



Cornell University
Cooperative Extension

Lake Ontario Fruit Program
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“Fruit Facts” – Thursday, May 23rd, 2024
Mario Miranda Sazo, Janet van Zoeren and Anya Osatuke

Recording is Now Available from Yesterday’s Western NY 8-12 mm Thinning Meeting & Post Petal Fall Pest & Disease Management Recommendations

Full recording here: <https://www.youtube.com/watch?v=usW4BhKwAKs>

[00:00:00](#) - Welcome & Intros, Craig Kahlke

[00:27:00](#) - Janet van Zoeren - Pest & Disease Management Highlights at the Post Petal Fall Timing

[00:08:32](#) - Craig Kahlke, Phenology/Crop Updates in Niagara/Orleans Counties

[00:14:32](#) - Mario Miranda Sazo, Phenology/Crop Updates in Wayne County

[00:19:29](#) - Jim Eve (Eve Farm Service, LLC) - Crop Updates/Thinning in Wayne County [00:25:16](#)

Vaughn Gingerich (Lake Ontario Ag Consulting, Inc.)- Crop Updates/Thinning in Western NY

[00:27:18](#) Dr. Terence Robinson, Cornell, Thinning Recommendations at the 8-12 mm timing for Western NY

[00:48:58](#) - Q & A

Important Note: We cannot fully assess yet the thinning effects on blocks that received chemical thinners on Monday, Tuesday or yesterday, or that were not sprayed, during the huge carbohydrate deficit experienced until yesterday (May 22). A more complete picture of the thinning effects and any overthinning will start to be noticed by Sunday or Monday of next week.

Next Tuesday is the Virtual Western NY Rescue Thinning Meeting
Tuesday May 28th, 4:30-5:30 PM

Join CCE LOF team, Jim Eve, Vaughn Gingerich, and Dr. Robinson via Zoom next week:

<https://cornell.zoom.us/j/91735410638?pwd=aTJsRnlVODFvdUJtRXRGNmVBVUdNZz09&from=addon>

Meeting ID: 917 3541 0638

Passcode: 950583

One tap mobile

+16465189805,,91735410638# US (New York)

+16468769923,,91735410638# US (New York)

Bilingual Twilight Meeting next week Wednesday May 29th at Orchard Dale Fruit Farm in Orleans county

Register now! Registration will close on Tuesday at noon: <https://lof.cce.cornell.edu/event.php?id=1936>

Bring your workers to join us on May 29th at Orchard Dale Fruit Farm in Orleans county from 5:30-8pm.

The event is a joint effort between LOF's Janet van Zoeren and Mario Miranda Sazo and NYS IPM's Anna Wallis. It will feature both educational IPM trainings, along with time for farm employees to socialize and learn from each other.

Educational programming will cover scouting and monitoring demonstrations, along with some theory on the basics of IPM and the importance of farm employees as on-farm scouts and to provide early-warning of potential insect pests and diseases. All programming will be given in both English and Spanish, providing an opportunity also for workers to listen and learn the other language.

Snacks and soda will be provided for 30 minutes of social time before and after the educational programming.

Everyone is welcome to attend! Registration will be required so we can provide sufficient food, but attendance will be free.

Twilight Meeting next week Thursday May 30th at Coulter Farms in Niagara county

This series of monthly meetings will examine seasonal changes in tree fruit and berry crops, demonstrate scouting techniques, and discuss integrative pest management solutions to maximize the health and productivity of berry and fruit plantings.

Join us from 7-8:30pm on **Thursday May 30th**. Please **arrive at 6:45pm** for pizza and soda. Thank you to Valent for providing refreshments!

Location: Coulter Farms, 3871 N Ridge Rd, Lockport NY.

1.5 DEC credits will be offered in categories 1a, 10, and 22.

Feel free to bring pictures or descriptions of pests you are concerned about on your farm.

No pre-registration required; **event is free to attend**.

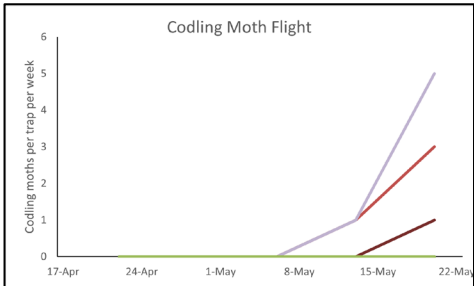
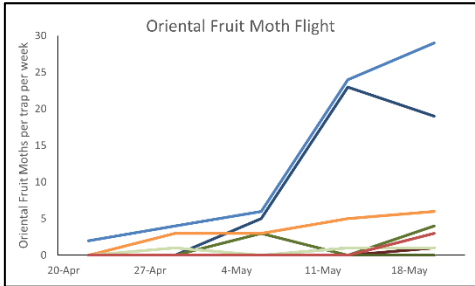
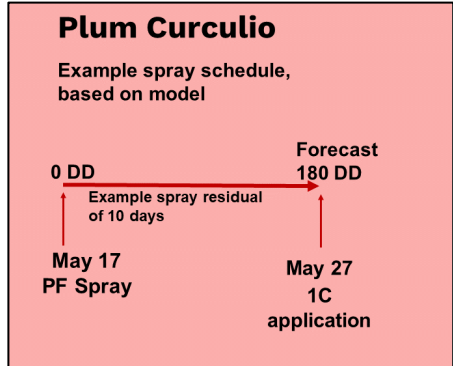
To Do Today

- **Review the above recordings/discussion about the recent heat wave and its effects on action of thinners or in trees that were not chemically thinned before or during the heat:** At the thinning meeting conducted yesterday, the Malusim (carbohydrate model and the interpretation presented by Dr. Robinson) indicated that over the last two-three days, we were in the middle of a **significant carbohydrate deficit** which began on Monday, continued on Tuesday, and peaked yesterday (Wednesday May 22).

Key messages:

- The carbohydrate model indicated we were in a severe deficit period which will be followed by a mild carbohydrate deficit in the next few days (today, tomorrow Friday) which will give good thinning. If you avoided/stopped thinning sprays during the heat wave, you can spray more safely today/tomorrow. There is nothing you can do if you already sprayed thinners in anticipation or during the heat wave. We hope several growers did not spray on Tuesday and yesterday.
- There is a risk of over-thinning this year due to the severe carbohydrate deficits of the last few days which were a natural thinning event in the WNY region.
- There is also a risk of overthinning where there was significant frost damage on April 25 and 26.

- Today (Thursday May 23) is the safest day to spray for the 10-13mm thinning window after the heat has past.
- High temperatures around the upper 70s and a mild carbohydrate deficit will give good thinning.
- Use full rates if spraying today. Please assess each block for number of fruitlets per cluster, king present/missing versus laterals:
 - If most king fruitlets are present, use full rates and follow the carbohydrate model.
 - If king fruitlets are missing due to frost, thin with low rates.
 - With Honeycrisp the excellent thinning achieved from petal fall sprays and additional thinning at 10-13mm spray may not be needed.
 - With Gala the 10-13mm spray is essential this week before fruitlet size gets too big!
- **Why are we already talking about overthinning due to the severe carbohydrate deficits?:** The demand for carbohydrate to support fruit growth and shoot growth increased linearly with the increasing temperatures experienced in the WNY region recently. Warmer temperatures during the days increased carbohydrate production (photosynthesis) up to about 85°F but higher temperatures reduced photosynthesis. The warm night temperatures also played an important factor and may have contributed to a higher thinner response (by the thinners applied before and during the past heat wave or occurred naturally by the tree itself without the action of thinners).
- **Carbohydrate balances (tree carbohydrate status on g/day) for Sodus, Wayne County were -98.43 on Tuesday May 21 and -94 on Wednesday May 22:** Growers should have avoided the use of thinners during these time periods to avoid excessive overthinning. We can't still assess the thinning efficacy or the natural drop of fruitlets on blocks that were not sprayed with thinners during this period. Large carbohydrate deficits were also calculated for other NEWA weather stations in Orleans and Niagara
- **Fire blight!** We are in the middle of a major infection event, which will continue now through the end of the week (Saturday in most locations). Keep all blocks with **any** open bloom **OR** if a significant storm event occurred at your farm recently covered with Streptomycin, kasugamycin, or oxytetracycline. Even in blocks where you don't see any open blooms and did not have heavy storms, you may want to use a biological such as Double Nickel or Regalia.
- **Watch for powdery mildew.** We have begun seeing mildew symptoms in many orchards. Some options for PM control include Flint extra, Inspire Super, Luna Sensation, Merivon, Miravis, Rally, and others.
- **Plum Curculio** management began at petal fall with an application of Exirel, Imidan and Verdepryn, Actara, Assail, Avaunt, or another product listed in the Guidelines. Most products will need to be reapplied 10-14 days after application (check the label), likely early next week for many farms. A second PC application will be necessary this year.
- **Wolly apple aphid** can be controlled by Movento, Senstar, Sefina or Sivanto at this timing.
- **Codling moth** flight began last week, with a biofix date of ~May 17th across the region (you may want to use your own trap catch data for a more specific biofix for your farm). If I use a May 17th biofix in the NEWA model, we are now at 140DD across the region. Larvicides should go on at 220DD, which based on current forecasts suggests a CM spray mid next week.
- IF OFM is a pest of major concern on your farm, the best timing to target the majority of OFM larvae will be today. That said, from my experience, despite high OFM moth trap catch, most caterpillars that are in the fruit at harvest are usually codling moth.



Pear

- **Fabraea leaf spot.** If you have had Fabraea in your peach block previously (note Bosc is especially susceptible), you will want to keep trees covered now through July 4th. Options include Topsin M, Ziram, Manzate and Syllit.

Stone Fruit

- **Peach Diseases (rusty spot, bacterial spot, brown rot):** Captan, Miravis, Inspire Super, and Merivon will control brown rot and peach scab. Be sure to rotate active ingredients to delay resistance. The addition of a copper (i.e. Cueva) will help blocks with a history of bacterial spot.
- **Oriental fruit moths** is a pest of major concern for stone fruit production. This week is the best timing to control the first generation caterpillars – Assail, Altacor, Delegate, Exirel and Verdepryn offer excellent control.
- **Remember to keep your trees healthy if they are being defoliated by peach leaf curl.** Avoid heavy cropping, keep well irrigated, and continue to manage those blocks for foliar diseases even if there will be no fruits.

On the Horizon

Codling moth larvicides should go on at 220DD, which based on current forecasts suggests a CM spray mid next week. There are many options available, including Dipel, Beleaf, Exirel, Altacor, Delegate, and Assail.

Spotted wing drosophila traps are now out in the field. We don't *expect* to catch any for at least few weeks, but this year most insects are developing about a week ahead of "normal". Stay tuned, and be ready to keep early ripening berries covered as soon as we begin to trap SWD in your region.

Summer disease management will begin sooner than we would like!

- **Black, white, and bitter rots, along with sooty blotch and flyspeck** make up the "summer diseases", which will be on our minds in a couple weeks. Each diseases is slightly different, but in general, products with efficacy against the summer diseases include: **Aprovia, Flint Extra, Inspire Super, Luna Sensation, Merivon, Pristine, and Sovran.**
- Be aware of **Marssonina leaf blotch**, which causes yellow leaves with small dark irregular blotches, followed by rapid defoliation (see image at right). Marssonina responds to similar conditions and fungicides as does apple scab, but often shows up later in the summer when you may have a gap in your fungicide program, or in varieties that are less prone to scab so may receive a limited spray program. There are no labeled fungicides for Marssonina in New York, but many of the products that you use for scab will also help manage Marssonina (especially effective products include Captan, Mancozeb, Luna Sensation, Luna Tranquility and Merivon).



Every effort has been made to provide correct, complete, and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide. Copyright 2024. All rights reserved. No part of this material may be reproduced or redistributed by any means without permission. Cornell Cooperative Extension provides equal program and employment opportunities.

The Lake Ontario Fruit Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extension Associations in Monroe, Niagara, Orleans, Oswego and Wayne counties.