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Cooperative Extension

Lake Ontario Fruit Program
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"*Fruit Facts*" – Tuesday, May 2nd, 2023

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Bud phenology update

Yesterday we saw more advanced pink stages with cluster separation and more than 40-45% bloom in Idared in inland sites. This morning we feature several cultivars that were photographed from blocks located in Marion close to the intersection of Warner Rd. and Route 21.

The cool temperatures this week will hold back full bloom which likely won't be until Monday, Tuesday, or Wednesday of next week. There were not open kings of RubyFrost, Gala, and Fuji at lake sites yesterday. Honeycrisp clusters were still at early pink and very tight in Williamson and Sodus.

More advanced pink stages and king/lateral blossoms of several cultivars in Marion (Wayne County) by Monday May 1, 2023

Photography by Elizabeth Tee

Apple Scab infection continues through Thursday

We continue to experience rains and winds, making it hard to get and keep a protectant spray on for apple scab. Many growers will need to "clean up" using a product with kickback after the rains end on Thursday/Friday.

Cool temps mean there is negligible risk of fire blight infection this week, even in blocks where blossoms are beginning to open.

Reminder to enroll in the Fruit Facts THIS WEEK!

Are you enrolled for this year's Fruit Facts? We have been providing a few complementary issues this spring, as a reminder to re-enroll if you would like to. These will continue until May 5th. You can re-enroll in with the Fruit Team and for your Fruit Facts subscription at: https://lof.cce.cornell.edu/enrollment.php.

To Do Today

- **Pruning and management of 3-leaders/tree:** Last Friday was a perfect day to evaluate Pink Lady shoot growth at early pink, select leaders, and prune any excessive strong shoots by leaving stub cuts of 3-4 fingers length. Additionally, pruning crew took out (flushed) any excessively strong vertical shoot between the selected three leaders. Pruning of tops removed competitive branches and left/favored open fruiting units with a flower at the tips. Longer fruiting units were left at the bottom to fill up the in-row space between the old trunks. The pruning will be followed by an application of apogee at early pink this spring. Nitrogen won't be applied to the beaver-grafted block in 2023.



- **Pruning with a platform and leaving a narrow top on Honeycrisp trees:** Yesterday Honeycrisp trees were at early pink and 2-3 shoots at the tops were pruned by leaving a 2-3 fingers stub cut. The below sequence shows how an orchard worker made quick/easy pruning cut decisions with the help of a self-steering platform at a speed of approximately 21-36 ft/minute.




- **This is the week to impose/finish the last touches of precision pruning on Honeycrisp at the early pink stage.**

  English - Pruning Guide for Precision Crop Load Management
  A video describing precision pruning, why, how, and when to accomplish it.
  https://www.youtube.com/watch?v=29cF8yOKup0

  Spanish - Guía de Poda para Manejar con Precisión la Carga Frutal (con subtítulos en Español)
  Un video, subtitulado en el idioma español, que describe la poda de precisión, el por qué, cómo, y cuando realizarla.
  https://www.youtube.com/watch?v=8kZYT-7etL4

- **The first step in managing crop load is to establish a target of final fruit number for Honeycrisp and Gala**

  Honeycrisp example:

  - 1,200 bu/acre*80 count / 1,320 trees/acre) = 73 fruits/tree

  Gala example:

  - 1,500 bu/acre*100 count/1,320 trees/acre) = 114 fruits/tree

- **The second step (important this week at early pink for Honeycrisp) is adjust bud load through precision pruning. And also ask your Jamaican and Spanish pruning crews to watch the CCE LOF YouTube videos in English and Spanish – see above!)**

  Honeycrisp example:

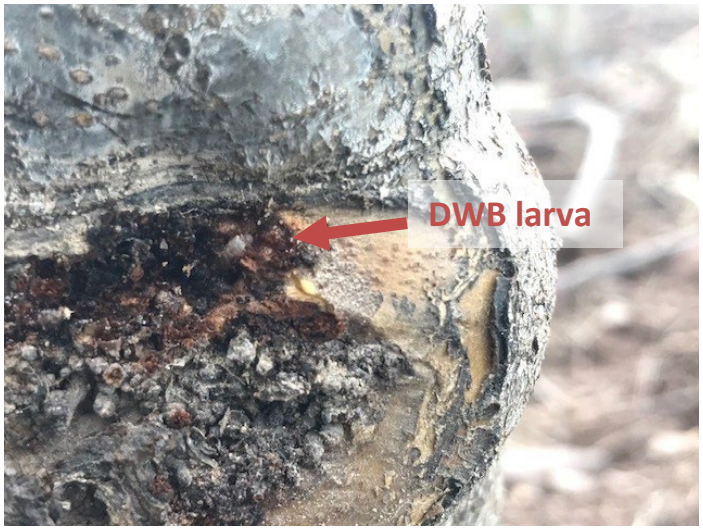
  - Target = 73 fruits/tree x 2 = 146 buds per tree
  - Don't leave more than 200 flower clusters on Honeycrisp!

  Gala example:

  - Target = 114 fruits/tree x 1.5 = 171 buds per tree
  - Don't leave more than 250 flower clusters on Gala!

- **Scout for Dogwood Borer larvae:** dogwood borer is a sporadic pest, most commonly found/problematic in high density plantings on rootstock prone to burr knotting. Historically it has likely been controlled in most orchards through applications of Lorsban. Last summer some larvae were found in hotspots. Currently, the overwintering larvae are in the tree trunks and have not yet pupated, making this ideal timing to scout for larvae and decide if you need to purchase mating disruption for your blocks for this year.

  To scout for Dogwood borer larvae, focus on trees prone to burr knotting and outside edges near woodlots. Look for burr knots that look punky and sunken, and for frass. If you see a burr knot that looks like the picture below, you can use your knife to dig into the frass filled hole, in order to kill the caterpillar inside. As of today, caterpillars were easy to find and were not very deep in the trunks of the trees. If you find more than a couple larvae, you will want to either scout very thoroughly and kill them all using your knife, and/or consider hanging mating disruption by the end of May for DWB.



- **Tarnished plant bug** is here – we have caught tarnished plant bug in monitoring traps in several locations across the region. If you had a history of economically important TPB damage in your blocks last year, consider a pink application this spring. Some highly effective products for TPB include many of the pyrethroids (i.e. Asana, Baythroid, Danitol, Mustang Max, Warrior II, etc) and Beleaf.
- You may also want to consider a **pink insecticide application** if you have a history of damage from **rosy apple aphid**. Some highly effective products for RAA include Exirel, Versys Inscalis, Sivanto Prime, Actara and Assail. If you apply a pyrethroid for TPB, that would also help control RAA. However, we recommend you target RAA with one of these other non-pyrethroid materials, in order to preserve all your beneficial natural enemies.

- **Mites** should also be on your mind in blocks with a history of infestation. Consider applying an ovicidal acaricides (Apollo, Savey/Onager, Zeal), either before or after bloom. Alternatively, you could apply a rescue-type product after bloom (i.e. Acramite, Carzol, Kanemite, Nexter, and Portal).
- **I**f you have any history of S**trep resistant fire blight** on your farm, or if you had **"bad" FB years** the past few years, consider appling prohexadione-calcium (**Kudos, Apogee**, etc.) at 2 oz/100 gal.

Stone Fruits:

- The **brown Rot** management period in stone fruit has begun. Although the optimal range for pathogen development is above 60F, blossom infection can occur at any temperature above 32F. If you have a history of blossom blight, and especially for nectarine growers, rotate fungicides 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).

Blueberries:

- Soil is warming up, so it is safe to apply **sulfur** now to lower the soil pH if it is above 4.5.
- Apply **nitrogen** to blueberries in split applications between April and early July. High rates of N fertilization will increase risk of anthracnose fruit rot.

On The Horizon

Plan to attend a CCE LOF virtual petal fall meeting in the next 8-10 days. More details early next week!

Why is blossom thinning critical for Honeycrisp in 2023?

- Gibberellins produced by the seed of young fruitlets and shoots tips inhibit flower formation for the next year.
- Excessive number of seeds inhibit flower initiation.
- The earlier the target fruit number can be reduced to the target fruit number the greater the likelihood of having flower initiation this season

Time to start getting ready your frost protection devices: Apple growers should check and test the use of frost protection devices (wind machines) next week. 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.

Many folks already have bees in the orchard, and blossoms are starting to open. Remember that some fungicides do have long term toxicity to bees, and that certain products synergize with each other to cause more harm when applied together than when used on their own. For a reminder of which fungicides are most bee-safe, view our "Bloom Pesticides – Relative Toxicity to Pollinators" cheat sheet at https://rvpadmin.cce.cornell.edu/uploads/doc_870.pdf.

Blueberries are approaching bloom. If the planting has a history of anthracnose, botrytis, or mummy berry, apply a fungicide during bloom. Softer products like Double Nickel (LC or 55) will control all three diseases, as will OSO 5% SC Fungicide.