"Fruit Facts" – Thursday, May 12 2022

Fire blight Infection Predicted beginning Friday/Saturday – be proactive!

It is much better to cover your blocks prior to infection rather than relying on kickback activity. This is especially important in any blocks with a history of Strep resistance – Kasumin should not be relied on for kickback activity.

If you have any blossoms open in your block, I'd recommend you do your best to get an antibiotic prior to any possible leaf wetting this weekend. Strep will last for 48hrs, but will not have any efficacy for flowers that are not yet open. The best control will happen if you are able to time sprays to go on immediately prior to an infection event, to get the most "bang for your buck". Watch the weather forecasts and NEWA models, and give me a call if you have questions! 585 797 8368.

More info below.

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.

<u>The link to the one-page flyer is here: https://rvpadmin.cce.cornell.edu/pdf/event_new/pdf96.pdf</u> 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: <u>bit.ly/orchardmeetups.</u>

IPM Notes...Janet van Zoeren

Fire blight: Across the region **conditions are favorable for fire blight infection potential beginning Friday** and going into the weekend. Watch the forecast and NEWA models for your own location. Remember that fire blight infection risk is dependent on:

- Temperature and moisture conditions. These are being used by NEWA to gauge risk. However, the model only
 accounts for natural wetting events. If you apply any liquid spray to a block with open flowers, be aware the
 moisture from the spray can allow FB to infect flowers, so an antibiotic should be added to the tank if possible.
 This includes both if you decide to put on a scab spray as well as your thinning applications.
- 2. Flowers being open. If there are no open flowers in a block, it does not need to be sprayed!
- 3. Block and regional history of fire blight. If there is no inocula in the area, consider a biopesticide.
- 4. Variety, rootstock, nitrogen fertilization, overall tree vigor, etc.

<u>Blocks with no history of resistance</u>: for a first FB application, we recommend Strep at 24 oz/acre in any block with open blossoms. Across most of the region you may want to put Strep on today, if you get a window for it. Check your own model predictions and use your blocks histories to determine how cautious to be. 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. With this heat, blossoms are going to be opening up quickly.

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. Do not use Strep, as it will be a waste of your money. Regulaid is a good addition to the first FB application, especially in quick-drying conditions. Note that Kasumin does not have good kickback activity, so it is especially critical to time sprays before predicted rain events.

Apple scab: The current forecast continues to show 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 first cover to reduce risk of fruit russeting.

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 <u>Pesticide Decision-making</u> <u>Guide to Protect Pollinators in Tree Fruit Orchards</u> provides very comprehensive information, and a shorter, more concise guide is available on the LOF website at <u>https://rvpadmin.cce.cornell.edu/uploads/doc_870.pdf</u>.

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, 585 797 8368.

Horticultural Notes...Mario Miranda Sazo

Bloom thinning will be CRITICAL for Honeycrisp, Fuji, and Gala this year: You can still learn about the PTGM and guide your bloom thinning decisions. Review the 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

Bloom thinning is here!

2022 bloom thinning options (Hormone types):

BA+GA4+7 (Promalin, Perlan, Typy)

- Causes more typey fruit for Delicious, Gala and other varieties
- In some years can cause some thinning
- When temperatures are warm it has a good effect
- Timing is at early king bloom and well before full bloom
- Use rate of **2pt/acre** gives a low amount of BA compared to Maxcel use rates

BA (Maxcel, Exilis, Riteway)

- Causes more blocky fruit (not elongated)
- Is a very mild thinner at bloom but can increase fruit size
- Increases cell division to create a potentially larger fruit
- Works well in warm conditions during bloom but poorly in cool conditions (1 year out of 2-3 there is a great response)
- Use rate of **8pt/acre** gives a high amount of BA compared to Promalin use rates

NAA (Fruitone, Pomaxa, Refine)

- A mild thinner (safe) when used at bloom
- Can be sprayed safely at high rate of **10ppm**
- Has a neutral effect on fruit size
- Little or no depression of photosynthesis at bloom
- Can help improve return bloom on Honeycrisp

NAD (Amide-Thin W)

- A mild thinner (safe) when used at bloom
- Can be sprayed safely at high rate of 8 oz/100
- Has a neutral effect on fruit size
- Little or no depression of photosynthesis at bloom
- Can help improve return bloom on Honeycrisp

Use of ATS sprayed at 60% on PTGM for varieties that are strongly biennial:

- 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	Gala
Fuji	NY-1
Evercrisp	Empire
Delicious	Macoun
	Pink Lady
Notes:	
• Do not spray caustic thinners under slow drying	and wet conditions or if there is frost

Frost causes damage to fruit skin and caustic thinners then cause russeting

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.

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