MSU Fruit Team Apple Maturity Report 2014 Northwest Region, Report Number 6: October 15, 2014 Emily Pochubay and Nikki Rothwell, Extension Fruit Educators

The region continues to receive a lot of rainfall, which is slowing apple harvest in the north.

Cool weather and rain continues across northwest Michigan, and these conditions have slowed harvest. Growers have been working around the clock to take advantage of the intermittent dry spells between the rains. We had some light rain Wednesday through Friday last week prolonging the wet conditions. On Monday, October 13, we received 1" of rain and 1.35" of rain on Tuesday, October 14. Rainfall is continuing this morning and is predicted to continue throughout the day.

This week at the NWMHRC, many growers dropped off samples for testing because apple varieties have been slow to mature. In addition to slow ripening, the typical order of ripening for the many varieties has been variable. For example, most Galas are still not testing mature at this time, yet Jonagolds are testing mature this week. This situation is highly unusual, and we do not have a good explanation for this scenario. Honeycrisp have been coming off in the region, and many apples are very large in size with good color. Color on all varieties is good this season. Cool but dry conditions are predicted for the remainder of the week, which will be helpful for growers to move ahead with harvest.

Summary of northwest Michigan apple maturity samples taken on 14 October

Variety	Color % (range)	Firmness lbs. pressure (range)	Starch (range)	Brix (range)
Jonagold	86.0 (70 – 100)	17.4 (16.0 – 20.0)	5.7 (4 – 8)	14.7 (13.8 – 15.8)
Gala	86.5 (70 – 100)	18.9 (17.0 – 22.0)	2.4 (1 – 4)	12.5 (11.0 – 13.8)
lda Red	86.2 (64 – 97)	17.5 (16.6 – 19.4)	3.5 (1.8 – 4.2)	12.3 (10.5 – 13.1)
Honeycrisp	77.0 (60 – 95)	15.8 (13.5 – 18.5)	5.8 (5 – 6)	12.0 (11.4 – 13.0)
Northern Spy	51.0 (30 – 80)	21.5 (18.0 – 23.5)	2.5 (2 – 4)	12.5 (11.0 – 14.2)
Golden Delicious	11.0 (0 – 30)	17.1 (16.0 – 19.0)	2.0 (3 – 9)	13.5 (11.8 – 15.0)
Red Delicious	99.4 (95 – 100)	18.9 (17.0 – 20.5)	2.0 (1 – 3)	12.5 (11.5 – 13.2)
Rome	98.0 (95 – 100)	20.3 (17.0 – 22.0)	4 (3 – 6)	11.8 (11.5 – 12.0)

Jonagold – Mature (one sample). Many Jonagolds blocks are mature and have been harvested. Compared with other varieties, Jonagold brix levels are the highest we have seen this year and these apples are holding firmness.

Gala – Immature to Mature (one sample). There continues to be high variability in maturation of Gala apples. Color, starch index levels, and brix have not changed significantly in the last week.

Ida Red – Mature (seven samples). Most IdaRed blocks are mature with the exception of some blocks in northern Leelanau County. Brix levels have increased slightly and firmness is holding compared with last week's samples.

Honeycrisp – Mature (one sample). Many Honeycrisp blocks have been harvested at this time. These apples are ripe and could be approaching overripe in some blocks. Rain this week has likely contributed to lower brix levels.

Northern Spy, Golden Delicious, Red Delicious, Rome – Immature (one sample each).