



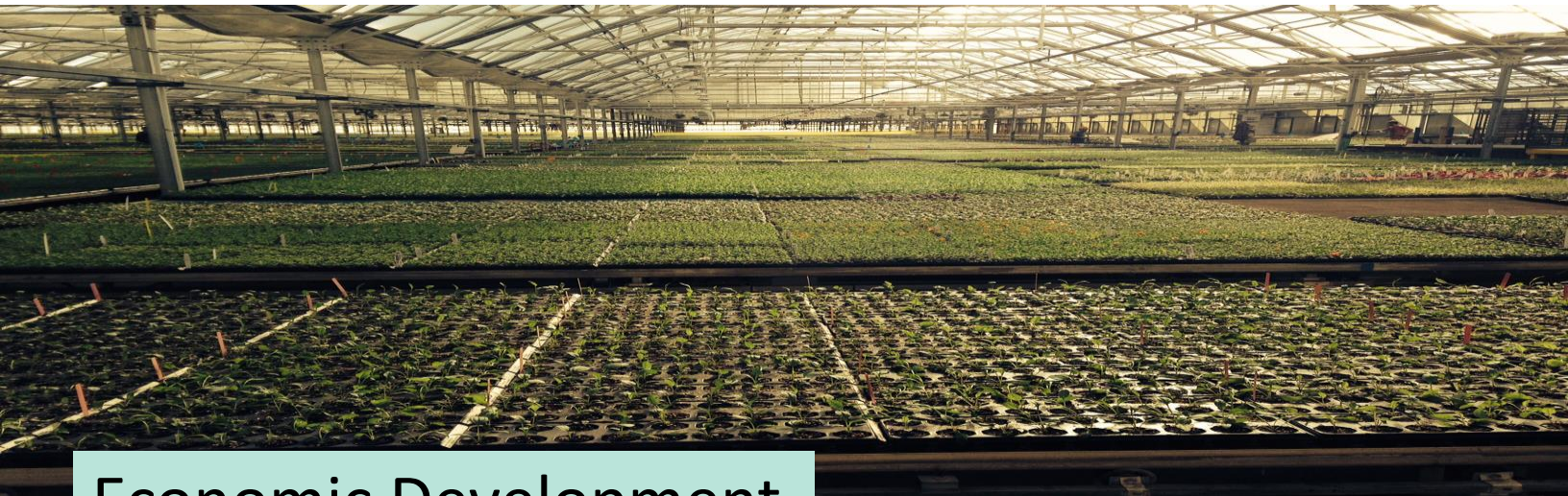
AGRICULTURE DEVELOPMENT DIVISION

Fiscal Year 2017

**Peter Anastor
Division Director**

**Michigan Department of Agriculture and Rural Development
525 West Allegan, Lansing, MI 48933**

AGRICULTURE DEVELOPMENT DIVISION



Economic Development

PROGRAM MANAGER: Peter Anastor | 517-284-5777 | anastorp@michigan.gov

The Agriculture Development Division delivers expertise and leadership to support economic prosperity in Michigan's food and agriculture sector through industry focused economic development, export assistance and grant management. The division also provides executive support for the Grape and Wine Industry Council and serves as the liaison with Michigan's many agriculture commodity groups.

The Economic Development Team provides assistance to growers, producers, processors and the food and agriculture industry in order to promote growth and investment in Michigan agriculture. Assistance is provided to both new and existing businesses and includes supply chain connections, regulatory assistance, funding, collaboration, and trade for the agriculture, food and forest products sectors. Our team works collaboratively with other federal, state and local economic development partners to provide seamless services to agriculture and food customers. We are also engaged in the broad agriculture, food and forest products sectors to provide a stable, constant connection and up-to-date understanding of opportunity areas.

ACCOMPLISHMENTS:

- Launched a new incentive that specifically focuses on the growth of the food and agriculture industry. The Food and Agriculture Investment Program will accelerate the growth of the state's food and agriculture companies by providing incentives that focus on value-added opportunities.
- ZFS Ithaca plans to invest \$129 million and add 74 new jobs for the development of a new soybean processing facility in Ithaca, Michigan. The new facility will have the capacity to process between 2,500 and 5,000 tons of soybean per day.
- Great Lakes HPP launched in Michigan with plans to develop a high-pressure processing (HPP) tolling center, food lab and innovation center in Taylor, Michigan. The company plans to invest \$5.5 million and will create up to 75 new jobs.
- Continental Dairy and Fairlife Milk found a sustainable wastewater solution through a Food and Agriculture Investment Fund grant. This project allowed the company to invest in a Dissolved Air Flotation unit at their Facility in Coopersville, allowing for the diversion of 300,000 gallons per day of high strength wastewater.

MEASURING SUCCESS:

Metric	FY 2016	FY 2017
Company Visits	222	347
Economic Development Activities	554	524
Company Investment	\$387,527,700	\$416,452,000
New Jobs Created	502	687

IMPACT FOR MICHIGAN:

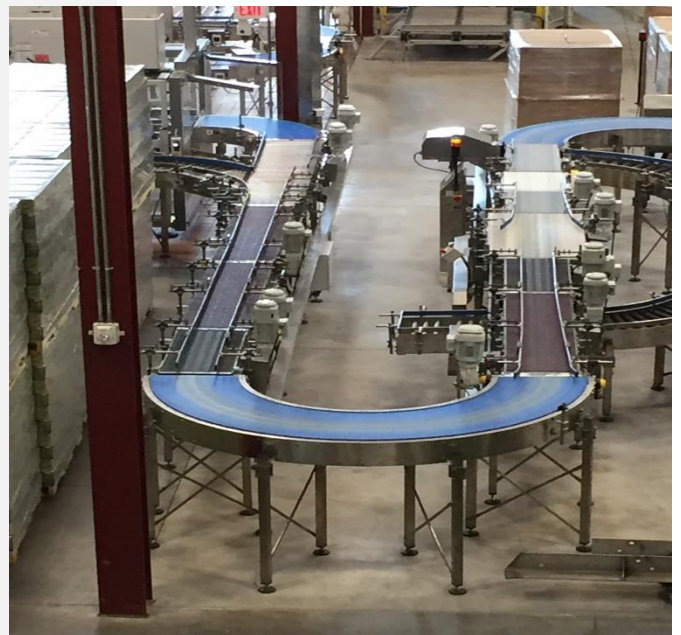
- The state's food and agriculture sector generates more than \$100 billion of total economic activity for Michigan each year.
- Michigan is one of the top states when it comes to the diversity of agriculture products grown with significant value-add opportunities in agriculture, food and forest products.
- Michigan is located within 500 miles of almost 50 percent of the North American population and has a network in place to meet the needs of those populations.

PROGRAM GOALS:

- Develop an Agriculture Economic Development plan in partnership with MEDC.
- Increase company visits and activities to identify opportunities for growth.
- Identify opportunities for growth in all agriculture sectors, including food processing, forest products, hops, barley, aquaculture, and dairy.
- Identify development-ready sites that can accommodate food processing growth.
- Connect businesses with technical and business development resources in order to provide clear paths to growth and expansion in Michigan.

KEY STAKEHOLDERS

- Businesses and Food Processors
- Agriculture Growers and Producers
- Forest Products Industry
- Regional and Local Economic Development Agencies
- Local Communities
- Site Selectors



GRANT PROGRAMS

PROGRAM MANAGER: Heather Throne
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MDARD administered the following grant programs: Specialty Crop Block Grant, Value Added/Regional Food Systems Grant, Strategic Growth Initiative Grant, Rural Development Fund Grant and One-Time Grants. The grant funds are used to enhance the competitiveness of specialty crops, develop value added agricultural processing, assist in efforts focused on removing barriers and leveraging food and agriculture opportunities and enhance land-based industries in rural communities.

IMPACT FOR MICHIGAN:

- Enhances the competitiveness of specialty crops
- Provides education on food safety and handling techniques
- Provides research on new industry technology
- Provides research on implementing and developing waste management relating to agriculture or agricultural products
- Provides research on pest management
- Increases land-based industries in rural Michigan
- Works to increase food and agricultural jobs
- Stimulates growth in the value-added processing sector

ACCOMPLISHMENTS:

- MDARD awarded \$902,100 in value added grants and leveraged \$1,464,302 in matching funds.
- MDARD administers an existing portfolio of 140 grant agreements totaling \$13,870,686.
- MDARD averaged 14.91 days for the review and disbursement of payments for existing grants.

MEASURING SUCCESS:

Metric	FY 2016	FY 2017
Active Grant Portfolio	104	152
Awarded Grant Funds	\$6,338,613	\$4,831,677
Leveraged Grant Funds	\$1,090,050	3,284,907
Grant Disbursement Response Time (Days)	9.23	14.91

PROGRAM GOALS:

- Maximize allocated grant funds with strong industry matches, to maximize the funding for the industry.
- Continue to review and streamline grant review processes to improved disbursement response times for grantees and reporting process.
- Implement additional checks and balances with grant financial reviews and conduct site visits for grant projects.

KEY STAKEHOLDERS

- Agricultural cooperatives
- Food and agriculture businesses
- Universities and research organizations
- Local governments
- Nonprofit corporations
- Economic development organizations

2017 Value-Added Grants

<u>Project</u>	<u>Amount</u>	<u>Project</u>	<u>Amount</u>
Campbell Milarch Vines	\$140,400	Indian Brook Trout Farm, Inc	\$150,000
Chestnut Growers, Inc	\$43,500	Kitz Koop	\$19,400
Food Lab Detroit	\$54,000	Michigan Sugar	\$100,000
Growing Hope	\$79,800	Rainbow Packing, Inc.	\$100,000
Harbor Hill Fruit Farm	\$150,000	Sprout Urban Farms, Inc.	\$65,000

MEASURING SUCCESS:

2017 Specialty Crop Block Grants			
<u>Project</u>	<u>Amount</u>	<u>Project</u>	<u>Amount</u>
Hop Growers of Michigan	\$92,167	Michigan Asparagus Advisory Board	\$90,490
Michigan Christmas Tree Association	\$74,673	Monroe County Community College	\$79,000
Michigan Cherry Committee	\$99,949	Michigan Bean Commission	\$99,400
Michigan Tree Fruit Commission	\$100,000	Michigan Nursery & Landscape Association	\$83,834
Michigan Vegetable Council	\$98,609	Cherry Marketing Institute	\$60,000
Michigan Potato Industry Commission	\$100,000	Crosshatch Center for Art & Ecology	\$80,268
Eastern Market Corporation	\$100,000	Michigan Wine Collaborative	\$89,500
Michigan Carrot Committee	\$78,427	Cherry Central	\$89,900
Michigan Apple Committee	\$10,000	MDARD International Marketing Program	152,077

2017 Rural Development Fund Grants			
<u>Project</u>	<u>Amount</u>	<u>Project</u>	<u>Amount</u>
Slagles Family Farm	\$84,110	City of Munising	\$150,000
Grand Traverse Pasta	\$75,250	Village of Ellsworth	\$32,000
Michigamme Township	\$26,500	Iron County Economic Development	\$22,140
Human Development Commission	\$61,600	Northern Economic Initiatives Corporation	\$50,000
Northwest Michigan Horticultural Research Foundation	\$170,000	Western Upper Peninsula Planning & Development Region Commission	\$27,230
Superior Watershed Partnership	\$75,200	Houghton County	\$80,000
Northern Michigan Geological Repository Association	\$226,700	Mason County Growth Alliance	\$35,000
Copper Peak Inc.	\$125,000	Newaygo County RESA	\$176,753

Commodity Coordination

PROGRAM MANAGER: Heather Throne | 517-712-0841 | throneh@michigan.gov

The Michigan Department of Agriculture and Rural Development has legal, fiscal and program oversight responsibility for the entire group of 14 legislatively established commodity boards that have producer check-offs or producer assessments. The MDARD director delegates this authority to the Agriculture Development Division (AgD) to represent the MDARD director at all regular and executive board meetings. MDARD also organizes and leads quarterly Commodity Executive meetings to which staff from more than 60 agricultural and food organizations are invited to participate. The half-day meetings cover a variety of important topics and current issues for Michigan's food and agriculture industry.

IMPACT FOR MICHIGAN:

- AgD is responsible for ensuring the Michigan Open Meetings Act and Freedom of Information Act regulations are being followed at the check-off boards.
- MDARD is responsible for ensuring that funds are being used according to industry adopted programs and in compliance with State of Michigan statutory financial and generally-accepted accounting standards.
- MDARD reviews all commodity audits and provides a written review of the audits provided to ensure financial soundness and compliance with generally accepted

ACCOMPLISHMENTS:

- MDARD is working with blueberry representatives through the referendum process to create a new check-off marketing board in May 2017.
- All Commodity Board Trainings were conducted, with two final ones to be completed in 2018.
- The AgD team attended 90% of all commodity meetings.

Commodity Meetings with MDARD Staff Participation	Number Attended 2017	Percentage Attended 2017
Bean Commission	5	83%
Wheat Committee	4	80%
Soybean Committee	8	100%
Cherry Committee	3	100%
Tree Fruit Commission	3	60%
Apple Committee	4	100%
Beef Commission	4	100%
Corn Committee	4	80%
Asparagus Committee	2	66%
Carrot Committee	3	100%
Onion Committee	3	100%
Potato Commission	3	100%
Dairy Committee	3	100%
Blueberry Committee	4	100%

KEY STAKEHOLDERS:

Michigan Wheat Committee
 Michigan Soybean Promotion Committee
 Michigan Onion Committee
 Michigan Carrot Committee
 Michigan Asparagus Committee
 Michigan Apple Committee
 Michigan Tree Fruit Commission

Michigan Dry Bean Commission
 Michigan Cherry Committee
 Michigan Corn Marketing Program
 Michigan Beef Industry Commission
 Michigan Dairy Marketing Program
 Michigan Potato Industry Commission
 Michigan Blueberry Commission

LEGAL AUTHORITY:

PA 232 of 1965, the Michigan Agricultural Commodities Marketing Act (MI Apple, MI Asparagus, MI Carrot, MI Cherry, MI Corn, MI Dairy, MI Onion, MI Soybean, MI Tree Fruit, MI Blueberry and MI Wheat commissions)
 PA 29 Michigan Potato Industry Commission
 PA 114 Michigan Bean Commission
 PA 291 Michigan Beef Industry Commission



Grape and Wine

PROGRAM MANAGER: Karel Bush | 517-284-5742 | bushk9@michigan.gov

The Michigan Grape and Wine Industry Council provides a forum for statewide collaboration in research, promotion and professional development to meet the changing needs of this exciting growth industry.

IMPACT FOR MICHIGAN:

- \$5.4 billion total economic impact
- Directly creates 27,930 jobs, generating \$772.6 million in wages
- Maintains land in agricultural production – 3,050 acres of wine grapes
- Contributes to Michigan’s tourism and agricultural economies, including \$252.7 million in tourism spending annually
- Generates \$853.6 million tax revenue annually for the State of Michigan and local and federal governments

ACCOMPLISHMENTS:

- Council staff collaborated with industry partners to conduct the first Michigan Certified Alcohol Service Training (Mi-CAST). Credentials were awarded to 25 participants for completing the training which provides knowledge and information for those in the winery industry around alcohol management, customer service and fluency/sensory evaluation.
- The Council funded \$138,785 in research projects to advance knowledge of wine grape growing and winemaking to serve the industry into the future.
- Council staff collaborated with the Michigan Department of Natural Resources to develop a “Wine Adventure” campaign, which included adding wineries to the DNR’s interactive online map.
- The Michigan Wine Collaborative, an industry-led organization with a mission to enhance the sustainability and profitability of the Michigan wine industry, held their first Annual Meeting.

MEASURING SUCCESS:

Metric	2016	2017
Winery participation in Council activities	78%	76%
Number of web referrals from social media channels	4,636	5,391
Number of wineries recognized by the Council	125	139
Acreage in wine grapes (USDA NASS)	2,900	3,050

PROGRAM GOALS:

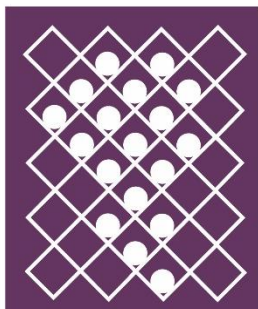
- Participation in Council-sponsored activities by 65 percent of the businesses that are recognized by the Council as “producers of Michigan wine”
- Increase web referrals from social media channels by 10%
- Increase the size of the industry to 10,000 acres of wine grapes by 2024
- Production of 3 million cases of Michigan wine per year by 2024

KEY STAKEHOLDERS

- Wineries
- Wine grape growers
- Wine trade partners: retailers, restaurants, wholesalers
- Michigan State University and other educational institutions
- Tourism organizations

LEGAL AUTHORITY:

- Public Act 58 of 1998



MEASURING SUCCESS:



International Marketing Program

Jamie Zmitko-Somers | 517-284-5738 | zmitkoj@michigan.gov

MISSION:

Assist Michigan food and agriculture businesses in developing trade opportunities to effectively export their products and achieve economic growth.

The International Marketing Program works to implement its mission by assisting Michigan producers and processors in developing trade opportunities through new market development or expanding existing markets to increase export sales. To showcase Michigan companies in the global arena, the program organizes and implements activities such as export seminars, buyers' missions, trade missions and Michigan Pavilions at select domestic and international trade show.

IMPACT FOR MICHIGAN:

Increasing exports of food and agriculture products and getting more companies involved in exporting increases the economic impact to the state. Benefits to the economy include increased jobs due to exports and helping to keep prices stable for Michigan growers and farmers.

ACCOMPLISHMENTS:

- Conducted second MDARD Director-led trade mission to China
 - Eight companies and one commodity group participated.
 - Companies reported an expected increase in sales over the next 6-12 months of \$860,000 and a total of 80 new buyer contacts.
- New opportunities for the craft beverage industry - Provided a first-time Michigan Pavilion at the BAR Show in Chicago, IL, May 21-22, 2017. Exhibitors received more than 230 leads and reported an estimated \$117,000 increase in sales due to participation.
- Awarded the first ever *MI Exporter "Rising Star" award* to The Gluten Free Bar located in Grand Rapids.

Note: the annual report is for the calendar year for 2017

MDARD Annual Report | 2016-2017

MEASURING SUCCESS:

Metric (Calendar Year 2017)	2016	2017
Michigan company participation in Food Export programs and services	80	76
Number of company visits by export team	25	39
Number of followers on Twitter	1,244	1,380
Number of followers on Facebook	423	499

PROGRAM GOALS:

- Assist Michigan companies in the export of food and agriculture products leading to first time exports or an increase in exports.
 - Assist companies in navigating federal and state export assistance programs
 - Increase visits with Michigan companies
 - Increase the number of Michigan Pavilions offered at domestic and international trade shows
- Collaborate with Michigan commodity groups to assist their industries in growing exports.
- Continue to develop export programs and provide assistance to the forest products and craft beverage industries.
- Develop and offer new export programs and services for Michigan companies.

KEY STAKEHOLDERS

- Michigan food and agriculture exporters
- Michigan food processors
- Michigan forest products companies
- Michigan growers and farmers
- Commodity groups



MICHIGAN GRAPE AND WINE INDUSTRY COUNCIL FY 2017 ANNUAL REPORT

The Michigan Grape and Wine Industry Council continues to provide an important forum for statewide collaboration in research, promotion and professional development to meet the changing needs of this exciting growth industry. The Council has established a goal to increase the size of the industry to 10,000 wine grape acres and 3 million cases of wine by the year 2024.

INDUSTRY HIGHLIGHTS

- Credentials were awarded to 25 participants for completing Michigan Certified Alcohol Service Training (Mi-CAST) during the Michigan Grape & Wine Conference in February 2017. The training is comprised of 3 modules: Techniques of Alcohol Management, Customer Service, and Wine Fluency/Sensory Evaluation.
- Nine wineries were recognized by the Council as “producers of Michigan wine”. One winery closed operations, bringing the total of recognized wineries to 132.
- Production of Michigan wine in the state rose 7.2 percent in 2016 (calendar year).
- The Michigan Wine Collaborative, an industry-led organization with a mission to enhance the sustainability and profitability of the Michigan wine industry, had their first Annual Meeting in February 2017, and was awarded a Specialty Crop Block Grant to assist in marketing the association and building membership.
- Michigan wineries garnered more than 190 gold medals in national and international wine competitions.
- Millions of dollars in investment was made by the industry in new construction and capital improvements to existing facilities.
- Food & Wine magazine published an article on “Best Michigan Wineries to Visit” in January 2017.
- Brys Estate Winery was honored as “One of the 20 Most Admired Tasting Rooms in North America” by Vineyard & Winery Management.

COUNCIL HIGHLIGHTS

- The Council worked with John Dunham & Associates to conduct an Economic Impact Study to determine the impact of the wine grape and wine industry. Hard cider impact data was also collected and reported.
- The Council worked with Michigan State University to produce webinar-style videos to complement Council-funded research projects.
- Council staff collaborated with the Department of Natural Resources to develop a “Wine Adventure” campaign, which included adding winery locations to the DNR’s interactive online map.
- 76% of the wineries recognized by the Council participated in one or more promotional partnerships with the Council during the year (target is 65%).
- The Council participated for the sixth consecutive year in a marketing partnership with Travel Michigan for a spring/summer radio/digital campaign focused on Chicago and was presented as

a “Scenic Route” Passion on michigan.org, which was effective in driving web traffic to the Council’s website.

- Michigan Wine Month was moved to May and continued to grow in consumer and trade education impact.
- Michigan Wines Showcase event was held in Detroit in May.
- Social media activity on the Michigan Wines Facebook, Twitter and Instagram accounts increased – in number of followers and engagement.
- The Council sponsored a three-day Michigan Grape and Wine Industry Conference in Traverse City in February, with record attendance of 360 participants.
- The Michigan Wine and Spirits Competition received 380 entries from 58 wineries.
- Membership in Vintage Michigan increased 8%, to more than 5,100 members.
- The Council funded \$138,785 in research projects to advance knowledge of wine grape growing and winemaking to serve the industry into the future.

Table 1
MICHIGAN GRAPE AND WINE INDUSTRY COUNCIL
FY 2017 BUDGET SUMMARY

Category	Total Expenditures
Administration	\$383,848
Research and Grower Education	\$138,785
Promotion and Consumer Education	\$359,815
Industry Support	\$ 29,451
Council Expenses	\$ 4,245
Total MDARD Administrative Costs	\$916,144

Table 2
MICHIGAN GRAPE AND WINE INDUSTRY COUNCIL
FY 2017 RESEARCH PROPOSALS FUNDED

Principal Investigator	Title of Proposal	Award
Sabbatini, Paolo	Upgrading Viticultural Research Capabilities at the MSU Northwest Horticulture Research Center	\$13,523
Sabbatini, Paolo	Control and Management of Sour Rot and Volatile Acidity in Vinifera Grapes Grown in Michigan	\$22,037
Isaacs, Rufus	Michigan Vineyard IPM Extension Program	\$16,765
Isaacs, Rufus	Biology and Management of Grape Mealybug	\$20,546
Schilder, Annemiek	Disease Prediction Models for Phomopsis Viticola in Grapes for Enviro-weather	\$20,026
Schilder, Annemiek	Increasing Potential for Biological Control of Grape Diseases	\$12,388
Berglund, Kris	Small Scale Thermovinification to Predict Large Scale Thermovinification Performance for Michigan Grapes	\$19,000
Moyer, Michael and Zabadal, Tom	Microvinification of Wine Grape Varieties that have Potential for the Michigan Wine Grape Industry	\$14,500
	Total	\$138,785

Table 3
Michigan Grape and Wine Industry Council
FY 2016 Research Results

Principal Investigator	Title and Summary of Results	Award
Isaacs, Rufus	<p>Biology and Management of Grape Mealybug This continuing project focuses on understanding the biology of grape mealybug, a vector of Grapevine Leafroll Virus (GLRaV), and then uses this knowledge to improve vineyard pest management programs. Adult mealybugs were detected before nymphs, and mealybugs were present throughout season. There was not a clear relationship between ant abundance and mealybug infestation, but we are still analyzing samples to determine if certain ants are more common in mealybug infested vineyards. An attractive but toxic ant bait is being tested to reduce ants and promote mealybug parasitism in treated vineyards, although it showed no reduction in ants or mealybugs in 2016. In an insecticide trial, Movento applied right after bloom appears to be the best option for mealybug control.</p>	\$19,725
Isaacs, Rufus	<p>Michigan Vineyard IPM Extension Program This project demonstrated how reduced-risk pesticides can provide effective insect and disease management when they are integrated into commercial grape production. Reduced-risk and standard broad-spectrum pesticide programs provided similar pest and disease control, and in some cases the reduced risk program out-performed the standard program. Scouting information was collected each week and summarized in biweekly reports that were published in MSU Extension Grape News and are now archived at www.grapes.msu.edu. Results from this and related studies were presented at grape workshops in southwest and northwest Michigan during the growing season, and provided information on current insect, disease and horticultural topics</p>	\$16,448
Sabbatini, Paolo	<p>Control and Management of Sour Rot and Volatile Acidity in Vinifera Grapes Grown in Michigan The primary objective of the study was to characterize the evolution of fruit technological maturity produced in grapes with varying levels of sour rot in order to determine the effect on overall quality at harvest. Secondly, we expect to be able to judge the effectiveness of varying degrees of leaf removal as a principal strategy for the reduction of sour rot allowing us to make the best recommendations possible to the industry regarding the use of this strategy. We executed the experiment during 2016 in a Merlot and Pinot Grigio vineyard located at the South West Michigan.</p>	\$23,537
5 Lakes Energy	<p>Pilot Measurement of Water Use in Wineries 5 Lakes Energy and its subcontractors were able to conduct research on flow meters that may be suitable for winery effluent water volume measurement. However, we were unable to identify a suitable meter to install as pilot installations at Michigan wineries. An educational handout for the Michigan wine industry was developed and resource information was summarized in the final report.</p>	\$15,000
Zabadal, Tom	<p>Developing Methods for the Use of Own-rooted Vitis Vinifera Vines in Michigan Vineyards Wine grape varieties of the species Vitis vinifera are recognized worldwide for producing the very highest wine quality. Recently, the chemical control of root Phylloxera has provided an alternative to grafting for controlling this pest on V. vinifera vines. This project evaluated that option along with methods for the rapid establishment of own-rooted V. vinifera grapevines. Results to date have indicated as little as a two-year period for establishment of productive own-rooted Vitis vinifera vines. The greatest advantage of this technology may occur when very cold tender Vitis vinifera varieties are planted in Michigan. In 2016 own-rooted cuttings of the varieties Merlot and Sauvignon blanc were planted and treated with spirotetramat. Further evaluation is needed to determine if this technology can provide sustainable Vitis vinifera productivity.</p>	\$21,800

<p>Schilder, Annemiek</p>	<p>Statewide Survey to Determine Diversity and Impact of Grapevine Viruses, Phytoplasmas and Insect Vectors on the Michigan Wine Grape Industry</p> <p>During late summer of 2016, 438 composite grape leaf samples were taken from wine grape vineyards in mid, southwest and northwest Michigan. Over 100 different vineyards were sampled. Testing was conducted on each sample using real-time polymerase chain reaction (RT-PCR) at the Foundation Plant Services facility on the UC Davis campus. Each sample was tested for 28 different viral or phytoplasma pathogens. In all, only 45 of the 438 samples (10%) were negative for all of the tested pathogens. A large number of samples (85%) tested positive for GRSPaV. Other commonly found pathogens were GLRaV 28% (any strain), GFkV 17%, GVA 11% and TRSV 12%. We are still in the process of analyzing the data and looking at associations between virus incidence and region and cultivar. It is initially noteworthy that a high percentage of the samples (85%) were positive for Grapevine stem pitting virus and that only 10% of the samples were negative for all pathogens tested. The results of this survey suggest that there is a significant number of Michigan grapevines that are infected with virus. We will continue to analyze the data to determine if all four samples from a field were uniformly infected with the same viruses. Additionally, we will determine if there are certain virus combinations that occur regularly in the same vines. It has been shown in other crops that synergism of symptoms can occur when multiple viruses infect the same plant. If certain virus combinations occur, it would be interesting to return to those fields and make a detailed analysis of symptoms and fruit quality and yield loss. We know the grape variety for most of the survey samples, therefore we will also look to see if certain varieties of grape are more prone to specific viruses.</p>	<p>\$20,000</p>
	<p style="text-align: right;">Total</p>	<p style="text-align: right;">\$116,510</p>