Apple Rootstocks and Cultivars eXtension Project

Dr. Rich Marini, Head of the Department of Horticulture

Orchard owners and home gardeners looking for the best answers to their questions about apple trees soon will have free, easy access to all the information they need, thanks to a land-grant university project funded by the U.S. Department of Agriculture.

eXtension is an interactive online learning environment that delivers researched-based knowledge developed by the nation’s land-grant university experts. Penn State University is a major contributor to eXtension. The new eXtension portal will be named “The Community of Practice (CoP) for Apple Rootstocks and Cultivars.”

History of eXtension
In 2001 a decision was made at the national level to transform the way Cooperative Extension delivers information through technology. After a few years of developing the administrative structure for the system, in 2004 the Cooperative Extension system adopted an assessment to provide project start-up funds for several years and in 2005 a prototype was introduced. In 2007 the full system was launched to provide access to the land-grant university system with rules of operation, governing committee, staff and long-term implementation plan.

Most fruit growers are familiar with the regional project NC-140, which evaluates rootstocks and NECC-1009, formerly NE-183, which evaluates apple cultivars. These projects have been very successful and most recommendations in North America are based on results from these two projects. Summaries of these projects are presented at grower meetings, newsletters and trade journals, but growers in non-cooperating states may receive limited information. Data are summarized in detail in scientific journals, but most nursery operators, growers, and consumers do not have access to these publications. In 2009 a subset of NC-140 cooperators wrote a successful eXtension proposal, which is funded through the Specialty Crop Research Initiative. Our goal is to develop a web-based information system to summarize the tremendous amount of information.
information we have generated for apple rootstocks and cultivars. Tools will be developed to help several stakeholder groups, including nursery operators, fruit growers, county educators, Master Gardeners, and home gardeners to make decisions concerning rootstocks and cultivars. This project is focused on the eastern U.S. because western growing conditions are different than in the East.

**The Apple Rootstock and Cultivar Project**
The first step was to develop a Community of Practice (CoP). The project is led by researchers at the University of Minnesota and Penn State University, with assistance from co-leaders from West Virginia University, University of Massachusetts, University of Missouri, North Carolina State University, Cornell University and The Ohio State University. Members from Penn State include Rob Crassweller and Rich Marini, Department of Horticulture and Daniel Foster, Department of Agricultural & Extension Education.

We have monthly virtual meetings, using Adobe Connect or Skype, and we have one face-to-face meeting each year. We are also organizing an advisory committee of nursery and orchard representatives to help evaluate our products as they are developed and to provide suggestions to make the system more user-friendly. In November 2010 we met in conjunction with the NC-140 technical committee and identified the types of information we want to include on our website. Web development specialists at the University of Minnesota have been providing guidance to help us develop these products. Part of this process was to develop 50 FAQs for rootstocks and we will do the same for cultivars. These are “Commonly Asked Questions” about rootstocks along with answers to the questions and the answers will be reviewed by members of the CoP before the site is launched. This peer-review process will provide quality control. We are also developing a large collection of pictures related to rootstocks and cultivars. Over the next two years we plan to develop videos and searchable data bases to go along with the pictures and user-friendly interactive products to provide location-specific information about rootstocks and cultivars. We expect that over time the CoP will expand to include other apple-producing regions, additional aspects of production, and complementary consumer information.

Another aspect of this project is to conduct a needs assessment to determine what types of information our audience wants and which formats would be useful. To obtain these types of information a survey was developed and this survey will be distributed to growers at winter meetings. So those of you attending the Mid-Atlantic Fruit & Vegetable Conference will be asked to complete this survey – it should only take about 10 minutes. The information will be summarized and interpreted at Penn State University, and we will be able to use this information to determine what types of information growers feel are important, where they currently get their information and we will be able to compare results from different production areas and different demographic groups. Once the information is developed and disseminated among the stakeholder groups, a program evaluation will be conducted. The stakeholder groups will again be surveyed to determine if the desired information has been adequately disseminated, is easily understandable, and is in an accessible format. During the next decade a lot of pomological expertise will be lost to retirement and without a national effort to archive our collective knowledge, the information will be lost. We are excited about this opportunity to develop a new method of summarizing and delivering information in a way that can easily be updated as new information becomes available. To be successful, we will need cooperation from nurserymen and apple growers, so we hope you will be willing to participate in our surveys this winter. You can learn more about the eXtension program at [http://about.extension.org/](http://about.extension.org/).

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**A Special Invitation to Young Growers**

A Young Grower Alliance Luncheon will be held at the Mid-Atlantic Fruit and Vegetable Convention

Tuesday, February 1, 12:00 pm
Hershey Lodge and Convention Center, Hershey, PA

As a follow-up to ideas discussed at the 2010 luncheon, USDA Deputy Under Secretary Cheryl Cook will discuss the “Know Your Farmer Know Your Food” program!

Please RSVP no later than January 24, 2011 to:
Sidney Kuhn
sidkuhnorch@gmail.com/ 717-334-2722
or
Katie Ellis
kag298@psu.edu / 717-334-6271 ext. 331
Winter Educational Meetings for Fruit Growers

Tuesday, Feb. 15—Southeast Region; Contact Andy Beck, awb123@psu.edu

Wednesday, Feb. 16—Susquehanna Region; Contact John Esslinger, cje2@psu.edu

Wednesday, Feb. 17—Northeast Region; Contact John Esslinger, cje2@psu.edu

Monday, Feb. 21—Adams County; Contact Tara Baugher, tab36@psu.edu

Tuesday, Feb. 22—Lancaster/York Counties; Contact Tim Elkner, tee2@psu.edu

Wednesday, Feb. 23—Franklin County; Contact Tara Baugher, tab36@psu.edu

Tuesday, Mar. 1—Appalachian Fruit Growers, Bedford; Contact Tom Ford, tgf2@psu.edu

Wednesday, Mar. 2—Western PA; Contact Bob Pollock, rcp3@psu.edu

Thursday, Mar. 3—Erie County; Contact Andy Muza, ajm4@psu.edu

Thursday, Mar. 4—Lackawanna County; Contact John Esslinger, cje2@psu.edu

Program Highlights

- Brown Marmorated Stink Bug Control Strategies
- IPM and Disease Resistance Management
- Integrated Orchard Floor Management
- Total Systems Approach for Retooling Orchards

This publication is available in alternative media upon request.

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.

Penn State encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, contact your local Penn State Extension office in advance of your participation or visit.
PRESIDENT’S DAY FRUIT GROWERS EDUCATIONAL MEETING
Monday, February 21, 2011

Biglerville High School Auditorium, Biglerville, PA

Morning:
(7:45—Registration; Moderator—Bill Mickley)

8:00  ACFGA Business and Elections
      Bill Mickley, President

8:10  Crop Risk Management
      Lynn Kime, PSU Ag Economist

8:20  PA Apple Marketing Program Support for Growers
      Karin Rodriguez, Executive Director

8:30  Fungicide Resistance Management
      Dr. Henry Ngugi, PSU Plant Pathologist
      1 Category Credit

9:15  Renewal Pruning for Intensive Orchard Systems
      Dr. Jim Schupp, PSU Pomologist

10:00 Show and Tell

10:15 Getting the Most from Your Orchard Nutrition Program
      Dr. Rob Crassweller, PSU Pomologist

10:45 What We’ve Learned from Insect Pest Management Challenges Over the Years
      Dr. Larry Hull, PSU Entomologist
      1 Category Credit

11:30 Group A—Lunch/Group B—Auditorium

12:15 Group B—Lunch/Group A—Auditorium

Training for Employee Safety
Jim Harvey, PSU Rural Health Safety Specialist
1 Core Credit

Afternoon:

1:00  Brown Marmorated Stink Bug and Other Invasive Species
      in the Orchard System
      Dr. Greg Krawczyk, PSU Entomologist
      2 Category Credits

2:00  Show and Tell

2:15  New Orchard Floor Management Tools for Fruit Growers
      Dr. Rob Crassweller, PSU Pomologist
      1 Category Credit

3:00  Rapid Response Education Program Feedback

REGISTRATION AND LUNCH—OPPORTUNITIES TO VIEW
EDUCATIONAL AND COMMERCIAL EXHIBITS

Concurrent Sessions

Special Computer Technology Program (In Library)

9:00  Macros and Pivot Tables: Using Excel Functions for Orchard
      Record-Keeping
      Dr. Katie Ellis, PSU Extension Educator

Special Session in Spanish (In Library)

1:00  Pruning Principles and New Practices for Intensive Plantings
      Dr. Tara Baugher, Penn State Extension Educator, interpreted
      by Bruce Hollabaugh, Hollabaugh Orchards

1:30  Integrated Management of Orchard Pests
      Dr. Katie Ellis, PSU Extension Educator
      1 Category Credit

Registration Form:
$15 per person for general session (covers lunch and educational materials);
No charge for concurrent sessions (unless staying for lunch)

Number Attending _____ X $15 = $ ___________

Please send payment, payable to ACFGA, by February 10 to:
Brenda Cressler, ACFGA
33 Musselman Avenue
Biglerville, PA 17307  (717) 677-7444; acfga@comcast.net
WINTER FRUIT GROWERS EDUCATIONAL MEETING
Wednesday, February 23, 2011

Savoy Restaurant, 11655 Anthony Hwy, Waynesboro, PA

Morning Session:
Moderator—Sean Tracey
8:00  Registration
8:30  Franklin County Horticultural Society
      Business Meeting
      Sean Tracey, President
8:45  Crop Risk Management Update
      Lynn Kime, PSU Ag Economist
9:00  Fungicide Resistance Management
      Dr. Henry Ngugi, PSU Plant Pathologist
      1 Category Credit
9:45  Getting the Most from Your Orchard Nutrition Program
      Dr. Rob Crassweller, PSU Pomologist
10:15 Show and Tell
10:30 Minimal Pruning for Intensive Orchard Systems
      Dr. Jim Schupp, PSU Pomologist
11:00 New Orchard Floor Management Tools for Fruit Growers
      Dr. Rob Crassweller, PSU Pomologist
      1 Category Credit
11:30 Questions for Morning Presenters
11:50 Lunch

Afternoon Session:
12:45 Brown Marmorated Stink Bug and Other Invasive Species in the Orchard System
      Dr. Greg Krawczyk, PSU Entomologist
      2 Category Credits
1:45 Training for Employee Safety
      Jim Harvey, PSU Rural Health Safety Specialist
      2 Core Credits
2:45 Adjourn

Registration Fee:
$10 per person (covers lunch)

Please make check payable to:
Franklin County Horticultural Society

Please send payment by February 10 to:
Jack Mickey, Franklin Co. Horticultural Society
2197 Lincoln Way West
Chambersburg, PA 17201
Beekeeping for Beginners – Virtual Webinar Series
Tom Butzler, Horticulture Extension Educator

Penn State Cooperative Extension is conducting a virtual Beginner Beekeeping Class starting in February 2011. The webinar course is designed to create a foundation of beekeeping knowledge in order to confidently help beginners manage honeybees.

Webinars are web-based seminars that deliver training through the Internet directly to your computer. You are able to view the presentation via your home/office computer and listen to the audio portion of the presentation through your computer’s speakers. These are interactive and will allow the participants to ask questions and communicate with the presenters. If you can’t join the session or would like to review a certain topic, sessions will be recorded and available to participants until the end of the year.

The Beekeeping for Beginners is a one year course that will include the following:
1. A seven part live webinar series (all sessions will be recorded and available until December 31, 2011)
2. Virtual Beekeeping Field Day
3. Accessibility to instructors through:
   ● Virtual office hours
   ● Discussion forums

The registration fee for the one year Beekeeping for Beginners is for $150. Registration and agenda information can be found at: http://clinton.extension.psu.edu/Hort/webinar/11Beekeeping.htm.

Free and Safe Disposal of Old Pesticide Materials

CHEMSWEEP is back for a new set of counties! The Pennsylvania Department of Agriculture CHEMSWEEP waste pesticide disposal program helps agricultural producers safely dispose of cancelled, suspended, or unwanted pesticide products.

Growers, pesticide applicators and licensed pesticide businesses in selected Pennsylvania counties are eligible for CHEMSWEEP each year. In 2011, these counties include Adams, Cameron, Clearfield, Clinton, Crawford, Erie, Fayette, Franklin, Greene, Huntingdon, Lehigh, Juniata, Mercer, Monroe, Northampton, Perry, Pike, Potter, Schuylkill, Somerset, and Westmoreland.

Inventory mailers have been sent to licensed applicators in eligible counties. If you didn’t get the mailer, don’t worry. Visit www.agriculture.state.pa.us, click on Programs (on the left hand side), then type “CHEMSWEEP” into the search box. Collections will start this summer, and the program covers the disposal cost of chemicals up to 2,000 lbs.

Don’t delay – applications are due March 15, 2011!
If you have any questions about the CHEMSWEEP program, call your nearest Pennsylvania Department of Agriculture Regional Office.
Small Fruit Pesticide Label Changes
Kathy Demchak, Department of Horticulture

Several changes to pesticide labels have occurred since late fall 2009, when the 2010 Mid-Atlantic Berry Guide went to print:

**General**
On some labels, we now see the mention of the low-growing berry subgroup (Group 13-07G), which includes lowbush blueberry and cranberry. The use of this grouping allows materials to be used on crops that previously rarely appeared on pesticide labels.

**Subtraction**
Endosulfan (trade name Thionex, and formerly Thiodan) use is being terminated due to concerns about worker safety and endosulfan’s ability to accumulate in the food chain. Existing stocks of Endosulfan may still be used.

**Additions**
Portal® (fenpyroximate, Nichino America, Inc.) is labeled for use on the low-growing berry subgroup, which includes strawberries. Use of this product is limited to two applications per season at least 14 days apart to avoid resistance development. Fenpyroximate is in IRAC activity group 21A, which is different from other activity groups labeled on strawberries. The pre-harvest interval (PHI) is 1 day, and the re-entry interval (REI) is 12 hours.

Altacor® (chlorantraniliprole, aka rynaxypry®, Dupont) is labeled for use on caneberries (raspberries, blackberries, etc.) for the target pests omnivorous leafroller (not a problem in PA) and raspberry crown borer (adults), which can be a problem here, most frequently on blackberries. The PHI is 3 days, and the REI is 4 hours.

Danitol® 2.4EC (fenpropathrin, Valent) is labeled for use on caneberries, (besides strawberries and blueberries on which it had already been labeled) with the most utility against Japanese beetle. It also is labeled for use for two-spotted spider mites, but the use of broad spectrum insecticides such as pyrethroids (part of the pesticide group into which fenpropathrin falls) is tough on beneficial mites, and thus has often resulted in pest mite flare-ups. The PHI is 3 days, and the REI is 24 hours.

Farm Food Safety Information and Upcoming Good Agricultural Practices (GAP) Training Opportunities from Penn State Cooperative Extension
Dr. Luke F. LaBorde, Associate Professor of Food Science

The Penn State Farm Food Safety web site at [www.foodsafety.psu.edu/gaps](http://www.foodsafety.psu.edu/gaps) is your resource for tools you can use to start writing a food safety plan. Included in the site are sections titled “What are Good Agricultural Practices?” “How does my farm compare with national GAP standards?” “How do I write a food safety plan?” and perhaps most importantly “Where can I get help?” The site also includes a template farm food safety plan with checklists and forms designed to make documentation of your practices simple and straightforward.

This winter, Penn State Cooperative Extension will be holding farm food safety training workshops throughout the state and you can expect to hear more about these in the coming weeks. The curriculum will include a discussion of farm food safety standards based on the USDA GAP audit program. In addition, we will guide participants through some of the more difficult aspects of farm food safety, e.g., how to document practices through a written plan, how to get water tested and what to test for, traceability issues, how to conduct mock recalls and more.

For more information on farm food safety and upcoming training workshops, visit the Penn State Farm Food Safety web site at [www.foodsafety.psu.edu/gaps](http://www.foodsafety.psu.edu/gaps), or contact Dr. Luke LaBorde at 814-863-2298 or lfl5@psu.edu.
Educational Opportunities

February 1-3, 2010, Mid-Atlantic Fruit and Vegetable Convention (special sessions in Spanish and on Farm Transition - details in this newsletter)
For additional information, visit http://www.mafvc.org/html/.

February 8-11, 2011, Tampa, Florida, 30th North American Strawberry Growers Association Annual Meeting in conjunction with the 7th North American Strawberry Symposium
Special Guest Speaker and Marketing Expert “Bill McCurry”
This very special, combined meeting will be held at the Doubletree Hotel, Tampa Westshore in Tampa, Florida.

Winter Educational Meetings

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Tuesday, February 22—Lancaster/York Counties; Contact Tim Elkner, tee2@psu.edu

Wednesday, February 23, 2011, Winter Fruit Growers Educational Meeting—Franklin County; contact Jack Mickey, Franklin Co. Horticultural Society, 2197 Lincoln Way West, Chambersburg, PA 17201

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Wednesday, February 16—Susquehanna Region; Contact John Esslinger, cje2@psu.edu

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View Fruit Times on the web at:
http://fruittimes.cas.psu.edu

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Where trade names appear, no discrimination is intended, and no endorsement by Penn State Cooperative Extension is implied. Recommendations based on conditions observed at Penn State Fruit Research and Extension Center, Biglerville, PA.

Penn State Cooperative Extension programs are open to all, regardless of their ability to pay. Please contact us if you require reduced or waiver of fees to attend this program.