New York Berry News

CORNELL UNIVERSITY

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What's Inside

CURRANT EVENTS

February 2, 2008. *Beginning Farmer workshop*. This workshop will focus on the business elements of starting your own rural enterprise. Location and more details to be posted soon! CNY Presented by Cornell Cooperative Extension of Chenango, Fulton-Montgomery, Herkimer, Otsego and Schoharie Counties. For more information, contact Rebecca Hargrave, jrh45@cornell.edu, 607-334-5841.

February 12-14, 2008. *Empire State Fruit and Vegetable Expo – "Growing for the Health of New York"*. Oncenter Convention Center, Syracuse, NY. Program and registration information: http://www.nysaes.cornell.edu/hort/expo/. For general Expo information, please contact Jeff and Lindy Kubecka, New York State Vegetable Growers Association, PO

February 7- 8, 2008. *2008 Farmers' Direct Market Association Conference* Holiday Inn, Waterloo, NY. For more information: http://www.nysfdma.com/.

February 8, 2008. *Bookkeeping Basics For Farms*, 10 am 2:30 pm, Cornell Cooperative Extension Center, 480 North Main Street, Canandaigua. Learn the essential points of farm record keeping and accounting, do-it-yourself software options, farm asset inventories, profit and loss statements, enterprise accounting for half-baked ideas and ash flow management. Most suitable for smaller farms with less than $100,000 in gross revenue. Charge: $15/person and $10 for second person from the same farm, includes lunch. Contact Jim Ochterski at 585-394-3977 ext. 402 or email at jao14@cornell.edu.

February 7-9, 2008. *Pennsylvania Association For Sustainable Agriculture (PASA) 17th Annual Farming For The Future Conference***,** Penn State Conference Center, State College, PA. For more information visit www.pasafarming.org.

February 19, 2008. *Ontario Berry Growers Annual Meeting*, Four Points Sheraton, St. Catharines, Ontario, Canada. See news brief below for more information.

February 20, 2008. *Ontario Fruit and Vegetable Convention: Berry Day*, Brock University, St. Catharines, Ontario, Canada. See news brief below for more information.

February 26, 2008. *Introduction to Berry Growing*, Livingston County CCE, Mount Morris, NY. For more information see news brief below.

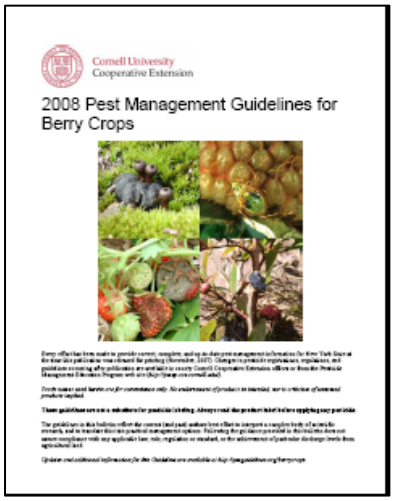
February 28, 2008. *The 2008 Hudson Valley Fruit Grower School - Berry Session*, Holiday Inn, Kingston, NY. Tree Fruit sessions will take place on February 26th & 27th. There will be a Trade Show on the evening of the 26th. Information will be made available at our web site (http://hudsonvf.cce.cornell.edu/calendar.html#fruitschool), or contact Steve McKay for more information.

March 6-8, 2008. *Professional Farmers Market Training Workshop***,** Rochester, NY. Scholarships are available for market managers to participate in Professional Farmers Market Training Workshops. Deadline for scholarship applications is January 15, 2008. For more information on the Professional Farmers Market Managers Training Workshop, call the Farmers Market Federation of NY at 315-475-1101 or log onto www.nyfarmersmarket.com/workshops.htm to view the workshop program, download the registration form and the scholarship application.

March 8, 2008. *Beginning Berry Grower Seminar*, Ontario County CCE, Canandaigua, NY. Contact Russell Welser for more information at: 585-394-3977 or rw43@cornell.edu.

March 25, 2008. *Berry Pest Management Workshop – Taking the Pain Out of Berry Pest Management* 8:30 am -4:15 pm, Jordan Hall Auditorium, NYS Agricultural Experiment Station, Geneva, NY. See brochure insert below for more information.

2008 CORNELL PEST MANAGEMENT GUIDELINES FOR BERRY CROPS NOW AVAILABLE



The 2008 edition of the *Pest Management Guidelines for Berry Crops* is now available. This annual publication provides up-to-date pest management information for blueberry, bramble (raspberry and blackberry), strawberry, and ribes (currant and gooseberry) production in New York State. Supplemental information on wildlife management and harvesting, handling, and transporting berries is also included. It has been designed as a practical guide for berry crop producers, crop consultants, ag chemical dealers, and others who advise berry crop producers.

In addition to annually revised pesticide and crop production information, highlighted changes in the 2008 *Berry Guidelines* include:

- New examples on calculating pesticide rates for small plantings and the amount of fertilizer to apply.
- Addition of biological control guidelines for root weevils in strawberry.
- Discussion on newly approved use of herbicides containing *pendimethalin* on strawberries.

The 2008 *Pest Management Guidelines for Berry Crops* can be obtained through your local Cornell Cooperative Extension office or directly from the Pesticide Management Education Program (PMEP) Educational Resources Distribution Center at Cornell University. To order from the PMEP Educational Resources Distribution Center, call (607) 255-7282 or send an email to patorder@cornell.edu.

The new 2008 guidelines are also available on line at: http://ipmguidelines.org/BerryCrops/.

Paul Baker, Agricultural Affiliates

INTRODUCTION TO BERRY GROWING

Tuesday, February 26, 2008
Livingston County Cornell Cooperative Extension, 158 Main Street, Mt Morris, NY
1 pm-3 pm

So You Want to Be a Berry Farmer?

Cornell Berry Extension Support Specialist Cathy Heidenreich from the Department of Horticulture, College of Agriculture and Life Sciences, Ithaca will present a program on berry growing on Tuesday, February 26 at the Cornell Cooperative Extension building in Mt Morris from 1 to 3pm.

The program will point out the keys to successful commercial and non-commercial berry farming ~~including~~ marketing, startup costs, site selection, preparation and layout, cultivar selection and planting, crop production and management, labor, and profitability. Strawberries, brambles, blueberries, currants and gooseberries will be included in discussions. Topics include nutrient management, weed, insect and disease management, trellising, irrigation and more. Printed materials are included in the presentation and production guides for brambles, highbush blueberries and strawberries will be available to examine for ordering.

There is no fee, but registration is suggested to assure notification of any change in scheduling. Phone 585-658-3250 for registration or questions.

Allstar Cast of Speakers

Dr. Juliet Carroll

Fruit IPM Coordinator
NYS IPM Program
Geneva, NY 14456

Dr. Kerik Cox

Tree Fruit and Berry Pathology
Department of Plant Pathology
NYSAES, Geneva, NY 14456

Dr. Greg Loeb

Grape and Small Fruit Entomology
Department of Entomology
NYSAES, Geneva, NY 14456

Dr. Andrew Landers

Spray Application Technology
Department of Entomology
NYSAES, Geneva, NY 14456

Bruce Wadhams

Spray Application Technology
Department of Entomology
NYSAES, Geneva, NY 14456

Dr. Beth Gugino

Nematology
Department of Plant Pathology
NYSAES, Geneva, NY 14456

Dr. Robin Bellinder

Weed Science
Department of Horticulture
CALS, Ithaca, NY 14456

Chris Benedict

Weed Science
Department of Horticulture
CALS, Ithaca, NY 14456

Polycom Locations:

Oneida County CCE

121 Second Street, Oriskany, NY 13424

More information: Jeff Miller, 315-736-3394-ext 120, jjm14@cornell.edu

Registration: Cindy Craven, 315-736-3394 ext 124, clc66@cornell.edu

Chautauqua County CCE

3542 Turner Rd Suite 1, Jamestown, NY 14701

More information: David Munsee, 716-664-9502 ext 202, dm276@cornell.edu

Registration: Emily Runge, 716-664-9502 ext 209, ear6@cornell.edu

Essex County CCE

3 Sisco Street, Westport, NY

More information: Anita Deming, 518-962-4810, ald6@cornell.edu

Other polycom locations pending

BERRY PEST MANAGEMENT WORKSHOP

Taking the Pain out of Berry Pest Management

Date: March 25, 2008

Time: 9:00 AM to 4:00 PM

Sponsored by:

NYFVI
NEW YORK FARM VIABILITY INSTITUTE, INC.

N.Y. State Berry Growers Association

Jordan Hall Auditorium
New York State Agricultural Experiment Station
630 West North Street
Geneva, NY 14456

Program Details

Growers, extension personnel, and consultants alike will benefit from the information presented in this day-long berry pest management workshop.

The workshop will provide an in-depth look at berry pest management from A to Z, from reviews of best management practices for various pest groups to updates on cutting edge berry pest management research and extension work at Cornell University College of Agriculture and Life Sciences.

DEC re-certification credits will be available for categories 1A, 10, and 22.

Can't make it to Geneva? Take in the conference at one of our polycom locations across the state (listed on the back of the brochure).

Plan to join us for this informative event. Hope to see you there!

Morning Session

8:30 AM Registration

9:00 AM IPM Elements for Berry Crops

9:30 AM Berry Insect Management Overview

10:00 AM TRAC Berry Software Overview

10:20 AM Break

10:30 AM Research Update, Berry Insects

11:00 AM Diagnosis, Visual Assessment and Management of Plant-Parasitic Nematodes of Small Fruit

12:00 noon Lunch

Afternoon Session

1:00 PM Berry Pesticide Application Technology

1:45 PM Sprayer Calibration Demonstration

2:00 PM Berry Disease Management Overview

2:30 PM Break

2:40 PM Research Update, Berry Diseases

3:10 PM Berry Weed Update

3:50 PM Upcoming Events for 2008 Season

4:15 PM Dismiss

Driving Directions: Take NYS Thruway to Exit 42. Turn left on NY 14 South from off ramp. Merge right immediately onto Route 96 North towards Phelps. Turn left on County Route 6/Pre-Emption Road. Turn left onto West North Street. Turn left into the parking lot at Jordan Hall. Park in the rear of the lot. Meeting is on the second floor. Restrooms are in the basement as you enter from the parking lot.

Berry Pest Management Workshop Registration Form

Name(s) of those attending

Name(s) of those attending

Name(s) of those attending

Name(s) of those attending

Company/Farm

Address

Phone

Method of Payment

Total enclosed

☐ Check

☐ Credit Card

Credit Card #

Exp. date

Name as it appears on the card

Signature

Fee for registration is $25.00, which includes lunch and program proceedings.
Checks should be made payable to:
Cornell University
Pre-registration forms must be received by Tuesday, March 18, 2008.

Sponsored by:
New York Farm Viability Institute
and
New York Berry Growers' Association

Mail form with payment to:
Nancy Long
NYS Agricultural Experiment Station
630 West North Street
Geneva, NY 14456
Fax: 315-787-2443

Questions?
Cathy Heidenreich
Phone: 315-787-2367
E-mail: mcm4@cornell.edu
or
Laura McDermott
Phone: 518-746-2562
E-mail: lgm4@cornell.edu

BERRY TOPICS AT THE ONTARIO FRUIT AND VEGETABLE CONFERENCE

The Ontario Berry Growers Association Annual meeting is Tuesday Feb 19, 2008, followed by the berry day at the Ontario Fruit and Vegetable Conference, Feb 20, 2008, both in St. Catharines, Ontario.

The Ontario Berry Growers Association is a strong supporter of research in Ontario and several presentations feature the results of such work. By attending this meeting you will be the first to hear results from projects on marketing, irrigation water quality, soil moisture monitoring and on farm variety trials. Grower-led panel discussions and round table topics are an important part of the 2-day program. Guest speakers from Florida, Ohio and Quebec will share their expertise on berry production systems from high tunnels to plasticulture and organic. Pest management also features strongly in the program, with updates on weed management, Japanese beetle and on-farm projects.

The berry program was developed by the Ontario Berry Growers Association education committee and OMAFRA, for strawberry, raspberry and other small fruit growers. Plan to attend the entire program, February 19-20, 2008. The OFVC conference and trade show continue on Feb 21. Stay another day to take in more sessions, including Local Foods, and Traceability.

For more information contact Kevin Schooley, 613-258-4587, or kconsult@allstream.net

Ontario Berry Growers Association Annual Meeting, Wednesday February 19, 2008

Four Points Sheraton Suites, St. Catharines, Ontario, Canada

9:30 am	**Raspberry cane diseases** - Pam Fisher, OMAFRA
10: 00 am	**Grower profile: Josmar Acres** - Andrea Otten
10: 45 am	**Panel Discussion: Transitioning your business to the next generation** – Facilitator: Peter Coughler, OMAFRA, Panellists: Paul and Ted Watson, Lee and Brad Etherington, Norm and Luc Charbonneau.
11:30 am	**Development of an Eastern North America Year Round Strawberry Industry** – Adam Dale, University of Guelph, and Craig Chandler, University of Florida
12:00 am	**OBGA annual meeting**
1:30 pm	**Pricing berries** - Bert Andrews, Andrews Scenic Acres and Kevin Schooley, KS Consulting
2:00 pm	**Container study and consumer preferences,** Andreas Boecker, University of Guelph
2:30 pm	**Round table discussions.** Join 3 of the 6 discussions, 30 minutes per round **Raspberry yields** (Lee Etherington and Adam Dale) **Containers** (Andreas Boecker.) **Pest management and organics** (Joe Kovach) **Festivals** (Geoff Dixon, Target Marketing) **Farm succession planning** (Peter Coughler) **Great strawberry varieties** (Craig Chandler)
4: 00 pm	**OBGA promotions** - Kevin Schooley, OBGA and Geoff Dixon, Target Marketing
7:00	**OBGA Hospitality Suite -** Enjoy some hospitality with fellow members! A great opportunity to network.

Ontario Fruit and Vegetable Convention Berry Session, Wednesday February 20, 2007

Brock University, St Catharines, Ontario, Canada

9:30 a.m.: **Ensuring Quality Plants from the Ontario Plant Propagation Program**
Adam Dale, Professor, Department of Plant Agriculture, University of Guelph
Guidelines for the Ontario berry plant propagation program have been updated to ensure confidence in plant health, trueness to type and performance.

10:00 a.m.: **Irrigation Water Quality and Berries**

Lindsay Arthur, Applied Research Coordinator - On-Farm Food Safety, Ontario Ministry of Agriculture, Food and Rural Affairs
What happens when surface water is applied by overhead irrigation to strawberries in the field: results of a project requested and funded by the OBGA.

10:30 a.m.: **Weed Management News for Berry Growers**
Leslie Huffman, Weed Management Specialist (Horticultural Crops), Ontario Ministry of Agriculture, Food and Rural Affairs
New products, techniques, and noteworthy research from the world of weed management.

11:00 a.m.: J**apanese Beetle: Where Did It Come From and What To Do About It**
Joseph Kovach, Associate Professor of Entomology and Integrated Pest Management Coordinator, Ohio State University
The quarantine on Japanese beetle has been lifted within Ontario and the province is now generally infested. Learn how to recognize and control this pest on blueberries and raspberries.

11:30 a.m.: **On-Farm Berry Project Results: Variety Trials, Cane Diseases, Root Weevils**
Pam Fisher, Berry Crop Specialist, Ontario Ministry of Agriculture, Food and Rural Affairs
Highlights of some recent OMAFRA berry team projects including the on-farm variety trials

12:00 -2:00: Lunch

2:00 p.m.: **Organic Strawberry Production in Ohio and Can Consumers Tell the Difference**
Joseph Kovach, Associate Professor of Entomology and Integrated Pest Management Coordinator, Ohio State University
A matted row strawberry planting was established to evaluate different composts and cultivars for organic production. Find out how different treatments affected cost of production, consumer preferences and nutraceutical content.

2:30 p.m.: **Strawberry Production Systems: Florida And Beyond**
Craig K. Chandler, Professor, Gulf Coast Research & Education Center, University of Florida
From Florida plasticulture production to table top production and stacking systems: a review of modern strawberry production systems and why they work where they do.

3:00: **Berry Production Systems: Moving Forward in Quebec**
Luc Urbain, agronome , Ministère de l'Agriculture, des Pêcheries et de l'Alimentation, Québec
High tunnels are catching on in Quebec for primocane fruiting raspberries.

3:30: **Soil Moisture Monitoring: Can Technology Help You with Irrigation Scheduling?**
Bano Mehdi, Professional Associate, Brace Centre for Water Resources Management
Find out how growers used soil moisture monitoring equipment to schedule irrigation in fruit and vegetable crops and how to choose the technology that suits your needs.

DIAGNOSIS, VISUAL ASSESSMENT AND MANAGEMENT OF PLANT-PARASITIC NEMATODES OF VEGETABLES AND SMALL FRUIT IN THE NORTHEAST

Ever wonder what plant-parasitic nematodes do to you crops and profitability, or how you can manage them on an as-needed basis? Then plan on attending one of our NE-SARE funded workshops titled "Diagnosis, Visual Assessment and Management of Plant-Parasitic Nematodes of Vegetables and Small Fruit in the Northeast". This workshop has been designed to train participants (county extension educators, regional specialists, crop consultants, IPM practitioners, interested growers and other ag service providers) throughout the Northeast in nematode diagnosis and management and to provide hardcopy and electronic resources that can be used on-the-farm and in various outreach activities. The topics to covered include: nematode biology and ecology (aka Nematology 101); signs and symptoms of nematode damage in the field and on vegetable, small fruit and some ornamental crops; soil nematode assessment (focusing on on-farm methods); and management options and managing nematodes on an as-needed basis.

The next two day-long workshops will held from **8:30 am to 5:00 pm** on **March 10th** in **Batavia, NY** at the **First United Methodist Church** and on **March 20th** in **Fairlee, VT** at the **Morey Lake Resort**. The workshop facilitators include George Abawi and Beth Gugino from Cornell University, Jim LaMondia from The Connecticut Agricultural Experiment Station and Deb Neher from the University of Vermont.

Although there is no fee to attend (and lunch and coffee breaks are provided), pre-registration is requested for planning purposes. For additional information or to register for either workshop please contact Beth Gugino at (315) 787-2412 or bkg9@cornell.edu. Additional information regarding the workshop is also available at http://www.nysaes.cornell.edu/hp/events/index.php.

For the March 10th workshop in NY, an application for DEC recertification credits in categories 1A, 10, 22 and 23 has been submitted. If you can not attend either of these workshops, this workshop will be held in eight additional locations (TBD) across the Northeast during fall/winter 2008/2009. Several of those will be held in conjunction with other larger state and regional meetings.

NEW DEPARTMENT OF HOMELAND SECURITY RULES CAN AFFECT CROP FARMERS

John Lory, Division of Plant Science and Commercial Agriculture Program, University of Missouri College of Agriculture, Food and Natural Resources

On November 20 Department of Homeland Security (DHS) released the final part of a rule that requires a facility that possesses significant quantities of "chemicals of interest" to register with the government by January 22, 2008. The rule includes a list of regulated chemicals and the "threshold quantity" above which an entity is required to register. The rule also requires any operation that obtains more than the threshold quantity of any chemical of interest to register with the government within 60 days of possession. The intent of the rule is to manage terrorism risk associated with chemical facilities. DHS has authority to impose fines of up to $25,000 per day for non-compliance.

The chemical of interest most likely to affect crop farmers is ammonium nitrate. The rule requires anyone possessing more than one ton of any material that contains 23% or more as nitrogen in the form of ammonium nitrate must register in the program. The rules do not differentiate based on the time of possession so a person handling more than one ton of ammonium nitrate containing material for a couple of hours or for a couple of months is equally affected.

Other chemicals common on crop farms are on the list including propane and anhydrous ammonia. These chemicals have threshold amounts that will make it unlikely that farmers are affected. Still, farmers should be aware of the limits: propane, 60,000 lbs (material in containers less than 10,000 pounds do not count towards the total); anhydrous ammonia, 10,000 pounds. These quantities may be an issue at distribution centers but most farms will not possess this much of these materials at any one time. Potassium nitrate and sodium nitrate are both chemicals of interest and have the low threshold of 400 pounds. These are infrequently used on conventional row crop farms but may be found on some farms.

Farmers who expect to exceed the possession limit for any one of these chemicals are required to register at a government website and undergo a preliminary screening process using the Chemical Security Assessment Tool (CSAT) called "Top Screen" for short. Based on the Top Screen review the government will determine if the operation "presents a high level security risk" that requires a more detailed assessment and other actions to meet the requirements of the rule.

To learn more about Top Screen and register to gain access to the Top Screen assessment process visit the Homeland Security Web site (http://www.dhs.gov/xprevprot/programs/gc_1169503302924.shtm). The registration process and review process are a multi-step process that cannot be completed in one sitting. Do not wait until the last minute to start this process if you are affected. See the full list of chemicals in the report in the Federal Register at http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/pdf/07-5585.pdf. The chemical list starts on page 65421. Another resource for information may be your fertilizer dealer who should have some experience dealing with these regulations.

(Reprinted with permission from: Integrated Pest and Crop Management, Vol. 17, No. 22, December 14, 2007)

FARMERS GET TEMPORARY REPRIEVE ON CHEMICAL REPORTING REQUIREMENTS

John Lory, Division of Plant Science and Commercial Agriculture Program, University of Missouri College of Agriculture, Food and Natural Resources

On December 21, 2007 the Department of Homeland Security (DHS) indefinitely delayed the requirement that farmers possessing chemicals of interest must register with the government. The announcement released as a letter from the Assistant Secretary at DHS stated that the registration deadline had been extended indefinitely for any farm operation that was registering in the program solely because they had or handled a chemical of interest.

The extension applied to farms (e.g., crop, fruit, nut, and vegetable); ranches and rangeland; poultry, dairy, and equine facilities; turfgrass growers; golf courses; nurseries; floricultural operations; and public and private parks operations. The exemption *does not* apply to chemical distribution facilities or commercial chemical application services; these facilities still are required to meet the January 21, 2008 deadline.

DHS released a list of chemicals in November 2007 and required anyone who possessed more than a threshold quantity of that chemical to register with the government and complete a top-screen assessment. Farmers who handle ammonium nitrate were the most likely to be affected by the rules. Farmers who maintain large inventories of propane, anhydrous ammonia or biogas also had the potential to be affected by the rules.

The indefinite extension of the deadline to register does not mean that farmers will not be affected by these rules. We all will have to wait to see what DHS decides about farm requirements under chemical reporting rules

CROP GROUPINGS EASE REGULATORY BURDENS FOR PESTICIDES USED ON MINOR CROPS

(*Editor's Note: This may be very good news indeed for berry growers, as berries fall under minor crops. Hopefully this will translate into more products becoming available more quickly*.)

SUMMARY: This final rule makes revisions to the pesticide tolerance crop grouping regulations. Crop grouping allows tolerances to be established for multiple related crops based on data from a representative set of crops. The revisions will create a new crop group for edible fungi (mushrooms), expand existing crop groups by adding new commodities, establish new crop subgroups, and revise the representative crops in some groups. Additionally, EPA is revising the general crop group regulation to explain how the Agency will implement revisions to crop groups. EPA expects these revisions to promote greater use of crop groupings for tolerance-setting purposes and, in particular, assist in retaining or making pesticides available for minor crop uses. This is the first in a series of planned crop group updates expected during the next several years.

To read more go to: http://www.epa.gov/fedrgstr/EPA-PEST/2007/December/Day-07/p23659.htm.

(Reprinted from: Federal Register, December 7, 2007 (Volume 72, Number 235), Rules and Regulations, Pages 69150-69158. See table following for current berry and small fruit crop groupings)

TABLE 1.--Crop Group 13-07: Berry and Small Fruit Crop Group	
Commodities	Related crop subgroups
Amur river grape (*Vitis amurensis Rupr)*.....	13-07D, 13-07E, 13-07F
Aronia berry (*Aronia spp.*).....	13-07B
Bayberry (*Myrica spp.*).....	13-07C
Bearberry (*Arctostaphylos uva-ursi*).....	13-07G, 13-07H
Bilberry (*Vaccinium myrtillus L.*).....	13-07G, 13-07H
Blackberry (*Rubus spp.*) (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these.....	13-07A
Blueberry, highbush (*Vaccinium spp.*).....	13-07B
Blueberry, lowbush (*Vaccinium angustifolium* Aiton).....	13-07B
Buffalo currant (*Ribes aureum* Pursh).....	13-07B
Buffaloberry (*Shepherdia argentea* (Pursh) Nutt.).....	13-07C
Che (*Cudrania tricuspidata* Bur. Ex Lavallee)...	13-07C
Chilean guava (*Myrtus ugni* Mol.).....	13-07B
Chokecherry (*Prunus virginiana* L.).....	13-07C
Cloudberry (*Rubus chamaemorus* L.).....	13-07G, 13-07H
Cranberry (*Vaccinium macrocarpon* Aiton).....	13-07G, 13-07H
Currant, black (*Ribes nigrum* L.).....	13-07B
Currant, red (*Ribes rubrum* L.).....	13-07B
Elderberry (*Sambucus spp.*).....	13-07B, 13-07C
European barberry (*Berberis vulgaris* L.).....	13-07B
Gooseberry (*Ribes spp.*).....	13-07B, 13-07D
Grape (*Vitis spp.*).....	13-07D, 13-07F
Highbush cranberry (*Viburnum opulus L. var. Americanum* Aiton).....	13-07B
Honeysuckle, edible (*Lonicera caerula* L. *var. emphyllocalyx* Nakai, *Lonicera caerula* L *var . edulis* Turcz. ex herder).....	13-07B
Huckleberry (*Gaylussacia spp.*).....	13-07B
Jostaberry (*Ribes x nidigrolaria* Rud. Bauer and A. Bauer).....	13-07B
Juneberry (Saskatoon berry) (*Amelanchier spp.*).	13-07B, 13-07C
Kiwifruit, fuzzy (*Actinidia deliciosa* A. Chev.) (C.F. Liang and A.R. Fergusons, *Actinida chinensis* Planch.).....	13-07D, 13-07E
Kiwifruit, hardy (*Actinidia arguta* (Siebold and Zucc.) Planch. ex Miq).....	13-07D, 13-07E, 13-07F
Lingonberry (*Vaccinium vitis-idaea* L.).....	13-07B, 13-07G 13-07H
Maypop (*Passiflora incarnata* L.).....	13-07E, 13-07F
Mountain pepper berries (*Tasmannia lanceolata*)(Poir.) A.C.Sm.....	13-07C
Mulberry (*Morus spp.*).....	13-07C
Muntries (*Kunzea pomifera* F. Muell.).....	13-07G, 13-07H
Native currant (*Acrotriche depressa* R. BR.)....	13-07B
Partridgeberry (*Mitchella repens* L.).....	13-07G, 13-07H
Phalsa (*Grewia subinaequalis* DC.).....	13-07C
Pincherry (*Prunus pensylvanica* L.f.).....	13-07C
Raspberry, black and red (*Rubus spp.*).....	13-07A
Riberry (*Syzygium luehmannii*).....	13-07C
Salal (*Gaultheria shallon* Pursh.).....	13-07B, 13-07C
Schisandra berry (*Schisandra chinensis* (Turcz.) Baill.).....	13-07D, 13-07E, 13-07F
Sea buckthorn (*Hippophae rhamnoides* L.).....	13-07B
Serviceberry (*Sorbus spp.*).....	13-07C
Strawberry (*Fragaria x ananassa* Duchesne).....	13-07G
Wild raspberry (*Rubus muelleri* Lefevre ex P.J. Mull).Cultivars, varieties, and/or hybrids of these.	13-07A

EPA AUTHORIZES CRITICAL USES OF METHYL BROMIDE FOR 2008

Margot Perez-Sullivan, (202) 564-4355 / perezsullivan.margot@epa.gov

In accordance with the Clean Air Act and Montreal Protocol, EPA has issued final methyl bromide production and import critical use exemptions for 2008. EPA also authorized uses that qualify for the 2008 critical use exemption. The exemptions for continued production and import of methyl bromide will honor the U.S. commitment to obtain methyl bromide for American farmers, in a manner consistent with the Montreal Protocol, while protecting the ozone layer.

This action is authorizing 4,813,452 kilograms (4,813.5 metric tonnes) of methyl bromide for approved critical uses in 2008, with 3,083,769 kilograms supplied from new production or import. *Approved critical uses include strawberry and tomato production, as well as commodity fumigation.* In 2008, production or import of methyl bromide in the United States will be almost 88 percent less than 1991 levels. After an October 2006 meeting of the Montreal Protocol parties, which authorized the use of 5,355,946 kilograms, EPA adjusted the authorized amount to account for the increased use of alternatives among methyl bromide users, and unused methyl bromide from previous years, effectively reducing more than 500,000 kilograms of potential methyl bromide releases.

Critical use exemptions are permitted under the Montreal Protocol for circumstances where there are no technically and economically feasible alternatives to methyl bromide. Further, the Clean Air Act Amendments of 1990 direct the EPA to issue regulations to implement the provisions of the Montreal Protocol within the United States.

Allowance decisions for 2009 were made at 19th Meeting of the Parties to the Montreal Protocol in Montreal, Canada in September. The agency is beginning the notice-and-comment rulemaking process for the 2009 calendar year. For more information on the final rule: http://www.epa.gov/ozone/mbr.

VIRUSES UNCOVERED IN BLUEBERRIES IN NEW YORK IN 2007

Juliet Carroll, NYS IPM Program, jec3@cornell.edu

Figure 1. Tomato ringspot disease (TmRSV) on blueberry cv. Patriot.

Further testing to determine the cause of virus-like symptoms troubling a blueberry planting in NY confirmed TmRSV, tomato ringspot virus, in cv Patriot (fig 1) and TRSV, tobacco ringspot virus, in cv Bluecrop (fig 2). Testing of the tissue samples we collected in mid-September was done by Robert Martin, USDA ARS, Oregon State University. Samples tested negative for blueberry shock and blueberry scorch viruses. Marc Fuchs, Plant Pathology, Cornell University, Geneva, also confirmed the ringspot viruses. Both these viruses are nematode-vectored and this may constitute the first report of their occurrence in blueberry in New York.

Figure 2. Necrotic ringspot disease (TRSV) on cv. Bluecrop.

Tomato ringspot is described as a serious and often lethal disease of blueberry in the APS Compendium. The entire planting of Patriot blueberries has been declining for two to three years, possibly longer. Dead plants have been replaced with limited success. Fruit production in the affected Patriots has been poor to none.

Necrotic ringspot is described as causing a slow but steady decline in bush productivity in the APS Compendium and this is essentially what the grower was concerned about with regards to the Bluecrop plants. Dead Bluecrop plants had also been replaced with perhaps greater success than within the Patriot planting.

Soil samples were collected from under the affected Patriot plants and screened for *Xiphenema* species by George Abawi, Plant Pathology, Cornell University, Geneva. None were found, probably due to the fact that samples were collected in September, a poor time of year to conduct soil assays for nematodes.

Marc Fuchs, Kerik Cox (Extension Pathologist, Plant Pathology, Cornell University, Geneva) and I plan to return to the planting next spring to obtain better tissue and soil samples for further testing. We would like to rule out other viruses and

determine if the nematode vector is present in the field.

The most important management practice for these diseases is purchasing and planting certified virus-free plants. Pre-plant soil nematode analysis will also help determine if resident populations of *Xiphenema* pose a risk to new plantings. In addition, growers that propagate their own planting material risk propagating virus-infected plants.

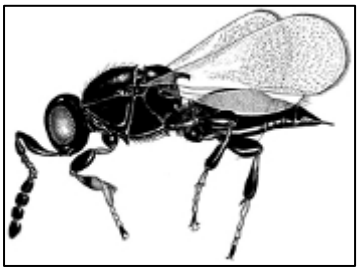
References

Caruso, F.L. and Ramsdell, D.C. 1995. Compendium for Blueberry and Cranberry Diseases. APS Press, St. Paul, MN. 87 pp.

THE GALL OF THAT MIDGE!

Jan Suszkiw, Public Affairs Specialist, Room 1-2220-C, 5601 Sunnyside Ave., Beltsville, MD 20705-5129

January 7, 2008. Tiny wasps discovered by Agricultural Research Service (ARS) scientists in Poplarville, Miss., may help Gulf Coast blueberry growers put the sting on their crop's top insect pest: the gall midge.



Female adult *Synopeas* wasp is about the size of a grain of freshly ground pepper (about 0.3 to 0.5 mm). *Drawing by Blair Sampson.*

As larvae, gall midges feed on the blueberry plant's buds, deforming them and endangering the fruition of up to 10 berries per bud. In Gulf Coast states like Florida, the midges are so prevalent some blueberry growers have abandoned rabbiteye varieties, which the pests commonly attack.

But blueberry growers take heart: The pests themselves are fed on—from the inside out.

Entomologist Blair Sampson made the discovery while working at the ARS Southern Horticultural Laboratory in Poplarville. He and a research assistant were examining a gall midge larva under a microscope when a pair of tiny jaws appeared, tearing at the specimen.

As it turned out, the jaws belonged to an immature wasp—one of four parasitic species that Sampson was to discover. The wasps belong to the genera *Synopeas*, *Inostemma* and *Platygaster*, but Sampson has yet to assign them a species name.

In blueberry fields, a female wasp seeks out midge larvae hiding inside buds and stings them. She then injects her eggs into her prey's stomach and brain. There, the eggs develop into immature wasps that fight for the chance to feast on their midge host. It's a mandible-on-mandible slugfest that ends when only one wasp remains.

Needless to say, the real losers are gall midges. Sampson has determined that a natural population of the wasps in blueberry fields can kill 40 percent of all midges, controlling them for about 200 days.

Sampson will explore the possibility of rearing the wasps for release into areas where years of insecticide use have diminished the insect's natural populations.

Read more about this research in the January 2008 issue of *Agricultural Research* magazine.

ARS is the U.S. Department of Agriculture's chief scientific research agency.

(*Editor's Note:* Greg Loeb, small fruit entomologist at NYSAES says this insect has not been reported as yet as a problem for NY blueberries. He indicated it seems to be causing the most problems for blueberries in southern states like Florida where it attacks flower buds and vegetative buds. However, it has been recently reported in Oregon and Washington where it is more of a problem for vegetative buds and it apparently is found it occur n the Northeast. He suspects they would not handle our winters very well.)

THINGS YOU SHOULD KNOW ABOUT WEIGHTS & MEASURES…

Sandy Buxton, Farm Business Management Educator, Cornell Cooperative Extension – Washington County, Hudson Falls, NY

How does a customer know that what they just paid for is actually what they received? The system that provides this public trust is a carefully regulated process. Controlled by NYS Agriculture and Markets, there are local offices in each county to oversee the equipment and the vendors who are weighing and selling products in their stores, at the market or through a pump.

Basic Rules

There are some very basic rules that are important for everyone to know.

- If you are selling something by weight, you are responsible to make sure that at least the listed amount of weight is contained by the package.
- **All scales must be certified by Weights and Measures PRIOR to using them for weighing out products**. The vendor is responsible for purchasing an approved device AND having it certified by a local Weights and Measures official. Many scales available at common retail outlets are not appropriate for use, visit www.agmkts.state.ny.us/WM/725ver0905.pdf for a list of approved commercial devices. **Do Not Wait to Call, it should be done immediately**. At this time there is no fee in many counties to have equipment certified but that could change and some counties do charge. There is also a fine for not using approved scales and for every miss-weighed unit available for sale.
- The local official, under the auspices of NYS Ag and Markets, may come out to your business, farmers' market stand, roadside stand or other selling venue and check to make sure that your products and labels agree on what is being sold. They also:
  - Enforce the laws and regulations
  - Inspect and test weighing and measuring devices used commercially
  - Inspect and test packaged commodities
  - Regulate commercial weighing and measuring practices used by vendors
  - Investigate consumer and business complaints
- Agriculturally related vendors who need to be aware of the rules and make sure they are abiding by them include:
  - Maple producers – who sell by weight and volume
  - Meat producers – who must make sure that the scales weighing and labeling their products have been inspected and certified.
  - Cheese and dairy producers – who are selling by weight and volume
  - Fruit – both selling by weight as well as the size of berry boxes may be checked.
  - Vegetables – for producers using scales to sell products by weight
  - Other possible concerns – bakers if products are labeled by weight, roadside stands who weigh out many products.

Contact information for local officials can be found at:
http://www.agmkt.state.ny.us/WM/wmdirlst.html

Or at the state level, from their website:
NYS Department of Agriculture and Markets
Bureau of Weights and Measures
10B Airline Drive
Albany, New York 12235-0001
(518) 457-3146
agmweigh@agmkt.state.ny.us

Some Local Scale Suppliers:

Gerhart Scale
PO Box 14501
Albany, NY 12212
www.gerhart.com
(518)459-0033

Global Industrial
1-888-979-7759
www.globalindustrial.com

MAKE SURE THE SCALE IS NYS APPROVED!!

Please note: The New York City Department of Consumer Affairs covers all five boroughs (Bronx, Kings, New York, Queens, and Richmond Counties). The cities of Cohoes and Watervliet in Albany County, Dunkirk in Chautauqua County, Mount Vernon and Yonkers in Westchester County have programs that are independent of the county program. Weights and measures officials throughout the State routinely inspect a wide range of commercial devices and packaged commodities to assure accurate measure in the marketplace. These inspections serve to eliminate from the marketplace those devices and packages that do not provide an accurate measure of the commodities or services that are exchanged. The inspections involve more than just accuracy tests, as the official must verify that the device or package meets other operational and/or marking and labeling requirements.

Officials inspect only commercial devices, that is, those used in the weighing or measuring of commodities for sale and those used to measure services rendered on the basis of weight or measure. Gas pumps, grocery store and deli scales, and truck mounted oil meters are some of the more common devices inspected. Devices such as taximeters, farm milk tanks, wire and cordage meters, and berry baskets also fall under the jurisdiction of weights and measures.

Look for the Weights and Measures Seal on Devices

The seal indicates that that device has been inspected and was performing correctly and within the applicable tolerances.

SOLUTION SOUGHT FOR BLACK RASPBERRY DECLINE

Laura McGinnis, *Agricultural Research Service Information Staff, 5601 Sunnyside Ave., Beltsville, MD 20705-5129; phone (301) 504-1654, fax (301) 504-1486*

Oregon farmers have been growing black raspberries for more than a century for making jams, beverages, desserts, and natural colorants. A source of nutritious anthocyanins, other antioxidants, and vitamin A, black raspberries have many potential health benefits.

For decades, Munger has been the cultivar of choice for the Pacific Northwest, where most of the nation's black raspberries are grown. But growers have recently started to seek more vigorous alternatives.

"In the past, growers would plant black raspberries and harvest crops for 10 years before replacing them," says Robert R. Martin, research leader of ARS's Horticultural Crops Research Unit at Corvallis, Oregon. "Then in the 1990s, the plants started losing vigor. You'd be lucky to get three harvests, and many growers were replacing their plants after two."

ARS scientists are working with farmers and industry members to identify the problem's origin and develop control strategies.

Black raspberry leaf with symptoms of black raspberry necrosis virus. **(D993-2)**

Virus Vectors

Martin, a plant pathologist, has discovered several viruses that may contribute to the berries' poor health. The most significant is black raspberry necrosis virus, which has been present in all observed cases. The virus can exist in isolation, Martin says. But the more severe form of decline growers have been experiencing is always accompanied by another virus: raspberry bushy dwarf, raspberry mottle, black raspberry latent––or any combination of the three.

Understanding how these diseases are transmitted and how they interact with their plant hosts is essential to controlling the problem. For example, scientists know that raspberry bushy dwarf and black raspberry latent viruses are pollen borne and have fairly mild symptoms in black raspberry. Scientists are less likely to be successful in controlling the problem by targeting the pollen-borne viruses, since preventing pollination would reduce fruit set and quality and severely affect production.

"The other two diseases are aphid transmitted, which gives us more options for an effective vector-control strategy," Martin says.

Research assistant Michael Dossett examines raspberry plants for aphids. **(D990-18)**

He and his colleagues have identified the raspberry aphid as a major culprit in the spread of black raspberry necrosis virus and raspberry mottle virus. Aphids are very effective disease vectors because they can transmit a virus to a plant in a few seconds. Since aphids can spread viruses in less time than it takes pesticides to kill the aphids, spraying black raspberry fields might not be an effective prevention strategy.

One potential solution would be to surround black raspberry fields with trap plants, such as blackberries, that also appeal to raspberry aphids but are not susceptible to this severe decline. Instead of spraying the entire field, growers could simply treat the bordering plants with a low-toxicity pesticide. Those plants would act as a barrier, ensuring that the aphids are defeated before they have an opportunity to spread the virus.

The raspberry aphid, *Amphorophora agathonica,* has been identified as a major culprit in spreading black raspberry necrosis virus and raspberry mottle virus. **(D992-20)**

Breeding Benefits

Plant geneticist Chad Finn is investigating the possibility of breeding disease- and insect-resistant black raspberry plants. Several years ago, he and his colleagues collected and assessed 16 different commercial cultivars. All were obtained from either commercial nurseries or the ARS National Clonal Germplasm Repository (NCGR) at Corvallis. They tested the plants for yield, berry size, vigor, and flowering and fruiting times. With Oregon State University graduate student Michael Dossett, they crossed among the eight most promising cultivars as well as with two selections from the wild. They examined the offspring to assess genetic variability and inheritance of various fruit and plant traits.

Dossett worked with ARS food technologist Jungmin Lee at Parma, Idaho, to evaluate the usefulness of the resulting populations as parental material for fruit chemistry traits in future breeding efforts. They measured the berries' Brix (a measure of sweetness) and titratable acidity—qualities that can influence commercial success—as well as their phenolic and anthocyanin contents. Anthocyanins are the dark pigments that make black raspberries ideal as natural colorants, and recent studies suggest that they could have anti-degenerative and anti-inflammatory effects.

Plant pathologist Robert Martin studies the results of serological tests on plant viruses. **(K10711-6)**

Dossett examined the results to determine which traits, such as nutritional benefits, the breeders could select for. But analysis of the initial crosses revealed a dearth of diversity—with one notable exception. A selection from the wild in North Carolina consistently produced vigorous, healthy, sturdy offspring that seemed to be less susceptible to disease than the other plants in the study. The anthocyanin makeup of these plants was also significantly different from that of the cultivars.

The results suggest that it is possible to breed black raspberries for improved characteristics, but the process could be slow and would likely benefit from introduction of wild germplasm.

Seed Search

Based on those findings, Finn, Dossett, and Kim Hummer, research leader and curator of NCGR, received grant funding to collect wild black raspberry germplasm in the eastern United States.

In June 2007, Hummer and Dossett traveled more than 2,000 miles to collect 15 accessions of black raspberries from 15 locations in South Carolina, Georgia, and Alabama. In July, Finn and Dossett traveled an additional 2,500 miles to collect 29 black raspberry accessions from locations in Kansas, Nebraska, South Dakota, and Minnesota.

"Between the two collecting trips and seed received from colleagues, we now have material from wild populations in 23 states and 2 Canadian provinces," Dossett says.

Plant geneticist Chad Finn evaluates black raspberry plants.
(D991-36)

Now the scientists are assessing the variability of the plants produced from the newly obtained seed accessions. Initial observations have revealed diversity in several characteristics, including thorniness, ripening time, and picking ease. They are comparing the diversity and characteristics within subsets of the population—for example, black raspberries obtained from Alabama—and within the entire population. This information can help breeders decide whether and where to seek more germplasm for breeding purposes.

During the initial screenings, scientists identified some resistance to the aphid vector of many of the viruses, raising hopes of developing cultivars resistant to the aphid-transmitted viruses. Ultimately, the scientists hope to breed a replacement for Munger with comparable flavor, nutritional quality, and fruit chemistry characteristics as well as superior hardiness, longevity, and aphid resistance.

In autumn of 2007 they planted the seeds they collected. Tests on those plants will reveal whether wild eastern black raspberry germplasm can be used to breed hardier plants for commercial use in Oregon or whether breeders should use another tactic, such as crossing black raspberries with red raspberries that have greater vigor.—

This research is part of Plant Genetic Resources, Genomics, and Genetic Improvement (#301), Plant Biological and Molecular Processes (#302), Plant Diseases (#303), and Crop Production (#305), four ARS national programs described on the World Wide Web at www.nps.ars.usda.gov.

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Questions or Comments about the New York Berry News?
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