

MSU Fruit Team Apple Maturity Report 2014

Northwest Region, Report Number 3:

September 24, 2014

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Apples are maturing slowly, but warm and sunny weather should move fruit along this week. We expect apples to be ready for harvest close to the predicted harvest dates for northwest Michigan.

After a rainy weekend, the clouds have cleared, and warm and sunny conditions are predicted for the entire week and into the weekend. This weather is perfect for picking apples, but many blocks are still not quite mature, even for long-term storage. Quality continues to look good across all apple blocks, and with the cool night temperatures, color continues to improve. The predicted sunny days and cool nights will continue to improve color. Overall brix levels have moved very little from last week, and the starch index readings from the varieties we collected this week are similar to our numbers from last week. This weekly information reminds us that in this cool year, apples mature much more slowly than in warm seasons. Our McIntosh predicted harvest date for northwest Michigan is 26 September, and with the warm temperatures predicted, many Mac orchards in the southern end of our growing region will be close to harvest around that target date.

Summary of northwest Michigan apple maturity samples taken on 24 September

Variety	Color % (range)	Firmness lbs. pressure (range)	Starch (range)	Brix (range)
Gala	78.8 (70 – 93)	19.4 (18.0 – 21.1)	1.1 (1 – 2)	10.7 (10.6 – 10.7)
McIntosh	87.0 (82 – 90)	16.2 (14.3 – 17.9)	2.9 (1.5 – 4.1)	12.6 (11.5 – 13.3)
Honeycrisp	79 (63.5 – 91)	16.5 (15.1 – 17.1)	2.3 (1.9 – 2.5)	12.4 (11.4 – 13.4)
Jonagold	70 (68 – 72)	17 (16.8 – 17.2)	2.15 (1.7 – 2.6)	13.3 (13.1 – 13.5)
Golden Supreme	35.5	15.6	3.5	13.4
Golden Delicious	20.5	18.4	1.5	12.6

Gala – Immature (3 samples). Galas are coloring up and holding firmness. Starch levels and low brix indicate that Galas are not yet mature. Galas have moved very little from last week.

McIntosh – Closer to mature (3 samples); some orchards are mature for long-term storage. There is still variability in maturity between orchards. Color is improving and sugars are increasing slowly. We have had few reports of Macs pushing off.

Honeycrisp – Immature (4 samples). Color is much improved this week. Firmness is down slightly compared with last week and starch indexes indicate that these apples are starting to ripen. Brix levels are comparable with last week’s measurements.

Apple Maturity Guide 2000

These are the levels that I use for classifying varieties. I have adjusted some of them. In the % clearing column, I need better levels.

Apple Maturity Guide 2000

Peach Ridge

8/31/00

Draft

Variety	Firmness				Starch		Starch	
	Short CA	Mid CA	Long CA	Export CA	Mature	OverM.	% Clearing of Flesh	% Clearing of Core
							Mature	Mature
Braeburn	16	17	18		3	7	0	100
Cortland	14	15	16		4	6	35?	100
Empire	14	15	16	18	3.5	6	15	100
Fuji	16	17	18		3	7	0	100
Gala	16	17	18		3	6	0	100
Golden Delicious	15	16	17		3	6.5	0	100
Honeycrisp	15	16	17		3.25	7	5?	80
Idared	14	15	16		3.5	6	10	100
Jonagold	15	16	17		3.5	5.5	10?	100
Jonathan	14	15	16		3.5	5.5	10?	100
McIntosh	14	15	16		5	7	40	100
Mutsu	16	17	18		3	6	0	100
Northern Spy	16	17	18		3	6	0	100
Red Delicious	16	17	18		2.5	5	0	80
Rome	15	16	18		3	5.5	5	100
Spartan	17	18	19		4	6	35?	100
Winesap	17	18	19		2.5	6	0	80
Granny Smith								

Brix Guide	Low	Fair	Good	Excellent
All Varieties	<11	11	12	13
Honeycrisp	<12	12	13	>14