The IR-4 Project

Providing Safe and Effective Pest Management Solutions for Specialty Crop Growers

Biopesticide Research and Registration Support Programs of the IR-4 Project

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Presentation outline

IR-4 Biopesticide Program

- Grant Program
- Label Database
- **Regulatory Assistance**
- **Products**

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Biopesticide Grant Program-Efficacy

Early Stage- Not completed toxicology work but has connection or registrant interest.

Advanced Stage- Complete toxicology , focus on label expansion- new pest or crop.

Demonstration Grant- On farm demonstration projects to promote adoption

Technology Transfer Grant- Regional expansion of exceptional demonstration projects

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Scope Grant

- **Fruit, Vegetable, Ornamentals, Forestry, Herbs**
- **Insects, Diseases, Weeds, Nematodes, Birds, Rats, Plant Growth Regulators.**

Biopesticide Grant-

Effectiveness Biopesticide/Organic pest management product.

***Key*: Preliminary efficacy data.**

- **Biopesticide Label Database**

- **>**
- **Crop**
- **Pest**
- **State**
- **Option- Limit output to Organic products**

- **Biopesticide Label Database**

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List biopesticide products that have the crop and pest on the label and registered in that state:

For each product List: Label, AI, manufacturer contact, REI, PHI, organic status.

Survey- Farm size, typical conventional product used, intention on using biopesticide

- **Over 30,000 hits since release May 2007**

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Regulatory assistance

Receive Requests- Public sector

New Active Ingredients
Small companies, USDA, University
Arranging meetings with EPA
Writing data waiver scientific justification
Formatting documents
Government Forms
Label Modification
Communication, Negotiation
Toxicology review

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IR-4 History of Biopesticide Successes

- **1976 IR-4 submitted an exemption from tolerance for Bacillus thuringiensis(Bt) on beeswax and honey and all raw agricultural commodities when applied to growing crops or postharvest**

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Kaolin (Surround)

~ 70% market Pear Psylla replacing Dimethoate, Lorsban, Di-Syston. IR-4 submitted registration package. Important organic production

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Aspergillus flavus AF36

Arizona Cotton Research and Protection Council

California Administrative Committee for Pistachios

Texas Corn Growers Association.

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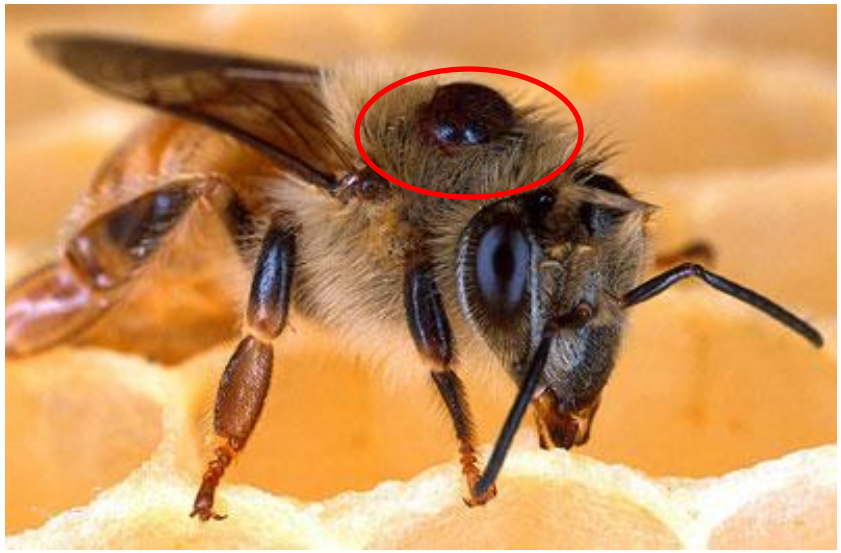
Varroa mite



Thymol,
Sucrose octanoate
Resistance issues of coumophos

Honeybee- $13 Billion pollination

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Giant Knotweed extract

Milsana

Regalia® SC

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Acetic Acid (Vinegar) as an Organic Herbicide

Anthraquinone Bird Repellant efficacy and residue work supports Section 18 labels. Replace lindane

- Seed treatment Corn
- WI, MI, MN, TX (cranes)
- South Dakota (pheasants)
- Mississippi (blackbirds)
- Tennessee (blackbirds)

- Rice Mid-South
- Sunflower, Canola

- International Crane Foundation, Audobon

Systemic control of Pythium root rot and Botrytis blight complex on Begonia

Trichoderma hamatum 382

Peat | Peat+Daconil | Peat+T382

Agricultural Research Service

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NAFTA Regulatory Activities

- **Chondrostereum- Bioherbicide from Canada**
- **Bacteriophage of Clavibacter michiganensis greenhouse tomato**

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Grant Cooperation

IR-4 and AAFC Joint Projects

Downy mildew/cucumber

Blueberry maggot

Onion thrips

Sclerotinia-white mold/dry bean

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When to Start?

Researcher

Non-GLP research
Observational studies

Researcher

- Pre-registration meeting

Suggest waiver

Suggest GLP toxicology study
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