

PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

SEPTEMBER 19, 2006



Early Fuji trial, Rutgers Snyder Farm 2005.
Photo credit: Win Cowgill

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Apple Maturity Update for North-Central New Jersey

Win Cowgill, Agricultural Agent, and Martha Maletta, Research Associate

Apple maturity is moving quickly with the warm days last week and the 80°F plus temperatures we had the past few days. We had 84°F yesterday at the Rutgers Snyder Farm. Cool nights have continued to bring on excellent red color throughout northern New Jersey. All varieties tested are several days ahead of last year at all locations sampled.

Harvesting at the correct maturity for increased profits. I guess you can call this paragraph "Win' Soapbox." Apples harvested prematurely will not have the best flavor for retail sales. Picked too soon green immature 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). Note: harvesting prematurely costs you dollars as apples are rapidly sizing, they will add an additional 5% or more in size if allowed to develop.

McIntosh-Macintosh harvest is done in central New Jersey and winding down in the most northern New Jersey counties.

Jonagold- is ready at several locations. We would like to see a 6 on starch for retail sales and 14-16% brix. We are harvesting Jonagold today at Snyder.

| Hunterdon | Location | Date | Retain | Pressure | Brix | Starch |
|-----------|-------------|------|--------|----------|------|--------|
| JonaGoRed | Snyder | 9/18 | no | 16.9 | 14 | 6.4 |
| Morris | Location | Date | Retain | Pressure | Brix | Starch |
| Jonagold | Harding Twp | 9/18 | yes | 15.5 | 13 | 5.2 |

Early Fuji Strains- there are four to five new strains of early Fuji. I made my first harvest last Friday (9/15) of all three. We will make two pickings. Our Asian population continues to grow (NJ's population is now 10% Asian) and there is a significant marketing opportunity to this group. Fuji is their apple of choice followed by Gala and Golden Delicious. Currently I have four of these cultivars under extensive testing (30-50 trees each) at the Rutgers Snyder Farm. These include BeniShoegun Fuji, September Wonder Fuji, Auvil Early Fuji, and Rising Sun Fuji. These are very interesting in looking at the early PYO market with a Fuji type. These are true Fujis as contrasted to the older Yataka Fuji which is not a true Fuji.

SEE APPLE MATURITY ON PAGE 2

Tracing Food Products

Jhilson Ortiz, Agricultural Agent

The ability to trace food products from consumer tables to planted plots in farms is becoming a requirement in this safety and service driven industry.

A few years ago, product tracing was only implemented in consumer products that had a bar code and were manipulated only by lot numbers.



In today's society, technology and public interest for quality assurance prompted the organic foods sector to establish a trail of papers that ensure the product has not been compromised in any part, from production, to storage and all the way to transportation and delivery.



A process like this can be easily implemented on those farms that do not have paper trail/product

trace-ability programs, even if the farms are not organic certified. The size and complexity of this trace-ability/Quality assurance program will depend directly on the size of the operation.

Ultimately, programs like this help us achieve a high level of quality assurance. It also gives us the opportunity to improve our service level by providing accurate information about our products and even let us separate compromised lots from our production schedule to maintain our level of quality and avoid costly recalls. □

APPLE MATURITY FROM PAGE 1

| Hunterdon | Location | Date | Retain | Pressure | Brix | Starch |
|-----------|----------|------|--------|----------|------|--------|
| September | Snyder | 9/18 | no | 15 | 13.6 | 7.8 |
| Wonder | | | | | | |

Macoun- Macouns have good sugar but still don't have full flavor. All are too starchy as indicated by SI testing. Note: no samples tested were mature enough for ideal harvest of this cultivar. Jon Clements, Extension Fruit Specialist UMass says "Harvest when they taste good!" But that means 5-6 on the starch chart. Samples tested ranged from 2.7-3.4. *Harvesting prematurely does not let the consumer experience the full flavor of Macoun.*

| Hunterdon | Location | Date | Retain | Pressure | Brix | Starch |
|-----------|--------------|------|--------|----------|------|--------|
| Macoun | Oldwick | 9/18 | Yes | 19.7 | 11.6 | 3.2 |
| Warren | Location | Date | Retain | Pressure | Brix | Starch |
| Macoun | Hackettstown | 9/18 | yes | 18 | 13 | 2.7 |
| Morris | Location | Date | Retain | Pressure | Brix | Starch |
| Macoun | Harding Twp | 9/18 | yes | 16.5 | 13 | 3.4 |

Cortland is an apple that has increased in popularity with newer strains being highly colored. Cortland is usually picked one week after Macs. They do not starch test well but SI testing can be used as a guideline. For Cortland target a starch of 5-6. Cortlands have been harvested across central New Jersey and are ready for spot picking in northern counties.

| Warren | Location | Date | Retain | Pressure | Brix | Starch |
|----------|--------------|------|--------|----------|------|--------|
| Cortland | Hackettstown | 9/18 | yes | 15.3 | 11 | 3.8 |

Jonathan is an old-time favorite apple popular in the Midwest. It has colored nicely and ready for harvest in several locations.

Idared- not ready yet. Great favorite in some New Jersey orchards.

| Morris | Location | Date | Retain | Pressure | Brix | Starch |
|--------|-------------|------|--------|----------|------|--------|
| IdaRed | Harding Twp | 9/18 | yes | 21 | 11 | 1.5 |

Red Delicious- Had low sugars across the board and low SI, all were starchy except the Pittstown samples. We would like a SI index of 4 or higher for fresh market sales and sugar of 11 plus. Reds were getting loose even with Retain.

| Hunterdon | Location | Date | Retain | Pressure | Brix | Starch |
|-------------|---------------|------|--------|----------|------|--------|
| Oregon Spur | Snyder | 9/18 | no | 15.4 | 10 | 3.8 |
| Red Chie | fPittstown | 9/18 | no | 14.5 | 10.8 | 6 |
| Super Chief | Oldwick | 9/18 | yes | 17.3 | 10.5 | 3 |
| Red Chief | Oldwick | 9/18 | yes | 18.5 | 8 | 2 |
| Warren | Location | Date | Retain | Pressure | Brix | Starch |
| Red Chie | fHackettstown | 9/18 | yes | 18.5 | 8 | 2 |
| Morris | Location | Date | Retain | Pressure | Brix | Starch |
| Red | Harding Twp | 9/18 | yes | 17 | 10.5 | 3 |

Delicious

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 | Pressure | Brix | Starch |
|-------------|--------------|------|--------|----------|------|--------|
| Empire | Snyder | 9/18 | no | 16.6 | 11.6 | 3.8 |
| Tome Empire | Snyder | 9/18 | no | 21 | 10.8 | 3.4 |
| Empire | Pittstown | 9/18 | yes | 16.7 | 11.6 | 3.8 |
| Warren | Location | Date | Retain | Pressure | Brix | Starch |
| Empire | Hackettstown | 9/18 | yes | 17.5 | 10 | 2.2 |
| Morris | Location | Date | Retain | Pressure | Brix | Starch |
| Empire | Harding Twp | 9/19 | yes | 16.4 | 10.8 | 3.6 |

SEE GOLDEN DELICIOUS ON PAGE 3

Golden Delicious- Golden's are moving along as well. Fruit not treated with ReTain is a bit ahead of normal.

| Hunterdon | Location | Date | Retain | Pressure | Brix | Starch |
|-----------|----------|------|--------|----------|------|--------|
| Golden | Snyder | 9/18 | no | 22.3 | 13 | 3.6 |

ReTain®: Reminder ReTain® should ideally be applied 28 days before anticipated harvest and with a 21 day Pre Harvest Interval (PHI). If blocks were not treated with ReTain®, it is too late this season to apply except for late October maturing apples in the northern most counties such as Fujii, Stayman, Braeburn.

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, Rob Sanchis research assist an the Rutgers Snyder Farm. Thank you to Ed Dager, for the Snyder Farm support and Geff Slifer, 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. □

Cornell University Cider Makers' Short Course

If there is sufficient demand (22 people enrolled), Cornell University will again offer an intensive four-day course for cider makers from Dec. 5 to 8th, 2006, at the New York Ag Experiment Station in Geneva, NY. As in previous years, the course will be taught by Dr. Peter Mitchell from the UK—an international consultant and expert in ciders.

This year's four-day course will include:

- A thorough introduction to the main principles and practices of cider production
- Training in the key techniques and laboratory skills for cider analysis and production
- Introduction to techniques and practices of cider sensory analysis
- Knowledge, insight and technical know-how based upon Dr. Mitchell's decades of practical experience as a teacher, consultant, and cider maker.
- A detailed course manual with many useful charts and tables for practical reference in the cidery

Cornell University hosts this course on a non-profit basis, with the required fees of \$725 per person (not including lodging or transportation) based upon our costs of instruction. We need 22 people enrolled to offer this course, and enrollment will be capped at that number on a first-come basis.

If you are interested in taking this cider-making course, you should contact directly either Ian Merwin at im13@cornell.edu, or Olga Padilla-Zakour oip1@cornell.edu.

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Submitted by William H. Tietjen, Agricultural Agent. □

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