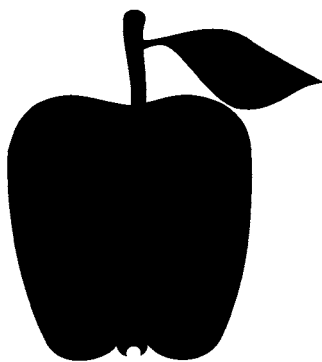


# PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

AUGUST 26, 2008



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## Apple Maturity Update for North-Central New Jersey

*Win Cowgill, County Agricultural Agent*

### RCRE of Hunterdon County

North and Central New Jersey remain extremely dry. August has been one of the driest on record. Cool crisp nights in the fifties have promoted good color development. Bright sunny days have made for high quality apples.

North Jersey growers are moving into Gala harvest with spot picking and harvest of early maturing strains like Fulford. McIntosh is ready to spot pick in Central NJ (Hunterdon County) especially where no irrigation has been available. Cool night temperatures have greatly enhanced red color in Macs, Cortlands and Gala. Honeycrisp has been slower to color.

### 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. Fruit has sized extremely well in most blocks even with the drought throughout August.

### Warren-Hackettstown-Date Retain Pressure Brix Starch-Iodine

<b>Gala</b>	<b>8/24</b>	<b>yes</b>	<b>21.3</b>	<b>11.8</b>	<b>2.8</b>
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### Hunterdon- Snyder Date Retain Pressure Brix Starch

Buckeye Gala	8/26	yes	24.7	11.8%	1.5
Stark Galaxy Gala	8/26	no	18.8	11	5
Imperial Gala	8/26	no	16.8	12	6

### McIntosh

Growers in Central and North Jersey should watch their Mac's closely for maturity development and drop. It is too late to treat Macintosh blocks with Retain. Applications of NAA can be used instead for stop drop. Many blocks in North Jersey have colored nicely; sugars are developing ranging between 9-12 brix. Central Jersey Mac harvest has may begin with some spot picking this week.

SEE APPLE MATURITY ON PAGE 2

<u>Hunterdon-Snyder Farm</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch-Iodine</u>
<u>McIntosh-Rogers Red</u>	<u>8/25</u>	<u>Yes</u>	<u>15</u>	<u>11.8%</u>	<u>2.5</u>
<u>Hunterdon-Pittstown</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch-Iodine</u>
<u>Pioneer McIntosh</u>	<u>8/24</u>	<u>yes</u>	<u>16.7</u>	<u>13.2</u>	<u>4.3</u>
<u>Warren-Hackettstown-</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch-Iodine</u>
<u>McIntosh- Marshal Mac</u>	<u>8/24</u>	<u>yes</u>	<u>18.5</u>	<u>11</u>	<u>2.25</u>

### 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. As of Monday the were judged not ready for spot-picking. One block will probably be ready next week, while the other will be further delayed.

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.

<u>Hunterdon- Snyder Farm</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch</u>
<u>Honeycrisp</u>	<u>8/25</u>	<u>Yes</u>	<u>17.7</u>	<u>12</u>	<u>1</u>
<u>Hunterdon- Pittstown</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch</u>
<u>Honeycrisp</u>	<u>8/24</u>	<u>yes</u>	<u>19</u>	<u>12.8</u>	<u>1.8</u>
<u>Warren-Hackettstown-</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch-Iodine</u>
<u>Hackettstown</u>	<u>8/24</u>	<u>yes</u>	<u>18.5</u>	<u>12.2</u>	<u>3</u>

### Cortland

Cortland is an apple that has increased in popularity with newer strains being highly colored. Cortland is usually picked one week after Macs (remember Macs can be picked over 3 weeks if stop drop is used. Normally around mid-September at the Rutgers Snyder farm. They do not starch test well but SI testing can be used as guideline, target a starch of 5-6.

<u>Hunterdon-Snyder</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch</u>
<u>Cortland-RedCort</u>	<u>8/26</u>	<u>yes</u>	<u>17.2</u>	<u>12</u>	<u>1</u>

**Mollies 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 was harvested last week in Morris/Hunterdon, but is not quite ready in Warren.

<u>Warren-Hackettstown-</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch-Iodine</u>
<u>Mollies Delicious</u>	<u>8/24</u>	<u>yes</u>	<u>17.2</u>	<u>12.5</u>	<u>2.1</u>
<u>Hunterdon- Pittstown</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch</u>
<u>Snyder Farm</u>	<u>8/25</u>	<u>no</u>	<u>15.8</u>	<u>12.8</u>	<u>3</u>

### Paula Red

<u>Warren-Hackettstown-</u>	<u>Date</u>	<u>Retain</u>	<u>Pressure</u>	<u>Brix</u>	<u>Starch-Iodine</u>
<u>Paula Red</u>	<u>8/24</u>	<u>yes</u>	<u>16.5</u>	<u>11.9</u>	<u>5.4</u>

### 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 Suncrips, Fuji, Stayman. □

# Peter Shearer Leaving Rutgers for Oregon State

Dr. Peter Shearer, our fruit entomologist, has accepted a position to become Professor of Entomology and Superintendent of Oregon State University's Mid-Columbia Agricultural Research & Extension Center (MCAREC) located in Hood River, Oregon. His last day at Rutgers will be Friday, August 29. This fruit research center is a branch of the Oregon Agricultural Experiment Station of Oregon State University's College of Agricultural Sciences. The Center is over 50 acres and is devoted to solving problems pertaining to tree fruit production. Dr. Shearer will be responsible for providing

the overall leadership and administration of MCAREC and for developing an integrated tree fruit entomology program with emphasis on pear and sweet cherry. We wish him well in his new position at Oregon State. Dr Shearer can be contacted at the center.

Dr. Kris Tollerup, Post Doctorate in Tree Fruit Entomology Rutgers NJAES and Ann Rucker, Soil and Plants Technician, both of whom worked with Dr. Shearer will continue to work on fruit entomology research at the Rutgers NJAES Agriculture Research and Extension Center in Upper Deerfield Township under the direction of Dr. George Hamilton.

Submitted by Jerome L. Frecon, Agricultural Agent. □

## Fruit IPM

Dean Polk, Fruit IPM Agent and David Schmitt, Eugene Rizio and Atanas Atanassov, Ph.D., Program Associates, Tree Fruit IPM

### Peach

✓ **Oriental Fruit Moth (OFM):** Growers in some northern counties had trap captures above the provisional threshold of 6 moths/trap. Late treatments for OFM (third brood stragglers and 4<sup>th</sup> brood) should be based on trap counts and any presence of flagging. Baythroid and Lannate are effective for OFM and catfacing with Baythroid having the best efficacy.

✓ **Tufted Apple Budmoth (TABM):** Timings are updated in the following table:

TABM Treatment Timings – 2 <sup>nd</sup> Generation				
County Area	Spray Type			
	AM	EM	Intrepid - EM	Bt-EM
Southern	4 <sup>th</sup> past	2 <sup>nd</sup> past	2 <sup>nd</sup> past	2 <sup>nd</sup> past
Central	4 <sup>th</sup> past	2 <sup>nd</sup> past	2 <sup>nd</sup> past	2 <sup>nd</sup> past
Northern	4 <sup>th</sup> 8/27-29	2 <sup>nd</sup> past	2 <sup>nd</sup> past	2 <sup>nd</sup> past

✓ **Fruit Rots:** Some late varieties are showing high percentages of skin cracking. Late peaches should be under a pre-harvest program which includes an SI or Strobilurin; of these Elite has the most efficacy followed by Pristine, Gem, Indar, and lastly Bumper. Elite is also effective for rhizopus rot.

### Apple

✓ **Tufted Apple Budmoth (TABM):** See Peach section above.

✓ **Sooty Blotch, Flyspeck:** After several weeks of high humidity and damp mornings, Sooty blotch can be expected to show up in mid and late season apples. Be sure to keep covered with an effective summer disease program (captan/Topsin combination or Pristine) through mid- September.

**Note: There is no Blueberry information this week.**

### Trap Counts

#### Tree Fruit

#### Southern Counties

Weekend	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
8/2	819	4	8		3	50	1	5	12	6
8/9	574	3	4		2	50	1	5	18	3
8/16	693	5	5		1	37	1	5	17	4
8/23	75	8	4		1	53	0	12	19	4

#### Northern Counties

Weekend	STLM	TABM-A	CM	AM	DWB	OFM-P	TABM-P	LPTB	PTB	OBLR
8/2	607.9	1.0	2.2	0.0	0.4	3.1	0.7	6.1	1.5	2.0
8/9	517.6	1.2	1.4	0.0	0.3	6.8	0.7	5.9	2.8	2.0
8/16	590	2	2	0	0	7	2	5	2	1
8/23	549	3	2	0	0	7	3	9	1	1

# Wine Grape Information for the Region

Mark Chien, Wine Grape Educator, Penn State  
Cooperative Extension

**C**anopy management: This is the best time of year to look at a wine grape vineyard. If the truth of a wine is in the bottle, then the truth of a vine can be seen right now after all the work of three months of fussing in the vineyard with leaves, shoots, clusters, disease, bugs, nutrition, etc has all culminated in what we see now. It was a gratifying experience to be in the vineyard of Jan and Kim Waltz in Manheim, PA. It was an ideal place to see the principles of canopy management applied. Richard Smart, one of the founders of these important viticultural concepts came from Tasmania (via Georgia, the one at war) to share his knowledge and experience with growers. Go to <http://winegrape.ag.psu.edu> for the story with pictures.

## Downy, Powdery, Botrytis, Rots and Hail

Geepers, creepers, what a summer so far. Another afternoon, another heavy thundershower in the Lancaster area. We are stuck in a low pressure cycle that doesn't seem to want to go away. These are the kind of conditions that make me appreciate the effects of rain shadows and wish we understood more about regional climate and geophysical dynamics. The only saving grace is some heat between storms that at least helps to push fruit maturity. Worst of all are some high wind and hail events that have affected many crops, including grapes. I visited one vineyard that is a total loss. If you measure the economic damage in terms of retail wine cost, it is staggering. There is not much you can do about hail except pray and live a good, clean life. In Piedmont, growers have taken to putting up fine mesh bird nets over the fruit zone early in the season. It's a royal pain but if it is the difference between having wine and not having wine, you do it. If hail hits after veraison, the dangers of all the rot and fruit degradation organisms increases dramatically. It's a real battle to preserve wine quality. The best solution is, of course, dry weather but we have no control over that. Barring that occurrence, the usual rot control measures need to be implemented in full vigor. If damage is slight, cutting off affected berries/clusters may be a good strategy to preserve wine quality.

An honest assessment of the fruit quality should be done and a decision if the wine has been too severely compromised. This is a very tough call to make and you definitely want to consult with wine makers if you are an independent vineyard. That means problems with foliar powdery mildew and downy mildew, especially as new leaves appear on "broccoli top" VSP. Some growers are running out of spray options. How many times have you hedged and sprayed this year already? That

will give you an idea of the kind of year it has been.

Now botrytis and all the berry threats begin to appear. Yellow jackets are always a wild card. Did you know that some of the finer mesh bird netting will exclude bees also? For DM the phosphorus acid products continue to be a good option - dilute to proper concentration to avoid burning foliage and fruit and beware of resistance issues with PAs. I hate recommending its use at any time of year but Captan has efficacy on DM and late season rots, which will probably be an issue this year if the weather does not change. Get ready to pull more leaves to get light/heat to the berries along with spray materials and aeration in the fruit zone. If you have reds that you care about and the color is uneven at almost full veraison it could not hurt to cut off pink clusters or parts of clusters. The vintage is mostly in the hands of Mother Nature now but there are small tweaks and adjustments that we can make to assure or even improve quality. It would be prudent to consider all of these the way this vintage is shaping up.

Here are some downy mildew control notes from Alice Wise and Wayne Wilcox at Cornell University that were published in mid-July:

**Downy mildew protection for canopy:** Proper hedging of the canopy is one of the best control strategies as it allows leaves to dry out more quickly. Thick canopies with bunched up shoots are candidates for DM infection, especially with dewy mornings. The lack of rain in July reduces but does not eliminate DM pressure. The humid, dewy mornings have stoked some infection. As 66 days restriction on mancozeb products starts to kick in, Ridomil Gold/Copper is still an option (42 day PHI). Copper products and the phosphorous acid products are both good options. Copper is a good protectant and can be tank mixed with sulfur. Advantages to the PAs are ease of use (liquids), translocation to younger and more DM susceptible foliage and post infection activity. These can also be tank mixed with sulfur. There have been a few reports of phyto from PA-sulfur tank mixes. Captan is a good protectant but does not offer post infection control. Should we get into extended wet conditions, captan has the advantage of providing good activity against most of the common non-Botrytis cluster rots that can occur under those conditions. Note that most labels have a 72 hr REI, down from 96 hrs. Ziram is another labeled protectant that offers DM control, although it is not as effective as captan. Abound and Pristine may provide decent DM protection, but are dangerous to rely on for DM control if pressure is high, based on the increasing development of DM resistance to the strobies in other locations. (AW & WFW)

SEE WINE GRAPE INFO ON PAGE 5

## **Wine Grape Production Guide due out this Fall - Dr. Tony Wolf at Virginia Tech**

This new book is an absolute MUST read for anyone who fancies his or herself as a commercial wine grower in the Eastern US. It is packed with excellent information for new and veteran growers alike. Please get multiple copies for yourself, vineyard manager, wine maker, etc.

NRAES is preparing to publish ***Wine Grape Production Guide for Eastern North America*** -- a comprehensive resource for novice and experienced growers, crop advisors, service providers, educators, communicators, and students. The book will be over 300 pages, with 174 color photos, 40 line drawings, 45+ variety descriptions, 42 tables, a key to insect and mite grape pests, and much more. For detailed information on the book and pre-printing opportunities, and to download a two-page flier and sample pages visit [www.nraes.org](http://www.nraes.org). I call your attention to the book at this point because of the numerous requests for information about it and because NRAES offers a steep discount for pre-print orders for the book (32 to 40% discounts, depending on quantities ordered). **The pre-print ordering discount expires on 5 September 2008.** NRAES, housed at Cornell University, is an extension program sponsored by 11 Land Grant Universities. NRAES publishes practical, science- and experience-based, peer-reviewed books on a variety of subjects, including fruit and vegetable production; livestock and dairy; waste management; natural resources; landscaping; personal finance; and more.

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

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