

WC MICHIGAN APPLE MATURITY REPORT FOR 9/15/2010

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Harvest is well underway. McIntosh harvest is just about done. Growers are harvesting Galas, Honeycrisp, Empires, Early Red delicious and starting with Jonagolds and Jonathans.

All the samples for this report were collected in Oceana County in Elbridge Township and Shelby.

Empire – One sample was tested. Fruit has very good size. Firmness is excellent in the range from 17.25-23 lb averaging at 19.8 lb. Starch Index values indicate uniform starch conversion...the values are mainly 2's and 3's in a 50/50 split averaging at 2.5. Fruit is still immature. Color is in a range from 35-98% with the average value of 72.8%. Background color is very much green at 4.1 attesting to the immature nature of the fruit. Brix are fair to good in a spread from 11.4-13% and average value at 12.36%. There is 30% of the fruit with incomplete seeds and 10% fruit is showing "hail" scars. Fruit is being harvested though it could have waited for another 5-7 days.

Jonathan – Only one sample from Elbridge Township area was tested. Fruit has excellent size ranging from 2.76-3.06" in diameter. Firmness shows wide variation with values from 16.5-22 lb. Overall firmness is excellent and well above required firmness for long-term C.A. storage. Starch conversion is well on its way with starch index values averaging at 4.1 in a range from 2-6. Fruit is testing mature on the starch-index scale. It has just entered optimum window for the long-term C.A. Color is very good to excellent from 90-100%. Brix are excellent with the average value of 14.74% and range from 13-15.8%. Fruit is ready for harvest. It is interesting to note that the physiological development of the fruit coincides with the predicted harvest date (9/14).

Jonagold – Two samples were tested. Both samples are showing excellent fruit size. The average sizes are in a range from 2.89-2.95" in diameter. There is significant variability in firmness within the samples starting at 15 all the way up to 23lb. Overall firmness is excellent with very little difference between the samples at 18.2 and 19.2 lb respectively. Starch index is very uniform within the samples but significantly different between the samples. One sample came from very vigorous and overgrown trees is showing slight starch movement and conversion testing immature on the SI scale with the average value of 2.4. The other sample coming from more dwarfing and more open-crown-growth trees is showing significantly higher starch/sugar conversion activity with the average value of 4.2 placing it on the mature side of the scale. Color and brix are showing strong correlation with SI values between the samples tested. Average values for the color are from 17-67.5% red and background color is from 4.9 to 4.1, still very much green. In the sample that tested mature brix are excellent ranging from 12.2-14.8% with the average value of 13.8%. The other, immature, sample has lower brix for a whole 1.5% point.

Golden delicious – One sample was tested. Very nice looking fruit showing 33% red blush on the sunny-side. There is great variation in fruit size within the sample ranging from 2.58-3.12" in diameter and average value at 2.8". It appears that thinning process should have been a bit more aggressive. Firmness is excellent at 20.4 lb and well above requirement for long-term C.A. Starch index values are very uniform and mainly in 1-2 range averaging at 1.5. Fruit is still immature on SI scale. Brix are excellent at 15.06%. Harvest is expected in 7-10 days.

Red delicious – Three samples were tested.

Early Red Chief is the only sample that came from Shelby area. This was the second test for this block. There has been very little firmness loss (1 lb) since the previous test 10 days ago. The average firmness is excellent at 18.06 lb. There has been less than 1-point gain on the SI scale. Average value is at 2.1 testing immature. Color is excellent at almost 100% red. There has been 0.3% increase in brox. Average value is still unsatisfactory at 10.46%. This sample is showing 20% moldy core and 30% incomplete seeds. At the time of sampling, harvest has been underway.

The other two blocks of Red delicious were comparable in all tested parameters. Firmness is excellent with averages ranging from 18.45-19.33 lb. Starch index average values are between 2-2.2 placing the fruit on the immature side of the SI scale. Color is respectable at 84 and 89% though still not fully developed. Background color is green at 4.1. Brix are poor with the average values ranging from 10.6 – 11%. Fruit is expected to enter optimum window for the long-term C.A. in 5-7 days.

Northern Spy - One sample tested. Firmness is excellent with the average value of 22.6 lb. Starch index is showing very little movement. Core is just starting to clear. With the average SI value of 1.2, fruit is still testing immature. Brix are low ranging from 9.6-12.6% averaging at 11.2%. Fruit is expected to get into the “mature zone” in 10-14 days.

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