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Horticultural News

Editors: Winfred P. Cowgill, Jr. & Wesley R. Autio

The New Jersey State Horticultural Society was organized on August 17, 1875 at Geological Hall, Rutgers College, New Brunswick, NJ. It remains the oldest Horticultural organization in New Jersey.

Horticultural News began as the *The New Jersey State Horticultural Society News*, in October of 1920. The Society began "collecting paid membership in order to obtain funds to promote new features of the society and extend the usefulness of the society. The Horticultural Society News was started to be the official society publication." Published M. A. Blake, Professor at Rutgers College was the first president and chair of the publication committee.

Editors served as follows:

MA Blake	1920 - 1947
Norman F Childers	1948 - 1980
Win Cowgill	1981 - 1988
Emily Brown Rosen	1988 - 1990
Linda Butenis Vorsa	1991 - 1995
Jerry Frecon	1995 - 2010

June 2010: *Horticultural News* has moved to an online web-based format. The New Jersey State Horticultural Society has partnered with the University of Massachusetts *Fruit Notes*, Dr. Wesley Autio, Editor. Cowgill and Autio will be the new editors of *Horticultural News* and *Fruit Notes*.

Horticultural News is distributed to growers, extension personnel and researchers and libraries across North America. Horticultural News focuses primarily on tree-fruit culture, but addresses small-fruit cultural issues as well. Most reports are from current research at Rutgers University, University of Massachusetts, and other universities.

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Cover: October 2011 snowstorm on Suncrisp at Rutgers Snyder Research & Extension Farm, Pittstown, NJ. Photo by Win Cowgill.

Performance of the Pearl Cherries in Massachusetts

Jon M. Clements
University of Massachusetts

The 'Pearl' series of sweet cherry are recent introductions by International Plant Management (www.varietymanagement.com). They include Black Pearl, Burgundy Pearl, Ebony Pearl, and Radiance Pearl. The Pearl cherries originated with Bob Andersen's former stone fruit breeding program at Cornell University and were partially selected for adaptability when grown in the humid Northeast.

In 2003, a sweet cherry variety evaluation trial was planted at the that included eleven NY-numbered selections from the Andersen breeding program on behalf of IPM at the UMass Cold Spring Orchard in Belchertown, MA. Although NY numbered selections at the time, it turns out that the planting included Ebony Pearl (NY 32), Burgundy Pearl (NY 38L), and Black Pearl (NY 8139) (three trees of each variety). These cherry trees are on Gisela 6 rootstock with between-tree spacing of six feet. The trees have grown well and have been quite manageable at this spacing on moderate-fertility soil.

Once these Pearl cherries started flowering and fruiting in 2005, annual information collected included: time of bloom; crop load; fruit size, color, sugar, eating quality, and resistance to cracking. A summary of these characteristics and observation on overall suitability for our climate follows.

Average Bloom Date

All three Pearl cherries bloom early. Bloom typically is during the latter part of the last week in April. Burgundy Pearl is slightly ahead of Black Pearl which is slightly ahead of Ebony Pearl, but they all overlap. Depending on the timing of frost, this early bloom may be good or bad; however, in general, early blooming cherries are more likely to be frosted. Frost occurred during bloom in 2008 resulting in few cherries; however, they have cropped heavily in all years without frost.

Cropping

In general, the Pearl cherries are heavy bloomers and croppers. Annual yields for Black Pearl and Burgundy Pearl were described as heavy to very heavy. Ebony Pearl yields were medium-heavy. Fruit size suffers with heavy yields, so pruning to promote vigorous re-growth will be important to help manage crop

Table 1. Fruit characteristics (average of years 2005-2011) of Black Pearl, Burgundy Pearl, and Ebony Pearl sweet cherries at UMass Cold Spring Orchard, Belchertown, MA.

Cherry	Harvest date	Fruit shape	Stem length	Skin color	Average fruit weight (g)	Flesh color	Soluble solids (%)
Black Pearl	July 3	oblate- heart	medium-long	dark red	8.9	red	13.1
Burgundy Pearl	June 30	oblate- heart	short-medium	red	9.1	orange-red	12.8
Ebony Pearl	June 28	oblate- heart	medium-long	red	10.0	orange	13.6

Table 2. Black Pearl, Burgundy Pearl, and Ebony Pearl trees on Gisela 6 rootstock in bloom, May 6, 2011, UMass Cold Spring Orchard, Belchertown, MA.

Black Pearl	Burgundy Pearl	Ebony Pearl
early to mid-season bloom	early-season bloom	mid-season bloom

load on these cherries (see giselacherry.com for pruning instructions).

Fruit Quality

Table 1 is a summary of 6-7 years of the Pearl cherries fruit characteristics.

Average harvest date. Black Pearl was picked later than both Burgundy and Ebony Pearl. But, because of cracking (and birds), both Burgundy and Ebony Pearl were likely picked too early in most years. In fact, information from International Plant Management suggests Black Pearl is harvested about a week earlier than the other two. Best fruit quality harvest dates in Massachusetts for these three cherries might now be surmised to be: Black Pearl – July 1 and Burgundy and Ebony Pearl – July 7. Thus, the first week in July would be the 'target' harvest week for the Pearl cherries.

Fruit shape. All cherries are described to have an acceptable, oblate-heart fruit shape. Thus, they are somewhat round-flat in appearance, but still classic-enough cherry shape.

Stem length. Burgundy Pearl has a shorter stem than the other two Pearl cherries.

Skin color. Black Pearl exhibited the darkest red skin color of the Pearl cherries. Both Ebony and Burgundy Pearl were a more 'translucent' red color in appearance, which was very attractive.

Fruit weight. All Pearl cherries were smaller than the target fruit weight of 10 g. Heavy crop loads and too-early harvest contributed to the smallish fruit size. Careful crop load management and delaying harvest should result in larger fruit size. Still, these are not 'big' cherries. They are average but adequate size.

Flesh color. Black Pearl had the darkest flesh and was characterized as being 'red.' Both Burgundy and Ebony Pearl were orange-red in flesh color.

Soluble solids. The sugar content should have been better. Again, too early harvest is not conducive to good sugars in the cherries. Fruit have to hang longer to get good cherry sweetness. Soluble solids of sweet cherries should be in the high teens at harvest.

Resistance to Cracking

Crack-resistance was somewhat disappointing. Although literature from International Plant Management suggests that Burgundy and Ebony Pearl have 'excellent' resistance to cracking, and Black Pearl has 'low' cracking, all three cherries cracked and split in wet years here in Massachusetts. Drier years were better, with Black Pearl pulling through with a little less cracking than Burgundy and Ebony Pearl. The latter two cherries were often picked too early as heavy cracking was observed. This observation only heightens the fact that *successful and profitable sweet cherry growing in Massachusetts requires rain covers!*

Conclusion

Although I was disappointed in the amount of cracking over the years, the Pearl cherries are no worse and likely somewhat better than other cherries that we might grow. If you think you can grow them without

Table 3. Black Pearl, Burgundy Pearl, and Ebony fruit, UMass Cold Spring Orchard, Belchertown, MA.

Black Pearl	Burgundy Pearl	Ebony Pearl

covers, think again – in most years they will crack. They are certainly highly productive, and will require the right kind of pruning to achieve adequate fruit size. Because they are relatively early cherries, they are attractive to birds (particularly cedar waxwings).

I have been most successful in harvesting a good crop of Black Pearl over the years, and therefore, declare it the best of the three. Personal correspondence with International Plant Management suggests "Burgundy Pearl has the best flavor, Ebony Pearl is the nicest cherry in its season, and Black Pearl will be the big winner of the three." All three Pearl cherries are worth consideration and are available from major nurseries and Summit Tree Sales (summittreesales.com).

2002 Massachusetts/New Jersey 'Cameo' Dwarf Rootstock Trial

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Planting Description and Protocol

In 2002, NC-140 plantings were established at the University of Massachusetts Cold Spring Orchard Research & Education Center in Belchertown, MA and at the Rutgers Snyder Research and Extension Farm in Pittstown, NJ. Cameo apple trees (Willow Drive Nursery) on three dwarfing rootstocks (G.16, M.9 NAKBT337, and B.9) were planted in a randomized complete block design (10 replications) spaced at 1.2 X 3.6 m. (Massachusetts) and 2.5 X 4.5 m (New Jersey). All trees were trickle irrigated and were trained to a vertical axis.

Annual measurements of trunk circumference, tree height and spread (2006 and 2011 only, reported here for 2011), root suckering, fruit yield (beginning in 2003), and fruit size (NJ only in 2004, 05, 08) have been made.

Table 1. Typical Cameo trees after harvest (October 11, 2011) on M.9 NAKBT337, G.16, and B.9 rootstocks, UMass Cold Spring Orchard, Belchertown, MA.

M.9 NAKBT337	G.16	B.9

Table 2. Overall trunk size, tree height and spread, suckers, and percent of the rootstock shank covered with burr-knots in 2011 of Cameo apple trees on three rootstocks in the 2002 MA/NJ NC-140 Cameo Dwarf Rootstock trial.

Rootstock	Trunk cross-sectional area (cm^2)	Tree height (m)	Tree spread (m)	Root suckers (no.)	Burr-knots (%)
G.16	66.2 a	4.2 a	2.5 a	1.3 b	3 a
M.9	50.6 b	3.8 b	2.4 a	2.8 a	1 ab
B.9	29.9 c	3.3 c	2.1 b	1.5 b	0 b

Levels not followed by a common letter are significantly different (Tukey HSD, $P = 0.05$).

Results

This report presents data from the 2011 (10th and final leaf) growing season, and results are presented in Tables 1-5.

Regarding tree growth (Table 2), G.16 had the largest trunk cross-sectional area followed by M.9 and B.9. In Massachusetts, G.16 was larger than both M.9 and B.9 (Table 2). In New Jersey, G.16 and M.9 were both larger than B.9. Trees were much larger in trunk area in New Jersey than Massachusetts, except for B.9. Those on G.16 were the tallest trees (tree height), followed by M.9 and B.9. B.9 had a lesser tree spread than G.16 and M.9. G.16 had more burr-knots than B.9 (Table 2) but did not differ from M.9 (which did not differ from B.9). None of the rootstocks had a large percentage of the above-ground shank covered with burr-knots.

M.9 had more root suckers than G.16 and B.9, which did not differ (Table 2). In Massachusetts, again M.9 had more suckers than the other two rootstocks; however, in New Jersey the rootstocks did not differ in suckering (Table 3). Overall, Massachusetts had more root suckers than New Jersey.

In 2011, there was no difference in yield per tree between the rootstocks across both states (Table 4). Yield per tree was much higher in New Jersey (36.3 kg) than in Massachusetts (15.3 kg). Cameo is highly biennial – in 2010, it was just the opposite, i.e. yield per tree in Massachusetts far exceeded New Jersey. Cumulative yield (2003-11) was higher for M.9 compared to B.9, however, M.9 did not differ from G.16 (Table 4).

Overall yield efficiency in 2011 was lowest for G.16 compared to M.9 and B.9, which did not differ (Table 4). This was also true in Massachusetts, however, in New Jersey B.9 had the highest yield efficiency compared to M.9 and G.16 which did not differ from each other (Table 5). B.9 had the highest cumulative yield efficiency (2003-2011) followed by M.9 and G.16 (Table 4). In Massachusetts, however, M.9 and B.9 did not differ but had higher yield efficiency than G.16. In New Jersey, B.9 had the highest cumulative yield efficiency compared to M.9 and G.16, which did not differ (Table 5).

Across both states, fruit size (fruit weight) did not

Table 3. Trunk size and number of root suckers by state in 2011 of Cameo apple trees on three rootstocks in the 2002 MA/NJ NC-140 Cameo Dwarf Rootstock trial.

	Trunk cross-sectional area (cm^2)		Root suckers (no.)	
Rootstock	Mass.	New Jersey	Mass.	New Jersey
G. 16	48.5 a	84.0 a	2.1 b	0.4
M.9	26.1 b	75.1 a	5.6 a	0.1
B.9	21.5 b	38.4 b	2.7 b	0.2

Levels not followed by a common letter are significantly different (Tukey HSD, $P = 0.05$).

Table 4. Overall fruit yield, cumulative yield, yield efficiency, cumulative yield efficiency, and fruit weight in 2011 of Cameo apple trees on three rootstocks in the 2002 MA/NJ NC-140 Cameo Dwarf Rootstock trial.

Rootstock	Yield per tree (2011, kg)	Cumulative yield per tree (2003-11, kg)	Yield efficiency (2011, kg/cm^2 TCA)	Cum. yield efficiency (2003-11, kg/cm^2 TCA)	Fruit weight (g)
G.16	26.2	181.5 ab	0.37 b	3.84 c	223
M.9	27.4	194.4 a	0.66 a	5.03 b	220
B.9	23.8	156.3 b	0.77 a	6.78 a	209

Levels not followed by a common letter are significantly different (Tukey HSD, $P = 0.05$).

Table 5. Yield efficiency and fruit size by state in 2011 of Cameo apple trees on three rootstocks in the 2002 MA/NJ NC-140 Cameo Dwarf Rootstock trial.

	Yield per tree (2011, kg)		Cumulative yield per tree (kg, 2003-11)		Yield efficiency (kg/cm^2 TCA)		Cumulative yield efficiency (kg/cm^2 TCA, 2003-11)		Fruit weight (g)	
Rootstock	Mass.	New Jersey	Mass.	New Jersey	Mass.	New Jersey	Mass.	New Jersey	Mass.	New Jersey
G. 16	11.4	41.0	167	196	0.24 b	0.49 b	3.76 b	3.92 b	230 a	215 b
M.9	21.2	33.6	196	193	0.88 a	0.44 b	5.63 a	4.44 b	193 b	248 a
B.9	13.4	34.3	148	164	0.63 a	0.91 a	6.84 a	6.72a	199 b	221 b

Levels not followed by a common letter are significantly different (Tukey HSD, $P = 0.05$).

differ between the rootstocks (Table 4), however, fruit in New Jersey were significantly larger (228 g) than those in Massachusetts (207 g). Within Massachusetts, Cameo fruit from G.16 trees were larger than those from M.9 and B.9, but in New Jersey, fruit were larger from M.9 (Table 5).

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Results from the First Year of Fruiting in the 2009 NC-140 Peach Rootstock Trial in Massachusetts

Wesley R. Autio, Jon M. Clements, and James S. Krupa
University of Massachusetts

In 2009, NC-140 established a peach rootstock trial at 14 locations in the U.S. and two locations in Mexico. It included Redhaven on 17 different rootstocks. One of these locations was the UMass Cold Spring Orchard Research & Education Center in Belchertown. Not all locations had all rootstocks; the Massachusetts planting has 15 rootstocks [see Fruit Notes volume 75, number 3 (summer, 2010) or Horticultural News, volume 90, number 3 (summer, 2010) for details regarding the rootstocks in this trial]. All trees are spaced 13' x 16.5' and trained as open centers. The planting includes eight replications of each rootstock.

In October 2011, tree size was assessed with trunk circumference (measured below the lowest scaffold branch), and these data were used to calculate trunk cross-sectional area. Root suckers were counted each year. Trees yielded significantly in the third growing season (2011), and all fruit from each tree were counted and weighed. These data were used to calculate

Table 1. Trunk size, root suckering, yield, yield efficiency, and fruit size in 2011 of Redhaven peach trees in the 2009 NC-140 Peach Rootstock Trial.[z]

Rootstock	Trunk cross-sectional area (cm^2)	Root suckers (no./tree, 2009-11)	Yield per tree (kg)	Yield efficiency (kg/cm^2)	Fruit weight (g)
Atlas	75.3 ab	0.0 b	20.7 ab	0.28 cde	161 c
Brights Hybrid 5	66.6 abc	0.0 b	17.8 b	0.27 cde	159 c
Controller 5	17.7 f	0.0 b	4.0 c	0.23 e	172 abc
Guardian	83.0 a	0.0 b	21.1 ab	0.26 cde	176 abc
HBOK 10	60.0 bc	0.0 b	24.7 ab	0.43 bcd	180 abc
HBOK 32	60.3 bc	0.0 b	23.0 ab	0.39 bcde	171 abc
KV010-123	57.4 cd	0.0 b	24.7 ab	0.44 bc	178 abc
KV010-127	66.4 abc	0.0 b	23.8 ab	0.36 cde	169 bc
Krymsk 1	36.5 e	0.0 b	20.0 ab	0.55 ab	192 ab
Krymsk 86	64.7 bc	0.0 b	19.0 b	0.31 cde	163 c
Lovell	74.1 abc	0.0 b	21.1 ab	0.30 cde	174 abc
Mirobac	56.9 cd	0.5 b	20.6 ab	0.36 cde	176 abc
Prunus americana	42.3 de	3.0 a	29.7 a	0.72 a	200 a
Penta	69.2 abc	0.0 b	16.0 b	0.25 de	160 c
Viking	66.4 abc	0.0 b	24.2 ab	0.38 bcde	166 c

[z] Means within columns followed by a common letter are not significantly different at odds of 19 to 1 (Tukey's HSD, $P = 0.05$).

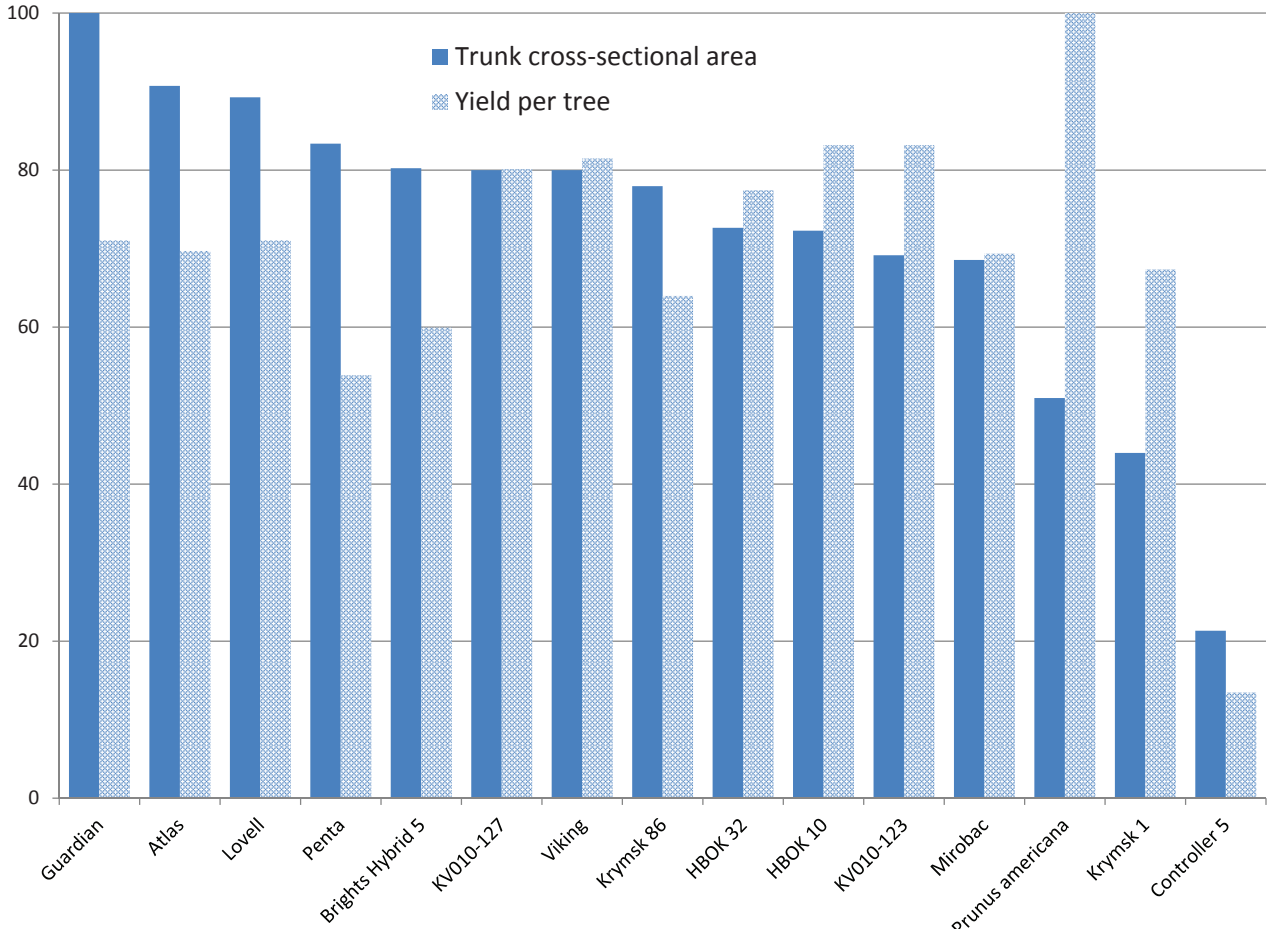

Figure 1. Trunk cross-sectional area and yield per tree in 2011 in the 2009 NC-140 Peach Rootstock Trial in Massachusetts. Trunk cross-sectional area are presented relative (%) to the largest average trees (on Guardian), and yield per tree are also relative (%) to the highest average yielding trees (on *Prunus americana*).

average fruit size for each tree.

After three growing seasons, the largest Redhaven peach tree were on Guardian rootstock, and the smallest were on Controller 5 (Table 1, Figure 1). A few of the trees appear to be dwarf to semidwarf in size, specifically those on Controller 5, Krymsk 1, Prunus americana, Mirobac, KV010-123, HBOK 10, and HBOK 32.

Root suckering has been very light on these trees, with the most suckering from Prunus americana with only three suckers total (Table 1).

Yield per tree varied from a low from trees on Controller 5 to a high from trees on Prunus americana (Table 1, Figure 1). Yield efficiency, likewise, was greatest for trees on Prunus americana and lowest for trees on Controller 5 (Table 1).

Fruit size was largest from trees on Prunus americana and smallest from trees on Brights Hybrid 5, Penta, Atlas, and Viking (Table 1).

Obviously, several additional years of data will be required to evaluate these rootstocks, but to date, Prunus americana looks very promising. Figure 1 displays tree size from largest to smallest and includes the associated yield per tree. Trees on Prunus americana clearly are dwarfed (only about 50% of the size of those on Guardian) but they also yielded the most in 2011. Often a dwarfed tree has greater yield efficiency than a larger tree, but it usually does not have greater actual yield per tree. As an added bonus, trees on Prunus americana had the largest fruit in the trial.

Please stay tuned; we will continue to report results from this trial in future years.

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Asian Pear Cultivar Trial in New Jersey and Massachusetts

Winfred P. Cowgill, Jr., Suzanne Sollner-Figler, and Rebecca Magron
New Jersey Agricultural Experiment Station, Rutgers Cooperative Extension

Jon M. Clements and Wesley R. Autio
University of Massachusetts

As part of a Northeast regional variety trial, plantings of Asian Pears were established in New Jersey and Massachusetts in 2010. The trials are located at the Rutgers Snyder Farm, Pittstown, NJ and the UMass Cold Spring Orchard, Research and Education Center, Belchertown, MA.

Background

Asian pears are becoming an important commodity for selected growers in NJ and MA. New Jersey has over 150 acres planted, MA over 60 to date. Growers utilizing tailgate markets and PYO growers with a customer base that desires Asian Pears both do well.

The purpose of this trial is to evaluate superior cultivars of Asian pears for commercial plantings in North Jersey and Massachusetts and identify the best ones for adoption. We hope to identify a handful of cultivars that will be well adapted to sustainable, direct-marketing farm operations.

Tree survival and size will be measured at the end of the study. Annual fireblight counts to evaluate fireblight susceptibility will be taken. Of greatest importance will be the evaluation of fruit quality. Three years of fruit quality data will be taken to identify the

Shinko Asian pear fruit in 2011 at the UMass Cold Spring Orchard in Belchertown, MA.

Shinko Asian pear tree in 2011 at the UMass Cold Spring Orchard in Belchertown, MA.

The 2010 Asian Pear Trial at the Rutgers Snyder Research & Extension Farm, Pittstown, NJ.

superior cultivars.

Hand-thinning time will be assessed for each cultivar. Chemical thinning trials will be continued in New Jersey. Maxcel (6-Ba) at the full label rate has been shown to eliminate 50% of the hand thinning costs for selected cultivars of Asian pears in NJ (more information will be published in a future article).

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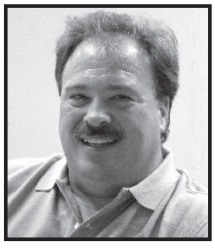

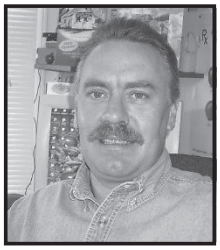

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Fruit IPM Program Presented with Distinguished Service to New Jersey Agriculture Award

The New Jersey Farm Bureau recently awarded, on November 14th, the "Distinguished Service to New Jersey Agriculture Award" to the entire Fruit IPM delivery team at the annual Farm Bureau Convention banquet. Those present were Dean Polk (accepting the award), David Schmitt, Atanas Atanassov, Win Cowgill, Gary Pavlis and Peter Nitzsche.

The NJAES/Rutgers Cooperative Extension Fruit Integrated Pest Management (IPM) Program is a team effort that delivers IPM information and services to NJ fruit growers, helping them produce fruit and manage pests in an economically sustainable fashion. The program uses multiple technologies to manage pests and minimize pesticide use. IPM program staff combine with specialists and county agents to provide an educational delivery program, driven by current research in NJ and other states. The program is supported by state funds, federal competitive grants, and grower/industry grants and fees.

The core staff for program delivery consists of a statewide agricultural IPM agent, Dean Polk, and 3 full time program associate staff. Eugene Rizio in Atlantic County has blueberry responsibilities in Atlantic and Burlington Counties. David Schmitt in Gloucester County has tree fruit and grape responsibilities in Gloucester, Cumberland, Salem, Camden, Burlington and Atlantic Counties. Atanas Atanassov in Hunterdon County is responsible for tree fruit growers in Hunterdon, Warren, Mercer, Monmouth, Middlesex, Morris, Bergen, Somerset, and Sussex Counties. Unlike extension in most other states, our program centers on the weekly delivery of farm scouting information to the

Left to right: Atanas Atanassov; Dean Polk; Win Cowill; Gary Pavlis; Peter Nitzsche; Rich Nieuwenhuis, president, New Jersey Farm Bureau, and Dave Schmidt.

commercial grower. The scouting and monitoring information is backed up with interpretation and recommendations to the grower for control and management decisions. Recommendations are through written reports, faxes, emails, or one-on-one discussion. Monitoring data is summarized for weekly articles in extension newsletters, grower update and annual meetings. Growers or grower organizations contribute funds that pay for seasonal technicians/field scouts, insect traps and other supplies, transportation and vehicle maintenance and portions of staff salary if needed. The core staff focuses on seasonal scouting for insects and disease, weeds (program dependent), management recommendations, regular communication with the growers, fertility sampling, and weekly newsletters.

Researchers and subject matter Extension Specialists provide back-up for production issues, assist in staff training, and conduct IPM research from which results are used within the delivery program as recommendations, monitoring procedures, or other knowledge required for successful management. The program represents a 2 way approach where delivery staff share on-farm information, and collaborate on research projects, which results in improved research and overall extension programming for clientele. Researchers and extension specialists continuously involved in the program include: Peter Oudemans, Plant Pathology (blueberries, grapes), Cesar Rodriguez-Saona, Specialist in Entomology (blueberries, grapes), Bradley Majek, Specialist in Weed Science (blueberries, tree fruit, grapes), Norman Lalancette, Specialist in Plant Pathology (tree fruit), Daniel Ward, Specialist in Pomology (tree fruit and grapes), and George Hamilton, Specialist in Pest Management (tree fruit and coordinator for federal and state funding).

County based agricultural agents interface with their growers, and provide expertise on plant growth regulators, fertility management, and other horticultural practices that may impact IPM decisions. County agents who provide regular input include Gary Pavlis in Atlantic County for blueberries, Jerome Frecon in Gloucester County for tree fruit, Winfred Cowgill in Hunterdon County for tree fruit, and Peter Nitzsche in Morris County.

Grower participation is at 2 levels. Primary participants have all or part of their acreage enrolled in the program for scouting and recommendations; get IPM reports, fruit quality analyses, tailored fertility recommendations, and end of year pesticide use reports. All fruit growers can get newsletters, attend meetings, or receive emails and faxes where IPM information is summarized and discussed with general recommendations. Secondary participants are all other growers getting IPM information, but not enrolled in the scouting program.

During 2011 the fruit IPM program worked with 88 growers as primary participants, consisting of 41 blueberry growers, 41 tree fruit growers, and 6 wine grape producers. Participating farms made up 66% of total NJ blueberry acreage, and about 80-85% of total peach and apple acreage.

The program is information intensive. Fruit growers now rely on narrow spectrum and expensive pesticides that must be timed for specific pest stages and managed to avoid pest resistance. This means growers must know more about the biology of pests, make use of pest levels and treatment thresholds, insect and disease degree day phenology models and other environmental monitoring tools, various pheromone technologies, and have a knowledge of beneficial insects and biological controls. IPM goals are to bring these factors together into one management program. However, the recent arrival of 2 invasive species, the brown marmorated stink bug, and the spotted wing drosophila are refocusing program efforts to the more intense control tactics that will have to be used for these insects. In the coming years the NJ fruit industry will require more applied research and increased collaborative efforts with other states, and the New Jersey Department of Agriculture to help solve these issues.

For further information contact:
Dean Polk, Professor and Statewide Fruit IPM Agent
e-mail: polk@aesop.rutgers.edu

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New Jersey News

Notice

The Annual Meeting of the New Jersey State Horticultural Society will be held at 4:30 p.m. on Wednesday February 1, 2012 in the Tower Suite of the Hershey Motor Lodge and Convention Center, Hershey, PA.

Cowgill Visits New Dean of Delaware Valley College of Science and Agriculture, June 2011

Invited by Dr. Russell Redding,(left) new Dean of Agriculture and Environmental Sciences, Win Cowgill (Right), Area Fruit Agent with Rutgers Cooperative Extension .& editor Horticultural News, tours peach plantings and reviews future orchard plans with Orchard Manager Doug Christie (center).

Peter Melick
Distinguished Service to Hunterdon Agriculture Award

Peter Melick received the 'Distinguished Service to 'Hunterdon Agriculture Award' at their annual dinner meeting of the Hunterdon County Board of Agriculture, November 12, 2011, Flemington, NJ. Peter Melick is Co-owner of Melick's Town Farm in Oldwick, NJ. He is a grower and marketer of fresh fruits, vegetables, and flowers. The retail and wholesale operation also includes the production of fresh apple cider. Peter served as a member of the Board of Directors and past president of the New Jersey Horticulture Society.

Peter's strong sense of community and public service began at a young age. He is a tenth-generation farmer, and has lived his entire life in Oldwick, NJ. As a boy, he was a member of Boy Scout Troop 199, where he reached the rank of Eagle Scout. After graduating from Voorhees High School, he attended Albright College in Reading, PA. While in college, Peter completed a comprehensive marketing study on his farm for one of his business classes. This exercise opened his eyes to the many possibilities available in agriculture and the future of his family's farm. Upon graduating in 1989, with a Bachelor of Science degree in Political Science and Business Management, Peter returned to help manage his family farm.

Peter Melick, Oldwick, NJ was presented a gift by Irvin Hockenbury as he was recognized by the Hunterdon County Board of Agriculture with the 'Distinguished Service to Hunterdon Agriculture Award' at their annual dinner meeting, November 12, 2011. Photo Credit Win Cowgill

Peter has been active in both the agricultural community and his local community, and he has served in many leadership positions. He was a member and President of the New Jersey State Board of Agriculture. He is past-Chairman of the Hunterdon County Agricultural Development Board, past President of the Hunterdon County Board of Agriculture. He is a past Farm Bureau Director representing Hunterdon County and he has also served as a member of the Tewksbury Township Agricultural Advisory Committee.

Peter also serves his local community in many ways. He is a member of the Tewksbury Township Committee, and he currently serves as Mayor. He is the current President, and past Chief of the Oldwick Fire Company. He also serves as a Hunterdon County Deputy Fire Coordinator. He is a member of the Zion Lutheran Church in Oldwick and is the President of the New Germantown Cemetery Association.Peter was awarded the New Jersey Outstanding Young Farmer Award in 2006, and he was a national finalist.

Peter is a columnist for the "Gardner News" and he has been featured on Fox Business News. Peter and his wife Denise have three sons: Will age 10, Andrew age 9, and Matthew age 6.

Samuel F. Sorbello, 78, Passed on December 7, 2011

Sam Sorbello was a retired peach grower with his son is Fred. Their farm was called Hill Creek Orchards. Sam lived the American dream. He married his high school sweetheart and started a successful business which impacted the dinner table at every home in our area. Samuel F. Sorbello was born in Mullica Hill in 1933 into a home where no English was spoken. He attended public school through the 11th grade and then went to work on the family vegetable farm.

At 22, against all advice, Sam ventured into farming on his own. He and his wife, Rose, used most of their cash wedding gifts to buy a used tractor and to make ends meet. In 1960 he began planting fruit trees, all peaches. After seven years he completed the transition from vegetables to fruit. Growing and selling peaches changed the family business in more ways than Sam could imagine. In the era when Sam farmed, each picking was packed and shipped to market immediately. This practice delivered wonderful products to Philadelphia but, at the height of the peach harvest, glutted the market and greatly depressed prices. Sam soon noticed that, only weeks after the New Jersey harvest peaked and supply dwindled, the price of a bushel of peaches rose dramatically. In 1964 Sam and Rose built their first cold storage building that could be chilled to 36° F. With cold storage available, Sam could hold the last 6,000 bushels of his harvest in reserve until other farms had picked and sold their fruit. Delivering to merchants in Philadelphia a few weeks later, he tripled the value of the peaches he had stored because he was the only grower with a supply. In 1973, Sam built a refrigerated warehouse for frozen food. Frozen seafood and blueberries were among the first such products he stored. In 1978 he responded to a customer's request and built the first USDA inspection facility in the Philadelphia area. This venture was in response to a meat importer dissatisfied with the service available from New York City's port. This facility attracted the business of many beef importers who formerly relied on New York and shortly thereafter Philadelphia dominated this business. Sam and a business partner expanded, buying frozen food facilities in Philadelphia and Camden, New Jersey. One Camden warehouse, "Dockside," was the largest portside frozen foods warehouse in the world. But, over time, the environment in which these businesses operated chaffed on Sam. He was happiest in Mullica Hill and so, in 1981, sold his interest and returned to his roots.

As a younger man, Sam enjoyed hunting in the rural area of Mullica Hill. When he retired, he took up golf and loved it. Sam and his wife, Rose enjoyed many great years in Longboat Key, FL where he fished and boated. Sam served on the South Harrison Township Committee and the School Board. He was never afraid of a challenge and Sam's brave determination will be with his family forever.

Sam is survived by his wife of 55 years, Rose (nee Cristaudo). Beloved father of Fred and his wife, Cheryl and Samuel J. and his wife, Colleen. Grandfather of Daniel A., Alexandra D., Jeffrey J. and Nathaniel A. Sorbello. Greatgrandfather of Alexander C. Sorbello. Brother of Bennie Sorbello, Joseph Sorbello, Frances Passeri, Fina Rainear and the late Anna Cocove. Nephew of Sam Bonaccorso.

Donations: Jefferson Foundation for Crohn's Disease Research 925 Chestnut St. Suite 110 Philadelphia, PA 19107.

2012 Mid-Atlantic Fruit and Vegetable Convention Educational Program

PRE-CONVENTION WORKSHOPS Monday, January 30, 2012

Greenhouse Boot Camp Workshop ($45.00 fee which includes lunch) **PRE-REGISTRATION IS REQUIRED**
9:30 **Registration**
10:00 **Market Potentials for Greenhouse Ornamentals -**Thomas Ford, Penn State Univ. Extension
10:15 **Selecting What to Grow; How Do you Choose with so Many Options -**Alan Michael, Penn State Univ. Extension
11:00 **Crop Scheduling -**Sarah Mitchell, Syngenta Flowers
11:45 **Lunch – included**
12:45 **Water Quality and NPK: Why Is It So Complicated?** -Dr. Cari Peters, J.R. Peters Co.
1:45 **Pest Control (Insects)** -Thomas Ford, Penn State Extension
2:30 **Break**
2:45 **Pest Control (Diseases)** -Steven Bogash, Penn State Extension
3:45 **Post Harvest Handling for Greenhouse Annuals** -Alan Michael, Penn State Extension
4:15 **Marketing Annuals into the Current Economy** -Steven Bogash, Penn State Extension
4:30 **Adjourn**

Mobile Marketing Opportunities & Managing Food Business Risks ($60.00 fee which includes lunch) **PRE-REGISTRATION IS REQUIRED Using Social Media & Mobile Applications in Marketing**
More and more consumers are using social media, such as Facebook and Twitter, and mobile phone applications, such as four-square or Google Places, to learn about businesses and products. Penn State's Sarah Cornelisse and Jeffrey Hyde will lead a discussion of some of these tools in the context of a strategic marketing plan. Participants will leave with a strong sense of how the tools can be used collectively to promote the business to certain target audiences. Managing Food Business Risks In the past decade, interest in locally produced foods has grown substantially, in a great part due to consumer desire to know how and where their food is grown. Capitalizing on this interest in buying fresh, local foods, agricultural producers who direct market and add value have realized a larger portion of each food dol-lar remaining in the farm/orchard – but with increased receipts have come larger business risks, due to factors unique to businesses whose products are ingested. This Penn State Extension session led by Lynn Kime and Winifred McGee introduces five proactive strategies and tools that can be adopted by producers to lessen their liability while remaining in compliance with government regula-tions and consumer expectations for safe, quality food products. By attending this session, participants will be able to choose proactive strategies and take the first steps in engaging a customized risk management plan.

Seed Heat Treatment Workshop – ($25.00 fee) **PRE-REGISTRATION IS REQUIRED**
1:00 to 5:00 This workshop will be a combination of formal powerpoint presentations as well as hands-on demonstrations. Registration will be limited. Participants will be given the opportunity to treat their own seed however, we will also provide some seed to practice with for those who don't bring their own. Depending on the number registered, we may need to place a limit on the amount of seed each person can treat. We will set-up 3 to 4 workstations. Participants will also have the opportunity to make their own drying screens to take with them.

Tuesday Morning, January 30, 2012

Tree Fruit -Nigerian Room
9:00 **Invocation** – James Clarke
9:05 **President's Address** -Ed Weaver, Weaver's Orchard
9:15 ****Making the Worker Protection Standard Work for You -**James Harvey, Penn State Univ.
9:45 **George Goodling Memorial Lecture -*Insect IPM Research in Pennsylvania Tree Fruits Over the Past 40 Years and A Glimpse into the Future -**Dr. Larry Hull, Penn State Univ.
10:30 Adjourn to Keynote Session

Farmers' Markets – Trinidad Room
9:00 **Community Interest, Volunteers and Events -**Megan McBride, Easton Farmers' Market
9:30 **Industry Show and Tell**
9:45 **The Consumer and the Farmers' Market: What Research Shows Us -**Dr. Kathleen Kelley and Dr. Jeffrey Hyde, Penn State Extension
10:30 **Adjourn to Keynote Session**

Vine Crops – Crystal Room
9:00 **Heirloom Watermelons/Muskmelons -**Aubrey Hanford, Samantha's Heirlooms and Exotics
9:30 **Industry Show and Tell**
9:45 **PA Winter Squash Variety Evaluation –** Dr. Elsa Sanchez, Penn State Univ.; Dr. Timothy Elkner, Lee Stivers and Thomas Butzler, Penn State Extension
10:30 **Adjourn to Keystone Session**

Brown Marmorated Stink Bug and Other Invasives -Magnolia Room AB
9:00 **The Invasives-**Dr. Shelby Fleischer, Penn State Univ.
9:30 **Industry Show and Tell**
9:45 **Brown Marmorated Stink Bug in Vegetable Crops –** Dr. Galen Dively, Univ. of Maryland
10:30 **Adjourn to Keynote Session**

Organic Production – Magnolia Room CD
9:00 **Comparing Cultivation, Seeding and Transplanting Techniques for Small to Mid-Scale Organic Vegetable Production –** Sara Runkel, The Seed Farm
9:30 **Industry Show and Tell**
9:45 **Interpreting Your Soil Test for Organic Applications –** Dr. Douglas Beegle, Penn State Univ.
10:30 **Adjourn to Keynote Session**

Greenhouse Production – Empire Room AB
9:00 **Container Vegetables: Opportunities for New Products** -Steven Bogash, Penn State Extension
9:30 **Industry Show and Tell**
9:45 **Trial Gardens Flower Report: The Best from the PSU Flower Trials** -Alan Michael, Penn Extension
10:30 **Adjourn to Keynote Session**

Asparagus – Empire Room C
9:00 **Optimum Fertility for Optimum Yields -**Dr. Michael Orzolek, Penn State Univ.
9:30 **Industry Show and Tell**
9:45 **Weed Management in Asparagus –** Dr. Bradley Majek, Rutgers Univ.
10:30 **Adjourn to Keynote Session**

Hops – Empire Room D
9:00 **Producing Hops: Early Decisions -**Rick Pedersen, Pedersen Farms
9:30 **Industry Show and Tell**
9:45 **Growing Hops –** Dr. Matthew Grieshop, Michigan State Univ.
10:30 **Adjourn to Keynote Session**

Featured Growers – Wild Rose Room
9:00 **To Be Announced**
9:30 **Industry Show and Tell**
9:45 **To Be Announced**
10:30 **Adjourn to Keynote Session**

Keynote Session -Nigerian and Aztec Rooms
10:45 **Mid-Atlantic Legislative Affairs Update –** Gary Swan, Pennsylvania Farm Bureau
11:00 **Keynote Presentation – Positioning Your Farm Business for the Future –** Dr. David Kohl, Virginia Tech Univ.
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Tuesday Afternoon, January 31, 2012

Tree Fruit -Nigerian Room
1:30 **Rootstock Scion Interactions -What Do We Know** -Dr. Terence Robinson, Cornell Univ.
2:15 **Industry Show & Tell**
2:30 **An Engineer's Vision for the Development of Orchard Labor Saving Technologies -**Dr. Sanjiv Singh, Carnegie Mellon Univ.
2:50 **A Producer's Perspective on Automation Technologies -**Bruce Hollabaugh, Hollabaugh Brothers, Inc.
3:10 **What Should Future SCRI Proposals Address?** (Open Dialogue with Audience, led by a panel of producers, scientists and growers -Bruce Hollabaugh, Jen Snavely, Mark Boyer, Dr. Sanjiv Singh, Dr. Larry Hull, Dr. Tara Baugher, moderator)
4:00 Adjourn

Marketing– Trinidad Room **To Be Announced**

Pumpkins – Crystal Room
1:30 **Virus Transmission in Pumpkins in the Mid-Atlantic**-Dr. Gerald Brust, Univ. of Maryland,
2:00 **To Be Announced**
2:30 **No-Till Pumpkins** -Sjoerd Duiker, Penn State Univ.
3:00 **Industry Show and Tell**
3:15 **Pumpkin and Vine Crop Disease Control** -Dr. Andrew Wyenandt, Rutgers Univ.
4:00 **Pennsylvania Pumpkin Variety Trial** -Dr. Timothy Elkner, Thomas Butzler, and Emily Swackhammer, Penn State Extension
4:30 **Adjourn**

Irrigation – Magnolia Room AB
1:30 **Marcellus Shale Exploration – Effect on Water Quality** – Bryan Swistock, Penn State Extension
2:00 **Monitoring Soil Moisture** – David Lankford, Earthtec Solutions
2:30 **Trends and Development in Drip Irrigation** – William Wolfram, Toro Ag
3:00 **Industry Show and Tell**
3:15 **Drip Chemigation for Vegetables** – Dr. Gerry Ghidiu, Rutgers Univ.
4:00 **Fertigation** -William Wolfram, Toro Ag
4:30 **Adjourn**

Organic Production – Magnolia Room CD
1:30 **Methods Cultural – Fundamental to Successful Organic Pest Management –** Brian Caldwell, Cornell Univ.
2:00 **Biological Control of Insects in Vegetable Cropping Systems –** Dr. Shelby Fleischer, Penn State Univ.
2:30 **Organic Asparagus Production –** Dr. Mark Hutton, Univ. of Maine
3:00 **Industry Show and Tell**
3:15 **Organic Insecticides – What Works and What Doesn't –** Dr. Galen Dively, Univ. of Maryland
4:00 **A Hybrid Mulch System for Organic Vegetable Production-**Dr. Mark Hutton, Univ. of Maine
4:30 **Adjourn**

Greenhouse Production – Empire Room AB
1:30 **Stopping Root Diseases -**Alan Michael, Penn State Extension
2:00 **Fertilizing Annuals -**Dr. Cari Peters, J.R. Peters Co.
2:30 **Growing New Guinea Impatiens and Sunpatiens –** Dr. James Faust, Clemson Univ.
3:00 **Industry Show and Tell**
3:15 **Fundamentals of Tank Mixing** – Dr. Ray Cloyd, Kansas State Univ.
4:00 **Greenhouse Light Management; Making the Most of Sunlight and Artificial Light –** Dr. James Faust, Clemson Univ.
4:30 **Adjourn**

Cole Crops – Empire Room C
1:30 **Cauliflower Production and Marketing in PA -**Jeffrey Stoltzfus, Eastern Lancaster Co. School District
2:00 **Brussels Sprouts Production -**Dr. Michael Orzolek, Penn State Univ.
2:30 **Swede Midge Update -**Christy Hoepting, Cornell Coop. Extension
3:00 **Industry Show and Tell**
3:15 **Insect Identification and Control in Cole Crops** -Dr. Gerald Ghidui, Rutgers Univ.
4:00 **Collards and Kale Production –** Dr. Gerald Brust, Univ. of Maryland
4:30 **Adjourn**

Labor/Farm Management – Empire Room D
1:30 **Overview of Computerized Recordkeeping Systems for Farms** -Keith Dickinson, Penn State Extension
2:00 **To Be Announced**
3:00 **Industry Show and Tell**
3:15 **To Be Announced**
4:00 **To Be Announced**
4:30 **Adjourn**

General Vegetables – Wild Rose Room
1:30 **Managing Soilborne Pathogens in Snap Beans** – Dr. Beth Gugino -Penn State Univ.
2:00 **Edamame Production** – Dr. Carl Sams, Plant Science Dept., Univ. of Tennessee
2:30 **Innovative Equipment for Small Farms** – Dr. John Wilhoit, Univ. of Kentucky
3:00 **Industry Show and Tell**
3:15 **Organic Amendments & Soil Testing to Manage Nitrogen for Vegetable Crops** -Dr. Joseph Heckman, Rutgers Univ.
4:00 **Sweet Spanish Onion Production** – Dr. Michel Orzolek, Penn State Univ.
4:30 **Adjourn**

Tuesday Evening, January 31, 2012 Social
6:00 **Fruit and Vegetable Grower Reception** – Chocolate Lobby
7:00 **Fruit and Vegetable Growers Banquet -**Aztec and Nigerian Rooms ($35 ticket required) – buffet dinner, recognitions and awards

Wednesday Morning, February 1, 2012

Tree Fruit -Nigerian Room
9:00 ***Brown Marmorated Stink Bug – One Year Later** -Dr. Gregory Krawczyk, Penn State Univ.; Dr. Tracey Leskey, United States Dept. of Agriculture
9:45 ***What Copper Formulations are Best for Tree Fruit Applications?** -Dr. David Rosenberger, Cornell Univ.
10:30 **Industry Show & Tell**
10:45 **Test Drive a High Density Sweet Cherry Orchard System** -Dr. Greg Lang, Michigan State Univ.
11:30 **Engineering of Machine-Assist Harvest Devices: Current and Future Activities -**Dr. Paul Heinemann, Penn State Univ.
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Peaches – Trinidad Room
9:00 **Mechanization in Peach Thinning** -Dr. Tara Baugher, Penn State Extension
9:30 **Peach Rootstocks Your Father Wished He Had** -Dr. Gregory Reighard, Clemson Univ.
10:00 **Industry Show & Tell**
10:15 ***Peach Scab – Biology & Control -**Dr. Norman Lalancette, Rutgers Univ.
10:45 **Breeding for Different Flesh Types, Acidity Levels and Bacterial Spot Resistance** -Dr. John Clark, Univ. of Arkansas
11:30 **RosBREED Survey to Quantify Grower Priorities for New Peach Cultivars** -Drs. Greg Reighard, Clemson Univ. and John Clark, Univ. of Arkansas
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Sweet Corn – Crystal Room
9:00 **Sweet Corn Insect Pest Control – What New and What Works** -Dr. Galen Dively, Univ. of Maryland
9:45 **No-Til Weed Control in Sweet Control – With and Without Atrazine** -Dwight Lingenfelter, Penn State Univ.
10:15 **Industry Show and Tell**
10:30 **Airblast Sprayers for Sweet Corn – Calibration and Adjustment** – George Hamilton, Univ. of New Hampshire Extension
11:30 **PVGA Annual Meeting**
12:30 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Farm Retail Marketing -Magnolia Room AB
9:00 **The Consumer and the On-Farm Market: What Research Shows Us** -Dr. Kathleen Kelley and Dr. Jeffrey Hyde, Penn State Univ.
10:00 **Industry Show and Tell**
10:15 **Custom Growing** -Bob Russell, Bob Russell Custom Grower
11:00 **Farm Product Branding** -Lela Reichart, Pennsylvania Dept. of Agriculture
11:30 **PVGA Annual Meeting –** Crystal Room
12:30 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Spanish -Magnolia Room D

Potatoes -Magnolia Room D
9:00 **Update from the United States Potato Board and the Pennsylvania Co-Operative Potato Growers-**John Probasco, United States Potato Board and Roger Springer, Pennsylvania Co-Operative Potato Growers
9:30 **Fertilizer Program for Potatoes in the Mid-Atlantic and Northeast** -Dr. Donald Halseth, Cornell Univ.
10:00 **Industry Show and Tell**
10:15 **What's New in the Cornell Potato Breeding Program** -Dr. Walter DeJong, Cornell Univ.
11:00 **Update on Potato Diseases** -Dr. Beth Gugino, Penn State Univ.
11:30 **PVGA Annual Meeting –** Crystal Room
12:30 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Greenhouse Ornamentals – Empire Room AB
9:00 **Western Flower Thrips Management; Is the Game Over?** – Dr. Raymond Cloyd, Kansas State Univ.
10:00 **Industry Show and Tell**
10:15 **Energy Conservation for Greenhouses** -Scott Sanford, Univ. of Wisconsin
11:00 **Biomass Energy for Greenhouses** -Scott Sanford, Univ. of Wisconsin
11:30 **PVGA Annual Meeting –** Crystal Room
12:30 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Peppers – Empire Room C
9:00 **High Tunnel Pepper Nutrient Management -**Steve Bogash -Penn State Extension
9:30 **Keeping it Safe: Tips for Producing and Packing Peppers in the World of Foodborne Illnesses –** Dr. Wesley Kline, Rutgers Coop. Ext.
10:00 **Industry Show and Tell**
10:15 **Pepper Disease Management Update –** Dr. Andrew Wyenandt, Rutgers Univ.
11:00 **Plant Pathogens in Surface Irrigation Water –** Lisa Jones -Cornell Univ.
11:30 **PVGA Annual Meeting –** Crystal Room
12:30 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Root Crops – Empire Room D
9:00 **High Tunnel Beets and Carrots –** David King, Harvest Valley Farms
9:30 **Insect Control for Root Crops –** Dr. Shelby Fleischer, Penn State Univ.
10:00 **Industry Show and Tell**
10:15 **How I Grow Root Crops** – Roy Brubaker, Village Acre Farm
11:00 **Herbicides for Roots Crops –** Dr. Bradley Majek, Rutgers Univ.
11:30 **PVGA Annual Meeting –** Crystal Room
12:30 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Wine Grapes – Wild Rose Room
9:00 **Grape Disease Research Update: Bunch Rot, Black Rot and Phomopsis** -Bryan Hed, Penn State Univ.
9:45 **Soil Health and Nutrition and the Cornell Soil Health Program** -Lee Stivers, Penn State Extension
10:15 **Industry Show & Tell**
10:30 **Bird Management in Vineyards** -Mark Chien, Penn State Extension
11:15 **Powdery and Downy Mildew Research in a Trying Year** -Dr. Noemi Halbrendt, Penn State Univ.
12:00 Lunch

Wednesday Afternoon, February 1, 2012

Tree Fruit -Nigerian Room
1:30 ****Calibrating Air Blast Sprayers -**George Hamilton, Univ. of Vermont
2:30 **High Density Pear Systems -**Dr. Terence Robinson, Cornell Univ.
3:15 **Industry Show & Tell**
3:30 **Food Safety Issues and US Apple Association** -Nancy Foster, U.S. Apple Association
4:00 **Pennsylvania Apple Marketing Board Program Update -**Karin Rodriguez, Penna. Apple Marketing Board
4:30 **Adjourn**

Peaches – Trinidad Room
1:30 **Annual Business Meeting of the National Peach Council**
1:45 **Ernie Christ Memorial Lecture -*The Long View of Orchard Floor Management in Peaches** -Dr. Bradley Majek, Rutgers Univ.
2:30 **Industry Show & Tell**
2:45 **Marketing Opportunities for the Peach Industry** -Steve Lutz, The Perishables Group
3:45 **What are my Favorite Peach Varieties & Why** -Grower Panel -Jerry Frecon (moderator);Mark Bream, PA; Bob Black, MD; Bob Best, NJ; Jim Bennett, DE
4:30 **Adjourn**

Tomatoes – Crystal Room
1:30 **Tomato Breeding Update -**Dr. Majid Foolad -Penn State Univ.
2:00 **Focus on Tomato: A Webcast Training Resource for Growers and Other Practitioners -**Phil Bogan-Communications Manager-Plant Management Network Int.
2:30 **Chasing Potassium: Building High Yields and Great Tomatoes -**Steve Bogash -Penn State Univ.
3:00 **Industry Show and Tell**
3:15 **Tomato Disease Update: Looking Back and Then Forward to 2012 -**Dr. Beth Gugino -Penn State Univ.
4:00 **Dicamba and 24-D Tolerant Crops in Tomato and Vegetable Rotations** -David Mortensen Penn State Univ.
4:30 **Adjourn**

CSA Marketing – Magnolia Room AB
1:30 **Crop Planning -**Tianna DuPont, Penn State Extension
2:15 **The Business Side of CSA's -**Joseph Stratton, Wynnorr Farm
3:00 **Industry Show and Tell**
3:15 **To Be Announced**
4:00 **To Be Announced**
4:30 **Adjourn**

Spanish -Magnolia Room C

Potatoes – Magnolia Room D
1:30 **Update on Insect Control in Potatoes** -Dr. Gerald Ghidiu, Rutgers Univ.
2:00 **Thoughts on Storage of Potatoes** -Todd Forbush-Techmark, Inc.
2:30 **Thoughts, Observations and Concerns from a Potato Chip Company Perspective**-Mitch Keeney, Utz Potato Chip Company (tentative)
3:00 **Industry Show and Tell**
3:15 **So You are Going to be a Potato Farmer-Now What? -**Robert Leiby, Penn State Extension,
4:00 **New Opportunities for Growing Potatoes in Pennsylvania** -Keith Masser, Pennsylvania Co-operative Potato Growers Inc.

Greenhouse Perennials – Empire Room AB
1:30 **New Improved and Underutilized Perennials** -Melanie Neff, Green Leaf Plants
2:00 **Green Roof Plants** -Paul Cook, Creekhill Nursery
2:30 **Managing Foliar Diseases in the Greenhouse** -Ruth Benner, Penn State Extension
3:00 **Industry Show and Tell**
3:15 **Perennial Crop Scheduling and Vernalization Requirements** -Melanie Neff, Green Leaf Plants
4:00 **Marketing Mania; Perennials for Generation X & Yer's** -Thomas Ford, Penn State Extension
4:30 **Adjourn**

Small Fruit – Empire Room CD
1:30 **Raspberry Nutrition: The Foundation of Productivity -**Dr. Eric Hanson, Michigan State Univ.
2:00 **Opportunities in Blackberry Production and Marketing -**Dr. John Clark, Univ. of Arkansas
2:30 **New Season Extension Technologies for Strawberries -**Dr. Kim Lewers, USDA-ARS.
3:00 **Industry Show and Tell**
3:15 **Selecting Primocane-Fruiting Raspberry Cultivars -**Dr. Gail Nonnecke, Iowa State Univ.
4:00 **Strawberries: Then, Now, and in the Future -**Dr. Marvin Pritts, Cornell Univ.
4:30 **Adjourn**

Wine Grapes – Wild Rose Room
1:30 **Update on NE-1020 Wine Variety Trials** -Dr. Robert Crassweller, Penn State Univ.
2:00 **Observations on 2011 Vintage** -Denise Gardner, Penn State Univ.
2:30 **New Zealand Wine Industry and Relations with the U.S**. -Dr. Kathleen Kelley, Penn State Univ.
3:15 **To Be Announced**
3:45 **Impact of the Use of Phosphorous Acid Formulations** -Dr. Joseph Fiola, Univ. of Maryland
4:15 **Adjourn**

Wednesday Evening, February 1, 2012 Social/Educational
5:00 **Reception for Pennsylvania Apple Growers** -Cocoa Suites – hosted by the Pennsylvania Apple Marketing Board
7:00 **Ice Cream Social for All Convention Attendees –** Great Lobby – hosted by the Pennsylvania Vegetable Growers Association – ice cream served until 8:00 p.m.
7:00 **Business Management Software**
7:00 **High Tunnel Biocontrol Workshop Principles for Successful Biocontrol –** Dr. Cathy Thomas, Penna. Dept. of Agriculture **Using Guardian Plants in High Tunnel Biocontrol Program –** Dr. Carol Glenister, IPM Laboratories **The Penn State High Tunnel Facility Biocontrol Program –** Dr. Michael Orzolek, Penn State Univ.

Thursday Morning, February 2, 2012

Tree Fruit -Nigerian Room
9:00 ***Disease Susceptibility of New Apple Cultivars -**Dr. Keith Yoder, Virginia Tech Univ.
9:45 ***Are Apple Tree Canker Diseases Impacted by Glyphosate Herbicide?** -Dr. David Rosenberger, Cornell Univ.
10:15 **Industry Show & Tell**
10:30 ***Apple Scab 101** -Dr. Henry Ngugi, Penn State Univ.
11:00 ***Apogee for Control of Fire Blight and Shoot Growth -**Dr. Keith Yoder, Virginia Tech Univ.
11:30 **China's Coming Impact on the Market -**Karin Rodriguez, Penna. Apple Marketing Board
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Peaches – Trinidad Room
9:00 ***Peach Scab -Biology & Control** -Dr. Norman Lalancette, Rutgers Univ.
9:45 **Industry Show & Tell**
10:00 **Update on Peach System Trials in Pennsylvania** -Dr. James Schupp, Penn State Univ.
10:45 **National Peach Council Update** -Kay Rentzel, National Peach Council
11:00 **Handling Low Acid Peaches** -Dr. Daniel Ward, Rutgers Univ.
11:30 California Peach Mechanization Discussion – Panel -Ajayab Dhaddy, CA Canning Peach Assoc.; Kevin Voss, CA Canning Peach Assoc.; Ranjit Davit, CA Canning Peach Assoc.
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

High Tunnels – Crystal Room
9:00 **Marketing Using a Cooperative CSA Model"-**Dr. Mitch Wapner, Paradox Farm/Firsthand Farmers
9:30 **What Growers Need to Consider When Comparing High Tunnel Frames**-Ed Person, Ledgewood Greenhouses
10:00 **Industry Show and Tell**
10:15 **Trial Results for Cucumber, Chinese Cabbage and Potatoes in High Tunnels**-Lewis Jett, West Virginia Univ.
11:00 **Diseases and Their Control in High Tunnels**– Dr. Meg McGrath, Cornell Univ.
11:30 **Using Bio-Control Measures in High Tunnels** – To Be Announced
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Agritainment – Magnolia Room AB
9:00 **Consumer Demand for Agri-tourism** -Sarah Cornelisse, Penn State Extension
9:30 **Networking With Your Regional Tourism Groups** -Shireen Farr, Cumberland Valley Visitors Bureau
10:00 **Industry Show and Tell**
10:15 **Our Small Diverse Farm and Thinking Outside the Box** -Paul Stahlman, Paul's Pumpkin Patch
11:00 **Our Seasonal Suburban Market** -Bruce Hellerick, Hellerick's Family Farm
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Cut Flowers – Empire Room AB
9:00 **New Varieties of Cut Flowers**, Alicain Carlson, North Carolina State Univ.
9:30 **Insect Management in Cut Flowers**, Thomas Ford, Penn State Extension
10:00 **Industry Show and Tell**
10:15 **Growing Cut Perennials in High Tunnels**, Keith Cramer, Cramer's Posie Patch
11:00 **Post Harvest Handling of Cut Flowers,** Alicain Carlson, North Carolina State Univ.
11:30 **Great Woody Plants for Cut Flowers,** Thomas Ford, Penn State Extension
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Small Fruit – Empire Room CD
9:00 **Experiences and Ideas in Marketing Berry Crops (grower panel) -**Fred Koenigshof, K & K Farms; Bruce Hellerick, Hellerick's Family Farm, Norm Schultz, Linvilla Orchards
9:30 **Experiences and Ideas in Marketing Berry Crops (cont.) –** Fred Koenigshof, K & K Farms; Bruce Hellerick, Hellerick's Family Farm, Norm Schultz, Linvilla Orchards
10:00 **Industry Show and Tell**
10:15 **Black Root Rot in Strawberries: What's New -**Emily Lavely, Penn State Univ.
11:00 **Food-Borne Diseases and Berries: How to Stay Out of the News** – Dr. Luke Laborde, Penn State Univ.
11:30 **Profitable Strawberries after the Competition is Finished –** Norm Schultz, Linvilla Orchards
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

General Vegetables –Wild Rose Room
9:00 **Food Safety Update** -Dr. Luke LaBorde, Penn State Univ.
9:30 **Soil Compaction** – Dr. Sjoerd Duiker, Penn State Univ.
10:00 **Industry Show and Tell**
10:15 **Food Safety Considerations When Using Manure and Composts -**Wes Kline, Rutgers Extension
11:00 **Grafted Watermelon and Tomato Production** -Dr. Sanju Gu, Lincoln Univ.-Missouri
11:30 **Attempts at Strawberry Production in Greenhouses**-Dr. Carl Sams, Univ. of Tennessee
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Post Harvest –Magnolia Room CD
9:00 **Post Harvest Handling of Sweet Corn –** Brian Campbell, Brian Campbell Farms
9:30 **Containers for Vegetables –** Eric Menard, Agrinovation
10:00 **Industry Show and Tell**
10:15 **Refrigeration: Cool Bot –** John Wilhoit, Univ. of Tennessee
11:00 **Post Harvest Food Safety –** Lee Stivers, Penn State Extension
11:30 **The Best Looking Vegetables –** Arthur King, Harvest Valley Farms
12:00 **Luncheon Buffet -**Great Lobby and Confection Lobby (cash)

Thursday Afternoon, February 2, 2012

Tree Fruit -Nigerian Room
1:30 ****Core Presentation**
2:00 **New Apple Rootstocks Available Now and On the Horizon -**Dr. Robert Crassweller, Penn State Univ.
2:30 **Rootstocks for Cherries: Not Your Father's Oldsmobile -**Dr. Gregory Lang, Michigan State Univ.
3:00 **Perishable Agricultural Commodities Act** -Travis Hubbs, USDA
3:30 **To Be Announced**
4:00 **Adjourn**

High Tunnels -Crystal Room
1:30 **High Tunnel Bramble Production and Vegetable**–Erik Gundacker, Grower Minnesota
2:00 **New Ideas for High Tunnels** – Todd Alexander, Tunnel Vision Hoops LLC
2:30 **How High Tunnels are Used in My Farming Operation** – Ed Person, Ledgewood Greenhouses
3:15 **Capturing Rainfall Off a High Tunnel for Irrigation** – Dr. Lewis Jett, West Virginia Univ.
3:45 **High Tunnels in the Urban Environment of Philadelphia** -Dr. William Lamont, Penn State Univ.
4:15 **Adjourn**

Marketing Through Communication – Magnolia Room AB

1:30 **Using the Web/Social Network Media for Marketing –** Jenny Carleo, Rutgers Extension
2:00 **Crisis Management-Dealing with the Media for Unexpected Situations-**To Be Announced
2:30 **Communicating the Benefits of Your Products-**Luanne Huges, Rutgers Extension
3:15 **Communicating Your Farm's Vision –** Stephen Komar, Rutgers Extension
3:45 **How We Communicate the Benefits of Our Farm Customers and Community -**Tracy Duffield, Duffield's Family Farm
4:15 **Adjourn**

Cover Crops –Magnolia Room CD

1:30 **Evaluation of Cover Crops for Improving Root Health and Yield of Vegetables -**Dr. Beth Gugino, Penn State Univ.
2:00 **Making Winter Cover Crops Work for Early Spring Vegetable Production: Reducing Tillage, Enhancing Soil Health and Increasing Profitability –** Natalie Lounsbury, Univ. of Maryland
2:30 **The Link Between Cover Crops and Weed Suppression -**Dr. William Curran -Penn State Univ.
3:15 **Use of Roll Down Cover Crops in Vegetable Production Systems –** Alison Grantham -Penn State Univ.
3:45 **Roll Down Cover Crops Grower Panel Discussion –** To Be Announced
4:15 **Adjourn**

Greenhouse New Technologies – Empire Room AB

1:30 **Improving Sustainability: Using and Understanding Biocontainers,** Matt Taylor, Horticulture Researcher, Longwood Gardens
2:00 **Lighting Your Crops with LED's,** Johann Buck, HortAmerica's LLC
3:15 **Virtual Grower Software Part 1,** Jonathan Frantz, United States Dept. of Agriculture
4:15 **Adjourn**

Small Fruit – Empire Room CD

1:30 **Highbush Blueberry Cultural Issues and Solutions –** Dr. David Handley, Univ. of Maine
2:00 **What's New in Blueberry Varieties? –** Dr. Mark Enlenfeldt, United States Dept. of Agriculture
2:30 **Spotted Wing Drosophila: The Other New Fruit Pest –** Dr. David Biddinger and Kathleen Demchak, Penn State Univ.
3:15 **Calibration of Smaller Equipment –** Lee Stivers, Penn State Univ.
3:45 **Adjourn**

Specialty Crops – Wild Rose Room

1:30 **Ethnic Vegetables** – Dr. Sanju Gu, Lincoln University, Missouri
2:00 **Tomatillo and Cilantro Production** – David Myers, Univ. of Maryland Extension
2:30 **Garlic Production** – Tony Hatfield-Nicholson, Juniata Stinking Rose
3:15 **Rhubarb Production** – Arthur King, Harvest Valley Farms
3:45 **Baby Vegetables -**Benjamin Beale, Univ. of Maryland Extension
4:15 **Adjourn**

ADVANCED REGISTRATION AND MEMBERSHIP INVOICE
For the Mid-Atlantic Fruit & Vegetable Convention
and Membership to the New Jersey State Horticultural Society
Hershey Lodge and Convention Center – Hershey, PA
January 31 and February 1, 2, 2012

Membership Name(s) _____

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Registration Fees

MEMBERS' ADVANCED REGISTRATION #_____@ $60 = $_____
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One, Two, or Three Day Members' Registration Will Cost $75 at the Door

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