



New York Berry News

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NNY Grower Testing Alfalfa Beetle-Busting Biocontrol to Protect Strawberry Crop

Kara Lynn Dunn, Northern NY Ag Development Program Publicist

October 18, 2013. Peru, NY. A low-cost, easy-to-implement on-farm solution for controlling a highly destructive alfalfa pest is now expected to pay off for New York strawberry growers.

The Northern New York Agricultural Development Program (NNYADP) has granted funds to Cornell University entomologist Elson Shields to evaluate the use of alfalfa snout beetle-controlling nematodes to manage two strawberry crop pests.

Strawberry root weevils and black vine weevils attack a wide array of plants from woody ornamentals in the urban landscape to commercial cane berry crops, including raspberries and blackberries; and strawberries.

“Strawberry root weevil and black vine weevil are very closely related to alfalfa snout beetle, and, like alfalfa snout beetle, these weevils are difficult to control with conventional pesticides, but they are

very susceptible to attack by the biocontrol nematodes,” Shields says.

Shields developed a protocol for using native New York nematodes to control alfalfa snout beetle, which had become the single most limiting factor for alfalfa growers in nine New York counties. Similarly, the two weevils are causing economic havoc for strawberry growers.

In the fall of 2013, with assistance from the Shields’ research and extension team, Rulfs Orchards applied biocontrol

nematodes to most of a 12-acre strawberry field at the Peru, NY, farm business. The untreated areas will serve as a control for evaluating the true effectiveness of the nematode treatment.

Shields estimates weevil damage at the farm was causing \$20,000 to \$30,000 worth of economic loss due to the loss of fruit and plants and the cost of reestablishing the strawberry planting.

Robert Rulfs says, “Strawberry root weevil and black vine weevil larvae feed on the strawberry



Photo: Weevil damage is worse at one end of a NNY strawberry field. Photo: Amy Ivy, CCE Clinton County



Photo: Strawberry Root Weevil (*Otiorynchus rugifrons*), Pest and Diseases Image Library, Bugwood.org.

“Strawberry root weevil and black vine weevil are found nationwide because they impact the potted plant nursery industry and shipments across the U.S.”



Above: Black Vine Weevil adult, (*Otiorynchus sulcatus*) Kent Loeffler, Cornell University, Bugwood.org.



Photo: Black Vine Weevil larvae (*Otiorynchus sulcatus*) Jim Baker, North Carolina State University, Bugwood.org.



Photo: Black Vine Weevil pupa (*Otiorynchus sulcatus*) Jim Baker, North Carolina State University, Bugwood.org.

NNY Grower Testing Alfalfa Beetle-Busting Biocontrol to Protect Strawberry Crop

(continued)

plant roots, killing the plants, and they have been causing large scale crop losses. This Northern New York Agricultural Development Program project is addressing a big problem for our farm business.”

To apply the nematodes, a crop sprayer already on the Rulfs’ farm was used, with only a nozzle change, removal of all screens and filters, and a good cleaning of the equipment to reduce any pesticide residue required.

The early September application allowed six to eight weeks for the nematodes to attack the weevil larvae that are active in the strawberry root zone until the soil

temperature cools as winter approaches.

In October, the researchers will collect soil samples to be analyzed at the Shields Lab at the Cornell University campus in Ithaca, NY, to confirm the presence of the nematodes.

The soil sampling will be repeated in May 2014 to confirm the successful overwintering of the nematodes that will become active to continue their attack on the remaining weevil larvae as the soil warms and to document the nematodes’ impact on the weevil populations. The goal of the treatment protocol is to prevent any further strawberry plant root

damage by the weevil larvae that persist through the Northern New York winter.

The nematodes applied to the Rulfs’ strawberry field are two native New York strains of nematode; each strain occupies the soil at different depths. Since the nematodes used are native to the region, they persist after application for many years. Northern New York farmers are reporting the long-term recovery of the alfalfa crops so valuable to the dairy industry and as a cash crop.

The NNYADP-funded project work in the Northern New York strawberry crops has implications for the berry industry elsewhere. Shields

NNY Grower Testing Alfalfa Beetle-Busting Biocontrol to Protect Strawberry Crop *(continued)*

says, "Strawberry root weevil and black vine weevil are found nationwide because they impact the potted plant nursery industry and shipments across the U.S."

Shields expects the 2014 data from the strawberry trial will be significant on the success side. If the data bears him out, his research team is ready to extend the treatment protocol to growers across New York and in the Northeast. Updates will be posted on the NNYADP

website at www.nnyagdev.org. The Alfalfa Snout Beetle Control Manual developed by the Shields' team for use by alfalfa growers is already posted on the NNYADP home page.

The farmer-driven Northern New York Agricultural Development Program funds research, technical assistance and outreach for agricultural producers in Clinton, Essex, Franklin, Jefferson, Lewis and St. Lawrence counties.



Photo: Left to right: Cornell Cooperative Extension Horticultural Specialist Laura McDermott, Cornell University Entomologist Elson Shields, and Cornell University Research Support Specialist Tony Testa prepare nematodes for application on strawberry fields at Rulfs Orchard. Photo: Amy Ivy, CCE Clinton County

NEW MICRO WATER SENSOR CAN AID GROWERS

*Krishna Ramanujan,
Cornell Chronicle*

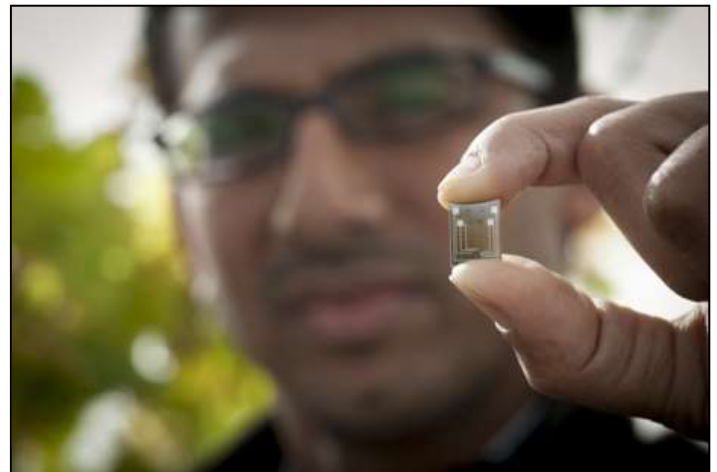
October 10, 2013. Crop growers, wine grape and other fruit growers, food processors and even concrete makers all benefit from water sensors for accurate, steady and numerous moisture readings. But current sensors are large, may cost thousands of dollars and often must be read manually.

Now, Cornell researchers have developed a microfluidic water sensor within a fingertip-sized silicon chip that is a hundred times more sensitive than current devices. The researchers are now completing soil tests and will soon test

their design in plants, embedding their "lab on a chip" in the stems of grape vines, for example. They hope to mass produce the sensors for as little as \$5 each.

In soil or when inserted into a plant stem, the chip is fitted with wires that can be hooked up to a card for wireless data transmission or is compatible with existing data-loggers. Chips may be left in place for years, though they may break in freezing temperatures. Such inexpensive and accurate sensors can be strategically spaced in plants and soil for accurate measurements in agricultural fields.

For example, sophisticated



Above: Vinay Pagay holds a "lab on a chip" that measures moisture levels in soil and can be embedded in plant stems for accurate information on water stress. The researchers hope to mass produce the chips for as little as \$5 each. Jason Koski/University Photography

vintners use precise irrigation to put regulated water stress on grapevines to create just the right grape composition for a premium cabernet or a chardonnay wine. While growers can use the sensors to monitor water in soils for their crops, civil

NEW MICRO WATER SENSOR CAN AID GROWERS *(continued)*

engineers can embed these chips in concrete to determine optimal moisture levels as the concrete cures.

“One of our goals is to try and develop something that is not only a great improvement, but also much cheaper for growers and others to use,” said Alan Lakso, professor of horticulture, who has been working on water sensing for 20 years.

The sensors make use of microfluidic technology – developed

by Abraham Stroock, associate professor of chemical and biomolecular engineering – that places a tiny cavity inside the chip. The cavity is filled with water, and then the chip may be inserted in a plant stem or in the soil where it, through a nanoporous membrane, exchanges moisture with its environment and maintains an equilibrium pressure that the chip measures.

Using chips embedded in plants or spaced

across soil and linked wirelessly to computers, for example, growers may “control the precise moisture of blocks of land, based on target goals,” said Vinay Pagay, who helped develop the chip as a doctoral student in Lakso’s lab.

Ernest and Julio Gallo Winery and Welch’s Juice Company have already expressed interest in the sensors. And Cornell civil engineer Ken Hover has started working with Pagay and Lakso on using the sensors in

concrete.

The researchers seek to understand how values gathered from sensors inside a plant and in soils relate to plant growth and function, so that growers can translate sensor values and optimize management.

The Cornell Center for Technology Enterprise and Commercialization is handling the intellectual property rights and patents.

NEW UNIVERSITY OF FLORIDA DEVELOPED STRAWBERRY VARIETIES ARE BRED WITH A FOCUS ON FLAVOR

*Robert H. Wells,
University of Florida*

September 12, 2013. Gainesville, FL. With the time for Florida growers to plant strawberries right around the corner, it won’t be long before Florida-grown strawberries appear in grocery aisles.

And for some of the best-tasting strawberries on the market according to multiple taste panels and tests, shoppers can simply look for those grown in the Sunshine State, thanks to work by the University of Florida. Researchers with UF’s Institute of Food and

Agricultural Sciences have continued to improve the quality and flavor of Florida-grown strawberries, as evident in their latest releases of the cultivars Winterstar and Florida Sensation. Winterstar will be available in grocery aisles this winter while Florida Sensation is slated to be available next year.

And while the strawberries won’t be labeled by variety, consumers should look for the Fresh from Florida logo or some other indication that they were grown somewhere in Florida, such as in Plant City, the state’s strawberry



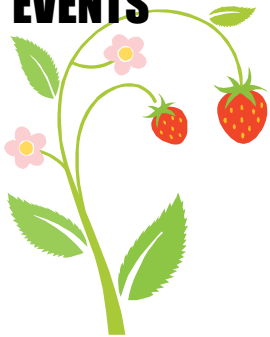
Above: Vance Whitaker, a UF/IFAS strawberry breeder based at UF’s Gulf Research and Education Center in Balm, helps breed Florida strawberries for exceptional taste. For some of the best-tasting strawberries on the market according to multiple taste panels and tests, shoppers can simply look for those grown in the Sunshine State, thanks to work by the UF/IFAS strawberry breeding program.:

capital.

Test panels have often rated Winterstar’s taste above the leading variety in the state, Florida Radiance, said Vance Whitaker, a UF/IFAS strawberry breeder based at UF’s Gulf Research and Education Center in Balm.

“It’s either always been equal to or significantly greater than Florida Radiance in terms of sweetness and overall

EVENTS



2013 Chautauqua County Small Fruit Meeting

Monday, December 9, 2013 1:00 PM—3:30 PM

CLEREL, 6592 West Main Road, Portland, NY

November 14, 2013. Portland, NY- Cornell Cooperative Extension announces that the sixth annual Small Fruit Meeting will be held at the Cornell Lake Erie Region Extension Laboratory (CLEREL) facility in Portland, NY (6592 West Main Road, Portland). The meeting will run from 1:00 PM to 3:30 PM on Monday, December 9th, 2013. This meeting is for all current or prospective small fruit growers in Western New York.

Four presentations will be given on various topics of interest to the small fruit grower. Juliet Carroll, Fruit IPM Coordinator with the New York State Integrated Pest Management Program of Cornell, will present information about the Spotted Wing Drosophila, an invasive fruit fly that arrived in New York in 2011. Spotted Wing Drosophila has the ability to directly infest sound fruit, especially blackberries, raspberries, blueberries, elderberries, and to a lesser extent cherries, plums, and grapes. Major losses have occurred in late summer and fall berries in New York. Ms. Carroll will cover biology of the insect, management tactics, and monitoring techniques.

Cathy Heidenreich, Berry Extension Support Specialist with Cornell University, will present about opportunities to expand your berry market with specialty small fruit crops,

including aronia, currants, gooseberries, jostaberries, elderberries, juneberries, hardy kiwifruit, honeyberries, cranberries and lingonberries. A brief overview of these small fruit crops and available production resources for them will be presented.

Virginia Carlberg, Community Educator with Cornell Cooperative Extension of Chautauqua County, will briefly present information about Cornell's new Berry Farm Business Summary Program, benefits of participating, and how to get involved.

Sharon Bachman, New York Invasive Species Outreach Educator, will present about wild parsnip, a non-native plant that poses a danger to people's health. This could be of particular concern to growers who offer a u-pick berry patch to customers. Participants will learn how to identify the different stages of the plant and best practices for removing them from the farm.

For more information about the Small Fruit Meeting, contact Virginia Carlberg at (716) 664-9502 extension 202 or email vec22@cornell.edu.

Registration is requested by December 6th. The meeting is free of cost to all Cornell Cooperative Extension enrolled members; non-enrolled

participants are requested to pay \$10 per person. Cornell Cooperative Extension provides equal program and employment opportunities. Accommodations for persons with special needs may be requested by contacting Cornell Cooperative Extension prior to December 6, 2013.

The Agriculture Program is one of many programs offered by Cornell Cooperative Extension of Chautauqua County (CCE-Chautauqua).

CCE-Chautauqua is a community based educational organization, affiliated with Cornell University, Chautauqua County Government, the NYS SUNY system, and the federal government through the United States Department of Agriculture's National Institute of Food and Agriculture.

For more information, call 716-664-9502 or visit our website at www.cce.cornell.edu/chautauqua

Cornell University Cooperative Extension provides equal program and employment opportunities.



Cornell University
Cooperative Extension
Chautauqua County



Chautauqua County

2013

Small Fruit Meeting

Monday, December 9, 2013

1:00 PM—3:30 PM

CLEREL, 6592 West Main Road, Portland, NY

This year's Sixth Annual Small Fruit Meeting will be held at the CLEREL facility in Portland, NY. All current or prospective small fruit growers in Western New York are welcome to attend this afternoon meeting.

Spotted Wing Drosophila: Biology, Crops of Concern, Best Management Practices—

Juliet Carroll, Fruit IPM Coordinator, NY State IPM Program, Cornell Cooperative Extension

Spotted wing Drosophila (SWD) is a fruit fly that arrived in NY in 2011. It has the ability to directly infest sound fruit, especially blackberries, raspberries, blueberries, elderberries, and to a lesser extent cherries, plums, peaches and grapes. Major losses have occurred in late summer and fall berries in NY. Management tactics currently rely principally on the use of insecticide sprays applied weekly when fruit ripen. Other tactics such as sanitation, judicious pruning, and monitoring can prove helpful. Information on SWD will be presented covering its basic biology, host preferences, management tactics, where to find timely information and what research is underway to combat this new insect pest of berries.

Expanding Your Berry Market with Specialty Small Fruit Crops –

Cathy Heidenreich, Berry Extension Support Specialist, Cornell University Department of Horticulture

There are several specialty small fruit crops that may be added to commercial berry operations in order to expand your current berry offerings. These include crops such as aronia, currants, gooseberries, jostaberries, elderberries, juneberries, hardy kiwifruit, honeyberries, cranberries and lingonberries. Commercial production of these crops is beginning to catch on in NY and you may want to consider adding one or more of these to your small fruit repertoire. They are also an excellent complement to a CSA offering. A brief overview of these small fruit crops and available production resources for them will be presented.

Tracking your Berry Bottom Line -

Virginia Carlberg, Community Educator, Cornell Cooperative Extension Chautauqua County

A quick introduction to the new Cornell University Cooperative Extension Berry Farm Business Summary Program and Berry Enterprise Budget Analysis Project and the benefits of better understanding your financial position.

Wild Parsnip-

Sharon Bachman, NY Invasive Species (NYIS) Outreach Educator, CCE-Erie & NYIS Outreach Program

Wild Parsnip, a non-native plant (which looks like dill without the smell), poses a danger to your customers if growing near your u-pick patch. Learn about how to identify the different stages of this plant, why this plant is a concern and best practices for removing from your farm.

Building Strong and Vibrant New York Communities

Cornell Cooperative Extension in Chautauqua County provides equal program and employment opportunities.

Chautauqua County 2013 Small Fruit Meeting Registration Form

Name(s): _____ Phone: _____

Address: _____ Total Amt. Enclosed: \$ _____

FREE for all CCE Enrolled farms \$10 per farm for all non-enrolled

Please make checks out to Cornell Cooperative Extension of Chautauqua County.

Return registration form to: Ginny Carlberg, CCE-Chautauqua County, 3542 Turner Road, Jamestown, NY 14701
by December 6, or pay at the door or call to RSVP- (716) 664-9502 x 202.

EVENTS



2014 Empire State Producers EXPO Berry Sessions Keep You Up to the Minute in Commercial Berry Crop Production

Join commercial berry growers from across the state on Wednesday, January 22nd and Thursday January 23rd 2014 for berry education sessions at the Empire State Producers EXPO held at the OnCenter in Syracuse, NY.

Morning Berry Session, Wednesday, January 22, 2014, 9 to 9:45 AM

This session is designed to whet your appetite for what promises to be a full day and a half of commercial berry educational programming you won't want to miss!

If you had to give an opinion of the return on investment berry crops provide to your operation what would you say? Would your answer be a factual one based on your most recent berry farm business summary and enterprise budget data? If not, now is your opportunity to be a part of a ground-breaking research and extension project funded by the

NY Farm Viability Institute on how to be able to do just that. Mr. Dan Welch, FarmNet Business and Succession Planning Coordinator, and Dr. Brad Rickard, Assistant Professor, both from the Cornell University Charles H. Dyson School of Applied Economics and management, will introduce you to the project. They will provide insights from year one of the project and explain how you, too, can get set up to evaluate berry crop return on investment for your operation.

Ever wondered what the bottom line is on soil and leaf analysis? Does the time, money and energy involved in doing the sampling, interpreting the results and making analysis-based management decisions pay off? Find out what other growers say about it during the morning session grower panel. Participants in a recent berry soil and nutrient management research and education project will provide insights on their experiences with analysis-based management. Panelists will include Mr. David Stern, Rose Valley Farm, Rose, NY, Mr. Brian Reeves, Reeves Farms, Baldwinsville, NY and other panelists TBA.

Mid-afternoon Berry Session, Wednesday, January 22, 2014, 1 to 2:30 PM

Will history repeat itself just when everything is coming up currants and gooseberries? The currant and gooseberry industry in NY has been growing slowly but steadily since revision of the ribes planting regulation in 2003, allowing expanded ribes production across areas of the state. Dr. Kerik Cox, Cornell University Department of Plant Pathology and Plant Microbe-

Biology, will discuss his research findings on the breakdown of disease resistance to White pine blister rust in black currant varieties and the potential impact of this development on the ribes production in NYS.

As warm humid summers become more of the norm in NYS, so does the occurrence and increasing severity of strawberry powdery mildew. Dr. David Gadoury, from the same department, will discuss research findings and progress in managing this frequently unobserved yet often serious strawberry disease that infects not only leaves, but also fruit! One of the obstacles to commercial berry growing in NY is harvest labor – are processing berries a viable alternative? What are the ins and outs of this type of production? As the final mid-afternoon session speaker, Mr. Sam Erwin, Indiana Berry and Plant Company, will discuss his experience with machine harvest of berry crops.

Day Neutral Strawberry Intensive Workshop, Wednesday, January 22, 2014, 3:30 to 5:30 PM

The berry intensive was added as a new feature of the 2013 EXPO and is back again this year occurring during the final session of the day 1 berry program.

Day neutral (DN) strawberry production has been a topic of recent much interest and research in the north Eastern region. Plan to attend this intensive workshop to find out what you need to know to add this season-extending system to your operation.

Strawberry specialists from NY, PA and FL will host the 2-hr

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intensive focusing on getting growers on board and up to speed with DN production.

Ms. Kathleen Demchak, Senior Extension Associate in the Pennsylvania State University Department of Plant Science, will kick off the intensive with a discussion of the general principles of DN production, followed by an in-depth look at weed management.

Dr. Courtney Weber, Cornell University Department of Horticulture, will continue the intensive by presenting results from his Geneva, NY research trials looking at effects of planting date and plant type on DN strawberry production.

The day will close with a discussion of Strawberry Nutrient Management in plasticulture systems by Dr. Bielinski Santos, University of Florida Department of Horticultural Sciences.

Spotted Wing Drosophila Session I, Thursday, January 23, 2014, 9 to 11 AM

Day two of the day and a half long berry program entails double-header sessions on the new invasive pest Spotted Wing Drosophila (SWD). This pest, first detected in NY in 2011, continues to cause significant damage and crop loss to berries across the state. What have we learned since SWD's arrival here in 2011? What tools are available for its management?

Dr. Greg Loeb, Professor and Associate Chair, Cornell University Department of Entomology, will start the program with a brief 2013 SWD season recap followed by results from his research on assessment of lures

for monitoring adult SWD. He will be followed by Dr. Juliet Carroll, Fruit IPM Coordinator for the NNYS Integrated Pest Management Program, who will discuss the outcomes of her 2013 NYS SWD trap network and future endeavors in this area.

Mr. Faruque Zaman, Entomology Program Associate with Suffolk County Cooperative Extension, Long Island, will discuss his results in year round SWD monitoring and berry fruit damage assessment.

Mr. Peter Jentsch, Extension Associate in the Cornell University Department of Entomology, Hudson Valley Lab, will review strategies for late season management of SWD.

The morning session will end with a brief NYS Berry Growers Association Annual Meeting. This group was instrumental in lobbying for and obtaining emergency NYS funding support for research on the biology and management of this emerging pest in NY. Take in this meeting to find more about how you can be a part of this important NYS commercial berry grower group.

Spotted Wing Drosophila Session II, Thursday, January 23, 2014, 1 to 3 PM

The final berry session of the EXPO continues to provide research findings on SWD and introduces 3 new SWD research projects launched this season. Dr. Greg Loeb will again present findings from his research trial, this time in regard to enhancing insecticide efficacy with phagostimulants.

Ms. Laura McDermott, Extension Associate and Berry Specialist

with the Cornell Cooperative Extension Eastern NY Horticulture Program and Ms. Lawrie Nickerson, Hayberry Farm, will discuss a new NE SARE farmer grant project evaluating the use of exclusion and mass trapping of SWD in organic Blueberry production.

Drs. Art Agnello and Andrew Landers of the Cornell University Department of Entomology will present preliminary information from their work with developing and evaluating a fixed spray system for SWD management in high tunnel raspberries.

The final berry program speaker of the day will be Ms. Johanna Elsensohn, Research Support Specialist in the same department, who will report first year findings from a new project documenting season-long wild hosts for SWD and their role in the biology of the pest.

Plan to join us for information packed 2014 EXPO berry educational program, you'll be glad you came!

For more information or to register go to:

<http://nysvga.org/expo/information/>



EVENTS



DON'T MISS THE 2013 NEW ENGLAND VEGETABLE AND FRUIT CONFERENCE - Vern Grubinger, University of Vermont Extension

On December 17 to 19 the biggest and best educational event for commercial growers of fruits and vegetables in New England takes place in Manchester, NH. It only happens every other year, so don't miss it. Over a thousand farmers attend, and the biggest complaint they have is "there were so many good sessions I couldn't get to them all." Be sure to pre-register to avoid late fees, and take advantage of the reduced rate for registering other family members and employees from your farm at the same time. Bringing a whole crew allows you to split up and collect information on the many different topics that will be covered.

Educational sessions. This year's conference features 31 educational sessions over 3 days, covering major vegetable, berry and tree fruit crops topics, as well as a special session on spotted wing drosophila. Each morning and each afternoon there are five concurrent sessions running side by side, so there is a lot to choose from. A session typically includes five separate half-hour presentations, which are given by a combination of farmers, educators, researchers and industry personnel.

Farmer to Farmer sessions. These gatherings take place twice

a day; one after each morning and afternoon concurrent session. These informal sessions bring speakers and farmers together for in-depth discussions that allow growers to learn from each other. Topics this year include: tractor cultivation, organic fruit, hand cultivation, quality seeds, winter growing, organic insect and disease control, and irrigation systems.

Trade show. Always popular at the conference is the extensive Trade Show with over 100 commercial exhibitors, and many non-profit exhibitors, too. Check out the latest in tractors, tillage and irrigation equipment, seeds and plants, fertilizers and pest controls, marketing supplies, and much more. Learn about the details of these products from the people that sell them. You must register for the conference in order to attend the Trade Show. It is open 8 am to 2 pm all three days and 4 pm to 6 pm on Tuesday and Wednesday.

Registration. The pre-registration fee to attend any part or all of the conference or trade show is \$105 for the first member of the farm or business, and \$75 for each additional member (family or employee) when pre-registered with first member. The pre-registration fee for students (high school or college) is \$45 each but only when pre-registered by the instructor.

Pre-registration is strongly encouraged! There is an additional fee of \$30 (\$20 for students) per person for late registration or walk-ins. On-line registration is available for your convenience at www.newenglandvfc.org. You can register individuals as well as groups of people. Please note: you will not receive a registration

receipt in the mail. Your registration package will be available at the registration desk when you arrive at the conference. If registering at the door, credit cards will be accepted; there is also an ATM machine available in the hotel if you need cash.

Accommodations. You are responsible for making your own lodging arrangements if you need them. The conference host hotel is the Radisson Center of New Hampshire, but rooms there sell out very early; call 603-625-1000 or go to www.radisson.com/manchesternh. Other hotels in the area include: Hilton Garden Inn 603-669-2222; Courtyard by Marriott, 603-641-4900; Homewood Suites by Hilton 603-668-2200; Four Points Sheraton, 603-668-6110; Holiday Inn Express, 603-669-6880; Super 8, 800-800-8000; Comfort Inn, 603-668-2600; EconoLodge, 603-624-0111. Additional information is available on the conference web site.

Parking. Limited parking is available in the parking garage next to the Radisson hotel. There is also a limited number of two hour and ten hour parking meters available along city streets. Other parking options in the area are the Hampshire Plaza Parking Garage and the Victory Park Public Garage. It is best to arrive early if you want to find a parking space near the conference.

For more information about the conference, including the names of individual presentations and speakers in each session, a list of trade show exhibitors, and links to the proceedings of past conferences, go to <http://www.newenglandvfc.org>.

AG NEWS

NYS Department of Agriculture and Markets Announces \$150,000 to Help Localities Plan for Their Agricultural Futures

October 30, 2013. The New York State Department of Agriculture and Markets today announced \$150,000 in funding to help four municipalities (3 counties and 1 town) develop local agricultural and farmland protection plans. Planning grants, an integral component of the State’s Farmland Protection Program, are being provided to Jefferson, Steuben and Ontario Counties, as well as the Town of Milton in Saratoga County.

Acting State Agriculture Commissioner James B. Bays said, “Governor Cuomo understands the important role that agriculture plays in local economies, and in this Administration interest in agriculture has never been higher. As a former Town Supervisor, I have seen firsthand how critically important it is to plan for future sustainability. This funding will assist municipalities in developing strategies on how to grow smart while continuing to protect their vast agricultural resources.”

Planning grants provide local

municipalities with an economic incentive to develop local agricultural and farmland protection plans. These plans help maintain the economic viability of the State’s agricultural industry and its supporting land base and protect the environmental and landscape preservation values associated with agriculture. Under this program to date, New York has helped fund agricultural and farmland protection plans in 77 towns and 13 counties.

Any municipality, including cities, towns and villages, located in a county that has an agricultural and farmland protection board is eligible for a farmland protection planning grant. These funds can provide up to \$25,000, or 75 percent of the cost of developing a local protection plan.

The planning grant program is also open to counties that have an approved agricultural and farmland protection plan that is ten years old or older. Those counties may receive up to \$50,000, or 50 percent of the cost of updating the

current plan or developing a new county plan.

For more information on funding, please visit: http://www.agriculture.ny.gov/funding_opportunities.

Agricultural and farmland protection plans should identify the location of farmland to be protected, the value of that land to the local economy, the value of that land as open space and the consequences of possible conversion. The plan should also describe the programs and strategies the local government intends to use to promote and protect continued agricultural use.

2013 Farmland Protection Planning Grants

Jefferson County.....	\$37,500
Steuben County.....	\$50,000
Ontario County.....	\$37,500
Town of Milton (Saratoga County).....	\$25,000
TOTAL.....	\$150,000



AGRICULTURE NEWS

New York State Department of Agriculture & Markets

108 Airline Drive ~ Albany, New York 12235 ~ www.agriculture.ny.gov

AG NEWS *(continued)*

Release of 2012 Census of Agriculture Data Delayed

November 13, 2013. The U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) will delay publication of the 2012 Census of Agriculture from February 4, 2014 as a result of the work stoppage caused by the recent lapse in federal funding. NASS will release preliminary results of the 2012 Census of Agriculture on February 20, 2014. The release, which will provide an initial look at national and state findings, will take place at the Ag Outlook Forum. NASS will release the full Census results at a later date and is working to set a revised schedule that ensures the highest-quality data. The release date was delayed by the work stoppage caused by the lapse in federal funding in October 2013. NASS is working to set a new schedule that ensures the highest quality data.

For more information contact Sue King at (202) 690-8122 or sue.king@nass.usda.gov.

Operating Loans for the 2014 Crop Season are Available Now

October 25, 2013. FSA would like to encourage producers to file loan applications now for operating loans for the 2014 crop

season. Eligible applicants may obtain direct loans for up to a maximum indebtedness of \$300,000 and a direct operating Microloan for up to a maximum indebtedness of \$35,000. Maximum indebtedness for a guaranteed loan is \$1,355,000. Annual operating loans are generally repaid within 12 months or when the commodities produced are sold. In general, loan funds may be used for normal operating expenses – other types of loans are also various purposes. Please contact your local FSA office to discuss your credit needs and obtain a loan application or obtain your loan application package on line at

<http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=landing>. The current interest rate on our direct operating loans is 2.125%. If your farm operation is prepared for the 2014 season, please assist us in passing the word along to your friends and neighbors who may need FSA assistance.

Questions? Please contact your local FSA office.

<http://offices.sc.egov.usda.gov/locator/app?state=ny&agency=fsa>

Secretary Vilsack Highlights First-Ever Report on USDA Efforts to Expand Agroforestry Practices on Farms, Ranches and Woodlands

October 28, 2013. Washington. Agriculture Secretary Tom Vilsack today released the first-ever report on USDA's role advancing agroforestry. [Agroforestry: USDA Reports to America](#) details how

agroforestry practices are helping farmers, ranchers and woodland owners enhance agricultural productivity, protect the environment and increase profits. "USDA has invested less than one percent of its budget into tree-based practices. Yet that small investment allows us to help create private goods and public services that reap great rewards, including reduced greenhouse gas emissions and more resilient agricultural lands," Vilsack said. "However, much work remains to promote and sustain agroforestry practices, which have great potential to promote economic growth and job creation in rural communities."

Agroforestry is a management approach that intentionally combines agriculture and forestry to create more sustainable land-use systems. Over the last five years, USDA has assisted landowners financially and with technical guidance to establish roughly 336,000 acres of windbreaks, riparian forest buffers and alley cropping; about 2,000 acres of silvopasture; and about 500 acres of forest farming. Those acres represent less than 1 percent of the potentially suitable land for applying those practices, suggesting there is an opportunity to significantly expand the application of agroforestry in the United States.

"Agroforestry provides benefits beyond rural areas," Vilsack said. "In suburban areas, agroforestry practices can improve wildlife habitat, mitigate the movement of odors and dust, serve as noise barriers and act as filters that help keep water clean."

AG NEWS (continued)

Agroforestry: USDA Reports to America is a cross-Departmental effort from eight agencies serving on the Agroforestry Executive Steering Committee: Agricultural Marketing Service; Agricultural Research Service; Farm Service Agency; National Agricultural Statistics Service; National Institute of Food and Agriculture; Natural Resources Conservation Service; Rural Development; and U.S. Forest Service. These agencies work closely with the USDA National Agroforestry Center to advance the science, practice and application of agroforestry, and guide implementation of the USDA Agroforestry Strategic Framework. A longer version of the report will be posted by USDA soon.

With the release of this report on agroforestry, USDA wants to start a national conversation about agroforestry with producers, landowners, communities and young people - America's future farmers.

"Our goal is and always has been to help landowners understand that trees - and other permanent vegetation - planted in the right place for the right reason, will add value to their lands," said Wayne Honeycutt, USDA Natural Resources Conservation Service Deputy Chief for Science and Technology, who chairs USDA's Agroforestry Executive Steering Committee. "Through the report, we are able to show landowner successes. In some cases, family farms have been saved and woodlands spared from development. We hope by showing these stories, more landowners will see the potential for their operations."

To access the report, visit

www.usda.gov/agroforestry. Send comments and questions about the report and USDA's role in agroforestry to agroforestry@USDA.gov.

USDA Farm Service Agency Urges Farmers and Ranchers to Vote in County Committee Elections Beginning Monday, Nov. 4

Nov. 4, 2013. WASHINGTON. — USDA Farm Service Agency (FSA) Administrator Juan M. Garcia announced that the 2013 FSA County Committee Elections begin today, Nov. 4, with the mailing of ballots to eligible voters. The deadline to return the ballots to local FSA offices is Dec. 2, 2013.

"The role and input of our county committee members is more vital than ever at a time when our country faces important choices regarding the funding and operation of our government," said Garcia. "New county committee members provide input and make important decisions on the local administration of disaster and conservation programs. With better participation in recent years, we have also seen promising increases in the number of women and minority candidates, helping to better represent the richness of American agriculture."

County committee members are an important component of the operations of FSA and provide a link between the agricultural community and USDA. Farmers and ranchers elected to county committees help deliver FSA programs at the local level, applying their knowledge and judgment to make decisions on

commodity price support programs; conservation programs; incentive indemnity and disaster programs for some commodities; emergency programs and eligibility. FSA committees operate within official regulations designed to carry out federal laws.

To be an eligible voter, farmers and ranchers must participate or cooperate in an FSA program. A person who is not of legal voting age, but supervises and conducts the farming operations of an entire farm may also be eligible to vote. Agricultural producers in each county submitted candidate nominations during the nomination period, which ended on Aug. 1.

Eligible voters who do not receive ballots in the coming week can obtain ballots from their local USDA Service Center. Dec. 2, 2013, is the last day for voters to submit ballots in person to local USDA Service Centers. Ballots returned by mail must also be postmarked no later than Dec. 2. Newly elected committee members and their alternates will take office Jan. 1, 2014.

Close to 7,700 FSA county committee members serve in the 2,124 FSA offices nationwide. Each committee consists of three to 11 members who serve three-year terms. Approximately one-third of county committee seats are up for election each year. More information on county committees, such as the new 2013 fact sheet and brochures, can be found on the FSA website at <http://www.fsa.usda.gov/elections> or at a local USDA Service Center.



Farm Food Safety Training with GAPs Dates Announced - Register Online for the Batavia Workshop Now!

Craig Kahlke, Lake Ontario Fruit Program

In recent years, several food borne illness outbreaks in produce have made national news. Both the produce industry and the federal government have stepped up demands for fruit and vegetable farms to meet food safety practice standards. These standards are known as GAPs (Good Agricultural Practices).

A new program, Harmonized GAPs, has been developed to combine several food safety certifications into one program. New York's retail produce buyers, such as Wegmans, are asking growers to adopt Harmonized GAPs certification in many cases.

In response, Cornell Cooperative Extension, the Cornell Vegetable Program, the Cornell Lake Ontario Fruit Team, the Produce Safety Alliance, and the Cornell National GAPs Program, with assistance from NY Ag & Markets, will be presenting a training for farm food safety or GAPs, including Harmonized GAPs. The training is open to all produce farms and related industry people.

This is for those farmers who are interested in produce safety or who are being required by buyers to develop food safety plans and provide third party verification of their food safety practices.

The Food Safety Modernization Act proposed produce safety rules have been released with a tentative final rule anticipated sometime in the summer of 2015. These workshops will help growers understand produce safety issues and Good Agricultural Practices as well as the FSMA proposed produce rule and third party audits.

The second day will be devoted to writing farm food safety plans so that each participant can work on their own farm plan.

These workshops are sponsored by the National GAPs Program, Cornell Cooperative Extension, Cornell University, Produce Safety Alliance, and the New York State Department of Ag & Markets with funding from the Genesee Valley Regional Market Authority.

This workshop is partially funded through a grant from the Genesee Valley Regional Market Authority.

Batavia Farm Food Safety Training with GAPs

Tuesday, December 10

What is GAPs?
How does GAPs work?
What does it mean for my farming operations?

Wednesday, December 11

Write a food safety plan for your farm*

Optional supplemental session
Mock audit (at a participant's farm during the growing season)

\$60.00 per person registration includes educational materials, lunch and refreshments. Add \$15.00 each for additional attendee from the same farm. Space is limited! **Pre-register by December 3, 2013.** Mail the [GAPs flyer and registration form](#) that follows in with your payment, or [register and pay online here](#).

Note: *Although this program is geared towards the USDA Harmonized Food Safety Standards and Audit, the food safety template and curriculum covers most major 3rd-party audit requirements, including the basic USDA GAP/GHP audit, Global Gap, etc.*

For questions, please contact Craig Kahlke at 585-735-5448 or cjk37@cornell.edu

* A laptop computer is required for the second day. If you need to borrow a computer, please let us know in advance. If you are not computer savvy, please bring a person with you that has computer knowledge and skills.

Farm Food Safety Training with GAPs

December 10-11, 2013

8:30 am Registration & Refreshments; 9:00 am - 3:30 pm Training

Fire Training Center

7690 State Street Road, Batavia, NY 14020

Cornell Cooperative Extension, the Cornell Vegetable Program, the Cornell Lake Ontario Fruit Team, the Produce Safety Alliance, and the Cornell National GAPs Program, with assistance from New York Department of Agriculture & Markets, will be presenting a training for farm food safety or Good Agricultural Practices (GAPs), including Harmonized GAPs.

Open to all fresh produce farms and related industry people.

This workshop is partially funded through a grant from the Genesee Valley Regional Market Authority.



In recent years, several food borne illness outbreaks in produce have made national news. Both the produce industry and the federal government have stepped up demands for fruit and vegetable farms to meet food safety practice standards. These standards are known as GAPs (Good Agricultural Practices).

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In response, Cornell National GAPs Program and Cornell Cooperative Extension have developed a multi-day workshop.

Tuesday, December 10

- What is GAPs?
- How does GAPs work?
- What does it mean for my farming operations?

Wednesday, December 11

- Write a food safety plan for your farm*

Optional supplemental session

- Mock audit (at a participant's farm during the growing season)

\$60.00 per person registration includes educational materials, lunch and refreshments. Add \$15.00 each for additional attendee from the same farm.

Register online at cvp.cce.cornell.edu or mail in your registration form and payment.

Pre-register by Tuesday, December 3, 2013. Space is limited!

* A laptop computer is required for the second day. If you need to borrow a computer, please let us know in advance. If you are not computer savvy, please bring a person with you that has computer knowledge and skills.

For more information about this training, contact Craig Kahlke, Lake Ontario Fruit Team, at cjk37@cornell.edu or 585-735-5448.



Cornell University
Cooperative Extension

To see a full listing of upcoming farm food safety trainings, go to www.gaps.cornell.edu

REGISTRATION

Farm Food Safety Training with GAPs

December 10-11, 2013

8:30 am Registration & Refreshments; 9:00 am - 3:30 pm Training

Fire Training Center, 7690 State Street Road, Batavia, NY 14020

Pre-register by Tuesday, December 3, 2013. Space is limited!

Name _____ \$60.00

Farm/Business Name _____

Additional Attendee (from the same farm) _____ \$15 each

Additional Attendee (from the same farm) _____ \$15 each

Address _____

Phone _____

Fax _____

Email _____

A laptop computer is required on December 11.
Check here if you would like to borrow a laptop

TOTAL DUE _____

Make checks payable to: **Cornell Cooperative Extension**

Return registration form and payment to: Cornell Cooperative Extension
Attn: Angela Parr
480 North Main Street
Canandaigua, NY 14424



Cornell University
Cooperative Extension

FOCUS ON FOOD SAFETY *(continued)*

Additional Workshops Dates Available:

December 18 & 19, 2013

Location: Wayne County,
CCE—Wayne in Newark
Time: 8:30am—3pm both days

January 6 & 7, 2014

Location: Ontario County,
CCE—Ontario in Canandaigua
Time: 8:30am—3pm both days

February 27 & 28, 2014

Location: Steuben County, TBA
Bath
Time: 8:30am—3pm both days

**The dates and locations –
ALL CONFIRMED – this is it
until December 2014. We do
not have workshops during
the growing season!**

For more information, contact
Craig Kahlke at
cjk37@cornell.edu or (585)
735-5448.

Small Changes Can Reduce Produce Contamination

October 23, 2013. Cornell researchers have identified some agricultural management practices that can boost or reduce the risk of contamination in produce from two major foodborne pathogens.

For example, applying manure within a year of harvesting produce boosts the odds of contaminating a field with salmonella, the biggest single killer among the foodborne microbes, report the researchers. And irrigating fields within three days and cultivating

fields within a week of harvest significantly raised the risk of listeria monocytogenes contamination. However, establishing a buffer zone between fields and potential pathogen reservoirs, such as livestock operations or waterways, was found to be protective against salmonella.

The study is published online in the journal *Applied and Environmental Microbiology* (scheduled for print in December).

“This is going to help make produce safer,” says first author Laura Strawn, a graduate student in the field of food science. “We could significantly reduce risk of contamination through changes that occur a few days before the harvest.”

Many of the risk factors were influenced by when they were applied to fields, which suggests that adjustments to current practices may reduce the potential for contamination with minimal cost to growers, says Strawn, whose co-authors include Yrjo Grohn, professor of epidemiology; and Randy Worobo and Martin Wiedmann, Cornell professors of food science.

Foodborne illness sickens an estimated 9.4 million people and kills about 1,300 annually in the United States, according to the Centers for Disease Control and Prevention. Produce accounts for nearly half the illnesses and 23 percent of the deaths.

“The research is the first to use field collected data to show the

association between certain management practices and an increased or decreased likelihood of salmonella and *L. monocytogenes*,” says Strawn. “These findings will assist growers in evaluating their current on-farm food safety plans (e.g., ‘Good Agricultural Practices’), implementing preventive controls that reduce the risk of preharvest contamination and making more informed decisions related to field practices prior to harvest. Small changes in how produce is grown and managed could result in a large reduction of food safety risks.”

Other co-authors of the study, which [can be found online](#), were all from Cornell and include Steven Warchocki, technician in food science; and Elizabeth Bihn, senior extension associate in food science and the Good Agricultural Practices coordinator.

The study was supported by the U.S. Department of Agriculture.

(Reprinted from: [Cornell Chronicle](#))



ON THE ORGANIC SIDE...

Year One of a Test of Biological Fungicides in Strawberries. - Mark Bolda and Monise Sheehan, University of California

October 9, 2013. This is simply a summary of one year of biological fungicide work in strawberries in 2012-2013 and should not be understood as a recommendation to use any of these products. This investigation is will continue into 2013-2014 and will serve to confirm and adjust the work here.

Introduction: A number of biological fungicides registered for use in strawberries have not been thoroughly tested through empirical studies to give guidance to growers on their efficacy and use.

Materials and Methods: Table 1 below is an outline of materials tested in 2012-2013. The field involved in the study was organically farmed and had a tested infestation of Verticillium at the average level of 25 microsclerotia per treatment replicate. Grower standard was managed as per grower practice, that is to say normal irrigation, fertility and pest management practices were applied. This grower standard did not include any sort of biological fungicide either by dip or injection through the drip tape during the season. Plot was replicated three times and each replicate consisted of at one bed of 180 feet in length. Application of the materials took place as indicated in the Table 1 right.

Plant dips were made by suspending the requested rate of fungicide in approximately twenty gallons of water and submerging and soaking about a half a box of strawberry transplants (about 500

Table 1. List of treatments

Test Material	Application/Use
Dazitol	6.25 gal/A applied 3-5 days prior to planting
Biotam + Serenade Soil	5 lbs/A pre-plant application 3-5 days prior to planting followed by Serenade Soil @ 4 qt/A (10 days after planting, and then Serenade Soil @ 2 qt /A applied monthly after planting. Second application of Biotam 5 lbs/A and Serenade Soil @ 4 qt/A in February.
Serenade Soil	Serenade Soil @ 4 qt/A (10 days after planting, and then Serenade Soil @ 2 qt /A applied monthly after planting.
Serenade Soil	Serenade Soil @ 4 qt/A (10 days after planting, and then Serenade Soil @ 4 qt /A applied every 60 days after planting.
Actinovate Rate 1	(1) 3 oz per 100 gal root dip at planting. (2) followed by 6 oz/A pre-plant in drip tape (3) followed by 3 oz/A every 30 days in drip tape
Actinovate Rate 2	(1) 3 oz per 100 gal root dip at planting. (2) followed by 6 oz/A pre-plant in drip tape (3) followed by 6 oz/A every 30 days in drip tape
SoilGuard	Apply at planting as root dip or planting furrow drench at 5 lb/A and again through drip tape every 4-6 weeks through harvest.
Double Nickel 55	Apply at planting at 1 qt /A (1/2 lb/A powder) as root dip or planting furrow drench and again through drip tape every 4-6 weeks through harvest.
Terra Clean 5.0	(1) 128 fl oz/100 gal drench (2) 2 gal/A drip applied at planting (3) 1 gal/A drip applied 10 days post plant and 28 days post plant (4) 1 gal/A drip applied 60, 90 and 120 days post plant
Terra Clean 5.0 + Serenade Soil	(1) 128 fl oz Terra Clean /100 gal drench + Serenade Soil @ 6 qt/ A soil drench (2) 2 gal/A Terra Clean drip applied at planting followed by SS @ 3 qt /A (3) 1 gal/A Terra Clean + 3 qt /A Serenade Soil drip applied 10 days post plant and 28 days post plant (4) 1 gal/A Terra Clean + Serenade Soil @ 3 qt/ A drip applied 60, 90 and 120 days post plant
Tainio	(1) Spectrum @ 50 g / A + Pepzyme C @ 12.5 oz/A 2- 3 days preplant (2) Biogenesis @ 1 lb/A+ Pepzyme C @ 12.5 oz/A as plant dip (3) Pepzyme C monthly through drip tape (4) Micro 5000 @ 2.66 oz/A at 2 leaf stage foliar

plants) thoroughly and then distributing to planting crews for transplant. Note that in the case of the two Actinovate treatments, plants were held for one night to prior to transplant, ostensibly to establish the organism on the plant roots.

Drip applications were made with a portable pump injecting each fungicide. Each application normally was preceded by filling the drip tape with clear water, injecting the mix and then further pumping in clear water to make sure the fungicide had moved well out of the drip tape.

ON THE ORGANIC SIDE...*(continued)***Application dates:****Preplant application – 11/3/2012**

Dazitol
Terra Clean 5.0
Terraclean 5.0 + Serenade
Soil
Tainio Spectrum + Pepzyme C
Biotam

Root dip + one overnight hold – 11/7/2012 (planted November 8)

Actinovate rate 1
Actinovate rate 2

Root dip and immediate planting – 11/8/2012

Double Nickel 55
Soilguard
Biogenesis + Pepzyme Z

10 days post – plant – 11/20/2012

Serenade 4 qt
Serenade 2 qt

Monthly applications

(12/11/2012, 1/16/2013, 2/26/2013, 3/27/2013, 4/30/2013, and 6/13/2013)

Terra Clean 5.0
Terraclean 5.0 + Serenade
Soil
Tainio Spectrum + Pepzyme C
Serenade 4 qt
Serenade 2 qt
Actinovate rate 1
Actinovate rate 2
Double Nickel 55
Biotam applied 2/26/2013;
Serenade 4 qt per acre applied other dates in treatment
Soilguard

Several dying plants from different areas of the test plots were sampled in July to confirm that *Verticillium* was the cause of plant death.

As a gauge of plant vigor from each treatment, strawberry plant diameters were measured February 13, and April 13.

Treatment	Plant Dia. cm 2/13/2013	Plant Dia. cm 4/13/2013	Yield to 5/14/2013	April Total Yield g/plot
Actinovate r1	14.05a	16.25a	3894.00a	2175.00ab
Actinovate r2	13.70ab	16.42a	3818.33a	2428.00a
Biotam	11.47b	15.77a	2176.67b	1377.00b
Dazitol	11.70b	17.70a	2505.67ab	1568.00ab
Double Nickel 55	12.65ab	15.92a	3084.00ab	1637.00ab
Serenade 4 qt +2 qt	11.57b	16.65a	2853.00ab	1471.67b
Serenade 4 qt +4 qt	12.42ab	16.02a	2621.00ab	1459.67b
Soilguard	11.85b	16.78a	2993.33ab	1652.33ab
Tainio	12.93ab	16.95a	3454.00ab	2075.33ab
Terraclean	11.50b	16.78a	2284.00b	1406.67b
Terraclean + Serenade	12.47ab	17.11a	2656.33ab	1559.67ab
Untreated grower standard	11.70b	17.90a	2145.00b	1189.00b

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Treatment	May Total Yield g/plot	June Total Yield g/plot	July Total Yield g/plot	Aug Total Yield g/plot	Total Yield g/plot
Actinovate r1	3741.67a	2791.00a	1902.33a	140.64a	16820.67a
Actinovate r2	3069.67a	3237.67a	2812.33a	149.35a	17201.34a
Biotam	2254.00a	3251.33a	3402.00a	503.14a	14468.33a
Dazitol	2514.67a	3075.33a	3049.33a	269.16a	14625.00a
Double Nickel 55	3038.67a	2837.67a	2573.67a	203.64a	15052.67a
Serenade 4 qt +2 qt	3244.67a	3287.00a	3623.67a	371.49a	16887.67a
Serenade 4 qt +4 qt	2959.67a	3617.67a	3236.33a	362.02a	16157.00a
Soilguard	3212.33a	3331.67a	2887.00a	359.45a	16352.33a
Tainio	3409.00a	3687.33a	3190.33a	170.27a	18145.00a
Terraclean	2496.67a	2997.00a	2750.00a	125.01a	13681.33a
Terraclean + Serenade	2544.00a	2810.00a	2230.00a	191.78a	13454.33a
Untreated grower standard	2812.00a	4019.33a	3800.00a	306.15a	16150.33a

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Measurements were in centimeters and from twenty plants in each plot.

With the beginning of fruit ripening, fruit harvest was done weekly in each treatment replicate. On each pick date, fruit from each plot was weighed and counted.

Plant diameters measured on February 13, 2013, were significantly larger in the low rate of Actinovate than the other treatments with the exception of the high rate of Actinovate, Tainio and Double Nickel 55.

Both rates of Actinovate realized higher fruit yield than all other treatments except for the Dazitol, in cumulative fruit yield, which included six weekly harvests, up to May 14, 2013. No further differences were

ON THE ORGANIC SIDE....*(continued)*

realized between May and August.

As noted above, this field has a very high infestation of Verticillium and all plots began to experience pronounced plant dieback in June, with some 60-80% remaining alive or declining and by end of July, nearly all plants in all replicate plots had died.

There was a trend for plants which had produced larger amounts of fruit in April and May to experience lesser fruit production lesser vigor and earlier dieback as the season progressed.

Conclusion

The results of this trial are encouraging. In the early part of the season up through the middle of May, several treatments had significantly higher amounts of fruits harvested than the grower standard. Nonetheless, none of the treatments provided sufficient protection to the plants to prevent an almost complete die out of the plants by August, effectively ending the season. *(Reprinted from: [UCANR Strawberries and Raspberries blog](#))*



\$ MONEY TALK \$

Marketing for Profit: Tools for Success Webinar Series Registration Now Open!

Essential FREE Resource for Farmers, Market Managers, and Local Producers

The Farmers Market Federation of NY and the NY Farm Viability Institute have partnered with USDA Northeast SARE to present a series of webinars on marketing: "Marketing for Profit: Tools for Success." These webinars have been designed with the assistance of regional and national marketing experts to provide critical marketing insights for farmers and farm markets throughout the northeast. The webinars are free, approximately an hour and a half long, and easy to access with a basic internet connection. This winter, 6 webinars will be held and interested participants are encouraged to register TODAY for the webinars they want to attend.

The Marketing for Profit: Tools for Success webinar series will give farmers the information and tools they need to excel at direct marketing their farm products. It will also provide curriculum, presentations and handouts to Cooperative Extension Educators and other farm service educators to help their farmers master key marketing concepts that will bring greater success and more profits to their farms than ever before.

Marketing encompasses a broad array of efforts all aimed at identifying your market and customers, satisfying your customers and maintaining your customers long term. It includes all marketing channel selections and business decisions, what to grow or produce and how it will be produced; i.e. conventional, organic, bio-dynamic

or some amalgam of these; how you choose to make products available, how product is presented to the public, how you present your business, advertising and promotions, signage, pricing strategy, and so on. Marketing is complex and is often the most misunderstood and least successful part of many farm businesses.

The series includes coverage of 5 categories of marketing concepts spanning three years: Self-Assessment, Market Assessment, Customer Assessment, Communications Assessment and Business Assessment. Each Assessment encompasses a series of 3 webinars. The winter season of 2013-14 will focus on Communications and Business Assessment. In these sessions you will learn key concepts in effective communications with your customers and presenting your product for maximum profits. You will also learn to identify key customer characteristics and how to use the information to better present your products and your business. One session will prepare you to weather a crisis and come out stronger than ever. Finally, the last session will help you to track all the data you have gathered throughout the process of developing your business and marketing plans and use this information to help you make critical business decisions.

These are just a sample of the skills and knowledge to be gained through this season's Marketing for Profit: Tools for Success webinar series. Each webinar will be repeated twice to maximize opportunity to participate.

\$ MONEY TALK \$

COMMUNICATIONS ASSESSMENT:

How To Say What We Mean and Mean Something!

Dave Bellso, DesignWorks Advertising
November 19 10:00 am – 11:30 am
November 20 6:30 pm – 8:00 pm

You Are What You Look Like!

Preparing the Product *Marty Butts, Small Potatoes Marketing*
December 3 10:00 am – 11:30 am
December 4 6:30 pm – 8:00 pm

You Are What They THINK You Are! Selling the Product

Dave Bellso, DesignWorks Advertising
December 17 10:00 am – 11:30 am
December 18 6:30 pm – 8:00 pm

LONG TERM ASSESSMENT:

Keeping an Eye On Your Customers.

Lindsay Ott Wilcox, Marketing Director, Clear Channels Communication
January 8 6:30 pm – 8:00 pm
January 9 1:30 pm – 3:00 pm

Putting a Handle on the Tomato: Reinventing the Product

Bob Buccieri, former President of the Farmers Market Federation of NY
January 28 10:00 am – 11:30 am
January 29 6:30 pm – 8:00 pm

Drudgery That Pays Well! Maintaining Databases and Information

Laura Biasillo, Ag Economic Development Specialist, Cornell Cooperative Extension, Broome County
February 4, 11:00 am – 12:30 pm
February 6, 6:30 pm – 8:00 pm

Coming November 1: *The Marketing for Profit: Tools for Success webinar series will be available online as a full marketing course for farmers and farm educators. The course will cover all 5 Assessment tools, the webinar presentations and includes all resources and links associated with each webinar.*

Those completing the full course of webinars will be fully prepared to complete a business and marketing plan and add profits to their farm business. In addition, they will receive a Certificate of Achievement and eligibility for Farm Service Agency (FSA) loan credits. To access the online course, register at <http://www.nyfarmersmarket.com/work-shop-programs/online-marketing-for-profit-course.html>.

For information and to register for the webinars and links to archived webinars, go to <http://www.nyfarmersmarket.com/work-shop-programs/webinars/program.html>.

For information and to register for the online course for Marketing for Profit: Tools for Success, in cooperation with Cornell Cooperative Extension, Broome County, go to <http://www.nyfarmersmarket.com/work-shop-programs/online-marketing-for-profit-course.html>.

For more information contact Diane Eggert at deggert@nyfarmersmarket.com or David Grusenmeyer at dgrusenmeyer@nyfvi.org.



Cornell Small Farms Program Online Berry Course Starts Nov 21!

If you're considering starting a berry farm, or adding berries and bramble fruits to your farm, this is the course for you. This fast-paced 3-week course combines twice-a-week webinars with resources and discussion forums in an online classroom. Course runs Thurs. Nov. 21 - Dec. 12, 2013 and costs \$200. To learn more and register, visit the [BF 122: Berry Production course page](#).

FOCUS ON PEST MANAGEMENT

NYSDEC - Approval - Special Local Needs Registration - Stinger Herbicide on Blueberry

Mike Helms, Cornell University Pesticide Management Education Program (PMEP)

October 22, 2013. The NYS Department of Environmental Conservation recently approved a Special Local Needs (SLN) registration for Stinger Herbicide (SLN NY-130008, EPA Reg. No. 62719-73), containing the active ingredient clopyralid, monoethanolamine salt. This registration allows postemergence weed control in blueberries against the broadleaf weeds listed on the SLN label.

FOCUS ON PEST MANAGEMENT

Please note the following:

- This product is classified as restricted-use in New York State.
- No sale, distribution, or use allowed in Nassau or Suffolk Counties.
- Aerial application is prohibited.
- Not for use on low growing blueberry varieties.
- User must agree to the “Special Conditions and Risks of Use” listed on the SLN label.
- User must also follow all precautionary statements, applicable use directions, use precautions, and limitations of the label affixed to the Stinger container.

A copy of the approved SLN label will be available shortly at the PIMS website (<http://pims.psur.cornell.edu>) under the “Special Registrations” link. Users must have a copy of this label and the primary product label in their possession at the time of application.

New Brown Marmorated Stink Bug Videos

*Chris Gonzales,
Communication Specialist,
Northeastern IPM Center*

Two new videos are the latest installments in the “Tracking the Brown Marmorated Stink Bug” series produced by the Northeastern Integrated Pest

Management Center at Cornell University. Earlier videos explain history and identification, overwintering and spread, monitoring and mapping, and host plants and damage.

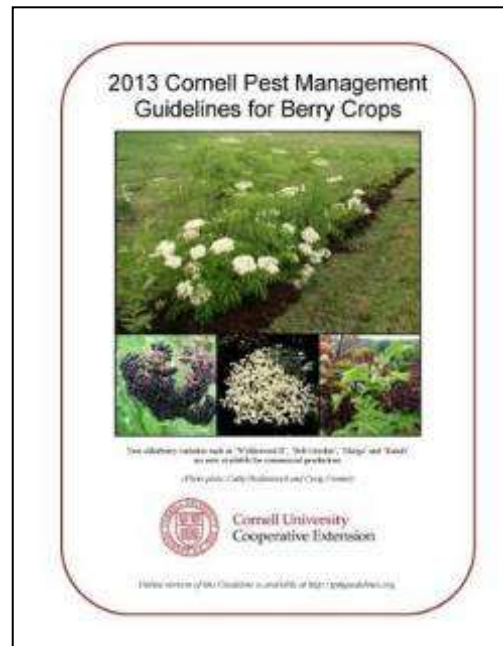
New Management Techniques Explained Researchers and growers explain management methods for BMSB such as insecticides, trap cropping, physical barriers, and organic and biological control techniques.

Biological Control of Stink Bugs

Biological Control of BMSB: Growers who use biological control methods could stop brown marmorated stink bug (BMSB), reduce costs, and put fewer chemicals into the environment. Learn to identify several native predators and parasitoids of BMSB in various crops and nurseries. Using less insecticide could help these natural enemies of BMSB. Methods such as cultural controls, trap cropping, and monitoring as part of a biological control strategy could keep BMSB populations in check.

To view the videos:
<http://www.stopbmsb.org/video>

BMSB, recently found in Sacramento, California, has been detected in 40 other states plus Ontario, posing severe agricultural and nuisance problems in six states. The insect threatens an estimated \$21 billion worth of crops in the United States alone.



Berry Diagnostic Tool



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J-Rooting of Strawberry Plants – Mark Bolda, University of California

November 7, 2013. I have had occasion in my travels over the past two weeks to find a good quantity of what is depicted in the two photos below: J-rooting of strawberry plants.

J-rooting of strawberry plants occurs when the root is too long for the planting hole (Photo 1 below shows how big a healthy transplant can be - lots of those this year by the way) which has been made for it and subsequently the root tips end up pointing upwards rather than down.

All too frequently, these upward pointing root tips end up being outside of the hole in the open air, as depicted in Photo 2 below.

It is not difficult to understand why J rooting is not beneficial to the plant.

Root extension in plants takes place from the root tips, and having them exposed to the open air, drying out and dying does nothing to help this process along and represents a setback to the establishing plant. To be blunt, it's a bad practice to be planting this way and shows a costly lack of attention to detail.

Transplanting is hard, back breaking work and it's not too difficult to empathize and understand how J rooting can happen all too easily. Growers can help their planting crews along and get the roots

straight down by several ways.

Already having a deep hole or slot to be placing the transplant into helps a lot.

Additionally, growers can ask that nurseries trim the roots to reduce the length of root of the transplant to better the odds of everything going straight down.

In field quality control on the day of planting by the person in charge also goes a long way in making sure J rooting doesn't become a pattern in for one individual or the crew.

(Reprinted from: [UCANR Strawberries and Raspberries blog](#))



Left: A healthy transplant showing the extent of the roots. Right: J rooted strawberry transplant showing roots exposed to the open air from improper placement in the hole.

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New York Berry News (NYBN) is a monthly commercial berry production newsletter provided by Cornell berry team members. It is designed to help promote and strengthen commercial berry crop production in New York State. NYBN is available free of charge in pdf format at:

<http://www.fruit.cornell.edu/nybn/> .

Visit the NYBN web site to view back issues or to subscribe to monthly e-mail notices with table of contents and a link to the most current issue.

More on individual team members and their areas of expertise may be found at: <http://www.fruit.cornell.edu/berry/berryteam.htm>.

Questions or comments about the New York Berry News?

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Editor's Note: We are happy to have you reprint from the NY Berry News. Please cite the source when reprinting. In addition, we request you send a courtesy [e-mail](#) indicating the NYBN volume, issue, and title, and reference citation for the reprint. Thank you.

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Upcoming Events

December 3-6, 2013 – *Joint North Carolina Strawberry Growers Association and North American Strawberry Growers Association Conference*, Sheraton Imperial Hotel, Durham, North Carolina. For more information, email info@ncstrawberry.com, call 919-542-4037, or visit www.ncstrawberry.com.

December 10-12, 2013. *Great Lakes Fruit, Vegetable and Farm Market EXPO and Michigan Greenhouse Growers Expo*. More information: <http://www.glexpo.com/>.

December 17-19, 2013. *New England Vegetable and Fruit Conference*. More Information: <http://www.newenglandvfc.org/>.

January 21-23, 2014. *Empire State Producers EXPO*. Save the dates! More information forthcoming.

January 28-30, 2014. *Mid-Atlantic Fruit and Vegetable Convention and North American Raspberry and Blackberry Growers Association Annual Meeting*,. Hershey, PA. More information: <http://www.raspberryblackberry.com/>.

June 18-25, 2015 – *11th International Rubus & Ribes Symposium*, in Asheville, NC, June 21-25, with preconference tour to farms and research sites June 18-20. More info to come. If you are interested in being a sponsor of this event, contact gina.fernandez@ncsu.edu.
