

PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

NOVEMBER 11, 2003



Fantasia Number One, According to NJ Taste Test Panel

Fantasia, a late season nectarine and the number one nectarine in New Jersey, was selected as the best tasting variety according to a panel of consumer taste testers at the recent Rutgers Fruit Variety Showcase in Gloucester County, NJ. 293, a variety developed at the New Jersey Agricultural Experiment Station and Flamin Fury PF 27A, an important late season variety were selected #2 and #3 respectively. All three varieties had an acidic, melting-textured yellow flesh which separated readily from the stone.

Julie Elmer, Food Technology Specialist, with the Rutgers Food Innovations Research and Extension Center in Bridgeton, New Jersey and Rutgers Cooperative Extension and Agricultural Agent Jerome L. Frecon conducted the taste test panel.

Ten varieties were harvested at full maturity or tree ripened. Each of the varieties had different textures and known flavor components, said Mr. Frecon. Two varieties grown in California and purchased at the Philadelphia Food Distribution Center were also part of the panel. "One variety, Elegant Lady was stamped tree ripened, and the other September Snow, well matured", said Frecon.

We tried to present the varieties in the same manner, said Ms Elmer. "All of the varieties were sliced and numbered in preparation for the blind taste test. Samples were similar in size and served at room temperature. Each fruit was evaluated on a 5 point scale for appearance, flavor, texture, sweetness and an overall grade. There were 31 participants, 38.7% women and 61.3% men. The ages were the following: 3.2% age 18-25 yrs., 6.4% age 26-34 yrs., 19.3% age 35-44 yrs., 42% age 45-54 yrs., 16.1% at 55-64 yrs., and 13% over 65 years. The group consisted of approximately 19.2% master gardeners, 22.6% growers, 22.6% agricultural extension and research personnel, 6.5% consumers, 6.5% engineers, and 22.6% unidentified professions," said Ms Elmer.

The winner of the showcase tasting by a slight edge was the Fantasia nectarine. Fantasia was 1st for flavor, texture, and tied for sweetness. Coming in close behind at second place was the NJ 293 Peach which placed 1st for appearance, 1st for overall, and tied for sweetness. The full results based on all scores are as follows:

SEE PEACH TASTE TEST ON PAGE 2

INSIDE

Fantasia Number One, According to NJ Taste Test Panel	1
2003 Growing Season Difficult for Most Peach Growers	2
Briefs	4
AGR-Lite Crop Insurance Approved for NJ for 2004	4
Top Ten Reasons to Have Crop Insurance	5
Calendar of Events	6
Cider Illness Outbreak in Ohio	6
2004 Mid-Atlantic Fruit and Vegetable Convention	7

Results of Showcase Tasting

1st Place

Fantasia Nectarine - Acidic yellow-flesh nectarine grown in NJ

2nd Place

NJ 293 – Acidic yellow-fleshed peach grown in NJ

3rd Place

Flamin Fury PF 27- Acidic yellow-fleshed peach grown in NJ

4th Place

Harcrest – Acidic yellow-fleshed fruit peach grown in NJ

5th Place

Jersey Queen- Acidic yellow-fleshed peach grown in NJ

6th Place

Lady Nancy – Acidic white-fleshed peach grown in NJ

7th Place

Tie between Sugar Giant, a white-fleshed low acid peach grown in NJ and Artic Pride, a low acid white-fleshed nectarine grown in NJ

8th Place

O'Henry II – Acidic, yellow-fleshed fruit peach grown in NJ

9th Place

NJ 7-28 White-fleshed peach, stony hard, low acid, grown in NJ

10th Place

Elegant Lady – Acidic yellow-fleshed peach, grown in California, tree ripened

11th Place

September Snow – low acid, white-fleshed peach, grown in California

Submitted by Jerome L. Frecon, Agricultural Agent.

2003 Growing Season Difficult for Most Peach Growers

Jerome L. Frecon, Agricultural Agent

It is good to reflect back upon the season to learn things that went wrong and correct them if possible. 2003 was the most difficult growing and shipping season for southern New Jersey peach growers in the 21 years I have been working with Rutgers Cooperative Extension. Most of you probably don't want to remember this season and unfortunately some of you may never forget it.

Being a positive thinker I would like to focus on what was good about the 2003 season. We had ample soil moisture throughout the season. We thus generally had big fruit and irrigation costs were low. Our surface water sources were replenished and our fertilizer got down to the roots quickly. We may have saved a little money on thinning because we didn't have to go back over blocks due to lack of soil moisture. We had lots of beautiful fruit and there may have been places where the lateness of the season helped the market (there were few). Our orchards looked green and lush, and some trees that were weakened by extended drought may have recovered. There was plenty of growth and vegetation to feed the deer so browsing on our trees may not have been as bad as normal.

We started out the season with projections of a big crop; about 80 million pounds. Yes, there were a few places where we had some frost, and we lost some trees due to abiotic factors (drought injury to root asphyxiation). We also lost some trees to collar rot injury, good old peach decline, and a few other things we could not identify. Tree loss did reduce the crop. We bloomed about 10 days later than normal and with the cloudy and sometimes cool weather, time of maturity never got back to normal. We started thinning early and hard because our sellers and buyers kept telling us fruit had to be larger. Most growers tried to grow big fruit, and by and large did a decent job. Where they did not they paid the price. It was obvious early in the season that we were going to come up short on volume. Based on leaf to fruit ratios, we have worked with over the years you can't grow all 2 3/4 inch fruit without reducing yields. While fruit color was good our soluble solids concentration (SSC) was lower. We were butting heads with southern peaches that were larger and sweeter early in the season. Because of the anticipation for New Jersey peaches, we were able to receive some acceptable prices for early varieties. Fortunately the growers that had large fruit could move it at a modest profit. There were exceptions and we have too many varieties before Redhaven that do not consistently produce 2 3/4 inch in diameter fruit. Medium sized peaches with SSC levels below 10% were hard to sell on any market. Low or sub acid peaches were disappointing because most tasted flat. Some growers could not sell their early to mid season white peaches.

We had tremendous pest management costs. We couldn't reduce any spray because the weeds and diseases kept coming. Even with the wet weather we didn't chance missing any insecticide sprays. We also saw some new marking on the fruit due to slow and poor drying.

As the season progressed the wholesale markets continued to get worse. Midseason to late peaches 2 1/2 inches in diameter were moving slowly and well below the cost of production. Movement was better on 2 3/4 inch peaches but prices hovered near the cost of production as

SEE 2003 SEASON ON PAGE 3

2003 SEASON FROM PAGE 2

storages backed up. Unfortunately because this season continued to be later than normal there were "old" 2 1/2 inch peaches competing with fresh 2 3/4 and up peaches. The NJPPC, NPC, and the NJDA worked hard to try and improve movement by lobbying the USDA programs to buy surplus peaches, and also to inform supermarkets that we had a lot of peaches to sell because the season was later than normal, and not because fruit was backed up in storage. Extra calls, visits and mailings were made to try and salvage the market. Unfortunately by early to mid September growers were abandoning some blocks because they could not market what they had harvested at any price. Other peaches were picked but could not be sold so full bins had to be dumped. There were 2 1/2 inch peaches and commercials that were packed and had to be dumped.. There were peaches that were picked at optimum maturity with the best flavor of the season that were eventually graded but a high percentage had to be dumped because the fruit was soft. Based on some of the returns growers received, their peaches should probably have never been harvested.

To add to the market problems there were beautiful peaches that fell on the ground in September. The long cloudy and wet growing season caused a heavy drop on late varieties. At least three wind and rain storms also blew a lot of fruit on the ground.

In a nutshell PEACHES, WHERE THEY WERE HARVESTED, SOLD WELL BELOW THE COST OF PRODUCTION AND MARKETING. Peach growers and shippers lost money. Some will simply not be able to continue to grow and market peaches. For those who can we must find solutions. Where do we go from here?

What can we do about the weather? We have to learn to better manage risk. We can't change the weather. We're having a series of seminars this month to tackle this question. The weather has to be better in the future. We also know that it is unusual to have a late season so this will change and may help us market.

We have made tremendous strides in growing peaches but have we made them in marketing?. We have good varieties over a longer season. We have diversity in peach types. No variety is perfect. We need to grow bigger and sweeter peaches early in the season. We need firmer, higher colored fruit that hangs on the tree later in the season. Retain, MCP and better varieties will help this. We still need diversity but we need to develop more markets.

We have good peach growers that do things correctly. No doubt the lack of capital will make it increasingly difficult to have all the production tools needed to grow peaches efficiently for some growers. Some growers need to be better prepared to irrigate and grow big fruit. Others need to learn to pick mature fruit. We need better varieties to help growers with these problems.

If we grow this large attractive and flavorful fruit in a cost effective manner and get it to the packinghouse at optimum maturity will we be able to sell it profitably? Some will be sold directly by growers who work well with the public, and have the marketing skills and capitol to move in this direction. Others will continue to wholesale and massage those niches in the market place to sell at a profit. And some of the largest growers will be able to compete providing what buyers want.

Many peach growers from other states had similar problems. Market News prices were well below the cost of production from most shipping points. By the end of October in 2002 the USDA Market News service reported 730,750,000 pounds of peaches shipped of which 520,960,000 came from California. In 2003 these volumes dropped to 691,140,000 pounds nationwide with 487,580,000 from California. These figures represent fresh market peaches and not nectarines or cling peaches. Just about every peach producing state was down except Michigan, Idaho, and Georgia. Last year these states had significant crop loss due to weather. Shipments from Appalachia are confusing. This area represents Pennsylvania, Maryland, Virginia and West Virginia. Many shippers are probably missed but it is hard to believe Pennsylvania grows 70,000,000 pounds of peaches when all of these only report they ship 9,710,000 pounds of peaches. We also saw that 15 to 20% more peaches were imported from Mexico and Chile last winter in comparison to the previous winter. Does this make a difference?

Now in New Jersey in 2003 the USDA predicted we would harvest 80,000,000 pounds of peaches. We normally sell about 30% of these peaches locally. For example our 2002 estimate utilized was 60,000,000 pounds and 40,310,000 pounds were shipped. This represented about 67% of total utilization. We assume the other 33% was either lost in the field or sold locally and not shipped. This year by the end of October we had only shipped 36,664,000 pounds or 45 % of our production. What happened to the other 55%? If we sold half of this locally, what happened to the other 27 %? Is this what we lost either in the field or what was dumped? This amounted to 21,500,000 to 24,000,000 pounds. Naturally I know some shippers don't report all their peaches.

If this is not a natural disaster it is certainly a marketing disaster. What happened to 900,000 to 950,000 boxes of peaches? I think we need some marketing help. It appears by the local food retailer peach displays, there is not much interest in promoting peaches where consumer can purchase more peaches at reasonable prices. There is more price spread between what growers and shippers receive, and the price listed on retail displays.

Some ideas in this area will be addressed in the next issue. □

Briefs

✓ **Halford seed used for rootstock may be mixed genotype and virus contaminated.** Producers should be aware that "Halford" seed stocks are probably a mixed bag. Dr. Simon Scott (Clemson University) has recently determined that "Halford" seed may be of mixed genotype, essentially the same as "cannery-run" seeds. In addition, high levels of peach viruses may be encountered in such seed, especially **Prunus Necrotic Ringspot Virus** (PNRSV). The Southeastern Budwood Testing Program is going well, and budwood stocks for southeastern peaches should be relatively clear of viruses. However, some viruses can come through seed stocks as well. This revelation concerning Halford indicates the clear need for a controlled seed stock. Establishment of a clean block (possibly Lovell) is highly desired – high on the "wish list." *Source: Southeastern Regional Peach Newsletter, Vol. 3 No. 4 – Page 1*

✓ **Plum Pox Virus survey of Pennsylvania continues to find new "hits," including a nursery.** Producers should not be complacent about **Plum Pox Virus** (PPV). Though the survey and eradication program in Pennsylvania continues to go well, PPV continues to be found in the region. Nine infected sites were found this summer: 6 homeowner properties, 2 commercial orchards, and one fruit tree nursery location. The nursery is the most troubling site, since the implications are obvious. Trace-back and trace-forwarding investigations are being utilized to determine whether budwood or rootstocks played a role in the nursery infection. *Source: Southeastern Regional Peach Newsletter, Vol. 3 No. 4 – Page 2*

✓ **Telone label changes.** Application of Telone II for nematode control just became a little easier, thanks to some specimen label changes. See the label for specifics, but the PPE requirements have been substantially reduced, and the buffer zones have been reduced from 300 feet to 100 feet (especially important where peach acreage is adjacent to housing). *Source: Southeastern Regional Peach Newsletter, Vol. 3 No. 4 – Page 2*

*Submitted by Jerome L. Frecon,
Agricultural Agent. □*

AGR-Lite Crop Insurance

Approved for New Jersey for 2004

Win Cowgill, Agricultural Agent, Kim Linonis, Program Associate, Dave Lee, Agricultural Agent and Jon Clements, Tree Fruit Extension Fruit Specialist, UMASS

Make Crop Insurance part of your business plan!

AGR-Lite (Adjusted Gross Revenue – Lite) is a streamlined whole-farm revenue protection crop insurance package that can be used as a stand-alone coverage or in addition to other individual crop insurance policies (except AGR). The plan is easy to understand because it follows the marketplace. It is particularly useful for many of our New Jersey fruit growers who are extremely diversified. The application process is streamlined. Growers should take a serious look at this program as a means to spread their risk.

Most farm raised crop, animals, and animal products are eligible for protection. The program is based on the 5-year average revenue reported on IRS Schedule F 1040 (or similar form), therefore, minimal additional record keeping is required.

Note: Policies must be purchased by January 31, 2004

Farms can earn up to \$512,000 in adjusted gross income, depending on coverage levels selected. Not more than 50% of allowable income can come from agricultural commodities purchased for resale and expected potato revenue cannot exceed 83.35% of the total revenue.

Producer Workshops have been scheduled throughout New Jersey. These two hour seminars will provide in depth information concerning AGR-Lite. Producers who bring their Schedule Fs from 1999-2003 will leave with the information an insurance agent needs to quote a policy.

North Jersey – Rutgers Cooperative of Hunterdon Co. Extension Office, Flemington, NJ

November 19, 2003 7-9 pm

South Jersey – Rutgers Agricultural Research and Extension Farm, Upper Deerfield, NJ

December 17, 2003 7-9 pm

Central Jersey – EcoComplex, Bordentown, NJ

December 18, 2003 7-9 pm

Additional information (including directions to workshop locations or insurance agent lists) can be obtained by visiting us on the web at: <http://saalem.rutgers.edu/cropinsurance> or by calling the Rutgers Cooperative Extension Office in Salem County at 856-769-0090.

Visit the Garden State Crop Insurance Education Web site at: <http://saalem.rutgers.edu/cropinsurance/agents.html> for a list of agents and to see our most recent on-line newsletter and new programs. □

Top Ten Reasons to Have Crop Insurance

Win Cowgill, Agricultural Agent, Jon Clements, Tree Fruit Extension Specialist, UMASS, Dave Lee, Agricultural Agent and Kim Linonis, Program Associate

Crop insurance is the cornerstone of an overall risk management strategy for tree and small fruit growers. Very few farmers can truly afford to be without it. If you still aren't convinced why you should have crop insurance, here are Win and Jon's top-ten reasons why you should:

- 1.) Crop insurance is the 800-pound gorilla of an overall risk management strategy for your farm or orchard. You do have a risk management plan, don't you?
- 2.) Crop insurance is not about making money. It is about protecting your investment.
- 3.) Crop insurance does not replace the retail value of your fruit if you sell retail, rather look at it as what it would cost to buy the apples for your retail business, it's a replacement tool...
- 4.) The probability of crop loss is likely greater than a vehicular accident or a property fire – yet you wouldn't consider NOT insuring against the loss of these valuable assets.
- 5.) Don't risk more than you can afford to lose! Crop insurance is a great way to protect against that one-time catastrophic loss that could put your orchard/farm/business out-of-business for good.
- 6.) Multi-peril crop insurance is cheap! The basic level of CATastrophic coverage is cheap. How about free in NJ. Catastrophic (CAT) Coverage is fixed at 50% of average yield and 55% of the Price Election. CAT is 100% subsidized with no premium cost to you except for an administrative fee of \$100, regardless of the acreage.
Note: in the apple coverage Options A, B, & C are not available with the CAT endorsement.
- 7.) If that is not good enough for you, buy-up insurance is available that will cover up to 85% of your loss.
- 8.) In New Jersey, apples and peaches are eligible for multi-peril crop insurance, as are cranberries and blueberries. For crops that are not insurable, you buy coverage via a written agreement. Or, look at Adjusted Gross Revenue (AGR) insurance, which covers whole farm revenue, and which the government also pays a significant portion of the insurance premium. (January 31, 2004 closing date.) See the companion article in this issue of Plant and Pest Advisory.

- 9.) Disaster payments, although politically popular, are NOT going to last forever. USDA is urging growers to adopt crop insurance as a risk management tool.
- 10.) Your crop insurance agent will be helpful in tailoring a crop insurance policy to fit your needs. But remember to contact them before November 20!

Note: Apple, blueberry, cranberry and peach policies must be purchased or renewed by November 20, 2003 for the 2004-growing season.

2004 price elections have increased for fruit policies in New Jersey as follows:

Apples: up to \$7.10 per bushel
Peaches: up to \$16.00 per bushel
Highbush Blueberries: up to \$0.56 per pound
Cranberries: up to \$28.00 per bushel

Additional information (including directions to Rutgers workshop locations or insurance agent lists) can be obtained by visiting our crop insurance and risk management web site: <http://saalem.rutgers.edu/cropinsurance> or by calling the Rutgers Cooperative Extension Office in Salem County at 856-769-0090.

Also a good resource is the USDA Risk Management Agency's Website at: <http://www.rma.usda.gov>. □

Calendar of Events

November 19, 2003, 7-9 pm - North Jersey AGR - Lite Crop Insurance Workshop, Rutgers Cooperative of Hunterdon County Extension Office. Contact: <http://saalem.rutgers.edu/cropinsurance> or by calling the Rutgers Cooperative Extension Office in Salem County at 856-769-0090.

December 17, 2003, 7-9 pm - South Jersey AGR - Lite Crop Insurance Workshop, Rutgers Agricultural Research & Extension Farm, Upperdeerfield, NJ. Contact: <http://saalem.rutgers.edu/cropinsurance> or by calling the Rutgers Cooperative Extension Office in Salem County at 856-769-0090.

December 18, 2003, 7-9 pm - Central Jersey AGR - Lite Crop Insurance Workshop, EcoComplex, Bordentown, NJ. Contact: <http://saalem.rutgers.edu/cropinsurance> or by calling the Rutgers Cooperative Extension Office in Salem County at 856-769-0090.

January 27 - 29, 2004 - Mid Atlantic Fruit and Vegetable Convention, Hershey, PA. Contact William Tietjen, at 908-475-6505 or Jerry Frecon at 856 307-6459.

March 13, 2004 - Grape Expectations – A Viticultural and Enological Symposium, Forsgate Country Club, Jamesburg, NJ. Contact: Dr. Gary Pavlis, Rutgers Fruit Research & Extension Center at 609-758-7311 or creamridge@aesop.rutgers.edu.

Cider Illness Outbreak in Ohio

William H. Tietjen, Agricultural Agent

The Ohio Department of Agriculture and Department of Health are investigating an outbreak of 14 cases of Cryptosporidiosis linked to a small apple cider producer in Ohio.

This is the third outbreak of Cryptosporidiosis associated with apple cider on record. In 1996, 32 people in New York were sickened by unpasteurized cider believed to have been made with fecal-contaminated well water. In 1993, 213 persons in Maine – (mostly schoolchildren) were made ill by unpasteurized cider believed to have been pressed from fecal-contaminated “drops” at a school function.

The Ohio grower delivered apples for pressing by a contract cider producer, who was subjecting the finished cider to ozonation. The cider was returned to the grower in drums, to be bottled for wholesale at his facility or sold on-site on a self-serve basis. Officials are conducting tests at both the orchard and the cider mill in an effort to pinpoint the source of contamination. It is not clear whether ozonation is a sufficient treatment to destroy cryptosporidium.

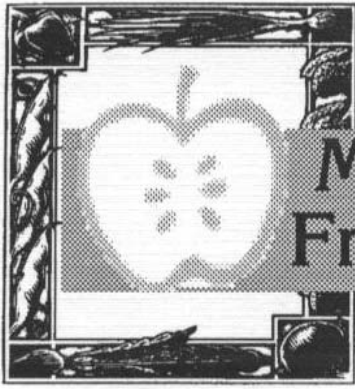
A Fact Sheet from the US Centers for Disease Control and Prevention states that ‘Cryptosporidiosis, is a diarrheal disease caused by a microscopic parasite, *Cryptosporidium parvum*. It can live in the intestine of humans and animals and is passed in the stool of an infected person or animal. Both the disease and the parasite are also known as “Crypto.” The parasite is protected by an outer shell that allows it to survive outside the body for long periods of time *and makes it very resistant to chlorine disinfection*. During the past two decades, Crypto has become recognized as one of the most common causes of water-borne disease (drinking and recreational) in humans in the United States. The parasite is found in every region of the United States and throughout the world.’

Symptoms include diarrhea, loose and watery stool, stomach cramps, upset stomach, and a slight fever. Some people have no symptoms. Symptoms generally begin 2-10 days after being infected. In persons with average immune systems, symptoms usually last about 2 weeks; the symptoms may go in cycles in which you may seem to get better for a few days, then feel worse before the illness ends.

Crypto lives in the intestine of infected humans or animals. Millions of Crypto can be released in a bowel movement from an infected human or animal. You can become infected after accidentally swallowing the parasite. Crypto may be found in the soil, food, water or surfaces that have been contaminated with the feces from infected humans or animals. Crypto is not spread by contact with blood.

This outbreak in Ohio shows that *Cryptosporidium* is a “real hazard” for apple cider. Diligence and cleanliness in all phases of cider production and pasteurization are necessary to ensure a product safe for all consumers to enjoy.

Information Sources: US Apple (<http://www.usapple.org>) and the US Centers for Disease Control and Prevention (http://www.cdc.gov/ncidod/dpd/parasites/c...sporodiosos/factsht_cryptosporidiosis.htm). □



Mid-Atlantic Fruit and Vegetable Convention

2004 Mid-Atlantic Fruit and Vegetable Convention Set for January 27 to 29

Fruit and vegetable growers from throughout the mid-Atlantic region and beyond will be gathering at the Hershey Lodge and Convention Center in Hershey, PA, on January 27 to 29 for the 2004 Mid-Atlantic Fruit and Vegetable Convention. About 2,000 persons are expected for the annual event that has become recognized as one of the premier fruit and vegetable grower meetings in the Northeast.

The Convention has been jointly sponsored by the State Horticultural Association of Pennsylvania, the Pennsylvania Vegetable Growers Association, the Maryland State Horticultural Society and the New Jersey State Horticultural Society in cooperation with Rutgers Cooperative Extension, Penn State University Cooperative Extension and the University of Maryland Cooperative Extension.

The Great American Hall at the Hershey Lodge and Convention Center will host the Trade Show with over 130 exhibitors. Specialized horticultural equipment, farm market merchandise, and packaging will all be on display along with information on the latest seed varieties, fruit varieties, pesticides and other supplies and services for the commercial grower.

Six or more concurrent educational sessions will be offered on all three days of the Convention. The following full-day sessions are planned for the first day: Tree Fruits, Season Extension Technology, Basic Vegetable Production School, and Wine Grapes. Half-day sessions on Wholesale Marketing, Labor and Legal Issues, Beans, Vine Crops, Asparagus, and Peppers will be offered. On the second day, full-day sessions on Peaches, Tree Fruits, Direct Marketing, Water Use Issues; Tomatoes (fresh market and processing), and Potatoes will be featured. Also scheduled are half-day sessions on Small Fruit, and Pumpkins.

The Convention will close on the third day with full-day sessions on: Tree Fruits, Small Fruit, Sweet Corn, Bedding Plants and Cut Flowers. Half-day sessions on Peaches, Specialty Vegetables, and Value-Added will also be offered.

Many pesticide applicator update training credits are available to growers attending the sessions. The program covers nearly every aspect of fruit, vegetable, potato, wine grape and small fruit production. Commercial growers should not pass up this terrific educational opportunity.

On January 27, fruit and vegetable growers will be treated to a reception followed by the annual Fruit and Vegetable Growers Dinner. The Dinner will include awards, recognitions and entertainment. The New Jersey State Horticultural Society and the New Jersey Small Fruit Council will be holding meetings in conjunction with the Convention.

For more information on the fruit, labor, wine grape programs and registration, contact Maureen Irvin, State Horticultural Association of Pennsylvania at 717-677-4184 or www.shaponline.org; New Jersey State Horticultural Society at 908-475-6505; Robert Black, Maryland State Horticultural Society at 301-271-7491; William Tietjen, at 908-475-6505 or Jerry Frecon at 856 307-6459. The program can also be found at the web site <http://gloucester.rce.rutgers.edu>.

For more information on the vegetable, potato or greenhouse ornamental program and registration, contact William Troxell, Pennsylvania Vegetable Growers Association at 717-694-3596 or www.pvga.org.

Persons registered for either the fruit or vegetable program can attend all the sessions offered (fruit, vegetable and small fruit sessions) plus the trade show. Registration either through the mail or at the door is required to attend both the trade show and educational sessions.

Submitted by Jerome L. Frecon, Agricultural Agent. □

FIRST CLASS
POSTAGE PAID
PERMIT #576
MILLTOWN, NJ 08850

PLANT & PEST ADVISORY FRUIT EDITION - CONTRIBUTORS

Rutgers Cooperative Extension Specialists

Robert Belding, Ph.D., Pomology
George Hamilton, Ph.D., Pest Management
Norman Lalancette, Ph.D., Plant Pathology
Sridhar Polavarapu, Ph.D., Entomology
Peter W. Shearer, Ph.D., Entomology

NJAES/Cook College

Joseph Goffreda, Ph.D., Breeding
Rutgers Cooperative Extension Agricultural Agents
and Program Associates

Atlantic County, Gary C. Pavlis, Ph.D. (609-625-0056)
Gloucester County, Jerome L. Frecon (856-307-6450)
Hunterdon County, Winfred P. Cowgill, Jr. (908-788-1338)
Morris County, Peter J. Nitzsche (973-285-8300)
Warren County, William H. Tietjen (908-475-6505)
Fruit IPM, Dean Polk (609-758-7311)

Meredith Compton, Program Associate (908-788-1338)

Gene Rizio, Program Associate (856-566-2900)

David Schmitt, Program Associate (856-307-6450)

NJAES Sustainable Agriculture Coordinator

Olga Wickerhauser

Newsletter Production

Jack Rabin, Associate Director for Farm Services, NJAES
Cindy Rovins, Crop Management Communications Editor

For back issues, visit our web site at:
www.rce.rutgers.edu/pubs/plantandpestadvisory.

Rutgers Cooperative Extension - NJAES
U.S. DEPARTMENT OF AGRICULTURE
Rutgers - The State University of New Jersey
Plant & Pest Advisory
18 College Farm Road
Cook College
New Brunswick, N.J. 08901-8551

Rutgers Cooperative Extension (RCE) provides information and educational services to all people without regard to sex, race, color, national origin, disability, or age. RCE is an Equal Opportunity Employer.

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The pesticide user is responsible for proper use, storage and disposal, residues on crops, and damage caused by drift. For specific labels, special local-needs label 24(c) registration, or section 18 exemption, contact RCE in your County.

Use of Trade Names: No discrimination or endorsement is intended in the use of trade names in this publication. In some instances a compound may be sold under different trade names and may vary as to label clearances.

Reproduction of Articles: RCE invites reproduction of individual articles, source cited with complete article name, author name, followed by Rutgers Cooperative Extension, Plant & Pest Advisory Newsletter.