

2026 IR-4 Project Update

Lina Quesada-Ocampo
IR-4 Executive Director



NEW DIRECTOR ANNOUNCEMENT



Dr. Lina Quesada-Ocampo

*William Neil Reynolds Distinguished Professor and
University Faculty Scholar*

IR-4's Mission

**Securing pest management solutions for specialty crops
and specialty uses in support of public well-being.**

A Shared Commitment to Specialty Crop Growers

IR-4's mission has been the core of my career - helping specialty crop growers.

I am a lifelong learner, committed to growing every skill needed to serve specialty crop growers.

I believe in science that is responsive to stakeholder needs, and my stakeholders see the benefit.



Vegetable
Pathology Lab
Endowment

\$55k - \$700k in
4y

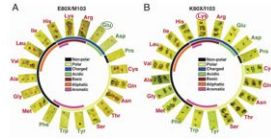


IR-4
Project 

About me



Bogota,
Colombia



Kamoun Lab: basic plant
pathology, effectors, etc.

NC STATE
UNIVERSITY



Translational vegetable
pathology

Crop protection
Diagnostics
Plant Pathology
Robotics
Metabolomics
Population genetics
Genomics
CROP IMPROVEMENT

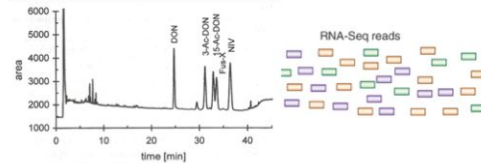
From immunology/medical to
plant pathology



Hausbeck Lab: applied plant
pathology, population genetics,
extension!



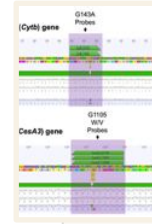
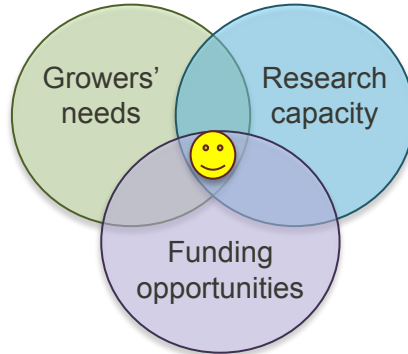
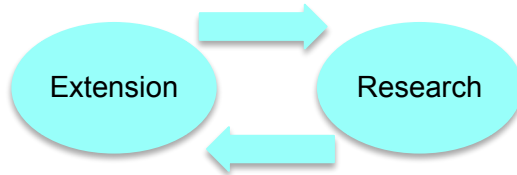
MICHIGAN STATE
UNIVERSITY



The
IR-4
Project

What I Have Been Up To: Research and Extension in Service of Specialty Crop Growers

Crop protection
Diagnostics
Plant Pathology
Robotics
Metabolomics
Population genetics
Genomics
CROP IMPROVEMENT



Pathogen biology, diagnostics and resistance profiling to guide management



Fungicide efficacy and variety testing
- 580 trials! (vegetables, hops, basil)



Extension that bridges science and on-farm decisions

A New Chapter at IR-4



Thank you for the warm

welcome!



Funding updates - outlook

- **NIFA IR-4 grant**
 - 2025-2029 grant year 2 awarded
 - FY2027 Congressional appropriations are looking on track
- **agInnovation NRSP-4 grant**
 - 15% cut in 2025
- **Company donations**
 - Some company funding has been reduced
- ***We need to bring finances to the forefront of decision-making***



Funding updates - adjustments

- IS Pause to address funding constraints
 - 1-hour discussion will be held tomorrow morning
 - Additional funding was allocated to the CA and FL analytical labs to help with sample backlog
- Phase out of eStudy eFDB
- Pause of sponsored projects
- Effort to capture competitive funding that is a good fit for IR-4

Bottom line: we are currently at capacity and cannot offer any other project expansions until additional funding comes to IR-4. If additional cuts or significant cost increases come, we will need to reduce capacity again



NIFA Project Allocations

- 2026 Food Use Workshop allocations:
 - 32 “A” Residue Priorities
 - 5 Priority Upgrade Proposals (4 regional PUPs, 1 national)
 - 12 H+ Efficacy and Crop Safety Priorities
- Lab capacity ($37 = 32 + 5$): CA-17, FL-17, USDA-ARS-3



A New Foundation for IR-4's Future

\$50,000 seed to establish the IR-4 Project Endowment at NC State

A PERMANENT FUND

A lasting philanthropic foundation for IR-4

A PATH FOR FUTURE GIFTS

A dedicated vehicle for charitable contributions

LONG TERM RESILIENCE

Supports IR-4's mission serving specialty crop growers



Give to the IR-4 Endowment

**Plant a seed today for
specialty crops—each gift
helps ensure the long-term
success of IR-4's mission.**

**Give
Here**

go.ncsu.edu/ir4giving

PMC updates

- **Welcome to new AA's:**
 - Amy Grunden (NC State ex-officio) to replace Steve Lommel
 - Kang Xia (MSU) to replace Doug Buhler
- **Welcome to new CLC members:**
 - [Patrick Wade - National Association of State Departments of Agriculture \(NASDA\)](#)
 - [Yukiko Naruoka - USA Pulses](#)
- **NIFA move to Kansas:**
 - Christopher Philips, National Program Leader, will not be moving

Registrant updates

No.	Registrant	Mtg.
1	ADAMA	5/5/26
2	ALBAUGH	7/24/26
3	AMVAC	5/21/26
4	BASF	5/7/26
5	Bayer	6/4/26
6	Belchim	5/28/26
7	Corteva	6/23/26
8	FMC	6/16/26
9	Gowan	5/14/26
10	ISK	6/2/26
11	K-I Chemical (Kumiai)	5/22/26
12	Landis	4/14/26
13	Nichino	6/17/26
14	Nisso	4/21/26
15	Nufarm	N/A
16	Syngenta	N/A
17	Tessenderlo / TKI	4/27/26
18	UPL NA Inc	6/25/26
19	Valent USA	5/6/26

- Concerns with EPA delays earlier this year

A New IR-4: We are Hiring!

- A significant wave of retirements is coming, you will see a lot of new faces at IR-4
 - Study Director – search underway
 - Weed Scientist/Study Director – soon
 - Data Systems Unit Manager – soon
 - Others
- It is a great time to provide feedback, what do you want to see from IR-4 in the future? - *catch us during a break*



IR-4 Wins and Program Updates

Food Crops – 2026 Registrations

Pest Control Agent	Registrant	Type	Date	Commodity or Crop Group	No. of Uses	No. of Tolerances
Permethrin	AMVAC, FMC, UPL NA	I	1/14/26	Arugula; Garden cress; Upland cress; Dragon fruit; Field corn subgroup 15-22C; Leafy greens subgroup 4-16A; Sweet corn subgroup 15-22D	21	7
Pyridate	BELCHIM	H	2/27/26	Vegetable, brassica, head and stem, group 5-16; Field corn subgroup 15-22C; Kohlrabi; Mint	2	5
Methoxyfenozide	CORTEVA	I	4/17/26	Edible podded bean subgroup 6-22A; Edible podded pea subgroup 6-22B; Field corn subgroup 15-22C; Grain sorghum and millet subgroup 15-22E; Pulses, dried shelled bean, except soybean, subgroup 6-22E, except pea, blackeyed, seed and pea, southern, seed; Pulses, dried shelled pea subgroup 6-22F; Succulent shelled bean subgroup 6-22C; Succulent shelled pea subgroup 6-22D; Sweet corn subgroup 15-22D; Tropical and subtropical, medium to large fruit, edible peel, subgroup 23B; Rice subgroup 15-22F	55	11

F = Fungicide; H = Herbicide; I = Insecticide/Acaricide; N = Nematicide; P = Plant Growth Regulator

Food Crops – 2026 Registrations

Pest Control Agent	Registrant	Type	Date	Commodity or Crop Group	No. of Uses	No. of Tolerances
Bifenthrin	ADAMA, AMVAC, FMC	I	6/30/26	Celtuce; Citrus, oil; Coffee, green bean; Cottonseed subgroup 20C; Edible podded bean subgroup 6-22A; Edible podded pea subgroup 6-22B; Fennel, Florence, fresh leaves and stalks; Kiwifruit, fuzzy; Kohlrabi; Leaf petiole vegetable subgroup 22B; Pulses, dried shelled bean, except soybean, subgroup 6-22E; Pulses, dried shelled pea subgroup 6-22F; Rapeseed subgroup 20A; Safflower; Succulent shelled bean subgroup 6-22C; Succulent shelled pea subgroup 6-22D; Swiss chard; Tropical and subtropical, palm fruit, edible peel, subgroup 23C; Vegetable, brassica, head and stem, group 5-16, except cabbage; Clover, forage; Clover, hay.	94	21
Totals					172	44

F = Fungicide; H = Herbicide; I = Insecticide/Acaricide; N = Nematicide; P = Plant Growth Regulator

Food Crops – 2026 Submissions

Pest Control Agent	Registrant	Type	Date	Commodity or Crop Group
Fluopyram	BAYER	F	2/20/26	Dragon fruit; Guava; Kiwifruit; Pomegranate; Greenhouse Pepper; Greenhouse Eggplant; Ginseng
Pyrimethanil	BAYER	F	2/20/26	Greenhouse Pepper; Greenhouse Eggplant
Trifloxystrobin	BAYER	F	2/20/26	Dragon fruit; Kiwifruit
Tebuconazole	BAYER	F	2/20/26	Guava; Pomegranate; Ginseng
Tebuconazole	ADAMA, ALBAUGH, BAYER	F	2/20/26	Avocado; Cranberry; Vegetable, tuberous and corm, except potato, subgroup 1D
F = Fungicide; H = Herbicide; I = Insecticide/Acaricide; N = Nematicide; P = Plant Growth Regulator				

Food Crops – Finalized Reports in 2026

Chemical	Registrant	Type	Date	Commodity	PR#
Halosulfuron	GOWAN	H	1/20/26	Stevia	13408
Flutianil	LANDIS	F	2/11/26	Hemp	12834
Fludioxonil + Pydiflumetofen	SYNGEN	F	3/10/26	Cucumber (GH)	12673
Pydiflumetofen	SYNGEN	F	3/10/26	Cranberry	13333
Dimethomorph + Ametoctradin	BASF	F	3/24/26	Pepper (Bell & Nonbell) (GH)	11690
Tiafenacil	ISK	H	5/29/26	Cucumber	13498
Glufosinate	BASF	H	5/29/26	Sunflower	13178
Quizalofop	GOWAN	H	6/2/26	Hops	13495
Glufosinate	BASF	H	6/12/26	Kiwifruit	12933
Quinclorac	ADAMA, ALBAGH	H	8/19/26	Apple	12570
Quinclorac	ADAMA, ALBAGH	H	8/19/26	Pear	12571
Cyproconazole	SYNGEN	F	8/21/26	Lemon (Post Harvest)	12993
Cyproconazole	SYNGEN	F	8/21/26	Orange (Post Harvest)	12994
Cyproconazole	SYNGEN	F	8/21/26	Grapefruit (Post Harvest)	12995
TOTAL					14
F = Fungicide; H = Herbicide; I = Insecticide/Acaricide; N = Nematicide; P = Plant Growth Regulator					

Food Crops – Finalized Reports in 2025

Chemical	Registrant	Type	Date	Commodity	PR#
Difenoconazole + Azoxystrobin	SYNGEN	F	1/16/25	Olive	13099
Benzovindiflupyr + Difenoconazole	SYNGEN	F	2/5/25	Beet (Garden)	12351
Azoxystrobin + Benzovindiflupyr	SYNGEN	F	3/11/25	Stevia	12532
Flupyradifurone	BAYER	I	3/26/25	Sugarcane	12987
Cycloate	HELMAG	H	3/27/25	Spinach	13409
Cycloate	HELMAG	H	3/27/25	Beet (Garden)	13411
Diquat	SYNGEN	H	7/17/25	Grape	12220
Prothioconazole	BAYER	F	7/30/25	Grasses (Seed Crop)	13195
Oxathiapiprolin + Mandipropamid	SYNGEN	F	7/30/25	Bean, Lima (Succulent)	12345
Fluoxapiprolin	BAYER	F	8/5/25	Ginseng	13157
Fluoxapiprolin	BAYER	F	8/5/25	Basil	13067
Ethaboxam	VALENT	F	9/15/25	Cherry	13286
Quinclorac	ALBAUGH	H	10/14/25	Hazelnut (Filbert)	12721
Spidoxamat	BAYER	I	10/15/25	Cucumber (GH)	13083
Spidoxamat	BAYER	I	10/15/25	Pepper (GH)	13084
Propiconazole	SYNGEN	H	10/27/25	Ginseng	12341
Mefentrifluconazole	BASF	F	12/16/25	Hops	13505
TOTAL					17

F = Fungicide; H = Herbicide; I = Insecticide/Acaricide; N = Nematicide; P = Plant Growth Regulator

Biopesticide Regulatory – At EPA

Agent / Technology	Status	Action	As of	Target / Use	PR#
Transgenic citrus line	EPA review	Submitted	8/26/26	Citrus greening; one line	1091B
RNAi Walnut	EPA review	Submitted	8/21/26	Crown gall	1082B
CTV defensins	Decision	Federal register	4/7/26	Citrus greening	1084B
CTV gen 2 defensin variants	EPA review	10-day data submitted	7/15/26	Citrus greening	1084B
CRISPR citrus 8-12 rootstock	EPA review	"Me too" by registrant	5/4/26	Citrus greening	1094B
Aspergillus flavus AF36, Prevail / Prime	EPA review	National labels	6/8/26	Aflatoxin	1095B, 1096B
Hafnia / Bacillus phages	EPA review	10-day data submitted	7/23/26	Varroa; honeybees	1070B
Female-lethal NWS	EPA review	Section 3, Inert, EUP	6/9/26	New World screwworm	1093B
Transgenic American chestnut	EUP by registrant	Collection of add. data	5/26/2026	Chestnut blight	1071B
Nudivirus, sterile Helicoverpa zea	EPA review	75-day data submitted	3/10/26	Corn earworm	1072B
CGMMV vaccine	EPA review	10-day data, Inert	8/9/2024	Cucumber virus	1081B
CRISPR citrus rootstock	Decision	Federal register	12/16/25	Citrus greening	1087B

Biopesticide Regulatory – In Progress

Agent / Technology	Stage	Action	Target / Next Step	PR#
Plant volatiles	Pre-sub.	Build 6 filings	<i>Helicoverpa zea</i> ; sweet corn	1092B
<i>Pseudomonas soli</i>	Pre-sub.	Meeting held	Fireblight; citrus diseases	1075B
<i>Pseudomonas fluorescens</i> M18	Pre-sub.	Meeting held	Fungal / viral diseases	1086B
<i>Verticillium nonalfalfae</i>	Field trials	EUP waived	Tree of heaven; Section 3	1056B
<i>Streptomyces nourseii</i> var. <i>xichangensis</i>	Pre-sub.	Meeting held	Numerous plant viruses	1090B



Thank you for all your contributions to IR-4! — I'm happy to take your questions