

October 10, 2007

TO: Apple Growers in Southeast Michigan  
MSU Extension Fruit Educators and Specialists

FROM: Bob Tritten  
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SUBJECT: Apple Harvest Update Report #7 – Southeast Michigan

#### APPLE HARVEST SUMMARY

Apple harvest is nearing an end for most fruit farms across the eastern part of the state. As I shared in last week's report, growers were already "throttling back" their harvest last week to accommodate the light crop and the fact that varieties were not ripening in the same order as normal. Growers have now finished up Red Delicious, and are working away steadily at Idared, Crispin, Northern Spy, Law Rome and some blocks of Fuji. Winesap, Braeburn and Granny Smith are varieties that are still needing more time to mature. Many growers are laying off picking crews waiting for these varieties to finish ripening.

This will most likely be the last full report of the 2007 apple harvest. I anticipate doing a shorter report to finish off the season next week. At most farms I won't have many varieties to sample from next week.

Variety	Color (Range)	Firmness (Range)	Starch (Range)	Brix
Crispin	13% (1-25%)	19.3 lbs (18.7-19.8)	3.5 (3.6-4.0)	14.3%
Red Delicious	100%	16.7 lbs (14.2-19.9)	4.6 (3.0-7.0)	13.8%
Idared	64% (44-81%)	15.3 lbs (12.9-16.7)	3.8 (2.6-5.3)	12.9%
Northern Spy	55% (36-75%)	18.7 lbs (17.4-20.2)	4.8 (4.1-5.7)	14.1%
Fuji	54% (28-75%)	16.6 lbs (15.1-17.9)	4.6 (3.6-5.6)	14.3%
Winesap	67% (36-98%)	18.4 lbs (17.7-19.0)	2.1 (2.0-2.2)	12.9%
Law Rome	94% (90-95%)	20.1 lbs (17.2-22.4)	3.5 (3.0-6.0)	12.6%
Braeburn	62% (38-86%)	20.9 lbs (19.7-22.1)	1.9 (1.5-2.3)	13.0%
Granny Smith	5% (0-10%)	17.0 lbs (13.0-22.0)	2.6 (2.0-4.0)	12.4%

#### INDIVIDUAL VARIETY RESULTS

**Crispin** were sampled for the fifth time of the season, this variety is showing more internal ethylene than last week, with 55% of the fruit showing greater than 0.2 parts per million (ppm). The pressure has remained about the same at 19.3 lbs, however the starch index has moved from 2.2 last week to 3.8 this week. The brix is 14.3%. Most blocks are nearly ready for harvest at this time based on the starch index. Crispin are eating much better than they were last week, however many blocks still need a few days to mature.

**Red Delicious** were sampled for the last week, however a much smaller sample taken due to the fact that most blocks have already been harvested. All the fruit are showing greater than 0.2 ppm of internal ethylene, with wonderful color. The pressure remains about the same at 16.7 lbs. This is surprising because of all the heat that we've had over the last week. The starch index is now 4.6, up from 3.3 last week. The brix remains fairly good at 13.8%. Again most Red Delicious blocks have been harvested at this time.

**Idared** were sampled for the fourth week of the season. Nearly 77% of the fruit are showing greater than 0.2 ppm of internal ethylene, the color remains good at 64%, and pressure has dropped from 16.2 lbs last week to 15.3 lbs this week. The starch has moved to an average of 3.8, however the range is broad from 2.6 to 5.3. Most blocks of Idared are ready for harvest at this time.

**Northern Spy** were sampled for the fourth week of the season, and only three samples taken this week. All of the fruit are showing internal ethylene levels greater than 0.2 ppm. The color has improved to 55%, up from 35% last week. The fruit remains fairly firm at 18.7 lbs, a drop from 19.6 lbs last week. The starch removal has jumped from 3.1 last week to 4.8 this week. The brix is very good this week at 14.1%, up from 12.4% last week. All the blocks tested this week indeed are ready for harvest, in fact several of them have already been spot picked.

**Fuji** were sampled for the fourth week of the season. The internal ethylene levels of greater than 0.2 ppm has jumped to 67% this week, up from 43% last week. The color has remained about the same at 54%, and pressure has dropped from 18.1 lbs last week to 16.6 lbs this week. The starch is averaging 4.6, however there is a broad spread of starch values in Fuji's, with several blocks being above 5.0. Based on these tests, most blocks of Fuji are ready for harvest at this time, or ready for a pretty thorough spot picking.

**Winesap** were sampled for the second week of the season, and was another block added to the sample list. Just over 65% of the fruit are showing internal ethylene levels greater than 0.2 ppm, the color has seemed to drop back some from 87% last to 67% this week. The pressure remains about the same at 18.4 lbs, the starch index has risen from 1.4 last week to 2.1 this week, with a brix of 12.9%. Winesap are not ready for harvest at this time, I would say they are about 5 to 7 days away from being mature.

**Law Rome** were sampled for the third week of the season. Nearly 70% of the fruit are showing greater than 0.2 ppm internal ethylene levels. The fruit remains well colored at 94%, the fruit remains firm at 20.1 lbs, a drop of a half pound pressure from last week. The starch index has stayed the same at an average of 3.5, however again there was a broad spread of maturity with a good deal of the fruit above 5.0. Most blocks of Law Rome indeed are ready for harvest at this time.

**Braeburn** were sampled for the third week of the harvest season. Just over 50% of the fruit are showing internal ethylene levels greater than 0.2 ppm, this is up from 60% last week. Color remains about the same at 62%, and the pressure has dropped from 22.4 lbs last week to 20.9 lbs this week. The starch removal has remained unchanged at 1.9. Braeburn appear to have matured very little over the last week, and will require at least another week to 10 days before they are mature.

**Granny Smith** were sampled for the second week of the season, the fruit are not showing any appreciable levels of internal ethylene level production at this time. Color has remained virtually unchanged at 5%. The pressure has dropped from 18.6 lbs last week to 17.0 lbs this week. The starch index has moved from 2.0 last week to 2.6 this week. Granny Smith are typically the last variety harvested, and they are still needing another two plus weeks before they are mature.

If you have any questions regarding this Apple Maturity Harvest Update, don't hesitate to email me ([tritten@msu.edu](mailto:tritten@msu.edu)) or call (810-732-2177). This same harvest information is also available on the SE Michigan Fruit Pest Management Code-A-Phone (810-732-1005).

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