



**“Fruit Facts” – Friday, April 21<sup>st</sup>, 2023**  
**Mario Miranda Sazo and Janet van Zoeren**

**Apple Scab infection event this weekend!**

A fairly significant **apple scab infection event** is forecast for this weekend, with the most spore release predicted for Saturday. Across most of the region, rains are forecast to begin this afternoon/evening into Saturday morning. Check your weather forecast and be sure to cover up as many blocks as possible prior to the rain.

Consider applying **Captan/Mancozeb mixed with a SI or SDHI**. As buds are mainly around tight cluster / early pink, this is a good time to mix in a fungicide that will also help control powdery mildew. A few products with some efficacy against PM or the summer rots, along with kickback action for scab, includes Cevya, Luna Tranquility, Luna Sensation, Flint, Fontelis, Merivon, Syllit, Rally, Rhyme, Inspire Super, Tesaris, Miravis, and Aprovia. Check the Recommends for a full list of products that are effective against scab, PM, cedar apple rust and summer rots, depending what diseases you have a history with.

Note that for a fire blight infection to occur at this time, you need open blossoms on the farm. To my knowledge, there are no open blossoms in our region yet!

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**The Statewide Virtual Pink Meeting recording is now available on our YouTube channel at:**

<https://youtu.be/qKiTN6rzhS0>

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**Black stem borer flight begins**

**Black stem borer** flight began last week, about a week earlier than last year and with much higher initial trap catch numbers. My gut feeling is that this may be a worse year again for black stem borer, although I hope I am wrong. If you have a history of BSB damage, if you get a window where temperatures are above 60F (black stem borer does not fly at lower temps), you may want to consider applying an insecticide this spring. However, balance that recommendation with considerations of pesticide residue during bloom and potential damage to pollinators – please give me a call if you’d like to discuss cost/benefits of a bsb application this spring. Labeled for use against BSB are the pyrethroids Danitol 2.4EC and Warrior II 2.08CS. Use care applying pyrethroids, as they may suppress natural enemy populations and cause secondary pest outbreaks.

***To Do Today***

- Consider applying **Captan/Mancozeb mixed with a SI or SDHI** for apple scab control. Make this application as late in the day today as you can, immediately before the rain. Don’t use Captan if you’ve applied oil in the past 10 days.
- **Recent statewide pink virtual meeting:** We had a very successful statewide pink zoom meeting this past Wednesday and all presentations are now posted on our CCE LOF YouTube channel.

- **Have you counted, reassessed pruning severity, and conducted final pruning touches** for Gala and NY-1? For Honeycrisp (also Fuji and EverCrisp) you should be able to conduct/finish precision pruning by the end of this or early next week. Soon we will be entering the right time window from 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 low return bloom) or anything else (315-719-1318).
- **Promalin use to improve shape (typiness) of Delicious and Gala:** Use promalin (concentration 25-50ppm; rate of formulated product 1/2pt/100 gal) early king bloom to 50% bloom (well before full bloom!). Apply as a fine mist using 50-100 gallons/acre. Don't apply more than 2 pt/acre. Fruit thinning may occur at high rates. Use of a surfactant increases both typiness and thinning responses.
- **Start planning the use of Apogee at pink for suppression of bitter pit in Honeycrisp – do you have enough product?**
- **Pruning of peaches:** You should prune off 1/3 to 1/2 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.
- **Stone fruit planting:** We recommend that all stone fruit be planted on 12-18 inch high berms. Stone fruit trees are not very water tolerant and the additional height gives more depth to the water table especially perched water tables that occur in the spring and fall. In addition, root growth is thought to be improved by providing additional oxygen provided by berming.
- **The benefits of a pre-bloom boron foliar application are:**
  - (1) the spray provides boron to the flower during the critical period of development of the ovules and anthers.
  - (2) improves pollen germination and pollen tube growth.
  - (3) improves early season leaf and shoot growth.
  - (4) is also beneficial in overcoming the effects of winter injury or early spring frosts.
  - (5) a prebloom application of zinc can also help to stimulate early bud, leaf, and shoot development.
  - (6) 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.
- **Do the right things after planting of new trees:** Weather and soil moisture conditions were good for planting yesterday.
  - soak tree roots before planting
  - be sure you plant with at least 4 to 6 inches of rootstock out the ground (avoid scion-rooted trees)
  - adjust graft unions carefully at planting, and pack soil around trees thoroughly
  - water trees in with a starter solution (soluble 20-20-20 fertilizer)
  - apply 1/4 lb of Calcium nitrate per tree after a significant rain or irrigation has ensured that the soil has settled tightly around the tree roots (this protects the roots from direct exposure to the fertilizer that may burn the roots).
  - apply another 1/4 lb Calcium nitrate per tree 4 weeks later after shoot growth starts
  - apply herbicides after the new planting has had a settling rain for better weed control results
- **Plan to score/girdle with the use of a double-bladed clipper plus Maxcel or Promalin to promote bud-breaks:** In the last few years, we have emphasized the importance of scoring and girdling for blind wood sections. These techniques temporarily interrupt the movement in the phloem (carbohydrate and hormone balance). Better results have been achieved if these techniques are performed with a **double-bladed clipper** or a small saw (wounds can heal a couple weeks later). These cuts can promote bud-break and enhance vegetative growth. The techniques should be applied in spring (green tip stage) the first year. Better results have been achieved if techniques are applied in the second year after planting when the root system is well established. Scoring/girdling should be followed with a directed spray of a PGR (Promalin, Maxcel).

### Other important reminders:

- **Don't take/submit soil samples if they are too wet for soil sampling.** It is better to wait until the middle/late in May, or, even better, to sample in the Fall (don't sample in the middle of the summer when soils are too dry)
- **You can still buy a relatively inexpensive weather station** (RainWise, Onset) and connect to NEWA in the next few weeks...
- **Are you familiar with the Apple Pollen Tube Growth Model, Fruit Growth Rate Model, and the Apple Precision Chemical Thinning Model** in NEWA? Please contact CCE LOF before bloom!
- **Plan early spring lime applications for established plantings** where necessary and if possible
- **Check soil analysis for lime and fertilizer needs**, and plan to **establish berms** for stone fruit plantings
- **Study last year's leaf analysis** and correlate to growth and vigor of each block for coming foliar application of nutrients
- **What will you be doing to better manage K/Ca levels in young and established 'Honeycrisp' orchards this year?**
- **Are you getting ready for early Calcium sprays** on 'Honeycrisp' this season? Do you have enough product?
- **Don't forget to order your Promalin, Maxcel, and Apogee materials!**
- **Count, count flower buds at the pink stage, before finalizing precision pruning for Honey!**

## On The Horizon

If you experienced a fire blight outbreak last year, consider an application of Apogee this year at pink. This is especially important on farms where Strep Resistant *Erwinia* has been found in the past. A **pink application** of prohexadione-calcium (**Kudos, Apogee, etc.**) at 2 oz/100 gal mixed with 1oz /100 acibenzolar S-methyl (Actigard) will both slow vigorous growth of the tree, but maybe even more importantly will thicken the cell walls making it more difficult for *Erwinia* to colonize.

**Suggested vegetative growth control strategies for mature 'Honeycrisp' blocks with very low return bloom or non-existent this spring:** I have visited a few 'Honeycrisp' blocks with very low return bloom or almost absent. If this is your situation, you can consider the following recommendations.

- **Delay the final pruning cut decision** of any large branch (1-2 branches/tree) until bloom or right after.
- **Reduce or eliminate the application of nitrogen.** The soil will generate enough N through the breakdown of organic matter.
- **Apply Apogee at pink** (probably early next week) – 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.

### **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.

**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.

### **Start planning or continue the annual maintenance of your trellis system:**

1. Replace broken and weakened posts (see pics taken in a mature Honeycrisp block yesterday)
2. Re-pound anchors and in-line posts that have heaved.
3. Straighten leaning posts.
4. Check and replace pulled staples especially those at stress points where wire changes direction.
5. Readjust wire tension before this year crop.