

# Important Updates to Our Gala Storage and Harvest PGR Recommendations

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- Hudson Valley Gala producers are approaching a decision on ReTain application dates for 2022, and Champlain Valley growers won't be far behind. We've experienced a hot, dry summer to date in the Hudson Valley but it appears that at our predicted temperatures for August will moderate. The Champlain Valley has had a relatively seasonal June, a hot second half of July, and the forecast is calling for an average August.
- Temperatures expected in August are an important consideration when choosing an application timing.
- For 2022, Professors Watkins and Robinson have now settled on a ReTain application recommendation of **½ pouch per acre timed for 21 days pre-harvest when temperatures for August are expected to be "average"**. Research has shown that **when August temperatures are above average, the application date should be moved 7 days earlier, to 28 days pre-harvest**.
- Research has demonstrated that Gala treated as recommended above, and harvested above 17 lbs., and at or below a starch pattern index of 4.0 or less, then stored at 38F, will be substantially less susceptible to developing stem-end browning in storage.
- **Bottom line, pick Gala for long-term storage in a timely fashion.**

## What to expect for this season's Gala harvest?

- The current **forecast for August** is that **temperatures will moderate and be essentially average** in both the Hudson Valley and Champlain Valley.
- A **survey of soil moisture status** at 8" (20 cm) in 19 of our Hudson Valley 'Honeycrisp' sites taken late last week shows our conditions to be quite dry, with an average reading of 78 centibars. There is still some soil moisture deeper in the profile and the trees were not obviously suffering from water stress. Overall fruit sizing was smaller than observed in previous years and the 78 centibar average was the highest observed since our measurements began in 2016.
- Although our bloom dates were later in 2022 in the Hudson Valley, our heat unit accumulation has been greater and soil moisture conditions dryer than 2021 with **less rainfall and small fruit size**. Bloom was early in the Champlain Valley, and we are still running about two days ahead of our 5 year average DD accumulations. We've had more regular rain in the Champlain Valley than the other fruit regions of New York this summer, slightly above average in June and July, so we expect Gala fruit size will be average in the Champlain, all else being held constant.

- **Peach harvest** dates so far this season have been similar or a day earlier than 2021 in the Hudson Valley.
- **Reviewing our 2021** data for harvest maturity of a standard-strain Gala block in an Ulster County orchard that was not treated with PGR's, we see that on September 1 sampled fruits were at 18.1 lbs. with a 3.7 starch pattern index and a brix reading of 10.5% SS. In Peru last season, our harvest maturity block of Gala had received a ½ rate of ReTain a week ahead of harvest, and on September 7<sup>th</sup> spot picked fruit were measuring 16.6 lbs., a 4.8 starch pattern index, and a brix reading of 11.2% SS. You'll recall that 2021 was a low-brix year, often running 1% less than we usually expect.
- Factoring in all of the above, we expect the **1<sup>st</sup> pick date for Gala in mid-Ulster County to be similar to 2021**. Gala maturity from block to block varies by geographical position, microclimate, strain and crop load. Figure on the last few days of August for Orange and Ulster Counties, September 1<sup>st</sup> or 2<sup>nd</sup> for Columbia County. **We expect harvest dates in Clinton County to be a day or two later than last year.**
- **In conclusion, our recommendation for ReTain rate and timing on Hudson Valley Gala in 2022** will be a ½ pouch per acre applied during the week of August 8<sup>th</sup> with the specific date depending on the factors described above along with weather conditions at the time of application. **In the Champlain Valley**, this application should likely be applied near the end of the week of August 15<sup>th</sup>, around the 18<sup>th</sup>/19<sup>th</sup>, with the specific date depending on the factors described above along with weather conditions at the time of application.
- **Waiting too long** for color development can result in the harvesting of Gala which is over-mature for long-term CA storage even if the fruit appears ok at harvest. Consider targeting your blocks with hi-color strains that color well and have been treated with harvest PGR's for **long-term storage**, getting the fruit off the tree and into storage by the first few days of September at the latest in the Hudson Valley, and mid-September in the Champlain. Place later-picked Gala into shorter-term storage for more timely marketing before SEFB can develop.

### **From the post-harvest webinar presented by Dr. Chris Watkins last Thursday:**

- PGR use is recommended with appropriate timing.
- Harvest indices based on SPI (<4.0) and IAD values (<40).
- 1-MCP treatment is recommended.
- Early harvest for long-term storage (even though size is sacrificed).
- 1-2% oxygen and 1% carbon dioxide for standard CA.
- 0.5% oxygen and 1% carbon dioxide if facilities allow.
- 38F storage temperature reduces SEFB while maintaining acceptable quality.