

Harvest Maturity Report #4



August 28, 2013

**Craig J. Kahlke, Area Extension Educator, Fruit Quality Management
Cornell Cooperative Extension – Lake Ontario Fruit Program
Cell phone: (585) 735-5448; email: cjk37@cornell.edu**

This is the fourth Maturity Report for the 2013 harvest season. Reports will be sent out every week, with supplemental reports during peak season if needed.

- **Paula Reds**- Picking finished.
- **Zestar** – **First** picking finished, all that remains is some second pick fruit.
- **Bartlett Pears** – The bulk of Bartlett pears for processing are being picked this week. They should be in the 16-18 pound range for harvest.
- **Ginger Golds** – **Picking starting now -see page 2.**
- **Gala** – see page 3.
- **McIntosh** – **The stresses on trees and the risk for preharvest drop (especially if you’ve had a history of drop) would lend you to making stop-drop applications. However, we are past the window for most to make full use of Retain or Retain + NAA.** For Terence Robinson & Mario Miranda-Sazos recommendations on materials, rates, and timing, see past Fruit Notes (Issue 18, August 14) or Fruit Fax from August 6. For most, we are only in the window for an NAA application as a rescue treatment 7-10 days before harvest if you have not already started split applications of Retain or Retain plus NAA. See page 3 in this report for testing data.

Overall Maturity Issues:

We still seem to be right on target for a “normal” harvest maturity window, at least for the early varieties. So dig up your records of harvest dates for varieties on your farms- a good starting point would be to average the dates from the years before 2007. We’ve not had a “normal” year since before then!

Weather Forecast It looks as if though we’ll be drying out for a bit as the chance of rain from Wednesday afternoon disappears at least until sometime Saturday. Temperatures from now through Sunday for most of the region will be in the mid to upper 80s with lows only in the mid and lower 60s at night- not good fruit coloring weather. 30-40% chances of scattered or isolated thunderstorms are

currently forecasted for Saturday and Sunday. Looking ahead to Labor Day and beyond, cooler weather is on the horizon with highs perhaps only in the low 70s and even upper 60s by Tuesday and 50s at night.

Ginger Gold – Harvest beginning now

Early sites mainly in Niagara & Orleans counties have started GG harvest early this week, but most of the rest of the region including Wayne county really won't get into picking until later in the week and through the weekend. The significant recent rains for most have not helped in the sugars and firmness. Varietal flavor may not be fully developed but color break is happening and growers will want to most likely pick sooner rather than later. Rising internal ethylene measurements this week have also indicated as much. This is especially true for lighter crop loads with very large fruit size. Some GG sizes are already getting too large to market!

The main maturity index for Ginger Golds is the change in ground color; from green to cream (earlier harvest, longer storage) or cream to yellow (short-term storage) and the development of varietal flavor. **Best (short-term storage) eating quality is achieved when harvest is delayed until fruit background color fades to white/cream color and fruit take on a yellowish appearance.** However, degree of acceptable color change will depend on your market. Early harvested fruit respond well to Smartfresh™ and CA. A bright yellow coloring indicates fruit have become over-mature. Individual fruit that are noticeably more yellow than the rest on the tree usually suffer from moldy core and will breakdown in storage and during marketing. Pickers should be instructed to discard these diseased apples. And moldy core was seen in a number of samples this week. Pick based on your marketers recommendations.

19 Ginger Gold blocks tested in Western NY on August 26 & 27, 2013

Index	August 26 & 27, 2013		August 19 & 20, 2013		August 13 & 16, 2012		August 24-25, 2011	
	Average n=19	Range	Average n=18	Range	Average n=16	Range	Average n=11	Range
Firmness (lb.)	18.0	16.6-19.9	19.2	17.4-24.0	20.6	19.1-22.8	19.5	17.3-21.2
Soluble Solids (%)	10.6	9.0-11.9	10.3	8.6-11.6	12.6	10.8-15.4	10.5	9.0-12.7
Starch Index	2.1	1.3-3.4	1.7	1.0-2.3	1.2	1.0-2.1	1.4	1.1-1.6

Galas – a ways off for most

Most of the Gala I looked at this week still needed a lot of help in the sizing department and had very little color change. Starch movement was practically none. Brix were under 10% and pressures averaged about 21 pounds. Earliest possibly guess is first pick beginning at the very earliest sights later next week/weekend or even early the week of Sept. 9.

Early McIntosh Strains – maturity progressing, but about 2 weeks away for most

I was surprised at the starch index progression and lower pressures on fruit than I'd anticipated. For Marshalls, fruit were still very green, but with pressures averaging 17.5 pounds, sugars at 10.4%, and a starch index of about 3. There was detectable internal ethylene measured in a few apples. Stay tuned for next week's testing data. The stresses of the season may put some fruit at risk for preharvest drop. Please consider trying split application of Retain or Retain + NAA in future years. We're beyond the timing window for this year.

Reminders

Please follow recommended maturity indices for each variety in addition to consulting with your marketer. Make sure there is adequate varietal flavor prior to harvest. **While I realize inventories are very low and the large demand for fresh apples have marketers screaming for fruit, picking under-mature fruit will only kill repeat sales.**

Variation between individual blocks and orchards always occur. Because of this inherent variation, the average maturity index readings of several grower blocks (as developed by the regional testing program) has often provided a better guide to harvest than readings from individual orchards. **BE SURE TO CONSULT WITH YOUR MARKETER – before harvesting the block.**

Crop load effects maturity. Trees with lighter crop loads, along with stressed trees (i.e. drought and frost damage/loss) and very young trees usually mature earlier. Maturity is usually delayed in trees carrying a larger crop.

The harvest maturity report for next week (9/5) will focus on testing data of Marshall Macs and Gala, while finishing Ginger Golds, along with starting Jonamac, regular strains of McIntosh, and Honeycrisp.

Harvest maturity report subscription reminder – tell a friend. Call or email Kim Hazel to subscribe at 585-798-4265 ext. 26, krh5@cornell.edu.