



“Fruit Facts” – Wednesday, April 21 2021

Statewide PINK meeting via Zoom next Monday April 26, 4-5:15pm

This will be the first of a series of statewide meetings to be held virtually this spring

Stay tuned, more details will be sent via the Fruit Facts and Fruit Notes newsletter, and will be available on our website (lof.cce.cornell.edu) in the next few days.

Wayne Co Respirator Fit Test – April 26/27

Cornell Cooperative Extension Wayne and the Wayne County Farm Bureau are collaborating again to offer in person respirator fit test training on Monday and Tuesday April 26 and 27th at the Pultneyville Lodge. Slots are limited this year and each slot can only accommodate 1 farm, due to COVID. Masks are required upon entry. Cost is \$90 / person.



Register by calling Beth Claypool at the CCE Office at 315-331-8415 ext. 102. Space is limited, so get in touch now!

CCE LOF and ENYCH Pruning Video Resources:

- [Precision Pruning Honeycrisp](#) by LOF (NEW RELEASE)
- [Precision Pruning for Early Crop Load Management](#) by ENYCH
- [Pruning Honeycrisp for Annual Production Video](#) by LOF

IPM Notes...Janet van Zoeren

Apple scab.

| April 19 th -21 st | Infection Predicted | Ascospore Maturity | Predicted Spore Release |
|--|--|--------------------|-------------------------|
| NIAGARA COUNTY |  Low | 23% | 9% |
| WAYNE COUNTY |  Low | 18% | 3% |

West of Rochester: There is an infection period predicted for April 17th-21st with a predicted cumulative 9% spore release over those days, mainly on Wednesday. If you did not apply a protectant fungicide such as Captan or Mancozeb in the last 2-3 days, you will want to apply something with kickback activity when possible.

East of Rochester: There is an infection period predicted for April 19th-21st with a predicted 3% spore release, mainly on Wednesday. If you did not apply a protectant fungicide such as Captan or Mancozeb in the last 2-3 days, you will want to apply something with kickback activity when possible.

Fire Blight. Are you ready to clean up any FB Inoculum that may have over-wintered after last year’s high levels of pressure and damage in many blocks? Any blocks on your farm where you had high levels of FB last year, you should be especially sure to be ready to hit the ground running this spring. Hopefully you already got a copper application on at around green tip. Your next window for FB control will be at pink (likely sometime next week, depending on your location and varieties). We

recommend an application of **prohexadione-calcium (Apogee/Kudos) at pink at 6 oz/100 gal**, which reduced plant vigor and also thickens cell walls, and which may reduce blossom blight and subsequent shoot blight in high vigor blocks. This pink Apogee application is considered added bonus control, but *does not reduce the need for carefully timed sprays during bloom!*

Be ready as soon as the blossoms begin to open in your blocks to:

- a, record the blossom open dates to use in the NEWA or Rimpro models
- b, start checking the model daily
- c, be ready with Streptomycin and Regalaid on hand, for when the first spray is necessary (probably won't be for a bit yet, but with the weather in upstate NY, you never can tell)

Powdery Mildew. Watch for mildew symptoms as your varieties reach tight cluster stage. Luna Sensation or Merivon (FRAC 11+7), Fontelis (7) and Flint Extra would help control mildew at tight cluster stage.

Mating Disruption. Are you are interested in learning more about mating disruption, or if you are deciding if it would be a good fit for your operation? There will be an informational meeting open to all tree fruit growers in the Lake Ontario area, organized by Trece Inc and Peck Babcock, on April 23rd. RSVP is required so let me or Kaley Catlin (KCatlin@trece.com) know if you are interested in attending.

Black stem borer flight began last week. The cool weather this past week meant they are not currently flying. However, if you have a history of BSB damage, you might want to get an insecticide on well prior to bloom.

This spring, you can still apply Lorsban (chlorpyrifos) to blocks with black stem borer pressure at petal fall. However, after July 31st of this year, all chlorpyrifos products will be banned in NY for all uses. Also labeled for use against BSB would be the pyrethroids Danitol 2.4EC and Warrior II 2.08CS.

Pear Psylla numbers have been high in some orchards this spring. Eggs have not yet hatched, so scout and control now. Scout terminal buds for ovipositing adults or eggs. If you find psylla adults or eggs, you can manage from now till bloom using an oil or Surround (Kaolin clay) application to delay egg laying, followed up by either an insect growth regulator (i.e. Esteem) or a pyrethroid or neonicotinoid (apply those well before bloom to avoid pollinators contacting the residue).

Did you apply a pre-bloom insecticide this year?

The McArt Lab at Cornell Entomology is looking for apple growers who applied a pre-bloom spray, to participate in a study to pinpoint how spray timing is related to pollinator pesticide exposure (and whether exposure is linked to on-farm or off-farm practices).

Participation would consist of:

- We would come to your farm during bloom, and collect 10 open flowers in your orchard
- We would ask to view your spring spray records, showing specific product(s) and date(s) that insecticides were used.

We would gladly communicate results with you individually later this year, but of course your information would be kept entirely anonymous otherwise. We are not looking to increase restrictions or regulations around spring insecticide applications – but rather to help provide information about what is and what isn't in your control to help keep your pollinators healthy.

Please reach out to me if you applied a pre-bloom insecticide and would be willing for me to stop off at your orchard during bloom! Phone: 585 797 8368 email: jev67@cornell.edu

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

Horticultural Notes...Mario Miranda Sazo

Please send me your pics or videos via text (cell 315-719-1318) or email (mrm67@cornell.edu) and let me know what you and/or your employees are Doing/Seeing/Trialing: This year I will be sharing via pics or videos the great field work that each of you conduct in the orchard or nursery every year.

Today I would like to share with you the outdoor heating system we installed for the sand culture experiment in Ithaca yesterday. Some of you know of this work I am conducting with Dr. Cheng to evaluate 'Honeycrisp' trees on four different rootstocks. We hope the frost protection device will work with the low temperatures forecasted for Thursday am in Ithaca.



Vegetative growth control strategies for mature 'Honeycrisp' blocks with very low return bloom or non-existent this spring: Last week a grower also shared with me pictures of 'Honeycrisp' trees with very low return bloom and asked me what to do to contain vegetative growth in 2021. I told the grower I have noticed the same issue in several mature 'Honeycrisp' blocks this year.



Suggested vegetative growth control strategies for mature 'Honeycrisp' blocks with very low return bloom or non-existent this spring:

- Delay the pruning cut decision of the largest 1-2 branches/tree until bloom or right after.

- **Reduce or eliminate the application of nitrogen** until late in the growing season. The soil will generate enough N through the breakdown of organic matter.
- **Apply Apogee at pink** (probably in the middle or late next week at the lake sites) – this application will help to reduce excessive tree growth when crop load will be very light or non-existent this season.
- **Root prune at bloom to 10 days after petal fall** can be very effective in controlling excessive shoot growth.

Preparing for frost events this spring: Of concern for both lakeshore and inland sites is whether killing frost or freeze events will affect our region this Thursday am or sometime over the next several weeks. Frosts on average have been noted as **late as May 15th (along the shoreline) and May 30th (for inland sites)** and typically we see an average of four or five freeze events in April and May in Western NY.

Get ready your frost protection devices: We recommend that apple growers check and test the use of frost protection devices (wind machines) today. Typically, a wind machine can protect 10 acres or so. We emphasize that the best methods to reduce frost risk and prevent crop loss are through orchard site selection and the use of wind machines during frost events.

Site location matters: New stone and pome fruit plantings will be more prone to future frost events if located in low-lying areas where cold air settles, and in areas where wind and air movement are blocked by obstructions such as trees, hills, fences, and or buildings.

Pruning of peaches: For those of you who have peaches and given the subsequent high risk of crop loss to frost, we recommend that peaches **be pruned less aggressively**. After we get past the risk of frost, you should prune off 1/3 to ½ of the remaining branch and thin out wood keeping the best pencil sized wood. We also recommend that growers use split applications of nitrogen this year in case we have a light crop due to frost and need to drop the second application to reduce vigor.

Pruning of tops: I am still seeing too many large branches in the top portion of mature Tall Spindle apple trees. At maturity the top portion of the central leader must be cut annually to a small side branch and you also have to eliminate the upper large branches with a bevel cut. The upper 1/3 portion of your trees should be composed of just fine fruiting wood.

The benefits of Boron and Zinc to overcome the effects of early spring frosts in 2021: With the first freezing weather (frosts) events forecasted for tonight or late this week, we recommend prebloom applications of zinc and boron to stimulate early bud, leaf, and shoot development. Growers might consider applying Dr. Warren Stiles “spring tonic” of 3 lbs of urea (feed-grade) plus 1 lb Solubor plus 1 qt zinc chelate EDTA per 100 gal. Application of this tank mix to apples at tight cluster to pink has been shown to strengthen buds and could help in a frost year. Years ago, some growers had trouble with zinc products that were not fully chelated and fruit finish problems resulted. You might also consider cutting the zinc rate to 1 qt per acre to reduce the chance of russetting. Be sure you have the right zinc product and read the label. We are always reluctant to suggest adding another level of complexity to the spray tank because complex mixes sometimes cause phyto or fruit finish problems. However, this may be a year where it is worth the gamble. Try and limit the number of materials by planning sprays carefully.

The benefits of a prebloom boron foliar application are:

- the spray provides boron to the flower during the critical period of development of the ovules and anthers.
- improves pollen germination and pollen tube growth.
- improves early season leaf and shoot growth.
- beneficial in overcoming the effects of winter injury or early spring frosts.
- a prebloom application of zinc can also help to stimulate early bud, leaf, and shoot development.
- one of the most critical periods that a zinc shortage may seriously impair tree performance is between budbreak and fruit set. A zinc shortage at this time often results in poor growth of the leaves and new shoots as well as abnormal development of pollen tubes, ultimately resulting in poor seed set.

Have you counted, reassessed pruning severity, and conducted final pruning touches for Gala and NY-1? For Honeycrisp (also Fuji and EverCrisp) you may be able to start by the middle or end of next week to finish precision pruning. We have already entered the right time window from early pink to bloom when it will be easy to identify and count Honeycrisp flower buds per tree. Then you will be able to prune to the target flower cluster number at that time. Call me if you need any assistance with precision pruning of Honeycrisp (especially with situations of very low return bloom as discussed above) or anything else (315-719-1318).

Berry Notes...Esther Kibbe and Janet van Zoeren

Strawberries. The cool temperatures have really slowed development, which is a good thing given that we may experience some freezing temperatures and snow in the next couple days. However, some strawberries are already showing blossoms -- mostly those under row covers or early varieties.

A few notes and reminders:

When to uncover? Research shows that it is best to uncover strawberries ~mid March or early April, despite the potential for minor blossom freezing damage in weeks like this. If you leave the plant covered for too long, it will continue to respire as temperatures warm up (i.e. use carbohydrates), but would be unable to photosynthesize without sunlight striking the leaves (i.e. unable to make carbohydrates). So, if straw is left on too long, it will deplete the plant's carbohydrate reserves and cause potentially serious stress to the plant itself. On the other hand, the likelihood for freezing damage this week, as temperatures dip, is relatively low, and likely to only affect a small percent of the season-long flowers. This is especially true because the cool down has been slow, so plants have had the chance to acclimate to the cooler temperatures.

Advantages. We have a few advantages going into the cold snap this week. For one thing, the wet ground is more likely to hold heat, which can help prevent the plants from desiccating or freezing. Additionally, we are expected to get some snow tomorrow, which could help insulate the plants from the effects of the cold. Snow, unlike ice, will provide an insulating cover for flower buds. Strawberry flowers are most sensitive to frost as they open. Temperature lower than 28°F will cause injury, but when flowers are clustered in the crown they can withstand 22°F as long as it's not for too long.

Frost protection strategies. That said, if you have the option of putting on a floating row cover, or running irrigation during the freezing temperatures, you may wish to do so. Using these tools is insurance against any freeze damage. Watch your weather prediction carefully over the next few days.

Deer. Finally, a reminder that deer are hungry this time of year, and the fresh green foliage of your new strawberry leaves will be very desirable. Deer fencing is generally the best way to keep plants safe from browsing. If that's not an option for you, seek other means to deter them.

Blueberries and Brambles are generally still at a growth stage where they can tolerate cold temperatures, but we may find damage as things develop. I'm sure we will all be out cutting buds to check over the next few weeks.

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.

The Lake Ontario Fruit Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extension Associations in Monroe, Niagara, Orleans, Oswego and Wayne counties.