

PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

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North Jersey Apple Maturity Update

Win Cowgill, Agricultural Agent

Apple fruit maturity is progressing on schedule. Retained Gala blocks are holding well. Forecasted cool night temperatures this week should slow down maturity and enhance red color development. HoneyCrisp, McIntosh were harvested last week at the Rutgers Snyder Farm.

The Starch-Iodine index is one of the best ways to track maturity on apple varieties. But it is also essential to monitor flesh pressure, sugar (Brix) development, and most importantly background color on cultivars like Gala. Specific starch charts have also been developed for Gala, Liberty, Cortland, and Mutsu. On the West Coast they have also been developed for Fuji. We have published a web page that contains these specific charts. Point your browser to:

<http://www.umass.edu/fruitadvisor/clements/articles/sitest.htm>.

September 10 Fruit Maturity Samples –**Please note which fruit samples tested below were treated with Retain.**

Note: **Retain treated fruit will delay fruit maturity one week or longer and increase flesh pressure.**

All fruit samples were collected and tested on September 10, 2001
Warren County-Hackettstown

	Cultivar	Retain	Pressure	Brix%	Starch
Macoun	-	Yes	20.1	11.5	1.6
Empire	-	Yes	16.6	10	3.2
Red	RedChief	Yes	19.9	8	1.5

Delicious

Hunterdon County-Pittstown

	Cultivar	Retain	Pressure	Brix%	Starch
Jonathan	-	No	17	10.8	2.7
Macoun	-	No	17	11	1
Empire	-	No	17.8	8.2	2.3
Red	RedChief	No	17.5	7	2

Delicious

McIntosh: Mac Harvest is almost complete in Northern New Jersey, a few Retained blocks remain to be harvested.

Gala: Gala harvest is in full swing in Northern New Jersey. We like to see flesh pressures of 16 or greater and sugars of 14% or greater for optimum fresh market sales. A starch-iodine index of 5

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Tuber Oatgrass Reporting

Albert Ayeni, Ph.D., Research Associate,
Weed Science

Tuber oatgrass is a perennial grass weed widely distributed throughout the Pacific Northwest. It resembles quackgrass in morphology but in some environments may grow to about six feet tall. It occurs on roadsides, in wastelands, and in cultivated fields. The bulbs are easily spread during tillage operations. There is limited information on control measures. Pete Probasco (Ag Agent, Salem County), brought a sample to our office at Rutgers Agricultural Research and Extension Center recently. He said the weed was found around the base of some ornamental plants growing out of some mulch materials that probably came from western United States. We are interested in knowing more about the distribution of tuber oatgrass in New Jersey and encourage you to report any sighting of this weed in your locality. You may call Albert Ayeni or Bradley Majek at 856-455-3100 or email ayeni@aesop.rutgers.edu or majek@aesop.rutgers.edu.



Tuber oatgrass (Arrhenatherum elatius (L.) Presl var. bulbosum (Willd.) Spenner
[Source: *Weeds of the West*, Tom D. Whitson (Ed.) et al. 1991]

MATURITY UPDATE FROM PAGE 1

for fresh market would be a rule of thumb. Background color has historically been one of the best indicators of maturity for cultivars such as Gala. Fresh market Galas should be harvested when the background color is turning from a yellow to a cream color.

Honeycrisp is a difficult cultivar to pick at the correct time. The background color does not change to indicate maturity. We must rely on the Starch Iodine index and sugar content. For storage it should be harvested at an SI of 5-6.

Cortland: Should be harvested the same time fresh market McIntosh are harvested.

Macouns and Jonathans are coloring well in the Pittstown area, both are a week away for harvest depending on site and location.

Empire: Empire for storage should be picked when the average starch-iodine index is between 4.5 and 5.5.

Red Delicious: Color development on Reds in North Jersey is excellent. If growers did not treat their Reds with ReTain, they may want to consider the use of NAA, two weeks prior to harvest. Reds for fresh market sales should be picked with a starch-iodine index of 3.5-4.5.

Apple Cultivar Order of Ripening

Macintosh
Gala
Honeycrisp
Cortland
Jonathan
Liberty
Macoun
Empire
Red Delicious
Jonagold

Additional Information

A limited number of Cornell Starch Charts and Cornell Bulletin 221 "Predicting Harvest Date Windows for Apples" is available from the RCE of Hunterdon County Extension office at 908-788-1338 or e-mail Pat Davino at pdavino@co.hunterdon.nj.us.

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