Michigan Vineyard IPM Extension Program

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Project objectives

Demonstrate performance of scouting and reduced-risk management in commercial vineyards.

Deliver information on IPM and new pest control tactics to the Michigan grape industry.

Deliver training programs on harvest-time pest concerns.
Weekly vineyard scouting

Checking berry moth trap at Berrien farm

Scouting at Van Buren farm
Demonstrating grape IPM programs

Berrien County (Vignoles, Concord) and Van Buren County (Chancellor, Niagara)

For each vineyard pair....
Grower's standard program
   Leverage, Sevin, Intrepid, Imidan, Mustang Maxx, Penncozeb, Ridomil, etc.

IPM program
   Intrepid, Venerate, Altacor, Phostrol, Sovran, Orius, etc.

Each vineyard monitored weekly for insect pests and diseases
Rose chafer, grape leafhopper, potato leafhopper, grape berry moth and Japanese beetle, SWD and BMSB

Phomopsis, black rot, powdery mildew, downy mildew, Botrytis, and sour rot

Sampled five clusters and five leaves on each of 5 vines on vineyard borders, and interior
Disease incidence in juice grape vineyards receiving either an IPM or Standard program. Downy mildew infections on leaves in two juice grape vineyards in southwest Michigan in 2017 (Left). Black rot symptoms on leaves and clusters at the same vineyards (Right).
Late-season disease cluster infections in wine grape vineyards receiving either an IPM or Standard program in southwest Michigan in 2017. Sour rot (Left) and Botrytis (Right).
Captures of spotted wing drosophila flies in monitoring traps at our study sites (Left).
Comparison of vinegar fly infestation between programs at grape farms in southwest Michigan (Right).
Delivering IPM programs

SW Hort Days
Great Lakes Expo
NW Vineyard Show
First Fridays
Summer IPM meetings
Viticulture Field Day
Annual Northwest Michigan Orchard and Vineyard Show will be Jan. 17-18, 2017
December 15, 2016 | Nikki Rothwell | Growers are encouraged to attend this two-day, premier educational program to discuss important issues for Michigan fruit industry and much more.

Managing spotted wing Drosophila in organic small fruit
December 13, 2016 | Heather Leach | Michigan State University releases new resource on useful information for managing spotted wing Drosophila in organic small fruit production.

Combing through Michigan’s pollinator planning efforts
November 21, 2016 | Meghan Milbrath | Why are so many Michigan pollinator planning efforts being developed? Let’s take a closer look at three programs and plans currently forming.

Pollination Forum will shine a spotlight on issues facing pollinators
November 11, 2016 | Meghan Milbrath | Join us Nov. 29, 2016, for the latest information on issues facing bees and the solutions being developed to support crop pollination.

2017 Northwest Michigan Orchard and Vineyard Show
Jan 17, 2017 – Jan 18, 2017 | Grand Traverse Resort, 100 Grand Traverse Resort Village Boulevard, Williamsburg, MI 49690

2017 Winter Grower Produce Safety Course
Jan 19, 2017 | MSU Northwest Horticultural Research Center, 6686 S. Center Hwy, Traverse City, MI 49684
Northwest Michigan wine grape report – Oct. 5, 2017

Summary of spotted wing Drosophila activity, harvest status, fruit maturity and innovative thermovinification technology.

Posted on October 5, 2017 by Thomas Todaro, and Nikki Rothwell, Michigan State University Extension

Spotted wing Drosophila activity of Leelanau Peninsula and Old Mission Peninsula

Spotted wing Drosophila (SWD) populations typically increase, often exponentially, through the growing season. However, this season we measured clear fluctuations of SWD adults trapped at vineyard centers and borders in all regions of northwest Michigan.

The initial decline of SWD population in vineyards earlier this fall were from traps near north central Old Mission Peninsula; these SWD trap number decreases occurred from Aug. 31 through Sept. 6 (Figs. 1A, B and C). The cause of this early and somewhat unusual population decrease was likely a result of the weather where relatively low temperatures and higher than normal rainfall were recorded (Fig. 2). From Sept. 6–14, SWD populations remained low, again likely due to relatively low average and minimum temperatures.

From Sept. 14–21, there was a considerable increase in the number of total SWD trapped in the south-central Leelanau Peninsula, north-central Leelanau Peninsula and north-central Old Mission Peninsula regions (Figs. 1A, B, C). We attribute the recent SWD increase (second spike) to environmental factors, as we only recorded two rainfall events: 0.19 inch on Sept. 17 and 0.06 inch on Sept. 21. Additionally, minimum temperatures did

MSU Grape Update subscribers:
1,875 in November 2016 to 2313 in Feb 2018.

During 2017, articles containing “grapes” received 50,000+ views of which 37,500+ were unique pageviews.

Tom Zabadal videos on pruning and tying vines have been viewed over 318,000 times, an increase of 41,000 over last year.

MGWIC project reporting videos available grapes.msu.edu
Thanks to....

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