand to have a longer block of time next time. Some projects were more complicated and warranted longer explanations that just weren't feasible to explain in 15 minutes. I'd say have everyone aim for 15 minutes, but give it an hour and a half block to allow for people to go over time if needed.

It is very useful to hear stories and tips from FRD in other areas.

It would be great that the person that is in charged to coordinate the time for each speaker takes care of it. For the lab session, some speakers went longer that the specified time (15 minutes) and it affected the time designated for the next speakers. During the lab session also, people in the audience were talking while the speaker was giving the presentation, it was difficult to put attention and also it was difficult for the speaker to be focus on what was presenting. The moderator did not do anything about it because was distracted with the phone mostly all the time.

For the lab session. On Tuesday our first (pre-break) speakers ended early and we watched a video presentation to fill the time. I would much rather have started the "complicated projects" session early and had more time to discuss the projects.

Even as a first time attendee I knew that those are the type of presentations likely to run longer than their allocated 15 min. It would have been nice to have a little time to discuss the projects especially for the ones as yet unresolved. Then if we were still ahead before the lunch break watch one of the video presentations then.

Good for refreshing GLP knowledge and asking questions.

Lab Session Day 2: Lab presentation could've used better time management and facilitation. The first presenters were allowed to speak for longer than their allotted time so the later presentations were rushed.

- Regarding the first day of NEC, I think we need to be cognizant that there are CLC members in the audience and that they will be going to Congress a few weeks later on IR-4's behalf.

- I felt the GLP scenarios was very helpful for people. They learned how to deal with many types of situations.

- I felt the trivia game at the end of Wednesday's schedule was too long and drawn out. IR-4 spends a lot of money to send people to this training event and provides training certificates, I feel we really need to provide in-depth training you cannot do via zoom. There is time to socialize and have fun during the reception, in the evening and during the tour.

PLEASE PROVIDE ANY COMMENTS OR FEEDBACK REGARDING THE AGRICULTURAL TOUR:

The bus broke down during the tour. Everyone did the best they could but the tour events had to be shortened.

The stops on the ag tour were great. However, even before the bus mechanical issues, stops felt very rushed with minimal time to engage in conversation with the hosts, etc.

very good

The tour was very fun and informative. I wish we had better weather that day, and that the bus didn't break down and put us behind schedule. We had to rush after that, and I wish we had more time to spend at every location.

It would have been better if temperature was little high but it is out of anyone's control.

was really great even with the bus malfunction and chilly weather

I think the selection of agricultural orgs/companies allowed the attendees to see the various crops grown in NC and the hardships the growers endure. Kudos to Donna for her calmness during the bus breakdown and also to the all of the attendees for not complaining.

Exploring Bohicket Farms, the Charleston Tea Garden, and seeing the USDA-ARS presentations were all great. It was too bad that the bus broke down to cut the time short, but the tours were very informative and a good experience even though it was cold.

Difficult to hear presenters-presenters with microphones did not know how to hold them properly, and when microphones were not available, microphones would have been appropriate. Room size/fans, and lack of microphones/inability to use them properly made much of the tour ineffectual.

The IR-4 staff handled the bus breakdown with the upmost professionalism. There is no way you can predict a breakdown and we wouldn't expect you to. Love the content of the tour although it was brutally cold and windy during most of it. There was one instance while the blue group were in the larger building of the US Vegetable Lab tour that we were rushed out of the building rather rudely (although this was brought on by the breakdown of the bus). We were listening to a researcher and I felt bad for them as we were unable to listen to their speech.

Thank you for putting this together as I enjoyed each of the stops.

Amazing tour, so happy to see the tea garden and Boone Hall Plantation. Really have a great appreciation to the HQ planning team(Krystal, Hannah & Donna) to make the tour so smooth and educational even when the bus broke down. Donna was so clam and gave us frequent updates, the lunches are ready when we arrived at the ARS site. What more can we ask for! Thank you so much! Everyone of us are so cool to stay a bit longer to see as much as we can.

The only thing I feel bad are the folks at the ARS who spent hours preparing the posters and samples and we only get to spend couple minutes with them in each station.

I enjoyed the variety of locations but wish we could have spent more time at the ARS facility and Boone Hall Plantation. The bus breakdown was the unfortunate cause but Donna handled it very calmly and professionally. Kudos to the whole HQ team for being able to pivot quickly and keep the tour going!

Didn't attend

This was fantastic, especially coming from the lab side of IR-4. It was really cool to see just how much research is going on out in the wider world on agriculture and get a glimpse of the differences in the challenges that different producers face.

Have a plan B in case of the bus doesn't work.

The tour was wonderful but just too cold to stay outside in February.

Good tour

Missed out on some presentations due to the bus mishap, but otherwise enjoyed the tour very much.

I enjoyed the tour especially learning about the tea plantation and the bees at Boone Hill. Several people wished they had the opportunity to stay longer at Boone Hill but no one could have anticipated the bus breakdown.

PLEASE PROVIDE ANY ADDITIONAL COMMENTS YOU HAVE ON THE HANDLING OF QUESTIONS/COMMENTS AT THE CONFERENCE.

very good
I liked the tokens. That was just enough incentive for people to speak up. It was good that we used the microphones for questions, that helped everyone hear what was said.
Would have been better to have a slightly more organized microphone system
The token system was a fun and encouraging way to get people to open up and participate without being too intimidating
More microphones and microphone people if using a room that size.
Have a channel to express their frustration of work and able to ask anonymously. Have a frank discussion on how to resolve the issues.
The microphone was somewhat prohibitive of freely talking.
Good!
Lab Sessions Day 1: The unplanned discussion about the Florida Lab's issue with falsifying data turned uncomfortable when lab personnel described their former lab mate's violations. Perhaps the moderator could've stepped in.

PLEASE PROVIDE ANY FEEDBACK ON HOW WE CAN CONTINUE TO IMPROVE THE NATIONAL EDUCATION CONFERENCE:

Not sure where this comment should go, but it is regarding the loaded baked potato lunch. There were many people who view potatoes as a side dish and would've liked something more substantial. Even though the potatoes were delicious, I would vote no on this as a lunch option next time. Instead, I would like to see something with more protein.
Overall, the quality and delivery of presentations feel like they are trending upwards. I would still recommend that people pay attention to tone and delivery (e.g., State of IR-4) to keep the energy positive. The focus on our impact and the importance of quality work and data at every step is a good thing to reinforce. I'm glad it was focused on so heavily.
better weather.
Have a introduction of people at HQ, the new folks and what they do. Provide a brief session for the lab and field folks to meet. Provide a brief session for the lab/field and SDs to meet.
Thanks to everyone for all the efforts. A very successful program.
2 days straight of presentations is a lot, may be worth it to make the event more like 2.5-3 days to have shorter days.
The "unofficial" national QA team meeting should be part of the agenda or get listed somewhere... if this is something Johanna wants to continue. If it takes a significant amount of time up (more than 1 hour), it should make it on the agenda. This makes travel expense reports easier for people who have to come in earlier to make the meeting (UCD requires a detailed agenda and explanation if you have to come in earlier than the official conference dates). This also could help avoid any confusion on what day/time QA should be arriving.
I sometimes find it hard to jump into conversations with people I don't know, and I think some of us feel that way depending on our personality. I loved the game at the end, it really brought people closer. I'd suggest trying Five Finger Showdown next time to introduce different teams or regions and help everyone get familiar with each other. Different regions can share different special/interesting/crazy thing they ever done.
Please schedule the training to a more reasonable time, the optional GLP training was too early for folks from California. The temperature in the rooms was too low and it felt like be in the freezer all the time.
Concentrate on the new (things that have changed), rather than covering everything. Newbies should get the basic training through other venues.

The hotel room maybe little too old that had to call a few times for someone to fix the bathroom toilet and the TV.

I wish I could have met more of the first-time attendees. Maybe there is something we can do as a quick activity on Monday night at happy hour. It would be a great way to get them more engaged at NEC.

It would be worth considering having more GLP training throughout the NEC in order to call it GLP training. With the more and more new people joining IR-4 we need to make sure they know GLP. I often hear "I don't know what I need to know". Just an FYI, the majority of sponsors do several hours of GLP training yearly.

PLEASE PROVIDE ANY SUGGESTIONS ON TOPICS FOR THE NEXT NEC IN 2029:

Indoor sessions were great. I just wonder if it is possible to conduct next NEC conferences April or May (or in summer) to visit the field during NEC? Also, this is the time, there might be some activities in the field depending on the location. I felt that most of us were trying to find warm place rather than exploring field in Charleston.

For the field to listen to the lab difficult projects panel.

Common deviations and how to prevent them

How to handle QA findings professionally, go over with real examples.

I like the life of a project. I also liked hearing about the labs discussing their struggles and troubleshooting.

The use of Kahoots (thank you, Martin!) was a fantastic idea to get the audience participation. We should encourage more sessions with these types of interactions. It forced the table to talk (and I also appreciated that Matt mixed us all up table wise at the end).

I would like to see more opportunities to encourage networking. The bingo card was great, but people were focused on filling the card out instead of actually trying to get to know the person they were seeking the initial/date from. I found myself networking the most during the reception and lunch breaks. This proved to be very valuable time for me personally for networking.

Great job!

For the lab session would be good to have an activity to discuss different difficult real scenarios that can involve all the labs beside having people to give a presentation.

EPA opinions or policies on spot spray applications w.r.t. residue tolerances and labeling. If only 10% of a field gets treated, how will this count against the total amount of product allowed per crop and/or the number of applications allowed on the label.

None.

Improving analysis efficiency in the lab (ie, larger sets, more efficient cleanup, simplifying methods, scheduling, etc)

I would suggest a) more GLP scenarios or what would you do in this situation and b) how to decrease your audit findings, c) dealing with facility files what are the expectations and d) a high level overview of the EPA Series 860s (Residue guidelines)

PLEASE PROVIDE ANY SUGGESTIONS ON LOCATION FOR THE NEXT NEC IN 2029:

Monterey, CA, New Orleans LA, Las Cruces NM

Arizona

Somewhere warm. Arizona? Hawaii :)

Somewhere on western coast

UC Davis/Sacramento

A place that is near a walkable town and a little bit warmer.

Sacramento, CA; Las Vegas, NV; San Diego, CA. Anywhere in the Western half of the US with weather above 40 degrees.
Texas?
UC Davis offered to host.
Hard to tell, Charleston was a great location but how would the organizing team know that it was going to be freezing!
warmer spot.
I believe it is time for the west coast or nearby venue.
Davis, or Sacramento, CA
Phoenix, Salt Lake City, Las Vegas, Sacramento
San Diego, San Antonio, New Orleans
Some place a bit further south where the airport isn't going to close due to snow.
Some where in the West Coast... and maybe we alternate coasts each NEC. Doesn't matter if we've hosted an event there before, I think we have enough new people now that we can start repeating locations. If that rule of "avoiding the same locations before" keeps up, we will eventually run of our possible locations... it's just not sustainable. PLEASE!
anywhere with less risk of snowstorms during the winter time.
A place that is not too cold (Las Vegas, Orlando, Puerto Rico, Hawaii).
Arizona
Denver, CO; Sacramento, CA
Maybe it is good to have the hotel little close to town with restaurants by walking distance, and also the month and date won't be too cold for field tour.
California: Sacramento or San Diego, Phoenix, San Antonio

eFDB Update

Presenter: Jimmy Byrtus





eFDB Update

March 2026 PMC Meeting

Jimmy Byrtus

eFDB Updates: Communication

➤ ServiceNow Platform

- Not a good fit for our needs, significant limitations

➤ Enter Google Form “eFDB Issue Request”

- Already available on the IR4 Intranet
- Allows us to easily track issues and allow for seeing patterns
- Automatic notification enabled when a form is completed
- Cost is free....
- As always, myself and/or David are available directly

Improved User Experience

➤ Updated Forms

- New forms created for Drench Applications (12 New Forms)
 - Greenhouse and Field with Multiple Test Substance Types (English and Metric Units)
- New forms created for Chemigation Applications (6 New Forms)
 - Field Only with Multiple Test Substance Types (English and Metric Units)
- Added eFDB Maintenance and Repair Log for more devices
- Added Document Upload Log to Facility Files eFDBs
- Added Form 6C. iAdvantage Calculation Form Instructions for Form 11, 12, 14

Improved User Experience cont.

➤ iAdvantage Mobile Edition Update

- New software being developed and should be available by the middle of March
 - Will eliminate the need for separate downloads based on operating system Apple vs. Microsoft
 - Will also allow for the use of Android based operating system
- This new software will have to be validated using our forms prior to release to researchers
 - The hope is to do this as quickly as possible, hopefully before most but not all trials have their first applications.

Electronic Signatures

➤ Electronic Signatures

- Conditionally accepted by the EPA, as we understand it. Currently appears that the use is cost prohibitive to IR-4.

➤ Work Around

- We have built new forms to be used as a mechanism to upload documents easily without signatures. (Electronic Only Files)
- Paper documents should still be scanned with wet initials and date.

➤ Items that Require Wet Signature

- Protocols, Amendments, Deviations

Transitions

- Jimmy is now the lead in administering the eFDB
 - David Schnatter is now responsible for creating eFDB's
- New ways of working implemented for 2026 protocols
 - David will create the eFDB's
 - Jimmy and Study Directors will have 24 hours to review
 - After review the eFDB's will be released to the researchers
 - This should reduce human error when building eFDB's and reducing any issues while in the field.

Potential for More Licenses?

➤ There has been some concern with not having enough licenses.

- Currently we review the number of licenses that we are using and deactivate any that we believe are no longer needed
- We are limited to 100 licenses at a cost of approximately \$230,000/year. Going over 100 licenses, we move to unlimited licenses at approximately double the cost
- Likely there will be a 10% increase cost for next year.
- I am asking for permission to be able to negotiate with iAdvantage to get more licenses at a lower cost.

Status of Funding/Grants

Presenter: Krystal Chojnacki



Status of Funding & Grants

Krystal Chojnacki

National Chief of Staff



NIFA Grant & ARS Funding

NIFA Grant

- 2025 Funds received and Subs are issued
- IS and Laboratory allocations are working their way to being issued via an amendment
- Working with NIFA to *hopefully* get year 2 funds RFA earlier than last year.
- 2022 NIFA grant will be closing for all sub awardees 4/30/2026. Please make sure to get those final invoices in and spend down all the funds.

ARS Funding

- Funding to support Quality Assurance services
- 2025 Cooperative Agreement has been issued and and Subs have been issued
- We have been notified that ARS is able to fund these services again in 2026 and we are working to provide documents from HQ and Subawards



Remaining IS and PP Budget

Remaining 2025 Integrated Solutions \$

- 2025 Funds we had set aside was \$511,111
- We allocated \$50k + IDC to our two IR-4 labs which reduced the amount by \$111,110
- IS allocated \$331,111 in projects
- We have **\$68,890** remaining



Remaining 2026 Product Performance \$

- 2026 Product Performance Priorities (Set at the 2025 FUW) was reduced to 6 to allow more funding to be diverted to the backlog.
- Then received back \$150,000 from reduced IS Priorities.
- The original allocation came to \$1,170,000.
- \$1,060,000 of this total was allocated for trials
- We have **\$110,000** to be allocated

Options and Recommendation

- Remaining funding total
 - \$68,890 of 2025 funds
 - \$110,000 of 2026 funds
 - **TOTAL: \$178,890**
- Options for spending this funding
 - Allocating the remaining amount evenly to the two IR-4 labs
 - Allocating the remaining funds to help cover the contract lab costs that are helping us to address the backlog and to analyze the studies from the ARS Wapato laboratory closure.
- Staff would like to recommend using these funds for contract labs.

IS Funding for 2026

- *Reminder:* PMC voted to:
 - Eliminate funding for Integrated Solutions priorities established at the 2025 FUW with \$150,000 moved to H+ and \$450,000 split evenly between the 2 IR-4 Laboratories to increase capacity.
 - The \$450,000 to IR-4 Labs will be included in the 2026 funding distribution and allocated through the 2026 NIFA grant cycle (ie. not separate like this year)
- The IS program is paused and will be revisited for receiving future funding once budgetary pressures are lessened.

Funding for Contract Labs

- *Reminder:* PMC voted to:
 - To reduce the priorities at the 2025 FUW (5 PUPs eliminated, Performance H+ reduced to 6 from 12 in 2025) to divert funds from regions to Headquarters, to help with the backlog costs at the contract labs in 2026.



LEARN MORE

ir4project.org

ir-4_project@ncsu.edu

2026 NRPM/PMC Meeting

Presenter: Debbie Carpenter



NRPM/PMC Schedule - Oct

Debbie Carpenter

Background

NRPM and PMC meetings traditionally held in late October. Need for time after the FUW for preparation, but also need to move protocols forward.

In 2026 – Oct 26-30

Friday, Oct 30 is the day before Halloween



Concerns

Travel concerns on Fri Oct 30 for those who want to be home for Halloween festivities.

Availability of voting PMC members – one not available Oct 26-28, another not available Oct 30.

Options

- **Decouple the PMC meeting from the NRPM.**
 - NRPM meet Oct 26-28.
 - PMC choose another meeting time for the fall meeting.
- **Compress the meeting schedule**
 - NRPM meet Mon/Tues, Oct 26-27
 - PMC meet Wed/Thurs, Oct 28-29

Compress meeting schedule

Shorten NRPM – Compared to 2024 NRPM

- In 2024 - IS – 2 hours is no longer needed
- Eliminate product performance planning as this is done over multiple meetings
- Focus on Residue trial planning, EH Planning
- Would remove RFC/HQ meeting, All Hands meeting
- Reception on Tuesday night?

Potential Schedule

Schedule in 2024 - 5 days			Proposed for 2026 - 4 days		
Mon	1 PM-5 PM	NRPM	Mon	1 PM-5PM	NRPM
Tues	9AM-5PM	NRPM	Tues	8AM-5PM	NRPM
			Tues	5:30 PM-7:30 PM	Reception
Wed	9AM-noon	NRPM	Wed	8AM-5PM	PMC
Wed	12:45 PM-4:30 PM	RFC, HQ meeting, PMC technical meeting with staff			
Wed	5:00-7:00 PM	Reception			
Thurs	8:00 AM - 5PM	PMC meeting	Thurs	8:00 AM- noon	PMC
Fri	8:00 - Noon	PMC meeting			
In 2024, NRPM including Residue, product performance, IS and EH planning					
In 2026, propose the NRPM focuses on the residue planning, EH planning					

Is there a preference?

- **Decouple the PMC meeting from the NRPM.**
 - NRPM meet Oct 26-28.
 - PMC choose another meeting time for the fall meeting.
- **Compress the meeting schedule**
 - NRPM meet Mon/Tues, Oct 26-27
 - PMC meet Wed/Thurs, Oct 28-29

**Thank
You!**

