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Cooperative Extension

Lake Ontario Fruit Program
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"*Fruit Facts*" – Tuesday, March 25th, 2025

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Don't Forget to Sign Up for the 2025 Fruit Facts!

Please make sure to sign up for a Fruit Facts subscription when you enroll in our program via your county office, if you wish to continue to receive Fruit Facts this year. In addition, there were some issues with emails bouncing last year, so if you do not receive any Fruit Facts newsletter next week, and think you should be receiving them, please reach out to Liz Tee asap (emt44@cornell.edu).

Respirator Fit Testing April 17th in Wayne County

If you live in Wayne county, there will be a fit testing clinic for you on April 17th in Pultneyville. There are still time slots available between 10am-3pm.

You must register before April 8th by contacting Janet van Zoeren at 585 797 8368 or jev67@cornell.edu.

You will receive a respirator medical certification, fit testing and training on the proper use of respirators for each applicant.

- $90 per person, checks can be made out to 'Finger Lakes Occupational Health Services'
- Must have a respirator with clean particulate filters for each person
- Individuals must be clean shaven where the respirator seals to the face.
- Paperwork can be requested ahead of time at Donna_Lawrence@URMC.Rochester.edu , if completing paperwork at the clinic arrive 10-15 minutes early to complete paperwork. Paperwork is also available in Spanish.

Phenology Updates

Phenology Update for Tuesday, March 25:

Over the past week, bud development saw **the first signs of green tip in NY-2** (RubyFrost) on Friday March 21 and yesterday (Monday, March 24). See next composite of pictures (Photo credits: Liz Tee).

Early apple bud phenology stages in Orleans blocks visited on Friday March 21 and yesterday (Monday, March 24).

First evaluations of vegetative buds versus floral buds on Honeycrisp: A quick evaluation of several branches on several trees found in site 1 (30% vegetative versus 70% floral), at site 2 (72% vegetative versus 28% floral) and at site 3 (49% vegetative versus 51% floral).

To Do Today

- 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 7th (Wayne county) and April 9th (Orleans county). Register today by following the above links.
- Any blocks that have reached green tip begin to have a risk of apple scab infection events. So far, the NEWA model is showing low (~1%) spore release, but in a high pressure block that can still be a large infection event. Base your decisions on: amount of green tissue showing, historic scab pressure, and your personal tolerance for some foliar scab. Consider a copper application is your block warrants a cover spray. Watch for frequent upcoming Fruit Facts issues as we progress further into green tip at more sites.
- Record green tip dates at several blocks/varieties around your farm, to use in the NEWA models this summer.

On The Horizon

New Preplant and Maintenance Soil Preparation Recommendations for Maximum Honeycrisp Tree Performance (remarks presented by Dr. Terence Robinson at the recent Honeycrisp intensive school in Syracuse).

Soil targets for Honeycrisp:

Soil pH

- Raise pH to 7.2-7.3
- Soil organic matter
    - 2-3% Organic matter
    - Every 1% of organic matter generates about 20 lbs N per year
    - Soils high in organic matter (>4%) will have greater tree growth but more bitter pit
- Soil Ca content
    - Target 5,000-6,000 lbs per acre
- Soil K content
    - Soil K content should be 15-20X lower than Ca content.
    - In the past we have suggested that the ratio of Ca:K of the soil should be at least 15:1
    - For Honeycrisp, we suggest the ratio of Ca:K should be 20:1
    - High K content results in large fruit size but high bitter pit
    - Most corn growers put on little K so planting Honeycrisp on corn ground is often desirable

Target of 5,000 to 6,000 lbs of calcium per acre for Honeycrisp:

- High Ca content in the soil will help ensure that the maximum amount of Ca will be deposited in the fruit (depending on the many factors that influence Ca uptake and movement into the fruit each year).
- Since both K and Mg are involved in high incidence of bitter pit, it is desirable to apply only calcitic lime ($CaCO_3$) to Honeycrisp blocks (avoid dolomitic lime which has Mg).

Maintenance plan for soil calcium:

- The pre-plant loading of the soil with Ca will last for several years.
- To maintain soil Ca levels at 6,000 lbs/acre, add 1-2 tons of calcitic lime every 2-3 years beginning in year 4.

Target of soil K or Mg content per acre should be 15-20X less than Ca:

- If Ca content is raised to 6,000 lbs /acre then K or Mg should be ~300 lbs/acre

Other recommendations for pre-plant soil modification:

- Add P preplant as Mono Ammonium Phosphate ~125 lbs MAP
- MAP is 52% P_2O_5 thus 125 MAP=65 lbs P_2O_5
- Other elements such as B and N can be added as a part of the annual fertilization

Conclusions:

1. Apple trees grow very well at pH's above 7.0 We suggest a target pH of 7.2-7.3.
2. Lime applications before planting can be plowed down and are more effective than lime applications after planting (Ca as lime moves down in the soil about 1 inch per year)
3. Target 5,000-6,000 lbs of Ca /acre
4. Apply ~60 lbs of P before planting and plow it down since P moves very slow in the soil.
5. Apply K sparingly if needed.
6. Add 1-2 tons of lime every 2-3 years beginning in year 4.