The IR-4 Project

History
Collaborations
Future Directions

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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**

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>USDA-CSREES</td>
<td>$10,667,000</td>
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<tr>
<td>USDA-ARS</td>
<td>$3,800,000</td>
</tr>
<tr>
<td>State Ag. Exp. Stations</td>
<td>$481,182</td>
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<tr>
<td>Unrestricted Grants from Industry</td>
<td>$1,000,000</td>
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</tbody>
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**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)
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

Risk Assessment

Tolerance Established by EPA in 16 months

Data Submitted to EPA

Manufacturer Adds Crop to the Product Label

IR-4 Food Crop Clearance Process
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Stakeholder:
Define Pest
Identify Pest Management Solution
Request Help from IR-4

IR-4 Food Crop Clearance Process
IR-4 Food Use Clearances

- 1994: 141
- 1995: 104
- 1996: 80
- 1997: 1
- 1998: 212
- 1999: 281
- 2000: 567
- 2001: 564
- 2002: 538
- 2003: 793
- 2004: 1014
- 2005: 991
- 2006: 1110
• 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
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!

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