# SW MICHIGAN APPLE MATURITY REPORT ISSUE 1 – August 25, 2010

Bill Shane, Diane Brown-Rytlewski, and Mark Longstroth Michigan State University

This is the first of weekly apple maturity report for SW Michigan from now until mid October. The samples for these reports are collected primarily in Berrien and Van Buren counties—the maturity is only a broad indication of trends for this area. 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) for more information, including reports from other regions, past season reports, and much more information about apple maturity and apples in general.

### **General comments**

The 2010 is bringing major challenges to southwest Michigan apple growers. Hot weather and light crop loads in many orchards are maturing apples much earlier than normal, as predicted by the Michigan apple maturity predicted harvest dates. According to weather records at the SW Michigan Research and Extension Center near Benton Harbor, 2010 matches 1998 for warmest year to date since 1996. The warm days and nights have inhibited color development on early season apples such as Paulared, Zestar, and Gala.

## Gala (10 sample sites)

Gala are testing very firm in the 18.3 to 24 lb range, average 21.4. Starch removal index readings range from 1.4 to 5.8 with an average of 3.4 with average brix of 12. Good firmness will allow delay of harvest to wait for better background color if needed.

The general predicted Gala harvest date for SW Michigan for 2010 is August 26<sup>th</sup>, compared to last year's predicted date of September 15<sup>th</sup>. The longterm normal harvest date for Gala in Berrien County is September 8<sup>th</sup>. Gala have a wide range of starch conversion this year, with some orchards having significant number of fruit testing mature for starch conversion. Growers need to monitor this variety closely

This variety tends to convert starch to sugar very quickly, hang well on the tree, and retain firmness. Gala has a tendency to crack when mature.

#### Gala summary

	Firmness (lb)	starch	brix
Average	21.4	3.4	12.0
Max	24.5	5.8	13.8
Min	18.3	1.4	11.0

**Honeycrisp** (4 sites sampled) Fruit firmness is averaging 17.4 lb (range 16.7 to 18.2). Starch removal average of 1.5 (range 1.0 to 2.2). Brix is averaging 12.2 (range 11.7 to 12.7). Skin color has improved markedly over the past week but is still relatively poor with green highlights. Honeycrisp starch conversion tests and tasting indicates that fruit are still immature although

relatively low firmness indicates that this variety should be monitored closely. 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>.

## Honeycrisp summary

	Firmness	starch	brix
Average	17.4	1.5	12.2
Max	18.2	2.2	12.7
Min	16.7	1.0	11.7

# **Empire**

Many Empires have already been harvested over the last two weeks for taffy apples. Background color is still green. Harvest can be delayed for Empire apples 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>.

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

The SW Michigan Apple Maturity Report is produced by: **Bill Shane**, Michigan State University District Extension Educator for Fruit and Marketing, Benton Harbor, 269-944-1477 (ext 205), fax 269-944-3106, **Diane Brown-Rytlewski**, Berrien County Extension Educator, Benton Harbor, 269-944-4126 and **Mark Longstroth**, District Extension Educator for Fruit and Marketing, Paw Paw, 269-657-8213 x3, tollfree 888-SWFRUIT, fax 269-657-6678, recorded message phone 269-657-8217;

Figure 1. 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.



