

# SW MICHIGAN APPLE MATURITY REPORT

## ISSUE 3 – September 7, 2010

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Contact Bill Shane at SWMREC 269-944-1477 x 205 if you would like to have samples from your farm tested for maturity. See the Michigan State University apple web site ([apples.msu.edu](http://apples.msu.edu)) for more information, including reports from other regions, past season reports, and additional information about apple maturity and apples in general.

### General comments

The winds of Friday night Sept 3 caused significant drop of Honeycrisp, McIntosh, and Jonagold in some sites. Bitter rot and black rot fruit symptoms are showing up at very low levels in a few Honeycrisp, Empire and Golden Delicious orchards in southwest Michigan.

**Gala** No new samples were tested this week. The general predicted Gala harvest date for peak harvest for longterm CA storage in SW Michigan for 2010 is August 26<sup>th</sup>.

**Early season Fuji** (4 samples, no graph). Early season Fuji varieties Auvil, Morning Mist, Daybreak, and Nickell grown at the SW Michigan Research and Extension Center were tested September 7. Firmness ranged from 15.3 to 19 lb, starch conversion from 3.4 to 7.8 (mature to overmature), and brix from 12.8 to 13.7. This group ripens 4 to 6 weeks ahead of traditional Fuji varieties.

**Honeycrisp** (6 sites sampled) Fruit firmness dropped 0.5 lb since last week and now is averaging 15.5 lb. Starch removal average is now 6.5 compared to 4.9 of last week. Brix is averaging 13.2 compared to last week's 12.9. Skin color has again improved markedly over the past week. Honeycrisp are generally testing mature according to starch conversion tests and firmness is now in the medium to short storage duration. The generalized predicted harvest date for Honeycrisp for Berrien County for 2010 is September 3<sup>rd</sup>, compared to last year's predicted date of September 20, and the longterm normal date of September 13<sup>th</sup>. So Honeycrisp is moving slightly ahead of the 2010 prediction and about 2 weeks ahead of normal.

**Empire** (5 sites sampled) Many Empires have already been harvested over the last two weeks for taffy apples. Background color is improving as green color is fading. Firmness is averaging 19.4 lb compared to 20.6 lb for last week, starch conversion is averaging 2.8 compared to 2.3, and brix is 11.1 compared to 10.3. Based on firmness harvest can be delayed for Empire apples that test similar to our samples, whether destined for CA storage or for local sales. The 2010 predicted harvest date for Berrien County is September 9, compared to the predicted date of September 29<sup>th</sup> for 2009 and the longterm predicted date of September 22<sup>nd</sup>.

**Jonathan** (7 sites sampled) Flesh firmness average is 18.9 lb, last week was 19.3 lb, starch conversion average is 4.2 compared to 2.7 last week, and brix average is 12.6, slightly higher than last week's 11.1. The 2010 predicted peak longterm CA harvest date for Berrien County is

Sept 15 and the normal date is September 22. Starch conversion now tests in the mature range with firmness still in the excellent firmness range.

**Jonagold** (8 sites sampled) Flesh firmness is averaging 19.2 lb about the same as last week's 19.5 lb, starch conversion average jumped to 3.6 compared to last week's 2.8, and brix is averaging 13.1 compared to last week's 11.4. Fruit firmness is excellent, in the longterm CA range. Starch conversion for the site have a wide range (1.4 to 6.2). The 2010 predicted date for Berrien County is Sept 15 and the longterm normal is Sept 22. Like other varieties this year, fruit maturity may run ahead of the predicted value. Firmness will likely drop quickly this week.

**Golden Delicious** (15 sites sampled). Skin color conversion from green to a brighter green/yellow is occurring in a few apples in some sites. Flesh firmness is averaging 18.7 about 1 lb less than last week. Starch conversion average is 2.3 about the same as last week's 2.4, and brix is averaging 12.1 compared to last week's 11.6. Most sites still have excellent firmness with a few testing in the mature range for starch conversion. The 2010 predicted date for peak harvest for longterm CA storage is September 19<sup>th</sup>.

**Red Delicious** (10 sites sampled). Flesh firmness is averaging 18.4 lb, about 0.8 lb less than last week. Starch conversion average is 3.4 compared to 2.4 of last week, and brix is averaging 10.6 compared to 9.6 for last week. Firmness ranges from excellent for longterm storage to midterm storage, with starch conversion generally in the mature range. The 2010 predicted date for peak harvest for longterm CA storage is September 21<sup>st</sup> and the longtime average is Sept 28<sup>th</sup>. Maturity looks like it is running ahead of the predicted date for 2010 for SW Michigan.

This report and project is made possible by the support of our sponsors which include Greg Orchards Produce, Inc, Michigan Apple Committee, Michigan State Horticultural Society, Michigan Agricultural Experiment Station, Mammoth Farms, and Michigan State University Extension. SW growers providing apples include Grandview Orchards, Mammoth Farms, Oak Hill, Bixby Orchards, Dan Klug, Weber Farms, Meachum Farms, Kevin Winkel Farms, Weckwerth Farms, Willmeng Farms, and Czuba Farms.

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Figures 1 & 2. Apple maturity trends for SW Michigan. Each dot is the average for an orchard based on a 10 apple sample. Samples were taken in Berrien and Van Buren counties.



