



Healthy Fruit

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Prepared by the University of Massachusetts Fruit Team

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Apple maturity report

Apple maturity is progressing rapidly now, however, most varieties are still behind historical norms – some just a few days, others at least a week. For many, the McIntosh harvest should be near completion this week. In all but the cooler orchards, McIntosh destined for CA storage should be done this week, based on starch-iodine index readings of 5-6. Unfortunately, color development seems to have been put-on-hold with the recent warmer weather, but that should change with a cooler weather forecast. Pre-harvest drop has been minimal, except in stressed (particularly leaf miner) blocks of McIntosh. Here are some results of a recent round of apple maturity testing:

Date	Location	Cultivar	Size (in.)	Color (% red)	Firmness (pounds)	Soluble Solids (%)	Starch Index
9/22	Deerfield	McIntosh	3.0	85	13.8	12	5.6
9/22	Belchertown	McIntosh (ReTain)	3.1	55	15	11.5	3.8
9/23	Sterling	McIntosh (ReTain)	2.9	75	15	12	5
9/22	Shelburne	Honeycrisp (ReTain)	3.1	50	14.4	12	3.9
9/22	Belchertown	Honeycrisp	3.4	75	12.8	12	7
9/23	Sterling	Honeycrisp	3.2	55	15	13.5	7.2
9/22	Belchertown	Macoun	2.9	60	17.4	11	2.4
9/23	Sterling	Macoun	3.0	70	17	12	2.9
9/22	Belchertown	Rubinstar Jonagold	3.3	85	17.7	13	4
9/23	Harvard	Jonagold	3.3	65	17.4	14.5	4
9/22	Belchertown	Empire	2.7	70	18.6	10.5	2.5
9/23	Harvard	Tome Empire	2.9	100	20	11.5	2.1
9/23	Sterling	Royalcort	3.1	95	15.2	11.5	1.9
9/23	Harvard	Cortland	3.2	60	16	11	1.3
9/22	Belchertown	Delicious	2.8	95	17.9	10	2.0
9/23	Sterling	Delicious	2.9	90	17.8	10.5	2

Comments on the individual cultivars:

McIntosh are mature and have reached that ‘sweet spot’ of 5 to 6 on the starch index scale. ReTain treated fruit are progressing, and drop is delayed at least a week compared to untreated Macs. Many growers should be attempting to wrap-up the Mac harvest this week, perhaps next week for ReTain-treated fruit.

Honeycrisp are approaching over-maturity in the warmer orchards. Although drop has not been terrible – as it can be on Honeycrisp – over-mature fruit can run into soft scald problems in storage, as well develop off flavors. Over-mature Honeycrisp become distinctly ‘fruity’ in aroma and taste. Honeycrisp cannot be picked on red color (although you may want to) – a subtle

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change (lightening) in green ground color or the starch-index test are better indicators of maturity.

Macoun are being picked because of consumer demand, however, the characteristic deep red color and sugars are not quite there yet. Macoun will continue to be picked over the next week as long as there is demand.

Cortland, Empire, and Delicious are all immature, however, like Macoun, demand for Cortland has resulted in the start of harvest. Otherwise, these varieties will not really be ready until later this week (at the earliest), and will begin to be at their best starting next week.

Jonagold, for those that have this overlooked variety, is approaching maturity and can start to be harvested this week. Size is outstanding, as well as color on the better coloring strains such as 'Rubinstar.'

Scald risk may be high

Nights have been comparatively mild this month. At Belchertown, the temperature has fallen below 50 F. only two nights in September. That is the temperature below which chilling hours are accumulated to determine scald risk – the more the chilling, the less risk for scald development on susceptible cultivars in storage. Because of the lack of chilling, the need for a pre-storage DPA treatment at higher rates is advised on scald-susceptible cultivars such as Cortland and Delicious. For more information on scald, and a calculator for determining risk and DPA application rate(s) for Delicious apples, see:

<http://www.umass.edu/fruitadvisor/fruitnotes/a1-633.html> and
<http://www.umass.edu/fruitadvisor/clements/scaldpredictor.html>

Mark your calendar

Several meetings should be on your calendar:

October 23, 2003: Twilight Meeting, Cider Hill Farm, Amesbury. 4:00 P.M. Sponsored by Massachusetts Association of Roadside Stands. For more information, see
<http://www.massfarmstands.com/twilight.html>

December 16, 2003: New England Stone Fruit School, Holiday Inn, Manchester, NH. Details TBA.

December 16–18, 2003; New England Vegetable and Berry Growers Conference '03 AND New England Fruit Meeting, Holiday Inn, Manchester, NH. For more information, see
<http://www.nevbc.org/>

Note: this will be the last Healthy Fruit issue for the 2003 growing season. The UMass Fruit Team hopes the information contained in Healthy Fruit in 2003 has helped you produce a 'healthy' and profitable fruit crop, and we hope for your continued success during the remainder of the harvest and marketing season. We look forward to returning in 2004. In the meantime be sure to look into the UMass Fruit Advisor on the web (<http://www.umass.edu/fruitadvisor/>) for current information and updates. Also, don't hesitate to contact any member of the UMass Fruit Team if you have a production or marketing question, or suggestion for improving Healthy Fruit in the future.

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