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Lake Ontario Fruit Program
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"*Fruit Facts*" – Tuesday, June 3rd, 2025

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We would like to inform you that the **2025 Cornell Pest Management Guidelines for Commercial Tree Fruit Production is now on sale and is available for purchase at https://www.cornellstore.com/books/cornell-cooperative-ext-pmep-guidelines**

Please purchase your 2025 online and/or hardcopy of the guidelines soon - the 2024 edition of the guide will be available to view for two weeks, expiring on June 16th, after which it will no longer be accessible. We hope you found online access to the 2024 Cornell Pest Management Guidelines for Commercial Tree Fruit Production convenient and useful.

CCE-PSEP Team

To Do Today

Fruit size is at the end of the 10-13mm thinning window this morning (see next Table). Today and tomorrow Wednesday are the last two days to get good results with chemical thinning and moderate carbohydrate deficits. High temperatures will result in a good but not aggressive response from thinners. The last satisfactory weather opportunity for 10-13mm thinning sprays is today and tomorrow Wednesday for lake sites. There will be a mild carbohydrate deficit with the forecasted temps for today. A better carbohydrate deficit is expected for tomorrow Wednesday with the higher temperatures. If temperatures reach 90°F or higher we suggest delaying thinning sprays until temperatures moderate, or spray at night if possible.

Fruit size evaluated in inland sites in Wayne on June 2, 2025

Cultivar	Average fruit size (mm)
Minneiska	13-14
Gala	12-14
Jonagold	14-20
Mutsu	15-18
Macoun	11-13
Ruby Mac	15-18
Empire	14-16
Aztec Fuji	12-14
Cameo	12-14
Golden Delicious	12-14
NY-1	13-14
NY-2	14-20
Honeycrisp	12-14
Zestar	18-21

- **Suggestions:**
    - High temperatures will result in a good but not aggressive response from both NAA and Maxcel
    - The carbohydrate deficits will result in mild or moderate thinning.
    - Thus, use full rates of NAA or Maxcel
    - Use 2pt Sevin per 100 gallons.
    - Use Regulaid (1pt/100)
- With Gala the 10-13mm spray is essential.
- With McIntosh, Empire, Honeycrisp, Macoun, Cortland the 10-13mm spray is needed.

Chemical thinning options at the 10-13mm

- Chemicals
    - NAA + Carbaryl
    - BA+Carbaryl
    - BA + NAA
    - Maxcel+Accede
- Gala - Use Maxcel at 64 oz TRVD basis + 2 pt Sevin XLR
- Honeycrisp – Use NAA at 3oz TRVD basis + 2 pt Sevin XLR
- McIntosh - Use NAA at 2oz TRVD basis + 2 pt Sevin XLR
- Empire - Use Maxcel at 64 oz TRVD basis + 2 pt Sevin XLR
- Spur Delicious - Use Maxcel at 64 oz TRVD basis + 2 pt Sevin XLR
- Fuji -Use Maxcel at 64 oz TRVD basis + 2 pt Sevin XLR

For blocks with fruit of 15mm or bigger size (rescue spray if needed this week in early sites), use Maxcel (64oz per 100 gallons TRV dilute basis) plus Accede (13.4 oz per 100 gallons TRV dilute basis)

Review of rate calculation for Maxcel or NAA:

Suggested rates are TRVD, thus the amount of chemical to add to a full spray tank must be calculated

- Calculate TRV for orchard and then a concentration factor
    - TRV/Volume of spray per acre=Concentration factor
    - Example: TRV=150 and spray volume is 75 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
    - Example 64oz Maxcel X Conc factor of 2=128oz Maxcel/100 gal X 5=5 gallons Maxcel/sprayer tank
- Because of carbohydrate surplus and cool temperatures use 2pt of Sevin.
    - Example 2pt Sevin /100 gal X 5=10 pt/sprayer tank=1.5 gal/sprayer tank

Tips for successful thinning in 2025:

Nozzle the sprayer differently for the next sprays

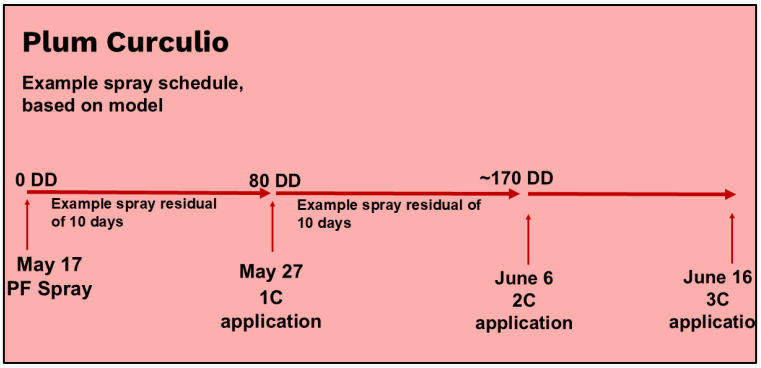
1. For12mm spray, nozzle so that 75% of the spray is directed to the top half of the tree.
2. For 18mm only spray the top of the tree.

Surfactants like Regulaid, can increase the response of NAA.

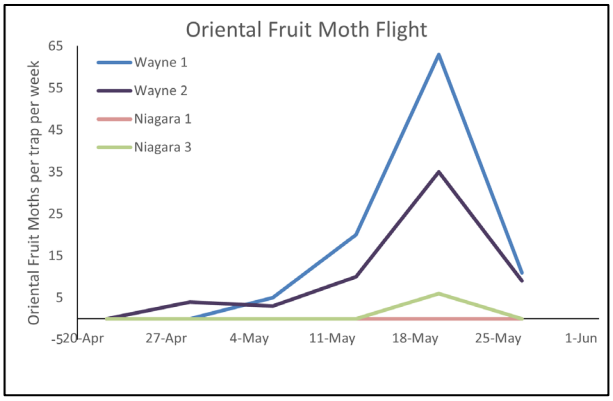
3. If there is a carbohydrate surplus include a surfactant
4. If there is a carbohydrate deficit do not include a surfactant.
5. If using NAA, then add Regulaid this year.

Disease and Pest Outlook:

- **We are beginning to see some foliar scab symptoms, which triggers the beginning of the secondary scab infection period. Keep tight scab coverage every 7-10 days through at least 3rd cover or so.**
  - Avoid Captan during the thinning season.
  - Powdery Mildew has been seen at high levels in many orchards this spring. **Cevya, Flint Extra, Inspire Super, Miravis, Rally and some of the pre-mixes double up protection for Powdery Mildew and Scab, and will also pick up management for apple blotch and some of the summer rots**.
  - **Scout for foliar scab** – it is becoming visible in hotspot blocks. Luna Sensation and Merivon can help clean up scab lesions. Always remember to rotate modes of action!
  - **Axios** is a new product with a new mode of action (group 52), which has been performing well in trials in Michigan and elsewhere.
- **If you have rattail bloom in some blocks, keep coverage for fire blight.**
  - **Remember that, even if it does not rain, the water in your thinning spray can trigger a fire blight infection.** Temperatures beginning today are finally high enough to potentially trigger a fire blight infection, this is the time to cover up prior to any possible moisture events, using either an antibiotic or a biological.



- **Most growers will be putting on a 1st cover 'bug' spray asap if not already (apply 1st cover 10-14 days after the petal fall spray).**
  - With the cool weather, **you can expect to need at least three, and probably four, plum curculio sprays this spring**! We will continue to manage plum curculio for as long as they continue to migrate into the orchard (308 degree days past petal fall) and we are currently only at ~120 degree days. Stay tuned here for updates on PC migration and spray timings. Remember to rotate chemistries and modes of action (Exirel and Verdepryn are in the same group!) to prevent resistance.



  - **OFM moth flight is finishing up and the caterpillar hatch is slowing.** Hopefully you included an OFM product in your 1st cover spray. Options include Assail, Avaunt, Exirel, and Verdepryn, among others.
  - **Codling moth flight has not yet started.** CM sprays will need to go on when eggs/larvae are present, so not for another couple of weeks.
- **If using mating disruption for Dogwood borer, hang those disruptors asap**! Mating disruptors need to go out before moths begin to fly, or will dramatically lose efficacy. We've not yet seen DWB moths in traps, but expect to do so in early June.
- **Rosy apple aphid has been prevalent in some blocks**. Look for curling down, crinkled leaves, and then turn the leaf over to look for the aphids on the undersurface. If prevalent on your farm, consider applying Admire Pro, Assail, Beleaf, Movento, Senstar or Sivanto prime.

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.
- **Pear psylla.** June is a great timing to remove water sprouts from your pear trees. This will remove their best summer food source, keeping populations in check. For summer monitoring, examine ~ 10 recently expanded shoot leaves per tree on ~5 trees per block. The action threshold during the summer is an average of 1.5 nymphs per leaf. If a spray is necessary, be aware that most of the products that are effective against psylla will have off-target effects on natural enemies.

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.
- **If using mating disruption for the Peach tree borers**, hang those disruptors asap.
- **Stone fruit Plum Curculio sprays** will continue until 308DD, similarly to in apples. **You will need to continue to cover stone fruits for PC for several sprays still to come.**

On the Horizon

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).

Codling moth flight has not yet begun, and so the timing for your "worm sprays" will be later this year than usual. You will need a good caterpillar spray when the CM caterpillars are active, which likely will be in ~2weeks or so. Stay tuned.