

MSU Fruit Team Apple Maturity Report 2013
Northwest Region, Report Number 4: September 25, 2013
Nikki Rothwell and Emily Pochubay, Extension Fruit Educators

This is the fourth week of 2013 apple maturity testing at NWMHRC. Results will be sent via fax and email to past apple maturity list subscribers. Results will also be available at http://agbioresearch.msu.edu/centers/nwmihort/nwmihort_resources_and_reports#NWMIAppleMaturityReps Reports for other regions around the state can be viewed at http://msue.anr.msu.edu/resources/apple_maturity_program_and_reports.

The weather forecast for the week is almost perfect for apple harvest: cool nights and warm days are good for both the fruit and workers. The most striking observation of apple harvest this season is the variability in ripeness among varieties and regions of the northwest. Some blocks of HoneyCrisp in the northern part of the region are ready for harvest compared to the same variety in other orchards much further south. In past seasons, growers typically have a set order for harvest according to variety or block, but this variability has growers hopping from block to block to capture the optimum harvest window for each variety. Overall, quality is looking good and color has really improved in the past week. Labor is on the short side across the region, which is a concern for growers, particularly if they have to move to multiple different blocks in a given time period. Apple harvest will be in full tilt for most farms this week.

Summary of northwest Michigan apple maturity samples taken on 24 September 2013

| Variety | Color % (range) | Firmness lbs. pressure (range) | Starch (range) | Brix (range) |
|------------------|-----------------|--------------------------------|----------------|--------------------|
| Gala | 84 (50 - 100) | 19.7 (16.5 – 23) | 2.6 (1 - 9) | 12.0 (10 – 14) |
| McIntosh | 95 (75 - 100) | 16.9 (14 - 23) | 3.5 (1 - 6) | 12.4 (11 – 15) |
| HoneyCrisp | 71 (25 - 95) | 16.0 (12.5 - 19) | 4.2 (1 - 6) | 12.4 (10.8 – 14) |
| Jonagold | 70 (25 – 100) | 18.1 (15 – 23) | 2.3 (1 – 8) | 13.9 (11.4 – 17) |
| Golden Delicious | 11 (5 – 20) | 18.9 (17 – 23) | 1.4 (1 – 3) | 13.5 (12.2 – 14.5) |

Gala – Mature to approaching mature (3 samples). Firmness is at 19.7 lbs., holding well. Starch index is at 2.6, up from 2.0 and brix levels are up to 12.0. Color has improved to 84%. Galas with a light crop are maturing quicker and coming off faster than blocks with a heavy crop.

McIntosh – Mature to approaching mature (4samples). Firmness is at 16.9 lbs., holding well. Starch index is at 3.5, up from 2.9 and the brix level has increased to 12.4. Color has improved 95%. Some Mac harvest has begun in the region, and although the firmness and starch are in the target zone, some fruit still eats fairly green.

HoneyCrisp – Mature to approaching mature (4 samples). Firmness is at 16.0 lbs., down from 16.1 lbs. Starch index is at 4.2, up from 3.6 and the brix level has increased to 12.4. Color has improved to over 70%. Background of most apples is still green. Growers on the east side of the Bay are further along with this variety, and HoneyCrisp harvest is underway in this region of NW Michigan. This variety needs multiple pickings over several weeks for premium quality fruit. Watch for the first 2 to 3 apples per tree to color for the first picking.

Jonagold – Approaching mature (3 samples). Firmness is at 18.1 lbs. Starch index is at 2.3, up from 1.6. Brix level is 13.9 and color is 70%.

Golden Delicious - Approaching mature (1 sample). Firmness is at 18.9 lbs. Starch index is at 1.4. Brix level is 13.5 and color (blush) is 10%. Maturity may vary among blocks as only one sample has been tested this week.