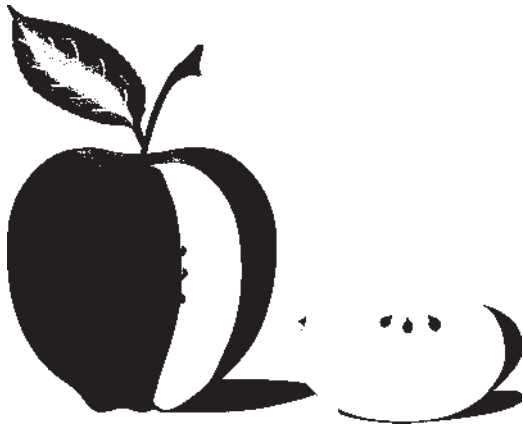


# PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

SEPTEMBER 21, 2004



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## Apple Maturity Update and Hurricane Ivan

*Win Cowgill, Agricultural Agent and Meredith Compton, North Jersey IPM Program Associate*

Apple maturity continued to slow with lower average daily temperature. Cool night temperatures continue to enhance red color development.

On Saturday September 18 the remnants of Hurricane Ivan deposited 5-6 inches of rain in Northern Hunterdon, Warren, Sussex Counties and in the Pennsylvania counties across the Delaware River in four hours. At the Rutgers Snyder Farm in Pittstown, central Hunterdon County, we only received 1.3 inches of rain. Up north streams filled, overflowed and caused the Delaware River to flood many of the river towns from Belvidere to Trenton. Much of the muck soil farmland in Great Meadows area of Warren County was underwater as the Pequest River backed up from Belvidere.

Sugar levels (Brix) in many of the apple samples taken Sunday 9/19 had dropped from the previous weeks tests, as the excessive rainfall had already diluted the sugar in the fruit.

**Important:** Any storm damage from this rain and wind event should be reported to your NRCS office as soon as possible.

Note the different harvest dates as you compare the maturities in the charts below.

**Cortland** is an apple that has increased in popularity with newer strains being highly colored. Most Cortland harvest was completed this past weekend in central/north Jersey.

**Jonagold**- most strains of Jonagold have been harvested in central NJ, some remain to be harvested in northern Warren County. Maturity varies between strains. Jonagolds eat best with a starch iodine of 6.

Hunterdon-Snyder	Strain	Date	Retain	Pressure	Brix	Starch
Jonagold	Jonagored	9/19	No	12.5	14.5	5.6
Warren-Blairstown	Strain	Date	Retain	Pressure	Brix	Starch
Jonagold	?	9/13	No	12.9	13.7	4.8

### Macoun

Middlesex-Oldbridge	Date	Retain	Pressure	Brix	Starch
Macoun	9/17	No	11	13	2.5
Hunterdon-Oldwick	Date	Retain	Pressure	Brix	Starch
Macoun	9/20	Yes	13.5	9	2.8

SEE APPLE MATURITY ON PAGE 2

# Calendar of Events

**September 23, 2004, 8:00 a.m. - 1:30 p.m.** - Core Credit Day. Location: Rutgers Cooperative Extension of Atlantic County.-6260 Old Harding Hwy., Mays Landing, NJ. Contact: For registration and other information contact Jenny Carleo at RCE of Atlantic County at 609-625-0056.

**October 14, 2004, 6:30 to 9:30 p.m.** - Farms and Farmers in South Jersey: Planning for Agriculture in your Community. Location: Mid Atlantic Food System Education Center, Pennsville School District Office - 30 Church St., Pennsville, NJ. Contact: Jerry Frecon at RCE of Gloucester County at 856-307-6450, ext. 1 for more information.

## APPLE MATURITY FROM PAGE 1

Hunterdon-Pittstown	Date	Retain	Pressure	Brix	Starch	
Macoun	9/19	Yes	15	12	3.6	
Warren-Hackettstown	Date	Retain	Pressure	Brix	Starch	
Macoun	9/19	Yes	15	12.4	3.3	
Warren-Hope	Date	Retain	Pressure	Brix	Starch	
Macoun	9/19	Yes	13.5	12	4	
<b>Empire</b> -Was not ready for retail sale type harvest in any sample tested.						
Mercer-Princeton	Strain	Date	Retain	Pressure	Brix	Starch
Empire	.	9/17	?	12.6	11	3
Middlesex-S. Brunswick	Strain	Date	Retain	Pressure	Brix	Starch
Empire	.	9/17	no	11.3	12.3	4.3
Hunterdon-Snyder	Strain	Date	Retain	Pressure	Brix	Starch
Empire	Thome	9/19	no	11	12.5	5
Hunterdon-Snyder	Strain	Date	Retain	Pressure	Brix	Starch
Empire		9/19	no	13	12	5
Hunterdon-Oldwick	Date	Retain	Pressure	Brix	Starch	
Empire		9/20	?	15	12	4
Warren-Blairstown	Date	Retain	Pressure	Brix	Starch	
Empire		9/19	no	11.5	12	4
Warren-Hackettstown	Date	Retain	Pressure	Brix	Starch	
Empire		9/19	yes	14.6	9	3
<b>Red Delicious</b> - Was not ready for retail sale type harvest in any sample tested.						
Mercer-Princeton	Strain	Date	Retain	Pressure	Brix	Starch
Red Delicious	?	9/17	?	13.2	10	2.5
Middlesex-S. Brunswick	Strain	Date	Retain	Pressure	Brix	Starch
Red Delicious	?	9/17	No	12	9.4	3
Hunterdon-Snyder	Strain	Date	Retain	Pressure	Brix	Starch
Red Delicious	Super Chief	9/19	no	14	12	3.4
Hunterdon-Oldwick	Strain	Date	Retain	Pressure	Brix	Starch
Red Delicious-	?	9/20	?	15	11	3
Warren-Hackettstown	Strain	Date	Retain	Pressure	Brix	Starch
Red Delicious	Red Chief	9/19	Yes	16.7	11	2.2
Warren-Blairstown	Strain	Date	Retain	Pressure	Brix	Starch
Red Delicious-	?	9/19	no	11.4	10.4	3.1
<b>Golden Delicious</b>						
Hunterdon-Snyder	Date	Retain	Pressure	Brix	Starch	
Golden Delicious-Smothee	9/20	no	.	.	4.2	
Middlesex-S. Brunswick	Date	Retain	Pressure	Brix	Starch	
Golden Delicious		9/20	no	12.5	12.5	4.2
Mercer-Princeton	Strain	Date	Retain	Pressure	Brix	Starch
Golden Delicious	?	9/17	?	12	11	6.7
Hunterdon-Oldwick	Strain	Date	Retain	Pressure	Brix	Starch
Golden Delicious-Smothee		9/20	?	11	10.5	4
Warren-Blairstown	Strain	Date	Retain	Pressure	Brix	Starch
Golden Delicious-	?	9/18	no	13	11.5	5.3
<b>Liberty</b> -is a scab immune apple from the PRI breeding program that has a unique high quality taste. The tree is very compact and spurry and comes back with a full crop every year.						
Hunterdon-Snyder-	Date	Retain	Pressure	Brix	Starch	
Liberty	9/19	No	17.7	13.5	4	
Liberty	9/20	Yes	14	12	1.7	

SEE UPDATE ON PAGE 3

**Mutsu/Crispin**

Warren-Blairstown	Date	Retain	Pressure	Brix	Starch
Mutsu	9/19	no	15	11.5	1.5
Warren-Hope	Date	Retain	Pressure	Brix	Starch
Mutsu	9/19	?	15	12	1.2

**Pinova**

Warren-Blairstown	Date	Retain	Pressure	Brix	Starch
Pinova	9/19	no	14	14	3

**How to read the charts on fruit maturity**

Starch Index (SI) is a measure of how much starch has converted to sugar in the flesh of the apple. The lower the number the more “immature” the fruit is. The higher the number the more “mature” the fruit is. We like to have an SI of between 5-6 to harvest for retail sales. Apples ‘eat’ best at an SI of 6 or higher.

Brix is a measure of sugar content of fruit. A brix of at least 12 percent should be present for acceptable eating quality, 13-14 is better.

Pressure- flesh pressure is taken after the skin is peeled off; two pressures are taken on each apple. Pressure is one of the truest measures of ripening. Pressure declines rapidly as the fruit matures (gets softer).

**Note:** This report takes approximately two days to prepare in collecting and testing samples and in preparation of the text and data. Six to eight apples of each cultivar are collected at each location.

A note of thanks to all who make this report possible beginning with all the growers who participate, M. Compton who assists in obtaining fruit samples, J. Beyer did most of the fruit testing this week, with M. Black assisting with sample collection. □

## Sustainable Agriculture Grants for Farmers Available

The Northeast Region Sustainable Agriculture Research and Education program (SARE) released updated application materials for its Farmer/Grower grant program. These grants support Northeast farmers who want to explore innovative and sustainable practices on their farms.

The Farmer/Grower Grant program, initiated in 1993, allows farmers to conduct experiments, try new approaches, and test emerging ideas about agricultural sustainability. The emphasis is on new ideas that advance good stewardship, improve farm profitability, and strengthen communities.

In 2004, grants ranged from \$1,121 to determine how an early planting of peas affects the nitrogen needs of pumpkins, to \$10,000 to see if chemical residues are contributing to health problems in honeybees. The average grant was about \$5,800; grants are capped at \$10,000.

Applicants must farm either full- or part-time in Connecticut, Delaware, Maine, Massachusetts, Maryland, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, West Virginia, Vermont, or Washington, D.C.

The deadline for the 2005 grant round is December 7, 2004, and applications can be downloaded from the Northeast SARE web site at [www.uvm.edu/~nesare](http://www.uvm.edu/~nesare). Farmers can also request a printed application by calling 802/656-0471 or by sending e-mail to [nesare@uvm.edu](mailto:nesare@uvm.edu).

*Submitted by Michelle Infante-Casella, Gloucester County Agricultural Agent.* □

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