

Northern Michigan FruitNet 2014

Northwest Michigan Horticultural Research Center

Weekly Update

February 11, 2014

CALENDAR OF EVENTS

- 2/18-19** **IPM Academy**
- 2/22-26** **IFTA Conference**
Kelowna, British Columbia
<http://www.ifruittree.org/>
- 2/26-28** **Michigan Grape & Wine Conference**
Grand Traverse Resort, Acme, MI
<http://www.michiganwines.com/conference>
- 2/27-3/1** **IFTA Post Conference Tours**
- 2/27-3/1** **25th Moses Organic Farming Conference**
LaCrosse, WI
www.mosesorganic.org
- 3/1-3/8** **ANR Week (Formerly Farmers' Week)**
MSU
www.anrweek.canr.msu.edu
- 3/1** **2014 Growing Michigan Agriculture Conference**
Kellogg Center, MSU
<http://bit.ly/GrowingMichigan>.
- 3/1** **Family Forest Ownership Succession in MI Workshop**
GT Conservation District
- 3/11** **Michigan Spring Peach Update Meeting**
SW Michigan Research & Extension Center
- 3/12** **Irrigation Workshop**
NWMHRC
-
- 3/20-21** **Advances In Berry Production Workshop**
Guelph, Ontario
- 4/12** **Healthy Forests – Caring for our Trees**
GT Conservation District

Agriculture Commission and Michigan Department of Agriculture and Rural Development Seeking Public Input on Generally Accepted Processing Practices

Deadline to provide comment is February 21, 2014

Program contact: Michelle Crook, 517-284-5625 or crookm@michigan.gov

The Michigan Commission of Agriculture and Rural Development and the Michigan Department of Agriculture and Rural Development (MDARD) today announced a public input period has been scheduled through February 21, 2014 in order to gather comments on the 2014 drafts of the state's Generally Accepted Processing Practices (GAPPs).

Written comments may be submitted to MDARD's Environmental Stewardship Division, P.O. Box 30017, Lansing, MI 48909 and postmarked no later than February 21, 2014, or sent via e-mail to crookm@michigan.gov by 5:00 p.m. on February 21, 2014. MDARD will forward all comments received by the due date to the GAPPs Task Force Chairperson for consideration. The GAPPs Task Force Chairperson will then present the proposed GAPPs to the Commission for final adoption. Public comments are accepted and considered at scheduled commission meetings before final versions of the GAPPs are approved.

The Michigan Agriculture Processing Act provides nuisance protection for agriculture processors which are in conformance with GAPPs. GAAPs were developed with representatives from universities, industry, state agencies, consulting engineers, and legal representatives. They are reviewed annually, revised and updated as necessary.

These GAPPs were developed in accordance with the Michigan Agriculture Processing Act, (1988 PA 381). The Act requires the establishment of Generally Accepted Fruit, Vegetable, Dairy, Meat and Grain Processing Practices. They are written to provide uniform, statewide standards and acceptable management practices based on standard industry practices.

Agricultural processing has experienced significant changes during the past 50 years. As communities expand into rural areas the potential exists for nuisance concerns to occur between residents and existing agriculture processing facilities. In addition, facilities have gone from operating over a relatively short harvest period to expanded year-round operations to better serve their customers, process a greater variety of products, and compete in a global economy. This has provided facilities the flexibility and opportunity to change and adopt new technology to remain economically viable and competitive while being protective of the environment. In order to assure a healthy, growing processing industry in Michigan,

effort must be taken to address concerns of processors and their neighbors. By following these GAPPs, processors can be protected from harassment and nuisance complaints. In addition, persons living near processing operations who do not follow GAPPs will be able to have concerns addressed when nuisance problems occur.

For a copy of these GAPPs, including the proposed revisions, please visit www.michigan.gov/gapps, or contact Michelle Crook at crookm@michigan.gov.

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NORTHWEST MICHIGAN IRRIGATION WORKSHOP

Join MSU Extension on March 12 to learn more about irrigation and water management. This day-long program will emphasize the design, use and maintenance of irrigation systems.

Spend the morning learning about water rights; the responsibilities and requirements of large volume water users; the important relationship between soil and water; Irrigation GAAMPs, and the basics of drip irrigation. Presentations will highlight how and why to schedule irrigation, in addition to the various tools available to growers to help them make irrigation decisions.

After lunch, hear the best management strategies for irrigating apples and cherries, managing fertilizer injections with various irrigation applications and a strategies approach to fertigating apples and cherries. Close out the day gaining knowledge directly from a panel of growers with irrigation and fertigation experiences and have time to visit with irrigation manufacturers and distributors.

The northwest Michigan irrigation workshop is pleased to host Dr. Denise Neilsen, a researcher from Summerland, British Columbia. Dr. Neilsen is a world-renowned expert on precision management of water and nutrients for woody perennial crops. She and her team have researched the climatic effects on the demand for irrigation water in the plant as well as the climate limitations to crop suitability and quality. She has helped growers optimize management practices to decrease environmental risk and improve nutrient use efficiency within various tree fruit production systems. Dr. Neilsen has also developed and utilized Beneficial Management Practices (BMPs) that improve/optimize water quality and quantity.

This workshop will be held at the Northwest Michigan Horticulture Research Center in Traverse City. The program will start at 8:30 a.m. The program will conclude at 5:00 p.m. and will include lunch. Registration is \$30 per person payable at the door. The northwest Michigan irrigation workshop is co-sponsored by Michigan State

University Extension, AgBioResearch, and the Northwest Michigan Think Tank.

To learn more about this irrigation workshop or to register, please contact Jackie Baase at baase@msu.edu or 231-946-1510.

Northwest Michigan Irrigation Workshop

Northwest Michigan Horticultural Research Center

March 12, 2014

- 8:30-9:15 **Large volume water user-rights, responsibilities and requirements**
Lyndon Kelley, Irrigation Educator, MSU/Purdue Extension
- 9:15-10:00 **Soil and water relationship important to irrigation and BMPs**
Steve Miller, Irrigation Specialist, MSU Extension
- 10:20-11:05 **Understanding the basics of drip irrigation and water application**
Dr. Ron Goldy, Michigan State University Extension
- 11:05-11:15 **BREAK**
- 11:15-11:35 **What is an 'acre inch' of irrigation on tree fruit systems? Hints on scheduling to achieve adequate water supply to your trees**
Beau Shacklette, Irrigation Technician, Trickle-Eeze/White Water Irrigation
- 11:35-12:15 **Introduction into irrigating and fertigating high-density apples**
Phil Schwallier, District Horticulturist, MSU Extension
- 12:15-1:00 **LUNCH**
- 1:00-1:45 **Best management strategies for irrigating apples and cherries**
Dr. Denise Nielson, Pacific Agri-food Research Center, British Columbia
- 1:45-2:15 **Managing fertilizer injections with irrigation applications**
Tom Anderson, Trickle-Eeze Co.
- 2:15-3:15 **Strategies approach to fertigating apples and cherries**
Dr. Denise Nielson, Pacific Agri-food Research Center, British Columbia

3:15-3:30 **BREAK**

3:30-4:15 **Panel of growers with irrigation and fertigation experiences**
TBD

4:15-5:00 **Social time with irrigation manufacturers and distributors**

PLEASE TAKE A MOMENT TO FILL OUT A POLLINATION SURVEY

As many of you know, MSU is the lead institution in a large, multi-state pollination project. To help gain a better understanding of pollination management practices in Michigan, we hope that you will take some time to fill out the survey on "Integrated Crop Pollination."

Please note that the survey will target growers of apple, cherries, blueberries, raspberries and pumpkins, squash and cucurbits - if you do not grow one of these crops, you can hit delete now. If you do grow one of these crops, I hope that you would take a little time to answer the survey-- I think it will only take 10 or 15 minutes, but your information is important to our pollination project.

Please click on the following link to start the survey and complete by **February 28th**:

https://www.surveymonkey.com/s/MI_growers

We value your participation! Thank you for your help and support of our project.

LOOK FOR SAN JOSE SCALE WHILE PRUNING SWEET CHERRIES

Growers in northwest Michigan reported San Jose scale damage in sweet cherry trees in the 2013 season.

Posted on **January 30, 2014, MSUE News**, by [Emily Pochubay](#), and Nikki Rothwell, Michigan State University Extension



Since its introduction into California in 1870, [San Jose scale](#), *Quadraspidiotus perniciosus*, has become a widely distributed pest of apple, peach, pear, plum, apricot, currant,

gooseberry, quince, woody ornamentals and sweet cherry in the United States. These small, sucking insects feed on sap from limbs and leaves of host plants as well as on the fruits of apple, peach and pear. A high population of San Jose scale is needed to cause significant damage to fruit trees, and older trees can withstand more feeding compared to younger plantings. Depending on the population size, young trees can be killed by San Jose scale in two or three years. In Michigan, San Jose scale is mainly a concern on apple, peach, pear and plum, but since the start of a San Jose scale monitoring program in the northwest in 2007, we have observed sporadic but potentially more widespread San Jose scale outbreaks in sweet cherry.

Sweet cherry growers in northwest Michigan observed damage in orchards in the 2013 season and suspected that San Jose scale was the cause. Growers reported that symptoms were more prevalent on light sweet cherry varieties, such as Gold and Emperor Francis. Damage was visible in the upper canopy or tops of trees where branches had died back. Tree gummosis was also observed. Damage in those high branches is likely linked to [sweet cherry tree sensitivity to ethephon](#) applications when this plant growth regulator is applied under hot and dry conditions. At this time, we hypothesize that a combination of San Jose scale infestation and ethephon phytotoxicity are related to this damage.

In winter months, bright yellow, early instar San Jose scale nymphs are protected under a waxy shell that is tightly adhered to bark. This waxy shell is inconspicuous and camouflaged on tree branches, making visual detection of scales difficult. However, looking for scales while pruning sweet cherry orchards while trees are dormant may indicate whether or not management action for San Jose scale this spring is needed. While pruning sweet cherry trees, look for scales on scaffolds, branches and spurs after these prunings have been removed from the tree. Growers should pay particularly close attention to older sweet cherry trees, tops of the trees and light sweet cherry varieties.

When the sap begins to run in spring, scales feed on sap and grow until late May when males come out from under the protective scale to mate with females. Monitoring for San Jose scale males using a pheromone-baited trap generally begins in the spring when males emerge. It is best to place the traps in trees where scales have already been detected to catch the newly emerging males early. Check traps regularly, at least once per week.

Each mated San Jose scale female is capable of producing nine or 10 young per day for up to six weeks. These bright yellow to orange young, also known as “crawlers,” attach to trees with their mouthparts and feed on tree sap. Crawlers can be monitored using dark sticky tape wrapped around tree branches. The dark tape provides contrast that makes visual detection of the crawlers easier.

After three weeks, crawlers molt resulting in a loss of their old skins, legs and antennae and become a flattened sac with waxy caps that remain attached to the trees with their mouthparts. The protective waxy shell expands as the scales continue to grow, molt and produce waxy secretions. These scales will develop, mate and produce a second generation. In years with an extended warm summer, a third flight of San Jose scale males may occur, as observed in [apples and peaches](#) at the [Trevor Nichols Research Center](#) in 2012.

If San Jose scale populations were high at the end of the 2013 season and growers saw visible branch dieback, control targeting adults pre-bloom should be applied this spring. Monitoring for San Jose scale males and crawlers in 2014 will allow growers to decide if management is needed and when to take action. The table below provides dormant, petal fall and first cover recommendations from [Michigan State University Extension](#) for insecticidal activity on San Jose scale in sweet cherry. Based on previous observations of San Jose scale populations in northwest Michigan, insecticides applied in mid-August target second generation crawlers.

Insecticidal activity on San Jose scale in sweet cherry.

Compound	Life-stage activity	Application timing
Oil	Overwintering scale	Delay-dormant
Lorsban	Overwintering scale	Delay-dormant
Esteem	Overwintering scale crawlers	Delay-dormant first cover
Movento	Adult scale	Petal fall
Tourismo	Adult scale	Petal fall
Lambda-Cy	Crawlers	First cover, post-harvest
Assail	Crawlers	First cover, post-harvest
Warrior	Crawlers	First cover, post-harvest
Centaur	Crawlers	First cover
Diazinon	Crawlers	Post-harvest

Refer to the MSU Extension article "[Time for San Jose scale](#)" for more information on San Jose scale and management options. Pending funding, we will be surveying sweet cherry orchards across the region to determine how widespread San Jose scale infestations are in sweet cherry.

Photo credit: U.S. National Collection of Scale Insects Photographs Archives, USDA-ARS, Bugwood.org

This article was published by [Michigan State University Extension](#). For more information, visit <http://www.msue.msu.edu>. To contact an expert in your area, visit <http://expert.msue.msu.edu>, or call 888-MSUE4MI (888-678-3464).

NORTHWEST MICHIGAN HORTICULTURAL RESEARCH FOUNDATION SUPPORTS YOUNG GROWERS TO ATTEND CONFERENCE

The Northwest Michigan Horticulture Research Foundation and Cherry Republic are helping four young growers from northwest Michigan attend the 2014 International Tree Fruit Association meeting in British Columbia.

Posted on **January 29, 2014, MSUE News**, by [Nikki Rothwell](#), Michigan State University Extension

Four young growers from northwest Michigan are headed to British Columbia at the end of February 2014 to attend the [International Tree Fruit Association](#) (IFTA) Annual Conference. The [Northwest Michigan Horticultural Research Foundation](#) (NWMHRF) provided four scholarships of \$1,000 per participant to help these growers attend this important educational conference. Participating young growers from northwest Michigan that will attend this year's IFTA conference are Chris Alpers from Alpers and Redpath Orchards, Leelanau County; Adele Wunsch from Wunsch Farms, Old Mission Peninsula; and Calvin Lutz II and III from Lutz Farms, Manistee County.

The scholarships were provided through two funding sources: NWMHRF's "Keep our Farmers Farming" fundraising campaign, and a donation to the NWMHRF from [Cherry Republic](#). Both the NWMHRF board members and Bob Sutherland of Cherry Republic were pleased to see these funds used to expand the knowledge base of young farmers who will bring new ideas and concepts back to the region. As in every year, this IFTA conference has promised to showcase what Canadian growers are doing differently and innovatively—these young growers can bring back this experience to Michigan orchards.

IFTA works toward promoting an understanding of the nature and use of intensive orchard systems through dissemination of information as well as expanding the knowledge of tree fruit production by encouraging research efforts. IFTA was established in 1958 and is the leading international organization that advances the adoption of intensive orchard systems. The organization conducts an annual educational conference and publishes the conference proceedings and additional articles in the Compact Fruit Tree journal. IFTA also conducts an annual orchard tour during the summer months and sponsors other tree fruit study tours. Lastly, this group provides funding support for research projects through a newly established research fund.

This year's conference will take place in Kelowna, British Columbia, Feb. 22-26, and conference attendees will have a chance to see both apple and cherry orchards. The pre-conference will kick off with an intensive fresh market sweet cherry workshop and a sweet cherry pruning demonstration. The main conference theme will be focused around precision orchard management, which includes precision management of orchards, tree care in the early years, varieties and precision harvesting.

Phil Schwallier, current President of IFTA and [Michigan State University Extension](#) district horticulturist from the Grand Rapids, Mich., area stated "This precision method of evaluating your operation is an eye-opener into the economics of every operation you perform on your

farm. For any young grower just into the fruit business, this conference will provide you with a management foundation you will use for life.”

Schwallier has been very supportive of the NWMHRF’s efforts to help young growers attend the IFTA conference. The NWMHRF began awarding scholarships in 2013 and hopes to continue awarding scholarships into the future.

The Northwest Michigan Horticultural Research Foundation continually supports the educational efforts of commercial fruit growers throughout Michigan, and these scholarships are another way to give back to the agricultural community. The NWMHRF board members and Sutherland are working together to find a way to support these educational scholarships on an annual basis.

This article was published by [Michigan State University Extension](http://www.msue.msu.edu). For more information, visit <http://www.msue.msu.edu>. To contact an expert in your area, visit <http://expert.msue.msu.edu>, or call 888-MSUE4MI (888-678-3464).

ADVANCES IN BERRY PRODUCTION WORKSHOP OFFERED

Current and potential berry growers are invited to attend this workshop on March 20-21 to learn about the production of day-neutral strawberries and culture of raspberries using protective structures.

Posted on **February 5, 2014**, MSUE News, by [Eric Hanson](#), Michigan State University Extension, Department of Horticulture

A two-day workshop is being offered to provide current and potential berry growers in-depth knowledge on the production of day-neutral strawberries and culture of raspberries using protective structures. The intent is to provide cutting edge information from growers and researchers.

The workshop will be held March 20-21, 2014, at the [Springfield Golf and Country Club, 2054 Gordon Street, Guelph, Ontario](#). Attendees will benefit most if they already grow or plan to grow day-neutral strawberries or raspberries in greenhouses or tunnels, but all are welcome to attend. It’s not a basic learn-to-grow type of program. The goal is to learn from each other, share research results and what you have learned in the field through trial and error. Speakers are coming from Michigan, Ontario and Quebec.

Pre-registration is required at \$150 for two days or \$100 for one day. To register, call or email the [Ontario Berry Growers Association](#) at 613-258-4587 or info@ontarioberries.com. Space is limited to 50 participants, so register soon. [View a brochure](#) for more information.

Thursday, March 20

9:30 a.m. -noon

- Welcome and round table introductions

- Day-neutral strawberry physiology and production systems, Jim Hancock, Michigan State University
- Our DN strawberry production system in Quebec, Guy Pouliot , Ferme Onésime Pouliot Inc.
- Cultivars and management systems for DN strawberries, Becky Hughes, University of Guelph, Discussion

12:45-5 p.m.

- Effect of temperature on flowering and fruiting of DN strawberries, Adam Dale, University of Guelph
- Optimizing fertigation in da- neutral strawberries
- Substrate production of strawberries, Dr. Yves Déjardins, Université Laval
- New technology for DN strawberry growers – low tunnels, biodegradable mulch, Eric Ménard, Dubois Agrinovation
- Keeping one step ahead of anthracnose and flower thrips, Pam Fisher, OMAF & MRA
- Focused discussions with short grower presentations, on harvest management and use of plug plants
- Day-neutral costs of production: Results of 2012 Survey, Dragan Galic, University of Guelph

Friday, March 21

8:30 a.m.-noon

- Introductions
- My vision for high tunnel raspberry production in Ontario, Adam Dale, University of Guelph
- Our raspberry production system in tunnels, Guy Pouliot , Ferme Onésime Pouliot Inc.
- Evaluating raspberry varieties grown in pots in a tunnel production system, Eric Hanson, Michigan State University
- Raspberry production and cane density under high tunnels and Voent covers, André Gosselin, Université Laval

1-3 p.m.

- Organic production systems in high tunnels, Eric Hanson, Michigan State University
- Pest management for raspberries in tunnels: can you beat spotted wing drosophila, Pam Fisher, OMAF and MRA
- Open Discussion

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MICHIGAN SPRING PEACH UPDATE MEETING

Date: March 11, 2014

Time: 8 a.m.-4 p.m.

Location: 1791 Hillandale Road, Benton Harbor, MI 49022

Contact: Dr. Bill Shane, 269-944-1477 ext. 205; cell: 269-208-1652; shane@msu.edu

Peach growers are always looking for ways to improve their profitability. The Michigan Spring Peach Update is the best annual meeting in Michigan to learn about this crop.

The meeting will focus on fresh market peaches including new peach varieties, insect management strategies, disease control, marketing strategies, rootstocks, farm marketing, and mechanical peach thinning.

Attendees will be eligible for credits toward recertification of their Michigan pesticide applicators license.

Deadline for early registration is Monday, March 3, 2014. Registration is \$30 per person or \$25 for current Michigan Peach Sponsor members, with catered lunch included. Registrations mailed after March 3 or at the door are \$5 more per person.

The meeting will take place at the Southwest Michigan Research and Extension Center, 1791 Hillandale Road, Benton Harbor, Mich, which is 2.5 miles east of I-94 exit 30 to Hillandale Road. Registration begins at 8 a.m. with programs starting at 9 a.m.

To pay in advance by check or money order, a registration form can be downloaded from the website Michiganpeach.org and mailed with payment by March 3. After this time, register at the door with check, money order, or cash. Credit cards will not be accepted. For additional meeting information, registration forms, or assistance, contact the conference coordinator Dr. Bill Shane at 269-944-1477 ext. 205, 269-208-1652 cell.

GETTING STARTED WITH SOIL IMPROVEMENT: AN OVERVIEW FOR BEGINNERS – Part 2

New farmers should have a clear understanding of fertilizers and soil amendments, both conventional and organic.

Posted on **January 31, 2014, MSUE News**, by [Jim Isleib](#), Michigan State University Extension

Beginning farmers may start out with low fertility soils where large additions of nutrients are necessary for acceptable crop performance. Even if the soils are great, a fertility program is essential to keep them that way. There are many options available to provide plant nutrients. The following summary is not meant to be exhaustive, but provides an overview.

Conventional fertilizers

“Conventional” fertilizers are concentrated, manufactured chemical products. They are highly soluble in soil water solutions and readily available for plant uptake. These fertilizers are widely available and can be blended to meet specific crop nutrient requirements.

Pros

- Convenience
- Generally higher concentration of nutrients
- Lower cost per unit of available nutrient
- “Quick release”
- Standardized nutrient content
- Precision of application
- Ability to “blend” precision mixtures of nutrients and micronutrients
- Multiple formulations (dry granular, liquid, foliar)

Cons

- No organic matter included
- High salt concentration
- Potentially imbalanced
- Potential damage to soil organisms
- Price fluctuates based on cost of energy
- Environmental hazard potential if misused
- Manufacturing these products requires high amounts of energy

Examples

- 46-0-0 – urea (46% nitrogen)
- 0-45-0 – triple superphosphate (45% P_2O_5)
- 0-0-60 – muriate of potash (60% K_2O)

Organic fertilizers

These products originate from plant, animal or mined sources.

Pros

- Natural, not manufactured
- Contain multiple plant nutrients
- Often farm-produced (manures, cover crops)
- Add soil organic matter
- Encourage soil biological diversity
- Improve water-holding capacity
- Allow a more self-contained farm system
- Slow-release of nutrients

Cons

- Low nutrient concentration
- Require large volumes

- Inconsistent product availability
- Higher cost per unit of nutrient, especially if purchased
- Variable nutrient content

Examples

- Compost (2-3% nitrogen, 1-2% P₂O₅, 1-2% K₂O)
- Cow manure (2-3% nitrogen, 0.5-1% P₂O₅, 1-2% P₂O)
- Blood meal (12% nitrogen, 1-2% P₂O₅, 0-1% K₂O)

Other soil amendments

Municipal biosolids. “Biosolids” refers to treated sewage sludge that meets the [EPA](#) pollutant and pathogen requirements for land application and surface disposal. These products contain significant nutrients, but are state regulated because of the potential for contaminants. They can be an economical source of plant nutrients in the right situation.

Industrial by-products. These vary in availability depending on the presence of industries in Michigan. Examples include paper mill sludge, sugar beet lime/pulp and spent grains from breweries or ethanol plants.

Industrial wood ash. If available, wood ash (0% nitrogen, 1-2% P₂O₅, 3-7% K₂O) makes a good liming agent (typically half the lime value and fast-acting) and provides significant potassium, some phosphorus and micronutrients.

Conventional or organic?

If your ultimate goal is organic certification, then getting started with the certification process is desirable. You should be using only fertilizers and soil amendments acceptable under the [USDA National Organic Program](#). Details can be found at the [Michigan State University Organic Farming Exchange](#) website. You may also want to review the [Michigan State University Extension](#) Bulletin E3067, “[Transitioning to Certified Organic in Michigan: Where to Start?](#)”

More details on fertilizers as well as fertilizer recommendations based on soil test reports can be provided by your local field crop, fruit and vegetable [MSU Extension educators](#). Another good resource is the MSU Extension Bulletin E3144 “[Building Soils for Organic and Sustainable Farms: Where to Start?](#)”

The 2014 MSU Extension Beginning Farmer Webinar Series is an ongoing educational opportunity for people new to farming. Registration is currently open for the following webinars:

- [Getting started with organic vegetable pest control](#)
- [Getting started with selling to schools and hospitals](#)
- [Getting started with selling at farmers markets](#)
- [Getting started with a CSA farm](#)
- [Getting started with hoopouses](#)

Check the [MSU Extension events calendar](#) for additional webinars:

- Getting started with hops
- Getting started with organic field crops
- Getting started with expanded vegetable production
- Getting started with basic farm business records

Read [Part 1](#) of this series for information on how new farmers can benefit from careful assessment of their farm's soil and planning for crop rotations and use of cover crops.

For more information, contact Extension educator Jim Isleib at isleibj@anr.msu.edu or 906-387-2530.

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INSURING AGAINST CROP LOSSES DUE TO RECALLS: ARE YOU COVERED?

Crop insurance for fresh produce is often taken for granted until it is sorely needed. Growers are urged to look into their fresh produce crop insurance coverage to ensure adequate coverage.

Posted on **February 6, 2014** by [Phil Tocco](#), Michigan State University Extension

Most fresh produce growers treat crop insurance like an umbrella. They don't give much thought to the size and functionality until it is needed. Every so often it's important to check to see if your crop insurance umbrella will actually work in a food safety crisis. One such area of crop insurance where you might have a lack of coverage is in the area of food adulteration. A recent episode at a Michigan produce farm pointed out the need to sit down with an insurance provider and plan for situations where you may have to destroy a crop due to potential food safety risks.

Fresh produce growers who practice good food safety on their farms are well aware of what practices can increase risk of foodborne illness. In instances where there is a known breach of food safety of a significant magnitude to warrant it, the most responsible thing to do is destroy the crop and not let it enter the food supply. These are instances that could include a major flood event midseason, significant numbers of livestock loose in a field, or misapplication of crop protectants. In these instances, the produce is essentially unsalable and the contaminating event may not have been the produce grower's fault. In most cases, crop insurance and standard liability coverage may only cover a small fraction of the loss due to food adulteration. This is irrespective of the size of the liability coverage.

If no such plan exists in your crop insurance options, then look for coverage of this type under your property and casualty policy. It is imperative that produce growers take a moment with their insurance providers to ensure they are adequately covered for crop loss in the event of food adulteration. The losses due to an unforeseen mishap can be catastrophic.

If you have difficulty with food safety issues, contact the [Michigan State University Extension Agrifood Safety Work Group](#) at gaps@msu.edu or 517-788-4292.

This article was published by [Michigan State University Extension](#). For more information, visit <http://www.msue.msu.edu>. To contact an expert in your area, visit <http://expert.msue.msu.edu>, or call 888-MSUE4MI (888-678-3464).

FINE POINTS OF WATER TESTING

Done right, water testing is an effective way to verify water used on fresh produce is safe for use. Little things can have a big impact on this. Consider some fine points when taking water samples.

Posted on **February 6, 2014** by [Phil Tocco](#), Michigan State University Extension

Verifying that irrigation water is safe for its intended use is of critical importance to fresh produce growers. Key to this verification is regular and effective water testing. When taking water samples to verify safety for fresh produce, a number of things need to be considered to ensure an accurate result.

Sanitize your hands

Opening a testing bottle exposes the very sterile inside of the bottle to a world of bacteria. Very large and often overlooked sources of bacteria are the hands of the person doing the sampling. It is therefore recommended that the person doing the sampling use hand sanitizer before opening the sampling bottle.

Save and use the preservative tablet

Most water sampling bottles have a preservative in the form of a tablet dropped into the bottle. When taking the sample, it is often easy to lose this tablet if it isn't taken out first. After the water sample is drawn, it is essential to put the tablet back into the water sample. The preservative helps to maintain the accuracy of the testing being done.

Pay attention to the sample hold time and temperature it is held at

It is very easy to put off taking a sample into the lab until a much later, more convenient time. This must be avoided at all costs. In order for a water test to be considered valid, it must be delivered on ice to a lab within six hours of sampling. Anything longer or warmer than this can return false positive samples and higher than threshold results, increasing the cost of production.

Attention to the finer points of water sampling can not only ensure accurate samples, but can save you money. Having the confidence to use irrigation water without the use of disinfection treatment first can really add up in money saved with little loss of safety.

If you have difficulty with food safety issues, contact the [Michigan State University Extension Agrifood Safety Work Group](#) at gaps@msu.edu or 517-788-4292.

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WEBSITES OF INTEREST

Insect and disease predictive information is available at:

<http://enviroweather.msu.edu/homeMap.php>

This issue and past issues of the weekly FruitNet report are posted on our website

<http://agbioresearch.msu.edu/nwmihort/faxnet.htm>

60 Hour Forecast

<http://www.agweather.geo.msu.edu/agwx/forecasts/fcst.asp?fileid=fous46ktvc>

Information on cherries is available at the new cherry website:

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

Fruit CAT Alert Reports has moved to MSU News

<http://news.msue.msu.edu>