



**“Fruit Facts” – Friday, May 20 2022**

**WNY Petal Fall Meeting via Zoom now Available on our LOF YouTube Channel**

2022 Petal Fall Meeting Playlist - <https://www.youtube.com/watch?v=uijmoAT0shY&list=PLYLbxsK4pTXUQI-sIWxjr9haKcPsfZMc>

- Dr. Kerik Cox (Cornell U) - Spring Disease Management - <https://youtu.be/VIJ1FgapuOw>
- Dr. Monique Rivera (Cornell U) – Spring Insect Management - <https://youtu.be/rEVg1e3fyvA>
- Dr. Terence Robinson (Cornell U) – Precision Crop Load Management in 2022 - <https://youtu.be/uijmoAT0shY>

**Updated version of Malusim to Guide Chemical Thinning Decisions is Available !**

A new updated version of Malusim mobile apps for iOS and Android are both now available in the respective app stores. The web version of the app is also up to date (see below for more details provided by Dr. Robinson yesterday).

**Registration is Open for 2022 Virtual Meetups about Labor and AG-Technologies this Summer!**

CCE LOF will be conducting again a second round of nationwide virtual meetups this summer. Last year we focused on ‘Honeycrisp’ and had a great success with this new/more informal format. **We plan to cover labor and AG-technologies this time.**

The link to the one-page flyer is here: [https://rvpadmin.cce.cornell.edu/pdf/event\\_new/pdf96.pdf](https://rvpadmin.cce.cornell.edu/pdf/event_new/pdf96.pdf) with the agenda that we recently began to use to announce this nationwide effort. This series of virtual meetups (7pm, EST), are **Free!**

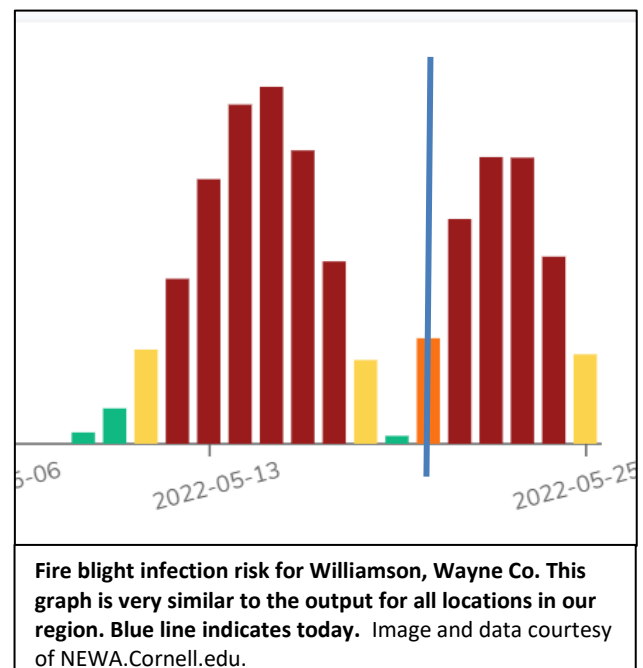
Please register as soon as possible here: [bit.ly/orchardmeetups](https://bit.ly/orchardmeetups).

**IPM Notes...Janet van Zoeren**

Across the region **conditions will be favorable for fire blight infection over the weekend** and moving into early next week. If you can, get a spray on today. Even if there are only a couple flowers will open in a block, that can lead to serious problems later this summer. However, start with your most susceptible blocks (later blooming varieties and young plantings).

**If you have reason to suspect Strep resistance on your farm**, do not use Strep as it will be a waste of your money. Kasumin and the biologicals will be your best options. Note that Kasumin does not have good kickback activity, so it is especially critical to time sprays before predicted rain events.

Especially at more inland sites (but stay alert on the lake as well!), there is a predicted **apple scab infection event** over the weekend, beginning late tonight or early tomorrow. Mancozeb combined with an SDHI or DMI will give forward and backward action, so should be applied either before or after any significant rain events.



Be aware that a scab spray may induce fire blight infection potential, so be sure to tank mix an antibiotic in with your scab sprays anywhere with any open blossoms. If possible, avoid captan now through first cover to reduce risk of fruit russetting.

### **Caterpillars.**

**Oriental fruit moth** flight is beginning, and we have reached “biofix” (sustained trap catch) at an orchard in inland Orleans and both inland and lakeside in Wayne Co. This seems to be an “on” year for OFM – even if you haven’t experienced problems with worms in the fruit in previous years, keep a tight schedule of monitoring and control for OFM this year. We’re already up over 60 moths caught in a single trap in a week at several sites.

However, at many of the site we are monitoring, we have not yet caught a single moth. As a reminder, even though I am reporting regional biofix and degree day accumulations in this newsletter, monitoring at your farm is critical to determine your own biofix date, as well as the population at your location.

**Codling moth** has so far only been found in a single trap, so control for this pest is still a ways off. If you intend to hang mating disruption for CM, do it now!

**Gypsy moth** has been seen in a few orchards and surrounding woodlots in the past week. So far, I have not seen “outbreak” levels of infestations anywhere this year, but considering the number we saw last year, do be on the lookout for them. At this point I have seen 1<sup>st</sup> and 2<sup>nd</sup> generation larvae – Dipel or other similar Bt lep products provide excellent control of gypsy moth when they are still in these early instars.

**If there are still bees in your blocks, wait to apply insecticides until hives have been removed and wild bees are not foraging on apple blossoms.**

**Plum Curculio** management begins as soon as petals are completely off all the trees in the block. Materials effective against PC include: Avaunt, Actara (also will control **Rosy Apple Aphid**), Imidan, Sevin, and pyrethroids such as Danitol, Baythroid, Lambda-Cy, Warrior, and Proaxis.

Include Proclaim, Rimon, or Intrepid in the petal fall spray if you have a history of high **Oblique Banded Leafroller** damage.

**San Jose Scale** can be controlled by Movento (with a penetrating adjuvant) Sivanto, Esteem or Centaur, generally to be applied around the PF or 1<sup>st</sup> cover timing. **Wolly apple aphid** can be controlled by Beleaf, Movento, Sefina, Sivanto or Diazinon at this timing.

**Mites.** Consider scouting the underside of leaves for European red mite. If you find high populations, there are a bunch of highly effective products you can use: Agri-Mek, Apollo, Onager, Savey, Zeal, Kanemite, Nexter, Portal, Acramite, Envidor, Nealta, or Banter. If you already applied for ERM, be sure to rotate to a new IRAC code.

If using mating disruption for **Dogwood borer**, hang those disruptors now.

### **Stone Fruit**

**Brown Rot** management will continue to be important in stone fruits, as temperatures are now in the optimal range for pathogen development of above 60F. Consider applying Captan or chlorothalonil (can’t be applied after shuck split) at petal fall or Shuck Split timing.

**Lesser Peach Tree Borer and American Plum Borer.** LPTB can be controlled using mating disruption. Borers can also be controlled at petal fall with a trunk application of **Asana**, **Baythroid** or **Warrior II**.

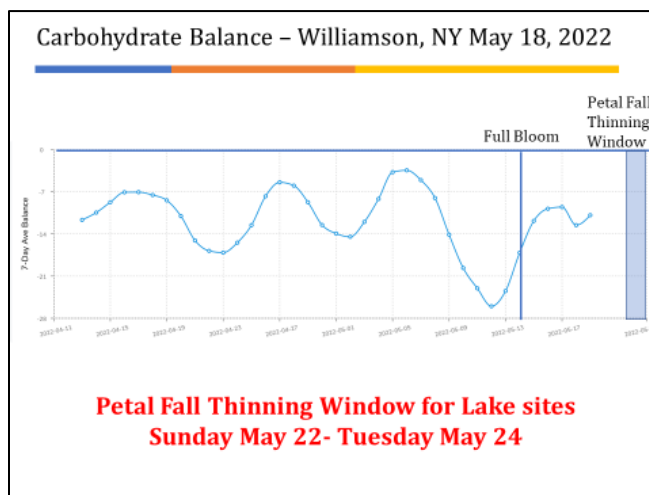
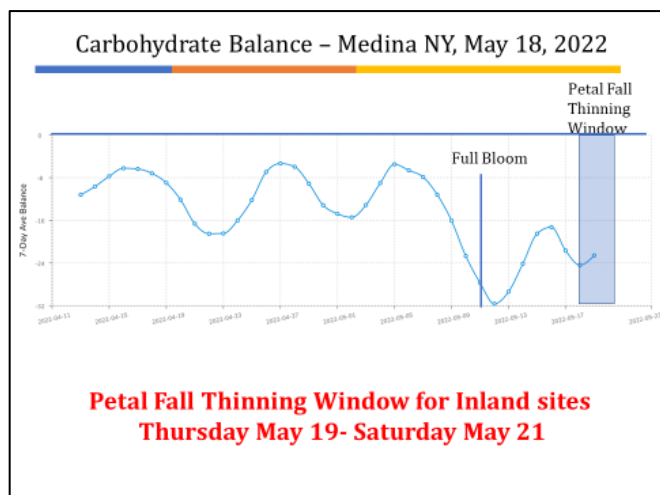
A single **spotted wing drosophila** has been trapped last week in a cherry planting. There is no need to spray any time soon, since there is no susceptible fruit on the plants at this time! It is a little earlier than usual to be catching SWD, but not unusual to catch an occasional single insect long before the true population explosion begins later this summer.

**Any questions about pest management, please call or email me: [jev67@cornell.edu](mailto:jev67@cornell.edu), 585 797 8368.**

**Updated version of Malusim to Guide Chemical Thinning Decisions is Available Today!:** A new updated version of Malusim mobile apps for iOS and Android are both now available in the respective app stores. The web version of the app is also up to date. The update fixes some bugs in the fruit growth rate model but does not completely fix the voice recognition problem in the FGR model. It appears that the IOS voice recognition is working but not the Android voice recognition. There is still a problem with the irrigation model on NEWA which they are working on.

**Petal Fall thinning windows based on DD and main remarks presented by Dr. Robinson this past Wednesday 5/18:**

- Petal fall thinning window for **inland sites** opened yesterday (May 19). PF sprays should be finalized today and tomorrow Saturday May 21.
- Petal fall thinning window for **lake sites** will open this Sunday May 22. Most sprays should occur from Sunday May 22 to Tuesday May 24. A few very late-late sites in our region should be sprayed on Wednesday May 25 or Thursday May 26.
- The carbohydrate model indicates there will be a significant deficit in the next few days to help achieve good thinning.
- At petal fall, all thinners have a moderate effect and are thus very safe (there is little risk of over-thinning)
- Use the carbohydrate model to adjust timing and rate
  - Both a Web-based version and a mobile phone version (MaluSim.org) are available
  - Don't spray when carbohydrate deficits are -60 or lower
- The petal fall spray is an essential component of this 2022 thinning program.
  - In blocks with a **strong set**, a full dose of either NAA+Sevin or NAD+Sevin is needed and is expected to give good thinning
  - This year with temperatures in the mid 70's and mid 80's, Maxcel+Sevin will give good thinning on **Gala, Empire, NY-1 and Fuji**



<b>Suggested Petal Fall Chemical Thinning (fruits 5-6mm)</b>	
<b>Honeycrisp</b>	<b>Gala</b>
NAA 3oz/100 + Sevin 1pt/100	Maxcel 64oz/100 + Sevin 1pt/100

## Final Suggestions

- Use full rates
  - 7.5ppm (3oz) NAA + 1 pt/100 of Sevin on Honeycrisp, Gala and NY-1 (mature)
  - 5.0ppm (2oz) NAA + 1 pt/100 of Sevin on McIntosh
  - 7.5ppm (3oz) NAA with no Sevin for Cortland
  - 64 oz/100 Maxcel + 1 pt/100 of Sevin will give good thinning in 2022
  - Suggested rates are dilute TRV rates
- Calculate TRV for each orchard and then a concentration factor
  - $TRV/Volume\ of\ spray\ per\ acre = Concentration\ factor$
  - Example: TRV=200 and spray volume is 100 then concentration factor=2
- Multiply suggested rates by concentration factor to get rate/acre.
  - Example 3oz NAA X Conc. factor of 2=6oz NAA/100 gal X 5=30 oz/sprayer tank
- Do not use concentration factor adjustment for Sevin or surfactants.
- Nozzle the sprayer differently. For the petal fall spray nozzle 1/3 bottom and 2/3 top
- Surfactants like Regulaid, can increase the response of NAA.
  1. If there is no carbohydrate deficit include a surfactant
  2. If there is a carbohydrate deficit do not include a surfactant.

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 2022. 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.**