MSU Fruit Team Apple Maturity Report 2014 Northwest Region, Report Number 5: October 8, 2014 Nikki Rothwell and Emily Pochubay, Extension Fruit Educators

Wet conditions have slowed apple harvest in northwest Michigan, and growers are waiting for clear days to pick the ripening crop.

The weather conditions are not cooperating with northwest Michigan apple growers as many apples are ripening quicker this week, but rain has kept them out of the orchards. At the NWMHRC, we received 0.82" of rain on Thursday, 2 October, 1.43" on Friday, 0.38" on Saturday, and just under 0.1" on Sunday. Growers were able to harvest apples on Sunday, Monday, and Tuesday, and rain is predicted again for today, Wednesday, 8 October. However, the remainder of the week looks good for harvest.

Many growers moved into processing varieties in the middle of last week because fresh market varieties were not quite there, then the rains came, and growers are trying to get back into fresh market blocks with the increase in ripening in those varieties. Starch index readings on all of our tested fruit are much higher than our readings from last week, which indicates that many varieties are going to be ripe at a similar time. Growers are working hard to move through harvest. Color continues to be beautiful, and size of fruit is excellent. Overall fruit quality is very nice across northwest Michigan.

Summary of northwest Michigan apple maturity samples taken on 7 October

| Variety | Color % (range) | Firmness lbs. pressure (range) | Starch (range) | Brix (range) |
|------------------|-----------------|--------------------------------|-----------------|--------------------|
| Jonagold | 68.0 (51 – 77) | 16.6 (16.2 – 17.3) | 5.8 (5.2 – 6.5) | 14.5 (14.3 – 14.7) |
| Gala | 80.0 (75 – 84) | 18.3 (17.9 – 18.6) | 2.5 (2.3 – 2.7) | 12.2 (12.0 – 12.3) |
| Ida Red | 77.3 (67 – 92) | 17.9 (17.1 – 19.1) | 2.6 (1.8 – 3.4) | 11.6 (10.5 – 12.2) |
| Honeycrisp | 77.0 (71 – 82) | 15.6 (15.2 – 15.9) | 5.7 (5.5 – 5.8) | 12.9 (12.1 – 13.6) |
| Northern Spy | 57.1 (43 – 71) | 22.1 (21.0 – 23.1) | 2.5 (1.3 – 3.2) | 12.1 (11.4 – 12.6) |
| Golden Delicious | 13.0 (5 – 25) | 17.6 (16.0 – 19.0) | 1.9 (1.0 – 3.0) | 13.7 (13.0 – 14.5) |
| Empire | 77.0 (60 – 90) | 17.2 (15.0 – 19.0) | 4.6 (3.0 – 6.0) | 13.1 (12.5 – 13.4) |
| Mutsu/Crispin | 6.7 (0 – 20) | 18.4 (17.0 – 22.0) | 3.2 (2.0 – 4.0) | 12.3 (11.0 – 14.0) |

Jonagold – Mature (3 samples). Jonagolds have matured rapidly in the last week. Starch index levels and brix levels jumped up this week indicating that these apples are mature. Firmness is holding and comparable to last week's measurements.

Gala – Immature to Mature (2 samples). Color, starch index levels, and brix increased slightly compared with last week's samples. Firmness is down slightly and many of these fruit are still not yet mature for fresh eating.

Ida Red – Immature (3 samples).

Honeycrisp – Mature (2 samples). Many honeycrisp are ripe and approaching overripe in some blocks. These fruit are very large and have maintained firmness since last week. Brix levels are up slightly and many of these fruit have good color.

Northern Spy – Immature (3 sample).

Golden Delicious – Immature (1 sample).

Empire, Mutsu/Crispin – Mature (1 sample). Apple maturity testing for one sampel per each of these varieties indicated that these apples are approaching maturity or mature.