NEW YORK BERRY NEWS
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Cornell University
College of Agriculture and Life Sciences

New York Berry News

Cornell University Berry Team

Inside this issue:

Please Take an On-line Survey for Spotted Wing Drosophila in Caneberries to Support Requests for Expanded Insecticide Labeling

Diane Brown, Michigan State University

We are asking for information about raspberry and blackberry growers' experiences with spotted wing drosophila (SWD) to help support requests to the US Environmental Protection Agency for expanded insecticide labeling to control SWD.

This information will also be valuable to provide background information for grants supporting research to guide management recommendations.

All information collected will be summarized; individual growers will not be identified, and information will remain confidential.

Please complete the survey only once.

Thank you for your assistance in collecting this information. Once it is completed, the results of the survey will be shared with all interested respondents.

Go to the SWD survey by clicking on this link: https://www.surveymonkey.com/s/GTF36QL

For more information growers may contact Diane Brown, Michigan State University, 269-944-4126 or rytlews1@anr.msu.edu.

Upcoming Berry Events

April 11, 2013

Highbush *Blueberry Production Workshop*, in Hamden, NY. For more information or directions, call 607-865-6531 or e-mail Janet Aldrich at JLA14@cornell.edu. A program brochure/registration form can be found online at: www.ccedelaware.org.

June 17-19, 2013

Berry Health Benefits Symposium, in Concord, NC. Join leading researchers and industry leaders to learn about the newest research in this field. Held biennially; this fourth Symposium will be the first time the event has been held on the East Coast. For more information, contact catmc@peak.org. Info about the 2011 Symposium may be found at www.berryhealth.org

Upcoming Events

Highbush Blueberry Production Workshop

April 11, 2013, 10:00 a.m. – 4:00 p.m.
Cornell Cooperative Extension of Delaware County, Hamden, NY

Cornell Cooperative Extension of Delaware County is pleased to offer a program on highbush blueberry production, to be held at Extension's Resource Center, 34570 State Highway 10, Hamden, NY, 13782 on Thursday, April 11, from 10:00 a.m. to 4:00 p.m. with sign-in beginning at 9:30 a.m. Cornell's berry specialists will cover the key topics in production and marketing of blueberries in New York State.

Dr. Marvin Pritts, Professor & Department of Horticulture Chairman, Cathy Heidenreich, Berry Extension Specialist, Kerik Cox, Associate Professor, Plant Pathology, and Greg Loeb, Professor, Department of Entomology will discuss site selection, soils, pollination, cultivars, insect and disease identification and management of blueberries. They will also address pruning basics and the economics of growing and selling blueberries.

The registration fee for this program is $20 per person or $35 per farm couple – please make check payable to "Cornell Cooperative Extension" and indicate "blueberries" on the check. Pre-registration & payment are required by April 4, 2013. Mail check to Cornell Cooperative Extension, P.O. Box 184, Hamden, NY 13782. A light lunch is included. Space is limited, so register early.

For more information or directions, call 607-865-6531 or e-mail Janet Aldrich at JLA14@cornell.edu. A program brochure/registration form can be found online at: www.ccedelaware.org. Accommodations for persons with disabilities may be requested by contacting Janet Aldrich by April 4, 2013. Requests received after this date will be met when possible.

Learn About Low-interest Microloans of up to $35,000 Now Available for Farmers
Free Webinar April 10, 7-8pm EST

Join the Cornell Small Farms Program and FSA Senior Loan Specialist Carrie Novak for this One-Time Opportunity

Small farmers spoke up and the Farm Services Agency (FSA) listened! In January 2013 the FSA launched a new Microloan Program that offers very low-interest loans of up to $35,000, with an abbreviated application process. On **Wed. April 10 from 7-8pm EST**, come learn about the details of the program, including loan terms and application process, and have the opportunity to type questions to the FSA's Senior Loan Specialist, Carrie Novak via chat pod. Carrie will also present basic FSA loan eligibility criteria and review the application form.

Register now to attend this free webinar. All you need is a computer with speakers and a high-speed internet connection. The Cornell Small Farms Program uses WebEx software for webinars, and if this is your first time joining a WebEx meeting, you will also be prompted automatically to download a small add-in software program in order to view the webinar on your computer. We'll send you a reminder and the link to join--along with a Webinar Participants' Guide with information about what to expect from a webinar--about a day before the presentation.

Can't join? No problem; we'll record the webinar and post it for viewing on the Northeast Beginning Farmer Project website, nebeginningfarmers.org.

Upcoming Events

Farm Fresh Foods = Healthy Employees
Promoting Workplace CSAs in the Southern Adirondacks

When: Thursday, April 4th at 10:00am

Where: Cornell Cooperative Extension of Saratoga County, 50 West High Street, Ballston Spa, NY

Register: contact Teresa Whalen, 518-466-5497 or taawhalen@yahoo.com

The southern Adirondack region has a strong agricultural presence. Farmers' markets are now found in many communities. Easy access from the Adirondack Northway and ongoing local food and health promotion efforts set the stage for increasing the consumption of locally grown produce and assisting local growers develop non-traditional markets in the form of CSAs.

A CSA (Community Supported Agriculture) involves consumers and farms. A group of individuals pay, in advance, for weekly shares of a local farm's production. As an employer you would be creating a convenient opportunity for your employees to improve their health by accessing fresh, locally grown foods delivered to your business. As a farmer, you would distribute the shares to the worksites, and tailor the method of distribution to the particular business.

In 2012, Cornell Cooperative Extension Capital District Vegetable and Small Fruit Program in collaboration with Adirondack Harvest (a program of CCE) received a grant through the Cornell Small Farms Program to fund the Workplace CSA Promotion Project - a promotional program for workplace sponsored CSAs. The geographic scope of the project included workplaces located in the counties of Warren, Washington and Saratoga. As a result of this project, employees customized their CSA share online and had delivery to their workplace. The project was a huge success, and will continue to grow, as a better understanding of this free employee benefit is realized by employers.

An introduction to CSAs, the many variations, the benefits to farmer and consumer, the shared risks, and the history of success over several decades will be presented. Educational materials developed as a result of the project will be provided, ideas exchanged, concerns voiced and connections made. Farmers, worksite representatives and interested individuals are welcome to attend. For further information and to register please contact Teresa Whalen, Adirondack Harvest Southern Chapter Representative, at 466-5497 or taawhalen@yahoo.com.

Upcoming Berry Events

August 1, 2013

2013 Cornell Fruit Field Day, NYSAES, Geneva, NY. Save the date! Details to follow.

August 13-14, 2013

Joint North American Strawberry Growers Association Annual Summer Tour. Vermont. Save the dates! Details to follow.

December 4-7, 2013

Joint North Carolina Strawberry Growers Association and North American Strawberry Growers Association Conference, Sheraton Imperial Hotel, Durham, North Carolina. More information: info@ncstrawberry.com or www.ncstrawberry.com.

News Briefs

Cornell Nursery Guide for Berry and Small Fruit Crops Updated for 2013

This two-part nursery guide designed for commercial berry growers cross references scores of cultivars with the wholesale nurseries that sell them. The guide is updated on an annual basis in early spring each year. To access the guide go to: http://www.fruit.cornell.edu/berry/nurseries/.

Cultivar pages for each crop (see menu in left-hand column) list specific cultivars followed by a list of links to the contact information for the various nurseries that sell them.

Strawberries (June-bearing, Day Neutral, and Alpine)
Raspberries (summer-fruiting red, black, purple; fall-fruiting red and yellow)
Blackberries etc. (Thorny, thornless, primocane-fruiting, trailing, plus blackberry x raspberry hybrids)
Blueberries (northern and southern highbush, lowbush, rabbit-eye)
Cranberries etc. (including Lingonberries and other members of the blueberry/cranberry family)
Currants (black, red, pink, white)
Gooseberries etc. (including currant x gooseberry hybrids)
Elderberries (American and European)
Juneberry/Saskatoon
Haskap/Honeyberry
Hardy kiwifruit
Miscellaneous (small fruits such as aronia, beach plum, fig, goji, mulberry, pawpaw, seabuckthorn and more)

The nurseries page (http://www.fruit.cornell.edu/berry/nurseries/nurseries.html) contains an alphabetized listing of businesses throughout the United States and Canada that have expressed interest in being included in the guide; no endorsement or discrimination is intended.

How can my nursery be listed?
Contact us each fall by November 30 and we'll add you to or update your entry for our Nursery Guide.

Please provide the following information:

- Nursery Name
- Website Address
- Email Address
- Mail Address
- Fax
- Phone
- Cultivars you currently sell

Cultivars you are not selling this year but sold last year

Mail or email (Attention or Subject line "**Berry Nursery Guide**") the information to:

Cathy Heidenreich, Cornell University Dept. of Horticulture, Geneva Campus, 630 West North Street, Geneva, NY 14456, mcm4@cornell.edu. In addition, we would be glad to receive your catalog each year.

News Briefs

Strawberry Sustainability Center Announced

Cal Poly and California Strawberry Commission create research and education program.
February 19, 2013. Focused on educating future leaders in the area of sustainability, growth and the success of the California strawberry industry, Cal Poly and the California Strawberry Commission announced today they have signed an agreement to create the first of its kind Strawberry Sustainability Research and Education Center.

Applied research and innovation across multiple disciplines coupled with access to real-world issues will enable Cal Poly and the California Strawberry Commission to achieve their shared vision of establishing a world class center focused on the sustainability of California strawberry farming.

"This partnership will enrich our 'Learn by Doing' approach by providing our students, faculty and staff the opportunity to work alongside experts in the strawberry industry on real-world challenges. This partnership is an important step forward in our desire to strengthen ties with key California industries so that our students can learn, do and succeed," said Cal Poly President Jeffrey D. Armstrong at a signing event in Sacramento Tuesday. "Faculty and undergraduate students from every corner of campus, including hydrologists, entomologists, plant scientists, engineers, packaging scientists and marketers, to name a few, will each have a hand in this important work for one of the nation's leading industries."

Mark Murai, president of the California Strawberry Commission, seconded Armstrong's sentiments. "Locally-produced foods are important to Californians, and we have created this unique partnership to address challenges facing farmers in the 21st century," he said. "We are committed to a robust partnership focused on innovation and applied research intended to help keep strawberry farming viable in California."

The newly created Strawberry Sustainability Research and Education Center is a one-of-a-kind concept rooted in the hands-on learning model that defines Cal Poly. The center will focus on applied research that incorporates both teaching and learning experiences for Cal Poly students, faculty, and California strawberry farmers.

David Wehner, dean of Cal Poly's College of Agriculture, Food & Environmental Sciences, added, "By forming the Strawberry Sustainability Research and Education Center, we will enable some of the nation's brightest students to work hand-in-hand with talented and dedicated faculty across disciplines -- whether it's in agriculture, engineering or business -- to provide practical solutions to the strawberry industry. Applying classroom learning to real-world problems is what Cal Poly is all about." *Source: Cal Poly, California Strawberry Commission*

Upcoming Berry Events

Save the dates:

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/.

NYS Ag News

"Our Grown in New York plan will dramatically strengthen New York's critically important farming and agriculture sectors for years to come by reducing taxes on farmers and helping farmers expand their markets, boost productivity and increase their profitability,"

Senate Republicans Unveil "Grown In New York" to Strengthen Agriculture and Family Farms

Tuesday March 5, 2012. Growing the state's agriculture industry and helping New York's family farms prosper is the goal of the "Grown in New York" plan, unveiled today by Senator Patty Ritchie, Chair of the Senate Agriculture Committee. Senator Ritchie was joined at a Capitol news conference by other members of the committee, as well as leaders of the New York Farm Bureau to announce a plan to strengthen the state's $5.2 billion agriculture industry by expanding markets for New York-grown products, improving the bottom lines of family farms, and investing in the future of farming.

"Agriculture is New York's leading industry, and Senate Republicans have been at the forefront of efforts to bolster agriculture and help farmers grow," Senator Ritchie (R-C, Heuvelton) said. "Over the past two years, we have worked to restore budget cuts to vital marketing, research, and educational programs farmers depend on to strengthen their bottom line.

'Grown in New York' is the Senate Republican plan to build on that success and help farmers grow and build for the future."

"Our Grown in New York plan will dramatically strengthen New York's critically important farming and agriculture sectors for years to come by reducing taxes on farmers and helping farmers expand their markets, boost productivity and increase their profitability," Senate Republican Leader Dean G. Skelos said. "The plan would also help keep farms in the family, remove burdensome and duplicative regulations, and ensure the future success of New York farmers."

New York Farm Bureau President Dean Norton said: "NY Farm Bureau has long held to the proven belief that when you grow New York's farms, you grow New York's economy. The efforts put forth today by Senate Republican Leader Skelos, Senate Agriculture Committee Chair Ritchie and their conference colleagues will do just that. We appreciate their hard work to lower the high cost of farming to help ensure the next generation of farmers can continue the time-honored tradition of providing healthy, local food to the people of this state and the world."

The Senate's Grown in New York plan would:

-- Reduce taxes on farmers;

-- Eliminate the burdensome 18-a energy tax surcharge;

-- Curtail red tape and outdated regulations;

-- Improve farmers' access to customers by expanding farmers markets and food hubs;

-- Put more New York-grown products in schools and government facilities;

-- Encourage the growth of New York's maple and wine industries;

-- Put idled farmland back in production; and

-- Improve farm safety.

Senator Catharine Young (R,C,I-Olean), Chair of the Legislative Commission on Rural Resources and a former Chair of the Senate Agriculture Committee, said: "All across New York State, from the tip of Long Island, to the North County, to my district in Western New York, the agricultural industry is a thriving and vital component of the economy, but we need to do more to support our farms. The average age of the farmer keeps increasing. According to national statistics from the U.S. Department of Agriculture, for every one farmer under the age of 25, there are five over the age of 75. We need to cultivate younger farmers. It needs to be attractive for them to stay or enter in the agricultural industry. Also, we need to keep promoting biofuel crops through tax incentives. These crops produce green, locally-produced energy and provide many jobs to Upstate New York. This package of bills will be a boon to our state's vibrant farms."

Senator Tom O'Mara (R-C, Big Flats) said: "We need to keep taking actions that keep our farmers competitive for the long haul. That includes encouraging our federal representatives to take every step they can to level the playing field with our Canadian neighbors who currently impose a strict and unreasonable tariff that keeps New York wines out of that potentially lucrative international market. We can't risk New York State's farmers being taxed, regulated and priced out of business. The 'Grown in New York' plan is a bold, common sense blueprint to keep New York a proud and strong agricultural state."

Senator Patrick M. Gallivan (R-C-I, Elma), said: "Agriculture is New York's most important industry and one of its most

NYS Ag News (continued)

diverse, impacting every individual and family in the state. The Grown in New York plan will help ease the tax burden on family farms, and eliminate the costly bureaucratic redundancies and red tape that continue to stifle growth. This is a dynamic and forward-thinking approach that recognizes the immense economic potential of agriculture and agri-business for New York State and will allow this important sector to expand and thrive for generations to come."

Senator Michael Ranzenhofer (R-C-I, Amherst) said: "As the number one industry in the state, our family farms do more than just feed New Yorkers. They are responsible for providing food for people across our nation and all over the world. Like many other energy-using businesses, the costs of doing business for many family farms is increasingly burdened by high utility bills. That is why it is imperative to repeal the 18-a assessment, lowering the cost of doing business, because when farmers prosper so does New York's economy."

Senator James L. Seward (R-C-I, Oneonta) said, "Farmers deal with countless challenges every day and initiatives that ease their financial burden while enhancing safety are vital. The Rollover Protection System (ROPS) Rebate Program fits the bill, helping retrofit over 1,100 tractors with lifesaving equipment since its inception. Tractor rollovers are the primary cause of farm fatalities, the use of ROPS and a seatbelt reduces the risk of injury by 99 percent. State support of this program can mean the difference between life and death on the farm."

Senator David J. Valesky said: "New York State produces high-quality agricultural products, and it makes perfect sense to highlight them in the thousands of restaurants across the state. The Dine: Pride of New York program will benefit the agricultural and restaurant industries, both extremely important to the state's economy."

JOBS AND PROGRESS – GROWN IN NEW YORK - Senate Republican Plan for a Stronger Agriculture Economy

Strengthening Family Farms by Reducing Taxes on Farmers

Two-percent property tax cap for farms; and

Reduce energy costs on farms by rejecting the Governor's effort to extend the 18-a energy tax, and restoring the 18-a assessment back to its pre-2009 level.

Helping New York Farmers Expand Their Markets, Boost Productivity, Increase Profitability

Dairy: Support the Governor's review of a state regulation that limits the size of some dairy farms;

Maple: Support legislation to cut burdensome regulations and expand opportunities for maple producers;

Farmers Markets: Urge state Department of Agriculture and Markets to commit additional resources to updating its database of New York farm markets, and make information more easily available to the public;

Food Hubs: Support the Governor's plan to create new "food hubs" located in growing regions of the state to facilitate access to New York City markets;

"Buy from the Backyard:" Support this program that sets a goal of at least 20 percent of food purchases by state and local government agencies to include locally produced items;

Remove Tariffs: Encourage our federal delegation, as well as Canadian officials to remove a severe tariff that restricts New York wines from being imported into Ontario;

Farm Breweries: Support increased funding to assist farmers in adding new crops like malt and hops for use in New York's burgeoning small batch and locally produced beer breweries;

Biofuel Crops: Support tax incentives for farmers to produce and use alternative, crop-based fuels; and

Rescue Abandoned Farmland: Provide incentives to return forest and abandoned fields to active farm producing.

Keeping Farms in the Family

Increase Estate Tax Threshold for farms from $1 million to $5 million;

Create Farm Savings Accounts for young people to purchase farms and to help farmers cover unexpected expenses and losses related to farming; and

Support continued funding of farming education and enrichment programs such as Future Farmers of America and 4H.

""Farmers deal with countless challenges every day and initiatives that ease their financial burden while enhancing safety are vital..."

NYS Ag News (continued)

"The Senate is proposing to restore funding for the Tractor Rollover Program that provides help to New York farmers to purchase and retrofit tractors with rollover protective structures (ROPS). The program rebates 70 percent of the cost of purchasing and installing the ROPS, up to $765. Tractor accidents are the number one cause of fatalities on the farm.."

Removing Obstacles to Success and Cutting Red Tape for Farmers
Cut needless red tape for farmers, who are subject to regulation by more than 20 different federal, state and local agencies. Duplicative red tape prevents farmers from spending more time working in their fields.

Investing in the Future of Farming
Seek additional budgetary support for: maple promotion, the Farm Viability Institute, dairy profits teams that help farmers improve efficiency, and funds to help berry and apple growers recover from damage from storms and invasive species.

Dine: Pride of New York
This bill would expand the current "Pride of New York" program by creating the "Dine: Pride of New York" program, allowing restaurants serving food and food products produced in New York State access to promotional materials in order to increase their exposure to consumers and promote the sale of locally grown food.

Protecting Farmers from Tractor Rollovers
The Senate is proposing to restore funding for the Tractor Rollover Program that provides help to New York farmers to purchase and retrofit tractors with rollover protective structures (ROPS). The program rebates 70 percent of the cost of purchasing and installing the ROPS, up to $765. Tractor accidents are the number one cause of fatalities on the farm.

Support for Dairy Producers
New York does not set the price of milk that our dairy farmers produce, and the Senators stressed the critical need for the federal government to maintain strong support for key federal programs, such as the Dairy Production Margin Protection Program and Dairy Market Stabilization, to stabilize the milk pricing system and to support a strong dairy industry.

New York Farm Numbers Unchanged

February 20, 2013. The number of farms in New York for 2012 remained the same as a year earlier, reports King Whetstone, Director of USDA's National Agricultural Statistics Service, New York Field Office. The number of farms for 2012 is estimated at 36,000. Land in farms was 7.00 million acres.

Farms with sales over $500,000 increased by 100 to 1,900 while farms with sales between $250,000 and $499,999 remained at 1,300. The area of land operated by farms in these two groups totaled 2.55 million acres, up 50,000 from 2011. The next smaller sales class, farms with sales between $100,000 and $249,999 increased by 300 to 3,500 while land operated by these farms increased to 1.20 million acres. There were 11,300 farms with sales between $10,000 and $99,999 compared with 10,800 a year earlier. Land they operated totaled 1.90 million acres. There were 900 less small farms with sales between $1,000 and $9,999 in 2012, at 18,000. Land in farms for this class dropped to 1.35 million acres.

The number of farms in the United States in 2012 is estimated at 2.2 million, down 11,630 farms from 2011. Total land in farms, at 914 million acres, decreased 3 million acres from 2011. The average farm size is 421 acres, up 1 acre from the previous year.

Farm numbers and land in farms are differentiated by five economic sales classes. Farms and ranches are classified into these "sales classes" by summing sales of agricultural products and government program payments. Sales class breaks occur at $10,000, $100,000, $250,000, and $500,000.

Farm numbers in the $500,000 and over sales class increased by 8.6 percent, to 145,190 farms. Higher commodity prices and larger value of sales contributed to changes in the number of farms within these sales classes. Meanwhile, the number of farms in the $1,000 - $9,999 sales class decreased by 2.5 percent to 1,172,200. Farm numbers increased slightly in the $10,000 - $99,999 sales class to slightly over 600,000 farms. The number of farms in the $100,000 - $249,999 and $250,000 - $499,999 sales classes increased 1.9 and 1.1 percent, respectively.

Land in farms increased in the largest sales class while decreasing in all other sales classes. Land operated by farms in the $500,000 & over sales class increased 3.7 percent, to 317.1 million acres. Land operated by farms in the $1,000-$9,999 sales class decreased by 3.9 percent, to

NYS Ag News (continued)

slightly less than 97 million acres. Land in farms in the $10,000 - $99,999, $100,000 - $249,999 and $250,000 - $499,999 sales classes decreased by 1.4, 2.6 and 2.4 percent respectively.

Governor Cuomo Announces $3.6 Million in CFA Funding for Food Distribution Hubs

New facilities will increase access to healthy, local products and create over 150 jobs

Albany, NY. February 11, 2013. Governor Andrew M. Cuomo today announced that $3.6 million in state funding awarded through the Consolidated Funding Application (CFA) process will be used to create food distribution hubs across the state. Four new facilities will be funded in Central New York, the Finger Lakes, Hudson Valley, and the North Country, in addition to an earlier food hub project on Long Island, creating more than 150 jobs in these regions and increasing access to healthy, local products for New York consumers.

"These four new food distribution hubs are an important investment in our state's agricultural sector and economy," Governor Cuomo said. "Not only will more than 150 jobs be created through these new projects, the hubs will also be essential resources for local farmers by providing services like branding, processing and storage. Above all, they will help distribute products, expanding consumer markets for New York farmers while improving access to healthy, fresh and locally-produced food for our families – a real win-win for the state."

State Agriculture Commissioner Darrel J. Aubertine said, "When New Yorkers buy local products, they stimulate local economies and help provide jobs for their neighbors. Food hubs provide a valuable service in helping to bring local products to market and I thank Governor Cuomo for making this important funding available."

Empire State Development President, CEO and Commissioner Kenneth Adams said, "Today's announcement is welcome news. Food hubs help bring local goods to market, spur growth and strengthen communities." New York State Homes and Community Renewal (HCR) Commissioner/CEO Darryl C. Towns said, "Regional food plants like Growing Upstate Food Hub are empowering New York State's farming community. HCR's Rural Area Revitalization Program (RARP) is proud to assist farmers in their long tradition of producing high-quality homegrown food. Here in Central New York, these centralized hubs will help smaller and mid-size farms compete by lowering the processing and distribution costs of getting their product to market. The Governor's Regional Economic Development Councils continue to recognize how critical farming is to growing regional economies and to New York's overall economic recovery."

These investments mark yet another step of the Governor's "Farm New York" program, a comprehensive strategy to maximize investment in the agricultural sector of New York's economy. It includes programs to develop New York's regional farm-food system, increase access to credit for farm businesses, expand food processing capabilities, and capitalize on emerging technologies to lower energy costs.

Four new facilities will be funded in Central New York, the Finger Lakes, the Hudson Valley and the North Country regions. These facilities complement an earlier food hub project on Long Island. More than 150 jobs will be created in the various regions.

Growing Upstate Food Hub, Central New York

More than $1.5 million in CFA funding will go toward Growing Upstate Food Hub located in Canastota, Madison County. Comprised of six farmer owned agribusinesses, the facility will be centrally-located on space with Thruway access. It will facilitate the aggregation, storage, and distribution of value-added agricultural products and directly create at least 30 full-time jobs once open in November 2013. In total, including both existing farms and projected additional farms, about 196 Central New York farms will provide farm products to be processed at the hub. Products include hops, broccoli, beef, milk, pork and beans.

"$3.6 million in state funding has been awarded through the Consolidated Funding Application (CFA) process will be used to create food distribution hubs across the state. Four new facilities will be funded in Central New York, the Finger Lakes, Hudson Valley, and the North Country, in addition to an earlier food hub project on Long Island, creating more than 150 jobs in these regions and increasing access to healthy, local products for New York consumers."

NYS Ag News / USDA News

Finger Lakes Food Hub
$450,000 in CFA funding will go toward the Finger Lakes Food Hub, which will be a 25,200 square foot facility built in the Village of Groton. By contracting with multiple small and mid-sized farmers, the Finger Lakes Food Hub will source a wide variety of locally field grown food products including root crops, herbs, and other fresh produce. The business will add value to these local products through packaging, branding, and processing such as quick-freezing before selling through established sales channels. It will collaborate with local farmers and producers to provide services and expanded markets for their products. This expansion will enhance distribution to markets such as Wegmans, Tops, Price Chopper, SYSCO, Regional Access, and Cortland Produce. The project will create 15 new jobs in the packing center and 65 seasonal jobs on local farms. It will put over 300 additional acres of farmland into agricultural production and generate over $2.3 million in annual sales by year three. The facility expects to be fully equipped and operational by December 31, 2013.

Hudson Valley Food Hub
More than $826,000 in CFA funding will go toward the Hudson Valley Food Hub, which will be located in Kingston. This project will expand the infrastructure of two successful food processing and distribution firms that serve New York State farms: Farm to Table Co-Packers and Hudson Valley Harvest. With additional processing equipment, cold/freezer storage, trucks and distribution depots, these two businesses will have expanded capacity to meet the growing demand for local food from customers in New York City and throughout the Northeast. This funding will stimulate a total investment of over $1.8 million, resulting in 15 new jobs, as well as 12 construction jobs in Kingston and six jobs located outside of Kingston. The Hudson Valley Food Hub works with over 60 NYS Farms from 19 counties, farming over 7,500 acres. Products coming through the food hub include vegetables, berries, fruits, beef, pork, chicken, lamb, goat, honey, maple syrup, grains, beans, cider and eggs.

North Country Food Hub

$350,000 in CFA funding will go toward the North Country Food Hub. United Helpers Management Company will establish a regional food hub and network in Canton.

Agriculture Enterprise Park Capital, Long Island
$500,000 in CFA funding is going toward this project. Agriculture Enterprise Park operates a processing plant in Riverhead, Suffolk County. The new facility is a public/private arrangement with multiple partners who received a $500,000 grant from the Long Island Regional Economic Development Council in 2012. The building has been purchased and is in the process of an extensive renovation. The infrastructure is being put in place to begin processing crops and allow farmers to reach markets outside of Suffolk County through the distribution of a wide range of Long Island products.
New York ranks second in the nation in the production of cabbage, apples and maple syrup; third in the production of wine and grape juice, and corn silage; fourth in the production of milk; and fifth in fresh market vegetable production. Governor Cuomo is focused on developing New York's agricultural industry, including improving opportunities for marketing, food manufacturing, wineries, breweries, distilleries, dairy farm growth and dairy processing growth.

Statement from Agriculture Secretary

Tom Vilsack on Departure of Deputy Secretary Kathleen Merrigan

Washington D.C., March 14, 2013 – Agriculture Secretary Vilsack today made the following statement on the departure of Deputy Secretary Kathleen Merrigan:

"USDA Deputy Secretary Kathleen Merrigan has helped USDA achieve record results over the past four years. She has played a vital role in the Department-wide

USDA News

USDA Announces 45th General Sign-Up for the Conservation Reserve Program

Minneapolis,MN, Feb. 16, 2013-Agriculture Secretary Tom Vilsack today announced at the National Pheasant Fest and Quail Classic that the U.S. Department of Agriculture (USDA) will conduct a four-week general sign-up for the Conservation Reserve Program (CRP), beginning May 20 and ending on June 14. CRP has a 27-year legacy of protecting the nation's natural resources through voluntary participation, while providing significant economic and environmental benefits to rural communities across the United States. Under Secretary Vilsack's leadership, USDA has enrolled 11.7 million acres in various CRP efforts.

"Since the 1980s, the CRP program has established itself as a benchmark in voluntary conservation efforts, providing American producers with assets to address our most critical resource issues," said Vilsack. "Last year, during one of the worst droughts in generations, the CRP proved vital in protecting our most environmentally sensitive lands from erosion. Emergency haying and grazing on CRP lands also supplied critical feed and forage for livestock producers due to the drought. And the program continues to bring substantial returns to rural areas, attracting recreation and tourism dollars into local economies while sustaining natural and wildlife habitat for future generations."

Additional sign-ups for continuous CRP programs-such as Highly Erodible Land Initiative and Initiative to Restore Grasslands, Wetlands and Wildlife-will be announced in spring 2013.

Currently, about 27 million acres are enrolled in CRP, which is a voluntary program available to agricultural producers to help them safeguard environmentally sensitive land. Producers enrolled in CRP plant long-term, resource-conserving covers to improve the quality of water, control soil erosion and enhance wildlife habitat. Contracts on 3.3 million acres of CRP are set to expire on Sept. 30, 2013. Producers with expiring contracts or producers with environmentally sensitive land are encouraged to evaluate their options under CRP.

Producers that are accepted in the sign-up can receive cost-share assistance to plant long-term, resource-conserving covers and receive an annual rental payment for the length of the contract (10-15 years). Producers also are encouraged to look into CRP's other enrollment opportunities offered on a continuous, non-competitive, sign-up basis and that often provide additional financial assistance. Continuous sign-up dates will be announced at a later date.

Over the past 27 years, farmers, ranchers, conservationists, hunters, fishermen and other outdoor enthusiasts have made CRP one of the largest and most important USDA efforts. CRP continues to make major contributions to national efforts to improve water and air quality, and to prevent soil erosion by protecting the most sensitive areas including those prone to flash flooding and runoff. CRP has also helped increase populations of pheasants, quail, ducks, and rare species, like the sage grouse, the lesser prairie chicken, and other grassland birds. Highlights of CRP include:

- CRP has restored more than two million acres of wetlands and two million acres of riparian buffers;
- Each year, CRP keeps more than 600 million pounds of nitrogen and more than 100 million pounds of phosphorous from flowing into our nation's streams, rivers, and lakes.
- CRP provides $1.8 billion annually to landowners-dollars that make their way into local economies, supporting small businesses and creating jobs; and
- CRP is the largest private lands carbon sequestration program in the country. By placing vulnerable cropland into conservation, CRP sequesters carbon in plants and soil, and reduces both fuel and fertilizer usage. In 2012, CRP resulted in carbon sequestration equal to taking about nine million cars off the road.

The Obama Administration is leading a host of federal agencies in the America's Great Outdoors initiative to develop a 21st century conservation agenda and reconnect Americans to the outdoors. At the same time, USDA continues to enroll a record number of acres of private working lands in conservation programs, working with more than 500,000 farmers and ranchers to implement conservation practices that clean the air we breathe, filter the water we drink, and prevent soil erosion. Since 2009, USDA has enrolled more than 50 million acres into the Conservation Stewardship Program to incentivize the most productive, beneficial conservation practices. And USDA's work in the Chesapeake Bay watershed, the Mississippi River Basin, and Gulf of Mexico are among 19 initiatives applying the most effective conservation practices to increase agricultural and environmental returns. USDA science is also helping to focus work in areas to reduce problematic nutrients making it to rivers and streams by as much as 45 percent. *For more information on CRP and other FSA programs, visit a local FSA service center or www.fsa.usda.gov.*

"New York State Berry Growers Association

Paul Baker
Executive Director
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Sanborn, NY 14132

Phone: (716) 807-6827

goodberries@roadrunner.com

http://www.hort.cornell.edu/grower/nybga/

NYS BGA NEWS

NEW YORK STATE BERRY GROWERS ASSOCIATION NEWS

Decisions on funding for Spotted Wing Drosophila will be made soon....*Dale-Ila M. Riggs, President, NYS Berry Growers Association*

It's the eleventh hour and the NYSBGA is still in the running for obtaining funding for research into how to deal with Spotted Wing Drosophila (SWD). The good news is that the Senate, under Senator Ritchie's leadership on the Agriculture Committee, has put $100,000 in the Senate budget for research for SWD. The bad news is that there is not yet a budget agreement, so we don't know if that funding will hold up through the final negotiations that culminate in a state budget.

We are pursuing other avenues for funding as well. The Department of Agriculture and Markets has been advocating on our behalf for funding to be appropriated from the Invasive Species line of the Environmental Protection Fund. We are cautiously optimistic about some funding from that source, but must wait for the state budget to be passed to get a final answer on that as well.

We are also hopeful that a Cornell team of researchers will be able to get some funding from the NY Farm Viability Institute to test a fixed sprayer system to control SWD in tunnel raspberries. We also expect that decision to be made soon.

Personally speaking, the suspense is just about killing me. Members of the Board and myself have spent a very large amount of time this winter working to get the word out that we need immediate funding for work to come up with answers that growers can use this season for SWD. I am hopeful that our work will pay off. By next month, I hope to be able to report great news. Keep your fingers crossed!

On the Organic Side...

RMA Releases Fact Sheet on Crop Insurance for Organic Farming

The USDA Risk Management Agency has published a three-page fact sheet titled "Organic Farming Practices." The new fact sheet provides a general overview of the crop insurance program, and details how RMA is working to improve crop insurance for organic producers based on the Office of Inspector General (OIG) audit of the federal crop insurance program for organic farming practices. It is available online in PDF at http://www.rma.usda.gov/pubs/rme/2013organicsfactsheet.pdf.

AXXE Broad Spectrum Herbicide Approved for Use in NY

East Hartford, Connecticut. BioSafe Systems is excited to introduce AXXE, the organic broad spectrum herbicide. AXXE is an environmentally responsible, organic certified, non-selective herbicidal soap labeled for agricultural and horticultural applications, specifically; fields, greenhouses, nurseries, commercial turf, and landscapes.

AXXE works on contact, provides a quick burn-down, and does not volatilize or migrate through soil. AXXE biodegrades quickly, leaving no harmful residue behind. Control a wide range of grasses, weeds, mosses, liverworts, and lichens with AXXE. Tank mix AXXE with a compatible

On the Organic Side *(continued)*

systemic herbicide for total weed control. AXXE is available in 2.5, 5, 30, 55, and 275 Gallons. For more information see the NY State label here: http://128.253.223.36/ppds/531476.pdf.

UT, NC State Scientists Secure Nearly $2 Million Grant to Improve Produce Safety – Naturally

Knoxville, TN, March 4, 2013. — A group of scientists at the University of Tennessee Institute of Agriculture and North Carolina State University are working together to improve the safety of organic produce — naturally.

Their study, "Alternative Post-harvest Washing Solutions to Enhance the Microbial Safety and Quality of Organic Fresh Produce," began last fall.

Right: Cantaloupes are among the organic crops that might benefit from post-harvest washing with naturally occurring microbials to prevent E. coli, Listeria and Salmonella contamination. Photo courtesy NC State University.

The four-year project is supported by a nearly $2 million grant from the U.S. Department of Agriculture's Organic Agriculture Research and Extension Initiative Program. Qixin Zhong, an associate professor in the UT Department of Food Science and Technology, leads the initiative.

"The goal of the project is to provide safe, alternative, sustainable and effective treatments to reduce foodborne illnesses caused by *E. coli*, *Listeria* and *Salmonella* contamination in organic produce," said Zhong.

The group hopes to provide those effective treatments in the form of alternative organic antimicrobials — naturally occurring substances such as organic essential oils that fight pathogens like *E. coli* — added to postharvest wash water.

"To improve the microbiological safety of organic produce, there is an urgent need to develop washing practices that not only enhance sanitation effectiveness but also fulfill the requirements of organic fresh produce," said Zhong.

As part of the project, the researchers also will evaluate

the economic feasibility of their work and impact on the shelf life of various types of organic produce.

"The research team is very eager to make sure the outcomes from this project will be applicable to organic growers throughout the United States," said Faith Critzer, a UT Extension specialist and faculty member of the UT Department of Food Science and Technology.

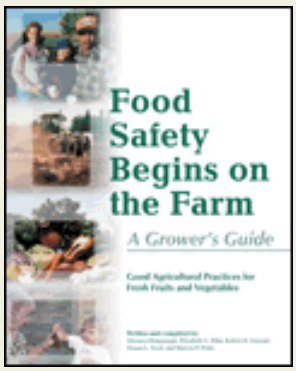
To achieve that goal, researchers partnered with a group of organic produce growers who will provide feedback throughout the study. In addition, the team will share research findings through webcasts, written fact sheets and a series of workshops held in Tennessee and North Carolina.

The UT Institute of Agriculture provides instruction, research and public service through the UT College of Agricultural Sciences and Natural Resources; the UT College of Veterinary Medicine; UT AgResearch, including its system of 10 research and education centers; and UT Extension offices in every county in the state.

North Carolina State University's project team includes an interdisciplinary group of faculty from the Plants for Human Health Institute, N.C. Cooperative Extension and the Department of Food, Bioprocessing and Nutrition Sciences, all of which are part of the university's College of Agriculture and Life Sciences (CALS). CALS' mission is to improve the economic, environmental and social well-being of North Carolina and the world.

GAPsNET

Good Agricultural Practices Network for Education and Training



Focus on Food Safety

PSA-FDA Q & A Series on FSMA Proposed Produce Safety Rule

The Produce Safety Alliance, in collaboration with the FDA, will be hosting a series of Q & A teleconferences to discuss specific sections of the Food Safety Modernization Act (FSMA) Proposed Produce Safety Rule. This is a great opportunity for you to ask questions directly to the FDA staff. Dr. Jim Gorny, Senior Advisor for Produce Safety, and Dr. Erick Snellman, Policy Analyst, will be available to answer questions.

Each teleconference will have a different focus; please refer to the schedule below.We ask that you keep your questions for each Q & A session relevant to the topic. Though Dr. Gorny and Dr. Snellman may not be able to answer every question, they will be able to direct and review specific sections of the proposed rule to enhance your understanding of what is being proposed. If specific details are not available or addressed in the proposed rule or through this Q & A series, we encourage you to write and submit a comment or question to the docket regarding issues that FDA should clarify or address in the final rule or in companion guidance documents. Comments must be submitted BEFORE May 16, 2013.

There are two ways to comment:
1.) Comment **electronically** at http://www.regulations.gov/#!docketDetail;D=FDA-2011-N-0921

2.) Written comments may be faxed to the FDA at 301-827-6870 or mailed to:

Division of Dockets Management (HFA-305)
Food and Drug Administration
5630 Fishers Lane, Room 1061
Rockville, MD 20852

Date	Time (EST)	Topic
Apr 22, 2013	11 AM	Soil Amendments
Apr 25, 2013	11 AM	Domestic and Wild Animals
TBA		Growing, Harvesting, Packing, & Holding Activities
TBA		Equipment, Tools, Buildings, & Sanitation
TBA		Health, Hygiene, and Training of Workers
TBA		Recordkeeping, Compliance, & Enforcement

Q & A Session with the FDA
We recommend reviewing the full proposed produce rule and codified sections before the teleconference. In addition, the links below will take you to other documents that may help clarify the proposed rule.

Proposed Produce Safety Rule at a Glance: http://www.fda.gov/Food/FoodSafety/FSMA/ucm334554.htm#coverage

Proposed Produce Rule Subpart Fact Sheets: http://www.fda.gov/Food/FoodSafety/FSMA/ucm334552.htm#L

Call-in Information and Instructions
To participate in the teleconference, dial the toll-free number below 5 minutes prior to the presentation. No registration is required. All participants will be placed on mute upon entering the conference; however, the Q & A will be moderated by an operator who

Focus on Food Safety (continued)

will provide instructions for how to ask questions using your telephone and individually unmute the lines of those who have questions. We ask that you call into the teleconference 5 minutes prior to the event start to ensure that all participants are available to receive instructions for the Q & A process at the beginning.

***Dial toll-free: 866-906-9888**
***Enter passcode: 8140591**
*These numbers will remain the same for ALL scheduled Q & A sessions.

Thank you to those attended the first two Q&A sessions and came prepared with great questions for the speakers. In case you missed one of these sessions, the recordings are now available for listening on the PSA homepage at http://producesafetyalliance.cornell.edu.

We hope you can join us for one or more of the series! If you have any questions about this series, please contact Gretchen Wall at 607-255-6806 or glw53@cornell.edu or Betsy Bihn, PSA Director, eab38@cornell.edu

Farmers Ask FDA for More Time to Analyze New Food Safety Rules

March 15, 2013. Over 270 organizations, food businesses and farms requested an extension of the comment period for two major proposed food safety rules. The groups seek more time to assess the effects of the 1,200 pages of rules on family farms and small food businesses.

The new regulations are an effort to implement the Food Safety Modernization Act passed by Congress and signed into law by the president in 2011. Unless extended, the public comment period closes May 16, 2013.

In a letter to Food and Drug Administration Commissioner Margaret Hamburg and Department of Health and Human Services Secretary Kathleen Sebelius, the organizations cite the sheer volume and complexity of the proposed rules and the timing of the comment period during spring planting among the reasons to lengthen the comment period until September 13, 2013.

"Hundreds of thousands of family farmers and family-scale food producers will be subject to extensive new regulations," said Judith McGeary, Executive Director of the Farm and Ranch Freedom Alliance. "FDA took two years to develop the proposed rules, and our members need more than 120 days in order to understand all of the implications and submit substantive comments."

The letter also notes that many farmers, including those of Amish faith, do not have easy access through the internet to FDA documents or information on the proposals.

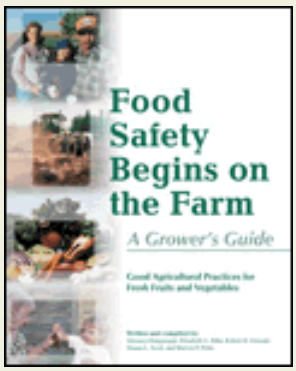
FSMA Public Meeting Materials Available
Presentations from the FSMA Public Meeting Concerning Proposed Rules for Preventive Controls in Human Food and Produce Safety Standards held on February 28 and March 1 2013 in Washington, DC are now available. View the presentations and additional information about the meeting.

Presentations from the FSMA Public Meeting concerning Proposed Rules for Preventive Controls in Human Food and Produce Safety Standards, held March 11 -12 2013 in Chicago, IL, are now available. Visit the meeting page to view the materials.

FDA is correcting technical errors in the proposed FSMA rules published January 16, 2013. Federal Register Notice of Corrections to the Current Good Manufacturing Practice and Hazard Analysis and Risk-Based Preventive Controls for Human Food Proposed Rule Federal Register Notice of Corrections to the Standards for Growing, Harvesting, and Holding of Produce for Human Con-

GAPsNET

Good Agricultural Practices Network for Education and Training



Focus on Food Safety *(continued)*

sumption Proposed Rule

Additional Information Concerning the Proposed Rules
Overview of the Proposed Rules
Preventive Controls for Human Food: Fact Sheet on the Proposed Rule

Standards for Produce Safety: Fact Sheet on the Proposed Rule

Creating a Culture of Food Safety on Your Farm - *Phil Tocco, Michigan State University Extension*
The landscape of fresh produce is continually evolving and growers must evolve with it. Having a food safety culture can help inform and guide this evolution.

March 4, 2013. Food safety mistakes happen to the best of produce growers and food handlers. In most cases, they do not cost anyone their lives and can be viewed more as opportunities for betterment. Michigan State University Extension says the key to this change of mindset is maintaining something called a food safety culture.

A food safety culture begins with viewing the produce that is handled in the operation as if it were food. It is very easy when handling bulk volumes of fruits or vegetables to think of it as a commodity, like corn or soybeans. By thinking of the produce as food, a culture of food safety begins. Every interaction with fresh produce, from the time it is harvested to the time it is sold, impacts quality and safety. Understanding and evaluating the flow of food in this context is really the next step in developing a culture of food safety. Whether it is recognizing that the holding temperature of the cooler is important, or understanding that healthy workers harvest and pack safe food, these realizations will begin to inform management decisions that drive change on the farm. As change takes hold, continuous improvement becomes the hallmark of a healthy food safety culture fully enacted upon a farm. *(Source: Michigan State University Extension)*.

Specialty Crops Inspection Division - Consolidating to Serve You Better - *Lorenzo A. Tribbett, Director, Specialty Crops Inspection Division*

As part of our ongoing efforts to provide the best possible service in a fiscally responsible way, the Agricultural Marketing Service's Fruit and Vegetable Program has merged the Fresh Products and Processed Products Divisions to form the new Specialty Crops Inspection (SCI) Division. SCI offers the produce industry inspection, grading, and audit services on a farm-to-retail basis for fresh, frozen, and processed products.

SCI is comprised of more than 800 highly trained and experienced employees who grade, certify,

and provide quality control and other services for fresh fruits, vegetables, and specialty items throughout the United States and Puerto Rico. We are located in all major terminal markets and other sites across the country where our cus-

TUNNEL TALK

Consumer Preferences for High-Tunnel Raspberry Varieties -

Diane Brown, Michigan State University Extension

Here are the results from MSU's research to determine which cultivars consumers prefer.

March 4, 2013. How do we perceive flavors? Flavor is complex in that it is more than what our taste buds tell us – that a food is sweet, salty, sour, bitter or savory. Scientists are discovering that we have even more taste receptors than previously thought. Foods taste differently to different people; we have different preferences for foods. What we call flavor is a complex interpretation by our brains of how food tastes and smells, coupled with our reaction to its temperature and texture. Flavor is difficult to quantify, but people may have definite opinions about what they like or dislike.

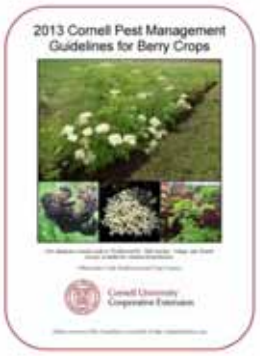
Michigan State University Extension has grown fall raspberry cultivars in containers under high tunnels for two seasons at the Southwest Michigan Research and Extension Center (SWMREC) in order to compare productivity and quality. Part of the assessment is to find out which cultivars consumers prefer. On various days in late summer and fall, we offered samples of raspberries all picked on the same day to individuals and asked them to rate them for sweetness (data not shown), flavor and whether or not they liked the berry. People were asked to sample more than one berry of each cultivar and rate the flavor on a scale of 1 to 5 with 1= very poor to 5= excellent. The intent was to determine whether there were clear favorites among the different varieties.

We also asked tasters to make comments about the cultivars to help explain their ratings. Favorable comments included sweet, great flavor, strong raspberry flavor and good firmness. Negative comments included bitter, bland, mushy, flat, sour, off-flavor and seedy. Some comments on the appearance of the berries included color was too dark, poor color, uneven color, berry was pretty, berry shape was squat, fruit was glossy, bright red, etc. Berry appearance clearly was also a factor. The lone yellow fruited raspberry ('Anne') in the trial was rated as less sweet than several other cultivars even though a measure of its sugar levels (brix) actually indicated that it was sweeter.

In 2011, there were no statistically significant differences in the flavor of our eight cultivars. More cultivars were added in 2012 and evaluations were done early and late in the season. Early in the season in 2012, 'Jaclyn' was rated higher in flavor than 'Anne.' Toward the end of the 2012 season when the late season cultivars were included, 'Nantahala' was rated highest for flavor and 'Crimson Giant' was rated lowest. Results to date indicate that some of the most flavorful cultivars are 'Caroline,' 'Jaclyn,' Polka and 'Nantahala'. (*Source: Michigan State University Extension.)*

Consumer flavor ratings of raspberry cultivars in 2011 and 2012. Ratings are on a scale of 1 (very poor) to 5 (excellent).

Cultivar	2011*	08/15/12 – 09/13/12*	09/22/12 – 10/24/12*
Jaclyn	3.7 a	3.5 a	3.3 ab
Caroline	3.6 a	3.3 ab	3.5 ab
Polka	3.5 a	3.1 ab	3.5 ab
Joan J	3.4 a	2.8 ab	3.2 ab
Josephine	3.0 a	3.2 ab	3.3 ab
Himbo Top	2.9 a	3.0 ab	3.0 abc
Autumn Britten	2.9 a	3.0 ab	2.5 abc
Anne	2.8 a	2.7 b	3.2 ab
Nantahala	NA	NA	3.8 a
Joan Irene	NA	NA	2.6 abc
Nova	NA	NA	2.5 abc
Erika	NA	NA	2.2 bc
Crimson Giant	NA	NA	1.5 c



PIMS

Product, Ingredient, and Manufacturer System:

http://pims.psur.cornell.edu/

http://www.omri.org/omri-lists

Berry Diagnostic Tool

http://www.fruit.cornell.edu/berrytool/

How Do I Manage Spotted Wing Drosophila (SWD) on My Farm?

Laura McDermott, Regional Agricultural Specialist, Eastern NY Commercial Horticulture Program

Ripening and ripe fruit are susceptible to SWD attack, but they appear to be only mildly attracted to unripe fruit. If adult SWD are present on your farm, manage them aggressively.

Aggressive management entails:

1. Excellent sanitation: Fruit should be harvested frequently and completely. Unmarketable fruit should be removed from the field and either frozen, "baked" in clear plastic bags placed in the sun, or disposed of off-site. This will either kill larvae or remove them from your farm.

2. Canopy and water management: Prune to maintain an open canopy. This may make plantings less attractive to SWD and will facilitate pesticide applications. Leaking drip lines should be repaired, and overhead irrigation should be minimized.

3. Insecticide treatments: Insecticide treatments should begin when scouting reports in the region alert growers to the first fly finding. Treatments should be applied at least every seven days and repeated in the event of rain. Choose the most effective insecticides with pre harvest intervals that work for your picking schedule. Rotate insecticides according to their modes of action. Check the 2013 Cornell Guidelines for the latest list of approved pesticides. (See tables below) Growers should be careful to avoid exceeding maximum applications per season which may be difficult for organic growers.

4. Monitor success of insecticide treatments with baited traps: Use red cups with holes no larger than 5mm in size. Bait can be apple cider vinegar or a yeast/sugar mix – whatever is easier for growers to accurately monitor. Traps should be hung in mid-canopy or on the north side of the row. Monitor these traps weekly.

5. Regular fruit sampling: At least 100 fruit per block per harvest should be observed for infestation. between sprays to determine spray efficacy. Place fruit sample in Ziploc bags. Crush berries lightly and add the saltwater solution (1-2 tsp salt to 1 cup water). Leave for an hour and assess for larvae.

6. Cool berries immediately: Chilling berries immediately after harvest to 320 -330F will slow or stop the development of larvae and eggs in the fruit. U-Pick customers should be encouraged to follow this strategy to improve fruit quality at home.

Insecticides for 2013

Blueberries:

1. Spinetoram [Delegate WG) (EPA # 62719-541) with 2(ee) recommendation. Recommended rate is 3-6 oz/A. Restrictions: Preharvest interval = 3 days; Do not apply more than a total of 19.5 oz/A per year; Do not make more than 2 consecutive applications of Group 5 insecticides (spinetoram, spinosad). If additional applications are necessary, rotate to a different class of material. Do not make more than 6 applications per calendar year; minimum treatment interval is 6 days. **IRAC group: 5**

2. Spinosad [Entrust, Entrust SC] (EPA # 62719-282, 62719-621) with 2(ee) recommendations. OMRI listed. Recommended rate 1.25-2 oz/A for Entrust and 4-6 fl oz/A for Entrust SC. Restrictions: Preharvest interval = 3 days; Do not apply more than a total of 9 oz/A of Entrust or 29 fl oz/A Entrust SC per year; Do not make more than 2 consecutive

How Do I Manage Spotted Wing Drosophila (SWD) on My Farm? (continued)

applications of Group 5 insecticides (spinetoram, spinosad). If additional applications are necessary, rotate to a different class. Do not make more than 6 applications per calendar year or more than 3 applications per crop; Minimum treatment interval is 6 days. **IRAC group: 5**

3. Azadirachtin [AzaSol, Molt-X] (EPA # 81899-4, 68539-11). Recommended rate is 6 oz/A in 50 gallons of water/A for AzaSol and 10 fl oz/A for Molt-X. Restrictions: Preharvest interval 0 days. **IRAC group: UN** (unknown)

4. Bifenthrin [specifically Triple Crown] (EPA NO 279-3440). This product is a mixture of three active ingredients including bifenthrin, zeta- cypermethrin and imidacloprid. Bifenthrin is a synthetic pyrethroid and is the same active as is found in Brigade. Recommended rate is 6.4-10.6 fl oz/A. Restrictions: Triple Crown is a Restricted Use Pesticide; Preharvest interval is 5 days; Minimum application interval is 7 days; Maximum amount of Triple Crown allowed per crop season is 31.0 fl oz/A. See maximum usage table on label when applying more than one of these active ingredients. Minimum spray volume is 20 gal/A of water by ground or 5 gal/A by air. **IRAC groups: 3A,** (bifenthrin and zeta-cypermethrin) **and 4A** (imidacloprid)

5. Bifenthrin [specifically Brigade WSB] (EPA #279-3108) with 2(ee) recommendation. Recommended rate is 5.3 to 16 oz/A. Restrictions: Brigade WSB is a restricted use pesticide. Preharvest interval is 1 day; Do not make applications less than 7 days apart. Do not apply more than 0.5 lb active ingredient per acre per season. **IRAC group: 3A**

6. Fenpropathrin [Danitol 2.4EC] (EPA #59639-35). Recommended rate 16 fl oz/A. Restrictions: Danitol is a restricted use Pesticide; Preharvest interval is 3 days; No not exceed 32 fl oz/A per season. **IRAC group: 3A**

7. Phosmet [Imidan 70-W] (EPA # 10163-169). Recommended rate 1.33 lb/A. Preharvest interval = 3 days. Do not apply more than 7 1/8 lb/A per year. Do not make more than 5 applications per year. **IRAC group: 1B**

Caneberries:
1. Spinetoram [Delegate WG) (EPA # 62719-541) with 2(ee) recommendation. Recommended rate is 3-6 oz/A. Restrictions: Preharvest interval = 1 day; Do not apply more than a total of 19.5 oz/A per year; Do not make more than 2 consecutive applications of Group 5 insecticides (spinetoram, spinosad). If additional applications are necessary, rotate to a different class of material. Do not make more than 6 applications per calendar year; Minimum treatment interval is 4 days. **IRAC group: 5**

2. Spinosad [Entrust, Entrust SC] (EPA # 62719-282, 62719-621) with 2(ee) recommendations. OMRI listed. Recommended rate 1.25-2 oz/A for Entrust and 4-6 fl oz/A for Entrust SC. Restrictions: Preharvest interval = 1 day; Do not apply more than a total of 9 oz/A of Entrust or 29 fl oz/A Entrust SC per year; Do not make more than 2 consecutive applications of Group 5 insecticides (spinetoram, spinosad). If additional applications are necessary, rotate to a different class. Do not make more than 6 applications per calendar year; Minimum treatment interval is 5 days. **IRAC group: 5**

3. Azadirachtin [AzaSol, Molt-X] (EPA # 81899-4, 68539-11). Recommended rate is 6 oz/A in 50 gallons of water/A for AzaSol and 10 fl oz/A for Molt-X. Restrictions: Preharvest interval 0 days. **IRAC group: UN** (unknown)

How Do I Manage Spotted Wing Drosophila (SWD) on My Farm?
(continued)

4. Bifenthrin [specifically Triple Crown] (EPA # 279-3440). This product is a mixture of three active ingredients including bifenthrin, zeta- cypermethrin and imidacloprid. Bifenthrin is a synthetic pyrethroid and is the same active as is found in Brigade. Recommended rate is 6.4 – 10.3 fl oz/A. Restrictions: Triple Crown is a Restricted Use Pesticide; Preharvest interval is 3 days; Minimum application interval is 7 days; Maximum amount of Triple Crown allowed per season is 10.3 fl oz/A. See maximum usage table on label when applying more than one of these active ingredients. Minimum spray volume is 50 gal/A by ground or 10 gal/A by air. **IRAC group: 3A**

5. Bifenthrin [specifically Brigade WSB, Brigade 2EC] (EPA #279-3108, EPA #279-3313) with 2(ee) recommendations. Recommended rate is 8.0 to 16 oz/A for Brigade WSB and 3.2-6.4 fl oz per/A for Brigade 2EC. Restrictions: Brigade WSB and Brigade 2EC are restricted use pesticides. Preharvest interval is 3 days; only one application may be made postbloom. Do not apply more than 0.2 lb active per acre per season. **IRAC groups: 3A**, (bifenthrin and zeta-cypermethrin) and 4A (imidacloprid)

6. Fenpropathrin [Danitol 2.4EC] (EPA #59639-35). Recommended rate 16 fl oz/A. Restrictions: Danitol is a restricted use Pesticide; Preharvest interval is 3 days; No not exceed 32 fl oz/A per season. **IRAC group: 3A**

7. Malathion [Malathion 8 Aquamul] (EPA #34704-474) for raspberries, blackberries, boysenberries, dewberries, and loganberries with 2(ee) recommendation. Recommended rate 2 pts/A. Restrictions: Preharvest interval = 1day. **IRAC group: 1B**

Strawberries:

1. Spinetoram [Radiant SC) (EPA # 62719-545) with 2(ee) recommendation. Recommended rate is 6-10 fl oz/A. Restrictions: Preharvest interval = 1 day; Do not apply more than a total of 39 fl oz/A per year; Do not make more than 2 consecutive applications of Group 5 insecticides (spinetoram, spinosad). If additional applications are necessary, rotate to a different class of material. Do not make more than 5 applications per calendar year; Minimum treatment interval is 4 days. **IRAC group: 5**

2. Azadirachtin [AzaSol, Molt-X] (EPA # 81899-4, 68539-11). Recommended rate is 6 oz/A in 50 gallons of water/A for AzaSol and 10 fl oz/A for Molt-X. Restrictions: Preharvest interval 0 days. **IRAC group: UN** (unknown)

3. Fenpropathrin [Danitol 2.4EC] (EPA #59639-35). Recommended rate 16 – 21.33 fl oz/A. Restrictions: Danitol is a restricted use Pesticide; Preharvest interval is 2 days; No not make more than 2 applications totaling 42.67 fl oz/A to the same planting in 12 consecutive months. **IRAC group: 3A**

4. Bifenthrin [specifically Brigade WSB] (EPA #279-3108) with 2(ee) recommendation. Recommended rate is 8.0 to 16 oz/A. Restrictions: Brigade WSB is a restricted use pesticide. Preharvest interval is 0 days. Do not apply more than 0.5 lb active per acre per season. For ground application, apply full cover spray in minimum of 50 gallons of finished spray per acre. **IRAC group: 3A**

5. Spinosad [Entrust, Entrust SC] (EPA # 62719-282, 62719-621) with 2(ee recommendations. OMRI listed. Recommended rate 1.25-2 oz/ for Entrust and 4-6 fl oz/A for Entrust SC. Restrictions: Preharvest interval = 1 day; Do not apply more than a total of 9 oz/A of Entrust or 29 fl oz/A Entrust SC per year; Do not make more than 2 consecutive applications of Group 5 insecticides (spinetoram, spinosad). If additional applications are necessary, rotate to a different class. Do not make more than 5 applications per calendar year; Minimum treatment interval is 5 days. **IRAC group: 5**

6. Malathion [Malathion 8 Aquamul] (EPA #34704-474) only with 2(ee) recommendation. Recommended rate is 2 pts/A. Restrictions: Preharvest interval is 3 days. **IRAC group: 1B**

Netting Control of Spotted Wing Drosophila (Drosophila suzukii)

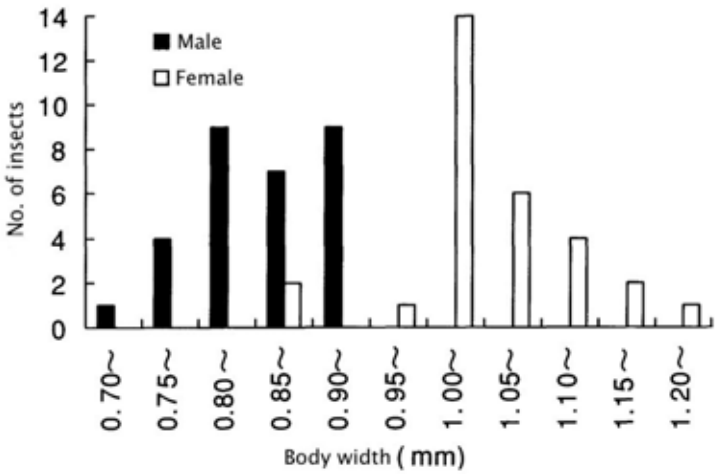
Chiba Prefectural Agriculture Research Center & Chiba Industrial Technology Research Institute

*(**Editor's note**: The authors of the two articles summarized below were graciously granted permission for a printing of a summary translation of them in NY Berry News. We wish to express our gratitude to them and also to Dr. Masanori Seto (ms545@cornell.edu), Postdoctoral Associate, Cornell University Department of Entomology, for his preparation of the summary translation).*

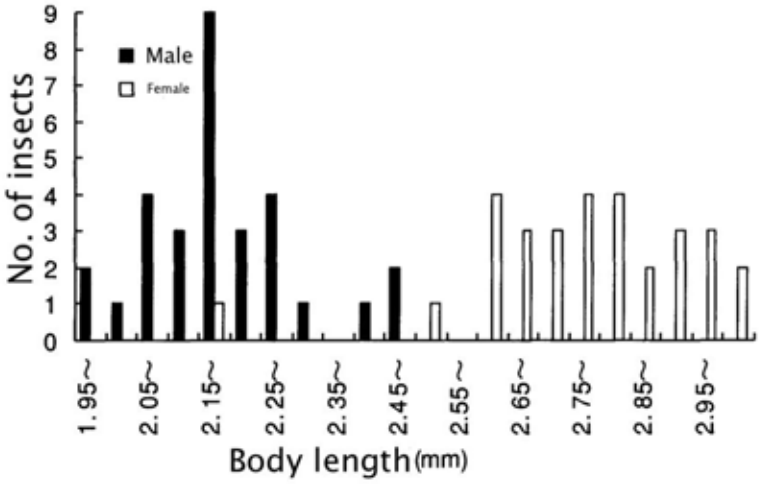
The researchers' approaches consisted of three steps.

Examine the body sizes of adult *Drosophila suzukii*
A laboratory trial to determine the maximum mesh size that do not allow *D. suzukii* adult passing through the net[1]
A field trial on effectiveness of netting against *D. suzukii* infestation and crop quality

1. Body width and body size



Body width was measured at the widest part of throrax.



Body length was measured from the head to the end of abdomen.

Netting Control of Spotted Wing Drosophila *continued)*

2. Mesh size that is small enough to prevent *D. suzukii* adults from passing through
12 cylindrical plastic containers (10 cm diameter) with bottoms were prepared. 20 ml of a mixture of Japanese sake and honey (5:1 volume) was placed as a bate in each container. Three containers were covered with 0.98 mm mesh, three containers were covered with 1.0 mm mesh, three of them were covered with 1.5 mm mesh and the last three were left uncovered as control. All containers were placed in a rearing box of *D. suzukii* for 24 hours and the number of insects trapped in the containers was counted. The trial had 6 repetitions.

Different mesh sizes. The containers were placed for 24 hours.

Table. Relationship between mesh sizes and the number of adults passing through the nets

Mesh size (mm)	Weave	No. of adults passing	Standard error
0.98	Plain	0 b	
1.0	Raschel knitting	0.2 b	0.17
1.5	Raschel knitting	43.0 a	23.5
Control	-	143.5 a	49.0

a,b Steel-Dwass method, 5% significance level

3. Field trial
Two 150 m^2 blueberry fields were covered with either insect net (0.98 mm mesh size) or bird net (30 mm mesh size) at the height of 2.5 m. The blueberry trees were 8 year old BlueCrop and planted at 1.4 x 1.4 m interval. During the harvest period, ripe fruit was collected. The fruit was soaked in water for an hour and counted the number of larvae coming out. Also, the crop quality, yield and the growth of new tree under each treatment were evaluated. The trials were done over three years.

Netting Control of Spotted Wing Drosophila *continued)*




Photos courtesy of Shinzo Kawase of the Chiba Prefectural Agriculture Research Center

Table. Duration of covering period with nets and duration of harvest period.

Treatment	Year	Covering period	Harvest period	Covering duration before harvest*
		(Month/Day)	(Month/Day)	(Days)
0.98 mm	2003	5/22~8/17	6/23~7/20	32
Insect net	2004	5/16~8/1	6/25~7/5	40
	2005	5/10~8/5	6/24~7/27	45
30 mm	2003	5/28~8/18	6/16~7/11	19
Bird net	2004	5/16~8/1	6/18~6/29	33
	2005	5/16~8/5	6/20~7/21	35
* Covering duration before harvest was the number of days between the beginning of covering period and the beginning of harvest period.				

Netting Control of Spotted Wing Drosophila (continued)

Table. The number of *D. suzukii* larvae detected from field grown blueberries covered with two different mesh size.

Treatment	Sampling date		# of fruits tested	# of larvae	# of larvae / 100 fruit
0.98 mm	2003	7/6	100	0	0
Insect net	2004	6/16	127	0	0
		6/22	238	0	0
		7/14	84	0	0
		Total	449	0	0
	2005	6/27	211	0	0
		7/4	176	0	0
		Total	387	0	0
	3 yr Total		936	0	0
30 mm	2003	7/6	100	191	191
Bird net	2004	6/16	150	0	0
		6/22	340	3	0.9
		7/14	96	23	24.0
		Total	586	26	4.4
	2005	6/27	219	13	5.9
		7/4	171	120	70.2
		Total	389	133	34.2
	3 yr Total		1076	350	32.5

Summary

1. Damage by Cherry Drosophila could be completely prevented by covering a blueberry orchard with a 0.98 mm mesh net.

2. Covering with the net did not decrease the soluble solids or amount of free sugar but it might produce a large amount of titratable acid and blue skin of the blueberry becomes lighter.

3. Covering with the net did not influence blueberry fruit weight, yield, or growth of current shoots.

Original Articles:

[i] Kawase, S. and K. Uchino, 2005. Effect of Mesh Size on Drosophila Suzukii Adults Passing Through the Mesh. *Annual Report of the Kanto Tosan Plant Protection Society*, **52**, 99-101.

[ii] Kawase, S., K. Uchino, M. Yasuda and S. Motoori. 2008 Netting Control of Cherry Drosophila *Drosophila Suzukii* Injurious to Blueberry. *Bulletin of Chiba Prefectural Agriculture Research Center*, **7**. 9-15.

Study Offers New Insights on Invasive Fly Threatening U.S. Fruit Crops

Matt Shipman, News Services, and Dr. Hannah Burrack, North Carolina State University

March 15, 2013. Humans aren't the only species with a sweet tooth. Research from North Carolina State University shows that the invasive spotted-wing vinegar fly (*Drosophila suzukii*) also prefers sweet, soft fruit – giving us new insight into a species that has spread across the United States over the past four years and threatens to cause hundreds of millions of dollars in damage to U.S. fruit crops.

Male and female Drosophila suzukii on a berry. (Photo credit: Hannah Burrack)

"Because we know that *D. suzukii* prefers softer, sweeter fruit, we can focus our research efforts into which wild fruits may serve as reservoirs for this species and help identify new crops that might be at risk," says Dr. Hannah Burrack, an assistant professor of entomology at NC State and lead author of a paper on the research. "These findings may also be a starting point for plant breeders interested in developing new fruit varieties that are more resistant to *D. suzukii*."

Originally from east Asia, *D. suzukii* were first detected in California in 2008. They have since spread to states from Wisconsin to North Carolina to Florida. The female flies use serrated blades on the tip of their abdomens to cut through the skin of ripe fruit and lay their eggs. The eggs hatch into larvae that feed on the flesh of the fruit until they reach maturity – ruining the fruit in the process.

Sellers go to great pains to remove infested fruit before it reaches the marketplace, so consumers won't notice a difference in fruit quality. But infestations can cause significant economic problems for fruit growers. For example, researchers estimate that *D. suzukii* has the potential to destroy 40 percent of blackberry and raspberry crops in the eastern U.S., which would affect berry prices and availability.

D. suzukii already causes tens of millions of dollars in crop damage annually to cherries, raspberries, blackberries, blueberries and strawberries. But researchers estimate that losses could climb into the hundreds of millions of dollars per year if the pest can't be controlled.

While ongoing studies explore pesticide-based approaches to control *D. suzukii*, the new research from NC State should help scientists and farmers with other control options. The red states show how far D. suzukii has spread since 2008. (*Image credit: Hannah Burrack*)

Study Offers New Insights on Invasive Fly Threatening U.S. Fruit Crops *(continued)*

For example, the study found that *D. suzukii* are more likely to infest certain varieties of raspberries and blackberries. This means growers may be able to limit crop damage by planting more of the varieties that *D. suzukii* tend to avoid. Similarly, this information allows farmers to focus pesticide treatment on varieties that are most susceptible to infestation.

The three-year study evaluated *D. suzukii* impacts in commercial blackberry and raspberry crops in North Carolina, and also encompassed laboratory experiments to help researchers determine which characteristics made fruits more likely to be infested. The work was supported by the Southern Region Small Fruit Consortium, North Carolina Tobacco Trust Fund Commission, North Carolina Department of Food and Agriculture, U.S. Department of Agriculture and North Carolina Blueberry Council.

The paper, "Variation in selection and utilization of host crops in the field and laboratory by *Drosophila suzukii* Matsumara (Diptera: Drosophilidae), an invasive frugivore," was published online March 14 in Pest Management Science. Co-authors are Dr. Gina Fernandez, a professor of horticultural science at NC State; Taylor Spivey, an undergraduate at Brevard College; and Dylan Kraus, an undergraduate at NC State

Strawberry Leaf Diseases– Identification and Management

Cathy Heidenreich, Cornell University Department of Horticulture

Identification of Leaf Diseases

Leaf Spot *(caused by the fungus Mycosphaerella fragariae)*
On leaves: Look for small round purple to reddish spots on upper leaf surfaces. *Centers of these spots become light tan to grey to white with age, with narrow reddish purple to brown borders; centers of the spots may dropout giving the leaves a "shot-hole" appearance.*

On fruit: "Black seed disease" occurs occasionally in heavily infected plantings. One to two black spots form on the surface of ripe berries under groups of up to 8 to 10 seeds. No fruit rot occurs below the spots but fruit are generally considered unmarketable due to appearance.

Other plant parts infected: leaf stems (petioles), runners, fruit stalks (pedicels), flowers, berry caps (calyxes). Symptoms are almost identical to those described on leaves.

Conditions favoring infection: Spores (conidia) are produced in spring on overwintering and dead leaves. They are rain-splashed onto newly growing leaves, stems, flowers and fruit. Infections occur during periods of leaf wetness lasting 12 to 96 hours and temperatures between 59 and 68 °F.

Strawberry Leaf Diseases– Identification and Management *(continued)*

Leaf Scorch *(caused by the fungus Diplocarpon earliana)*
On leaves: Spots may have 2 shapes; small pinpoint spots in large or small numbers and/or ¼ to ½" diameter blotchy spots. Scorch spots are typically reddish brown and often fuse together. As the disease progresses the leaves brown, wither and curl, becoming "scorched" in appearance. *Note the centers of these spots do not become white, brown, or gray, as with leaf spot or leaf blight.*

On berry caps: "dead cap", "dead burr". Irregular brown spots form on the berry caps, often from the margins or tips of the caps inward. No fruit rot occurs but fruit are generally considered unmarketable due to appearance.

Other plant parts infected: leaf stems (petioles), fruit stalks (pedicels), flowers, berry caps (calyxes). Flower and fruit trusses may be girdled and die. Severe leaf scorch infections reduce vegetative growth and fruit yield the season *after* infection. Scorch also reduces both numbers and vigor of crowns; highly infected plants may die when stressed by heat, cold or drought.

Conditions favoring infection: Spores (conidia) are produced in spring on overwintering and dead leaves. They are splashed onto newly growing plant tissue by rain, heavy dew or overhead irrigation. Infections occur during periods of leaf wetness lasting 9 hours or more and temperatures between 59 and 86 °F. Leaf scorch infections may occur year round but hot dry conditions (>95°F) and temperatures below freezing reduce the rate of disease.

Leaf Blight *(caused by the fungus Phomopsis obscurans)*
On leaves*: Large, nearly circular spots with wide reddish purple margins and brown centers. Lesions (spots) from the leaf margin may also be V-shaped toward the mid-vein.*

On fruit: Phomopsis soft rot has not yet been reported in New York but does occur in Ohio and southern states to Florida. The disease affects ripening or fully matured fruits. Early symptoms are round, pink, water-soaked spots. Later these enlarge and turn brown with a "crusty" appearance. The crusty appearance is due to formation of clusters of tiny spore producing structures called pycnidia. These can be seen with a 10x hand lens or magnifying glass. Later stages of Phomopsis soft rot resemble those of anthracnose except anthracnose spots on fruit do not have a crusty appearance but rather develop salmon-colored ooze under moist conditions.

Other plant parts affected: leaf stems (petioles), runners, fruit trusses (pedicels) may be girdled, collapse and die. Severely diseased plants may not yield well. Plants weakened from Phomopsis may be more susceptible to winter injury.

Conditions favoring infection: Spores (conidia) are produced on overwintering and dead leaves. They are rain-splashed onto newly growing plant tissue in spring. The fungus is capable of causing infection over a wide range of temperatures (50 to 95 °F). Research indicates disease development is influenced more by wetting period length (6 to 15 hours) than temperature. Infections typically occur early in the season but remain latent until warmer weather with symptoms appearing during harvest or after renovation in late

Strawberry Leaf Diseases– Identification and Management *(continued)*

Powdery Mildew *(caused by the fungus Podosphaera macularis)*
On leaves: *White powdery patches typically develop on the lower surfaces of leaves first and may go unobserved until leaf margins begin to curl upward.* These patches may enlarge and cover the entire leaf undersurface. Purple to reddish blotches may also occur on the lower leaf surface as a result of infection. Upper surfaces may have powdery patches as well. Numerous small dark round overwintering structures (cleistothecia) may appear on leaves in fall.

On fruit: Powdery mildew may infect flowers, causing them to produce hard dry, misshapen fruit; older fruit may also be colonized giving them a seedy look. Both types of infection reduce fruit quality and marketable yields.

Other plant parts infected: leaf stems (petioles), flower trusses (pedicels. Severe leaf infections damages leaves, reducing their ability to photosynthesize; leaves may eventually die and drop off depending on the severity of infection. This in combination with infections of flowers and fruit may have a serious effect on yield.

Conditions favoring infection: Unlike the leaf spot fungi, which are favored by the presence of free water on plant surfaces, the powdery mildew fungus is inhibited by wet, rainy conditions. Disease develops best under conditions of moderate to high humidity and warm temperatures (60 to 80°F). This fungus also differs from the leaf spot fungi in that it is an obligate parasite requiring living host tissue to survive; thus it overwinters only in infected living tissue (crowns and leaves). Infected transplants may be a major source of disease initiation in a new planting

Angular Leaf Spot *(caused by the bacterium Xanthomonas fragariae)*
On leaves: *Angular leaf spot appears first as tiny water-soaked spots (lesions) on the lower leaf surface. These enlarge to form angular lesions, restricted by small leaf veins.* The young spots are usually best viewed on the underside of the leaf and appear translucent when looked at with a light source behind them and dark green when viewed normally. This difference is an important distinguishing characteristic in identifying the disease. Spots eventually become visible on the upper leaf surface and appear as irregular, reddish brown spots. These may grow together to cover large leaf areas, causing infected leaves to appear scorched or blighted closely resembling leaf spot and leaf scorch. Dead tissue becomes dry and brittle, breaking off; giving leaves a frayed or ragged look. Heavily infected leaves may die if the bacterial infection moves into major veins.

On fruit: When infections of angular leaf spot become systemic, the berry cap (calyx) may also be infected. The modified leaves of the berry cap (sepals) darken and dry. This reduces the marketability of the fruit.

Other plant parts affected: Systemic infections may occur, with all types of plant tissue including the crown being infected. In severe cases, a decline similar to that caused by Phytophthora cactorum or anthracnose crown rot may develop. Water soaking at the base of newly emerging leaves may be the only visible symptoms to be expressed before the plant suddenly dies.

Strawberry Leaf Diseases– Identification and Management *(continued)*

Conditions favoring infection: Moderate day time temperatures (68 °F) accompanied by low to near freezing night-time temperatures (36-39°F) and precipitation events such as heavy rain or dews or overhead irrigation used for frost protection.

Management of Leaf Diseases

Leaf Spot, Leaf Scorch, Leaf Blight
General management information: Frequent rains, overhead irrigation, and heavy dews favor disease development and spread. Promote good air circulation for rapid drying of leaves and fruit by using recommended in-row and between-row plant spacings and keeping plantings well-weeded. Minimize the use of overhead irrigation; consider installing a drip irrigation system and using floating row cover for frost protection instead.

Whenever possible choose varieties that are resistant or tolerant to leaf diseases. Remove and destroy dead leaves at renovation. Apply nitrogen fertilizers only after renovation or in the fall to reduce chance of infection; applications of nitrogen in the spring produce an overabundance of young leaf tissue susceptible to leaf-disease fungi.

New plantings or plantings with history of disease: Apply a protectant spray in early spring as new leaves begin to unfold and again before conditions that favorable for disease occur (check product labels for recommended intervals between sprays). Begin sprays again after renovation to protect new foliage from infection. Thorough coverage is necessary for good control; it is especially important to cover undersides of leaves as well as surfaces.

Leaf Spot
Conventional Products: Cabrio EG, Captan 50WP, Captan 4L, Captec 4L, Pristine, Rally 40WSP, or copper (several formulations).

Organic Products: Basic Copper 53, Nu-Cop 50DF and 50WP, or Badge X_2.

Leaf Scorch
Conventional Products: Topsin-M 70WSP, or copper (several formulations).

Organic Products: Badge X_2; check with certifier for allowable copper formulations.

Leaf Blight
Conventional Products: Agristar Sonoma 40WSP or Rally 40WSP, Topsin-M 70WP, or copper (several formulations).

Organic Products: Nu-Cop 50DF and 50WP, or Oxidate.

Powdery Mildew
General management information: Whenever possible choose varieties that are resistant or tolerant to powdery mildew. Infected transplants may be a major source of disease initiation; plant only clean plant material from certified nurseries. Ask your nursery about their powdery mildew management program for transplants. Note the standard practice of removing leaves from transplants during harvest and packing will also help reduce disease in new plantings although some powdery mildew may be present on crowns.

New plantings or plantings with history of disease: It is important to begin management at the very first sign of disease in the field and continue applications as long as disease development continues (see product labels for recommended spray intervals). Effective control of powdery mildew in the fall will reduce disease development in the spring; reduction of powdery mildew development on leaves will also aid in reducing fruit infections.

Conventional Products: Abound, Cabrio EG, Organic JMS Stylet Oil, Pristine, Quintec, Rally 40WSP or Agristar Sonoma 40WSP, Rampart, Topsin 4.5L, Microthiol Disperss or Kumulus DF.

Organic Products: Actinovate-AG, Kaligreen or Milstop, Kumulus DF, Oxidate, or Organic JMS Stylet Oil.

Strawberry Leaf Diseases– Identification and Management *(continued)*

Angular Leaf Spot

General management information: Frequent rains, overhead irrigation, and heavy dews favor disease development and spread. Promote good air circulation for rapid drying of leaves and fruit by using recommended in-row and between-row plant spacings and keeping plantings well-weeded. Minimize the use of overhead irrigation; consider installing a drip irrigation system and using floating row cover for frost protection instead.

Begin applications when symptoms occur. Continue on a weekly basis until conditions no longer favor disease development; discontinue applications if signs of crop injury appear. Thorough coverage is necessary for good control; it is especially important to cover undersides of leaves as well as surfaces.

Conventional Products: Kocide DF or Badge X_2.

Organic Products: Badge X_2 or Oxidate.

Focus on Pest Management

Mustang Max Approved for use on Berries in NYS

February 14, 2013. The NYS Department of Environmental Conservation has approved a major change in labeling for Mustang Max (EPA Reg. No. 279-3249) which contains the active ingredient zeta-cypermethrin.

This label change adds uses on several crops including: berries; sunflowers; root, tuber, and cucurbit vegetables; peanuts; pome fruits; tree nuts; grapes; canola; non-grass animal feeds; cilantro; and turnip greens. Mustang Max is a federally restricted-use pesticide.

Copies of the approved label for this product will be available on PIMS (http://pims.psur.cornell.edu) shortly. As with any pesticide product, always read and follow label directions..

Always Be Diligent Concerning Personal Protective Equipment

March 4, 2013. This month pesticide safety educators, health professionals and other experts from around the U.S. will explore how to motivate pesticide handlers to use best practices concerning personal protective equipment (PPE). The discussion is part of a Pesticide PPE Seminar Series sponsored by the National Institute for Occupational Safety and Health (NIOSH).

PPE includes apparel and devices worn to protect the body from contact with pesticides or pesticide residues, including aprons, chemical-resistant suits, coveralls, footwear, gloves, headgear, protective eyewear and respirators.

"The PPE specified on a pesticide label is essential to protecting those who handle a pesticide," notes Dean Herzfeld, Ph.D., coordinator of Pesticide Safety and Environmental Education, University of Minnesota. "But unfortunately, proper selection, use, cleaning, maintenance and storage of PPE are not practiced by everyone. It is critical that the pesticide product label and any applicable PPE user instructions and government regulations be followed diligently."

Here are some fundamental principles concerning the use of personal protective equipment.

Any product that contains a pesticide – including baits, aerosols, fertilizers, seed, organic pesticides, "natural" products, etc. – must be handled using the required PPE in the correct way. If you don't have the PPE required by the pesticide label, **don't** apply the pesticide.

The required PPE can vary for different pesticide products and for different formulations of the same product. Follow the PPE section on every product carefully, even if the brand name is the same.

The required PPE may be different for different tasks, such as mixing, loading, application, repair, cleanup and/or early entry into a treated area.

PPE requirements can change at any time due to new research and/or regulatory requirements, so read the entire label every time you purchase

Focus on Pest Management *(continued)*

a pesticide. The same applies to any instructions that accompany the PPE; read them carefully, even if you purchased the same brand and model before.

Correct selection of PPE is critical. For example, a "water-resistant" material is different than a "chemical-resistant" material. Chemical-resistant aprons, coveralls, eye protection, footwear, gloves and headgear are not equally resistant to all pesticides, under all conditions, and for the same length of time.

Pesticide labels will usually list "examples" of suitable glove types. Use one of the examples listed unless you are willing to do the research to ensure other types meet the same chemical-resistance requirements. Never wear canvas, leather, cotton or other fabric gloves unless specified on the pesticide product label.

Wear sleeves outside the gloves if spraying below the shoulders and inside the gloves if spraying overhead. If spraying both overhead and below the shoulders, duct tape can be used to temporarily seal the area where the gloves meet the sleeves. Always wear pant legs outside your footwear. Exposed footwear should be cleaned after each day's use and should never be worn indoors.

If a respirator is required, use the exact type specified on the label and make sure it is certified by NIOSH. Whether you are required to use a respirator or choose to do so, an initial medical evaluation is strongly advised, even if not required by law. Certain respirators require a tight seal to the face and must be fit tested by a trained person before the first use, annually, and when there are significant changes in weight or facial features. In addition, conduct a seal check before every use, according to PPE instructions. Replace respirator filters, canisters, cartridges, etc. according to the PPE instructions **and** whenever there is equipment damage, breathing resistance, odor, taste, irritation or soiling.

Remove PPE as soon as you complete tasks where you were exposed to the pesticide. Wash your gloves with soap and water, even if they are disposable, and then remove other PPE while still wearing the gloves. Then wash the gloves again with soap and water before removing them.

If your PPE is reusable, follow the specified cleaning and maintenance instructions. Before and after every use, check for any type of deterioration or damage to components, seams, etc. and dispose of the PPE properly if it is no longer usable. Never reuse any type of disposable (one-time use) PPE.

Wash regular work clothes that have been exposed to pesticides as soon as possible to ensure maximum pesticide residue removal. Wash them separately from other laundry using detergent and hot water.

Follow the manufacturer's storage instructions for both reusable and disposable PPE. Keep PPE in its sealed package until use, and never store with pesticides or personal clothing. Most PPE must be protected from chemicals, sunlight, extreme temperatures, excessive humidity and moisture, or the specified shelf-life will be reduced.

Dispose of PPE carefully to avoid contamination to yourself, others or the environment. Properly cleaned PPE can be disposed of as regular garbage, while PPE that is contaminated with a pesticide must be disposed of according to directions on the pesticide product label and in compliance with all federal, state and local regulations. In the absence of specific label directions or government regulations, dispose of contaminated PPE as household hazardous waste, which can be taken to an appropriate waste collection event or disposal site.

Sometimes PPE is uncomfortable, particularly when working in hot weather. However, hot weather is **never** a good excuse for not using the required PPE. Attempt to work outdoors during the coolest periods of the day. Take all necessary steps to avoid heat stress, including frequent rest breaks in shaded areas and drinking plenty of water (not caffeinated drinks). Don't work alone. Know the signs of heat stress and how to treat it. Any circumstances that cause PPE discomfort and/or reduce protection must be resolved in a way that does not cause a health hazard.

If an accident results in exposure to the pesticide, follow the first aid instructions on the label. The proper first aid varies depending on the product and type of exposure, so it is critical that the label is always immediately available to the pesticide user as required by law. Follow the

Focus on Pest Management *(continued)*

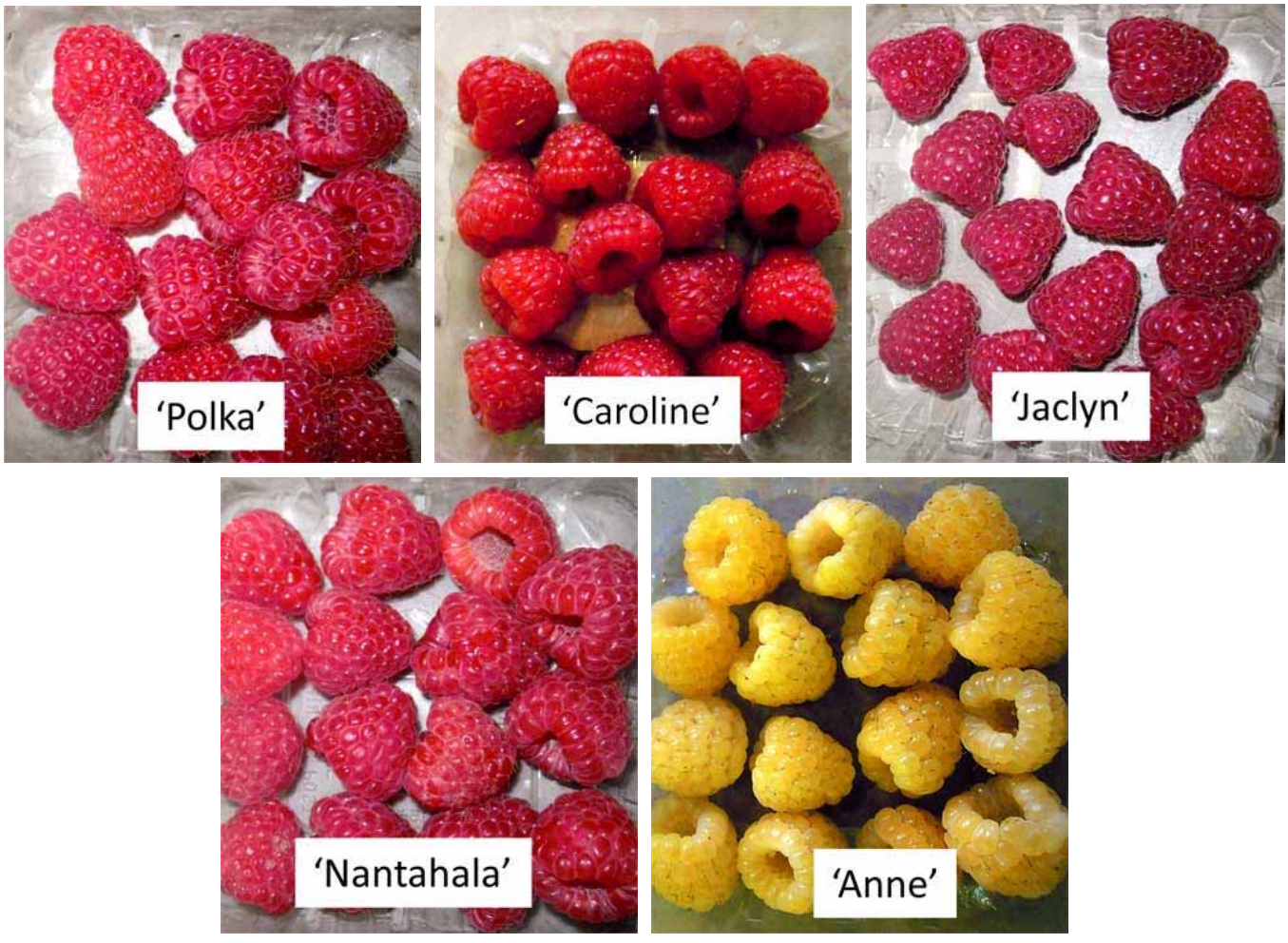
first aid instructions immediately after exposure, even if you do not have any symptoms.

"If you still have questions after reading both the pesticide product label and the PPE instructions, call the pesticide product manufacturer, the PPE manufacturer, your Cooperative Extension Service or your state's Pesticide Safety Education Program," says Herzfeld. "Your personal safety is of the utmost importance and is an essential part of proper and safe pesticide use."

This is the seventh in a series on pesticide stewardship sponsored by the Weed Science Society of America. Next month: Protecting Your Workers.

TUNNEL TALK *(continued from page 17)*

Raspberries from the SWMREC high-tunnel container berry production project, 2012



MARCH/APRIL BERRY BAROMETER – Cathy Heidenreich, Cornell University

Welcome to another year of the berry barometer. This series provides a month-by-month review of cultural and pest management considerations for various berry crops during the growing season to help keep you up to the mark. Management considerations are categorized first by berry crop and then by new or established planting.

ALL BERRY CROPS

Established plantings

Pruning - Pruning should be approaching completion by now for berry crops in most areas. Finely chop brush in place or remove and burn it.

Weed management – now is the time to get ready, get set, go! for pre-emergent weed management.

Drainage - In berry plantings where water is standing, evaluate drainage systems and the need for treatment of Phytophthora root rot using Ridomil band application before growth begins in blueberries and raspberries and before bloom in strawberries.

Pest management – Perform routine sprayer maintenance, check for worn nozzles and replace as needed, do calibrations. Review last year's records for problem pests and pest locations. Were the products used successful? Should you start scouting sooner this year? Or make the first application at a lower threshold? Check product labels for efficacy against target pests. Order products as needed.

Irrigation systems - Check for problems and/or leaks. Make any adjustments or repairs as needed.

Trellis/fencing – Examine existing trellis/fencing for problems; make needed adjustments or repairs.

New plantings

Plant materials – Did you remember to order your plants? Check the 2013 Cornell nursery guide for sources if you still need to do so (http://www.fruit.cornell.edu/berry/nurseries/). Verify you indicated a shipping date for plants that will allow you to plant as soon as the soil can normally be worked or danger of frost is past.

Final site preparation – Hopefully you did your site preparation homework! Depending on the crop this should start 1-3 years in advance of planting for best success. Remember to till under legume cover crops no less than 1 month before planting. Pre-plant herbicide applications are a big help in controlling perennial weeds in new plantings. Roundup is one alternative for this application. Remember Roundup applications need to be made 30 days before planting. Follow label instructions carefully. After weeds die, till to prepare for planting. Amend soil as recommended from your soil test results. Be sure to incorporate amendments to a depth of at least 8" prior to planting. Do a final soil fitting just prior to planting. Purchase seed for sod truck rows or planting borders.

Irrigation systems -Do you have suffient irrigation supplies on hand to begin irrigating immediately after planting? This helps to settle soil around roots, reduce transplant shock, and promote establishment.

Trellis/fencing – Purchase needed materials and supplies. Install new structures for 2012 plantings.

STRAWBERRIES

Established plantings

Straw mulch removal - Late March is typically the time for removing straw mulch depending on your growing region; this season however may be the exception to the rule as we are still running about 10 degrees lower than normal.

Frost control –Have frost protection ready to go and monitor temperatures closely. Frost free dates for much of the state fall between May 15th and 30th; what about your area? Go to http://davesgarden.com/guides/freeze-frost-dates/ and enter your zip code if you are not sure.

Spring weed control –*Chateau SW, Chateau WDG* may be applied pre-emergence to dormant strawberries.

Leaf spot diseases –An early season application is recommended in plantings where leaf disease was pressure was high the previous growing season and conditions are favorable for disease development. See the article in this month's issue on leaf disease identification and management for more information.

New plantings

Plant materials – Check strawberry plants on arrival to be sure they are in good condition; moisten as necessary. Keep dormant runner plants in cold storage (30 to 32°F) in plastic bags if they cannot be planted immediately.

Preplant weed management – *Chateau, Goal 2XL,* or *Round* up 30 days before planting. *Prowl H2O* 24 hrs prior to planting.

MARCH/APRIL BERRY BAROMETER —(continued)

Final site preparation – Do final fitting of planting. If planting into killed sod, do not till. Build raised beds if desired; 8-10" high x 24" wide. Lay out the field prior to planting day. Stake rows with wire flags. Check your row spacing to allow for easy equipment movement and access later on.

Plant spacing – In-row spacing for matted rows 18-24"; between-row spacing 48-52 inches, depending on equipment size.

Planting – If using biodegradable mulch, lay 1-2 days prior to planting. Apply at slightly looser tension than conventional plastics. Do not apply at temperatures above 80°F. If you use a mechanical planter, have it tuned up and ready to go. Place roots in water ½ to 1 hour before planting. Keep plants moist during the planting process. Plants should be set with the center of the crown level with the soil surface. Check planting depth after planting; firm soil around plants. Irrigate immediately to settle soil around roots and reduce transplant shock. *Aim EC, Aim EW* for weed management within 24 hrs after planting.

BLUEBERRIES

Established plantings

Spring weed control – Spring pre-emergent options include *Aim, Callisto, Casoron, Devrinol, Sinbar, Surflan, Princep*, or *Velpar*. Post-emergent options include *Gramoxone Inteon* or *Scythe* which should be used before new cane emergence. Casoron 4G – in blueberry plantings with nutsedge and some stubborn perennial broadleaf weeds, Casoron 4G must be applied before soil temperature exceeds 45°F at 100 lb/acre for annual broadleaf and grass weeds, and 150 lb./acre for perennial weeds.

Freeze damage – We are entering the danger zone where spring weather may fluctuate between hot and cold. Take precautions whenever possible. For an excellent MSU pictorial guide on blueberry growth stages and temperature damage thresholds go to: http://blueberries.msu.edu/growing_blueberries/growth_stages_table.

Canker Diseases - The time for delayed dormant (as leaf buds begin to break) applications of lime sulfur or copper for problem locations is approaching. Do not apply sulfur within 2 weeks of an oil spray or when temperatures are above 75°F to avoid phytotoxicity.

Scale insects - Problems with scale insects last season? Apply an *oil spray* (2-2.5%) during bud swell (after bud scales start to expand, but before first leaf stands out from clusters). Apply in 250-300 gal water/A at 300-400 psi for thorough coverage. Oil may be tank mixed with *Esteem* (5 oz/A) at delayed dormant.

New plantings

Plant materials - Two-year old bare root or potted plants are generally the best buy. Potted plants are more expensive than bare-rooted plants but many growers find they establish more quickly.

Verify you indicated a shipping date for plants that will allow you to plant as soon as the soil can normally be worked and danger of spring frost is past.

Check blueberry plants on arrival to be sure they are in good condition; moisten as necessary. Keep bare-rooted plants in cold storage (30 to 32°F) in plastic bags if they cannot be planted immediately. Containerized plants may be kept out doors until planting; keep them well watered.

If potted plants are used, check to see if they are pot bound. If so, the root ball should be cut before planting to ensure good root spread and branching. Remove the plant from the pot and lay it on its side. Cut through the root ball perimeter 4-6 times, rotating the plant between each cut. Plant, gently spreading roots out along cuts. Firm soil around the plants.

Preplant weed management –*Round* up 30 days before planting.

Final site preparation—Do final fitting of planting. Layout planting; flag rows. Plow a very shallow furrow setting dormant canes, root cuttings or plug plants into. Prepare raised beds if desired; 10-12" high x 4-6' wide at the base.

Plant spacing – spacing should be 4-5 feet in-row and 10 ft between rows. PYO rows should be 200 ft or less in length.

Planting – Prepare raised beds if desired; 8-12" high and 4 ft wide. Saturate peat bales and allow them to soak several days before planting.

Layout the planting, flagging plant locations. Wait to plant until severe freeze danger has past. Moisten roots

MARCH/APRIL BERRY BAROMETER – (continued)

½ to 1 hour before planting.

Planting holes need to be more wide than deep, to allow the roots to be spread out at planting. Incorporate approx. 1 gal peat moss into planting hole soil and back fill with the soil/peat mixture.

Set plants at the same depth they were planted at in the nursery. Spread out roots. Fill hole with peat soil mix. Firm soil around plants. Irrigate immediately after planting (1" water) to settle soil around roots. Mulch with wood chips, sawdust or other materials. Remove at least 1/3 of top growth of newly set plant and rub off any flower buds to promote establishment and reduce transplant shock.

Plant sod alleys or clean cultivate between rows.

RASPBERRIES AND BLACKBERRIES

Established plantings

Assessing Cold Damage In Caneberries: Michele Warmund, Horticulture professor at the University of Missouri and Dr. Bernadine Strik, Horticulture professor and berry extension specialist at Oregon State University suggest this simple method:

Put cane/branch sections in a Ziploc bag and store at room temperature for 4-5 days.

Then cut and check for injury symptoms.

Usually after 4-5 days the dead tissue, whether buds or vascular tissue, will have oxidized & turned brown.

For more information and photos: http://www.berriesnw.com/SFU/2011/SFUdocs11/ColdDamageCane01-14-11.pdf. *(Source: Peerbolt Crop Management Small Fruit Update)*

Spring weed control - Pre-emergent herbicide options for spring include *Devrinol, Princep, Sinbar, Solicam*, or *Surflan*. Post-emergent options for spring include *Aim*, *Scythe* and *Gramoxone Inteon* applied before cane emergence. Casoron 4G – in blackberry, raspberry plantings with nutsedge and some stubborn perennial broadleaf weeds, Casoron 4G must be applied before soil temperature exceeds 45°F at 100 lb/acre for annual broadleaf and grass weeds, and 150 lb./acre for perennial weeds.

Cane Diseases - Delayed dormant application of lime sulfur or copper may be beneficial in plantings with a history of disease. Applications should be made on a calm day with sufficient water to soak canes completely. **Caution:** Sprays applied after ½" green tip may burn leaves, particularly in warm weather. **Note:** A delayed dormant application is not necessary for fall-bearing raspberies if last year's canes were mowed and removed or thoroughly shredded.

New plantings

Plant materials – Check plants on arrival to be sure they are in good condition; moisten as necessary. Keep dormant canes at 35°F in plastic bags if canes cannot be planted immediately.

Preplant weed management –*Round* up 30 days before planting.

Final site preparation - layout planting; flag rows. Plow a very shallow furrow setting dormant canes, root cuttings or plug plants into. Do final fitting of planting; do not till if planting into killed sod. Prepare raised beds if desired; 10-12" high x 4-6' wide at the base.

Plant spacing

Red raspberries – 2-3' in-row spacing, 9-10ft between-row spacing. Cultivars that sucker vigorously should be set at the 3 ft spacing; those that produce fewer suckers should be set at the 2 ft spacing.

Black raspberries - 3-4 ft in-row spacing, 9-10ft between -row spacing.

Purple raspberries - 3-5' in-row spacing, 9-10ft between-row spacing.

Thorny blackberries - 3-4' in-row spacing, 9-10ft between-row spacing.

Thornless blackberries - 4-5' in-row spacing in a hill system, 9-10ft between-row spacing.

Planting

Dormant canes: Do not allow roots to dry out before planting. Hold plant by hand or machine to the same depth as canes were set in the nursery. Be sure plants are set vertically and not at an angle for best growth. Prune back to a height of 5" immediately. Prune back to soil level after new shoots emerge from soil.

Tissue culture plug plants: Delay planting of tissue culture plug plants until all danger of spring frost is over. Apply water to transplant holes. Cover the top of the

MARCH/APRIL BERRY BAROMETER —(continued)

root ball with field soil to a depth of ¾ ".Firm soil around plug plant. Avoid herbicide applications or soil disturbances.

Root cuttings: Raspberry root cuttings should be of variable length and 1/10" or larger in diameter. Plant root cuttings about 3" deep with approx. 2 ounces of root per hill or 3 feet of hedgerow. Blackberry root cuttings should be 3/8 to 5/8" in diameter and 6" in length.

After planting, a light layer of straw mulch will help reduce weeds and retain moisture. *Remember mulch is applied the planting year only.*

Irrigate immediately after planting.

Plant sod alleys or clean cultivate between rows.

CURRANTS AND GOOSEBERRIES

Established plantings

Spring weed control - Product options include *Aim, Devrinol, Rage, Surflan, Gramoxone Inteon*, or *Scythe*.

Powdery mildew – Powdery mildew overwinters on currant and gooseberry twigs. Initially, white powdery patches of mycelium and spores appear on the leaves and shoots in early spring. In plantings where disease historically occurs, apply the first spray before disease onset. Conventional control options include *Rally, Cabrio, JMS Stylet Oil* or *Sulfur*. Organic options include *Organic JMS Stylet Oil*.

Scale Insects – If scale were a problem last season, the recommendation is a *dormant crop oil spray* (4 gal) in 10 gal water applied before the buds swell and burst in the spring.

Currant stem girdler - Currant stem girdler is a sawfly that emerges in late April or early May. Adult sawflies lay eggs in young, succulent shoot tips, then girdle tips below the eggs. Shoot tips die, reducing cane length. Sanitation is currently the only control strategy available for this insect pest in NY. Cut off affected tips below evidence of insect activity and destroy prunings.

New plantings

Plant materials - Vigorous 1 year old plants are generally easier to transplant and less expensive to purchase. Bare-rooted plants may be preferable as containerized plants become root bound very quickly.

Preplant weed management –*Round* up 30 days before planting.

Final site preparation - do final fitting of planting.

Layout planting; flag rows. Prepare raised beds if desired (18" w x 12" h); cover with landscape fabric or black plastic mulch.

Plant spacing

Red and white currants, and gooseberries—Fresh fruit spacing 3-4 feet in row, 10 ft between-row.

*Black currants—f*resh fruit spacing 4-5 ft in row, 10 ft between-row.

Mechanically harvest fruit spacing 2.5 -3 ft in –row, 10 ft between rows.

Planting - Cut through circling roots of pot bound plants with a sharp knife before planting. For bare root plants, prune out dead or diseased roots and thick, wood roots that are kinked, twisted or point inward toward root collar. Shorten roots to fit planting holes.

Dig planting holes 12" deep and 18" in diameter. Make a shallow cone of soil in center (8' high). Spread roots over cone. Set plants slightly more shallowly than grown in the nursery. Firm soil around plants. *Do not add amendments to the planting hole.*

For larger plantings, plow a 12" deep furrow centered on the plant row and set plants into the furrow. Spread roots along furrows and firm soil around plants.

Shorten canes to 1-2 buds above ground. Irrigate immediately. Mulch if desired.

Farm Safety

Is the ROPS Rebate Program Right for My Farm?

Did you know...

- Each year 4 out of every 100,000 American workers die on the job.
- The fatality rate for farmers is 800% higher than all American workers.
- The tractor is the leading cause of death on a farm.
- The most frequent cause of tractor related deaths are side and rear overturns.
- Farmers in the Northeast experience the highest rates of overturn death.
- 80% of deaths caused by rollovers happen to experienced farmers.
- 1 in 7 farmers involved in tractor overturns are permanently disabled.
- 7 out of 10 farms will go out of business within a year of a tractor overturn fatality.
- ROPS are 99% effective in preventing injury or death in the event of an overturn when used with a seatbelt.
- ROPS remain 70% effective without the use of a seatbelt.
- Over 800 NY farmers have installed rollbars through this program
- 53 NY farmers have avoided death or serious injury since retrofitting through the ROPS rebate program.

The ROPS (Rollover Protective Structure) Retrofit Program is funded by the National Institute of Occupational Safety and Health (NIOSH) and facilitated by the New York Center for Agricultural Medicine and Health (NYCAMH). Various partners have funded or provided in-kind support to each state for the rebates.

How the ROPS (Rollover Protective Structure) Rebate Program Works
The ROPS Rebate Program will rebate 70% of the cost of purchasing and installing the ROPS (Rollover Protective Structure) up to $765 maximum rebate. This includes the cost of the ROPS (rollbar, ROPS with Awning or ROPS cab), shipping, and installation charges.

Apply on-line or call the ROPS Rebate Hotline (1-877-ROPS-R4U or 1-877-767-7748) for registration and pre-approval. You must be a resident of the state in which you are applying for a rebate. There are no other qualifying conditions. Pre-approval is required only to ensure that funding is available for the rebates. Rebates are available on a first come first served basis.

ROPS Rebate Program staff will research the type of equipment needed, provide estimated costs as well as sources for purchasing ROPS and send this information to you. Participants may order the ROPS from whichever source they choose as long as the ROPS are SAE Certified.
Rollbar prices vary according to the tractor make and model. Prices run from $198 all the way up to $2750. The average cost of a rollbar is $850.

When ready to make your purchase, you must re-contact the ROPS hotline staff via email or by phone (1-877-767-7748) We cannot guarantee your rebate until you confirm with us where you ordered your ROPS and what the estimated cost is. It is at this point that your rebate money will be reserved and an approval letter will be issued to you confirming your participation in the program.
We recommend that you have your rollbar professionally installed but you have the option of self-installing. In this case, a "before" and "after" photo is required as your proof of installation.

Only one tractor per farm can be rebated during a program year. Upon submission of receipts for all expenses and proof of installation a rebate check will be mailed to you within 30 days.

For more information: http://ropsr4u.com/. **Further questions may be directed to:**

Barbara Bayes, Program Coordinator
ROPS Retrofit Program, New York Center for Agricultural Medicine and Health (NYCAMH)
One Atwell Road, Cooperstown, NY 13326.
Phone: (877) 767-7748 or (607) 547-6023 x231
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New York Berry News is a monthly commercial berry production newsletter provided by Cornell Berry Team members.

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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.

Focus on Food Safety

—(continued from page 16)

tomers need us. In addition, we work with thousands of employees of our State partners who serve hundreds of additional growing and shipping locations.

Recently, I was honored to be named the first director of the new SCI Division. I have been with USDA since 2001, working first as the Perishable Agricultural Commodities Act (PACA) Division's training officer, and then as its deputy director. I led the team that reorganized the PACA Division in 2006. Prior to joining USDA, I served for 27 years in the U.S. Air Force and retired as a Chief Master Sergeant. In the Air Force, I was responsible for over 4,200 military and civilian employees and 240 offices worldwide.

I look forward to working with all of SCI's stakeholders and customers. Please feel free to contact me directly via phone (202) 720-5870 or email at lorenzo.tribbett@ams.usda.gov. I look forward to meeting many of you in person at produce industry events and invite you to visit if you are ever in Washington, DC.

Lorenzo Tribbett is the director of the AMS Fruit and Vegetable Program's Specialty Crop Inspection Division. (From USDA ARS Fruit and Vegetable Program News, Winter/Spring 2013)