

Harvest Maturity Report #2



August 14, 2013

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

You are already paid and subscribed for the season, but feel free to pass on the subscription form to another farm- the form is at the end of the report.

- **Jersey Macs** - Picking nearly finished.
- **Paula Reds- There are reports of fruit drop on this variety.** Ethrel treated fruit are being picked now. Non-Ethrel fruit will begin to be picked in the next few days. The main maturity indices for this variety are the changing of the background color from green to creamy yellow, apples loosening on the stem, a starch reading near 3.0, and pressures between 15-16 psi.
- **Ginger Golds – see below**
- **Zestar – see below**

Ginger Gold – A ways off.

11 Ginger Gold blocks tested in Western NY on August 12, 2013

Index	August 12, 2013		August 13 & 16, <u>2012</u>		August 24-25, <u>2011</u>	
	Average	Range	Average	Range	Average	Range
	n=11		n=16		n=11	
Firmness (lb.)	19.9	18.3-22.1	20.6	19.1-22.8	19.5	17.3-21.2
Soluble Solids (%)	10.3	8.8-12.3	12.6	10.8-15.4	10.5	9.0-12.7
Starch Index	1.3	1.1-1.8	1.2	1.0-2.1	1.4	1.1-1.6

Ginger Golds – Ginger Golds are not ready yet. Most in the region are reporting a good crop load and excellent fruit size on this variety. However, nearly all fruit I looked at this week were completely green with a just a blush of color on a few fruit and no background color change. There is very little starch movement as well. Brix and varietal flavor need to come up significantly. The main maturity index 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.

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. Pick based on your marketers recommendations.

Zestar!® - Entering the harvest window shortly.

Zestar!® (Minnewashta cultivar) is a University of Minnesota cross between the state's State Fair X MN 1691 cultivars. The apples are medium in size with 60-85% bright red color over yellow background when mature. The flavor has been described as a good sweet-tart flavor with brown sugar overtones. Bred for MN-like climates, it is extremely cold-hardy but there are claims that it can be grown in much of the US.

Exact maturity indices have not been developed for our area, but fruit for picking has a brix of 12-13%, starch in the 3.5-6.5 range, and pressure from 12-14 pounds. The one sample I tested had a brix of 12.3%, a starch index of 3.5, and a pressure of 14.3. This may indicate that we are entering the harvest window for this variety very soon. Zestar!® is a multiple pick variety.

This variety stores in regular cold storage but go soft fairly quickly after that. They are great for farmer's markets.

Preparing for Harvest:

Now is the time to find your pressure testers (penetrometers) and refractometers (brix) testers – for possible suppliers, or to order new ones check the following links-
for Wagner Instruments pressure testers: <http://www.fruittest.com/>
or for refractometers, try Atago USA: <http://www.atago.net/USA/products.html>
or Frostproof: <http://frostproof.com/fruit-testing/> (they have refractometers & pressure testers)

- Get a notebook to record your testing results.
- **Iodine** - Is last year's iodine still any good? Iodine can be stored for up to two years. It should be stored in an opaque container, out of sunlight in a cool dry place. If any holdover supplies last year did not receive proper storage, it is best to buy new. We will be stocking iodine solution in local extension

offices of Wayne, Niagara, and Orleans over the next few weeks in ½ pint (\$4.00) and 1 pint (\$8.00) sizes. If you want large quantities, please call or email Craig (585-735-5448, cjk37@cornell.edu) to order by the gallon (\$40.00). Prices for iodine solution have gone up this year because the chemicals that make up the solution have gone up significantly. Starch charts are also available free of charge at the same locations.

Overall Maturity Issues:

- So far, so good! A normal timing of budbreak and an adequate bloom period followed by reliable weather for the most part has started off the season very well. Periods of heavy rain in the late spring gave way to really hot weather in mid to late July. Ever since, very mild temperatures with plenty of sunshine and cooler nights have been the dominant weather patterns into August. Reports are of excellent fruit size and a very good cropload for most of Western NY. As of now, we seem to be right on target for a “normal” harvest maturity window, at least for the early varieties.
- **Weather forecast** – The next few days are forecasted to have highs in the 70’s with lows in the 50s, with mostly cloudy weather but little chance of rain. Saturday looks to usher in highs in the low 80s for the next few days with nighttime lows in the 60s.
- **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 and very young trees usually mature earlier. Maturity is usually delayed in trees carrying a larger crop.

The harvest maturity report for next week (8/21) will focus on testing data for Ginger Golds and Zestar.

Harvest Maturity Fax Subscription

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