



**“Fruit Facts” – Tuesday, May 10 2022**

**New LOF YouTube video about Bloom Thinning guided by the PTGM – new release!**

Last Friday our super ‘IT guru’ Liz Tee finished and posted a YouTube video titled ‘Pollen Tube Growth Model & Thinning Guide for Precision Crop Load Management’. A new video describing bloom thinning, why, how and when to accomplish it. Please check it out! <https://youtu.be/zMVkyzbKhqk>

**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](http://bit.ly/orchardmeetups).


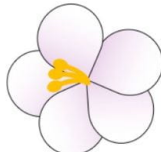
**IPM Notes...Janet van Zoeren**


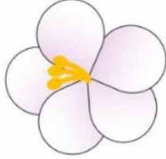
**Apple scab:** The current forecast shows low to no risk of apple scab infection events this week. However, as we always say, the model is only as good as the weather forecast; be sure to keep an eye on the forecast and out the window for unexpected rain events. The below visuals as well as further information can be found at the Cox lab’s blog: <https://blogs.cornell.edu/coxlab/2022/05/08/apple-scab-fire-blight-disease-forecasting-week-of-5-9-22/>.

If a scab spray is needed, avoid captan now through 1C to reduce risk of fruit russetting. Additionally, it is best to spray during and after bloom when trees are not wet (i.e. avoid spraying after a rain event, when dew is on the leaves, when humidity is high, etc).

**Fire blight:** Many cultivars are currently at full pink, with a few early blossoms beginning to open. Orchards along the lake have low to no risk of fire blight infection in the coming days. However, **as you get further from the lake, into Knowlesville, Marion, Rose, etc, beginning Wednesday you will need to watch the weather** and apply Strep at 24 oz/acre to any block with open blossoms before predicted rain, dew, or spray wetting events. We recommend including Regulaid at 1 pt/100 gal with the first strep application of the season, and applying at the maximum labeled rate. Remember that strep will protect 24 kickback and 48hrs forward, but **will not protect any blossoms that open after the application is made.**

**If you have reason to suspect Strep resistance on your farm,** use Kasumin at 64 fl oz/acre in 100 gallons of water for your first application this spring. Regulaid is a good addition to the first FB application, especially in quick-drying conditions.

	APPLE SCAB Infection Predicted	APPLE SCAB Infection Details	FIRE BLIGHT Infection Predicted	FIRE BLIGHT Infection Details
<b>WAYNE COUNTY</b>	 <b>None</b>	Spore release: 0%  Ascospore Maturity: 96%	 <b>None to Moderate</b>	Highest EIP: 22 -81  Highest DH: 22 - 357

	APPLE SCAB Infection Predicted	APPLE SCAB Infection Details	FIRE BLIGHT Infection Predicted	FIRE BLIGHT Infection Details
NIAGARA COUNTY	 None	Spore release: 0%  Ascospore Maturity: 74%	 Low – Moderate	Highest EIP: 29-107  Highest DH: 152- 425

**Black stem borer** beetle flight has begun. In blocks with a history of damage from these beetles, now is the best opportunity to control them. That said, from my observations, they can be hugely problematic in some orchards one year but not the next, and as Art Agnello has shown, do not attack non-stressed trees. I have also trapped large numbers of BSB in orchards where little or no damage to the trees was seen. Ongoing research will hopefully help determine when management is warranted for this pest; in the mean time, if you have reason to suspect BSB damage and wish to manage for them, Warrior II or Danitol can be applied during pink or during petal fall. **Do not apply these products when bees are in the orchards!**

**Bees in the orchards!** At several of the orchards I visited this week the bees have already arrived, and elsewhere they will soon. Keep your bees safe, and stay informed of which pesticides are most safe during bloom. The [Pesticide Decision-making Guide to Protect Pollinators in Tree Fruit Orchards](#) provides very comprehensive information, and a shorter, more concise guide is available on the LOF website at [https://rvpadmin.cce.cornell.edu/uploads/doc\\_870.pdf](https://rvpadmin.cce.cornell.edu/uploads/doc_870.pdf).

**Oriental fruit moth** has been caught three weeks in a row at a single location (historically the earliest trap catch). Based on that, I would expect it to begin to arrive across the region in the coming week. If you are monitoring at your own orchard, remember to record the “sustained trap” date to use in the NEWA model.

**Lesser apple worm** has been trapped in and OFM trap at another location. We are putting **codling moth** traps out this week.

#### Stone Fruit:

Stone fruit **brown Rot** management should take place from pre-bloom through petal fall. There are many labeled products available (see Recommends), including Rovral 4 flowable (which may provide 24hr “kickback” activity) and chlorothalonil/Bravo (avoid when bees are foraging, if possible).

**Plum curculio** is active once temperatures reach above 60F. As stone fruits reach shuck fall, consider applying **Assail or Avaunt** (or see the Recommends for other options).

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*

#### **Time to start thinking about bloom thinning guided by the Pollen Tube Growth Model (PTGM):**

In 2022, bloom thinning will be essential for:

- Honeycrisp to achieve good return bloom (without kings open as yesterday – be ready to start counting)
- Fuji to achieve good return bloom
- Gala to achieve good fruit size (without kings open as yesterday – be ready to start counting)

**WNY growers should implement the use of the PTGM to time their blossom thinning sprays.**

**Measurement of style length is critical:** If style measurement is too long then chemical application is delayed and too little thinning is achieved.

**Bloom thinning will be CRITICAL for Honeycrisp this year:**

- Seeds produce gibberellins which inhibit flower formation for the 2023 season
- The earlier that fruit number can be reduced to the target fruit number the greater the likelihood of having flower initiation (it can occur as early as 20-30 days after full bloom)
- Plan ahead your blossom thinning sprays and be ready!

**In NY, we use ATS sprayed at 60% on PTGM:**

- 2.5-3.0%
- Burns stigma of pistil
- Causes mild leaf phytotoxicity but no effect on fruit finish
- Requires 2-3 applications
- When used with the PTGM can achieve a substantial portion of thinning job
- Has a neutral effect on fruit size
- Not registered as a thinner in NY but can be legally used as a bloom time foliar fertilizer
- Improves return bloom of Honeycrisp

When to use ATS versus Hormone Thinners at Bloom	
Use ATS for varieties that are strongly biennial	Use a hormone type thinner for small fruited varieties
Honeycrisp Fuji Evercrisp Delicious	Gala NY-1 Empire Macoun Pink Lady
<b>Notes:</b> <ul style="list-style-type: none"> <li>• Do not spray caustic thinners under slow drying and wet conditions or if there is frost</li> <li>• Frost causes damage to fruit skin and caustic thinners then cause russetting</li> </ul>	

**The right timing for Apogee and Kudos (yesterday, today !!) for bitter pit mitigation in ‘Honeycrisp’ is full pink, preferably applied when temperatures are 60°F or above:**

- Apogee should be applied to mature bearing tall spindle ‘Honeycrisp’ at pink stage at a rate of 6 oz./A. for orchards up to 180 gallons TRV. Cover the foliage well. **Apply at full or late pink**, not early pink. **Use a water conditioner**, “hard” water deactivates Apogee and Kudos.
- **Avoid cold temperatures at application** and during the 8-hours post is a **critical factor**. Prohexadione calcium (Apogee, Kudos) are plant growth regulators and require metabolic activity within the plant for uptake and metabolism. Temperatures below 60°F are questionable for an application timed at pink. Delay your application until temperatures are warm enough for up to eight hours post.

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 2019. 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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