

<b>Title:</b>	<b>The Ohio Extension Integrated Pest Management Program 2013-2016</b>		
<b>Sponsoring Agency</b>	NIFA	<b>Project Status</b>	COMPLETE
<b>Funding Source</b>	Non Formula	<b>Reporting Frequency</b>	Annual
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**Program Code:** QQIPM

**Program Name:** Extension Integrated Pest Management -

**Project Director**

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**Recipient Organization**

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**Performing Department**

{NO DATA ENTERED}

**Co-Project Directors**

{NO DATA ENTERED}

**Departments**

{NO DATA ENTERED}

**Non-Technical Summary**

The Ohio Extension IPM Program is a comprehensive program organized to encourage collaboration and innovation between OSU Extension, OSU Department faculty, and a multitude of stakeholders. The IPM Program is integrally connected with focused Extension teams who strongly connect to stakeholders and help us gather input on our direction and priorities. We also have an advisory committee that annually reviews the past actions of the IPM Program and comments on the future direction of the program.

Other methods we use to gather stakeholder input comes from our program emphasis area leaders and from growers involved in our field days, workshops, and demonstration projects. Stakeholder comments are directly solicited from commodity groups, grower associations and other professional associations.

The Ohio Extension IPM Program is a balanced yet flexible program, serving both rural and urban audiences, allowing us to systematically respond to stated IPM Roadmap issues while being able to effectively address current pest issues and rapidly respond to emerging pest issues. We value traditional IPM programming conducted via field days, workshops, and conferences, yet embrace the use of newer electronic techniques such as webinars and video recordings. We constantly seek to expose new audiences to the benefits of IPM principles.

In this proposal we are focused on serving the needs of Specialty crop growers (fruits and vegetables), Agronomic crop growers (field corn, soybeans, wheat), maintaining and enhancing the outreach of our Pest Diagnostic Facilities, promoting early detection and sound pest management of bed bugs in residential and multi-unit dwellings, and reaching broadly to educate the average Ohio citizen through Master Gardener IPM training module and newly expanding Urban farming movement.

**Accomplishments**

**Major goals of the project**

For the next three years, each of the five EIPM program emphasis area will work to achieve all or a subset of these goals:

- 1) To develop, conduct, and resource IPM related workshops, conferences, webinars, and meetings to support the needs of our various clientele. It is critical this program remain flexible enough to conduct programs for new and emerging pest management issues that may radically impact entire emphasis areas and ensure the transfer of new practices and techniques developed from on-going research programs to appropriate clientele.
- 2) To develop and contribute to specific outreach resources such as newsletters, enhanced factsheets, e-publications, online IPM videos, and smart phone applications. It is critical this program continues to produce new resource materials to address current issues facing our various clientele.

- 3) To develop and maintain a responsive information network that serves our clientele, stakeholders, and collaborators. It is critical that this program modernize its web based and electronic information dissemination network to increase its visibility and utility.
- 4) To enhance the capacity of basic IPM program functions, such as pest diagnostics and pest monitoring. It is critical we maintain infrastructure for broad pest identification, monitoring, and reporting functions integral to statewide IPM programs as they serve clientele ranging from homeowners to commercial producers.
- 5) To increase our evaluation of all IPM program emphasis areas to adequately document output, outcomes, and impact. It is critical for the continued success of our program to report measurable progress and accomplishments to our funders, administrators, collaborators, and stakeholders.

### What was accomplished under these goals?

#### Buckeye Lady Beetle Blitz

The Buckeye Lady Beetle Blitz Program surveys native and exotic lady beetles across Ohio with the help of home gardeners. In 2014 we trained 94 participants across three workshops to collect and report lady beetle data. Each participant received a tool kit including all the materials needed to collect and interpret their data. Of these we had 77 and 70 volunteers send in their data from June and August, our two sampling periods. Currently one undergraduate student and a laboratory technician are verifying the accuracy of volunteer identifications by examining their sticky cards and data sheets. A key outcome of this project will be a greater understanding of the current lady beetle assemblage using home gardens, how it varies across the growing season and if changes can be detected since we began collecting data in 2009.

#### Pollination Investigators

The goal of the Pollination Investigators program is to measure how local and landscape variables influence pollination of vegetable crops in home gardens. In 2014 we trained 94 participants across three workshops to collect and report pollination data. Each participant received a tool kit including all the materials needed to collect and interpret their data. Of these we had only 7% of volunteers send in their data which is currently being analyzed. We are looking into ways to increase our data return rate on this project so that differences can be measured.

### What opportunities for training and professional development has the project provided?

Mary Gardiner (investigator), Chelsea Smith (research assistant II) and Scott Prajzner (graduate student) received partial support to attend the Entomological Society of America Meeting in Portland, OR in November 2014, where each presented either a poster and gave a talk.

### How have the results been disseminated to communities of interest?

{Nothing to report}

### What do you plan to do during the next reporting period to accomplish the goals?

{Nothing to report}

### Participants

#### Actual FTE's for this Reporting Period

Role	Non-Students or faculty	Students within Staffing Roles			Computed Total by Role
		Undergraduate	Graduate	Post-Doctorate	
Scientist	1.8	0	0	0	1.8
Professional	0.5	0	0	0	0.5
Technical	0.5	0	0	0	0.5
Administrative	0	0	0	0	0
Other	0	1	0.5	0	1.5
Computed Total	2.8	1	0.5	0	4.3

### Student Count by Classification of Instructional Programs (CIP) Code

Undergraduate	Graduate	Post-Doctorate	CIP Code
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Undergraduate	Graduate	Post-Doctorate	CIP Code
9	1	0	01.00 Agriculture, General.

**Target Audience**

The following groups of people have been reached by the outreach efforts of the OSU EIPM Program during September 1, 2013 – September 30, 2014; commercial fruit growers, commercial small fruit growers, commercial vegetable growers, home gardeners, Master Gardeners, students, diagnosticians, teachers, extension educators & other professionals, Ohio NRCS state and local staff, crop consultants, certified crop advisors, seed company representatives, agri-chemical company representatives, commodity board representatives, and field crop producers. Other targeted audiences include small scale Appalachian farmers, rural and urban farmers, African American and Hispanic farmers, socially and economically disadvantaged refugee immigrant farmers from several counties in Africa. Amish & Mennonite farmers who are educationally disadvantaged (8th grade education at best) were also served by this project.

**Products**

Type	Status	Year Published	NIFA Support Acknowledged
Conference Papers and	Published	2014	NO

**Citation**

Gardiner, M.M., M. Griffith, and C.A. Smith. Online versus workshop: does your training method affect the accuracy of citizen-science collected arthropod data? Student Symposium: the buzz about entomology: engaging the public in science. Entomological Society of America North Central Branch Meeting. Des Moines, IA.

**Other Products**

**Product Type**

Other

**Description**

Three workshops were held in May, 2014 to train volunteers to participate in the Buckeye Lady Beetle Blitz and Pollination Investigators citizen science programs. We trained a total of 94 participants at locations in Wooster, Cleveland, and Cincinnati OH.

**Changes/Problems**

{Nothing to report}