



## “Fruit Facts” – Wednesday, May 19 2021

Next week: **Plan to attend next week’s WNY ‘12mm thinning sprays’** with Dr. Terence Robinson

When: **Monday May 24, 2021**

Time: **4:00 – 5:00pm**

Zoom link: <https://cornell.zoom.us/j/99841136339?pwd=WStyS3o1Nng2YjlvNkxPa0YyMGxlZz09>

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**2021 WNY Petal Fall Meeting now posted on our CCE LOF YouTube Channel:** <https://youtu.be/mf6ASdWMHQo>

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

**Fire Blight.** We are entering into a few days of **extreme fire blight infection risk**, with the highest risk period for across the region beginning on Thursday.

**For a blossom blight infection to take place, the following criteria have to be met:**

1. Blossoms open in the orchard.
2. Sufficient heat units have been met (currently true across region)
3. Some sort of wetting event (which can include rain, dew, or even a *spray application*)

The optimal timing would be to get Strep on the blocks as close as possible ahead of the predicted infection event. Strep protects blossoms that are *already open* for the following 48hrs (but does not protect any flowers that open during that time) and has some kick-back activity reaching 24hrs.

If this is your first fire blight control application, use the full label rate of strep along with Regulaid at 1 pint/100 gallons. However, **do not add Regulaid if captan has been applied within the last 10 days, and do not tank mix this application with any thinner product if Regulaid is going in the mix.** Read more about FB management for 2021 in the recent Fruit Notes article: [https://rvpadmin.cce.cornell.edu/uploads/doc\\_975.pdf](https://rvpadmin.cce.cornell.edu/uploads/doc_975.pdf).

If you have already applied Strep this season, and either new flowers have opened or we are past the 48hr residual period, consider using Kasumin 2L for at least one of your FB applications, for resistance management. Regulaid is not necessary after the initial Strep spray for the season.

**Apple scab.** An apple scab infection is possible this week, if your microclimate experiences a significant wetting event. In particular, there is a chance of scab infection predicted for Thursday. You may want to add Mancozeb or another scab product in with your fire blight spray this week.

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** has been trapped in all counties in the region, and has reached “biofix” at many locations. We will now be watching the dd accumulation to determine the best timing for an insecticide. This seems to be an “on” year for OFM – even if you haven’t experienced problems with worms in the fruit in previous years, this year is a year to keep tight control of monitoring and control for this pest. At several sites we’ve seen over 50 moths trapped in a single trap in a week!

**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** also is likely to be quite plentiful this summer. Watch for the little caterpillars on your apple and blueberry plantings. Dipel is an excellent product for control of gypsy moth, although it is most effective when larvae are young.

**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.

### 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**. (Gladiator or Besiege are pre-mixes, which I recommend using only in special circumstances when both active ingredients add something specific).

A single **spotted wing drosophila** has been trapped last week in a blueberry planting, and this year in cherry. There is no need to spray at this time, 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.**

## ***Horticultural Notes...Mario Miranda Sazo***

**WNY petal fall virtual meeting:** We had another very successful petal fall 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 petal fall (fruits at 5-6mm or 100-130DD base 4°C):**

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

### **Best petal fall spray timing based on DD is forecasted to be:**

- Geneva **Monday May 17 – Wed May 19**
- Medina **Tuesday May 18 – Friday May 21**
- Williamson **Friday May 21 – Sunday May 23**

### **Suggestions**

High temperatures will be upper 70°F and an average carbohydrate balance of @ -30-50g (negative balance). This will give good thinning.

### **Use normal rates:**

- 7.5ppm (3oz) NAA + 1pt/100 of Sevin on Honeycrisp, Gala, and NY1 (mature)
- 5ppm (2oz) NAA + 1pt/100 of Sevin on McIntosh
- 5ppm (2.5oz) NAA with no Sevin for Cortland

- Maxcel will thin well with temperatures above 75°F

It is possible that with both bloom thinning and petal fall thinning **sufficient thinning** will be achieved in 2021.

Late next week when **DD accumulation reaches 200-250** will be the window for the 12mm spray in 2021. Plan to attend '12mm thinning sprays' zoom meeting **next Monday May 24** (see above zoom details).

#### To know how good of a thinning job you did with bloom and petal fall sprays this year:

- Measure fruitlets at **50DD** after the petal fall application and **120DD** after the petal fall application and use the Fruit Growth Rate Model (contact Mario or Craig for any doubt if you are interested to learn how to implement it).
- Send the data to LOF or directly to Dr. Robinson ([tlr1@cornell.edu](mailto:tlr1@cornell.edu)). At the meeting, Dr. Robinson offered help with data interpretation and suggestions for thinning.

#### Take-home messages:

- For all post-bloom thinning sprays, nozzle the sprayer so that 2/3 of the spray is directed to the top half of the tree
- Where there has been frost damage, apply no thinner to the bottom half of tree
- Don't use surfactants like Regulaid or Oil if there was frost damage
- Don't use Regulaid if carbohydrate balance is negative
- If the carbohydrate balance is positive then Regulaid is OK
- Add oil only to the 18mm spray

**We also discussed the area wide issues with low bloom this year (Honeycrisp situation) at the end of the zoom.** The following reasons of why a low bloom in 2021 was provided by Dr. Robinson to a grower days ago (slightly edited today). Some of the same thoughts were shared with grower participants at the zoom this past Monday.

"I attribute all the variability in return to crop load last year especially from **bloom to 6 weeks after bloom and the drought**. Some of the variability can be explained as follows:

1. **Young blocks** are entering their first significant crop and had good bloom this year because they were not too heavy last year. If you do not blossom thin this year (or do not apply thinning sprays at petal fall this week) you will put them into biennial bearing and will have light bloom or no bloom next year on them. **It is important to reduce the total seed load on the trees as soon as possible.**
2. On **older blocks** which carried a full crop last year the trees were already in a biennial bearing cycle. The heavy bloom last year led to the lack of bloom or variable bloom this year and was more related to the actual number of fruits on the tree last year and the drought conditions in early June through July.
3. First the issue of actual fruit number. Last year was a snowball bloom on Honeycrisp and even with bloom thinning the number of fruits was still too high and all of the fruits had a **high seed counts** which resulted in **too much gibberellin in the plant to allow flower initiation.**
4. The **area wide issues with low bloom** I think are also related to the **drought conditions last June**. Honeycrisp sets flower buds **early** and the **drought in late May and early June stopped shoot development and did not allow flower bud development even if people irrigated later in June.**
5. This year we encouraged you (the WNY fruit growers through the CCE LOF extension program) not to back away from **bloom thinning** because the repeated years of studies have indicated that **bloom thinning always helps**, especially with ATS.
6. If you did not blossom thin, there is still time to apply a **petal fall spray** to minimize the negative effects of **high seed counts** per tree, especially in **Honeycrisp and Fuji.**"

## Berry Notes... Janet van Zoeren

**Strawberries:** The past few warm days have really pushed things along. Some of the first strawberry flowers have black centers from freezing damage, but healthy secondary flowers have been pushing through with this heat. Keep an eye out this time of year for tarnished plant bugs, spider mites and strawberry clipper damage. Insecticides should be avoided during bloom. However, keep scouting to be ready at petal fall.

If weather during flowering is rainy or if there is heavy dew in the mornings, considering using a fungicide to prevent **Botrytis (grey mold)** from infecting senescing flower petals and developing fruit. If the weather is relatively dry during bloom, a fungicide may not be necessary. You won't see the infection until fruiting, but this is the time for prevention. According to research conducted by David Strickland and Kerik Cox (Cornell AgriTech), Switch, Fontelis and Rovral are the best products against **grey mold and anthracnose**, while Captan, Pristine, Serenade Opti and Cueva seemed little better than the untreated control.

Watch for **angular leaf spot** if you used sprinkler systems for frost protection. Oxidate/Rendition is the safest option to control angular leaf spot.



Angular leaf spot on top of leaf can appear as bright/light green spots, whereas on underside of leaves will look water-soaked, and may have ooze. Photos courtesy of Esther Kibbe.

Cold damaged blossoms have a black center, while yellow centers show that a berry will develop.

**Blueberries:** 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.

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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