# IR-4 Project
# International Activities Update

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# Outline

- Brief IR-4 Overview
- International use of IR-4 Data to support MRLs
- IR-4's International Residue Studies
- Capacity Building
- Global Minor Use Workshop
- Global Fund
- Global Minor Use Summit-3

# IR-4 Project

**A US government funded research program**

***Facilitating the regulatory approval of sustainable pest management technology for specialty crops and specialty uses to promote public well-being***

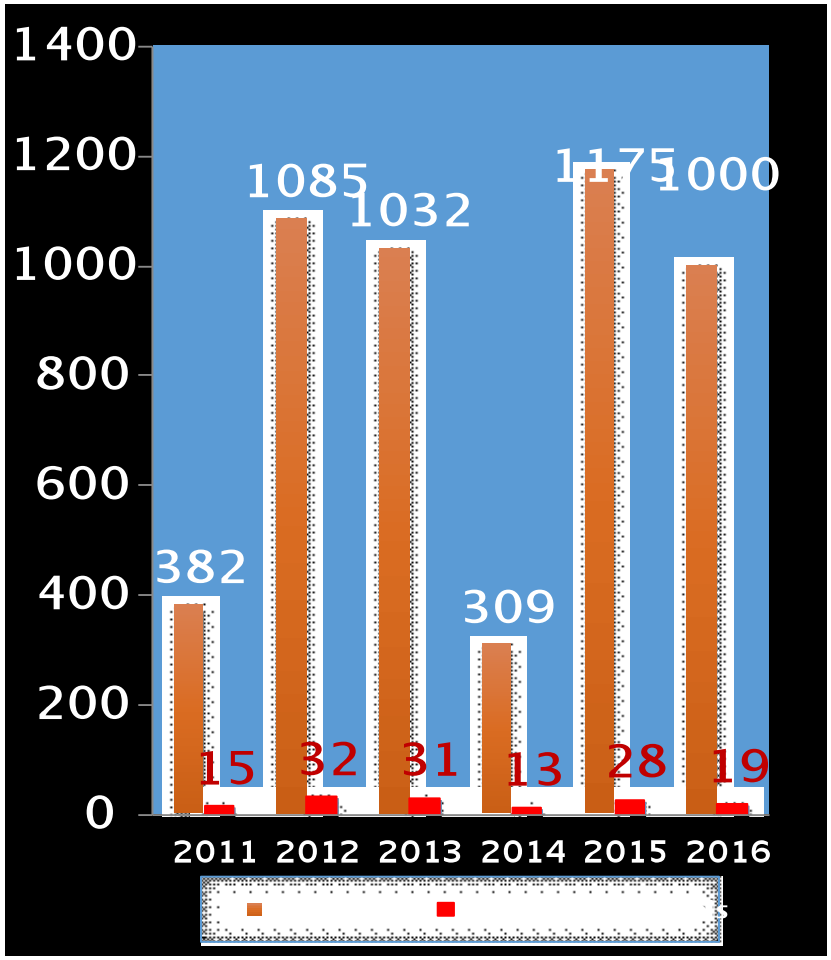
# Objectives

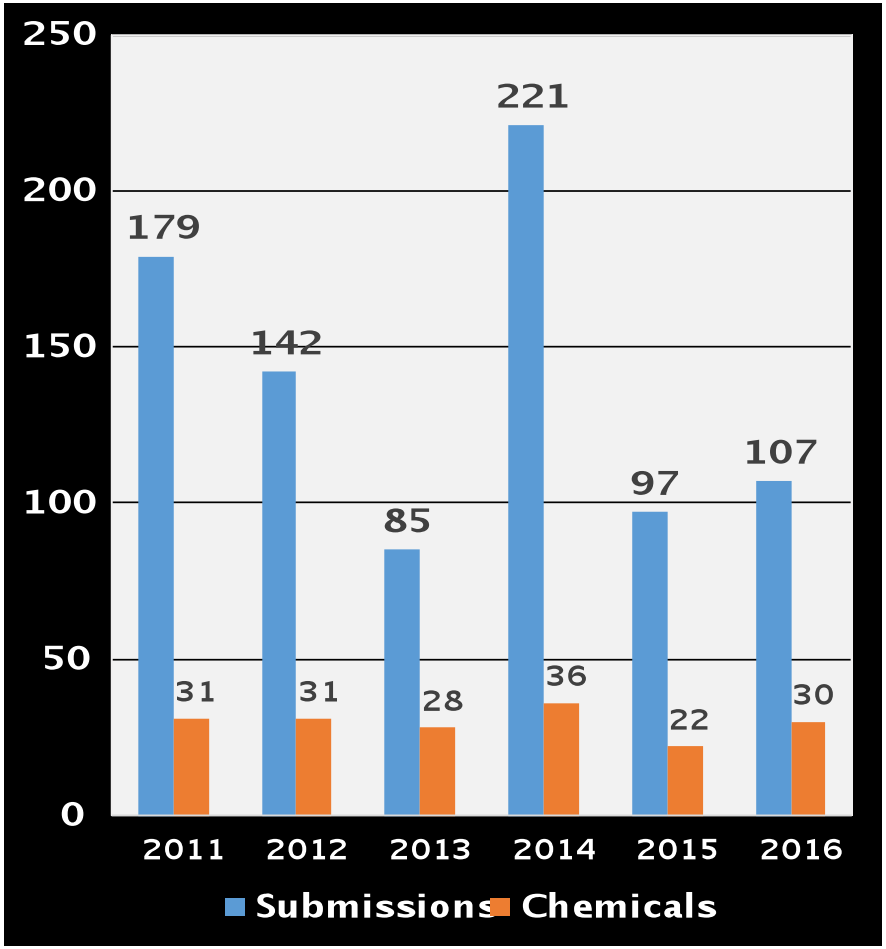
- **Food Program w/ Reduced Risk Products**
  - Residue trials, some efficacy & crop safety
  - Crop Grouping
  - ***International Harmonization, MRL's and Registrations***
- **Biopesticide and Organic Support Program**
  - Regulatory support and efficacy
- **Ornamental Horticulture Program**
  - Efficacy and crop safety
  - Invasive species
- **Public Health Pesticides**

# IR-4 Data

- Conduct 70 residue studies per year on 40 or chemistries (about 500 field trials)
- Submit approximately 80 study reports to EPA each year
- EPA reviews and established Tolerances (MRLs) on 20 or more chemicals per year.
- Through crop group extrapolations etc the data supports and average of more than 700 new uses each year.

# Deliverables w/Food Crops



# Crop Grouping

- **NAFTA revision 2002, Codex Update followed**
  - **Last Crop group submission went to EPA in 2016**
  - **All Fruit types are done (NAFTA/Codex)**
  - **All Vegetable Types are done in Codex and most codified in NAFTA**
  - **Assisting EPA with updates for ChemSAC reveiw**
  - **Nuts and seeds – nearly complete (tree nuts and oil seeds codified in NAFTA)**
  - **Grasses – Cereal grains done in Codex, forage etc pending and are being reviewed at ChemSAC later this year.**
  - **Herbs and spices – being reviewed (NAFTA/Codex), ChemSAC reviewed last week.**
  - **New EPA FR Notice later this year (last installment?)**

# International Use of IR-4 Data

# International Use of IR-4 Data

- **Codex/JMPR**
  - **Work with commodity groups and EPA to add uses (chemicals) to JMPR work plan**
  - **Review JMPR work plan and dovetail IR-4 data with chemicals scheduled for review**
  - **Work with EPA and Registrants to submit data to JMPR**
  - **Nominate Chemicals for JMPR review**
  - **Consider working with other countries to nominate chemicals or add commodities to JMPR workplan**

# International Use of IR-4 Data

**Additional examples include:**

- **Hop exports to the EU**
- **Citrus and Berry growers to Asia markets**
- **Cranberries to the EU**

# International Use of IR-4 Data

- **2017JMPR Submissions by IR-4**
  - **Flonicamid legumes**
  - **Potassium Phosphide tree nuts**
  - **Captan Ginseng.**
  - **Other IR-4 data being submitted by Registrants**
  - **STDF projects being submitted by MFG**

# Data Development Next Steps

- New TASC request - Enhanced Data Sets to Satisfy International Data Requirements for Establishment of Appropriate Maximum Residue Level's (MRL's) to support US exports.
  - Being implemented in 2017 ($350,000)
  - 31 Field Trials
  - Lab support, Admin support (SD etc) and indirect support

# International Residue Studies and Capacity Building

# Global Residue Studies

**IR-4's efforts are making a difference**

- **Canada since 1996**
  - **15-20 joint studies a year**
- **Global Zoning Study w/ Tomato**
  - **4 ai's/28 locations**
- **Blueberry – GLP residue study in various regions**
  - **Managed by IR4**
  - **Harmonized MRLs and use registered**

***A key part of global field trial exchangeability proposal by EPA and PMRA***



# International Residue Studies – Capacity Building or Research >60 Countries, >>100 Scientists.

# STDF Projects Completed

- Azoxystrobin + Difenoconazole/dragon fruit with samples from Indonesia and Vietnam
- Spinetoram on lychee and mango from Thailand
- Spinetoram on avocado from Columbia
- Pyriproxyfen on Papaya from the Philippines, Malaysia and Brunei
- Pyriproxyfen on Mango from Malaysia and Singapore
- Pyriproxyfen on Pineapple from Panama
- Pyriproxyfen on Banana from Costa Rica and Guatemala

# Global Minor Use Workshop

# Global Minor Use Workshop

- Sponsors
  - IR-4 (USDA), Australia, Canada, the EU and others)
- First step in global research approaches to solve minor use needs.
- Created a global database
- ID common critical pest management voids
- Plan Cooperative research or data sharing.
- Nearly 200 attendees from 30 countries.

# Follow-up

- Quarterly teleconferences
- Sharing research activities
- Annual report
- Some joint research
- Potential project with a new active ingredient.
- Large body to coordinate, lots of moving parts.
- Requires commitment from MFG – also a lot of coordination for a Global project, with public entity.
- Progress is being made.

## The NEED FOR PEST CONTROL CONTINUES

## Results of Global Workshop - 2015
Surveyed 40 countries, 2500 pest problems

| Cropping System | Pest/Crop rank 1 - A (highest votes) | Pest/Crop rank 2 - B (votes) | Pest rank 3 – B (votes) |
|---|---|---|---|
| **Protected (green house)** | **Aphids /lettuce**<br>**Possible Solutions:**<br>Flonicamid, Pymetrozine, Cyantraniliprole, **Sulfoxaflor, NA 11630** | **Thrips /fruiting vegs.**<br>**Possible solutions:**<br>Cyantraniliprole, Novaluran, Cyclaniliprole | **Whiteflies/fruiting veg.**<br>**Possible solutions:**<br>**Flupyradifurone,** Cyantraniliprole, Novaluran, **NA 11630** |
| **Temperate** | **Downy mildew/leafy vegetables**<br>**Possible solutions:**<br>**Ametoctradin + Dimethomorph,** Acibenzolar, Zoxamide, Fluopicolide + Propamocarb Cyazofamid, **Oxathiapiprolin** Famoxadone + Cymoxanil | **Aphids/legumes crops**<br>**Possible solutions:**<br>**Flonicamid,** Pymetrozine Cyantraniliprole, Sulfoxaflor, Dinotefuran Spirotetramat Flupyradifurone, **NA 11630** | **Weeds/leafy vegetables**<br>**Possible solutions:**<br>s-metolachlor |
| **Tropical Fruit** | **Fruit flies**<br>**Possible solutions:**<br>**Spinosad (Spinetoram),** Cyantraniliprole Kaolin, **NA 11630** | **Anthracnose**<br>**Possible solutions:**<br>**Trifloxystrobin + Fluopyram** Pyraclostrobin + Metiram Mandistrobin, Isofenamid Azoxystrobin + Difenoconazol Cyprodinil + Fludioxonil Penthiopyrad **FLUOPYRAM + TEBUCONAZOLE** | **Psyllids on Citrus crops**<br>**Possible solutions:**<br>Diflubenzuron, Flonicamid Sulfoxaflor, Buprofezin, **NA 11630** |

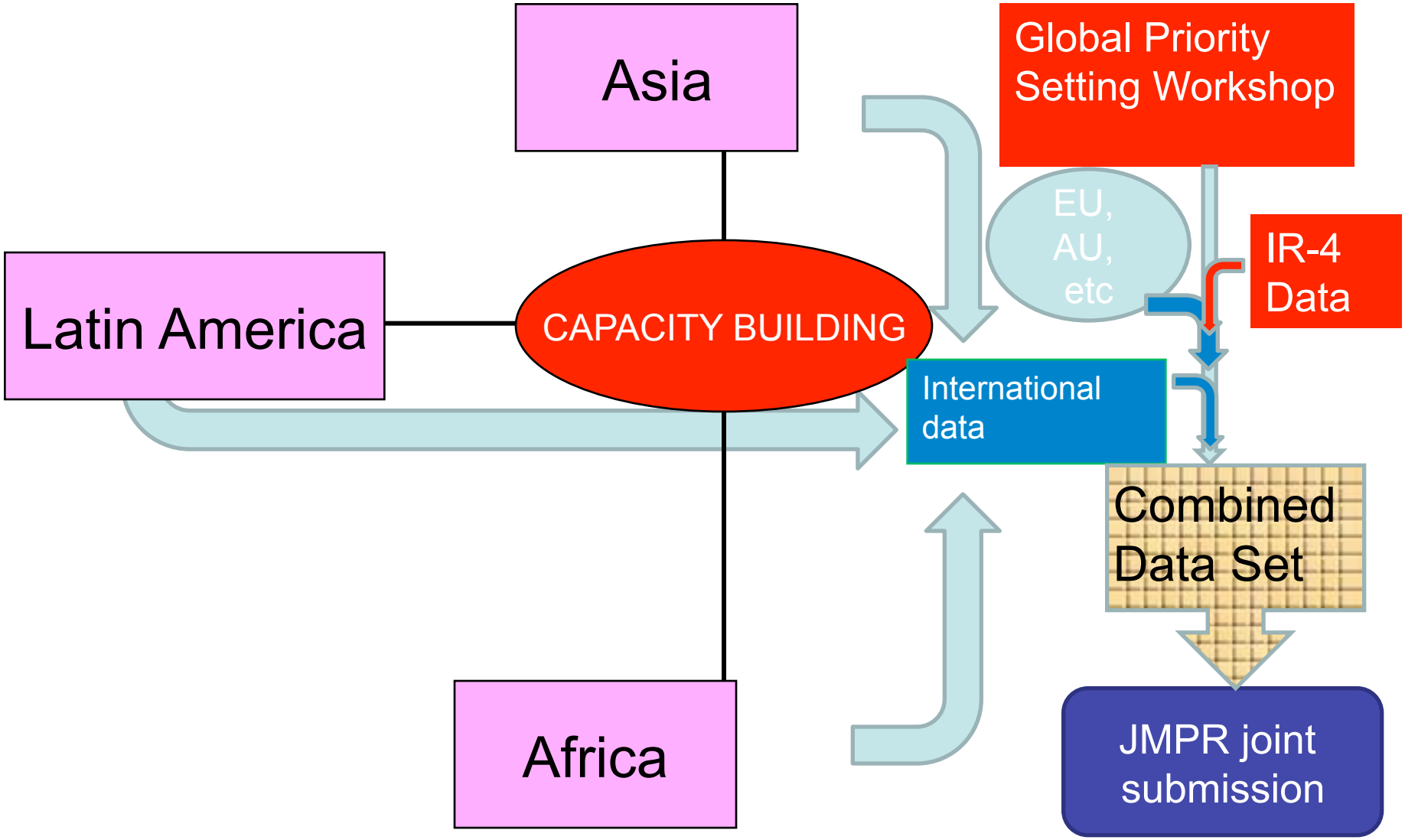
Red Font indicates active projects
Purple font indicates possible Global project on new a.i.

# Our Vision

**Global network of capable minor use programs working together to solve the MUP**

- Help establish and mentor these minor use programs
- Partner with other data development groups
- Address the many unresolved needs.

# Global Data, setting Global MRLs



# Global Process

Current framework

1000* possible projects

Global Workshop

Priorities
3 tropical
3 temperate
3 protected

Funding

Research goes forward, following year or longer

International Organizations,

Grower, researchers, Farm advisors

Identify top research priorities

Use consensus decision making process

Industry and Regulatory attend and must provide "buy in" for selected projects

Proposed framework..
For a successful model

1000* possible projects

Foundation Funding

Global Workshop

Priorities – based on needs and funds

Research starts as soon as priorities are determined

Use Global Research Hubs

*priorities collected from survey and now listed in global database

# The Global Minor Use *Fund*

- USDA- FAS has contributed towards a launch to the GMUF
  - Three Years
    - Secure other funding sources
    - Establish infrastructure
    - Support Global Prioritization Process
    - Support *some* capacity building
    - Support start up of some joint projects
  - There have been other donors…need more….

The IR-4 Project

# Global Minor Use Summit-3

## Autumn 2017


GMUS-3
Third Global Minor Use Summit
Fairmont Queen Elizabeth Hotel
Montreal, Quebec, Canada
October 1-4, 2017

# Seek further work in the areas of:

- **Technical and cooperative areas:**
  - International data sharing and research collaboration
  - limiting duplication of efforts while providing robust data sets
  - Data exchangeability
  - Involvement of all stakeholders
  - Re-evaluate capacity building
- **Policy considerations:**
  - Enhance involvement of policy makers
  - International harmonization of MRLs and risk assessments
  - Promote policy to accept exchange of field trial sites (common zones)
  - Share criteria standards that define minor uses
  - Discuss policy aspects to enhance the registration of minor uses - that add value to minor uses such as crop groups, fee waivers, etc.

# Questions/Comments

THANK YOU FOR YOUR KIND ATTENTION
Questions/Comments?

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*This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2015-34383-23710 with substantial cooperation and support from the State Agricultural Experiment Stations, USDA-ARS and USDA-FAS. 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.*