

The IR-4 Project

History Collaborations Future Directions

Jerry Baron
Executive Director
The IR-4 Project





The IR-4 Project

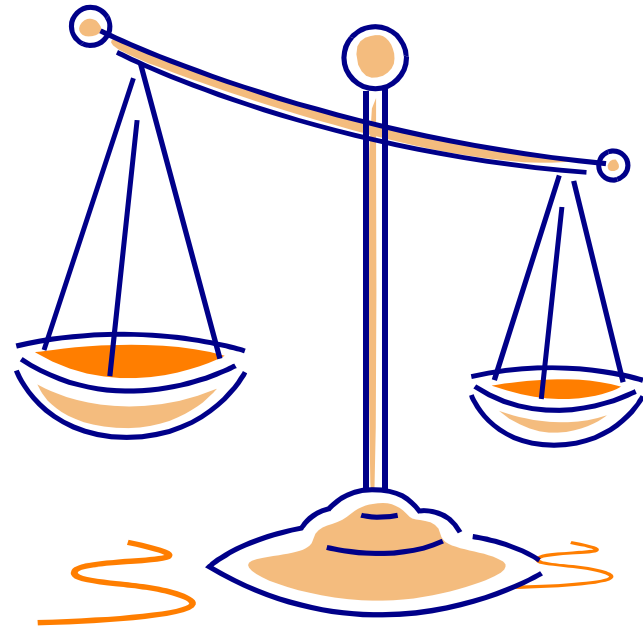
Current Mission

To Provide Safe and Effective
Pest Management Solutions for
Specialty Crop Growers

IR-4 is the only publicly funded research program in the US that develops necessary data to facilitate the registration of Crop Protection Products for Specialty Crops

Minor Use Problem

- **For low acreage, high value “specialty” crops, there are limited pest control options available**
- **It’s all about economics,
cost of data
development exceeds
potentials sales**
- **Crop damage liability further
complicates the problem**



Current Objectives and Relative Effort

- Food Program w/ Reduced Risk Products (75%)
- Ornamental Horticulture Program (10%)
- Biopesticide Program (10%)
- Crop Grouping (5%)

IR-4 Support

Direct Contributions – Almost \$16 million USD

USDA-CSREES	\$10,667,000
USDA-ARS	\$ 3,800,000
State Ag. Exp. Stations	\$ 481,182
Unrestricted Grants from Industry	\$ 1,000,000

Indirect Contributions – At least \$15 million

Test Chemicals

Technical Support

Employee Benefits

Utilities

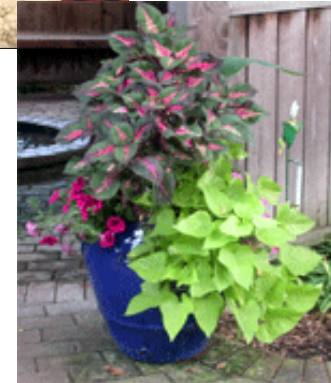
Land Use

Other miscellaneous research costs

The IR-4 Project: The Past

Excellent History of Providing Crop Protection Tools to Growers

- Established in 1963
- Over 10,000 Food Crop Clearances, 1,110 in 2006
- Over 10,000 Ornamental Use Clearances





The IR-4 Project: Milestones

**Early years, very little personnel and financial resources –
Beg, Borrow & Steel**

**Established four Regional Laboratories in 1975 through
Land Grant University System with 1st major CSREE
funding (\$250,000)**

**USDA-ARS established companion Minor Use Program in
1976**

Ornamental Horticulture Program added in 1977

Biopesticide Program added in 1982



More Milestones

**After FIFRA 88, IR-4 initiated Reregistration Defense Program
-Goal of 1000 minor uses supported with 700 actual
uses “saved”**

Established a GLP Program in 1989

Established Commodity Liaison Committee (CLC) in 1991

Established a Quality Assurance Unit (QAU) in 1993

**Strategic Plan updated in 1995 – complete Reregistration
In 1997 program shift to Reduced Risk Products and
Biopesticides**

The Holm Era

Focus on Building Partnerships

- **Crop Protection Industry**
- **Regulatory Agencies (EPA, CDPR, PMRA)**
- **Cooperate with other Minor Use Programs (e.g. Canada's PMC)**



IR-4 Food Crop Clearance Process

Stakeholder:
Define Pest
Identify Pest Management Solution
Request Help from IR-4



The Process Starts with Requests
Submitted from:

- Growers,
- Grower Groups,
- State/Federal Research & Extension Personnel

Request Reviewed by Manufacturer

Requests Prioritized

Top Priority Researched That Year
Second Priorities Researched as Money Allows



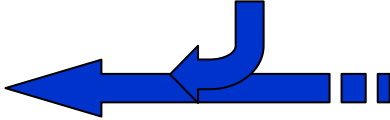
Field and Lab Research

- Measure Residue levels in Crop/Crop Group
- Top Priorities completed in 30 months



Manufacturer Adds Crop to the Product Label

Risk Assessment

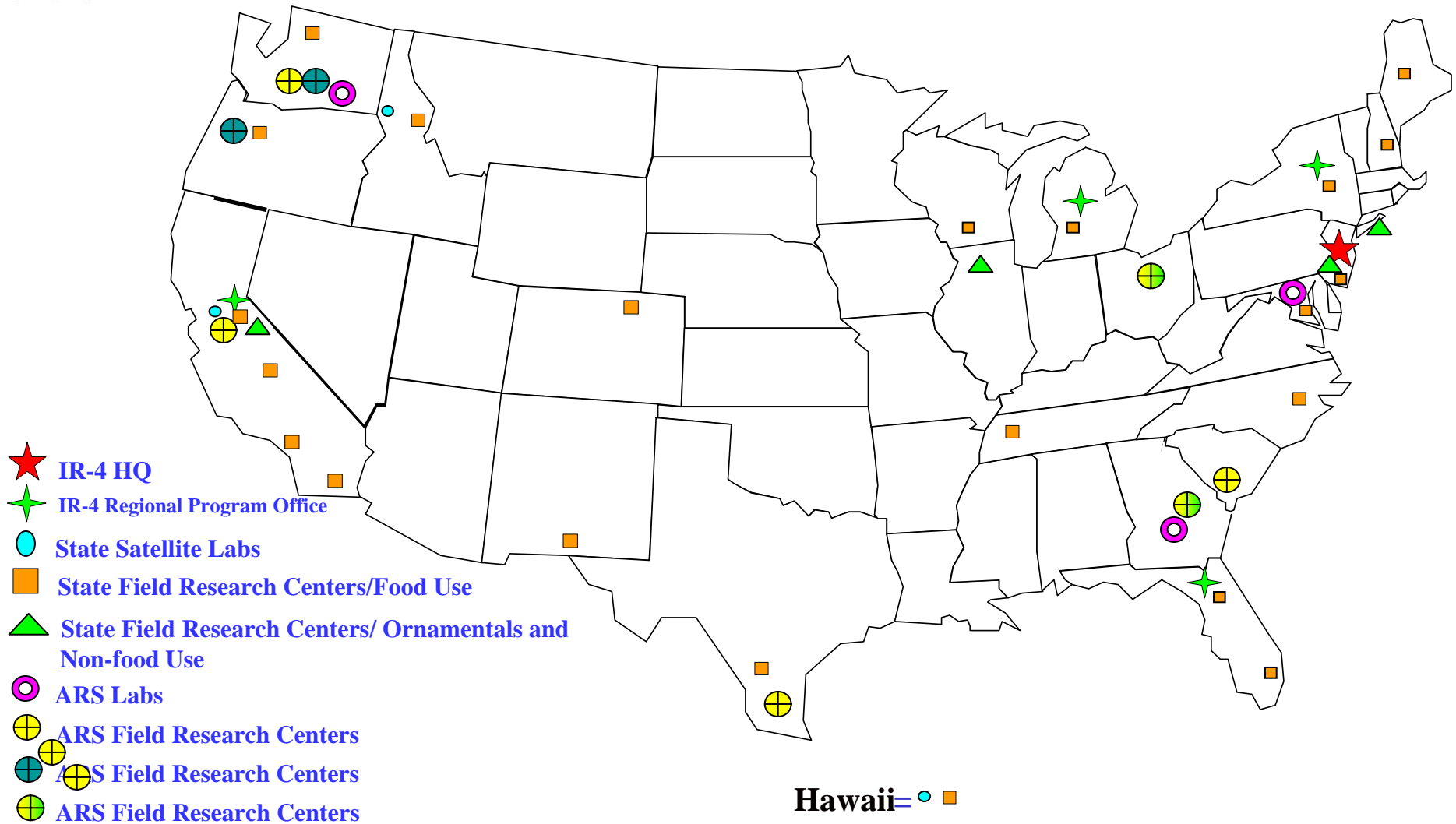


Tolerance Established by EPA in 16 months

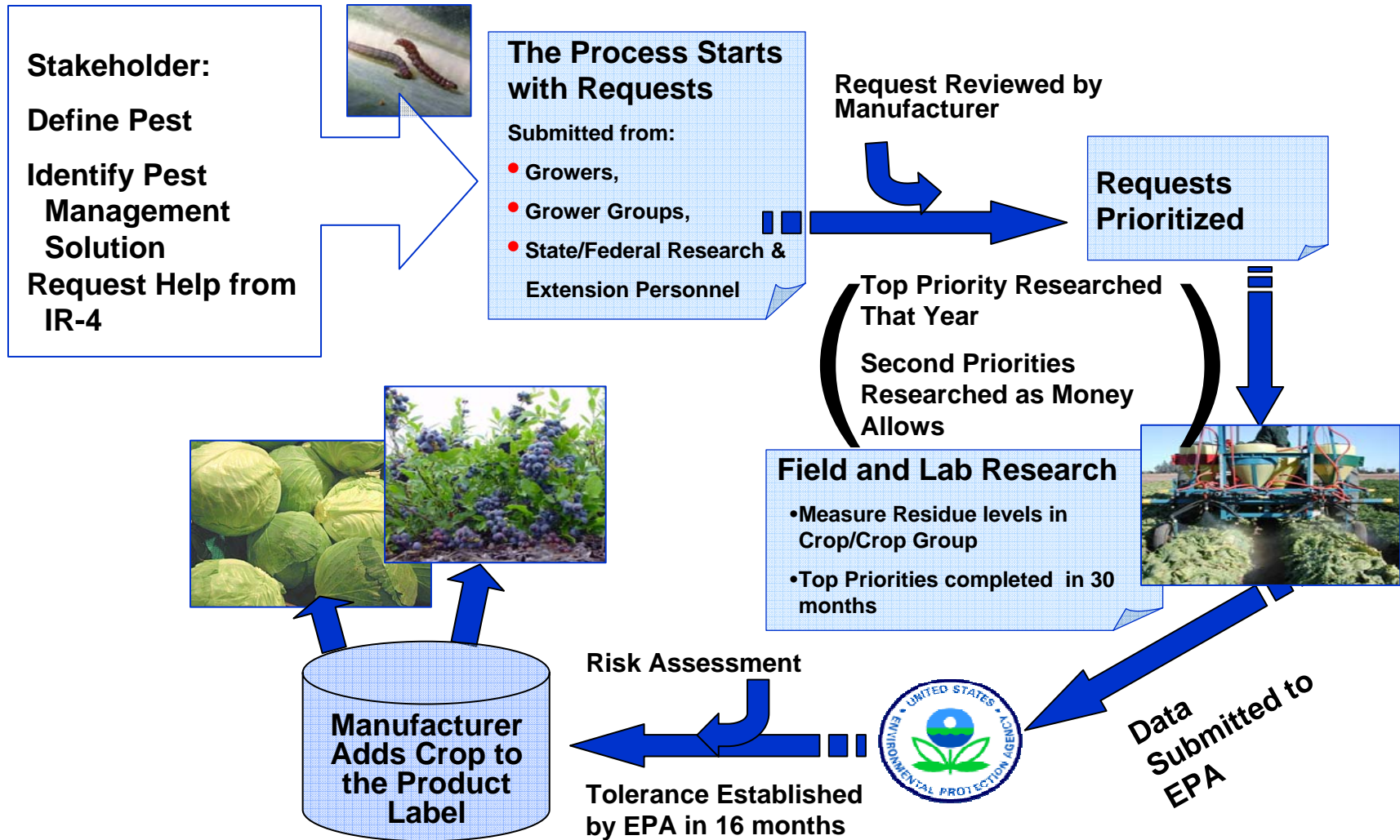


Data Submitted to EPA

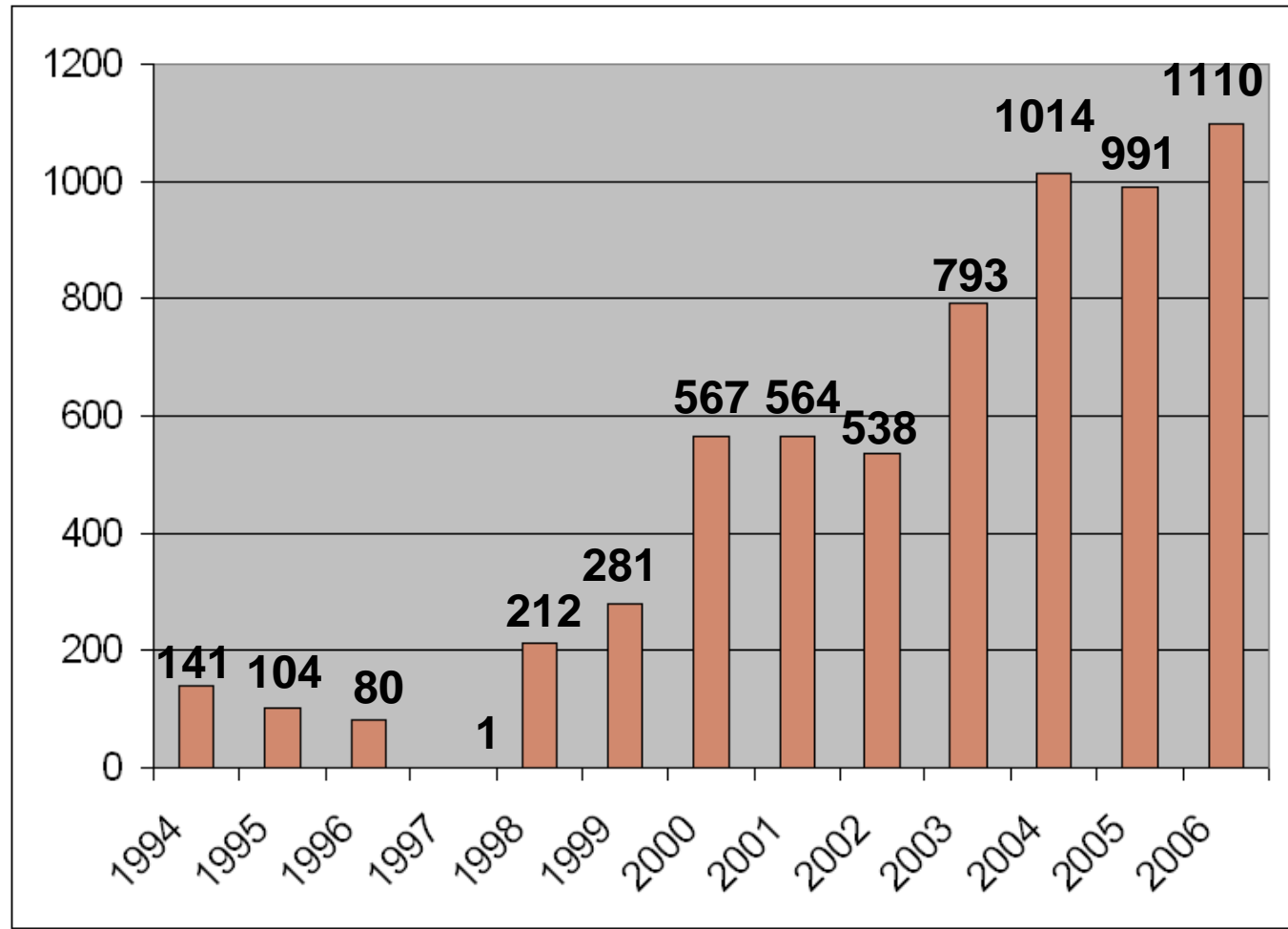
IR-4 Infrastructure



IR-4 Food Crop Clearance Process



IR-4 Food Use Clearances



2007 Farm Bill

- **A broad alliance of Specialty Crop Growers have agreed, they want programs designed to support all specialty crops, not crop specific earmarks (subsidizes and/or insurance)**
- **The Administration's proposed 2007 Farm Bill contains numerous provisions to help specialty crops, including research on pest management**
- **Should be broad support for IR-4 and its efforts**

New Opportunities

- 1. Invasive Pest Management on Specialty Crops**
- 2. Global Harmonization Activities**
- 3. Nationally coordinated efficacy/crop safety program for APWS (“A” Priorities Without Solutions)**
- 4. Sustainable funding for traditional IR-4**
- 5. Public Health**

Global Harmonization



**IF IR-4 is a program for domestic growers,
WHY get involved in Global Harmonization?**

- **IR-4 has provided domestic growers with access to numerous new pest management tools.**
- **These are OK to use if crop sold in US.**
- **Often significant problems if produce is exported. Growers forced to use older pest management tools.**

“A” Priorities Without Solutions

- **IR-4 allow stakeholders to identify a limited number of pest management voids that do not have solutions**
- **IR-4 fund and conduct comparative product performance testing to identify best solution/s**
- **Once identified, IR-4 expedite residue work**
- **Example: Onion Thrips**

Thank You!

Jerry Baron:

jbaron@aesop.rutgers.edu

(732) 932-9575 ext 4605

