

NRSP-4 Update

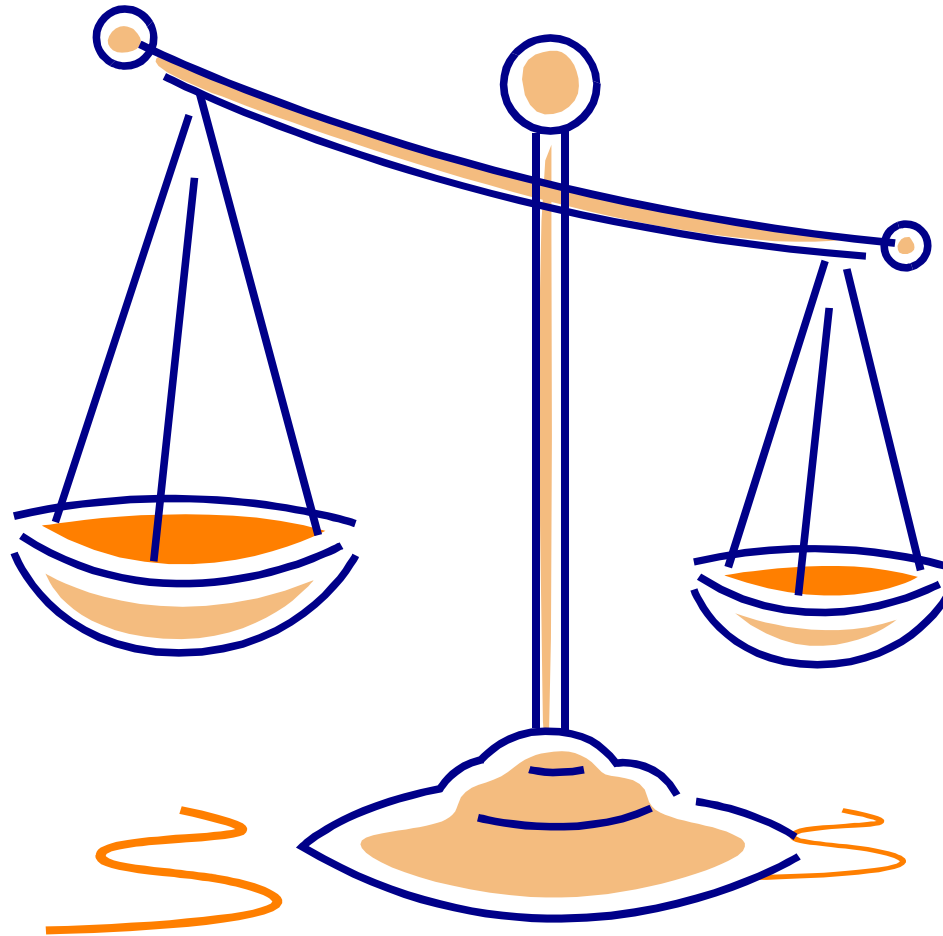
**Jerry Baron
Executive Director
The IR-4 Project**



Benefits of Pest Management

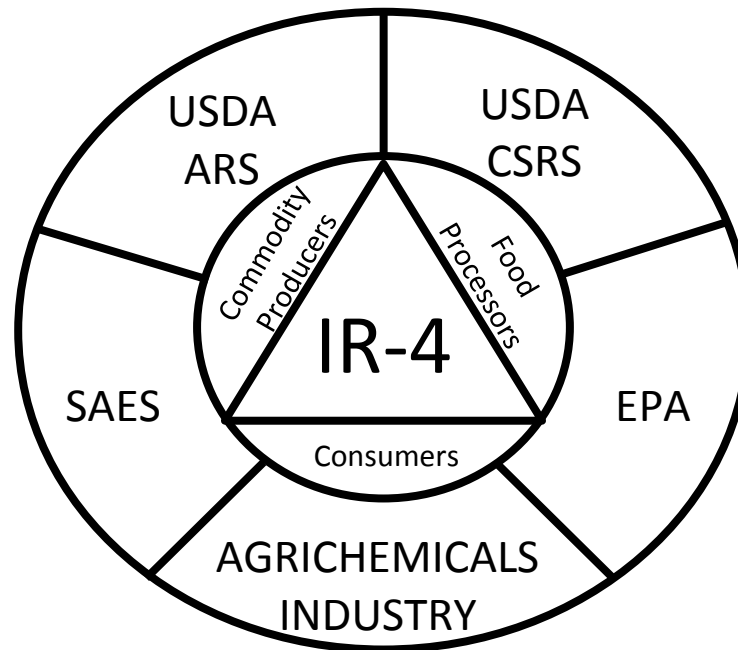


Minor Use Pesticide Problem



IR-4 Mission

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



IR-4 Project Objectives

- Food Crop Program
- Biopesticide & Organic Support
- Environmental Horticulture Program

Flagship Objective

Food Program w/ Reduced Risk Products
EPA required Magnitude of Residue
trials (19,814 supported uses)



Modern Minor Use Problem

Registrations are plentiful but ability to use approved pest management products can be limited:

- **Export issues**
- **Efficacy data needs**
- **Pest resistance**
- **Use restrictions**
- **Public acceptance**

Integrated Solutions

- 1. Screen conventional products and biopesticides**
- 2. Manage pest resistance**
- 3. Reduce pesticide residue levels to enhance trade**
- 4. Research efforts to address needs for organic production**



Global Harmonization Efforts

- 1. Repurposing old IR-4 Data**
- 2. Data Development**
 - **Global Zoning**
 - **Enhanced Domestic Research**
 - **Joint Research Projects**
- 3. Leadership (GMUS/GMUW)**
- 4. Global Minor Use Foundation**

2014 Farm Bill

INTER-REGIONAL RESEARCH PROJECT NUMBER 4.—Subsection (e) of the Competitive, Special, and Facilities Research Grant Act (7 U.S.C. 450i(e)) is amended in paragraph (4) (E) assist in removing trade barriers caused by residues of pesticides registered for minor agricultural use and for use on domestically grown specialty crops;

Biopesticides

- Focus on both conventional and organic market use
- Support biopesticide registrations
 - Regulatory Support
 - Data development now in Integrated Solutions
- Includes support for biotechnology - Plant Incorporated Protectants



Changes in Biopesticide World

- Many new effective products with registrations
- Products have fit into conventional agriculture systems
- Big companies are established in biopesticide market
- Consumer demand for green products for home and garden
- Biostimulants



Specimen Label



NATURALYTE® INSECT CONTROL

*Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

A Naturalyte® insect control product formulated for control of lepidopterous larvae (worms or caterpillars), leafminers, thrips, and red imported fire ants.

Group	5	INSECTICIDE
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Active Ingredient:

spinosad (a mixture of spinosyn A and spinosyn D)	22.5%
Other Ingredients.....	77.5%
Total	100.0%

Contains 2 lb of active ingredient per gallon.



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.



Precautionary Statements

Personal Protective Equipment (PPE)

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until sprays have dried.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds

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NATURALYTE® INSECT CONTROL

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A Naturalyte® insect control product for control or suppression of lepidopterous larvae (worms, caterpillars and each twig borers), leafminers, and thrips

Group	5	INSECTICIDE
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Active Ingredient:

spinosad (a mixture of spinosyn A and spinosyn D)	22.8%
Other Ingredients.....	77.2%
Total	100.0%

Contains 2 lb of active ingredient per gallon.

EPA Reg. No. 62719-292

EPA Est. _____

Precautionary Statements

Personal Protective Equipment (PPE)

applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Agricultural Use Requirements (Cont.)

It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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Pesticide Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Offer for recycling if available.

Refillable containers 5 gallons or larger:

Environmental Horticulture

- Predominantly crop safety testing and efficacy, including invasive pests allowing industry to expand registrations (Open Labels)
- Pollinator Protection



SIGNIFICANT Leverage of Funding

<u>GROUP</u>	<u>AMOUNT</u>	<u>PROGRAM(S) SUPPORTED</u>
NRSP-4	\$ 481,182	Food, Ornamental, Biopesticide
USDA-NIFA	\$11,916 000	Food, Ornamental, Biopesticide
USDA-ARS	\$ 3,100,000	Food & Ornamental
USDA-FAS	\$ 450,000	Food (International)
Grants from Industry	<u>\$ 1,000,000</u>	All
TOTAL	\$16,947,182	

*Does not include in-kind contributions that are provided by Rutgers (\$216K) other State Agricultural Experiments Stations (\$2.9 M), Canada (\$450 K), EPA (\$7.6 M), growers and the crop protection industry (\$5.5 M). In-kind contribution valued at over \$16.755 million annually

Funding

- IR-4 funding less today than in 2010; expenses continue to rise → less research
- CLC stepped up their game; “19 in 19”
- At the end of the process; another year of flat funding → Operation 20 in 20
- Eliminated in President’s FY 2020 proposal
- Convert to SCA in FY 2021 → 10% IDC
- Engaged in Strategic Realignment discussions

Benefits/Summary

- Growers
 - Legal access to safe & effective pest management technology.....grow high quality crops
- Food Processors & Food Retailers
 - Consistent supply of raw materials
- Economy
 - ***IR-4 contributes \$9.4 Billion to annual US GDP/supports >95,200 jobs***
- Public
 - Plentiful supply of specialty crops that contribute to a healthy diet & plants that enhance the environment.

Village farms®

Greenhouse Grown



leadership. knowledge. growth.

FFVA
FLORIDA FRUIT & VEGETABLE ASSOCIATION



National Watermelon Association



Founding Member:
MIRC
Mint Industry Research Council



THE BLUEBERRY PEOPLE®
MBG Marketing

U.S. APPLE®
ASSOCIATION

USA Dry Pea & Lentil Council

SAF
SOCIETY of AMERICAN FLORISTS
Your Growth is Our Business



THE CRANBERRY INSTITUTE



USA HOPS
HOP GROWERS OF AMERICA



Buckeyes
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Buurma
FARMS
GREENS

Buurma
FARMS
GREENS

Buurma
FARMS
GREENS

Thank You

