"Fruit Facts" — Tuesday, April 4th, 2023 Mario Miranda Sazo and Janet van Zoeren

We're approaching green tip and are now beginning weekly Fruit Facts issues. We look forward to the growing season! Please notice our new Fruit Facts format – instead of dividing pest and horticultural management issues separately, we will now include those together, and will divide the document into tasks you need "to do today" vs items "on the horizon" that you may want to start planning for now.

We hope this format works for you and always welcome any feedback!

Using Craig's most recent bud break forecast (sent yesterday via an email blast), we estimate that **green tip in apples** in early sites will be on **April 11-12** (early cultivars) and on **April 14-15** (all other varieties). For the later sites, green tip dates look to be **April 13** (early cultivars) and **April 15** (all other varieties).

To Do Today

- Are you enrolled for this year's Fruit Facts?
 We're providing a few complementary issues this spring, as a reminder to re-enroll if you would like to. You can reenroll in with the Fruit Team and for your Fruit Facts subscription at: <u>https://lof.cce.cornell.edu/enrollment.php</u>.
- If you need to send anyone for the "Special Permit" handlers course to be able to apply certain restricted use pesticides, those courses will be offered in person on April 11th (Wayne county) and April 12th (Orleans county).
 The prices increases after today, and registration will close on Friday this week!
- Call your nurserymen! Check your nursery orders, including tree numbers, tree quality, and delivery rates.
 - As soon as your tree order arrives, open the boxes, including the interior plastic wrap, inspect the trees for trueness. This process also helps air them out and gives you a chance to water the roots if they appear to be drying.
 - Storing of trees for the 2023 planting season: The optimum storage temperature is 33-35°F although trees can tolerate slightly less than 32°F or warmer temperatures up to 45-50°F. At warmer temperatures trees can begin to break bud before they can be planted this spring. Another important storage requirement is to avoid ethylene gas. Trees should not be stored in the same room with apples.
 - If a cooler is not available for the new trees, find the coolest place you have and keep the roots moist until planting is possible in your area.
- Check your **pesticide inventory** and make sure you will be able to source any products including herbicides that you will need this summer.
- Study last year's leaf analysis and correlate to growth and vigor of each block.

Pome Fruits.

- **The digging of on-farm nursery trees began last week:** The weather and soil conditions were appropriate for digging of several hundred trees with machines in Wayne.
- End of the window for collection of budwood: Given the predicted green tip dates of Apr 11-15 (see above), we are quickly approaching the end of the window for collection of budwood while it is fully dormant for any top-, side-, or beaver-grafting project you may plan this coming season. If this is the case, you should collect new growth "one-year wood" from the past season.
 - The best budwood: The best wood is located at the ends on the branches or tops of the trees often near a pruning cut from the prior season. If you look at the terminal growth of a limb, it is the newest growth from above the growth ring where the prior year's terminal bud was. Wood to the "south" of this growth ring is not desirable as those buds are very dormant, dead or have grown into fruiting spurs.
 - Avoid the spurry wood! It is undesirable and usually can't be used.
 - Cut dormant wood about 8-12": Wrap with a damp paper towel or damp newspaper and wrap with plastic to keep it from drying out. You can store budwood in a labor camp refrigerator with the temperature turned all the way down. Freezing temperatures at or just below 32°F will not harm fully dormant wood but will prevent the development of mold.
- Preparing to graft in the orchard: Tree tops should be removed and ready for spring grafting at the latest this week.
 The majority of the top should be removed first so that the large quantity of brush can be removed. The fresh cut will be made the day of grafting to create a smooth fresh cambial interface.
- 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.
- Feed grade urea will help reduce disease inoculum in your pome and stone fruit orchards any time after snow is off the ground until silver tip. Make the urea application with nozzles directed at the ground to speed up leaf litter decomposition. This will reduce inoculum and give you a huge head start for control of apple scab, Marsonina blight, cankers, and fruit rots. Apply urea at 40 lbs. in 100 gal/A. and rinse the sprayer with water afterwards to prevent corroding the sprayer pump.
- **No** apple scab infection events are predicted in our region in the coming week.
- This week looks like a good window for dormant oil sprays, which can be applied any time between now until ½" green (below freezing temperatures in the two days prior or two days after oil application can damage tissues). The 2-3% oil application will help with mites, San Jose scale and pear psylla.
- Be sure to subscribe to receive the new Scaffolds podcast! You can listen on your desktop on the Spotify webpage (<u>https://open.spotify.com/show/5WscL4QHbFJudltdLBRIR9?si=f6dc8ad9a33d45d9</u>) or search for it on your podcast platform.

Stone Fruits.

- Feed grade urea will help reduce disease inoculum in your pome and stone fruit orchards any time after snow is off the ground until silver tip. Make the urea application with nozzles directed at the ground to speed up leaf litter decomposition. Apply urea at 40 lbs. in 100 gal/A. and rinse the sprayer with water afterwards to prevent corroding the sprayer pump.
- A dormant or delayed dormant treatment with copper can help reduce **bacterial canker** inoculum in cherries.
- Peach leaf curl control is built upon a single dormant fungicide application; it will be much more difficult to play catch-up if you miss this application. Fungicides labeled include chlorothalonil (i.e. Echo), metallic copper (4 8 lbs per acre), Ferbam (4.5 lbs per acre), or Ziram (3 ¾ 8 lbs per acre). Copper products will also provide some suppression of peach bacterial spot. Avoid copper if below freezing temps occurred or are predicted to occur within 48hrs.

On The Horizon

General Reminders:

The incorporation of adequate amounts of lime prior to planting a new orchard is ESSENTIAL: Please keep in mind that all the lime requirement obtained on a soil analysis report or from any lime table is at 100% ENV (Effective Neutralizing Value). To convert that to an application rate of a specific lime material, the lime requirement at 100% ENV must be divided by the ENV of the lime material. For example, if the lime requirement at 100% ENV is 3.5 tons/acre, the actual application rate for a lime material that has an ENV of 70% should be 3.5/0.7 = 5 tons/acre. The topsoil (0-8 inch depth) should be adjusted to pH 7 and subsoil (8-16 inch depth) to pH 6.5. An adequate liming program based on soil tests should be the first consideration in developing orchard fertilization programs. Before planting correct pH, phosphorous and potassium.

Pome fruits:

Silver tip through green tip. A "delayed dormant" silver-tip application of a high (>15%) metallic copper equivalent (MCE) **copper** fungicide (e.g. Badge, Kocide, Cuprofix) will help clean up any **apple scab** and **fire blight** inoculum that overwintered in bud scales and will provide an early protection against ascospore release for the following 7-10 days. Avoid applying copper if below freezing temps occurred or are predicted to occur within 48hrs.

½" green. Dormant **oil sprays** should go on by ½" green, and similarly to copper should not go on if below freezing temperatures occur in the two days prior or two days after application. A 2-3% dormant or delayed dormant oil will help with **mites**, **San Jose scale** and **pear psylla**. A reduced rate application could go on until pink.

Green tissue. Apple scab infection potential begins when there is green tissue present in your orchard. Unless you: a, have green tissue present, b, had high apple scab pressure last year, and c, are growing a highly susceptible cultivar (see https://blogs.cornell.edu/applevarietydatabase/disease-susceptibility-of-common-apples/), we recommend <u>not</u> to begin scab control yet this season. Read more about scab infection updates at the Cox lab blog: https://blogs.cornell.edu/coxlab/category/disease-forecasting/

Think twice when planning to graft an old block to 'Honeycrisp' in 2023: Grafting to Honeycrisp has been problematic especially in more vigorous rootstocks with very fertile soils. This condition produces an unbalance between the bottom (big root system) and the top (new grafted cultivar). Vigorous re-growth and too much nitrogen of the scion wood can contribute to a delay in early production, fruit quality issues, and bitter pit incidence. Our current research findings indicate that high peel N/Ca ratio (>10) can affect overall fruit quality and a high peel SAP K/Ca ratio (>25) can increase bitter pit. A grafted Honeycrisp block can be a challenge even on a dwarfing stock and for an experienced WNY fruit grower. Prefer planting a new orchard instead of grafting to avoid fruit quality issues and incidence of bitter pit. Think twice when planning to graft an old block to Honeycrisp in 2023.

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 2023. 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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