New York Berry News

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What's Inside

1. Currant Events
   a. Upcoming Meetings
   b. Fall CleanSweep Program Ready for NY Holders of Obsolete Pesticides
   c. Guthion Registration for Caneberries Cancelled
   d. Raspberry High Tunnel Open House
   e. EPA Completes 2,4-D Review Process
   f. Fruit Chemical Survey to be Conducted
   g. Johanns and Other Officials Continue Farm Bill Listening Tour
   h. New Standard to Come for Pesticide Container Recycling
   i. NASS to Assess Benefits of Conservation Programs
   j. New Grants Available
2. NASGA Summer Tour Highlights 2005–*Marvin Pritts*
3. As the Temperature Falls, High Tunnel Raspberries are on the Rise!-*Hans Spalholtz*
4. Marketing Specialty Fruit-*Wen-fei Uva* and Bob Weybright
5. Blueberry Disease Fast Facts-Leaf Rust and Powdery Mildew-*Cathy Heidenreich*

Somehow its fall and September's issue of NYBN is hot off the press, but a little behind the times, for which we apologize!. Never the less- it's still packed with the latest in small fruit news and information for our area.

This month's issue features plenty happening in the area of pest management with product registration changes, proposed changes in standards for pesticide container recycling, CleanSweep program opportunities, and a newly announced fruit chemical survey.

Other features include an article on highlights of the NASGA summer tour, the Cornell University Raspberry High Tunnel research and open house coming soon, marketing of specialty fruits, and fast facts on 2 sometimes problematic blueberry diseases for our area.

UPCOMING MEETINGS

October 14-15, 2005. *National Blueberry Conference and Exposition*, Amway Grand Plaza Hotel and DeVos Place, Grand Rapids, Michigan. . **Contact**: Gretchen@blueberries.com.

October 14-15, 2005. *Passive Solar Greenhouse Workshop*. 1522 Lefever Lane, Spring Grove, Pennsylvania. **Contact:** Steve and Carol Moore (717) 225-2489.

October 20, 2005. *Cornell University Raspberry High Tunnel Open House,* Maple Avenue, Ithaca, NY, 1-4 PM. For more information, see news brief that follows or **contact**: mcm4@cornell.edu, 315-787-2367.

December 1-7, 2005. *International Society for Horticultural Science 9th International Rubus and Ribes Symposium*, Pulcon, Chile. **For more information contact**: Pilar Banados, Facultad de Agronomia Ingenieria Forestal, Universidad Catolica de Chile, Casilla 306-22, Santiago, CHILE; fax: 56-2-55334130, E-mail: pbanados@puc.cl or online: http://www.faif.puc.cl/rubus-ribeschile.html

December 6-8, 2005. *Great Lakes Fruit, Vegetable, and Farm Market Expo*. DeVos Place Convention Center, Grand Rapids, Mich. www.glexpo.com.

December 13-15, 2005. *New England Vegetable and Berry Conference*. Radisson Hotel, Manchester, NH. http://www.nevbc.com/.

January 4–6, 2006. *North American Berry Conference and Southeast Regional Fruit and Vegetable Conference*; Savannah International Trade and Convention Center, Savannah, GA. For more information see news brief below or contact Georgene Thompson, 717-243-1349, georgenethompson@comcast.net or visit http://www.nasga.org.

January 31 – February 2, 2006. *Mid-Atlantic Fruit and Vegetable Convention*. For more information contact the Pennsylvania Vegetable Growers Association at pvga@pvga.org or visit http://www.pvga.org/.

February 15-16, 2005. *NABGA Regional Meeting*, at the *Empire State Fruit and Vegetable Expo*. More info to come.

FALL CLEANSWEEP PROGRAM READY FOR NY HOLDERS OF OBSOLETE PESTICIDES

October 7, 2005 - Deadline for registration if holder has unknown products/missing labels greater than 50 lbs/5 gallons.

During the week of November 6, 2005, identified counties in New York will receive a one-time environmental benefit program for improved pesticide stewardship. This Fall CleanSweep Program will target the following counties: Livingston, Monroe, Ontario, Seneca, Wayne, and Yates counties. Residents outside of these counties may also participate, but the collection sites and outreach are limited to these six counties. The CleanSweep NY program will continue to move westward until either the funds are expended or the program begins again in the East and starts another cycle.

The New York State Department of Environmental Conservation (DEC), in cooperation with New York State Agriculture & Markets (Ag. & Mkts.), Soil and Water Conservation Districts and Cornell Cooperative Extension is directing the CleanSweep NY Program for 2005 for the environmentally safe removal of cancelled, unwanted, or unusable agricultural or commercial pesticides, most forms of empty pesticide packaging and elemental mercury from dairy manometers.

Obsolete pesticides and improperly handled pesticide packaging, can pose a significant hazard to ground and surface waters of New York State. Furthermore, accidental exposures are a health risk to anyone who, unknowingly, comes into contact with old chemicals or spent packaging, whether that person is the property owner's family, first responders to emergencies (particularly fires), or handlers at any solid waste facility. Yet, the DEC recognizes that farmers and other holders of old pesticides have been, in many respects, responsible environmental stewards, since they have not had many legal opportunities, to safely dispose of these agricultural pesticides. This program provides that opportunity.

The CleanSweep NY Program for 2005 builds on the DEC's successful experience in other areas of New York State. The Department with assistance from associated parties has collected a total of 309,000 pounds of obsolete and unwanted pesticides from previous programs conducted in Long Island, New York City, the Hudson Valley, and Upstate New York. The CleanSweep NY Program is funded by negotiated penalty settlements that channel one-time enforcement money into an "Environmental Benefits Program."

This CleanSweep NY funding was specifically earmarked for the benefit of New York agriculture. For this reason, there is no charge and no limit to the quantity of obsolete pesticides or mercury that can be returned by farmers, former farm owners, and commercial applicators involved in production agriculture. Commercial pesticides *will* also be accepted free of charge from governmental and non-agricultural commercial applicators *provided* that no more than 100 pounds are returned. For each pound above 100 lbs., these same holders will be charged at the current CleanSweep NY contract rate on a per pound basis. This rate ranges from $1.25 to $1.65 depending on the state of the packaging. This low rate is still substantially less than the service fee that any individual company would have to pay for privately negotiated, legal disposal.

CleanSweep NY does *not* allow routine homeowner participation. However, retail establishments selling either agricultural, commercial, OR home/garden pesticide products may also participate with the same 100 lbs. payment threshold in effect.

Since proper disposal or recycling of empty, rinsed containers is supported from separate sources, there is no limit to the quantity of metal or plastic pesticide containers, nor any restriction on the source of the plastic containers, other than the crop protection and other pesticide restrictions imposed by the industry supported Agricultural Container Recycling Council as listed at http://www.acrecycle.org or instructions available from contacting 1-877-952-2272.

2005 Fall Collection Schedule & Locations:

No One Admitted to a Site WITHOUT Pre-Registration

Note: Site dates may change or be combined if there are low numbers of registrants.
Direct all inquiries to CleanSweep NY, not these generous sites that have volunteered their space for this event: 1-877-793-3769 or info@cleansweepny.org

Date	County	Location
Mon., Nov. 7, 2005	Yates	Birkett Mills Yates Blodgett Division 118 Hamilton Street, Penn Yan
Tues., Nov. 8, 2005	Ontario	Cornell University NYS Agricultural Experiment Station Field Research Unit, 1097 County Rd. 4, Geneva
Wed., Nov. 9, 2005	Livingston	United Agri-Products/UAP - Avon 2305 Lakeville Road, Avon
Thurs., Nov. 10, 2005	Monroe	Monroe County Hazardous Materials Facility Department Environmental Services 444 E. Henrietta Road, Rochester
Fri., Nov. 11, 2005	Wayne	United Agri-Products/UAP- Sodus 6277 Buerman Road, Sodus

All participation in the CleanSweep NY Program for 2005 is through advance enrollment only. Details, as they become available, and locations of collection sites will be posted at http://www.cleansweepny.org. Additional information and enrollment forms can be obtained by contacting your local DEC Pesticides Office, Cornell Cooperative Extension agent, Soil and Water Conservation District or from the CleanSweep NY information line at 1-877-SWEEPNY or 1-877-793-3769 or by sending a request, including your name and address, via email to info@cleansweepny.org.

GUTHION REGISTRATION FOR CANEBERRIES CANCELLED

This notice announces the order to amend registrations to terminate certain uses, voluntarily requested by the registrants and accepted by the Agency, of manufacturing-use products containing the pesticide azinphos-methyl, pursuant to section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. This order follows a February 28, 2005 Federal Register Notice of Receipt of Requests (70 FR 9644) (FRL-7702-5) from the azinphos-methyl registrants Bayer CropScience, Gowan Company, and Makhteshim Chemical Works to amend manufacturing-use product labels to terminate caneberries, cotton, cranberries, peaches/nectarines, potatoes, and Southern pine seed orchard uses, effective August 17, 2005. Growers with current labeled product can use azinphos-methyl only through next year's growing season. Read more about this ruling in the Federal Register Vol. 70, No. 158, August 17, 2005 at: http://www.epa.gov/fedrgstr.

RASPBERRY HIGH TUNNEL OPEN HOUSE

Thursday, October 20, 2005 - 1 to 4 PM

Cornell University invites you to attend a Hi Tunnel Open House to observe raspberries growing and fruiting in late October – well past the time when they are normally in season. Come by Cornell's East Ithaca farm on Thursday October 20 between 1:00 and 4:00 to meet with researchers, taste fruit, and study this new technology and market opportunity.

The East Ithaca Farm is located on Maple Ave., adjacent to the Cornell Campus. Coming from Rt. 79 east, turn right onto Pine Tree Rd., go through the stop light by East Hill Plaza, and take the next left onto Maple Ave. The research farm is on the right, past the cemetery.

Coming from Rt. 13 north, take Rt. 366 towards Ithaca. Turn left onto Pine Tree Road at the flashing red light, just past Cornell Orchards. Take the next right onto Maple Ave. The farm is on the right, past the cemetery.

Coming west on 79, or south on 96 or 89, take Rt. 79 east through Ithaca and up the hill. Midway up the hill, bear left onto Rt. 366. At the first stoplight, take a soft right onto Maple Ave. (not a hard right). The farm is at the top of the hill on the left.

For more information contact Cathy Heidenreich, mcm4@cornell.edu or call 315-787-2367.

EPA COMPLETES 2,4-D REVIEW PROCESS

The EPA has released its comprehensive assessment of the herbicide 2,4-Dichloro-phenoxyacetic acid (2,4-D) under the agency's reregistration program. EPA's decision document concluded that 2,4-D does not present risks of concern to human health when users follow product instructions as outlined in the agency's 2,4-D Reregistration Eligibility Decision (RED) document.

"The EPA's assessment of the human and environmental scientific data reinforces a growing number of regulatory decisions and expert reviews that conclude the use of 2,4-D according to product instructions does not present an unacceptable risk to human health or the environment," said Don Page, assistant executive director of the Industry Task Force II on 2,4-D Research Data. "EPA's comprehensive findings are consistent with decisions of other authorities such as the World Health Organization, Health Canada, European Commission, and recent studies by the U.S. National Cancer Institute."

The agency's announcement and release of the RED on 2,4-D completed a 17-year review process. Over the course of this study, the Industry Task Force II on 2,4-D Research Data developed and submitted to EPA over 300 good laboratory practice toxicology, environmental, and residue studies which EPA scientists reviewed to assess the herbicide's safety under the Federal Insecticide, Fungicide, and Rodenticide Act and the Food Quality Protection Act.

(Source: EPA and CropLife Magazine)

USDA-NASS TO CONDUCT FRUIT CHEMICAL USE SURVEY

The U.S. Department of Agricultures National Agricultural Statistics Service (NASS) will conduct the Fruit Chemical Use Survey this fall to gather reliable, objective information about pesticides and fertilizers used on fruit crops. Information gathered from growers in 12 States will be used to set state and national estimates on use of pesticides and fertilizers on 24 fruit crops.

Nearly 400 New York fruit growers will be contacted in October to collect information on fruit crops such as pesticides and fertilizers used, acres treated and rates applied.

Because of the challenges and unique issues facing today's fruit growers, participation in this survey is vital. Only by contacting growers directly can NASS compile and publish the most reliable statistics possible.

These statistics will give growers an opportunity to tell how they use agricultural chemicals responsibly to produce a safe and abundant food supply for the United States and the world. Survey results are official USDA data that help to clarify the facts about chemical use in agriculture. This information is used in the decision-making process for the Food Quality Protection Act (FQPA), which has an impact on pesticide registrations, re-registrations and product alternatives.

"We safeguard the confidentiality of all survey responses," said Stephen Ropel, Director of USDA's National Agricultural Statistics Service, New York office. "Data collected from individual operations are combined with other responses to provide the needed data. We will not disclose any data about an individual operation."

NASS will publish the Fruit Chemical Usage report with state and national estimates of fruit growers' use of agricultural chemicals in July 2006. For a copy of this report or to obtain other agricultural statistics visit our Web site at www.usda.gov/nass/ or call 800-821-1276.

JOHANNS AND OTHER USDA OFFICIALS CONTINUE FARM BILL LISTENING TOUR

New York Farm Bill Forum Scheduled for September 29, 2005

DECATUR, IL, Sept. 1, 2005 - Agriculture Secretary Mike Johanns announced the next series of Farm Bill Forum's today. The public is invited to attend and offer comments on farm bill policy.

"I'm learning a great deal from the people participating in the Farm Bill Forums," said Johanns. "These forums present a tremendous opportunity for the citizens we serve to have a voice in the development of a new farm bill."

The Secretary will conduct the following Farm Bill Forums:

- Sept. 12, Kansas State Fair, Hutchinson, Kansas
- Sept. 14, Salt Lake City, Utah State Fair
- Sept. 15, Grand Island, Nebraska, Husker Harvest Days
- Sept. 20, Farm Science Review, London, Ohio
- Sept. 22, Oklahoma City, Oklahoma State Fair

The following specialty Farm Bill Forum will be hosted by Natural Resources and Environment Under Secretary Mark Rey:

- Sept. 6, 1:00-4:00 p.m. (MDT), Blackfoot, Idaho, Idaho State Fair, West Event Center Free Stage

The following specialty Farm Bill Forum will be hosted by Rural Development Under Secretary Tom Dorr:

- Sept. 7, 12:00-3:00 p.m. (CDT), Huron, South Dakota, S.D. State Fair, Huron Dakota Land Stage

The following specialty Farm Bill Forum will be hosted by Food Nutrition and Consumer Services Under Secretary Eric Bost:

- Sept. 29, 9:00 a.m.-12:00 p.m. (EDT), New York City, N.Y., Alexander Hamilton U.S. Custom House Auditorium
- Sept. 30, 10:00 a.m.-1:00 p.m. (MDT) Cheyenne, Wyo., Little America Hotel

The Secretary has now conducted forums in Tennessee, North Dakota, Minnesota, Wisconsin, Iowa, California and Pennsylvania, Alabama, New Mexico, Kentucky and Illinois. Forums have also been conducted by top USDA officials in Indiana, Wyoming, and Alaska.

When participating in the forums, the public is encouraged to respond to one or more of the following six questions. The format of the forum will also allow an open comment period for general farm bill comments.

1. How should farm policy address any unintended consequences and ensure that such consequences do not discourage new farmers and the next generation of farmers from entering production agriculture?
2. How should farm policy be designed to maximize U.S. competitiveness and our country's ability to effectively compete in global markets?
3. How should farm policy be designed to effectively and fairly distribute assistance to producers?
4. How can farm policy best achieve conservation and environmental goals?
5. How can Federal rural and farm programs provide effective assistance in rural areas?

6. How should agricultural product development, marketing and research-related issues be addressed in the next farm bill?

The public is also welcome to submit their comments via the USDA Farm Bill Forums website at http://www.usda.gov/farmbill

Throughout 2005, Johanns and other senior USDA officials will participate in the Farm Bill Forums that will be held across the country. The dates, locations and times of the forums will continue to be announced as they are scheduled and posted on the USDA website.

NEW STANDARD TO COME FOR PESTICIDE CONTAINER RECYCLING

A new national standard that specifies best management practices for recycling used, non-refillable, plastic pesticide containers is being developed. "Millions of plastic pesticide containers are used and disposed of every year in the U.S.," said Nancy Fitz, a chemical engineer at the US. Environmental Protection Agency Office of Pesticide Programs. "We believe that the time has come for a nationally recognized consensus standard that will encourage more container recycling."

Fitz is co-chair of the committee tasked with developing this standard. Committee members include representatives from the Association of American Pesticide Control Officials, the American Association of Pesticide Safety Educators, the Chemical Producers and Distributors Association, the National Pesticide Stewardship Alliance, and pesticide manufacturer and distributors sectors.

The project will draw upon the experience of the Ag Container Recycling Council (ACRC). "While ACRC will continue to collect containers, this standard will provide a concrete guide to those companies that may wish to implement their own recycling programs," said Johnny Berry, an ACRC member and the standards committee co-chair. "We also believe that any organization or company that claims to be recycling, or says it supports recycling, should have a clear standard available against which to evaluate that claim."

The committee expects that have the standard completed by early 2006. The American Society of Agricultural and Biological Engineers is developing this standard in cooperation with CropLife America and ACRC. Anyone interested in more information on this effort should contact Nancy Fitz at: Fitz.Nancy@epamail.epa.gov.

(Source: The Ag Container Recycling Council and CropLife Magazine)

NASS TO ASSESS BENEFITS OF CONSERVATION PROGRAMS

How are farmers and ranchers conservation practices improving water, soil and air quality and enhancing wildlife habitat across the country? To help answer this question, the U.S. Department of Agricultures National Agricultural Statistics Service (NASS) will conduct the Conservation Effects Assessment Project (CEAP) starting in September.

"The 2002 Farm Bill provided historic levels of funding for conservation programs," said Stephen Ropel, Director of USDA's National Agricultural Statistics Service, New York Field Office. "CEAP will offer USDA, the agricultural community, policymakers and the general public a measure of the benefits achieved through this investment."

Selected producers will be asked for information about their farming activities, land management practices and participation in USDA conservation programs. The information gathered through CEAP will be combined with data from other sources to create a complete picture of environmental and conservation management conditions across the United States.

NASS closely safeguards the confidentiality of all survey responses. Information from individual producers and operations is never disclosed, but is used in combination with other responses to set state and national estimates.

"By participating in CEAP, farmers and ranchers have an opportunity to ensure that conservation programs will continue to keep Americas working lands healthy and productive into the future," Ropel said.

For more information about CEAP and other surveys conducted by NASS, contact the New York Field Office at (518) 457-5570.

NEW GRANTS AVAILABLE FROM NORTHEAST SARE PROGRAM

Starting in 2006, the Northeast SARE program will offer grants to organizations such as community nonprofits, Cooperative Extension, local governments, educational institutions, planning boards, farming cooperatives, and incorporated citizens' groups.
The purpose of the Sustainable Community Grants program is to reconnect rural revitalization and farming. Projects can address adverse issues such as land use, nutrition, employment, markets, education, farm labor, public policy, and environmental quality. We seek proposals that will bring together farmers, local government, citizens, community nonprofits, extension, civic and environmental organizations, and others who contribute to community vitality. Projects should support appropriate growth, improved quality of life, a cleaner environment, and farm diversity and profitability.

To apply, you must be affiliated with an organization such a community nonprofit, Cooperative extension, local government, an educational institution, a planning board, a farming cooperative, or an incorporated citizens' group. You must also be able to accept responsibility for the grant on behalf of the organization and be in a position to sign a performance contract, manage the grant submit interim and final reports using the World Wide Web, and respond to any inquiries. All applications must come from an individual within an organization. Unaffiliated individuals may not apply.

This service area of the organization must be within the region served by the Northeast Sustainable Agriculture Research and Education (SARE) program and the Northeast Regional Center for Rural Development. This region is made up of Connecticut, Delaware, Massachusetts, Maryland, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia, and Washington D.C.

More information and a downloadable application form are available from: http://www.uvm.edu/~nesare/. Sustainable Community Grants proposals must be received by 4 PM on Friday, November 18, 2005.

NASGA SUMMER TOUR HIGHLIGHTS 2005

Marvin Pritts, Department of Horticulture, Cornell University's College of Agriculture and Life Sciences, Ithaca, NY 14853

On August 17 -19, a busload of NASGA growers visited farms and markets in the Lower Hudson Valley, outside of New York City. The intention of the organizers was to show how farmers have adapted to a crush of people surrounding the farm. A common factor across all the farms was that they considered people to be an asset, and were modifying operations to take advantage of a well-off population. For some farmers, strawberries no longer had a place in the farm operation because the land had to return a higher value than strawberries could provide. For other farms, strawberries had an important role to play, although in all cases they were part of a diverse mix of crops.

Adam's Fairacre Farms was established in 1919. They used to grow strawberries, but many of the fields have been paved over in order to accommodate a very large greenhouse operation, nursery, garden center, and store. The paved fields were stocked with containerized trees selling for hundreds of dollars each. The business grows 100,000 mums and 70,000 poinsettias, supplying stores in many neighboring states. They now sell fencing, landscape supplies and power tools to complement the "farm market" that now mostly resembles a grocery store. The focus is definitely on high value products in order to survive the high taxes and land values in the area.

Sugar Maple Farm is another example of a more traditional 500-acre farm, once owned by J.C. Penney, that has evolved to produce extremely high value products – in this case, thoroughbred racehorses. We saw stallions worth more than one million dollars, and who fetch $3,500 for a stud fee.

We visited Barton Farms, listed by USAToday as one of the top five PYO farms in the country. They used to grow strawberries, but no longer do – not because strawberries are a poor crop for them, but because the number of people who visit is so great, that they can survive the stress only by concentrating customers during the fall months. They now focus exclusively on late summer and fall crops such as grapes, fall raspberries, apples, pumpkins, and other vegetables. The

Bartons are easily accessible from New York City, and the publicity that the farm has received has attracted people from the inner city. These folks are difficult to manage in the fields, compared to traditional customers who understand a little something about agriculture and usually have had some prior experience on a farm. To accommodate the number of visitors, the farm is open at night and has several activities that extend the hours of operation.

One blueberry farmer from Iowa related to me that they have a similar strategy, but in his case, they concentrate customers to Saturday mornings. This is the only time they open, and the blueberries do just fine with once-a-week harvesting. This has enabled them to cut down on labor since the operation only has to be supervised for a short time each week. And they get all the fruit harvested because demand is so great.

Wilklow Orchards, on first appearance, is more typical of farms in the Northeast. The have 60 acres of tree fruit, strawberries, raspberries, blackberries, blueberries and currants, 30 acres of vegetables, and flowers such as lilacs. However, they are selling these products at very high-end markets. Many of the fruits are processed into jam and baked goods. These, together with the fruits and vegetables, are sold at farm markets in NYC where they bring very high prices. At Rockefeller Center, day-neutral strawberries were selling for $3.50 a pint. But to take advantage of the city markets, Fred gets up at 2:30 am, packs the truck, and heads to the city at 3:30 am. He sets up the stand (fee is $175/day) so he is ready to go when everyone else is waking up in the city. The stand is taken down around 6:00 pm and he returns to the farm by about 8:30 pm.

We also visited The Poughkeepsie Farm Project, a CSA on the Vassar College campus. The CSA is organic, and expects members to work for several hours on the farm as part of their share. They grow a wide range of fruits and vegetables, including some great-looking strawberries. The Project has 200 shareholders, and in additional to supplying them with fruits and vegetables, contributes a significant amount to the local food pantry.

Our last visit was to the Hunts Point Terminal Produce Market in New York City. As the largest produce market in the world, it receives product from 55 countries via truck, plane, train, and rail. The market covers 125 acres, accommodates 2,500 buyers each day, and employees 10,000 people. More than $2 billion is sales occurs through the facility each year. The market is planning to expand because business is good, as 20 million people live within a 50 miles radius of the facility. Berries were a strong component of the business – at least one company told us that berries exceeded bananas in total sales. The sellers told us that 1 lb. packages were best for strawberries, since few NYC residents had refrigerators large enough to accommodate bigger units. Top quality berries with stems were selling for $36/flat. Most berries were from the West Coast, although I did see some black currants from Sand Hill Berries in Pennsylvania. The sellers told us that local berries generally did not hold up well in the market because they are not handled properly after picking.

This tour highlighted some of the ways that growers have adapted to increases in population, land values, and taxes, and a decrease in farm labor supply. These growers did not give up when their situation changed, but modified their practices, through lots of hard work, to take advantage of their new situation.

AS THE TEMPERATURE *FALLS*, HI TUNNEL RASPBERRIES ARE ON THE *RISE*

Hans M Spalholz, Graduate Student, Department of Horticulture, Cornell University's College of Agriculture and Life Sciences, Ithaca, NY 14853

As the interest of commercial operations in off-season growing and niche marketing increases, more research has turned its focus to season extension technologies in fruit production. One such technology is the use of high tunnels. The potential and promise of high tunnels in raspberry culture seems to be great but the science behind it still needs to be fine-tuned. We need to identify the right varieties, know how to best manage plants, and above all, if the use of season extension technology is economically viable on the farm.

In an attempt to answer some of these questions, we planted a field of fall-bearing raspberries in April of 2004. All canes were mowed to the ground in the fall. In spring of 2005, we installed the framework for a tunnel over the planting. The tunnel was covered with plastic on September 13, 2005, just prior to harvest. This high tunnel measures 96 ft long x 30 ft wide. However, during the summer, plants were treated in various ways to delay flowering and fruiting. Typically, one would prefer that these fall-bearing types fruit early to avoid frost. Our objective was to delay fruiting until late in the fall when the availability of fresh raspberries is low and the price is high.

Our raspberry study has two parts. The first is to monitor the growth and productivity of several promising late varieties that typically fruit too late for the New York climate. The second set of treatments manipulates 'Heritage' so that it fruits later than the normal September season. The five treatments are: 1) an unmanipulated control, 2) applying straw over plots in late February at the rate of 6 tons/acre after a period of cold weather, 3) mowing canes to the ground in early June shortly after they emerge, 4) pinching primocanes (removing the top 4 – 6 inches) when they reach a height of about 2½ ft., and 5) pinching when canes were 3 ½ ft. tall. Each of these 4 treatments delayed flowering, and we are now determining how they affect the time of harvest and yield.

The second part of the experiment examines several high quality varieties that often cannot be completely harvested due to frost. The varieties are Heritage, Caroline, Josephine, Autumn Britten, NY01.63, NY01.64, and NY01.65. These numbered selections were made by fruit breeder Courtney Weber, who suspects they may have traits that will allow them to perform well in high tunnels.

The plastic is on and the sides are now up, and harvesting is underway with data collected twice every week. Although the advent of impending colder weather is not exactly something to look forward to, we are eager to see the results of this experiment in its first fruiting year.

Hope to see you all at the Open House on **Thursday, October 20th** from **1-4 p.m.** We anticipate being in the throes of harvest even though we should have experienced several hard frosts by then that will have ended outdoor harvesting of raspberries.

MARKETING SPECIALTY FRUIT

Wen-fei Uva, Senior Extension Associate, Department of Applied Economics and Management, Cornell University, and Bob Weybright, Agricultural Issue Leader, Cornell Cooperative Extension, Dutchess County

Many horticultural producers have encountered increased marketing and financial challenges due to globalization, retail consolidation, weather events, rising production costs, changing market demands and low prices. Many of them are also exploring new crops and new products to add value to their operations. In the July 2005 *Smart Marketing* article, I discussed the results of market research on how to sell specialty jams and jellies to gourmet consumers.

Through the same market research project, we also explored ways to introduce a new fruit crop or product to the market. We studied three areas -- consumer marketing, gourmet chefs, and produce distributors. I want to look at some relevant marketing issues in this article.

Who Wants Specialty Fruit? - Consumer Marketing
Gourmet consumers in metropolitan areas present the best market expansion potential for specialty fruits and new fruit products. These consumers usually purchase their gourmet food items from various independent stores or farmers' markets, not from supermarkets. To capture this market, specialty fruit marketers should first focus on gourmet food stores and independent produce retailers or farmers' markets, not major supermarkets in the target market area. Since consumers would have little or no experience with the specialty fruit or fruit product, impeccable packaging, along with price is the major communication tools, and marketing should be designed to reflect the image that the new fruit or product is special and gourmet. Once consumers have purchased and tried the product for the first time, quality and taste are the most important factors for return purchases. Overall, gourmet consumers are interested in new products and are willing to pay a premium price for them. To sustain this market interest, it is important for producers to build on high quality products and develop complimentary items for the product line.

Who is Cooking Specialty Fruit – The Gourmet Chef Market
In the food service sector, specialty fruit marketers should first identify cutting-edge operations and individuals, such as high-end restaurants, that have unusual menus and gourmet chefs who are innovative and willing to try new things. Generally speaking, initial contacts with restaurants should be done directly with chefs and not through produce wholesalers. Providing different forms of product samples such as fresh and frozen fruits in whole and pitted forms for chefs to test recipes is an effective way to establish interest. When selling specialty fruit to gourmet chefs, marketers could consider two major types of chefs – the sous-chef or pastry chef.

Sous-chefs tend to use the new fruit products as sauce or garnish for their premium-priced entrée dishes or appetizers on the menu, so they are willing to pay a premium price for the fruit, but the volume needed will be smaller. On the other hand, pastry chefs need higher volumes of fruit for their recipes, and they are more concerned about price of the fruit and the labor involved to process the fruit.

A key element that is appealing to this type of customer is the story that goes along with the fruit or vegetable. While the stories and history might seem boring to you, they are interesting and a quite possibly the deciding factor that determines whether a chef will give the item a try!! Other marketing strategies for this market include working with chefs to develop new recipes, providing them with materials and stories about the fruit, and helping generate publicity that the chefs can use to promote the fruit and dishes on their menus and thereby differentiate their operations. Fundamentally, it is important to make contacts with the restaurants or chefs a couple months before harvest so the chefs can plan their menus and promotion accordingly, and you can work out a viable delivery system. Also, maintaining consistent seasonal supply, high fruit quality and adequate quantity is crucial.

Who Will Sell Specialty Fruit? – The Produce Distributors
Another potential market for specialty fruit and products are wholesale food and produce distributors. Specialty produce purveyors are more likely to be interested in the new fruit and are often willing to test market with small quantities. Initial contact could be done directly with product samples. Produce buyers face an enormous influx of new products every day. To stand out among them, in addition to product features, sellers should use any tangible attributes (native to a region, interesting story or provenance, sustainability, etc.) that could promote the fruit and help generate buyers' interest in the

product. Most likely, the specialty fruit in its fresh form would only be available seasonally. Therefore, clear communication about harvest time, quantity and quality will be very important, and whether frozen products are available during the rest of the year or not. Among the wholesale markets, small processors, gourmet food retailers, and specialty produce wholesalers are the ones who would be most interested in purchasing new specialty fruits and products.

Developing a new fruit or new product takes time, effort, and money. At the product introduction stage, all the entities discussed in this article showed a willingness to pay a premium price for good quality specialty fruit or fruit products that would, in turn, help their own marketing or satisfy consumer interests in new products. This presents a potential for high returns to growers. Therefore, armed with a good understanding of marketing potential and premium price points for different market sectors, growers would be ready to reap the profit when the fruit is ripe.

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** For more information on the Beach Plum Project, see http://www.beachplum.cornell.edu/.

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Red currants

Gooseberries

Elderberries

Hardy Kiwi

BLUEBERRY DISEASE FAST FACTS

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During recent grower visits to Delaware and Tioga counties we encountered some rather usual blueberry diseases for our area, no doubt more prevalent due to our unseasonably warm summer. While neither of the diseases appeared to present a serious threat at the levels that were found in these localities, it is good to be aware of their presence and the potential problems they might pose if infections should become more severe. Below is a brief summary of each disease.

BLUEBERRY LEAF RUST



What: Leaf rust is caused by the fungus, *Pucciniastrum vaccinii*, which now has a new name: *Naohidemyces vaccinii*. The rust's alternate host, hemlock (*Tsuga* sp.) needs to be present for the disease cycle to be completed. The disease first appears as yellow (chlorotic) leaf spots on the upper leaf surface of new blueberry leaves. Spots later turn reddish brown. Entire leaves may turn brown, die, and drop prematurely if infections are severe. Yellowish orange pustules (uredinia) become visible on the lower leaf surface about mid-summer.

When: Airborne spores (aeciospores) infect newly expanded blueberry leaves in spring. Leaf spots usually are first visible mid-season. Spores (urediniospores) released from rust pustules (uredinia) formed mid-season on blueberry lower leaf surface below these leaf spots may re-infect blueberry leaves, leading to disease build-up on blueberry. Telia form in the blueberry leaf infections late in the season. They appear as flat, dark-colored crusts on the lower leaf surfaces. Infected leaves with telia drop to the ground where the fungus overwinters. In early spring, these telia release spores (basidiospores) that infect young hemlock needles. Aeciospores formed on hemlock needles are released to start new infections on blueberry leaves. In southeastern states where hemlock is not present, the disease overwinters on evergreen blueberry leaves.

Where: Leaf rust has been reported from Europe, Argentina, Asia, Mexico, Canada, New Zealand, Australia, and the United States. The disease is most prevalent in the southeastern United States; with localized plant disease outbreaks (epiphytotics) occasionally occur on high bush blueberry in east coast states. Sources for the disease in the mid0atlantic states are believed to be wind-borne urediniospores from southern growing areas. Leaf rust is most prevalent in areas within the natural range of hemlocks.

How: Details on conditions needed for infection under natural conditions are sketchy at best. Leaf rust reportedly develops on newly emerging blueberry leaves in early spring when temperatures reach 20 ^{o}C. A leaf wetness period of 48 hours is sufficient for infection under controlled environmental conditions. Pustules are evident on newly infected leaves 10 days after inoculation.

References:

1. Caruso, F.L., and Ramsdell, D.C. (eds.) 1995. Compendium of Blueberry and Cranberry Diseases. APS Press, St. Paul Minn.

2. DeMarree, J.B., and Wilcox, M.S. 1947. Fungi Pathogenic to Blueberries in the Eastern United States. Phytopathology 37: 487-506.

3. Sato, S.K., Katsuya, K., and Hiratsuka, Y. 1993. Morphology, taxonomy, and nomenclature of *Tsuga*-Ericacae rusts. Trans. Mycol. Soc. Japan 34:47-62.

4. Schilder, Annemiek. 2005. Michigan Blueberry Facts: Leaf Rust. http://www.blueberryfacts.org/leafrust.htm.

5. _____. Common Tree Diseases of British Columbia Conifer Rust Fungi: Hemlock-Blueberry Rust. http:www.pfc.cfs.nrcan.gc.ca/diseases/ctd/Group/Rust/rust10_e.html.

6. Ziller, W.G. 1974. Tree Rusts of Western Canada. Can For. Ser. Publ. No. 1329, Victoria, BC.

BLUEBERRY POWDERY MILDEW



What: This disease is caused by the fungus, *Microsphaera vaccinii*. Most mildew fungi do not kill their host, but instead reduce growth and yield by competing for/depleting host nutrients.

When: The first symptoms usually appear in mid-summer as white patches on upper leaf surfaces of some cultivars. On other cultivars, it may be indistinct and confined to the lower leaf surface. Infected leaves may curl or pucker. Chlorotic spots (lesions) with red borders are common on leaf upper surfaces, and may be confused with symptoms of red ringspot virus (RRSV). However, mildew lesions may be distinguished from RRSV lesions by the appearance of water-soaked areas on the lower leaf surface opposite the chlorotic spots. Cleistothecia are most often found on upper leaf surfaces late in the season. They appear as small black globes with many branched appendages.

Where: Blueberry powdery mildew may be found in most blueberry plantings throughout the United States. This disease is most common and severe in climates that are warm and dry.

How: Mildew spores (conidia) are carried by air currents to emerging tissue and cause infection during periods of high relative humidity. Free water on the leaf surface is not required for infection. Infection may occur in 23 hours, with new spores being produced and matured in 5 days. The onset of cooler weather in late summer shifts the fungus from conidia production to cleistothecia. Whether the fungus overwinters as cleistothecia or mycelium in dormant buds is not known.

What to do:

- Blueberry powdery mildew may be found in most plantings where conditions are favorable for its development, but the risk of damage from this disease is usually considered slight.
- Plant resistant cultivars where disease pressure is potentially high.
- Reduce humidity in the plantings through planting orientation, plant spacing, pruning practices, limiting overhead irrigation.
- Fungicide applications are *not* recommended unless the disease is severe.
- If fungicide applications are used, it is important to make the first application early after petal fall to reduce primary inoculum and applications throughout June, July, and August to reduce secondary infections.

References:

1. Caruso, F.L., and Ramsdell, D.C. (eds.) 1995. Compendium of Blueberry and Cranberry Diseases. APS Press, St. Paul Minn.

2. DeMarree, J.B., and Wilcox, M.S. 1947. Fungi Pathogenic to Blueberries in the Eastern United States. Phytopathology 37: 487-506.

3.Hugulet, J.E., Fulton, R.H., and Veenstra, M.A. 1961. Control of Powdery Mildew of Blueberry. Plant Disease Reporter 45(5): 368-372.

4. Schilder, Annemiek. 2005. Michigan Blueberry Facts: Powdery Mildew. http://www.blueberryfacts.org/powderymildew.htm.

Check out the NYSAES Tree Fruit and Berry Pathology web site at:
www.nysaes.cornell.edu/pp/extension/tfabp

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