Cornell University
Cooperative Extension

Lake Ontario Fruit Program
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"*Fruit Facts*" –Friday, May 2nd, 2025

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In case you missed it yesterday (or want to re-watch any portion), the recording of the Cornell Western and Northeast NY Pre-Bloom Virtual Meeting held yesterday is available here: https://youtu.be/DsvtAuQBE4Y

To Do Today

Bloom thinning recommendations by Professor Terence Robinson

The past year (2024) in review:

- Bloom of many blocks in 2024 was heavy.
- Frost at bloom resulted in reduced crop and russeted fruit.
- High temperatures between petal fall and full bloom gave natural thinning.
- Temperatures in winter were cold and consistent.
- Bloom in 2024 is generally good in most blocks but some Honeycrisp and Fuji are light.

Bloom thinning is critical for Honeycrisp and other biennial varieties:

- Seeds produce gibberellins which inhibit flower formation for the next year.
- The earlier that fruit number can be reduced to the target fruit number the greater the likelihood of having flower initiation.
- **Precision pruning + Blossom thinning** is an excellent method to remove excess seeds before they cause damage.

Precision pruning	versus	Light Pruning
Precision pruned 131 initial buds Total initial seed load= 6,550 seeds Seed load after bloom thinning= 1,310 seeds		Light pruning 400 initial buds Initial seed load = 20,000 seeds Seed load after bloom thinning= 4,000 seeds

Options for bloom thinning sprays in 2025

Caustic Products

- ATS 2.5-3.0%
  - Burns stigma of pistil
  - Apply using PTGM at 60%
  - Causes mild leaf phytotoxicity but no effect on fruit finish
  - Requires 2 applications
  - Not registered as a thinner in NY but can be legally used as a bloom time foliar fertilizer.

- Lime Sulfur (2.5%) and oil (2.0%)
  - **Newly registered in NYS (Miller Chemical Co.)**
  - Burns both stigma and style of pistil
  - Apply using PTGM at 80%
  - More consistent thinning than ATS
  - Requires 2 applications
  - Can cause russeting if applied at petal fall or later

Hormone Products

- NAA (Fruitone, Pomaxa, Refine)
  - A mild thinner (safe) when used at bloom
  - Can be sprayed safely at high rate of 10ppm (4oz/100 gal)
  - Apply at full bloom
  - Can help improve return bloom on Honeycrisp
- NAD (Amide-Thin W)
  - A mild thinner (safe) when used at bloom
  - Can be sprayed safely at high rate of 50ppm (8 oz/100 gal)
  - Apply at full bloom
  - Can help improve return bloom on Honeycrisp

When to use Caustic versus Hormone thinners at bloom:
Use caustic thinning products when weather conditions at bloom are good

- No frost
- Not too hot (70-80°F)
- Good bee flight
- Bloom is not too fast

Use a hormone type thinner when weather conditions are poor

- If there has been some frost or frost is forecasted
- Poor bee flight
- Bloom is fast
- Temperatures are hot
- Not comfortable with caustic thinners

Suggested bloom thinning for Honeycrisp

Bloom:

- Lime Sulfur (2.5%) + oil (2.0%)
- Use PTGM and spray at 80%, 2 times
- No Captan 7 days before or 7 days after oil spray

Suggested bloom thinning for Gala

Early King Bloom

- Promalin 2 pt/acre

Full Bloom

- Lime Sulfur (2.5%) + oil (2%)

- Use PTGM and spray at 80%, 2 times
- No Captan 7 days before or 7 days after oil spray

We are in the middle of a significant apple scab infection period across the entire region. If you were not fully covered going into the rains last night, you may want to come in early next week or during a break in the rains using a product with kickback.

- Powdery mildew has already been seen in several blocks. If you see powdery mildew on terminal clusters, consider using Inspire Super to double up scab and PM protection.
- This may be a good opportunity for a Dodine application (for blocks with low PM pressure).
- Avoid Captan if you have applied or plan to apply oil within 10 days.

Early powdery mildew on terminal leaves. Photo by Elizabeth Tee.

Mainly for farms located inland south of the ridge road away from the lake: IF you have any open bloom on early varieties, and IF you see temps above 60F predicted at your location, and IF you experienced a fire blight outbreak last year, consider applying an antibacterial product (Strep, Kasumin, Blossom Protect, etc). Strep has the best kickback activity, so would be a good choice if you suspect you did not cover up prior to a fire blight event.

- **If you do not have open flowers, there is no risk of fire blight in that block!**
- You may want to include Regulaid with your initial Strep application. **Do not tank mix a thinner with Regulaid**!

Stone Fruits

- **Stone fruit brown Rot** management has now begun. Although the optimal range for pathogen development is above 60F, blossom infection can occur at any temperature above 32F. If you have a history of blossom blight, and especially for nectarine growers, rotate fungicides from pre-bloom through petal fall. There are many labeled products available (see Recommends), including **Rovral 4 flowable (which may provide 24hr "kickback" activity) and chlorothalonil/Bravo (avoid when bees are foraging, if possible). Organic options for brown rot include Double Nickel and Oso**.