New York Berry News

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No room for discussion in this month's issue, so jump right in and see for yourself all that's new and noteworthy in berry production information. And just look at all those educational opportunities!

CURRANT EVENTS

Nov. 26, 2007. *Berry Weed Workshop*. Voorheesville, NY. Sponsored by the NYFVI berry production project. For more information, Laura McDermott, 518-746-2560 or lgm4@cornell.edu

Nov. 29, 2007. *Deer Control Management Workshop*, Wolcott, NY. Hosted by Cornell Cooperative Extension's Lake Ontario Fruit Program, Agr. Assistance, Finger Lakes Trellis, and Beth and John Marriott For more information, see news brief below.

December 4-6, 2007. *Great Lakes Fruit, Vegetable and Farm Market EXPO*, DeVos Place, Grand Rapids, MI, for more information: www.glexpo.com.

December 7, 2007. *Introduction to Berry Growing*, Civil Defense Center, Bath, NY, 1 PM. Sponsored by the Steuben County CCE. See news brief below for more details.

December 12, 2007. *Strawberry IPM, one of the talks offered at the Finger Lakes Produce Auction Growers' Meeting*, Yates County Office Building, 417 Liberty Street, Penn Yan, New York. For more information: 315-536-5123.

Jan. 29-31, 2008. (A berry triple header!)
Mid-Atlantic Fruit and Vegetable Convention, Hershey Lodge and Convention Center, Hershey, PA. For more information Contact William Troxell, 717-694-3596.

Annual meeting of the North American Strawberry Growers Association will be held in conjunction with the Mid Atlantic Fruit and Vegetable Convention (above), and the National American Bramble Growers meeting (below). For more information: see news brief below or contact Kevin Schooley at kconsult@allstream.net or visit www.nasga.org.

NABGA Annual Bramble Conference will be in Hershey, Pennsylvania in association with the Mid-Atlantic Fruit and Vegetable Convention and the North American Strawberry Growers Association. For more information contact: Debby Wechsler, 1138 Rock Rest Rd. Pittsboro, NC 27312, **nabga@mindspring.com**.

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

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 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.

NYS BERRY GROWER SURVEY ON IT'S WAY

Watch your mailboxes for a copy of the NYS Berry Growers Survey! The purpose of the survey is to evaluate communication between researchers and growers and to assess current production practices. Surveys have been sent by snail mail or e-mail to berry growers in New York State. The survey can also be accessed at **http://www.fruit.cornell.edu/berries/survey.htm**. Your completed survey done on line or returned in the post paid envelope by **November 30, 2007** enters you in the prize drawing:

1st prize:	A complete set of NRAES Production Guides for Small Fruit, including strawberries, blueberries, and brambles ($128 value)
2nd prize:	2008 Cornell Pest Management Guidelines for Berry Crops ($25 value)
3rd prize:	*Greenhouse Raspberries* and *High Tunnel Raspberries and Blackberries* ($18.50 value)

Survey results will be compiled and shared with you through NY Berry News, the Empire Expo and other venues in early 2008. We hope to hear from you! *If you have any questions at any time* please feel free to contact the researchers conducting the study; Rebecca Harbut (email: rmh44@cornell.edu phone: 607-254-2945), Cathy Heidenreich (email mcm4@cornell.edu, phone 315-787-2367), Laura McDermott (email lgm4@cornell.edu, phone 518-642-1007) or Dr. Marvin Pritts (email: mpp3@cornell.edu, phone: 607-255-1778).

DEER CONTROL MANAGEMENT WORKSHOP

Thursday November 29th, 2007 - 10:00am to 11:30am
Marriott Orchards, 4779 Crane Rd. Wolcott NY.

Come hear about the latest research in deer and vole control management, innovative fencing and trellising supplies, and deer permits. This workshop will feature Dr. Paul Curtis, Assistant professor and coordinator of the Wildlife Damage Program in Cornell's Department of Natural Resources, Jim Eckler, a wildlife biologist with the Department of Environmental Conservation, and Todd Smith from Finger Lakes Trellis Supply (formerly Innovative Fence).

Hosted by Cornell Cooperative Extension's Lake Ontario Fruit Program, Agr. Assistance, Finger Lakes Trellis, and Beth and John Marriott.

Workshop agenda:

10:00	Welcome and Introductions (Jay Osborne CCE LOF, Jeff Alicandro Agr.Assistance).
10:10-10:40	Status of current research in deer and vole control management (Paul Curtis, Cornell Univ.).
10:40-11:10	Post-pounders, deer fence options, orchard supplies – (Todd Smith, Finger Lakes Trellis Supply).
11:10-11:30	Deer management and nuisance permits (Jim Eckler, NYS DEC).
11:30	Adjourn.

*******Sponsored by Agr. Assistance and Finger Lakes Trellis Supply. Coffee, donuts, and deer jerky will be provided.*******

To register please call Lindsay Alicandro of Agr. Assistance (585) 734-8904 or email lindsayalicandro@agrassistance.com or call Jay Osborne of CCE Lake Ontario Fruit Team (315) 719- 1318 or email jlo25@cornell.edu to register.

Driving directions to Marriott Orchards (John & Beth Marriott). The workshop will be held at 4779 Crane Road in Wolcott just north of Paul Wagner's farm. Take Route 104 west to Route 89 south. Take the Route. 89 ramp and merge onto Wolcott Spring Lake Road. (CR 262). Turn right onto Butler Center Road (CR 264). Turn right onto 4779 Crane Road.

STEUBEN CCE HOSTS INTRODUCTION TO BERRY GROWING

Introduction to Berry Growing will be offered Friday, Dec. 7, 2007 at 1:00 p.m. at the Civil Defense Center, Bath, NY. This course is sponsored by the Steuben County Cooperative Extension Office. Cathy Heidenreich, Western NY Berry Extension Support Specialist from Cornell's Department of Horticulture, will explain what to consider before becoming a berry grower: site selection and planting, brief overview of crop production for strawberries, raspberries,

black berries, blueberries, currants and gooseberries, and concluding with general information on pest management and marketing/profitability. This free workshop will offer light refreshments and must be reserved by Dec. 5 by calling 607-664-2300. For more information contact Stephanie Mehlenbacher at sms64@cornell.edu.

2008 NABGA CONFERENCE PREVIEW

Things are shaping up for the North American Bramble Growers Annual Conference January 29-31 in Hershey, PA! Details will be coming to you in the next issue, with registration and hotel information. This conference is cooperation with the North American Strawberry Growers Association and the Mid-Atlantic Fruit and Vegetable Convention. Here are some of the events and topics that are planned:

Tuesday, January 29

• An all-day tour. Stops include the Landisville Research Farm, Brown's Farm Market, Nissely Winery, Verdelli's produce packing operation, and of course, Chocolate World. We are, after all, in ***Hershey***, Pennsylvania!
• An all-day workshop on Fundamentals of Berry Production. For part of this workshop, strawberry and bramble growers will be together, then they will split into separate groups.

Wednesday, January 30

• "Showcase Farm" presentation featuring Sand Hill Berries of Mt. Pleasant, PA. This farm is a long-time member of NABGA (Susan Lynn is currently on the Executive Council, and Richard Lynn serves on the NABG Research Committee). It has about 20 acres of raspberries including red, black, and golden raspberries, and another 14 of blackberries, strawberries, currants, gooseberries, blueberries, and kiwiberries. It also has some terrific marketing, including a brand-new winery, an on-farm store, a cafe, and lots of value-added products.
• Talks on specific bramble topics, including breeding and new cultivars, and an extended session on protected raspberry culture (high tunnels and greenhouses).
• Many other concurrent activities of interest to bramble growers, including direct marketing sessions, a large trade show with over 140 exhibitors, and posters. Strawberry and vegetable sessions will also be running.
• In the evening, a Berry Film Festival, organized by Sand Hill Berries (see box).

Thursday, January 31

• The "Showcase Farm" will feature Charlie O'Dell of Crow's Nest Farm in Blacksburg, VA. Charlie is already well known to many outside the region for his magazine articles and his work with colder-climate plasticulture strawberries. Retired as Virginia Tech horticulture specialist, on his farm, he has kept his zeal for eye for research, observation, and experimentation! The farm has eight acres of blueberries, thornless blackberries, primocane-bearing raspberries, seedless table grapes and tree fruit, marketed through PYO and at a farmers' market. Charlie is also the Region 7 rep on the NABGA Executive Council.
• Bramble sessions on weed control, pest control, and other topics.
• The NABGA annual meeting (over lunch).
• Concurrent sessions on strawberries, blueberries, food safety, direct marketing, financial management, vegetables, tree crops, and flowers.
• Trade Show and posters.

The Location

The conference will be at the Hershey Lodge and Convention Center. Hershey is located 15 minutes from Harrisburg International Airport (HIA), served by seven major airlines; the Lodge offers shuttle service for a small fee. Baltimore-Washington Airport (BWI) is about 90 minutes away.

Hershey is well known as the home of Hershey Chocolate; the smell of chocolate pervades the town and a tour of Chocolate World is practically obligatory. Gettysburg Battlefield is about 45 minutes away, and Lancaster, in the heart of Pennsylvania Dutch country, is about 30 minutes away. Hershey is only a few hours from Washington, DC, Baltimore, New York, and Philadelphia. For more information, visit: http://www.hersheypa.com/.

NABGA is seeking sponsors and exhibitors for this meeting; if your company is interested in becoming a sponsor or exhibiting at the trade show, contact Debby Wechsler, 1138 Rock Rest Rd. Pittsboro, NC 27312, nabga@mindspring.com.

North American Bramble Growers Association

PROTECTED RASPBERRY CULTURE TO BE FEATURED AT 2008 NABGA CONFERENCE

lan to attend this "mini-workshop" on Wednesday, afternoon, January 30! Both greenhouse and high tunnel production will be addressed. Comments Ralph Cramer of Haygrove Tunnels, "Raspberries respond extremely well to tunnels. Growers report that compared to field production, the shelf life is more than double and the yield is more than triple. Plus the average price is higher because they harvest earlier and later than the field. One tunnel grower is averages 11,000 pounds per acre on 12 acres of tunneled Autumn Britten and he harvested 14,000 pounds on his best acre. He rarely has to spray any fungicides. As he says, "Growing raspberries in tunnels is a no-brainer."

NORTH AMERICAN STRAWBERRY GROWERS ASSOCIATION ANNUAL MEETING AND CONFERENCE

The North American Strawberry Growers Association (NASGA) will hold its annual conference January 29-31, 2008 in Hershey, Pennsylvania. This special **North American Berry Conference** is a cooperative event with the North American Bramble Growers Association, and will be held in conjunction with the regional Mid-Atlantic Fruit and Vegetable Convention.

Attendees will have a tremendous amount of selection between sessions, tours and workshops over the three days of this conference. Growers are encouraged to bring their spouse, family members and staff to take in as much information as possible.

On Tuesday, January 29th there will be a tour of local farms, and ag-related businesses. Those not interested in the tour can participate in an all-day workshop on Fundamentals of Berry Production or attend any of the other sessions offered as part of the Mid Atlantic Conference.

Day 2: Wednesday, January 30, features a "Grower Showcase" presentation from Sand Hill Berries of Mt. Pleasant, PA, one of the region's leading berry producers. Strawberry topics include an in-depth look at day neutral production, and soil health and pest management discussions.

Day 3 On Thursday, January 31, the "Showcase Farm" will be Crow's Nest Farm in Blacksburg, VA, the farm of retired Virginia Tech extension horticulturalist Charlie O'Dell. Strawberry topics include a plasticulture production, weed management and a look at new strawberry varieties. Attendees can also participate in the Bramble sessions, blueberry session or any of the other sessions offered as part of the conference.

Membership Benefit: One free conference registration will be provided to all NASGA members who submit their membership dues prior to December 31, 2007.

A large trade show and poster display will be held throughout the conference.
The conference will be at the Hershey Lodge and Convention Center, in Hershey, Pennsylvania. Hershey is located 15 minutes from Harrisburg International Airport (HIA), served by seven major airlines; the Lodge offers shuttle service for a small fee. Baltimore-Washington Airport (BWI) is about 90 minutes away.

This conference has tremendous value to all those who participate! Not only will there be fabulous educational opportunities but what many consider the biggest value is the networking among other growers, researchers and extension. Don't miss this great opportunity.

For more information regarding the conference or an updated agenda contact Kevin Schooley at 613-258-4587, info@nasga.org or visit the NASGA website at www.nasga.org

PESTICIDE APPLICATOR EXAM SCHEDULE NOW POSTED ON DEC WEBSITE

The New York State Department of Environmental Conservation's schedule of upcoming pesticide applicator exams is now posted on the DEC website. You can access it from the Pesticide Certification and Registration page http://www.dec.ny.gov/permits/209.html at the bottom under the heading "More about Pesticide Certification and Registration". The first link under that heading is for the Statewide Pesticide Exam Calendar.

Here is a direct link to the exam schedule page: http://www.dec.ny.gov/permits/39583.html

PLEASE NOTE: You must contact the New York State Department of Environmental Conservation regional office offering the exam to pre-register. "Walk-Ins" are NOT allowed! When you pre-register, you will need to provide proof of eligibility to sit for the exam. You can also obtain information about exam fees, location and time of the exam, and any special requirements for taking the exam. This is also a good time to ask any questions you may have about the certification process.

For more information:

Maggie O'Neil, Chief, Pesticide Reporting & Certification Section
NYS Dept. of Environmental Conservation
625 Broadway, Albany, NY 12233-7254
Phone: 518-402-8748
Email: meoneil@gw.dec.state.ny.us

IMPORTED BEES NOT SOURCE OF VIRUS ASSOCIATED WITH COLONY COLLAPSE DISORDER

Kim Kaplan, Agricultural Research Service News Service, USDA, (301) 504-1637

Beltsville, Md., Nov. 19--Scientists from the U.S. Department of Agriculture's Agricultural Research Service (ARS) have found that the Israeli acute paralysis virus (IAPV), a virus recently shown to be associated with Colony Collapse Disorder (CCD) of honey bees, has been in the United States since at least 2002, according to a note published in the American Bee Journal.

Research entomologists Yanping (Judy) Chen and Jay D. Evans, both with the ARS Bee Research Laboratory here, conducted a detailed genetic screening of several hundred honey bees that had been collected between 2002 and 2007 from colonies in Maryland, Pennsylvania, California and Israel.

"Our study shows that, without question, IAPV has been in this country since at least 2002," said Chen. "This work challenges the idea that IAPV is a recent introduction from Australia."

Evans added, "Our study in no way rules IAPV out as a factor in CCD. We have always believed that CCD is a complex issue likely involving multiple elements. Research by several groups will now focus on understanding differences in virulence across strains of IAPV and on interactions with other stress factors."

IAPV showed a high degree of genetic diversity in the U.S., with distinct lineages in California, Maryland and Pennsylvania. The virus was found to be substantially different from the well-studied Kashmir Bee Virus.

IAPV, first described in Israel in 2002, came to national and international attention in September when university and ARS scientists, including Evans, showed a strong association between the presence of IAPV and CCD.

That first study also found IAPV in honey bees from Australia that had been imported into the United States, as well as in royal jelly imported from China. Australian bees began to be imported from Australia into the United States in 2005. Questions were raised about a connection between those imported bees and the appearance of IAPV in the United States. Beekeepers have sought out Australian imports of bees to replenish their hive populations.

ARS has begun several experiments to determine what factors may be most involved in CCD. Combinations of four areas are being examined: pathogens, parasites, environmental stresses, and bee management stresses such as poor nutrition.

CCD became a matter of concern in the winter of 2006-2007 when some beekeepers began reporting losses of 30 to 90 percent of their hives. While colony losses are not unexpected during winter weather, the magnitude and rapidity of loss suffered by some beekeepers was highly unusual.

The defining trait of CCD is a low number of adult honey bees present with few signs of dead honey bees in the hive. Often there is still honey in the hive and immature bees (brood) are present, indicating recent brood rearing.

Pollination is a critical element in agriculture, since honey bees pollinate more than 130 crops in the United States and add $15 billion in crop value annually. There were enough honey bees to provide pollination for U.S. agriculture this year, but beekeepers could face a serious problem next year and beyond if CCD becomes more widespread and no treatment is developed.

More information about CCD can be found at www.ars.usda.gov/is/br/ccd/.

NEW COMPLIANCE INFORMATION FOR ALL EMPLOYERS (AGRICULTURAL AND NON-AGRICULTURAL)

Last week the Department of Homeland Security (DHS) made two major announcements concerning the I-9 Form and H-2A Petitions.

Form I-9
The U.S. Citizenship and Immigration Services (USCIS) branch of the DHS has issued a revised *Form I-9, Employment Eligibility Verification*, and *M-274, Handbook for Employers, Instructions for Completing the Form I-9*. **Employers should use the new form effective November 7, 2007 on all new hires* (you will not need to fill out the new form for current employees).**

The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) mandated a reduction in the number of documents that employers may accept from newly hired employees during the employment eligibility verification process. In 1997, the former Immigration and Naturalization Service (INS) published an interim final rule in the Federal Register eliminating some of the documents IIRIRA slated for removal. However, Form I-9 was not updated to reflect the revised List of Acceptable Documents at that time. USCIS has revised Form I-9 to bring it into compliance with the 1997 regulation as a first step toward achieving the document reduction goals set out in IIRIRA and as a further step in its ongoing work toward reducing the number of documents used to confirm identity and work eligibility.

The most significant change to the revised Form I-9 is the elimination of five documents from List A of the List of Acceptable Documents. The documents that have been removed from List A are:

- Certificate of U.S. Citizenship (Form N-560 or N-561)
- Certificate of Naturalization (Form N-550 or N-570)
- Alien Registration Receipt Card (I-151)
- Unexpired Reentry Permit (Form I-327)
- Unexpired Refugee Travel Document (Form I-571)

One document was added to List A of the List of Acceptable Documents:

- Unexpired Employment Authorization Document (I-766)

All the Employment Authorization Documents with photographs that are in circulation are now included as one item on List A:

- I-688, I-688A, I-688B, I-766

The new Form I-9 in both English and Spanish (Employers may use the Spanish version as a translation guide for Spanish-speaking employees, but must complete the English version and kept it in the employers records) and the Employers Handbook are available from the USCIS website as downloadable PDFs at www.uscis.gov.

Employers are required by law to complete Employment Eligibility Verification forms (Form I-9) for all employees, including United States citizens.

H-2A Petition
USCIS has also announced that **effective December 10, 2007 it will only accept H-2A petitions mailed to its California Service Center**. New York producers should no longer mail their petitions to the Vermont Service Center. USCIS will return to the petitioner any H-2A petition received in Vermont on or after December 10, 2007. According to USCIS, this centralization is planned to streamline the H-2A process and improve service for agricultural employers. Producers should use the following address:

U.S. Citizenship and Immigration Services
California Service Center
ATTN: H-2A Processing Unit
P.O. BOX 10140
Laguna Niguel, CA 92607-1040

USING BEETLE BIOLOGY TO PROTECT BEEHIVES

Sharon Durham, *Public Affairs Specialist, USDA Agricultural Research Service Information Staff, Beltsville, Maryland.*

A new way to lessen damage from small hive beetles in honey bee colonies has been developed by Agricultural Research Service (ARS) scientists in Gainesville, Fla. Small hive beetles (*Aethina tumida*) began appearing in U.S. hives during the past 15 to 20 years and now infest bee colonies throughout the East.

Peter Teal, leader of the Chemistry Research Unit at the ARS Center for Medical, Agricultural and Veterinary Entomology in Gainesville, and his colleagues have developed an apparatus and attractant to help beekeepers protect their honey bees. A paper on this research recently appeared in the Proceedings of the National Academy of Sciences.

Small hive beetles release a yeast that's highly alluring to fellow beetles. When the yeast grows on pollen in the hive, it attracts more beetles and sets off a cascading effect. When the population of beetles explodes, the disturbed bees leave the hive, according to Teal. This leaves beekeepers without honey or their bee colonies.

To exploit the small hive beetle's biology, Teal installed traps baited with the yeast below test hives belonging to cooperating beekeepers. The traps were separated from hives by sliding doors drilled with conical holes that allowed the beetles to enter the traps, but not to exit.

The researchers believe these traps will solve the problem for small-scale beekeepers, which make up 60 percent of the industry. These small-scale bee keepers tend their hives daily and can clean their traps frequently. For large-scale beekeepers who maintain up to several thousand hives, Teal's team hopes to develop a new trap requiring less management.

If perfected, this trap could be a boon to the bee industry in Florida, which is a common overwintering destination for commercial bee colonies. A patent for the trap was filed in March 2005. Teal hopes to apply the same principle to reduce populations of Varroa mites, another significant pest in honey bee hives.

Read more about the research in the November/December 2007 issue of Agricultural Research magazine, available at: http://www.ars.usda.gov/is/AR/archive/nov07/beetle1107.htm. ARS is the U.S. Department of Agriculture's chief scientific research agency.

NASS URGES FARMERS TO COUNT THEIR FARMS ALONG WITH THEIR BLESSINGS THIS HOLIDAY SEASON

As New York farm families gather this Thanksgiving to count their many blessings and give thanks for another successful harvest, the National Agricultural Statistics Service (NASS) New York Field Office urges these producers to ensure their farm is also counted in the 2007 Census of Agriculture. The Census is a crucial tool that provides farmers with a voice in the future of their community and operation.

"Thanksgiving reminds us that it can be easy to take for granted having a safe and bountiful food supply when farmers have been doing such a great job ensuring our nation has the nutrition and resources it needs to live well," said Steve

Ropel, director of the NASS New York Field Office. "But to ensure farmers can continue feeding and clothing a growing world, we need to provide them with the programs, services, and tools they need. To do this, we urge them to speak out and let their voices be heard by participating in the 2007 Census of Agriculture."

Conducted every five years by the USDA, the Census is a complete count of the nation's farms and ranches and the people who operate them. The Census looks at land use and ownership, operator characteristics, production practices, income and expenditures and other topics. It provides the only source of uniform, comprehensive agricultural data for every county in the nation.

"Thanksgiving is the perfect time to remind farmers how important they are and how much the nation appreciates their hard work," said Ropel. "It's also a good time to remind them that they have a voice and a responsibility to use that voice to make a better future. Tools like the Census enable farmers to help shape the future of agriculture and their own local communities."

NASS will mail out Census forms on December 28, 2007 to collect data for the 2007 calendar year. Completed forms are due by February 4, 2008. Producers can return their forms by mail or, for the first time, they have the convenient option of filling out the Census online. For more information about the Census, visit www.agcensus.usda.gov or call toll-free (888) 4AG-STAT or (888) 424-7828.

REDUCING COMMON GROUNDSEL IN STRAWBERRY FIELDS

Leslie Huffman - Weed Management Specialist (Horticultural Crops)/OMAFRA

Common groundsel is an annual weed that continues to cause problems for strawberry and vegetable growers. It is a fairly short weed, with slightly fleshy leaves similar to dandelion. Like its cousins in the Composite family, groundsel has a distinctive composite flower with many florets. Look for the cluster of small yellow flowers that quickly shed an abundance of seeds, flying away on the wind.

The problem is that groundsel can germinate, flower and shed seed in a very short time, especially under warm conditions. We often find very tiny plants with flowers and seeds shortly after mowing. These seeds continue the cycle, as they are not dormant and germinate almost immediately after hitting the ground. Usually 50% of the seeds germinate immediately after dispersal.

*Left: Common groundsel (*Senecio vulgaris*) can be significantly reduced with diligent prevention efforts over 2 years. Right: Dandelion and other broadleaf weeds can be controlled with post-harvest applications of 2,4-D in orchards.*

Common groundsel is a particular problem for strawberry growers because our common strawberry herbicides – Treflan (Note: *Not labeled for use in NY)*, Sinbar, and 2,4-D - do not control it well. So growers who notice a few small plants in the spring may find their field totally covered in common groundsel by the fall, and many strawberry fields have been removed a year or two early because of common groundsel.
Fortunately, Devrinol herbicide will prevent groundsel germination. Our strategy in strawberries has been to target Devrinol in early September for winter annuals.

Recent research in Ohio has shown that groundsel that germinates in the fall produce seeds with a longer dormancy that will persist in the seed bank. This study also showed that 94% of groundsel seed that is buried will either germinate or die within 24 months. This indicates that a focused effort for 2 years can practically eliminate groundsel, especially if control efforts are focused in the fall.

Several approaches will be needed to reduce common groundsel:

- Frequent cultivation in the year of planting are needed. Groundsel seedlings are most susceptible to cultivation before the first true leaf, and can easily re-root if cultivation is delayed until weeds are larger.
- Application of Devrinol at Labor Day (followed by irrigation if ½" of rain does not fall) will prevent establishment of winter annual forms that produce dormant seed.
- Using Lontrel (*Stinger is NY equivalent for this product*) in your renovation program will reduce groundsel, although weeds that have already formed seeds will continue to shed them.
- Using Sinbar regularly also reduces groundsel to some extent.
- Hand weeding of groundsel escapes will be important, especially on new fields, and during the early fall.

Where groundsel has become a severe problem, growers have had success in switching to a reduced-till system using chemical renovation (i.e. narrowing rows with Gramoxone, with no soil tillage). By the 2nd year, groundsel problems have been drastically reduced, especially if weed escapes are removed as well.

We know that several approaches are needed to manage common groundsel, and focusing efforts to eliminate the fall population will help reduce long-term problems. Another example where knowledge of the weed's biology can help us achieve the control level we need.

(Reprinted from: The Ontario Berry Grower, Vol. 6, November 2007)

KNOW YOUR ENEMY: BINDWEED

David H. Johnson, Senior Research Associate and Associate Professor, Pennsylvania State University Southeast Research and Extension Center, Manheim, Pennsylvania

Field bindweed (*Convolvulus arvensis*) is considered one of the 10 worst weeds in the world, and with good reason. It is highly invasive in several habitats, including agricultural fields, roadsides, orchards, and riparian zones, and it is very difficult to control. This weed is native to Eurasia and was introduced into North America in grain and garden seeds during the colonial period. This plant has an attractive flower, and was even used for some ornamental purposes. A similar species, hedge bindweed (*Calystegia sepium*), also occurs commonly in this area.
Field bindweed is a perennial plant, and re-grows from roots each year. It has an extensive root system that acts as a large storage organ for carbohydrates, allowing this weed to re-emerge time and again after removal of the foliage by cultivation, hand pulling, or herbicides. The long, thin vines can grow to 6 feet or longer, and have numerous small, arrow-shaped leaves.

These vines grow along the ground or wind their way up other plants, fence posts, etc, and can “strangle” other plants. The real action occurs underground, however, and it extensive root system can very effectively compete with desirable plants for moisture. These roots can grow to depths of 20 feet, but most roots occur near the surface. Root pieces can also form adventitious buds, which can produce new roots and foliage. A root piece as little as 2 inches long can produce new plants, so it is easy to spread this weed by tillage and cultivation.

This plant produces numerous, attractive, trumpet-shaped flowers that are usually white or have a pinkish tint. These flowers produce round seeds that are very tough. These seeds can survive methyl bromide fumigation, and have even been known to germinate after storage for 50 years. However, its main method of spread is by roots.

While I have no data to support this, I would think that tall-growing, thickly planted cover crops could be effective at smothering this weed. A thick stand of something like sorghum-sudangrass might be effective. Another might be buckwheat. Although buckwheat doesn’t grow very tall, its thick growth might effectively shade out bindweed plants. This would probably have to be done for more than one year to be effective.

While tillage can spread this weed, it can also aid control by exposing roots to desiccation. Roto-tilling will only act to chop up the roots and rebury the pieces, creating new plants. There is a bindweed mite that will colonize the plants and suppress the growth, but these will not generally provide control. Bindweed foliage is actually a decent forage, and grazing sheep will also suppress growth.

Field bindweed control is very difficult in most crops. Glyphosate products have marginal activity at normal use rates, and most herbicides can not adequately kill root tissue, and so the plant can reemerge. Gramoxone, which only kills the foliage that the spray droplets touch, will not affect the root tissue. As mentioned above, tillage, while removing the top growth, often makes the problem worse by spreading root pieces. If allowed to grow too big, the vines can wrap around crop plants and cause damage as they are removed. This can be especially troublesome in vegetable crops.

The growth regulator herbicides that include the active ingredients 2,4-D and dicamba are probably the only herbicides really effective on bindweed. Products containing dicamba include Banvel, Clarity, Marksman, Distinct, Northstar, Yukon, and others, but none of these are labeled for most vegetable crops (*or berries*). 2,4-D (amine formulations) can be used in sweet corn (*also in strawberries, but not other berry crops*) , and I have achieved fair bindweed control with this product. These products can be used in field corn, though, and one alternative is to grow field corn for a few years and use these products to control bindweed.

As with most perennial weeds, probably the best time for chemical control is the fall. At this time, perennial weeds are saving up carbohydrates in the roots and crowns to help them survive the winter and provide energy for re-growth the next spring. The plant is busy translocating sugars from the leaves to the roots, and herbicides that translocate, such as glyphosate, can be carried into the root tissue where they can cause damage. This will weaken the plant for next year. At the research farm we commonly spray herbicides on bindweed patches (and other perennial weeds such as thistles) in the fall. This should be done prior to a hard frost.

I believe that the best recommendation for bindweed is not to grow vegetables (*or berries*) in fields where it is established, and be very careful about transferring it to clean fields with your equipment. If you see any bindweed vines or roots hanging from your chisel plot or cultivator tines, stop and remove them before entering a new field. Once established, this weed is very difficult to control.

(Editor's comments appear in parentheses in text. Reprinted with permission from: The Penn State Vegetable & Small Fruit Gazette, Volume 11, No. 11, November 2007)

RAISING PREMIUM FRUIT

Debby Wechsler, Executive Secretary, North American Bramble Growers Association, Pittsboro, NC.

At New York City's Greenmarket in Union Square, people line up to get Jack Torrice's raspberries on Saturday morning. They pay $6.00 for a half pint. Sometimes they buy a lot of them. Jack says that when one man who usually bought a dozen instead bought thirty, he asked him about it. "I just really like raspberries," the man said. Though the market runs 8 am until 6 pm, Jack always sells out by 11:30.

Chefs call him up to find out when he will start coming. Why the fuss? Jack Torrice raises greenhouse raspberries. His raspberry harvest season starts in mid-April and finishes in mid-June, about two weeks before the field-grown raspberries from New Jersey and Pennsylvania start to come into the Greenmarket.

Raspberries are all he's allowed to sell there; although he also has flowers at that time of year, this well-established, popular farmers' market only gives out new spaces based on products needed, and they already had plenty of flower growers. Jack and his wife, Martha, farm in Oswego, NY, a six-hour drive from New York City. The main crops at Fruit Valley Orchard are tree fruit – they have about 60 acres of apples, pears, and cherries— plus a couple of greenhouses of flowers. Everything sells locally except the raspberries; he could never get that kind of price in Oswego.

Winter greenhouse raspberry production has many advantages for northern growers, including:

- *Little to no domestic competition.*
- *Retail price is between $3.00 and $6.00 per half pint.*
- *Greenhouses are often empty between December and April.*
- *Farm labor is generally underutilized in winter.*
- *Raspberries grow best at cool temperatures.*
- *Raspberries do not require supplemental light to produce fruit.*
- *Raspberries can be produced in greenhouses without pesticides.*
- *They can be harvested close to market at the peak of flavor.*
- Quality is superb.

A few years ago, diversifying, he planted about a fifth-acre of raspberries for PYO. Then, after he heard a talk on greenhouse raspberry production at a NY growers conference, he bought Cornell's *Greenhouse Raspberry Production Guide* (see resources below), and gave it a try. "They are a lot more fun to grow indoors," says Jack. He started three years ago with one 20 x 72 greenhouse and 128 raspberry plants, putting them in 3-gallon pots, with a soil-less potting mix and drip irrigation.

The following year, he moved the plants to a 30 x 90 greenhouse, and increased to 180 plants. Last year, he had divided some of these and had 305 plants in two 30 x 90 greenhouses; he will add another 45 plants to fill them up this year. About four-fifths of the plants are Tulameen and the rest are Titan.

In late June, the plants are moved outside, where they stay until they receive their requisite 800 chilling hours. Then, Jack moves them into the greenhouse and fires up the heat, and they break dormancy in a few weeks. Usually they have fulfilled their chilling requirement by January first, though last year it was so warm, they didn't meet this requirement until the end of January, which threw the harvest season off. And last year, the Tulameen plants suffered major cold damage when the weather dropped to 12 degrees before Christmas. In hindsight, he says, he should have moved the plants indoors, but he hadn't expected it to get that cold, and it is a *lot* of work to move all those pots. The Titan plants weren't affected.

Jack buys a box of bumblebees for each greenhouse for pollination, carefully screening off the fans so they don't get chewed up. He has not had to spray for pests or diseases in the greenhouse, but notes that if a problem happens in the greenhouse, it can get out of hand in a hurry. One year, spider mites started to build up, but it was at the end of the season, so after he took them outside, he sprayed them with dormant oil.

In early April, the berries are just starting to ripen in the greenhouse. Orange twine supports the plants. A few weeks later than in the photo to left, in late April or early May, plants are much taller and berries are being harvested. Photos by Dena Fiacchino.

Jack starts picking on Sunday for next Saturday's market. The secret of success for this extended shelf life is that all the fruit is harvested with the calyx intact: the berries are clipped from the plant with scissors instead of being pulled off the plant. The stems are cut very short so that they don't poke holes in other berries. The fruit are harvested directly into clamshells and then stored at the recommended 37 degrees. When he sells, Jack does not distinguish between berries picked almost a week ago and those Jack, "Often people say that they just finished the ones they bought last week – and those berries are almost two weeks old." The berries are big and with those little stems, sometimes people even think they are strawberries.

RESOURCES

Greenhouse Raspberry Production Guide, Dept. of Horticulture Publication No. 23, by Kurt Koester and Marvin Pritts, 38 pages.

The online version can be viewed or downloaded at www.fruit.cornell.edu/Berries/bramblepdf/ghrasp.pdf.

To order bound copies, send a check for $9.50 (payable to Cornell University) to:

Dept. of Horticulture
Attention: Max Welcome
134a Plant Science Bldg.
Cornell University
Ithaca NY 14853-5904

At the peak of the season, it takes two people about 5-6 hours to pick all the fruit. Clipping the berries is a little slower than regular picking, but, says Jack, "We have it down to a science." So far, they've been able to do most of the picking with just family labor. At full production (which will increase since the plantings are increasing), he's taken up to 350 half-pints to the market. The fewest half-pints he's taken is 30, but since the Torrices' have a son on Long Island, they could drop by the market that day on their way.

Jack has no doubt that he is making money with the raspberries; though the freeze damage last winter cut into his production severely last year, he still did better than break even. Certainly he's enjoying growing and selling them. His customers' enthusiasm must be inspiring and help make that long drive worthwhile.

For more information on the North American Bramble Growers Association or to become a member contact Debby Wechsler, 1138 Rock Rest Rd. Pittsboro, NC 27312, nabga@mindspring.com

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DEVELOPING SPECIALTY AND VALUE-ADDED AGRICULTURAL PRODUCTS

Steven A. McKay, Fruit Extension Educator, CCE Columbia County, Hudson, NY

Our New York and Federal governments are recognizing the market potential of specialty and value-added agricultural crops by making funding available to producers in the form of grants and specialized staff. NYS Ag and Markets offers grants each year that fund Pride of New York projects, as well as innovative specialty product development. The Pride of New York marketing campaign has made local produce and processed products more visible to consumers. It's a branding program that helps consumers recognize that a product is from New York. The federal government has grants and resources available that are described at the following web site: http://www.usda.gov/documents/SPECIALTY_CROPS.pdf

Adding value to raw farm products is one of the ways that producers can improve the viability of an agricultural enterprise. I'd like to review some of the considerations in developing a value-added product which can be a processed product or a raw product that may have been produced, sorted or packaged in a unique way.

Before developing a new value-added product one must do a feasibility study and marketing plan. The formality of this work will depend on how large the venture is projected to be, with larger projects requiring more detailed studies. The important thing is to be reasonably certain that you'll be able to sell the product to be developed. Remember that marketing value-added/specialty products which are unknown to the public can be challenging, and will require consumer education.

There are many types of products that can be defined in either of two levels of processing: primary processed products, and secondary processed products. Primary processing is basically an intermediate step between the fresh produce and the final retail product. Primary products are the simplest value-added products: produce can be frozen, dried, or made into pulp or syrup. These products are either packaged in retail packs, or held and used throughout the year to make the retail products. Secondary products are the further processed retail products one finds on the shelves of the grocery store.

To help understand the retail products, I've divided them into categories for brief comment.

Teas and Infusions- Black tea can be flavored with fruits and other dried plant parts. Infusions or herbal teas contain fruit and/or other dried plant parts often blended with other herbs or berries.

Perfume- The strong fragrance of some fruits and herbs lends itself to perfume.

Extracts- Aromatics, color, and nutraceutical portions of the produce can be extracted to flavor and color other products or develop nutraceutical products. Scents for soaps, bathing and skin care products, candles, and incense are possible uses.

Baking Ingredients- Purees, sauces, and fruit blends are packaged in appropriate sized containers for industrial, restaurant or bakery, and home use.

Baked Goods- Pie, quiche, cheesecake, tarts, strudel, and filled cookies are just a few of the common baked goods which use fruits and vegetables.

Prepared Fast Food- Frozen dinners or entrees, and food prepared by supermarket take out operations incorporate produce into the menu.
Fresh Frozen- Fresh frozen produce, blended or packed as one type at the retail level can be boxed or bagged with an attractive package**.** There is potential to market this product in specialty stores in the US.

Canned- Produce can be canned in bottles or metal cans. Bottles are an attractive packaging style for the specialty food market.

Juices- Juices can be made from fresh or frozen fruits. A number of processes are options for manufacturing the product. Level of filtration, pulp content, sugar, acid, flavorings, etc. provide variety. The juice can also be blended with other juices, whey, herbs, etc. to make any number of health drinks. Tetra pack, plastic, bags, and glass are available for individual and family sized portions.

Syrups- Like juices, brands of syrups have their unique characteristics. Sugar content, acidity, addition of flavorings, concentration, etc. are variables.

Vinegar-Vinegar gives cooks yet another unique tool for sauces and dressings. Placed in a fancy bottle, the vinegar is a wonderful gift.

Alcoholic Products- Wine ranging from sweet to dry, sparkling wine, wine coolers, and hard liquors are all possibilities.
Candies and Chocolates- Gel candy, pastilles, hard candies, filled hard candies, and filled chocolate are forms of confections that are common. Liqueur filled chocolate is another possibility.

Dairy Products- Yogurt, keifer, ice cream, whey and juice are all possible to find.

Frozen Sorbetto- Frozen dessert.

Soft Spreads- A variety of spreads with different percentage fruit content, blends of fruit, and firmness are found.

Nutritional Supplements and Nutraceuticals- Wafers made with fruit and herbs, cold and cough drops, and vitamin tablets are possibilities.

Cereals- Cereals blended with dry fruit are popular.

Dried/ Freeze Dried/Dried Powder/Fruit Leather- These products all have use in making dressing, stuffing, chocolate bars, and sauces for meat.

Salad Dressings- Dressings containing dried produce or vinegar are an option.

Flavored Honey- Flavored honeys can be made by blending honey with syrup or powdered fruit.

Once you have a recipe developed, Cornell can assist in commercializing the recipe. You will need to send the recipe to Cornell for assuring the safety of the processing and ingredients. With Cornell's approval, one makes an appointment with NYS Ag and Markets to have the production facility approved, and to get a license. From there one is ready to produce.

PRICING POWER

John Berry, Agricultural Marketing Educator Penn State Cooperative Extension - Lehigh County, Allentown, PA

Agricultural marketing activities account for over 17% of the nation's gross national product and seventy cents of every consumer food dollar goes to cover marketing expenses. Being involved in marketing helps producers decide what to produce and when. Clearly, performing some marketing chores is a possible source of increased revenue.

According to academics, there are nine functions of marketing. Buying, selling, storage, transportation, processing, grades and standards, financing, risk taking and market information. One aspect of marketing that generates many questions is the function of selling. "What should I be pricing my melons at?" is heard on many visits to local farm markets. Looking at the above list - of the nine functions of marketing, only *selling* generates cash. This tells me that price is a significant part of your overall marketing plan.

Cost of production is the academic basis of calculating price. However, pricing must be flexible enough to meet the competition and adjustable enough to changing market conditions. As an integral part of the marketing plan, price must be set to meet the sales and financial goals of the enterprise. Having a clear idea of your marketing objectives and the target market for your products makes selection of a "proper price" easier.

Cost Plus Method

Price mark-ups are an area of great confusion. Mark-up should be given as a percent of the selling price. Net profit is greatly affected by calculating your mark-up incorrectly. Cost plus mark-up equals selling price. Here's an example. Let's say my marketing plan calls for a gross profit goal of 20%. Let's say a watermelon costs me $1.00. The proper selling price is $1.25, not $1.20. The cost of $1.00 plus mark-up of $0.25 equals selling price of $1.25. This represents a 20% gross margin on the selling price. A common incorrect method of calculating margin would be to take the cost at $1.00 add 20% and get a selling price of $1.20. The trouble with this incorrect method is when the accounting is done I have received a 16% gross margin, not the 20% called for in my planning.

This cost plus method does not take into consideration the competition. Remember, pricing at the level of the competition reflects the costs and perceptions at other farm markets, not yours. Your price is a result of your costs and the perception of your products by your customers. I suggest to retailers the concept of *value* instead of the concept of price when promoting to customers. Value includes the product itself in all its freshness and nutrition, and adds customer service, convenience and your status as a food expert. At a market some time ago I over heard a conversation between the clerk and a customer. The customer was agitated over the price of cantaloupes and suggested a neighboring market had prices much lower. The clerk never missed a beat with the reply – "Well, we know the value of our cantaloupes; I guess they know the value of theirs."

The Point Is Profit

We are trying to maximize total profits, not the profit per unit. Are you willing to take a lower price if you could sell more units? The following table gives you a picture of this game. The first row states that if your margin is 10% and you reduce your price 5%, it will take an increased sales volume of 100% to meet your planned revenue goals.

Current % Profit Margin	% Price Reduction	Required % Increase in Sales Volume
10	5	100
15	5	50
15	10	200
20	5	33
20	10	100
25	5	25
25	10	67

An effective pricing strategy depends on four factors. 1) You must know your cost for each product. 2) Possible sales response to price change is vital. 3) What are the costs and prices of the competition? 4) What are the probable responses from the competition to what you do?

Summary

Proper pricing is essential to long run business success. Pricing is as much a marketing concern as an accounting one and good pricing is a measure of management effectiveness. Good pricing allows a retail farm market to more easily reach their marketing and financial goals.

(Reprinted with permission from: The Penn State Vegetable & Small Fruit Gazette, Volume 11, No. 11, November 2007.)

WEATHER NOTES

NEW YORK CROP WEATHER SERVICE NOTES

This is the last edition of the New York "Weather and Crops" for the 2007 season. The New York Field Office gratefully acknowledges the weekly cooperation of the Agricultural Weather Information Service, Inc., National Weather Service personnel, Agricultural Extension agents, FSA representatives, and independent volunteer observers who collectively make this report possible.

Week ending October 21st: We began the period with high pressure controlling our weather resulting in dry conditions through Thursday night. A frontal system tracked through late Friday and Friday night, producing over an inch of rain in central New York and a third to three quarters of an inch in western and southern areas. High pressure and dry conditions returned for Saturday. Temperatures were generally near normal in all areas during the middle part of the week, then trended above normal by Thursday and Friday becoming well above normal during the weekend.

Questions or Comments about the New York Berry News?
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Check out the NYSAES Tree Fruit and Berry Pathology web site at:
www.nysaes.cornell.edu/pp/extension/tfabp

WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, October 22nd, 2007

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	58	9	54	2978	483	1.07	0.44	28.04	6.53	58	9
Glens Falls	52	6	35	2393	248	0.97	0.34	21.32	-0.04	52	6
Poughkeepsie	58	9	60	3196	558	1.09	0.40	29.73	5.11	58	9
Mohawk Valley											
Utica	52	7	24	1964	294	2.32	1.34	27.06	-3.91	52	7
Champlain Valley											
Plattsburgh	53	7	36	2276	102	1.17	0.61	22.23	1.51	53	7
St. Lawrence											
Canton	53	8	39	2337	381	2.00	1.30	25.00	2.30	53	8
Massena	53	7	37	2350	311	1.49	0.87	21.01	0.38	53	7
Great Lakes											
Buffalo	60	10	70	3089	651	0.76	0.06	15.15	-7.19	60	10
Colden	55	8	41	2332	371	0.20	-0.62	17.35	-9.05	55	8
Niagara Falls	59	9	65	2960	516	0.13	-0.48	14.48	-7.29	59	9
Rochester	59	10	63	3063	694	0.20	-0.33	13.22	-5.82	59	10
Watertown	56	9	54	2502	479	0.56	-0.04	13.64	-4.56	56	9
Central Lakes											
Dansville	57	8	50	2724	352	0.13	-0.43	15.50	-5.45	57	8
Geneva	56	8	43	2736	395	0.62	-0.01	16.10	-4.74	56	8
Honeoye	57	7	50	2572	95	0.05	-0.58	19.05	-1.58	57	7
Ithaca	56	8	44	2498	389	0.65	-0.06	21.22	-1.44	56	8
Penn Yan	58	9	56	2991	650	0.50	-0.13	16.03	-4.81	58	9
Syracuse	58	9	60	2963	576	0.39	-0.31	19.48	-4.21	58	9
Warsaw	54	8	36	2327	537	0.22	-0.49	19.46	-5.24	54	8
Western Plateau											
Alfred	54	8	31	1992	223	0.31	-0.32	19.18	-4.01	54	8
Elmira	56	9	47	2633	408	0.51	-0.12	18.70	-2.35	56	9
Franklinville	54	10	36	2101	479	0.16	-0.64	18.93	-6.22	54	10
Sinclairville	57	11	51	2363	524	0.20	-0.69	22.72	-5.51	57	11
Eastern Plateau											
Binghamton	57	10	53	2735	592	1.16	0.53	23.09	0.88	57	10
Cobleskill	52	5	29	2240	247	0.57	-0.06	27.47	3.55	52	5
Morrisville	53	7	33	2235	345	1.27	0.54	25.42	1.14	53	7
Norwich	55	9	41	2345	357	1.14	0.44	26.81	2.92	55	9
Oneonta	57	11	50	2835	1012	1.16	0.41	26.77	1.32	57	11
Coastal											
Bridgehamton	59	7	69	3054	489	1.65	0.89	21.78	-1.69	59	7
New York	66	11	117	4251	823	0.64	-0.02	35.56	11.19	66	11

1. *D*eparture *from N*ormal
2. *Y*ear *to D*ate: Season accumulations are for April 1st to date

The information contained in these weekly releases are obtained from the New York Agricultural Statistics Service (http://www.nass.usda.gov/ny/), who in turn obtains information from reports from Cornell Cooperative Extension agents, USDA Farm Service Agency, Agricultural Weather Information Service Inc., the National Weather Service and other knowledgeable persons associated with New York agriculture.