

# **Trends in Collaboration: Specialty Crop and Minor Uses – IR4, Minor Use Foundation, Governments, Grower groups and more**



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Minor Use Foundation, Inc  
Presented December 11-12, 2019  
Washington, DC



# My Background: Education and Industry

- Research Scholar: International Rice Research Institute, Philippines, 1980-1981
  - Dissertation Research: Weed Ecology and Control in Rainfed Rice Cropping Systems
- Ph.D. University of Wisconsin-Madison, May 1982
  - Agronomy, specialization in Weed Management
- Career in Syngenta Crop Protection, LLC and legacy companies
  - Field scientist, Technical Manager, Marketing Manager, Product Development Manager, Head, Development Portfolio and Project Management
- 20 year involvement as Syngenta Liaison to the IR4 Project



# My Non-profit Experience and other Interests

- Appointed Board Chairman, Minor Use Foundation, Inc – June 2019
- Council for Agricultural Science and Technology (CAST) [www.cast-science.org](http://www.cast-science.org)
  - The Science Source for Food, Agricultural, and Environmental Issues
  - Executive Treasurer, Board of Directors Member and Industry Liaison
- IR4 Project ([www.ir4project.org](http://www.ir4project.org))
  - Led interaction between Syngenta Crop Protection, LLC and IR4 which resulted in gaining >900 tolerances and >4500 new labels for specialty crops and minor uses in USA using Syngenta technology. Syngenta Crop Protection, LLC Liaison
  - Career long member of Weed Science Society of America (WSSA) [www.wssa.net](http://www.wssa.net)
- Chorale Music, Gardening, Hiking, Biking, Travel



# NAFTA Minor Use Cooperative

## The Strength of the USA / Canada “Win-Win” Model



### Objective:

- Conduct Joint Residue Studies and provide simultaneous submissions to both regulatory agencies (EPA and PMRA)
- Submissions reviewed and registrations approved in both countries at approximately the same time with harmonized tolerances/MRLs
- Address grower pest control needs with safe effective products in a manner that does not affect trade markets



# Minor Use Foundation, Inc



# Vision and Mission

- The organization will:
  - Implement Priorities resulting from the Global Minor Use Workshops.
  - Provide funding for research to other qualifying organizations.
  - Fund research program to obtain harmonized MRLs
  - Coordinate activities with organizations that work throughout the world
  - Establish a collaborative international approach to address MRL needs for specialty crops and minor uses
- Seek and obtain funding from Government Grants, Foundations, other non-profits, and Industry to support research and future Global Minor Use meetings
- Establish an advisory council to provide advice
- The Minor Use Foundation, Inc
  - 501(C)(3) non-profit
  - Board Chairman, Dirk Drost
  - Board Members: Dan Kunkel, IR4; Michael Braverman, IR4, and Jason Sandhal, USDA-FAS



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# Current Update

- Board established
- Initial tranche of funding raised. Further fundraising underway.
- Advisory Council – principles are agreed, implementation pending
- 2019 program established
- 2020 program planned
  - Aligned with priorities selected by IR4 stakeholders in September 2019; Anticipate studies to be started in spring 2020
  - Extend work being done by IR4/PMC by adding study locations and funding to ensure sufficient trials and distribution to apply for CODEX MRLs.
  - Funding work in Asia Pacific via AAPARI; in LATAM; and in AFRICA



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# Trends in Collaboration

My opinions and views formed from personal experience in working in Crop Protection Industry, with IR4/PMC, and with Non-Profits and Universities over my career



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# Opportunities and Way Forward

- **Communication:** We must increase the effort to communicate sound science – what we do, why we do it, and the public benefits of technology. We must defend our science-based regulatory system and support and defend USDA, EPA, FDA etc. The regulatory framework facilitates innovation.
- **Collaboration:** We must find ways to work together on topics which we agree on to strengthen the agricultural systems on which society depends for safe, abundant, and economical food, feed and fiber.
- **Public/Private Partnerships:** We should understand and replicate successful models of public/private partnerships and expand/understand why they work
  - IR4, PMC, AgVet Dept of Ag, Australia, Minor Use Foundation, USDA-FAS,
  - And others..



# Isn't it better to coordinate in advance, and get data from multiple countries?



North America bug

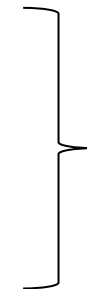


Costa Rican bugs



GAP 25% variability OK  
to combine data

- 90-110 g per hectare
- 3-4 x times per season
- 14 days apart
- 7-10 days pre-harvest



Combined GAP from both countries



Harmonized MRL

MRL works for both countries

# Minor Use Foundation 2019 Program: APAARI Residue trial funding

1. Spinetoram/Dragon fruit – 3 trials in Vietnam.
  2. Trifloxystrobin+ Fluopyram on dragon fruit\* -2 field trials in Vietnam.  
1 trial in Indonesia
  3. Trifloxystrobin+ Fluopyram on papaya\*-1 trial in Malaysia  
1 trial in Thailand
  4. Picarbutrazox/ Basil\*-1 trial in Thailand
  5. Clethodim/ lettuce- 3 trials in Thailand
- Overall budget \$75,240

\*Current IR-4 study



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# Minor Use Foundation 2020 Program Potential Country and Company Interests

Active Ingredient	Crop	Country											
		CO	CR	PR	PA	TH	MY	IN	VN	SG	GH	AU	AU
INDOXACARB	AVOCADO												
MEFENOXAM	CACAO												
FLUOPYRAM	COFFEE												
PERMETHRIN	DRAGON FRUIT												
PROPICONAZOLE	DRAGON FRUIT												
DIFENOCONAZOLE	GRAPEFRUIT (POST HARV)												
DIFENOCONAZOLE	LEMON (POST HARVEST)												
CLOFENTEZINE	LYCHEE												
DIFENOCONAZOLE	ORANGE (POST HARVEST)												
BIFENAZATE	PEPPER (GH)												
AZOXYSTROBIN	POMEGRANATE												
CHLORANTRANILIPROLE	RICE												
PYDIFLUMETOFEN	STRAWBERRY (GH)												
CYFLUFENAMID	STRAWBERRY (GH)												

# Minor Use Foundation Residue Trial funding 2020 (planned)

1. Indoxacarb/Avocado\*- Australia (2 trials)
2. Fluopyram/Coffee- Colombia, Costa Rica (10 trials)
3. Permethrin/Dragon fruit\*- Thailand (3 trials)
4. Chlorantraniliprole/Rice\*- Thailand, Vietnam, Senegal, Ghana, Australia (5 trials)

\*Current IR-4 priority will be supplemented added studies. Proposed Budget approximately USD \$200,000



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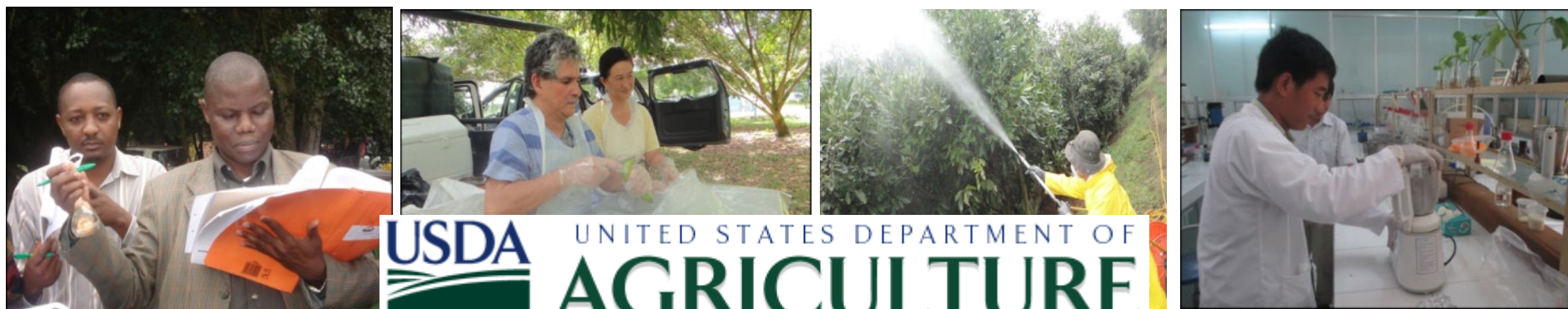


# Communication, Coordination, Collaboration!

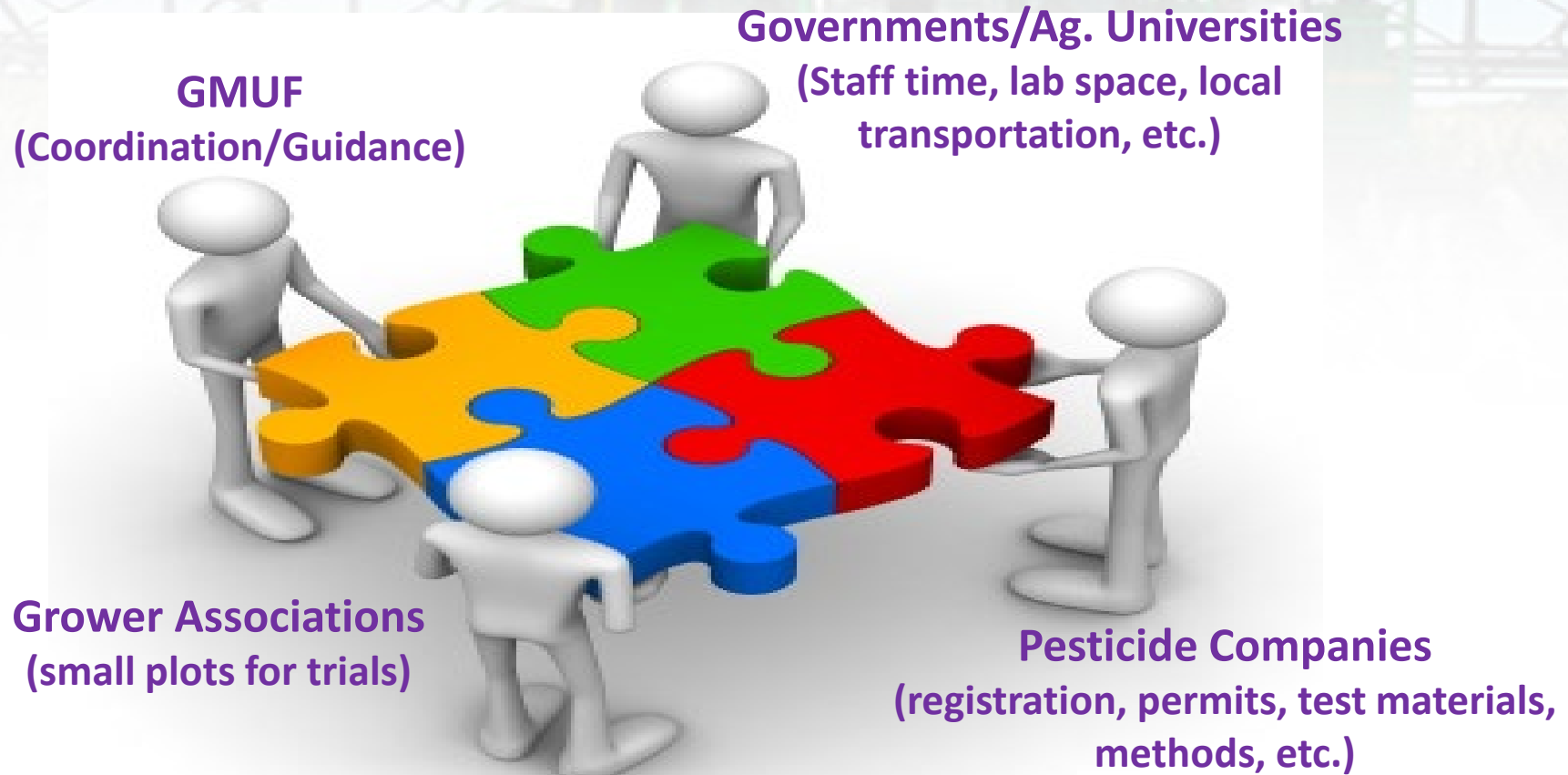
## Global Residue Project for Tropical Fruits

Goal: Develop process for generating residue data to establish Codex MRLs (and/or other national MRLs) via collaborative data generation projects.

Vision: Establish global network of residue research teams to collaborate in generating data for MRLs (work-sharing and cost-sharing) and to coordinate minor use programs.



# Communication, Coordination, Collaboration Capacity, Contribution



# Thank you for participating in today's session!

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- Credits: Thank you to Dr. Michael Braverman, IR4; Dr. Dan Kunkel, IR4; Dr Jason Sandhal, USDA-FAS; Ms. Shirley Archambault and Dr. Marcos Alvarez, PMC for their reference materials and inputs; Dr. Jerry Baron, IR4 for advice and input.



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