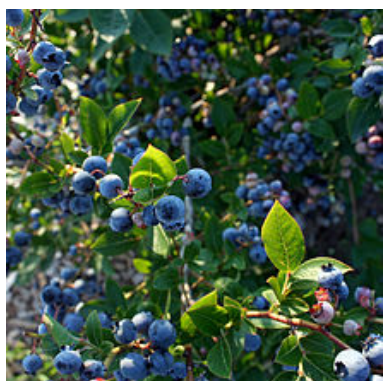




Fruit Production

Impacting the Michigan Fruit Industry

In 2015, the state's \$56.6 million investment in Michigan State University (MSU) AgBioResearch and MSU Extension generated more than \$1 billion for Michigan residents. Every dollar the state invested in MSU AgBioResearch and MSU Extension leveraged an additional \$2.59 in federal funds and external contracts, grants and other revenues. As a result, MSU Extension and MSU AgBioResearch are able to serve Michigan residents with a benefit/cost ratio of 18:1. More than 13,500 participants used science-based deliverables including educational meetings, reports and bulletins produced by MSU Extension fruit researchers and educators in 2015.



“IPM meetings are definitely worth the time spent to attend. They are invaluable.”

- Grower participant of northwest Michigan IPM updates.



THE ISSUE

Michigan is a major producer of apples, blueberries, cherries, grapes and many other fruit crops. To maintain competitiveness in a global marketplace, Michigan fruit growers need to be on the cutting edge of economically sustainable production, pest management and post-harvest practices.

MSU EXTENSION ACTION

MSU Extension develops programs and publications to support long-term grower profitability while rapidly responding to the immediate needs of Michigan's diverse fruit industry. MSU Extension fruit researchers and educators promote current production efficiencies, sustainable pest management strategies and post-harvest techniques for tree fruits, berries and grapes.

THE IMPACT

- Fruit educators develop one-time workshops on specific topics, as well as weekly, bi-weekly or monthly face-to-face meetings that provide timely horticultural and integrated pest management (IPM) information to fruit producers. In 2015, these meetings included:
 - › Tree Fruit Plant Growth Regulators (PGR) meetings in west Michigan for apple producers that attracted 189 participants.
 - › IPM meetings that reached over 800 fruit producers and crop consultants who look to MSU Extension for production recommendations during the growing season. Seventy-six meetings were held in 2015: 32 Northwest Tree Fruit IPM Updates, five Northwest First Friday Grape Grower Meetings, 11 Southwest Fruit IPM Meetings, 23 Fruit Ridge Tree Fruit Meetings and seven Blueberry IPM Meetings. As a result of these IPM meetings:
 - 89 percent scouted on farms for pests/diseases to make management decisions.
 - 65 percent referred to MSU Enviro-weather pest and disease models to assist with management decisions.

- 92 percent rotated fungicides to minimize risk of fungicide resistance.
- 61 percent reduced the number of fungicide applications for powdery mildew.
- 80 percent relied on MSU's spotted wing Drosophila trapping program to guide management decisions.
- The invasive insect, spotted wing Drosophila (SWD), is a top priority for Michigan fruit producers. MSU Extension has delivered research and programs to help producers minimize production risks associated with SWD.
 - › In 2015, statewide surveys were sent to industry stakeholders to assess the impact of SWD extension efforts. Survey results indicated the following:
 - 73 percent saw an increase in management costs due to SWD.
 - 92 percent used the weekly MSU Extension SWD trapping report to help guide management decisions.
 - 76 percent altered their insecticide program based on monitoring information from their region.
 - 69 percent changed their management practices when trap catches increased in their region.
 - The majority of growers had no crop losses to SWD.
 - › These survey results indicate that timely, cost-effective and reliable management of SWD is of high importance to Michigan fruit growers. Continued SWD research and programming is critical to assist growers with SWD management decisions.
 - › MSU Extension SWD programs reduced the number of insecticide applications made in blueberries in 2015 by one spray compared with 2014. Pest management costs also decreased to \$215 per acre, \$44 less per acre spent in 2014 and \$157 less than in 2013.
- The 2015 Winery Establishment Conference hosted 46 participants from 15 counties in Michigan. Participant survey results (n=30) representing 65 percent of participants indicated the following:
 - 100 percent would recommend this conference to others.
 - 83 percent do not own a winery.
 - 70 percent intend to start a new winery, which could result in potentially 19 new wineries.
 - 13 percent intend to meet with a zoning administrator.
 - 10 percent intend to start the process of winery establishment.
- MSU Extension publishes timely, fruit-related information.
 - › Six updated or new bulletins and fact sheets were distributed via the MSU Extension Bookstore or MSU Extension Fruit and Nut webpages.

- › More than 200 articles were distributed via MSU Extension News (www.msue.anr.msu.edu/topic/info/fruit). These articles reached more than 4,000 subscribers through the Fruit & Nut Digest.



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