New York Berry News

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What's Inside

December 14, 2010. *Cornell University Agribusiness Economic Outlook Conference.* David L. Call Auditorium on the Cornell campus. Please contact Carol Thomson at cmt8@cornell.edu or (607) 255-5464 or visit the website at http://aem.cornell.edu/outreach/ag_outlook_conference.php for upcoming registration and program information.

January 6-7, 2011. *NARBA (North American Raspberry and Blackberry Growers Association) Annual Meeting*, Savannah, GA. For more information: Debby Wechsler, 919-542-4037 or info@raspberryblackberry.com, or http://www.raspberryblackberry.com/.

January 27, 2011. *Empire State Fruit and Vegetable EXPO berry session*. Mark your calendar now - details to follow in the next issue.

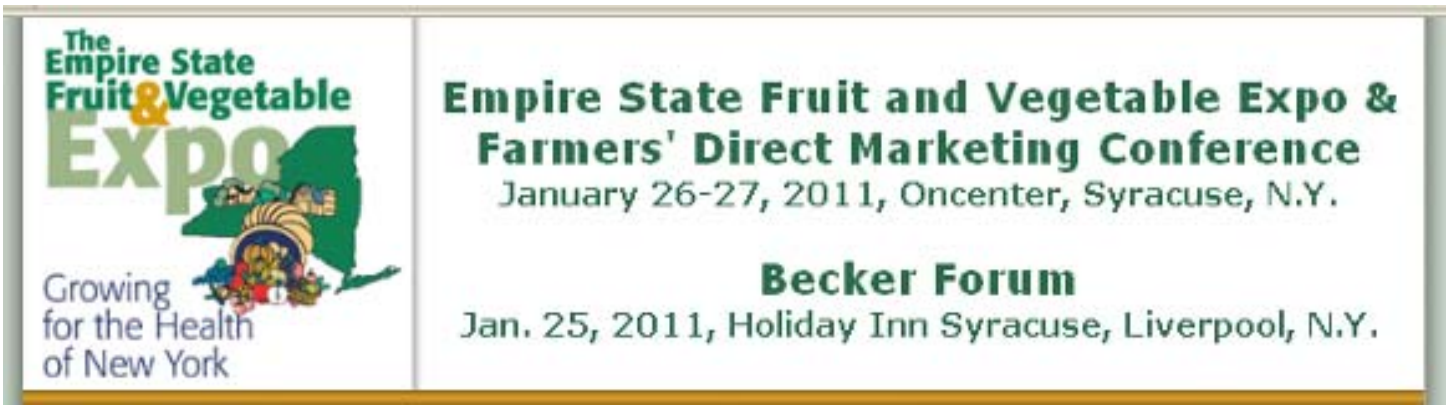
January 31 – February 3, 2011. *Mid-Atlantic Fruit and Vegetable Convention* at the Hershey Lodge in Hershey, PA. For more information visit www.mafvc.org.

February 8-11, 2011. *7th North American Strawberry Symposium and joint North American Strawberry Growers Association Meeting.* Tampa, Florida. For more information: Kevin Schooley, 613-258-4587, or info@nasga.org or http://www.nasga.org/.

March 5, 2011. *Planting, Cultivating, and Marketing Juneberries in the Great Lakes Region*. NYS Agricultural Experiment Station, Geneva, NY. For more information: Nancy Anderson (585) 394-3977 x427 or e-mail nea8@cornell.edu.

June 22-26, 2011. *10th International Rubus and Ribes Symposium, Zlatibor, Serbia***.** For more information contact: Prof. Dr. Mihailo Nikolic, Faculty of Agriculture, University of Belgr, Belgrade, Serbia. Phone: (381)63 801 99 23. Or contact Brankica Tanovic, Pesticide & Environment Research Inst., Belgrade, Serbia. Phone: (381) 11-31-61-773.

Happy Thanksgiving!



EMPIRE STATE FRUIT AND VEGETABLE EXPO BIGGER THAN EVER

They come from all over the country. Last year, over 1,500 growers, agribusinesses, researchers and extension agents gathered at the Oncenter in Syracuse, N.Y., to further the advancement of fruit and vegetable agriculture. The 2011 Expo promises to draw an even bigger crowd.

"The turnout last year was phenomenal," said Jeanette Marvin, Executive Secretary for the New York State Vegetable Growers Association. "But this year's schedule promises to be even stronger. We've added a general session featuring renowned farm management expert Bernie Erven."

"We are really lucky to get Bernie Erven," said Allison DeMarree, Cornell Cooperative Extension. "Bernie is the foremost speaker on farm labor and management and he is an excellent speaker."

Erven, an Ohio State University professor emeritus, is a recipient of the USDA Excellence in Teaching Award, and has twice received the Distinguished Teacher Award at Ohio State. Erven has been a professor and extension specialist in the Department of Agricultural, Environmental and Development Economics at Ohio State since 1984. He also manages his own human resources consulting firm, Erven HR Services, LLC.

The 2011 Empire State Fruit and Vegetable Expo will be held January 26-27, 2010, at the Oncenter Convention Center in Syracuse, NY. The Expo provides growers with a multitude of educational opportunities, Association meeting and networking times, and a commercial trade show which offers the latest services, equipment and advances in the horticultural industry in New York State.

Sessions conducted at the Expo include specific commodity sessions, focusing on a variety of crops including sweet corn, potatoes, tree fruit, and berries, to name a few, as well sessions on direct marketing, soil health, research, food safety, labor, and more.

Mark your calendars now and save the dates in January in order to attend the Empire State Fruit and Vegetable Expo. You, and your farm business, will be glad you did!

The 2011 Empire State Fruit and Vegetable Expo is sponsored by the New York State Vegetable Growers Association, Empire State Potato Growers, New York State Berry Growers Association, New York State Farmers' Direct Marketing Association, New York State Horticultural Society, Cornell University and Cornell Cooperative Extension.

MAKE MONEY SELLING BERRIES

It's been a berry great season, you have a beautiful crop in the field, and you're ecstatic. What's missing? The money.

Selling that beautiful crop can be the hardest thing about making a living growing berries. Come to the Berry Crop session of the NYS Fruit and Vegetable Exposition, Thursday January 27 at the OnCenter in Syracuse to learn about new approaches to making money selling berries.
Matt LeRoux from Cornell Cooperative Extension will give you simple ways to compare marketing strategies for your farm, so you can come up with the ones that fit you the best. From farm stands to farmers markets, you-pick berries to CSAs and wholesale buyers like grocery stores or restaurants, each "channel" has pros and cons. Learn how to evaluate your farm's marketing channels so you can focus on the ones that are profitable and minimize the others.

Following Mr. LeRoux's talk you'll get to hear from three successful berry growers who have remarkably different marketing strategies. Growers will each tell about how their farm sells berries now, and how these marketing channels have evolved over the life of their farm (response to various pressures or success).

- Katie Creeger, Kestrel Perch Berries, (berry CSA);
- Suzie Grisamore,Grisamore Farms, Locke, NY (wholesale, you-pick, agritourism);
- Terry Perfetti, Cherry Knoll Farm, Marathon, NY (value added, wholesale and retail).

Soils for Berries

Berry crops are notoriously finicky about the soils they're grown in, and in NY we have a huge variation in soil types to work with. Come to the Berry Crop session of the NYS Fruit and Vegetable Exposition, Thursday January 27 at the OnCenter in Syracuse to learn more about soils for berries.

Start off by learning about the characteristics of our NY soils from a berry plant's perspective. Drs. Marvin Pritts and Harold Van Es will give a candid look at NY soil types and how they affect berry growth including reading and interpreting soil descriptions, soil limitations, and to what extent they can be overcome.

After that, hear from fellow farmers on how they manage their own soils. From irrigating a sandy soil to raised beds on clays, these farmers will share their creative solutions to dealing with the land they were dealt. Later on in the day, hear Cornell professor Art Degaetano teach us Weather 101: Understanding forecasts and reading the local conditions. He'll define frosts and freezes, explain how the field can get a frost while the house thermometer reads 34 F, and explain simple tools that you can use to prepare better for local weather events. You'll learn how to decipher berry root problems with Jim LaMondia, Connecticut Agricultural Experiment Station, as well as interpret soil and leaf test results to better understand the fertility needs of your crop. At the end of the day you can get personalized help finding your own farm's soil type on the Web Soil Survey.

For more information and to register, visit http://www.nysaes.cornell.edu/hort/expo/

ENGAGING CONSUMERS THROUGH SOCIAL MARKETING

Social Media Training Webinar Series Announced

Fayetteville, NY (October 12) – The Farmers Market Federation of New York is pleased to continue its support of community farmers markets and the direct marketing of farm fresh products, with the introduction of a web based series of educational opportunities for consumers, farmers and farmers market managers. "We hope to use social marketing techniques and mechanisms to help people connect with local farms and farmers markets and become engaged in the discussions around local food," explains Diane Eggert, Director of the FMFNY.

Social marketing utilizes free online networking sites to connect with consumers in an interactive way which engages them in conversation and

promotes farms and farmers markets. ”The challenge is that farmers markets and farm stands are not well versed in using social marketing to make those connections, and consumers don’t realize the opportunity to use this technology to increase their understanding of locally produced products,” offers Bob Buccieri, President of the Board of the FMFNY and farmers market administrator in Seneca Falls.

The goal of the program is to have farmers markets and farm stands use social marketing to engage consumers, build a sense of ownership with their site’s fans and followers and increase consumer awareness and participation in farmers markets and farm stands, generating additional sales growth for farmers, engagement with local producers and support for the communities which host farmers market.

Joe Stabb, Marketing Director for Onondaga County’s OnCenter and social media trainer, will provide training to establish a series of four webinars to guide farmers market managers and direct marketing farmers in using various social networking sites. The webinars will discuss how to set up an account and build a page/site and how to use the site to market a farm or market. The webinars will cover:

- Defining social marketing through online social networking sites
- Discuss using Foursquare, Facebook, YouTube and blogs
- Tips and hints on successful use of each medium
- How to develop a marketing campaign through the cross utilization of networking sites

“We have found a great deal of curiosity concerning social marketing and farms,” explains Stabb who has directed efforts for social and web marketing through ABC Creative Group, the OnCenter and others for many years, “but there is little understanding of the opportunities, and the Federation has recognized a need to develop understanding, and support within our communities for their markets.”

Farmers Market Managers and direct marketing farmers are encouraged to participate. The webinars are free, but space is limited. Contact the Farmers Market Federation office for registration information at 315-637-4690 or email deggert@nyfarmersmarket.com. Pre-registration is required.

Social Media and Foursquare Nov 16, 12:30 – 1:30 pm or Nov 18, 7 – 8 pm

Face it: Facebook is Here to Stay! December 14th, 12:30 – 1:30 pm or December 16th, 7-8 pm

Blogs – The “Interactive” Website January 18th, 12:30 – 1:30 pm or January 20, 7-8 pm

YouTube – See and Be Seen, Plus How to Create a Well Rounded Social Media Campaign February 8, 12:30 – 1:30 pm or Feb 10, 7-8 pm

The project is supported through a grant from USDA’s Farmers Market Promotion Program.

FSA TARGETS FUNDS FOR SOCIALLY DISADVANTAGED FARMERS

Batavia, New York – 11/08/2010 — The New York State Farm Service Agency (FSA) announced the availability of funds for Socially Disadvantaged (SDA) individuals who want to purchase or operate a family-size farm in fiscal year 2010.

In Fiscal Year 2010, which ended September 30, 2010, New York Farm Loan Programs made **45** SDA loans totaling more than $ **4.9 million**.

"A SDA farmer comes from a group whose members have been subjected to racial, ethnic or gender inequality without regard to their individual qualities. SDA members include women, African Americans, American Indians, Hispanics, Asian Americans, Pacific Islanders and Alaskan Natives," said Joanne Crosman, Genesee County FSA Farm Loan Program Manager.

The SDA program provides direct and guaranteed assistance in the form of farm operating and farm ownership loans. Direct loans are made to applicants from FSA. Guaranteed loans are issued by lending institutions, but typically 90 percent of the loan is guaranteed by FSA.

Operating loans may be used to purchase livestock, equipment, feed, seed, and other business related expenses. Repayment terms run from one to seven years.

Ownership loans provide capital to purchase or enlarge a farm, construct or improve buildings, promote soil and water conservation and pay closing costs. Direct ownership loan terms are up to 40 years. Guaranteed loan terms are established by the lender.

Qualified candidates are provided information and assistance to develop sound management practices, analyze problems and utilize available resources essential for successful farming operations to cope with the changing agricultural environment.

SDA loan applicants do not receive automatic approval. Individuals must be U.S citizens with a satisfactory history of meeting credit obligations; have sufficient education, training or experience managing or operating a farm; possess legal capacity to incur debt; and be unable to obtain credit elsewhere.

Contact the Batavia FSA Office servicing Genesee, Wyoming, Niagara, Livingston, Orleans, & Monroe counties at 585-343-9167 x 2000 for more loan information. You may find the local office listed under the blue or government pages of your local telephone directory.

OMRI PRODUCTS LIST EXCEEDS 2000 PRODUCTS

October 27, 2010. The OMRI (Organic Materials Review Institute) Products List reached a milestone on October 7, 2010, for the first time exceeding 2000 listed products. OMRI, a global leader in materials review, performs comprehensive verification and listing of materials suitable for use in organic production.

"The OMRI Products List has grown steadily over the last 13 years, and we thank OMRI's clients and supporters for working to ensure solid and consistent standards within the organic industry, and for helping us reach this milestone," said Peggy Miars, OMRI Executive Director. "We at OMRI are proud to support the organic label through our history of solid integrity and reliable reviews."

While OMRI staff may have paused to celebrate the landmark occasion, the organization is processing applications quicker than ever. A new streamlined review process has completely eliminated the initial wait time for new applications while retaining the same rigorous standards that have made OMRI a cornerstone of the organic industry. "Now is a great time to submit an application, since we have made great strides in customer service," added Miars. OMRI welcomed Miars in September, when she began her tenure as OMRI's new Executive Director/CEO.

NRCS MAKES HIGH TUNNEL PROGRAM MORE FLEXIBLE

The Interim Conservation Practice Standard (798) 'Seasonal High Tunnels System for Crops' was piloted in 2010 to offer a technology to extend the growing season in many areas of the United States to successfully produce vegetable and other specialty crops. The interim standard has been used for about 9 months now. Many producers have requested to add fans, heaters, and roll-up sides as features that would improve function and efficiency. As a result, the Interim Conservation Practice Standard (798) has been revised to relax the restrictions on electrical, heating, and mechanical ventilation systems. This revision is applicable to previous facilities planned and installed. The new practice definition for (798) reads: "A seasonal polyethylene-covered structure that is used to cover crops to extend the growing season in an environmentally safe manner." This will provide the opportunity for those producers who want to add the additional electrical, heaters, double layer poly greenhouse covering, and ventilation systems to do so at their own expense.

The criteria for the interim standard remain unchanged. If the addition of electrical or mechanical equipment adds to the structural requirements of the structure, it is up to the producer to fund then higher-cost structure. The seasonal high tunnel system must still be a manufactured kit, as stated in the criteria. *(Source: Vermont Vegetable and Berry News, November 9, 2010.)*

Editor's note: *NY NRCS confirms they will be offering the high tunnel program in New York again this year. However, New York has not yet prepared or announced the program signup or changes within our state. Details will be forthcoming. For more information contact your local NRCS office or go to: http://www.ny.nrcs.usda.gov/.*

INVITATION TO HAYGROVE OWNERS' CONFERENCE

(Non-Owners Welcome!)

December 3, 2010 – Lancaster, PA

This meeting is a "grower to grower" event where all the speakers are growers and researchers using Haygroves. They will give presentations on cultural methods, variety selection, yields and marketing. They will share their tunnel experiences on various crops ---tomatoes, raspberries, cherries, peppers, eggplant and more.

Haygrove tunnels have a shorter payback period than any other tunnel, which is what makes them so profitable. This conference is your chance to learn from growers with hands-on experience in Haygroves.

Pre-registration is required if you want the free lunch

Location: Lancaster Farm and Home Center, 1383 Arcadia Rd, Lancaster, Pa

Registration/breakfast 8:00 am, meeting 8:30 am -4 pm

Registration deadline Nov 24, **no lunch provided for on-site registrants.**

Names of attendees

Haygrove owner (free) _____

Owner's guest (free) _____

Others ($25 each) _____

Return registration with payment by Nov. 24, 2010 to:

Haygrove

694 Kraybill Church Road

Mount Joy, PA 17552

MICHIGAN EARLY DETECTION FINDS NEW INVASIVE FRUIT PEST

Michigan Ag Connection - 11/04/2010. Spotted Wing Drosophila (*Drosophila suzukii*), or SWD, a small vinegar fly native to Asia, has been found in traps deployed this year by Michigan State University (MSU) entomologists in southwestern Michigan. This pest is established in the western United States, damaging fruit in California and the Pacific Northwest, but this is the first time it has been found in the Midwest.

SWD is a pest of berry crops, cherries, grapes and tree fruit, with a preference for softer fleshed fruit. No flies were trapped in Michigan through the summer months this year, but in late September and early October, monitoring traps in southwestern Michigan picked up male and female SWD. This pest has not been found in any fruit, and flies were trapped only after crop harvest was complete.

A Michigan SWD response team was formed earlier this year to survey the states' fruit industries and to develop a pre-emptive Early Detection-Rapid Response (ED-RR) Plan as part of an integrated pest management (IPM) strategy for SWD. The response team is comprised of entomologists from the MSU Departments of Entomology and Horticulture, MSU Extension staff, staff members from the Michigan Department of Agriculture (MDA) and fruit commodity group leaders. The plan included setting out traps across Michigan for SWD in crops that the pest is known to affect. Implemented in spring 2010, the ED-RR Plan has enabled early detection of SWD.

Further monitoring is underway this fall to determine the distribution of this fly in Michigan. Members of the SWD response team are urging fruit growers in the state to become aware of this pest and to plan for ED-RR through trapping, monitoring and crop-specific control measures as part of their IPM program for 2011.

"We have been aware of SWD since it was first discovered in 2008 in California," says Rufus Isaacs, berry crops entomologist at MSU and the chair of the response team. "This insect is originally from Asia but has already been found to be invasive in Hawaii, California, Oregon, Washington, Utah, Florida, the Carolinas and British Columbia. Our response team set up 300 traps in June in more than 100 fruit-growing sites and checked them regularly. The traps were monitored the entire season with no positive finds of SWD until late September in a few fruit farms. This is probably because harvest was complete in July and August, so growers were no longer actively managing pests in those fields."
Isaacs says that because the pest was found after fruit harvest, there was no threat that the pest was in harvested fruit. He also noted it was found in an area that had minimal insect management.

"Early detection of an exotic pest is vital to our work to safeguard Michigan's agriculture producers and natural resources," Ken Rauscher, MDA's Pesticide and Plant Pest Management Division director, says. "It's only through collaborative efforts with state, university and agricultural commodity leaders will we be successful in preserving the vitality of Michigan's fruit-growing industry."

"This pest was found only late in the season, so this gives us an opportunity to help growers learn what they need to know to effectively address SWD in 2011," says Isaacs. "The SWD response team is confident that Michigan growers can control this pest with proper management."

Because SWD has not been previously found in Michigan, it is not known if it will survive the cold Michigan winter.

"What we know now is that, unfortunately, this insect is here in Michigan, but MSU has a team of entomologists and MSU Extension educators prepared to address this threat from both research and education angles, and our monitoring program will continue in 2011," Isaacs says. "If SWD is detected again next year, it is one more insect pest that Michigan fruit growers will need to add to their crop management programs. IPM strategies will be implemented next year to help monitor and control SWD."

(Reprinted from: Michigan Ag Connection: http://www.michiganagconnection.com/.)

WEED SCIENCE SOCIETY OF AMERICA WSSA

CRANBERRY CROPS THRIVE WITH EFFECTIVE WEED CONTROL

Spotters, wick wipers and other techniques play vital role

LAWRENCE, Kansas - November 2, 2010. Harvest is now underway for the colorful cranberries that herald the holiday season and grace dinner tables around the country. The USDA predicts the 2010 crop will be the second highest on record led by Wisconsin and Massachusetts, respectively, the top two cranberry-producing states in the country.

But before they make their way to your table, cranberries (*Vaccinium macrocarpon)* must be defended from a variety of pesky and persistent weeds.

"Cranberries are a perennial crop, and that makes weed control challenging," says Hilary Sandler, integrated pest management and weed specialist for the University of Massachusetts Cranberry Station. "Most problem weeds that impact cranberries are also perennial and come back year after year, thriving under the same growing conditions as the crop."

Managing weeds in cranberry crops can be a tough challenge because of how cranberries grow. They are low, woody vines typically two to eight inches in height that form a continuous, lawn-like swath across a bed or bog. That makes it impossible to till weeds without damaging the crop itself.

Jed Colquhoun, associate professor in the Department of Horticulture at the University of Wisconsin, says nearly 80 percent of Wisconsin cranberry growers focus on early intervention and hire experts to scout their crops for weeds and other pests throughout the growing season.

"Part of dealing with the enemy is to know where the enemy is he says."Surveys show that most cranberry beds in our state are scouted at least 14 times throughout the growing season.

Those same surveys indicate that nearly nine out of 10 cranberry growers in Wisconsin rely on an integrated approach to weed control. They hand-pull weeds as soon as spotters identify them, suppress weeds with sand, replant bare spots to shade out weed seedlings and mow the areas surrounding the crop bed to keep weeds and seeds away.

When herbicides are required, Colquhoun says was an alternative to a broadcast application. A boom is pulled across the bed to wipe the herbicide across any weeds that are growing taller than the cranberry vine. Wick wiping minimizes the amount of chemical applied and protects both the cranberry vine and fruit. Very few herbicides are labeled for such a unique use, but they are critical to an integrated weed management program in cranberries.

Sandler says some Massachusetts growers are experimenting with handheld flame cultivators that burn down weeds. And many are also using carefully timed flooding.

"Flooding is used throughout the season for weed, insect and disease control," she says. "Often growers flood the beds briefly in the spring and fall for weed control. But if the situation becomes desperate with a particularly invasive weed,

they may sacrifice the crop for the year and flood a bed for as much as 2 months during the summer."

Common weeds in cranberry crops

The weeds that plague cranberries can vary by region. Colquhoun says those most common in Wisconsin are plants that won't be called weeds in a different setting. Many are native wetland species of wildflowers and trees that unfortunately have become well-established in decades-old berry beds.

"Trees in particular can be difficult to remove," Colquhoun says. "Hand weeding is often the only option, and it takes a long-term commitment to outlast them." Other significant weeds in Wisconsin cranberries range from yellow loosestrife (*Lysimachia terrestris*), goldenrod (*Solidago* spp.) and dewberry (*Rubus hispidus*) to cottonwood (*Populus deltoides*), joe-pye weed (*Eupatorium maculatum*) and St. Johnswort (*Hypericum* spp.)

In Massachusetts, many of the same weeds can be a problem. But they pale in comparison to Dodder (*Cuscuta gronovii*) ' a parasitic weed that can quickly overrun a cranberry bed (*below left*). It wraps a spaghetti-like tangle of shoots around the plants to form a tightly woven mat and rob them of vital water and nutrients.

As a result, dodder is considered as a "zero tolerance" weed managed at the highest priority. Another particularly bothersome weed plaguing Massachusetts cranberry crops is poison ivy (*Toxicodendron radicans*). When it invades a bog, the low pH level stunts the weed's growth so it reaches only a few inches in height (*above right*). That means poison ivy can hide in the crop canopy where it is difficult to spot and to control.

Sandler says a successful cranberry harvest depends on growers knowing how to prioritize weeds based on their biological characteristics and impact.

"Some weeds don't do so much damage and we can just live with them," she says. "But there are others that cause great concern and must be controlled before they cause serious economic loss."

About the Weed Science Society of America - *The Weed Science Society of America, a nonprofit scientific society, was founded in 1956 to encourage and promote the development of knowledge concerning weeds and their impact on the environment. The Weed Science Society of America promotes research, education and extension outreach activities related to weeds, provides science-based information to the public and policy makers, fosters awareness of weeds and their impact on managed and natural ecosystems, and promotes cooperation among weed science organizations across the nation and around the world. For more information, visit www.wssa.net.*

ROLLING RYE - GUIDELINES HELP DETERMINE WHEN'S BEST

Dennis O'Brien, Public Affairs Specialist, Agricultural Research Service Information Staff, Room 1-2212-B, 5601 Sunnyside Ave., Beltsville, MD 20705-5129

Cereal rye is increasingly being used as a cover crop because it prevents erosion, helps the soil retain nutrients, and reduces the need to till the soil. Organic farmers also use cereal rye to help control weeds. When used as a cover crop, rye is planted in the fall, killed in the spring, and left to decompose. Then, soybeans and other cash crops are seeded through the dried-up plant residue, which forms a surface mulch.

In a field of rolled cereal rye, ecologist Steven Mirsky evaluates ground coverage of the rye mulch and weed emergence through it.(D1980-1)

In some cases, farmers are opting to use a tool known as a "roller/crimper," which can flatten and kill an actively growing field of rye in a single pass. There are several designs, but most involve some type of rolling, paddle-wheel-like cylinder that attaches to a tractor and barrels over a field, tamping and crimping the rye into a smooth mat to kill it. The technology has been used for at least 15 years in small farms in South America and is slowly catching on in the United States, according to Steven Mirsky, an ecologist in the Sustainable Agricultural Systems Laboratory in Beltsville, Maryland.

Mirsky estimates that rolling a field of rye uses 10 times less energy than mowing. Rolling is also faster and only needs to be done once a season. And while mowing leaves bits of rye in the field that decompose quickly, rolling leaves rye residue intact, forming a thick mat that provides better weed suppression.

Rollers present their own challenges. If you roll the rye too early in the spring, it won't die off, but will grow back and take up moisture from the soil, essentially competing with the cash crop and diminishing yields.

A front-mounted roller-crimper rolling over a cover crop.(D1981-1)

But Mirsky and other ARS researchers hope to encourage more U.S. farmers to adopt the technology because of the potential benefits to soil quality and the reduced energy and production costs. They are studying ways to maximize the benefits of a roller, and with the help of a computer model, they are developing guidelines for predicting the best times for growers to use rollers to kill their rye. The guidelines are based on regional weather patterns over the course of a growing season, and their hope is that the guidelines will be used nationwide.

Mirsky planted two common types of rye, Aroostook and Wheeler, in Pennsylvania test plots, at six 10-day intervals, in two successive falls. He used a 1.5-ton steel crimper, constructed by colleagues at Pennsylvania State University, to flatten it out at 10-day intervals each spring. He then visually rated the rye's regrowth on a 0-to-100 scale, 6 weeks after each plot was flattened.

Front view of a front-mounted roller-crimper. (D1981-2)

The results show that the best time to roll the rye is when it reaches 50 to 75 percent of its flowering state, because that is when rolling consistently kills the cover crop. The results, published in *Agronomy Journal*, were consistent for both varieties of rye, and it didn't matter exactly when in the fall the rye was planted or when in the spring it was rolled, as long as the plants had reached 50 to 75 percent of their flowering state.

The computer simulations developed as part of the project also adequately predicted the best dates for growers to roll their rye, with those dates timed around regional heating and cooling patterns and how early or late in the fall the rye is planted.

They are working toward a Web-based tool that growers around the country will be able to use, possibly by typing in ZIP Codes or other information that identifies the locations of their fields.—By

(This research is part of Crop Protection and Quarantine, an ARS national program (#304) described at www.nps.ars.usda.gov. Steven Mirsky is with the USDA-ARS Sustainable Agricultural Systems Laboratory, 10300 Baltimore Ave.,Beltsville, MD 20705-2350; (301) 504-5324."Rolling Rye: Guidelines Help Determine When's Best" was published in the November/December 2010 issue of Agricultural Research magazine.)

WINTER MULCH FOR STRAWBERRIES

Sonia Schloemann, UMass Extension Fruit Specialist, University of Massachusetts, Amherst.

An important fall job in commercial strawberry production is mulching. Strawberries are commonly grown in cold climates, such as the northern US and Canada, but the strawberry plant itself is actually quite vulnerable to cold injury. Research has shown that, without mulch, strawberry crowns can suffer damage at temperatures below 12°F and unprotected strawberry plants can suffer desiccation damage from drying winter winds. A protective mulch can protect strawberries from cold by providing insulation, and from desiccation by providing a barrier against drying winds. Mulches will also protect plants from injury caused by soil heaving, which results from freezing/ thawing cycles during the winter. So, a key to consistent quality strawberry production in cold climates is in protecting the plants from severe temperatures or temperature swings through the practice of mulching.

Production systems can also affect the need for mulching. Plants on raised beds, for example, are more vulnerable to cold and desiccation injury than plants in level plantings, especially in locations that are exposed to strong winter winds. Annual production systems, such as fall planted plasticulture, may utilize less hardy or disease susceptible cultivars. As we will see, mulching practices must adapt to these new systems.

When should the strawberry grower plan to apply mulch?
Research suggests that a good timing guide is to apply mulch after three consecutive days with a soil temperature of 40°F or below. This soil temperature usually occurs after multiple frosts, and when the plants have slowed growth in

response to cooler temperatures. It is best to apply mulch before the soil freezes solid. In New England mulches are applied in late November.

What is a good mulch material?
The traditional mulching material for strawberries in New England is straw. Straws from wheat, rice, oats, or Sudan grass work well. Straws coarser than Sudan grass are not recommended. Straw should be clean, free from weed seed, and contains a minimum of grain seed. Strawberry growers can produce their own straw, often cutting the straw before the grain seed is viable. Store straw for mulching in a dry area. Occasionally, grain seedlings can become a weed problem the following spring; an application of sethoxydim will give good control.

How much mulch should be applied?
A traditional, level matted row planting will require 2.5 to 3 tons of straw per acre for a 2 to 3 inch deep mulch, or about 300 small bales of average weight. Raised bed plantings and sites with strong wind may require twice this amount for adequate coverage.

How is the mulch applied?
Smaller plantings may be mulched by hand by shaking out the bales of straw over the row. Larger plantings often use bale choppers to break up the straw bales and distribute the straw over the bed. Choppers are available for both small bales and large round bales.

How and when is the much removed?
In the spring, when plants begin to show growth under the winter mulch (new green tissue), the mulch should be raked off the rows to allow sunlight to penetrate and reach the foliage. Delaying removal will delay plant growth and flowering and may reduce yield. Mulch can be raked off by hand with ordinary yard rakes in smaller plantings. In larger plantings, various mechanical tools are available ranging from modified hay rakes and tedders to equipment specifically designed for the purpose.

Floating row covers as mulch.
These covers are composed of a plastic such as polypropylene, spun-bonded into a fabric that is permeable to light, air, and water. Research and growers' experiences demonstrate that these covers are useful for winter protection of strawberry plantings. While floating row covers are available in several weights, only the heavier weights are recommended for winter protection. At present a widely available weight recommended for winter strawberry protection is 1.25 oz/yd2 (42 g/m2). A variety of fabric widths are available, with common widths ranging from 15 feet to 60 feet. This material currently costs about 4 cents per square foot. With proper care, this heavier fabric should last 3-4seasons. Floating row covers are widely used to protect annual plasticulture plantings.

Row covers are best applied on still days. Be sure to line up sufficient labor to place the row cover. If possible, use wider widths for more efficient application. The row cover edges must be anchored, as must areas where two covers overlap. A variety of methods are used to anchor the edges. Edges may be anchored with posts, rocks, or tube sand. The edges may also be covered with soil.

Once the mulch is in place, the job is not done for the winter. Monitor the planting frequently. If straw has blown off areas, replace at once. Watch the edges of row covers, and adjust anchors if needed. Repair any rips or holes as soon as possible.

Any reference to equipment or product brand names does not constitute endorsement over like products or equipment.

(Reprinted with permission from: UMASS Berry Notes Vol. 22(11):2-3, November 2010.)

EXTEND YOUR BERRY CROP SEASON BY CHOOSING THE BEST COMBINATION OF VARIETIES

Laura McDermott, Capital District Vegetable and Small Fruit Regional Specialist, Cornell Cooperative Extension and Cathy Heidenreich, NYS Berry Extension Support Specialist, Cornell University.

There are many reasons that growers would choose to extend the cropping season for berries. The earliest berries notably capture the best market prices - which is what growers strive for. On the latter end of the season, there may be late season marketing opportunities, and certainly creating as long a time as possible for berry sales is a good thing. Season extension techniques may improve yield, fruit quality and shelf life, and possibly allow us to grow a wider variety of berries, all attributes which growers and consumers can be happy about.

When season extension is discussed lately, it often includes plant manipulation techniques, like tipping raspberries or removing blossoms from strawberries, or it might refer to environmental manipulation like using row covers or high tunnels to temporarily provide protection from an unsuitable environment. The easiest thing a grower can do to extend the berry season is to choose to grow berry crops that complement each other seasonally, and then choose varieties that provide plentiful, high quality berries throughout the harvest season. The following summaries are meant to be examples of the way a grower could choose overlapping varieties that would keep fresh, nutritious berries in front of his customers for the longest possible time – without doing any crop or environmental manipulation. As customers come to rely on local farms for their fruit needs, that will provide the incentive for more elaborate season extension efforts.

These summaries are not inclusive. There are dozens of varieties that could be substituted for the ones mentioned below. Growers should always try different varieties as fruit characteristics may differ between locations. Additional information about these and other varieties as well as the nurseries where you can order them is located at the Cornell Berry pages.

The earliest berries in NYS are strawberries. Traditional June bearers and Day Neutral strawberries begin producing in May in some warmer regions, but June throughout the state. In cooler regions and with good variety selection, June bearers will continue into July, but day-neutrals will provide customers with fresh strawberries into October throughout most of the state – with just a bit of attention to frost protection. Additionally, many other berry crops will start production in July including blackberries, blueberries, currants, gooseberries and raspberries. Many of these can continue into September and possibly longer if the correct varieties are chosen and with slight modifications to environment. Elderberries ripen in August and hardy Kiwifruit, soon to be very popular with consumers, is a great addition to the September market table.

Choosing the best berry varieties is not an easy task. There are hundreds of options, all touted to be the most delicious and productive. Growers need to consider local customer preferences in addition to pest resistance, vigor and timing. The tables below may provide you with ideas for new varieties to try this season, but remember to order soon as nurseries sold out of many varieties very quickly last season.

Table 1. Blueberry, Raspberry and Strawberry varieties for an extended season

Fruiting Time	Blueberry	Summer Raspberry	Fall Raspberry	June Strawberry
Early Season	Duke Reka	Prelude Reveille	Caroline Autumn Bliss	Earliglow Wendy
Early Mid-Season	Blueray Patriot	Killarney Canby	Ruby Fall Gold	Darselect Honeoye
Mid-Season	Bluecrop Blueray	Latham Liberty	Polana	L'Amour Cabot
Late mid-season	Darrow Chandler	Titan Taylor	Josephine	Allstar Sparkle
Late Season	Elliott Liberty	Tulameen Encore	Heritage Himbo Top	Idea Winona

Many of the berries on this list are familiar to growers, but the key is to have some of all varieties so that you can prolong the optimum harvest window. The area where many growers may be surprised at the varieties listed is in the fall raspberries. Most folks are still relying on Heritage to pull them through the autumn, but this is a mistake as the new varieties offer significant advances in earliness and fruit quality. The overall yield of these newer varieties will not approach Heritage, but having some nice looking early fall raspberries may encourage late summer pickers to return.

The chart above does not mention Day-Neutral strawberries. In NYS day neutral production relies largely on 4 varieties: Albion, Evie 2, Seascape and Tribute. Using these varieties in a number of different field or high tunnel production systems will add a great deal to berry season extension.

The blueberry variety plan is the most reliable in season stretching mainly because blueberries last so well on the plant. Still, in a year like summer 2010, the sustained heat really shortened the season, so most growers did not harvest much of anything past the 2nd week of August.

Table 2. Blackberry and Ribes - varieties for an extended season

Fruiting Time	Summer Blackberry	Fall Blackberry	Red Currant	Black Currant	Gooseberry
Early Season	Ouachita	-----	Jonkheer von Tets* Pink Champagne	---	Invicta
Early mid-Season	Triple Crown	---	Minnesota 52 Stevens Red	Consort	Hinnomaki Green
Mid-Season	Doyle	Prime-Jim Prime-Jan	Rovada	Ben Alder Ben Sarek Titania	Hinnomaki Red
Late mid-Season	Chester	Prime-Ark 45	---	Ben Commond	Tixia
Late Season	---	---	Tatran	---	Captivator

**Susceptible to currant cane blight*

Farmers in cold areas may get excited when they see the primocane blackberry varieties listed. Prime-Jim and Prime-Jan have been around for several years and offer the cold climate berry grower the possibility of getting blackberries in normally un-hospitable zones. The problem is that these varieties still need a VERY long growing season before they can be harvested. In a 2008 Massachusetts study, both of these varieties started bearing by Sept 15th and were finished by early October in the field. Compared to the same planting design under a high tunnel, which yielded 2.5 times more fruit that same season, it still points that some type of protection would really help fall bearing blackberries.

Summer blackberries likewise may need some environmental or plant manipulation in many NY regions, but for growers in Zones 5 and warmer, these plants offer a product highly desired by health conscious consumers. Ribes, currants and gooseberries, are very popular with certain ethnic markets, but growers would profit by putting a bit of extra effort into marketing these fruit. Currants and gooseberries are featured in many cooking magazines and make great preserves. Black currants specifically have very high anti-oxidant levels and could be marketed to those folks that have home juicers.

The possibility for making the most of your berry season begins with your winter order. Take plenty of time to look at the fruit you offer over the entire season and try hard to avoid dead zones when no fruit is available. Northeast growers will have to work hard to meet the local demand, but the end result will be worth it.

Spotted Wing Drosophila

A new invasive pest of Michigan fruit crops

Rufus Isaacs and Noel Hahn, Department of Entomology
Bob Tritten and Carlos Garcia, MSU Extension

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New • October 2010

Introduction

The Spotted Wing Drosophila (SWD) is a small vinegar fly with the potential to damage many fruit crops. It was first detected in Michigan in late September 2010. Unlike most other vinegar flies that require damaged fruit to attack, SWD causes damage when the female flies cut a slit and lay eggs in healthy fruit. This insect is a pest of most berry crops, cherries, grapes and other tree fruits, with a preference for softer-fleshed fruit. Given the propensity for this insect to spread and its potential to infest fruit, it is important to learn about monitoring and management of SWD to minimize the risk of larvae developing in fruit and affecting fruit marketability.

SWD, or *Drosophila suzukii*, was first discovered in the western United States in 2008 and moved quickly through the Pacific Northwest into Canada. In the spring of 2010, SWD was discovered in Florida on strawberries and detected later in the summer in the Carolinas. It has also been detected in Europe. Because the flies are only a few millimeters long and cannot fly very far, human-assisted transportation rather than natural dispersion is the most likely cause of the recent rapid spread.

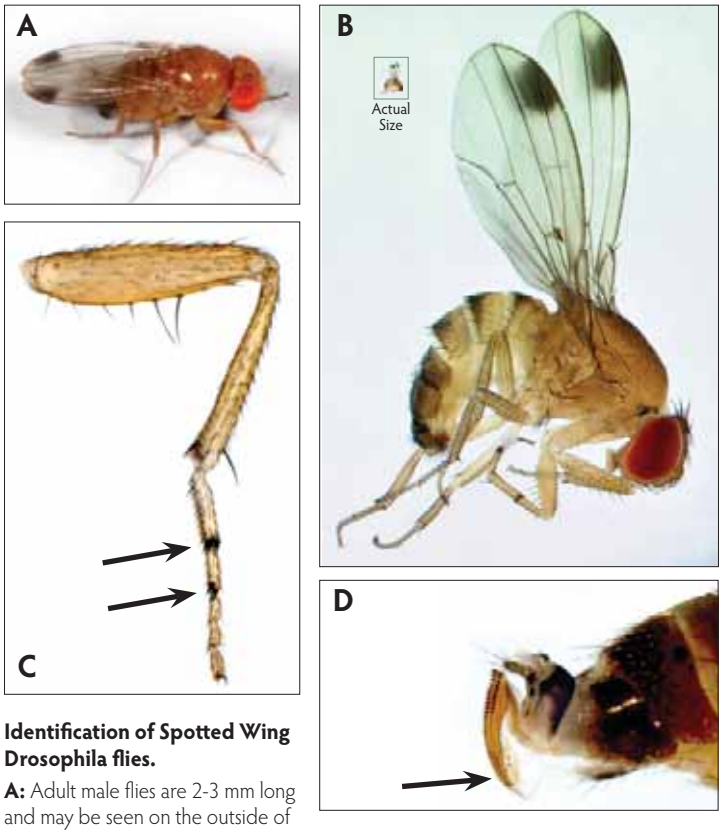
Damage

Female SWD can cut into intact fruit using their serrated ovipositor to inject eggs under the skin. By being able to insert eggs into intact fruit, the larvae of SWD can be present during ripening, leading to a risk of detection in ripe fruit after harvest. During egg-laying, sour rot and fungal diseases can also be introduced, further affecting fruit quality. There is a greater risk of fruit contamination at harvest from SWD compared with native species that lay eggs only in already-damaged and rotting fruit.

The adult SWD lives for about two weeks, and can lay more than 100 eggs in a day. This demonstrates their high potential for fruit infestation and spreading through a field if not controlled. Infested fruit do not show obvious symptoms of infestation at first, with only a small pin-prick visible from egg-laying. Within a few days, the fruit flesh will start to break down, leading to discolored regions and eventual collapse of the tissues. By this point, the white larvae can be relatively easy to detect.

SWD Management

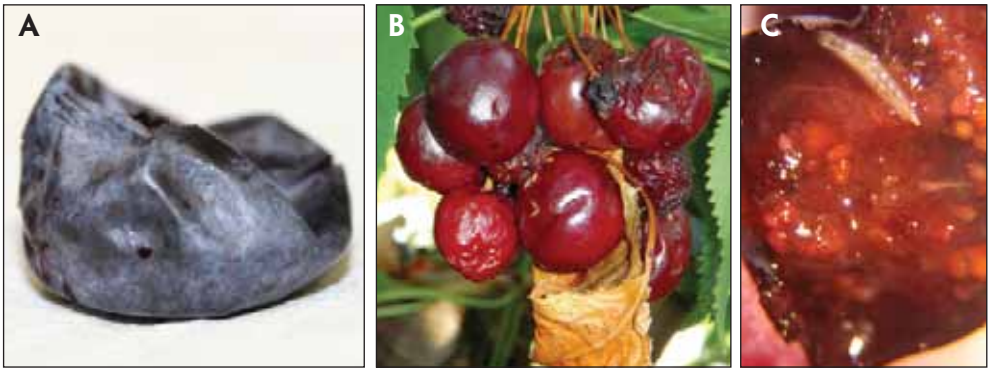
There are three important components to effective SWD management: Monitoring, Identification, and Control.



Identification of Spotted Wing Drosophila flies.

A: Adult male flies are 2-3 mm long and may be seen on the outside of fruit. **B:** The male SWD has two distinctive dots on the wings (females do not have the wing spots). **C:** Male flies also have two dark bands on the forelegs. **D:** On the female SWD, the serrated ovipositor is a distinctive morphological feature, longer than other vinegar fly species and with two rows of serration. Photos by Martin Hauser (A, C, D) and Gorak Arakelian (B).

Monitoring: The first and most important step is to determine whether SWD are present. This can be done using a simple monitoring trap, consisting of a plastic 32 oz. cup with several 3/16" -3/8" holes around the sides of the cup, leaving a 3" to 4" section without holes to facilitate pouring out liquid. The holes can be drilled in sturdy containers or burned with a hot wire or wood burner in the thinner plastic cups. Pour 1" to 2" of pure apple cider vinegar into the trap as bait. To help attract flies and ensure that trapped flies do not escape, a small yellow sticky trap is placed inside the trap. Traps are hung in the shade in the fruit zone using a stake or a wire attached to the sides of the trap, and fastened to a branch or trellis



Fruit infestation symptoms: A: Collapsed blueberry one week after infestation. **B:** Diseased cherry tissue associated with SWD infestation. **C:** SWD larvae are white and visible against the darker fruit. Photos by Vaughn Walton (A), Peter Shearer (B) and Tracy Hueppelsheuser (C).

wire. Check traps at least weekly for SWD flies, and change the vinegar. Pour the old vinegar into a bottle or away from the trap location, and place traps back near the crop with fresh vinegar. Continue monitoring through harvest and post-harvest.

Identification: Some native species of vinegar flies and other insects will be attracted to the traps. These need to be distinguished from SWD flies. Vinegar flies are small (2 - 3 mm) with rounded abdomens. Examine the wings of trapped vinegar flies using a hand lens. Some small native flies have dark patches on the wings, but will not have the distinctive dark dot that is present on both wings of SWD males. Female SWD are harder to identify, but this can be done by using a hand lens to examine the ovipositor (see photo on previous page). Keep a clear record of the number of SWD detected at each check. Given the importance of early detection, it is imperative that possible detections in new areas are clearly identified by sending them to the address below. If SWD are found in traps, start management activities immediately.

Monitoring trap for SWD. A plastic container with holes, containing apple cider vinegar as a bait, and a sticky trap to catch flies. Photo: Rufus Isaacs.

Control: There are some important cultural controls that growers can adopt to minimize the buildup of populations. These include removing overripe fruit, wild host plants such as wild grape, raspberry, blackberry, etc. from nearby fields, and ensuring timely crop harvest. If SWD are detected in fruit farms, active management programs should be implemented immediately, including the cultural controls described above, coupled with monitoring and control of adult flies using insecticides with knock-down activity (see below). Additional monitoring should be done to determine the approximate distribution of SWD across various fields.

Michigan fruit growers already use IPM programs to manage fruit flies (blueberry maggot, cherry fruit fly, and apple maggot) during the summer months, and these programs will provide some protection against SWD. However, these fruit flies have only one generation a year, and a week between emergence and egg-laying. SWD lays eggs soon after emergence and will complete multiple generations under Michigan conditions. For these reasons, spray intervals should be tightened if SWD is detected to prevent infestation before harvest.

A number of registered insecticides have shown high activity on SWD in recent trials conducted in western states. These include organophosphate and synthetic pyrethroid insecticides, with lower activity and residual control from spinosyn and organic pyrethrum class insecticides. Many of these trials have been in laboratory trials or field trials with different conditions than the humid Midwest. Selection of insecticides for SWD control should take into account the other pests present, harvest date, re-entry restrictions, as well as potential impacts on existing IPM programs, beneficial insects, and the environment. Refer to MSU Fruit CAT Alerts and Extension publication E-154 for the latest insecticide recommendations, and follow IPM newsletters for timely updates during the season. Remember to follow the label restrictions and rotate chemical classes to avoid resistance development. If this pest is present, the level of control will depend on the size of the SWD population, timeliness of application, coverage of fruit, and product effectiveness.

Follow Future Developments

There is active research and monitoring underway to minimize the impact of SWD on fruit production. As new information is available, it will be posted online at www.ipm.msu.edu/SWD.htm and will be distributed to fruit growers via MSU Extension programs.

Flies suspected of being SWD can be placed in a plastic zippered bag or small vial and sent for identification to:

Howard Russell, SWD Monitoring Program
Diagnostic Services
101 CIPS, MSU, East Lansing, MI 48824.

Include location/date collected and your contact information.

This fact sheet was produced with support from Project GREEEN and the Michigan Agricultural Experiment Station. For more information, check the Michigan State University SWD Page online at **www.ipm.msu.edu/SWD.htm** or at the Oregon State University SWD website at **swd.hort.oregonstate.edu**

MICHIGAN STATE UNIVERSITY | Extension

BLACKBERRIES IN THE HOME GARDEN

Steven A. McKay, Extension Educator

There's nothing better than a plump, juicy, sweet, ripe blackberry...right off the vine, in pie, in jam, or in juice. Growing blackberries in the home garden does have its challenges in the Northeast, but it is possible. There are a couple of varieties that will survive in New York, even though they may sustain a degree of winter injury. Few pest problems are associated with the plants, and the main cultural practice requiring attention annually is pruning and trellising.

Choosing a site for your planting and preparing it is the first step. You must remember that blackberries like full sunlight, well drained sites, and that the plants are large. Zone 5 is limited somewhat by cold winter temperatures, but two varieties are planted, recognizing that damage to canes will occur fairly regularly. Still, since plants are large, and snow often covers and protects the lower portion of the plant, you will usually have some fruit. I recommend growing thornless varieties only, since thorns interfere with pruning and harvest, and are very unpleasant to work with. 'Chester' is the most cold-hardy variety, and produces tart berries good for pie and jam, while 'Triple Crown', a less hardy variety is sweeter. Both have the potential to produce huge, upright plants with girth size at the crown of two or more inches, and canes ten to fifteen feet long.

The first year, tissue culture plugs, or layered shoot tips are planted. The plants are allowed to grow as much as possible, and to produce two or three canes. These canes will have fruit the following summer, and will be cut away after fruiting. In pruning, remember that canes only produce fruit once, and then they must be cut away, leaving only the canes that grow during that same year. The thing that is usually most confusing to gardeners is that during the growing season one must trellis last year's canes while they produce the fruit crop, and must nurture and trellis this year's growing canes so they will have fruit in the following year. Here are my suggestions to keep this as simple as possible.

- Construct a simple trellis with wires at about three and six feet high. For a single plant, just put in two posts separated by about four feet.
- Tie canes to the trellis or posts during the first year.
- Prune away dead parts of the canes in the spring. These canes will produce fruit.
- Cut new canes to within four to six inches from the ground, leaving at least two to three buds in the last week of July
- Protect the new canes that come from the stubs by tying to the posts or trellis as fruit is harvested from old canes.
- Cut away old canes after fruiting is finished.
- Either leave new canes tied up, or remove them from trellis to overwinter under wood chip mulch with protection from voles (by baiting).
- Tie overwintered canes up in the spring to repeat the cycle.

Blackberries will usually thrive with very little need for fertilizer. In fact, most people probably over-fertilize their plants which can lead to more possibilities of winter injury since plants grow too vigorously late into the season. A bit of garden compost each year should be fine to help promote good soil structure and fertility.

Lime-sulfur is applied to canes in the early spring before plants have ¼ inch of growth to prevent cane fungus. Insects are seldom a problem, and pyrethrin or carbaryl can be used to control Japanese beetles, tarnished plant bugs, or sawflies.

Recently primocane blackberries have been introduced to the market to eliminate overwintering of canes. They produce fruit on canes that grow in the same season, and are cut away after fruiting in the winter. There is no winter damage since all canes are cut away. Their disadvantages are that they have thorns, and sometimes ripen late, so their production can be limited by fall frosts. 'Prime Jim', and 'Prime Jan' are two varieties currently available to home gardeners.

WEATHER NOTES *(Courtesy NY NASS)*

Week ending October 17th: The week started off with high pressure over the northeast and dry conditions with seasonable temperatures. A weak cold front moved through on Monday providing mainly light rainfall to the southern half of the state. High pressure built back in for Tuesday with seasonable temperatures persisting. Wednesday featured plenty of sunshine with high pressure overhead. Thursday into Thursday night, a developing storm system brought rain to the area from south to north. The storm strengthened into a powerful nor'easter by Friday which gave most of the central and eastern part of the state a soaking rainfall. The heaviest rain fell across eastern areas with the season's first snowfall in portions of the Adirondacks. Cold temperatures and windy conditions were also experienced through Friday night. The nor'easter pulled away into the Canadian Maritimes on Saturday leaving dry but breezy and cool conditions for the first half of the weekend. Temperatures averaged near normal for much of the week, except slightly below normal towards the end of the week. Precipitation was generally close to normal except above normal in the eastern portion of the state associated with the nor'easter that brought a widespread soaking rainfall..

Week ending October 24th: The week started off with a cold front passing through the region on Sunday. The front stalled south of the region while a low developed over the Carolinas. A second frontal system passed through on Thursday ushering somewhat cooler air. It was followed by high pressure for the end of the week. The week was fairly wet over western New York with over an inch of rainfall measured at Buffalo and Niagara Falls. On the other hand it was quite dry in eastern New York with less than five hundredths of an inch at Albany, Poughkeepsie, New York City, and Long Island. Temperatures for the week averaged somewhat cooler than normal with temperatures six degrees below normal on the 19th and 22nd. Cool temperatures on the morning of the 19th and 22nd ended the growing season over the Capital District, much of the Hudson Valley, the Berkshires, and the Mohawk Valley.

This is the last edition of the New York "Weather and Crops" for the 2010 season. The New York Agricultural Statistics Service gratefully acknowledges the weekly cooperation of the Agricultural Weather Information Service, Inc., National Weather Service personnel, Agricultural Extension agents, FSA representatives, and independent volunteer observers who collectively make this report possible.

Questions or comments about the New York Berry News?
Ms. Cathy Heidenreich, Cornell University Dept. of Horticulture, 630 W. North Street, Geneva, NY 14456 *Phone*: 315-787-2367
Email: mcm4@cornell.edu

Check out the NYSAES Tree Fruit and Berry Pathology web site at: **www.nysaes.cornell.edu/pp/extension/tfabp**
*Cornell University provides equal program and employment opportunity.

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00 AM, October 17th, 2010

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	67	34	51	0	14	3106	620	0.97	0.34	21.57	0.42
Glens Falls	66	29	47	-2	4	2577	436	1.12	0.49	22.41	1.41
Poughkeepsie	74	34	53	2	25	3285	658	1.39	0.74	20.79	-3.43
Mohawk Valley											
Utica	61	31	44	-3	0	1987	321	0.73	-0.25	35.53	5.12
Champlain Valley											
Plattsburgh	67	30	47	-2	10	2514	345	1.95	1.39	25.90	5.50
St. Lawrence Valley											
Canton	62	31	45	-3	0	2412	460	1.46	0.76	29.40	7.10
Massena	65	33	49	2	11	2598	564	1.26	0.63	28.52	8.24
Great Lakes											
Buffalo	68	35	51	-1	22	2906	480	0.50	-0.16	22.67	0.73
Colden	68	30	47	-3	8	2337	384	0.61	-0.21	23.21	-2.71
Niagara Falls	72	32	51	-1	25	2983	551	0.71	0.11	19.34	-2.07
Rochester	70	34	51	-2	15	2920	563	0.64	0.13	24.12	5.40
Watertown	61	29	48	-2	4	2597	582	1.32	0.75	24.64	6.80
Central Lakes											
Dansville	74	34	51	0	25	2803	443	0.55	-0.02	26.40	5.77
Geneva	69	35	49	-3	6	2757	426	0.87	0.24	28.47	7.99
Honeoye	72	31	51	-2	14	2707	242	0.56	-0.07	28.42	8.15
Ithaca	68	29	46	-4	2	2577	476	0.89	0.14	23.96	1.70
Penn Yan	72	35	50	-1	12	2923	592	0.53	-0.10	23.77	3.29
Syracuse	67	35	51	-1	13	3041	666	1.31	0.61	28.58	5.29
Warsaw	67	33	47	-1	10	2269	485	0.80	0.07	29.13	4.84
Western Plateau											
Alfred	72	32	48	1	12	2495	733	0.59	-0.07	27.54	4.71
Elmira	75	31	50	1	20	2782	565	0.69	0.06	23.06	2.37
Franklinville	73	27	47	-1	9	2158	541	0.23	-0.61	26.21	1.50
Sinclairville	76	32	49	1	15	2486	654	0.50	-0.39	27.32	-0.39
Eastern Plateau											
Binghamton	67	32	49	0	15	2753	618	0.85	0.22	24.47	2.62
Cobleskill	65	31	47	-3	3	2465	479	0.90	0.23	28.23	4.67
Morrisville	62	31	45	-4	2	2314	429	2.47	1.70	33.06	9.18
Norwich	69	29	46	-3	3	2397	414	1.17	0.47	27.08	3.59
Oneonta	67	32	47	-1	5	2518	701	1.33	0.59	30.67	5.66
Coastal											
Bridgehampton	72	39	54	-1	28	3301	752	2.18	1.46	19.47	-3.56
New York	77	50	61	4	78	4418	1016	1.72	1.09	19.06	-4.92

1. *D*eparture *from N*ormal 2. *Y*ear *to D*ate: Season accumulations are for April 1st to date. Weekly accumulations are through 7:00 AM Sunday Morning.

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, October 24th, 2010

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	63	30	46	-3	4	3110	609	0.03	-0.60	21.60	-0.18
Glens Falls	63	25	42	-5	0	2577	429	0.07	-0.58	22.48	0.83
Poughkeepsie	70	35	50	1	10	3295	651	0.04	-0.66	20.83	-4.09
Mohawk Valley											
Utica	57	24	40	-4	0	1987	314	0.57	-0.43	36.10	4.69
Champlain Valley											
Plattsburgh	59	27	43	-3	2	2516	339	0.06	-0.52	25.96	4.98
St. Lawrence Valley											
Canton	60	29	42	-4	0	2441	482	0.49	-0.21	30.47	7.47
Massena	61	28	44	-3	3	2601	559	0.29	-0.33	28.81	7.91
Great Lakes											
Buffalo	61	36	49	0	8	2914	469	0.87	0.17	23.54	0.90
Colden	61	33	45	-2	3	2340	375	0.98	0.14	24.19	-2.57
Niagara Falls	63	35	50	1	11	2994	543	0.88	0.25	20.22	-1.82
Rochester	62	36	48	-2	9	2929	554	0.43	-0.13	24.55	5.27
Watertown	60	27	45	-3	3	2600	574	0.48	-0.15	25.12	6.65
Central Lakes											
Dansville	63	36	48	-1	9	2812	434	0.41	-0.15	26.81	5.62
Geneva	62	32	47	-2	4	2761	414	0.41	-0.22	28.88	7.77
Honeoye	62	34	47	-3	4	2711	226	0.37	-0.26	28.79	7.89
Ithaca	60	29	44	-4	0	2577	462	0.22	-0.48	24.18	1.22
Penn Yan	62	33	48	-1	7	2930	583	0.23	-0.40	24.00	2.89
Syracuse	62	35	48	-1	9	3050	657	0.40	-0.30	28.98	4.99
Warsaw	58	31	45	-1	1	2270	477	0.92	0.18	30.05	5.02
Western Plateau											
Alfred	62	32	45	-1	0	2495	723	0.43	-0.20	27.97	4.51
Elmira	64	30	45	-3	3	2785	554	0.13	-0.50	23.19	1.87
Franklinville	62	28	41	-4	0	2158	533	0.76	-0.01	26.97	1.49
Sinclairville	66	32	45	-2	0	2486	644	0.44	-0.47	27.76	-0.86
Eastern Plateau											
Binghamton	60	33	46	-2	3	2756	610	0.22	-0.41	24.69	2.21
Cobleskill	60	32	44	-3	0	2465	469	0.13	-0.52	28.36	4.15
Morrisville	56	30	42	-5	0	2314	421	0.80	0.08	33.86	9.26
Norwich	62	27	43	-4	0	2397	406	0.46	-0.24	27.54	3.35
Oneonta	61	32	44	-2	0	2518	692	0.30	-0.47	30.97	5.19
Coastal											
Bridgehampton	67	36	50	-3	7	3308	733	0.03	-0.75	19.50	-4.31
New York	71	48	57	2	50	4468	1023	0.02	-0.67	19.08	-5.59

1. *D*eparture *from N*ormal 2. *Y*ear *to D*ate: Season accumulations are for April 1st to date. Weekly accumulations are through 7:00 AM Sunday Morning.