

Lake Ontario Fruit Program Your Trusted Source for Research-Based Knowledge

"Fruit Facts" - Wednesday, May 26 2021

Next week: Plan to attend next week WNY 'Rescue Thinning Sprays' zoom meeting with Dr. Robinson.

When: **Tuesday June 1, 2021** Time: **noon-1pm - new time!**

Zoom link: https://cornell.zoom.us/j/99363007075?pwd=ZnFPZIMxVS9ma1dpR2g3WFVJTXICUT09

2021 WNY 10-13 mm Meeting now posted on our CCE LOF YouTube Channel: https://youtu.be/HtcwnCoeB1o

All our last zoom meetings and much more is on our YouTube channel at: https://www.youtube.com/channel/UC6PXjEkx7nLDY1A81Ek5brQ

IPM Notes...Janet van Zoeren

Fire Blight. Continue to keep any open flowers covered for FB. Despite the dry weather, remember that any moisture at all (including dew or the liquid from a spray application) can trigger a fire blight infection period. With the warm temperatures we've been seeing, your safest option would be to keep **open flowers** covered by rotating **Strep with Kasumin 2L** every few days, especially when you are in the orchard spraying for thinning or insects. Regulaid is not necessary after the initial Strep spray for the season. Once you reach petal fall, that block will be safe from blossom blight.

Apple scab. We continue to have a small amount of lingering apple scab ascospores that have not yet been discharged. Depending on your history of apple scab and the way you intend to market your fruit, you may want to continue to keep trees covered for scab ahead of rain events. There are predicted rainshowers this afternoon and on Friday.

Powdery mildew. Conditions are now nearly optimal for powdery mildew infection. Watch for PM on terminal tips: some options for PM include **Rally, Topguard, Flint/Sovran, Fontelis** and others.

Caterpillars.

Oriental fruit moth numbers have been high (~50 per traps in many locations) this year. In addition, based on model predictions, the timing for a caterpillar spray for this pest this year is not expected to line up with the traditional petalfall timing. Current DD accumulations based on the NEWA model predict the optimal timing to apply for OFM this year to vary between:

- Inland west of Rochester: currently at 332DD = *spray this week*. Some insecticide options for OFM in apple include Imidan (also controls PC), Verdepryn (also controls PC), Assail, Delegate, Rimon, Altacor and Exirel (also controls PC).
- Inland east of Rochester: currently at 270DD = probably spray early next week
- Lakeside: currently at 200-220DD = late next week

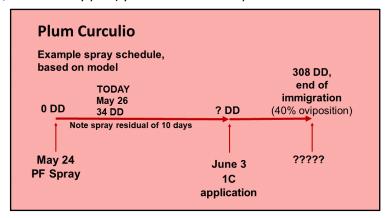
Codling moth showed up last week in inland sites, and this week in lakeside sites.

- If applying an ovicide (Rimon), inland sites should apply now and lakeside sites probably later this week/weekend (target 100DD).
- Insect growth regulator products like **Intrepid** and **Esteem** generally go on at ~100-200DD (later this week inland or early next lakeside)
- For other products the target timing will be ~250-350DD.

Plum Curculio management begins as soon as petals are completely off all the trees in the block. Materials effective against PC include: **Exirel**, **Imidan** and **Verdepryn** (also control OFM), Actara (also controls Rosy apple aphid), Assail and Avaunt.

It is likely we will have a prolonged period of PC activity this year. If you would like to use the NEWA DD model to determine whether you will need a second PC spray, record (or estimate, if it's already past) your 80% McIntosh petal fall date.

As a reminder of how the PC model works, for high pressure orchards you will want to continue to re-apply a cover spray to control PC from petal fall until they complete their immigration period at 308 DD. So, in the example depicted at right, let's say this year you apply your pf spray on May 24th. That will work for 10-14 days (depending on product), so you will re-apply around June 3 – June 7. We are currently at ~34 DDs. If we reach 308 DD before June 3rd, no second application for PC would be necessary. Run your own calculation using your 90% petal fall date and your own PF spray date.



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.

San Jose Scale and Rosy apple aphid can be controlled by Movento (with a penetrating adjuvant), generally to be applied around the PF or 1st cover timing.

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

Stone Fruit.

Plum Curculio first spray should have gone on already. See above info about if a second application in necessary.

Oriental Fruit Moth recommended timing to spray in peaches in earlier than in apples. We recommend you spray the peaches for OFM now, across the region. Insecticide options for OFM in peach include Imidan, Verdepryn, Assail, Delegate, Altacor, Belt, and Exirel.

Lesser Peach Tree Borer. LPTB flight began across the region this week. The window for using mating disruption to control LPTB is now closed. However, if you have a history of peach tree borer damage, the best timing for a trunk application of **Mustang Maxx**, **Asana**, **Baythroid** or **Warrior II** would be late this week or early next week.

Any questions about pest management, please call or email me: jev67@cornell.edu, 585 797 8368.

Horticultural Notes...Mario Miranda Sazo

WNY 10-13mm virtual meeting: We had another very successful zoom meeting this past Monday and it is now posted in our website (please review above for more details). The following notes are the main remarks presented by Dr. Robinson this week.

Chemical thinning options at 10-13mm:

- Sevin + oil
- Maxcel + Sevin
- NAA + Sevin
- Maxcel + NAA

Gala – great year to use Maxcel at 64 oz TRVD basis + 1 pt carbaryl

Honeycrisp – use NAA at 2 oz TRVD basis + 1 pt Carbarayl

McIntosh – use NAA at 2 oz TRVD basis + 1 pt Carbaryl

Empire – use Maxcel at 64 oz TRVD basis + 1 pt Carbaryl

Spur Delicious – use Maxcel at 64 oz TRVD basis + 1 pt Carbaryl

Fuji – use Maxcel at 64 oz TRVD basis + 1 pt Carbaryl

Best timing for 10-13mm based on Degree Days (DD) is forecasted to be:

- Geneva Sunday May 23 Wed May 26
- Medina Monday May 24 Thursday May 27
- Williamson Wednesday May 26 Sunday May 30

Suggestions:

- Any of the 3-4 days will give mild-good thinning
- High temperatures will be upper 70°F and the average carbohydrate balance will be close to 0. This will give mild thinning
- Use full rates

Expected thinning efficacy:

• It is likely that the 10-13mm thinning sprays will not give sufficient thinning so rescue sprays might be needed (more about this next **Tuesday June 1, noon-1pm**, see above rescue zoom meeting).

Take-home messages:

- For the 10-13mm sprays, nozzle the sprayer so that <u>75% of the spray</u> is directed to the <u>top half</u> of the tree
- Where there has been frost damage, apply no thinner to the bottom half of tree
- Surfactants like Regulaid, can <u>increase the response of NAA</u>. Since the carbohydrate deficit is <u>mild</u> this year a surfactant can help
- Add oil only to the 18mm spray

If we have rain showers after a chemical thinner application this week:

- The uptake by the leaves is decreased if a rain event occurs after application of thinners
- Cornell research has shown a 50% reduction in uptake with rains occurred two hours after application
- Good uptake will occur if you let the foliage dry for at least 6-8 hours
- Other researchers have measured uptake as long as 16 hours after application.

We also discussed the use of Return Bloom Sprays this year for good repeat bloom in 2022 (more details about this <u>next</u> <u>Tuesday June 1</u>):

- For <u>mildly biennial varieties</u> spray 4 sprays of Ethrel (1pt/100) or 10ppm NAA beginning when fruits are <u>25mm in diameter</u> at 10 days intervals (probably beginning June 10)
- For <u>strongly biennial varieties</u> (Honeycrisp and Fuji) spray 4 sprays of Ethrel beginning when fruits are <u>16mm in diameter</u> at 10-day intervals (first 2 sprays ½ pint/100 and last 2 sprays 1pt/100). Follow the Ethrel sprays with 2 more sprays of 10ppm NAA

Are you prepared/ready for irrigation this season?

- With the sudden warm weather we had last week, first irrigation practices began last Tuesday or Wednesday (especially in blocks located in the West side of the city) for some Gala, NY-1, and Honeycrisp growers
- If you are not still ready for irrigation, please remember that any lack of rainfall coupled with warmer temperatures can affect fruit growth rate at this stage
- It can also affect <u>return bloom in Honeycrisp and Fuji</u> if a severe water stress occurs the first 5-6 weeks after full bloom
- You should focus irrigation on small fruited varieties like Gala, Empire, Macoun, and weak cultivars like NY-1 and Honeycrisp

With young trees that have a crop, the unsupported terminal portion of the leader above the last wire should be defruited for maximum shoot growth and good lignification during years 2, 3 and 4. The wrapping (twisting) of the leader around a plastic tie or vertical wire stabilizer works, supports the leader, and encourages new growth above where it is supported by a tree-clip at the trellis wire.

For trees which had moderate or poor growth in the first year or were planted on a weak rootstock, these trees should be de-fruited in year 2 (and in very few cases in year 3) because fruits will outcompete with overall tree and shoot leader growth for carbohydrates and water. Weak trees planted this year should not carry a crop.

Growing and safely pushing a weak cultivar the rest of the 2021 growing season. A young Honeycrisp tree is less forgiving than Gala. To grow a weak Honeycrisp tree you have to support, prune, leave horizontal shoots, and single the leader.

- Remove extra shoots at the terminal (always leave a stub of two-fingers length, do not rub the buds below the ring) and divert the growing effort on the central leader.
- You can still remove any large lower limb that is out of balance with the rest of the texture of the canopy
- Prune out anything that is too long, too thick, or too narrow (remember the use of the 3 "Ts")
- Always leave longer stubs to secure renewal (critical for Honeycrisp).
- In some cases, renewal pruning needs to be "accelerated" on Honeycrisp. Removing the largest bottom branch from this slow-growing tree will divert energy to the growing terminal. The same pruning techniques are applicable for NY-1, or other weak cultivars.
- First grow the tree then cropit!

"Whole tree nutrition" (for nursing limbs and grafts) is critical for maximum growth of scion the first year after grafting. There are several grafted projects all over our region that could benefit by implementing a targeted foliar program on scion growth or "whole tree nutrition". As soon as the grafts are out 6-10 inches and supported to a plastic twine or similar, you should start spraying a leaf feed of some source (consider at least urea at 3 lbs/100 gallons). You can spray 20 to 30 gallons per acre every week from now until July 15. Do not push with N beyond July 15 to avoid any potential winter damage in the tips of the scion with any sudden drop of temperatures we may experience in November of 2021. Also, don't forget to remove nursing foliage that is shading the graft at this time of the year, clean out specially the west side of the rows for maximum light penetration in the lower part of your trees.

Berry Notes... Janet van Zoeren

<u>Strawberries:</u> Most varieties are still flowering along with some fruit developing. Frost damaged flowers have probably already fallen off, but remaining buds will continue to produce strawberries this season. Keep an eye out this time of year for tarnished plant bugs, spider mites and strawberry clipper damage.

<u>Blueberries:</u> are now reaching full bloom. Watch for young **gypsy moth caterpillars** on your blueberry plantings. This year seems to be an "on" year for gypsy moth, which tends to cyclically reach infestation levels every decade or so. Dipel is a good product to control gypsy moth.

Bloom is the best timing to control **anthracnose fruit rot**. There are many different fungicides that can help manage these fruit rots – the key is timing. Remember that many fungicides have been shown to have sublethal but still damaging effects to bees, so do your best to choose less toxic products and spray when bees are not foraging.

Looking ahead, be ready for **fruitworm** sprays as early varieties move to petal fall and as you remove bees from the plantings.

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 2021. 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.

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