



College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

Hawaii's Pesticide Registration Program

New Registrations and Pipeline Items
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Who / What is Hawaii's Pesticide Registration Program?

Personnel

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Main Objective

Generate the data (e.g., efficacy, crop safety, residue) required to add Hawaii's minor specialty crops to pesticide labels

Focus on food crops because they require tolerances

→ IR-4 Program



Who / What is IR-4?

**Interregional Research Project No. 4
(USDA NIFA Grant)**

aka

**National Research Support Project (NRSP) – 4
“Specialty Crop Program”
“Minor Crops Program”**

Objective

**Provide safe and effective pest management
solutions for specialty crop growers
(nationwide)**

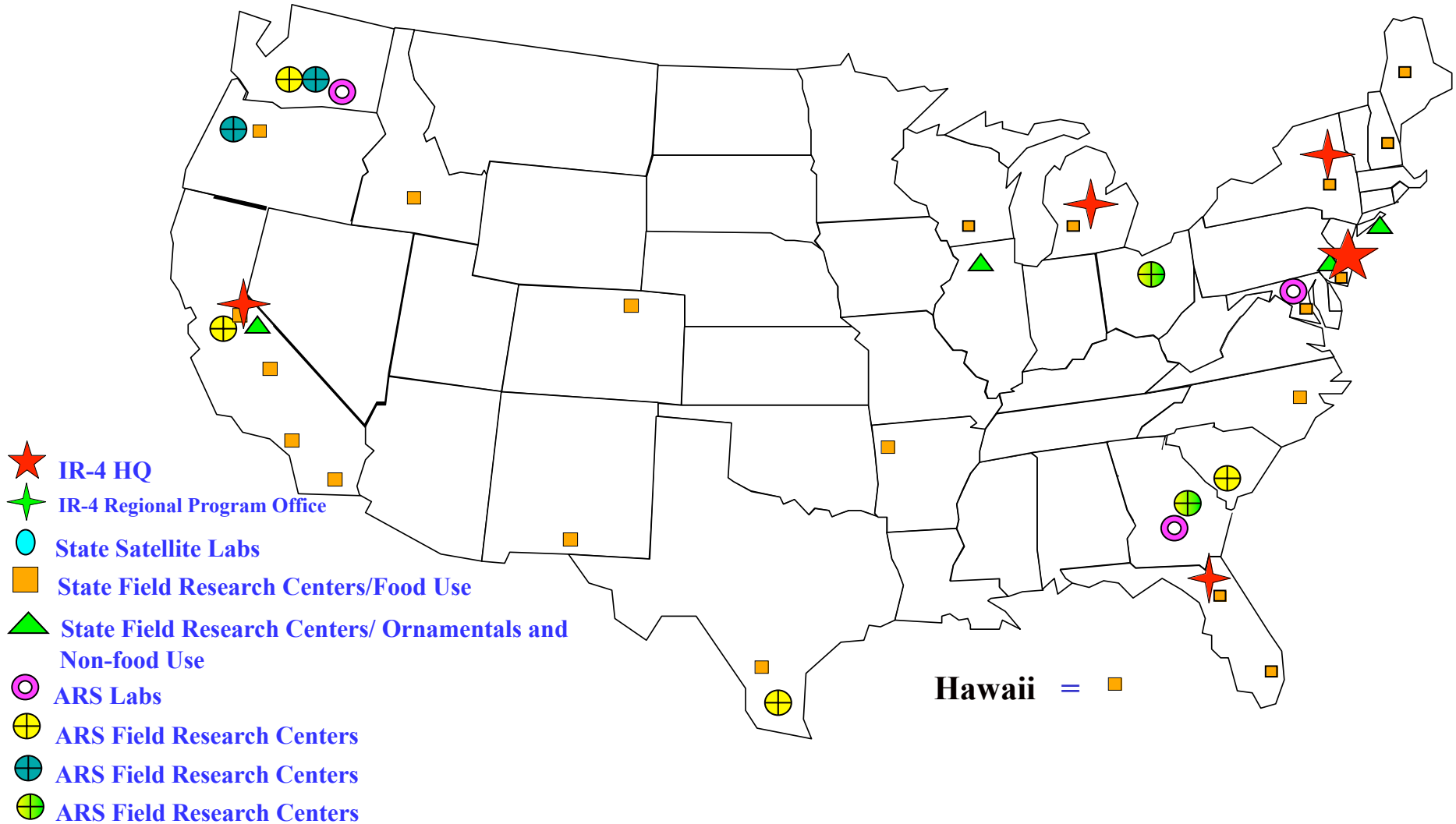


Interregional Research Project No. 4

- **Food Crop Program**
 - Residue studies, some efficacy & crop safety
 - Crop Grouping
 - International Synchronization of MRL's, Crop Groups and Registrations
- **Ornamental Horticulture Program**
 - Efficacy and crop safety
- **Biopesticide and Organic Support Program**
 - Regulatory support and efficacy development
 - Grant program (new product development)
- **Public Health Program**
 - Registering pesticides for control of pests that transmit human disease
- **International Program**
 - MRL harmonization (Codex)
 - Worldwide residue data project

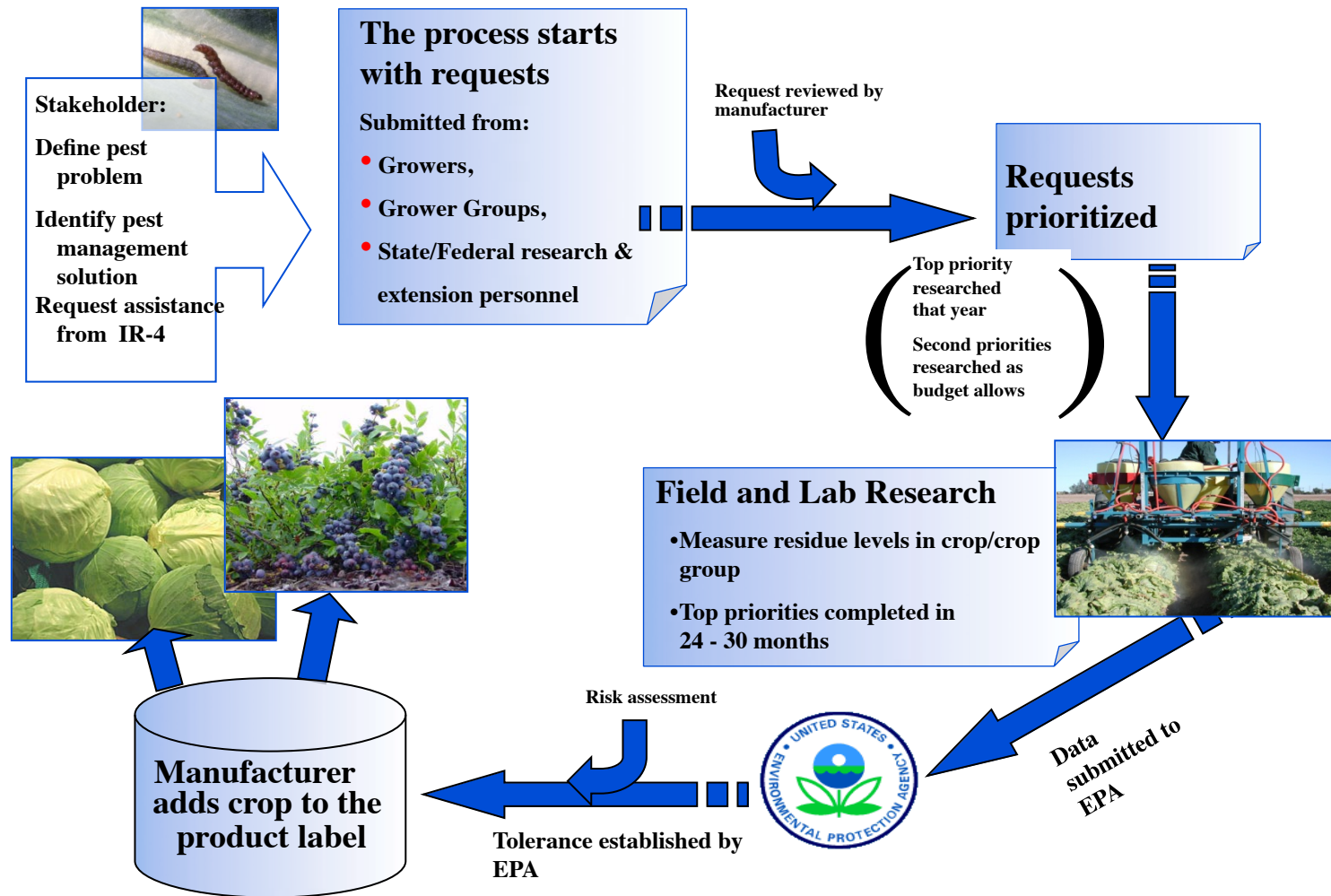


IR-4 Project Infrastructure





The IR-4 Regulatory Clearance Process





SUCCESSFUL REGISTRATIONS (selected)

CROP	ACTIVE INGREDIENT (PRODUCT)	TARGET PEST
Coffee	Spirotetramat (Movento)	Green scale
Coffee	Buprofezin (Applaud)	Green scale
Coffee	Oxyfluorfen (Goal)	Reregistration
Coffee	Imidacloprid (Provado/Admire)	Green scale
Papaya (post-H)	Fludioxonil (Scholar)	Colletotrichum (stem end rot)
Papaya	Buprofezin (Applaud)	White peach scale
Papaya	Malathion	Reregistration
Papaya	Mefenoxam +copper (Ridomil Copper)	Phytophthora palmivora
Papaya	Myclobutanil (Rally)	Powdery mildew
Papaya	Trifloxystrobin (Flint)	Powdery mildew
Papaya	Triflumizole (Procure)	Powdery mildew
Passion fruit	Malathion	Reregistration



SUCCESSFUL REGISTRATIONS (selected)

CROP	ACTIVE INGREDIENT (PRODUCT)	TARGET PEST
Taro, dryland	Dimethomorph (Forum)	Phytophthora leaf blight
Taro, dryland	Oxyfluorfen (Goal)	Weeds
Taro, dryland	Paraquat (Gramoxone)	Reregistration
Ginger	Paraquat (Gramoxone)	Weeds
Macadamia	Malathion	Reregistration
Pineapple	Malathion	Reregistration
Pineapple	Quizalofop (Assure)	Weeds
Pineapple	Spirotetramat (Movento)	Mealybugs
Pineapple (post-H)	Fludioxonil (Scholar)	Mold
Banana	Spirotetramat (Movento)	Aphids
Banana	Imidacloprid (Provado, Admire)	Aphids
Persimmon	Chlorothalonil (Bravo)	Cercospora leaf spot



IR-4 RESIDUE PROJECTS IN THE PIPELINE (selected)

CROP	ACTIVE INGREDIENT (PRODUCT)	TARGET PEST
Papaya	Cyantraniliprole (Exirel?)	Thrips
Papaya (label?)	Zeta-cypermethrin (Mustang)	Thrips
Papaya	Fluazifop-p-butyl (Fusilade)	Star grass
Rambutan	NAA	For male flower production
Ti leaf (food use)*	Azoxystrobin (Heritage)	Leaf spot
Ti leaf (food use)*	Propiconazole (Tilt)	Leaf spot
Ti leaf (food use)	Oxyfluorfen (Goal)	Weeds
Coffee	Spinosad (Success, Entrust)	Coffee leafminer (HI=banana moth)
Coffee	Indaziflam (Alion)	Weeds
Coffee	Pyrethrins+PBO (EverGreen)	Reregistration (tolerances)
Taro, wetland	Metaldehyde (Deadline)	Apple snail

* IR-4 no-data petition using bridging data from other crops.



IR-4 RESIDUE PROJECTS IN THE PIPELINE (selected)

CROP	ACTIVE INGREDIENT (PRODUCT)	TARGET PEST
Corn, seed	Imidacloprid	Remove nonfood restriction
Guava (FL)*	Cyprodinil+fludioxonil (Switch)	Anthraco nose
Guava (FL)*	Diquat (Reglone)	Parthenium weed
Banana (FL)*	Diquat (Reglone)	Parthenium weed

*These FL projects are cooperative projects. Guava is a representative crop for the tropical fruit crop group (edible peel). Therefore, when this crop group is formalized by EPA, it will probably include the following: Ambarella; Arazá; Babaco; Bilimbi; Cajou (pseudo-fruit); Cambucá; **Cashew** (pseudo-fruit); Davidson's plum; Feijoa; Fig; Gooseberry, Indian; Guava; Guava, para; Jujube, Indian; Mangaba; Marian plum; Mombin, Malayan; Mombin, purple; Nance; Natal plum; Papaya, Mountain; **Persimmon, Japanese**; Pomerac; Rose apple; **Starfruit**; Uvalha



EFFICACY PROJECTS IN THE PIPELINE (selected)

CROP	ACTIVE INGREDIENT (PRODUCT)	TARGET PEST
Basil (Uyeda, Uchida, Sugano, Fukuda)	Azoxystrobin, triflumizole, propiconazole, fenamidone, etc.	Downy mildew, <i>Stemphyllium</i>
Coffee (Kawabata)	Tolfenpyrad, cyantraniliprole, etc.	Coffee berry borer
Banana (Wang)	Flonicamid, pyrifluquinazon	Aphids
Dragon fruit	? (Recent interest on Hawaii Island)	Anthracnose
Cacao (non-bearing) (Bittenbender)	Imidacloprid (Admire Pro)	Chinese rose beetle
Papaya (Sibucao)	Boscalid+pyraclostrobin (Pristine)	<i>Asperisporium</i> black spot



The majority of our projects typically target pesticides that require tolerances in food crops

Requires residue data

→compliance with EPA's GLPS

Takes a long time to get the crop on the label (5+ years)

**Food use program provides largest amount of funding;
use any extra funds to expand efficacy and crop safety
testing to pests on other crops for future projects**

IR-4 does have a biopesticide and organic support program

This program is mainly for bringing new products to market

Pending availability of funds IR-4 may provide support for pesticide efficacy and crop safety field trials, but in past years and for the present, this is probably not likely.

These projects also need to be prioritized at the national IR-4 Food Use Workshop, typically held in Sept each year



QUESTIONS?