

The  
**IR-4**  
Project 

Pest Management Solutions for Specialty  
Crops and Specialty Uses

Environmental  
Horticulture  
Program



## Environmental Horticulture Mission

To facilitate regulatory approval of sustainable pest management technology for environmental horticulture crops that promote public health and wellbeing.

## Data Development for Registration Support

IR-4 coordinates national and regional research projects to develop efficacy and crop safety data so that new biological and chemical active ingredients can be registered and current products expanded for new uses.

- Identify grower needs through surveys and project requests
- Prioritize projects at biennial workshop
- Conduct research with scientists throughout the US
- Communicate results by summarizing trial data and posting reports
- Network with growers, researchers, registrants and regulatory officials

## Outcomes

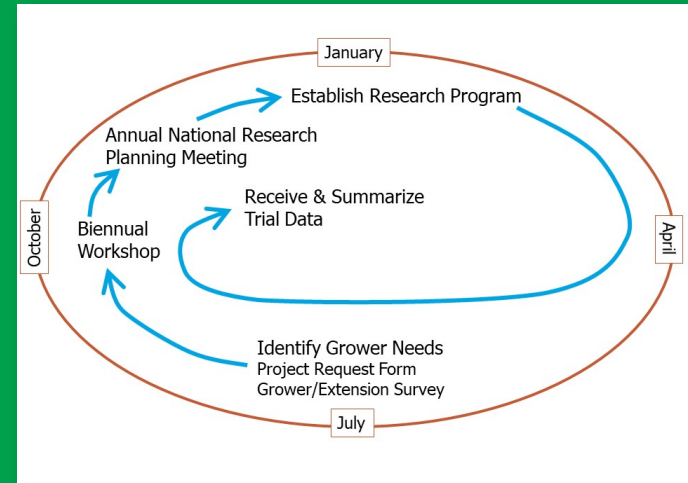
Over 38,000 registered crop uses have been registered since 1977, when the Environmental Horticulture Program was established.

Pathogen, pest, and weed management tools are readily available to greenhouse and nursery growers.

Growers and consumers benefit by having more tools for Integrated Pest Management systems and resistance management strategies.



## Environmental Horticulture Program: Research Cycle

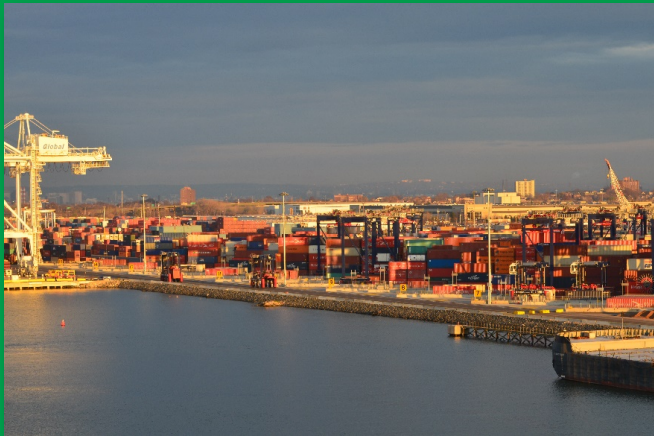


## Invasive Species

IR-4 has coordinated research projects studying mitigation strategies and developing basic knowledge for several invasive species - boxwood blight, chrysanthemum white rust, European pepper moth, gladiolus rust, and impatiens downy mildew.

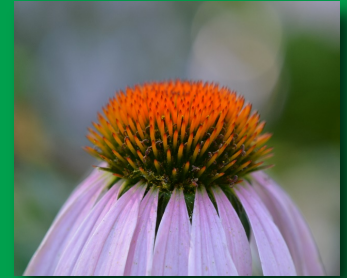
### Outcomes

- Improved management strategies
- Better understanding of environmental parameters for pathogen infection and pest development
- Serological and genetic diagnostic tools
- Increased knowledge of basic biological and genetic characteristics of these pathogens and pests



## Pollinator Protection Activities

Protecting pollinators is a unique challenge for the green industry. While the green industry is poised to provide plants to aid in habitat restoration, production systems must incorporate practices to manage pests without harming pollinators. What this means and its implementation are open questions. IR-4 hosted a workshop to refine the scientific questions and outline needed research.



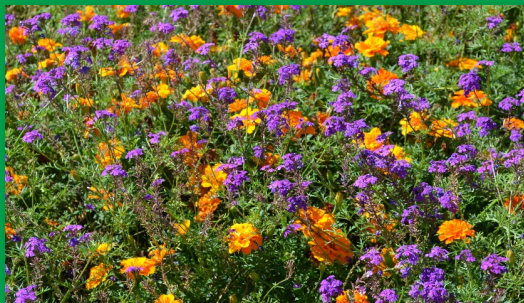
### Outcomes

- Better understanding of risk assessment processes
- Identification of key knowledge gaps for assessing pollinator risk in the green industry
- Improved awareness of how scientific results can be interpreted in diverse audiences
- Submission and receipt of an SCRI CAP research grant leading to creation of the Protecting Bees website and research to address knowledge gaps.



## The IR-4 Environmental Horticulture Program fosters a diverse selection of healthy plants for bouquets, houseplants, landscapes and urban forests.

Healthy plants provide numerous physical and mental benefits including filtering impurities out of air and water, providing food and habitat, and reducing stress levels which improves productivity and conflict resolution. Mature, well-kept landscapes enhance property value and tend to reduce neighborhood crime rates.



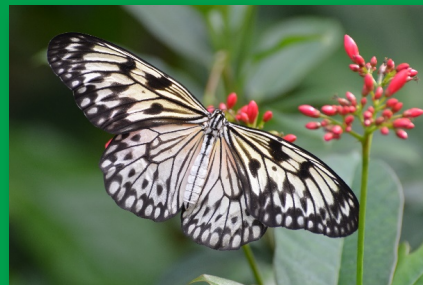
## IR-4 can best help the green industry if you

- Tell us your needs
- Contact your legislators to support adequate funding for research activities, and
- Tell us how we are doing and how we can better serve you.

## Contact Information

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*Photos by Cristi Palmer*



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