

Michigan State University IPM Program Report on 2013-14 highlights

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Sell-out crowd for MSU IPM Academy – enhanced with NCR SARE

In February 2014, a group of MSUE educators, led by Erin Lizotte, Mallory Fournier and Joy Landis, collaborated to develop a two-day Academy that cut across commodity groups and provided educational resources to serve beginner and advanced IPM users. (View program details at <http://bit.ly/ipm-academy14>.) With support from a Sustainable Ag Research and Extension (SARE) Professional Development grant we doubled participation over 2013. This was the second year of the grant which aims to reach consultants and others who advise farmers and is part of our effort to multiply our connections to farmers. We surveyed attendees asking whether they plan to utilize, expand or improve use of a variety of IPM practices and resources and are analyzing those results. We will follow up with a second survey after the growing season to learn whether they followed through on their intentions to practice IPM.

IPM news and alerts a focal point at growing MSU Extension (MSUE) website

Successful IPM practitioners value access to regional data and advice throughout each unique growing season. The IPM communications team organizes over 60 MSU campus specialists and field extension staff to produce IPM and related articles and reports. This information is posted in the plant agriculture portion of MSUE's website (<http://msue.anr.msu.edu/topic/info/agriculture>). Educational and advisory information is posted year-round, peaking during the growing season when an average of 95 articles is posted each month. During 2013, the IPM communication team edited and posted over 970 articles (up from 2012's 840 articles) written by MSUE specialists and educators.

The accompanying table shows the number of people signed up to receive a weekly email digest of these articles. These counts do not reflect the many people who go directly to the web pages through search engines (58 percent of all). The entire MSUE website received over 1.3 million visitors last year, who made over 3.3 million page views. Our IPM information continues to be a significant draw for this traffic. Early feedback gained during our survey on how MSUE IPM programming impacts Michigan's agricultural producers indicates that MSUE's in-season advice is one of the most valued services provided to Michigan's IPM practitioners.

Category	# of digest subscribers March 2013	# of digest subscribers March 2014
Fruit & Nuts	1,382	1,868
Field Crops	1,301	1,645
Vegetables	1,239	1,732
Turf & Landscape	3,010	4,132
Nursery & Christmas trees	1,762	1,858
Floriculture	759	948
Home Gardening	974	1,739
Total subscribers for weekly digests	10,427	13,922

Survey initiated to measure MSU Extension IPM programming impacts on Michigan's agricultural producers

In fall 2013, we began an evaluation with MSU economist Steven Ray Miller to measure the impacts of our IPM programming with a goal of improving our future efforts. The process began with a focus

group discussion with chemical representatives and scouts. A mail survey with the National Agricultural Statistics Service is currently underway. A potential second focus group is proposed for early fall 2014. While observations can be made from the focus group and early mail responses, we are not at a point to analyze results.

Enviro-weather continues to expand its resources and use is up.

MSU's IPM and climatology programs collaborate to oversee Enviro-weather, an online resource that provides dependable weather-based information to support IPM and other management decision-making. Enviro-weather includes over 80 stations across Michigan and Wisconsin's Door Peninsula. Weather data is communicated quickly and inexpensively using cellular IP technology to connect to MSU for organizing and archiving to run applications.



<http://www.envioweather.msu.edu>

The tools, summaries and applications available on the web site have increased from 19 (16 commodity-specific, geared primarily toward fruit producers and three general weather tools) in 2007 to 55 (45 commodity-specific, including fruit, vegetables, trees, landscape and field crops and 10 general weather tools). We continue to field requests for additional web tools and more than 10 are in progress for 2014.

Enviro-weather use has grown considerably as evidenced from website usage statistics and user comments. In 2013, users accessed Enviro-weather tools 198,000 times, compared with 46,000 in 2008 and 109,000 in 2010. This was a decrease from the number of times tools were accessed in 2012 (234,000), but most of the 2012 increase was during March and April, during the unprecedented heat wave and ensuing frosts, showing that Enviro-weather is essential when up-to-date information on how weather affects crops and pests is

needed. During meetings, field days and conventions, users continually stress the important role that Enviro-weather plays in managing their crop.

Smart Gardening Initiative

The MSU IPM Program has entered a second year of collaboration with our consumer horticulture team and Master Gardener volunteers to deliver key messages for garden and lawn care. Our goals are to get more gardeners using the following practices:

- **Smart lawns** - Mow at the highest setting to promote deep roots, avoid grub damage and crowd out weeds.
- **Smart plants** - Select plants, trees and shrubs that are native or well-adapted to challenges by pests and local conditions.
- **Smart soils** - Test the soil to use money and soil wisely by fertilizing only as needed per test results.

We used these as stand-alone messages in MSUE News articles and also embedded them in more comprehensive programs such as exhibits with tip sheets at large home and garden shows and smaller workshops. We looked for multiple uses for everything designed or written to maximize time and funds committed. Some of our results include:



- Smart Gardening exhibits at garden shows in Grand Rapids and Novi drew people from more than 50 of Michigan's 83 counties and two surrounding states. Master Gardener volunteers documented 1,789 discussions about Smart Gardening at the shows.
- MSU sales of soil test kits for lawns and gardens are up 203 percent with 3,433 sold in 2013.
- Calls to our statewide garden hotline grew 20 percent and website visits have increased 25 percent.
- Surveys of the participants in the Grand Rapids Smart Gardening conference and apprentice program indicate 69 percent used a soil test, 90 percent raised their mowing height, and 91 percent installed native plants.
- Extension educators' time was used efficiently as information developed for a show presentation was used for an MSUE article which then became a printed tip sheet. Master Gardener volunteers, who previously answered random questions at booths, are excited to be trained on a focused message with new, related tip sheets to share.
- The Ohio State University is sharing Smart Gardening programming and materials with us through a federal IPM Extension collaboration beginning fall 2013.

Feeding the interest in cover crops

In 2013, Dale Mutch and Dean Baas continued our research, demonstration and outreach on the use of cover crops as part of an IPM program. By leveraging resources and funding with the Great Lakes Cover Crop Initiative (GLCCI), an EPA Great Lakes Restoration Initiative project, 35 events were held in Michigan reaching 1,378 participants. Presentations and discussions at these events included the benefits of cover crops to pest management, soil health, nutrient management and ecosystem services. In 2013, an additional 9,500 acres of cover crops were planted through the GLCCI project. This raises the three year total to 37,000 acres of cover crops planted in the Great Lakes Basin through this project. One Bay County farmer involved in the GLCCI noted that oilseed radish has been used in some areas to control nematodes, a benefit he's hoping to reap in his fight against sugar beet cyst nematode. Four on-going studies are investigating biofumigant cover crops and their impact on nematodes in fruit, vegetable and soybean systems.

More information at: www.ipm.msu.edu