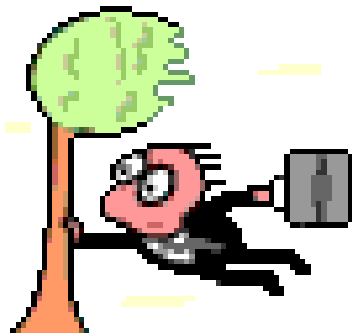


PLANT & PEST ADVISORY

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Protect Your Apple Yields Against Natural Perils

Kris Smolenski, Program Assistant in Agriculture and Win Cowgill, Agricultural Agent

Hail, frost, deer, insects, and disease are all too familiar causes of loss for New Jersey apple producers. Whether there is total destruction or a less significant yield loss, crop insurance can help recover some of the expenses spent on maintaining the crop. Producers can choose to cover 50-75% of their apple yield history through a crop insurance policy. A catastrophic or CAT policy is a minimal coverage of 50% yield and 55% of the price election set by the Risk Management Agency. A CAT policy is fully subsidized by the federal government and costs the producer \$100 of administrative fees.

Note: The enrollment/renewal date for a 2007 apple crop insurance policy is **November 20, 2006**.

Apple Quality Options

Fresh Option

This option takes into account quantity and QUALITY of your apples. If 50% of your apples do not grade U.S. Fancy due to a covered peril it is a 70% loss. If 65% of your apples do not grade U.S. Fancy due to a covered peril it is a 100% loss. You must discuss with the adjuster what you can do with the fruit after it has been adjusted for this option. Failure to do so can adversely affect the outcome of your claim. Sales records must be maintained by unit!

Buy-up coverage levels: You can choose how much of your production history you would like to guarantee, from 50% to 75%, at 100% of the established price.

Government subsidy

The percentage the government pays of your premium.

Coverage Level	50/100	55/100	60/100	65/100	70/100	75/100
Federal Subsidy	67%	64%	64%	59%	59%	55%
Your Portion	33%	36%	36%	41%	41%	45%

Unit Structure

You are able to divide your orchard into optional units if, for each optional unit you have different Farm Serial Numbers or your orchard consists of non-contiguous land. Also, you must be able to supply production records based on this unit structure.

SEE COVERAGE ON PAGE 2

Catastrophic coverage (CAT)

Provides a 50% production guarantee with losses paid at 55% of the Federal Crop Insurance maximum indemnity price, cost is \$100 per crop per county. No consideration for loss of grade. Apples grading U.S. #1 Processing or better whether harvested or left on the tree will count as production. In order to collect any payments on a CAT policy, a producer must experience a disastrous loss to their apple yield. Even if a loss of this magnitude does occur, the producer will only receive 55% of the RMA's price election sum. Producers that wish to cover a greater amount of their yield and price election can elect to purchase a buy-up policy ranging from 50-75% of their maximum approved yield and up to 100% of the price election.

New Jersey Cat Policies

In 2005, 22 CAT apple policies were sold in New Jersey. None of these 22 policies received a crop insurance payment. Four 50% buy-up policies were sold in that year with a total insurance payment of \$58. Two 55% buy-up policies were sold with a total of \$18,917 paid to producers for losses due to natural disasters. The two 55% policies cost a total of \$1,960 to producers after federal subsidies. Therefore, the producer received \$9.65 for every dollar that they paid for the policies. Buy-up policies do cost producers more money than the minimum CAT policy, but as shown in 2005, the money invested is well worth it if there is a loss. How much can you afford to lose?

For more information on this policy or a list of crop insurance agents visit <http://saalem.rutgers.edu/cropinsurance> and www.rma.usda.gov. You can also call the NJ crop insurance education hotline at 1-800-308-2449 or contact Kris Smolenski, Program Assistant, Agriculture at KSmolenski@saalemcountynj.gov. □

Apple Maturity Update for North-Central New Jersey

Win Cowgill, Agricultural Agent

We have not had a more perfect fall season for maturing and coloring apples in North Jersey. Cool nights in the 40's and 50's continue to color fruit. Warm sunny days are maturing the fruit with good sugars. Several days of 80 degree temperatures continue to hasten fruit maturity. Some cultivars are way ahead of last year depending on location; others are right on target.

Harvesting at the correct maturity. Picked too soon green apples will be starchy and not have the full flavor components developed, or the best sugar acid balance. For retail sales most cultivars should be 5-6 on the starch chart and at least 13% Brix (sugar). For short-term storage of 1-2 month's 4-6 on the SI chart.

Many of you know my friend Dr. George Green, retired Penn State Pomologist. He reads my newsletters more now that he is retired than when he was at Penn State! But that is a good thing. Dr. Green offered the following comments about measuring fruit flesh pressure vs. fruit firmness: "In my post harvest life I remember the debate on whether the readings from maturity are firmness or pressure. After a little debate it was decided that it should be called firmness since pressure is normally used with per square inch and there is no area associated with firmness testers." Note that in the tables below I have changed pressure to fruit firmness.

Jonagold- has been harvested for the past two weeks and is ready at all locations.

Warren	Location	Date	Retain	Firmness	Brix	Starch
Jonagold	Blairstown	9/24	no	16	13.4	7.8

Macoun- Macouns have excellent color this year, but the high quality flavors have been slow to develop, even through growers have been harvesting for two weeks or more in Central New Jersey. Jon Clements, Extension Fruit Specialist at UMass says "harvest when they taste good!" But that means 5-6 on the starch chart and a brix of 13% are better.

Hunterdon Location Date Retain Firmness Brix Starch

Macoun	Pittstown	9/25	yes	16	12.5	3.5
Macoun	Snyder	9/25	no	17.8	11.2	3.7

Warren Location Date Retain Firmness Brix Starch

Macoun	Hackettstown	9/24	yes	17.8	13	3.5
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Morris Location Date Retain Firmness Brix Starch

Macoun	Harding Twp	9/25	yes	17.3	13.2	4.3
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Cortland is an apple that has increased in popularity with newer strains being highly colored. Cortland is usually picked one week after Macs. Most Cortlands have been harvested.

Empire-Was not ready for retail sale type harvest in any sample tested. We would look for starch of 5-6, brix of 13-14%, pressure 16 lbs.

Hunterdon Location Date Retain Firmness Brix Starch

Empire	Snyder	9/25	no	15	9.4	5.5
Thome Empire	Snyder	9/25	no	18	11	5

Warren Location Date Retain Firmness Brix Starch

Empire	Blairstown	9/24	no	17.8	11.2	5
Empire	Hackettstown	9/24	no	18.1	11	4.5

SEE APPLE MATURITY ON PAGE 3

APPLE MATURITY FROM PAGE 2

Morris	Location	Date	Retain	Firmness	Brix	Starch
Empire	Harding Twp	9/25	yes	16.8	11	4.5

Red Delicious- Have matured early for some growers but not all. Reds in the northern counties are not ready for retail harvest. Sugars have been slow to develop in reds, and most are still very starchy. Reds picked immature continue to convince the consumer that they taste like napkins.

Hunterdon	Location	Date	Retain	Firmness	Brix	Starch
Oregon Spur	Snyder	9/25	no	15	11	4.5
Warren	Location	Date	Retain	Firmness	Brix	Starch
Red Chief	Blairstown	9/24	no	17.1	10.2	2.5
Red Chief	Hackettstown	9/24	yes	19	9.8	2.1

Early Fuji Types- have all been harvested including Yataka.

Pinova (also called Corail) is an interesting new apple cultivar from the German apple breeding program at Dresden-Pillnitz. At present this cultivar is commercially planted in Europe and being looked at in the USA. "The parents are Clivia (Oldenburg x Cox Orange) x Golden Delicious, so the excellent taste of Cox Orange is combined with the good cropping capacity of Oldenburg and Golden Delicious and the storage and shelf life characteristics of Golden Delicious" according to the Institute of Plant Genetics at Dresden, Germany (see photo on page 4).

Warren	Location	Date	Retain	Firmness	Brix	Starch
Pinova	Blairstown	9/24	no	20	11	2

Idared is a popular dual purpose apple that was not quite ready in Morris County.

Morris	Location	Date	Retain	Firmness	Brix	Starch
Idared	Harding Twp	9/25	yes	17.3	12.4	3.3
Warren	Location	Date	Retain	Firmness	Brix	Starch
IdaredGold	Blairstown	9/24	no	15.5	11.6	3.6

Golden Delicious- is maturing a bit earlier in Hunterdon and Morris, right on time in Warren.

Morris	Location	Date	Retain	Firmness	Brix	Starch
Golden Delicious	Harding Twp	9/25	yes	17.8	16	4
Hunterdon	Location	Date	Retain	Firmness	Brix	Starch
Gibson golden	Snyder	9/25	no	17	13.6	5.6
Golden Delicious	Pittstown	9/25	no	16.2	14	6
Warren	Location	Date	Retain	Firmness	Brix	Starch
Gold Del.-Gibson	Blairstown	9/24	no	16.5	12.4	5.2
Gold Del.	Hackettstown	9/24	yes	17.3	12.	3.3

Liberty- a very high quality scab immune cultivar; not quite ready.

Hunterdon	Location	Date	Retain	Firmness	Brix	Starch
Liberty	Snyder	9/25	yes	18.5	12.6	2.25

Crispen (Mutsu) widely planted in Western New York as a high quality eating apple; large size and green color with a pink/yellow blush on the cheek are characteristics of this cultivar.

Warren	Location	Date	Retain	Firmness	Brix	Starch
Crispen	Blairstown	9/24	no	17.5	11.4	2.8
Hunterdon	Location	Date	Retain	Firmness	Brix	Starch
Crispen	Snyder	9/24	no	19.6	11.4	1.75
Crispen	Pittstown	9/25	no	17.7	11.5	1.2
Morris	Location	Date	Retain	Firmness	Brix	Starch
Crispen	Harding Twp	9/25	yes	17.4	10.6	2.2

SEE NORTHERN SPY ON PAGE 4

Recycle Your Drip Irrigation Tape Year-Round

If you're looking for a cost effective way to recycle your drip irrigation tape, then look no further. The Cumberland County Improvement Authority (CCIA) will continue to collect and recycle drip tape generated by New Jersey farmers in 2006.

This year-round agricultural plastics recycling program, started as a pilot project in 2005 through a grant provided by the New Jersey Departments of Agriculture and Environmental Protection, has been modified for 2006.

Mulch film, silage bags, peat moss bags, and other agriculture plastics will *no longer be accepted*. Quality control of the drip tape is the most important variable to a successful recycling program. Here are some guidelines to follow:

- Once the drip tape is removed, be sure to remove as much of the contaminants as possible (dirt, water, plant material, etc.). Excessive contaminants will cause the material to be rejected at the collection site. Minimizing these contaminants will lower your recycling costs.
- Drip tape should be rolled up and tied with drip tape only.
- Keep the material as dry as possible because moisture will add to the weight of the material and increase the cost of recycling to the farmer.
- Keep the drip tape as clean as possible - it will save you money on recycling costs.
- Do not place any other material in the collection bin except drip tape. If other material is commingled with the drip tape, the entire load will be rejected for recycling.

SEE DRIP TAPE RECYCLING ON PAGE 4

Collection Site Information:

Date: Collection runs year-round

Cost: \$30 per ton

Location: Cumberland County Solid Waste Complex

169 Jesse Bridge Road, Deerfield, NJ
 Located off Route 55, Exit 29 (Sherman Ave., Route 552)

Time: Monday-Friday 7:30 a.m.-3:30 p.m.
 (Saturday by appointment only)

Contact: Dennis DeMatte, Jr., Recycling Coordinator, CCIA

Phone: 856-825-3700

- When entering the Solid Waste Complex, identify the material as drip tape. This is necessary since the CCIA also has a nursery and greenhouse film collection program and the drip tape must be stored in a separate area.
- Vehicles used to transport the drip tape are not required to be licensed by the NJDEP so long as the drip tape is transported directly to the collection site.
- Prior to delivery of the drip tape, all growers *must* establish an account with the CCIA or utilize a licensed solid waste hauler.

For additional questions regarding the recycling of plastics generated in agriculture, contact Karen Kritz, NJ Department of Agriculture, 609-984-2506 or e-mail Karen.Kritz@ag.state.nj.us. □

Northern Spy

Hunterdon	Location	Date	Retain	Firmness	Brix	Starch
Northern Spy	Snyder	9/25	no	18	12	5.5
Morris	Location	Date	Retain	Firmness	Brix	Starch
Northern Spy	Harding Twp	9/25	yes	17.5	12.8	4

What the numbers mean

Several growers have asked for a bit of information on what the numbers mean in our brix and starch iodine tests. The SI is a measure of how much starch has converted to sugar. 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. Brix is a measure of sugar content of fruit. A brix of at least 12 percent should be present for acceptable eating quality. Fruit firmness is also an excellent indicator of maturity and the “crunch factor”. For most varieties I would like to see firmness of at least 16 lbs at harvest. The exception is Honeycrisp. It has excellent crunch at 13-14 lbs fruit firmness. Studies have shown that it has double the number of cells that give it its unique crunchy texture.


Note: This report takes approximately two days to prepare in collecting and testing samples and in preparation of the text and data. A note of thanks to all who make this report possible beginning with all the growers who participate, Martha Maletta, Research Assistant, RCRE of Hunterdon Co. and Rob Sanchis Research Assistant at the Rutgers Snyder Farm. Thank you to Ed Dager, for the Snyder Farm support and Geff Sliffer, Plant and Soil Science Technician for assistance with all aspects of fruit production at Snyder. Most importantly thank you to the growers for allowing me to sample their blocks.



*Pinova- taken at Race Farm in Blairstown NJ
 Photo credit: Win Cowgill*

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NJ AGRICULTURAL EXPERIMENT STATION
RUTGERS
COOPERATIVE RESEARCH & EXTENSION
Plant & Pest Advisory
Rutgers' Cook College
18 College Farm Road
New Brunswick, N.J. 08901-8551



PLANT & PEST ADVISORY

FRUIT EDITION - CONTRIBUTORS

RCRE Specialists and Program Associate

George Hamilton, Ph.D., Pest Management
Norman Lalancette, Ph.D., Plant Pathology
Bradley A. Majek, Ph.D., Weed Science
Peter Oudemans, Ph.D., Small Fruit Plant Pathology
Cesar Rodriguez-Saona, Ph.D., Cranberry/Blueberry Entomology
Peter W. Shearer, Ph.D., Entomology
Daniel Ward, Ph.D., Pomology
Gail Lokaj, Program Associate in Pomology

NJAES/Cook College

Joseph Goffreda, Ph.D., Breeding

RCRE 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)
Passaic, Elaine F. Barbour, Agric. Assistant (973-305-5740)
Warren County, William H. Tietjen (908-475-6505)
Fruit IPM, Dean Polk (609-758-7311)
Atanas Atanassov, Ph.D., Program Associate (908-788-1338)
Gene Rizio, Program Associate (856-566-2900)
David Schmitt, Program Associate (856-307-6450)

Newsletter Production

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

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