

WC MICHIGAN APPLE MATURITY REPORT FOR 9/29/2010

Mira Danilovich

This year will be remembered for the earliest completed harvest if not ever than at least in the most recent history. Most growers will be done harvesting in about two weeks at the most. Currently they are finishing Golden delicious getting “deep” into Red delicious and starting on Idareds and N. Spys.

Golden delicious – Harvest is just about done. It was difficult to find a sample for testing. This sample came from the bins in the block being harvested at the time. There is great variation in firmness within the sample ranging from 13.5 to 18lb. In less than a week fruit has lost 1.5 lb in firmness. The average firmness is 16.3 lb making it suitable for mid-term CA storage. On the starch index scale, fruit has gained 1.2 points and is testing mature. Background color is getting more of a yellow hew though green color is still dominant. Brix are good at 12%. There is 20% fruit with incomplete seed count and 10% fruit with frost rings.

Red delicious – Five samples of Red Chief and one of Starking Red delicious were tested.

Red Chief - Firmness is from very good to excellent with the average values in a range from 17.8 to 19.5 lb. Starch index varies among the samples, though it shows very uniform performance within the individual samples. The average values are from 2.3 to 3.1. All samples except one are on the mature side of the S.I. scale. Color is excellent with the average values from 99 to 100% red. Background color is at 4. Brix vary greatly within the individual samples but average values between the samples show more uniform pattern. Average values are ranging from 11 to 12.4% with majority of samples around 11-11.3%. Harvest is underway in most of the sampled blocks.

Starking Red delicious – Firmness is excellent and holding showing only 0.6 lb loss in about a week. Starch conversion changed slightly gaining 0.2 points in the S.I. scale. Color is excellent for the strain showing 99% red with mainly green with more yellow hew for the background color. Brix are good for the variety averaging at 11.14%. Harvest is expected by the end of the week.

Idared – Three samples were tested this week. There is very little and/or no firmness change. The average values are excellent and in a range from 18.8 to 20 lb. Starch conversion is showing slow movement. Two samples are testing immature with values from 2 to 2.7 and one sample has crossed over into the mature zone with average S.I. of 3. Color is very good to excellent with averages in a span from 75.5 to 96% red. Brix are good with values from 12 to 12.6%. Block testing mature is being harvested. Harvest in the other two blocks is expected in about a week.

This information is available at: www.apples.msu.edu

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**2010 Michigan State University Fruit Team Apple Maturity Summary Report
West Central**

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Date	Location	Diameter		Firmness		Starch		Index	% Red		Color Back	% Brix		Storage Pot.	Comments
		Range	Mean	Range	Mean	Range	Mean		Range	Mean		Range	Mean		
	M^cIntosh														
9/2	P.Marquette-L	2.73-3.2	3.05	13.5-17.75	15.7	2-4	3	imm.	50-90	73.5	5.00	10.6-12	11.6	Mid.Term	100% inc.s.
	Riverton-H	2.45-3.05	2.75	14.5-21	17.4	2-6	3.9	imm.	35-60	47.5	4.70	10.4-12.6	11.24	L.T.	40% inc.s.; 20% frost scars
	Riverton-P	2.45-3.35	2.91	17-21	19.3	2-6	3.1	imm.	50-98	78	4.40	11-14.6	13	L.T.	50% frost mscars; 10% black rot;10% inc.s.
9/3	Shelby-F	2.78-3.13	2.93	14-20	16.4	3-6	4.5	imm.	40-75	60	4.60	9.8-12	10.9	L.T.	Being harvested
	RedMac														
9/3	Shelby-F	2.6-3.1	2.84	14-20.5	17.6	3-6	3.7	imm.	35-95	74	4.40	11.6-13.6	12.4	L.T.	10% inc.s.
	GALA														
9/2	Roverton-H	2.53-3.05	2.71	19-23	21.13	1-5	2.5	imm.	50-80	62	2.90	12-14.6	12.6	L.T.	30% Frost scars; 30% inc. s.
	P. Marquette-L	2.35-2.8	2.65	21-23	22.1	1-2	1.7	imm.	65-95	86	2.60	11.2-14	12.6		20% frost scars; 30% inc.s.; 10% n.s.
	Honeycrisp														
9/2	P. Marquette-L	2.5-3.1	2.82	13.5-20	16.4	1-7	4.3	mat.	30-75	51	3.90	10.6-13.6	11.6		
9/18		2.7-3.2	3.03	12.5-20	16	4-8	6.3	mat.	40-95	59	3.50	10.4-14.2	12.3		30% b.p.;60% inc.s.; 10% n.s.; 10% frost scars
9/2	Riverton-H	2.7-3.4	3.11	14.5-20	17.5	1-2	1.3	imm.	30-75	58	3.60	12.8-15	13.5		20% bitter rot;20% w.c.;20% black rot;40% frost scars
9/20		2.87-3.5	3.3	13-20.5	15.6	6	6	mat.	50-90	72.5	3.00	14-16.8	14.7		40%bit.pi;20% bitter rot; 40% inc.s.
	Cortland														
9/20	Riverton-H	2.8-3.53	3.22	14.25-20.5	17.25	1-2	1.4	imm.	80-100	93.2	4.30	12.8-15	13.6		50% inc.s.;20% n.s.; 10% color bleed;10% frost scars
	Jonathan														
9/3	RubyJohn	2.2-2.68	2.5	17.5-23	21	1-2	1.8	imm.	95-100	98	4.50	11.6-13.6	12.5		40% inc.s.;20% color bleed; 10% n.s.
	LuckeyJohn														
9/13	Elbridge	2.76-3.06	2.91	16.5-22	18.4	2-6	4.1	mat.	90-100	99	4.50	13-15.8	14.7	L.T.	30% color bleed; 10% w.c.; 10% b.p.; 10% n.s.
9/20	Elbridge-NCP	2.65-2.9	2.7	15.5-19.5	16.9	5-8	6.6	o.mat.	95-99	98	4.30	12.4-14	13.1	L.T.	10% bitter pit;10% inc.s;10%color bleed/being harvested
	Jonagold														
9/13	Elbridge-LT	2.6-2.23	3	15-21	18.23	1-3	2.4	imm.	0-50	17	4.90	11.6-14.6	12.5		40% frost scars; 100% inc.s.; 10% hail scars
	Elbridge-HR	2.67-3.28	3	16-23	19.2	2-6	4.2	mat.	50-90	68	4.10	12.2-14.8	13.8	L.T.	20% inc.s.; 10% n.s.
9/20	Elbridge-YR	2.78-3.3	3.1	15-21	18.74	3-7	5	mat.	95-100	98	4.90	12.6-15	13.8	L.T.	10% m.c.;30%color bleed;30%inc.s.
9/18	P. Marquette-l	2.6-3.18	2.9	15-20.5	17.3	5-8	6.7	o.mat.	0-50	33	4.70	10.4-13	11.4	L.T.	40% inc.s.
	Summit-K	2.7-3.28	3.1	16-23	20	2-4	3.1	imm.	65-98	84	4.10	12.8-14.6	13.7	L.T.	20% w.c.; 20% frost rings; 30% inc.s.; 30% n.s.
	Empire														
9/13	Elbridge-F	2.62-3.06	2.9	17.25-23	19.8	2-3	2.5	imm.	35-98	73	4.10	11.4-13	12.4	L.T.	30% inc.s.; 10% hail scar/being harvested
Date	Location	Diameter		Firmness		Starch		Index	% Red		Color Back	% Brix		Storage Potential	Comments
		Range	Mean	Range	Mean	Range	Mean		Range	Mean					
	Golden delicious														
9/2	Riverton-H	2.35-3.02	2.62	17-23	20	1-2	1.1	imm.	0	0	4.00	10.4-12.8	11.9	L.T.	80% frost scars; 20% inc.s.
9/20		2.5-2.95	2.73	15-20	17.83	3-4	3.1	mat.	0-45	16.5	3.90	12.2-14	13.2		40% frost scars; 10% inc.s.

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9/24		2.68-3.2	2.93	13.5-18	16.3	3-6	4.3	mat.	0	0	3.60	11-13	11.9		20% inc.s.;10% frost scars/being harvested
9/20	Riverton-L	2.53-2.85	2.7	14.5-18.5	17.3	3-8	6.4	mat.	0	0	4.00	9-11.6	10.7		10% m.c.; 100 frost scars
9/13	Elbridge-NCP	2.58	3.12	18-23.5	20.4	1-2	1.5	imm.	10-50	33	3.50	13.4-16.6	15.1	L.T.	10% inc.s.
9/20		2.78-3.22	2.94	19.5-23.25	21.63	1-3	2	imm.	30-70	41	3.40	10.6-12	11.3	L.T.	10% w.c.;40% inc.s.;10% frost scars/being harvested
	Red delicious														
	Early Red Chief														
9/3	Shelby	2.65-2.85	2.76	17.5-22	19.3	1-2	1.4	imm.		100		9.8-10.9	10.2	L.T.	10% m.c.; 10% inc.s.; 10% n.s.
9/13		2.65-3.05	2.84	16-22.5	18.1	2-3	2.1	imm.	99-100	99.5	4.80	9.8-11.4	10.5	L.T.	20% m.c.; 30% inc.s./being harvested
	Red Chief														
9/13	Elbridge-SCP	2.45-3	2.75	18-23	19.3	2-3	2.2	imm.	75-98	89	4.10	10.6-11.6	11		30% m.c.; 20% inc.s.
9/20	Elbridge-SCP	2.65-3	2.81	16.5-21.5	18.24	2-3	2.4	imm.	80-100	89	5.00	10.2-11.6	11		30% m.c.;50%inc.s.;10% frost rings
9/28	Elbridge-SCP	2.55-3.02	2.8	18-21.5	19.33	2-5	3.1	mat.	98-100	99.3	3.80	10.4-12.8	11.9		30% m.c.;50% inc.s.; 10% w.c.; 20% frost scars
9/13	Elbridge-NCP	2.6-3	2.74	16-23	18.7	2	2	imm.	65-100	84	2.30	10-11.4	10.6		60% inc.s.
9/20	Elbridge-NCP	2.55-3.05	2.75	17-22	19.2	2-3	2.4	imm.	90-100	97	4.25	11-11.4	11.12		40% m.c.;20% n.s.; 20% frost scars
9/28	Elbridge-NCP	2.65-2.97	2.82	17.5-21.5	19.46	2-4	2.8	mat.	95-100	99	4.00	11.4-13.8	12.34		30% m.c.; 40% w.c.; 20% inc.s.; 10% bitter pit; 30% frost scars
9/18	Summit-K	2.55-2.97	2.8	17-22.5	19.3	1-2	1.9	imm.	75-100	93	4.30	10-12	10.5	L.T.	10% m.c.; 40%inc.s.;20% frost scars; 10% n.c.
9/24	Summit-K	2.7-3.15	2.88	15.5-20	18.21	2-4	2.3	imm.	95-100	98.4	4.00	10.6-12	11.14		60% m.c.;40% frost scars; 10% w.c.
9/20	Riverton-H	2.7-2.95	2.83	16-20	17.4	1-3	2	imm.	100	100	0.00	10-12	11.3	M-L	20% m.c.; 10% iinc.s.; 10% n.s.;70% frost scars
9/24	Riverton-H	2.65-3.07	2.83	16.25-19.5	17.8	2-3	2.7	mat.	99-100	99.8	4.00	10-11.8	11		40% m.c.; 30% frost scars; 20% inc.s.
9/20	Riverton-P	2.5-2.92	2.7	17.5-21.5	19.7	2-3	2.4	imm.	95-100	99	4.00	10.4-13.4	11.5		70% bitter pit; 10% m.c.;20% inc.s.;10% n.c.;100% c.bleed
9/28	Riverton-P	2.82-3.2	2.98	15.5-22	18.45	2-3	2.5	mat.	98-100	99.7	4.00	11.4-13	12.42		30% bitter pit;40% m.c.;50% inc.s.;20% color bleed
	Starking delicious														
9/18	P.Marquette	2.6-2.9	2.7	16-22	19.3	2	2	imm.	95-100	99	3.80	10.4-12.6	11.6	L.T.	50% inc.s.; 10% m.c.; 10% w.c.10% frost scars
9/24	P.Marquette	2.5-2.86	2.71	16.5-22	18.7	2-3	2.2	imm.	95-100	99.2	3.67	10.2-12.2	11.14		30% inc.s.; 10% m.c.; 40% frost scars; 10% hail scars
	Low Rome														
9/18	Summit-P	2.62-3.4	2.9	21-23	22.8	2-5	3	mat.	100	100		11-12.6	11.9		100% color bleed
Date	Location	Diameter		Firmness		Starch		Red%	%	Color	% Brix	Storage	Comments		
		Range	Mean	Range	Mean	Range	Mean	Index	Range	Red	Back	Range	Mean	Poten.	
	Idared														
9/18	P. Marquette	2.71-3.05	2.83	17.5-23	20	1-2	1.8	imm.	50-80	68	4.00	11-13	12.1		90% inc.s.
9/24		2.75-3.1	2.92	17.5-23	20	1-3	2	imm.	65-90	75.5	3.40	11.6-14.6	12.6		40% frost scars;60% inc.s.;10% n.s.
9/18	Summit-K	2.7-3.02	2.91	17.5-23	19.7	2-3	2.7	imm.	75-100	94	3.80	10.6-12	11.3		80% color bleed; 20% inc.s.
9/24		2.7-3.05	2.93	17.5-21.5	19.4	2-3	2.7	imm.	80-100	95.7	2.10	11.4-12.8	12		10% inc.s.; 90% color bleed
9/20	Riverton-P	2.55-3.17	2.94	16-21	18.93	1-2	2	imm.	70-98	86	3.3	11-13.4	11.9		50% color bleed; 40% inc.s.; 10% frost scars
9/28	Riverton-P	2.65-3.25	3	16-22	18.8	2-4	3	mat.	70-99	91	3.6	11-14.2	12.6		30% color bleed; 50% inc.s.; 20% frost scars
	N.Spy														

