

# PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

SEPTEMBER 4, 2007



Photo by Pete Nitzsche, Agricultural Agent, Rutgers NJAES

## Apple Maturity Update for North-Central New Jersey

Win Cowgill, Agricultural Agent

North Jersey growers are moving into Gala harvest with spot picking and harvest of early maturing cultivars like Fulford. McIntosh is ready to spot pick in Central NJ. Cool night temperatures have greatly enhanced red color in Macs, Cortlands and Honeycrisp as well as most Gala strains. Dry, bright sunny days for the past 9 days have enhanced fruit quality and red color.

Maturity is right on track with respect to normal harvest dates in Northern NJ.

**Mollie's Delicious** is a Northern NJ favorite at roadside markets that came out of the NJAES breeding program. It was first introduced in 1966 as a cross between Golden Delicious and Gravenstein by Drs. Hough and Bailey. It has excellent eating quality. Mollies harvest is under way in Warren County

<u>Warren-Hackettstown-Date</u>	<u>Retain Pressure</u>	<u>Brix</u>	<u>Starch</u>	<u>Iodine</u>
Mollies Delicious	9/3	yes	13	12 6.8

### Gala

Background color has historically been one of the best indicators of maturity for Gala. Fresh market Galas should be harvested when the background color is turning from a yellow to a cream color. SI index with the Gala Starch chart can be a guideline as well. I like to harvest Gala at above 12% brix and over 16 lbs pressure. Multiple pickings must be used on Gala to get consistent fruit quality and size the first pick is usually a skim of the ripest fruit

The high colored strains are showing good color.

<u>Morris- Harding Twp Date</u>	<u>Retain Pressure</u>	<u>Brix</u>	<u>Starch</u>
Fulford Gala	9/2	yes 15.9	13% 7

<u>Hunterdon-Oldwick Date</u>	<u>Retain Pressure</u>	<u>Brix</u>	<u>Starch</u>	<u>Iodine</u>
Fulford Gala	9/2	No 16.5	11%	4.3

<u>Warren-Hackettstown-Date</u>	<u>Retain Pressure</u>	<u>Brix</u>	<u>Starch</u>	<u>Iodine</u>
Gala-Buckeye	9/3	yes 16.3	11.8	5.6

### McIntosh

Growers in Central and North Jersey should watch their Mac's closely for maturity development and drop. Even blocks that had Retain are getting droppy. NAA can be applied on top of Retain to prevent additional drop at 10-20 ppm. NAA treated fruit should not be placed in long term storage.

SEE APPLE MATURITY ON PAGE 2

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Many blocks in North Jersey have colored nicely; sugars are developing ranging between 9-12 brix. Central Jersey Mac harvest may begin with some spot picking this week. Growers in the Hudson Valley, NY are picking Macs as well.

**Morris-Harding Twp.- Date Retain Pressure BrixStarch-Iodine**

McIntosh-Rogers Red 9/2 Yes 15.4 12.6 5

**Morris-Harding Twp.- Date Retain Pressure Brix Starch**

McIntosh-Linda Mac 9/2 Yes 16.7 13.2 4.3

**Hunterdon- Oldwick Date Retain Pressure Brix Starch**

McIntosh 9/2 No 14.2 11.6 5.9

**Hunterdon- Califon Date Retain Pressure Brix Starch**

McIntosh-Macspur 9/2 No 14.1 11.6 5.6

**Warren-Hackettstown-Date Retain Pressure BrixStarch-Iodine**

McIntosh-MacSpur 9/3 yes 14.3 10.8 5.2

McIntosh- Marshal Mac 9/3 yes 16.5 11.1 3.8

**HoneyCrisp**

The three Honeycrisp blocks I visited have developed good color but have not developed the good varietal flavor necessary to command the premium prices.

Non- Retained Honeycrisp may be ready for spot picking by the end of the week. This appears to be a year with significant variability in fruit ripening, even on individual trees. Growers should be picking Honeycrisp 4-5 times this year in order to adequately harvest mature, highly colored fruit.

*The recommended maturity for the harvest of Honeycrisp in NJ is starch=7.0, internal pressure > 13.5 pounds, soluble solids > 13 brix, and the presence of good varietal flavor. A lousy eating Honeycrisp is a lousy apple.*

However, monitoring varietal flavor and background color change from green toward cream may be more useful when timing the harvest of Honeycrisp. Late harvest of Honeycrisp will increase the incidence of soft scald during storage but most of our NJ growers do not store Honeycrisp.

**Morris-Harding Twp.- Date Retain Pressure BrixStarch-Iodine**

Honeycrisp 9/2 Yes 16.1 12.4 5.3

**Morris- Myersville Date Retain Pressure Brix Starch**

Honeycrisp 9/2 yes 16.1 12.4 5

**Warren-HackettstownDate Retain Pressure Brix Starch**

Honeycrisp 9/3 yes 12.7 10.5 5.3

**Retain®:**

**Timing Retain Applications**

The correct timing for applications of Retain to Empire fruit is expected to be the week of September 4th if you would normally pick fruit without Retain during the week of September 25th.

Reminder: Retain® should be applied 21-28 days before anticipated harvest on alter varieties, with a 7 day Pre Harvest Interval (PHI). If blocks were not treated with Retain®, it is not too late this season to apply for late September apples like Red Delicious and Empire, and too early for October maturing apples such as Suncrip, Fuji, and Stayman. □

# Nematology

John M. Halbrendt, Penn State University, Fruit Research and Extension Center

Reprinted from Penn State's Fruit Times Newsletter, Vol. 26, No.8, August 28, 2007

**REMINDER: FALL NEMATODE SAMPLING:** We finally have good soil moisture and with cooler temperatures the optimum time for fall nematode sampling is fast approaching. Early detection of a potential nematode problem is especially valuable when transitioning to crops that are highly susceptible to Tomato Ring Spot Virus (ToRSV) such as peach. The advance knowledge that nematode control is needed allows for considering which nematode management option best fits with the timetable for site renovation.

Even where ToRSV is not a concern, replanting into a nematode infested site can seriously reduce vigor of new trees. Some evidence suggests that dwarfing rootstocks may be more susceptible to damage than the old standard rootstocks. For this reason every new orchard should have a nematode assay to assess the risk of problems. Long range planning is best and it is a good idea to assay for nematodes a year in advance of pushing out an orchard. Nematode control should be an integral part of the orchard renovation plan and not an afterthought. It is virtually impossible to fumigate and plant in the same season and post-plant nematicides are not as effective as pre-plant applications that can be thoroughly incorporated. Site renovation with rotation crops and green manure treatments require at least a year, although two years is recommended.

For nematode assay kits contact your county agricultural agent or the Rutgers Plant Diagnostic Laboratory and Nematode Detection Service at <http://njaes.rutgers.edu/plantdiagnosticlab/> or 732-932-9140.

## Tips for Nematode Sampling:

- Moist, well-drained soil is best for sampling. Do not sample waterlogged soil; when in doubt it is better if the soil is a little dry than too wet.
- Do not sample around dead or dying trees.
- Sample where feeder roots are abundant; this is generally beneath the canopy drip line.
- Make sure your sample is representative of the site by preparing a composite sample from approximately 20 sub-samples. Limit each composite sample to an area not more than 3 acres.
- Remember, keep samples cool (refrigerated) until they are sent for analysis.

Growers are reminded that good broadleaf weed control is an important cultural practice that can greatly reduce the incidence of peach stem pitting by eliminating reservoirs of the tomato ringspot virus.

Submitted by Jerome L. Frecon, Agricultural Agent. □

# Food Safety Series: Areas for Improvement Before Third Party Audit

Wesley Kline, Ph.D., Cumberland County Agricultural Agent

I have been working with growers who requested a walk through of their facilities before having a third party audit. Following are some observations and suggestions for changes:

## Portapotties

When I checked the portapotties, over 50% (three service companies) did not have the interior log that the service company is to fill out or it was last year's log. That log shows that the units are serviced. When we checked with the companies they said it was an oversight. This oversight could require the grower to get a second audit since this is considered a worker hygiene issue. If the log is not present, the grower should have their own log that they are using to prove the units are being serviced.

Most growers had handwashing stations outside the portapotty. That is the correct procedure. It does not matter whether there is a washing unit in the portapotty or not. There must be one outside so handwashing can be observed. Also, the water must be collected from the hand washing station. If the grower uses a barrel or large container to hold handwashing water there must be a way to collect that water. Do not let it go directly on the ground.

## Bird control

Birds are still an issue in some packing sheds. The things that seem to work best are electronic bird scares, plastic sheets over the doors or bird netting in place of doors. The bird netting can be rigged on a pulley system to raise or lower to allow forklift and other traffic. Remember to close all doors at night. The biggest problem with birds is generally early in the morning or at dusk.

## Sanitizing packing lines and area

Daily cleaning will help reduce the risk of microbial buildup. There are several steps to help in the process:

1. Sweep floors and wipe down equipment
2. Pre-rinse equipment
3. Visually inspect the equipment surfaces. This is especially important along belts and rollers
4. Apply a cleanser, scrub the equipment from top, downward
5. Never place equipment on the floor to clean
6. Rinse from top to bottom

SEE SANITATION ON PAGE 4

# New Spanish Ag Phrasebook for Fruit Growers

... Connecting Cultures for Improved  
Communication

Agricultural producers rely on a skilled, dependable workforce to operate their farms. Often, these farm owners and managers find themselves supervising Spanish-speaking employees, and effectiveness is limited due to the language barrier. To aid employers in their ability to communicate with employees, Penn State Extension in Adams County compiled this book of phrases expressing some simple things in Spanish as they relate to a farm operation. The phrasebook was designed for easy reference of applicable Spanish phrases using English keywords, making them as easy to find as possible. (Phrasebook compiled by Ben Wenk, Ben Cordivano, Katy Lesser, Esther Sollenberger and Leighton Rice.)

To obtain a copy of the English-Spanish Dictionary of Agricultural Words and Phrases, please visit the Penn State Extension in Adams County web site at <http://adams.extension.psu.edu/> and click on Spanish Ag Phrasebook.

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

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#### SANITATION FROM PAGE 3

7. Clean floors with appropriate cleanser
8. Sanitize equipment and floors
9. Clean and put away supplies

If these activities are not carried out daily the same procedures should be followed when sanitizing the packing area. □

# Fruit Variety Showcase

*Jerome L. Frecon, Agricultural Agent*

For discussion and the exhibition of peach, nectarine and wine grape varieties – 4:00 – 9:00 p.m., Wednesday, September 5, 2007 in the auditorium of the Office of Government Services, 1200 N. Delsea Drive, Clayton, NJ 08312.

Dr. Bill Shane, District Fruit and Marketing Agent with Michigan State University will be a speaker at our Fruit Variety Showcase. Dr. Shane, the originator of Beaumont Peach, is located at the southwest Michigan Fruit Research and Extension Center in Benton Harbor, Michigan. He will be sharing his experiences with many of the fruit varieties on display and particularly the varieties originating in southwestern Michigan.

On display will be varieties harvested August 1 thru September 5 from variety test blocks. Also, a discussion of current evaluative research will be held throughout the meeting. Please contact Jerome L. Frecon, 856-307-6450 ext 1 or check website for further information: <http://gloucester.rce.rutgers.edu>. □

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## Calendar of Events

**September 5, 2007 – Fruit Variety Showcase** – 4:00 – 9:00 p.m. in the auditorium of the Gloucester County Office of Government Services, 1200 N. Delsea Drive, Clayton, NJ 08312. There will be exhibitions and discussions of peach, nectarine and wine grape varieties. For more information, please contact Jerome L. Frecon at 856-307-6450, ext. 1 or check website: <http://gloucester.rce.rutgers.edu>.

**September 6, 2006** - Science -Based Organic Grape Production Field Day, Thursday, 10 a.m. until 4:30 pm. To be held at The Lake Erie Regional Grape Research and Extension Center (the Penn State lab at North East). To inquire about registration contact Penn State Cooperative Extension in Erie County at (814) 825-0900.

**RUTGERS**

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**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.

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