



**MICHIGAN  
POLLINATOR  
INITIATIVE**

Michigan State University  
AgBioResearch

MICHIGAN STATE  
UNIVERSITY  
EXTENSION

---

---

---


---

---

---

---

---



President Obama Memorandum  
Setting the Pollinator

**NATIONAL STRATEGY TO  
PROMOTE THE HEALTH  
OF HONEY BEES AND  
OTHER POLLINATORS**

Division of Health & Food

---

---

---

---

---


---

---

---

**MSU Research and Extension**

Working with state, industry, and non-profit groups to provide resources on pollinator related topics and issues for stakeholders



- Gardeners
- Growers
- Beekeepers
- Land managers

MICHIGAN STATE  
UNIVERSITY

---

---

---

---

---

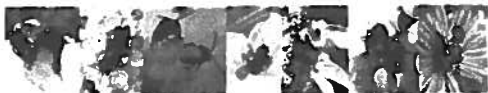
---

---

---

## Floriculture

- Education
  - Consumers
    - Planting resources – useful plants for pollinators
    - Gardening for pollinators
    - Pesticides risks – known risks and understanding uncertainty
  - Growers
    - Reduce risk to pollinators and beneficial insects
    - bee-friendly vs. 'Bee-friendly' marketing
- Research




---

---

---

---

---

---

---

---

Neonicotinoid Insecticides Used for Pest Control on Ornamentals<sup>1</sup>

Neonic insecticides given to bees orally	Honey bees		Honey bees		Bumble bees		Bumble bees	
	Lowest concentration	Lowest concentration	Lowest concentration	Lowest concentration	Lowest concentration	Lowest concentration	Lowest concentration	
	Acute (ppb)	Chronic (ppb)	Acute (ppb)	Chronic (ppb)	Acute (ppb)	Chronic (ppb)	Acute (ppb)	Chronic (ppb)
Acetamiprid	442,000	ND	5,000	ND	ND	ND	ND	ND
Clothianidin	>190	ND	24	ND	ND	ND	ND	ND
Dimethoate	>380	ND	ND	ND	ND	ND	ND	ND
Imidacloprid	>185	0.10 >20	ND	24	ND	59	ND	10
Thiomethoxam	>250	ND	ND	50	ND	120	ND	1.00



<sup>1</sup>From the 2012 Xerces Society Report: 'Are Neonicotinoids Killing Bees?'

---

---

---

---

---

---

---

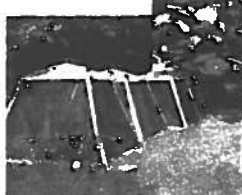
---

## Activities in floriculture

- Ongoing research
- Project Green
- Specialty Crop Research Grant



ST. LOUIS, MO



Strong ties and support from industry




---

---

---

---

---

---

---

---

Education on latest research and advanced methods - Biocontrol



- Organize tour for extension educators and growers
- Work with other groups to provide resources
- Interest in further research



---

---

---

---

---

---

---

---

On the National Stage



Protecting Pollinators in Ornamental Landscapes Conference

October 12 - 14, 2015 at the Kanuga Conference Center in Hendersonville, NC

Hosted by Michigan State University and North Carolina State University, this conference is intended for extension educators, academic and industry researchers, growers, and representatives of related industries interested in or involved with ornamental plant production or maintenance.

---

---

---

---

---

---

---

---

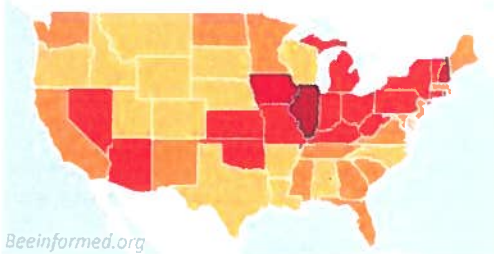


# The Michigan Pollinator Initiative

## Michigan Beekeeping



Michigan is one of the top honey producing states in the country, generally producing around 5 million pounds of honey, with a value of over \$ 7 million. Michigan honey bees provide much of the pollination services for our many fruit and vegetable crops, including cherries, apples, blueberries, melons, and cucumbers.



Beekeepers in MI experience some of the highest losses in the country – with rates of winter loss around 30% since 2006, and over 50% in 2013-2014.

## Michigan Natives



Zachary Huang

About 400 native bees call Michigan home – providing essential pollination for both crops and our natural ecosystems. These species are under threat from habitat loss, pesticides, and disease.

The **Michigan Pollinator Initiative** was formed to address current and future issues related to bees, other pollinators, and pollination in Michigan. The mission of the Michigan Pollinator Initiative is to develop a coordinated **research, education, extension, and policy** driven effort to address priority issues related to pollinators and pollination. The MPI works in pursuit of research-based solutions for beekeepers, growers, land managers, and policy makers to promote economic vitality and ecological stability.

The Michigan Pollinator Initiative (MPI) is housed in the Entomology Department at Michigan State University, and will bring together the personnel and expertise currently working on pollinator related issues. The initiative will also seek partners working on pollination and pollinator related topics in Michigan - as the initiative develops, we expect to connect with the Department of Agriculture and Rural Development, other universities, relevant state-wide organizations, and stakeholder groups.

## Primary Focus Areas

Research and education programs will focus on the following areas:

- Pollinator health
- Forage for honey bees and wild bees
- Pesticide use best practices
- Information delivery for beekeepers and growers
- Pollinator-related education

## Target Stakeholders

- Beekeepers
- Growers
- Students
- Land Managers

*For more information on the Michigan Pollinator Initiative, email Meghan Milbrath at [mpi@msu.edu](mailto:mpi@msu.edu)*

