



Maine Tree Fruit Newsletter

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Apple Thinning

Highmoor Farm apple trees are in the early fruit set stage and are showing signs of good fruit set of king bloom. The forecast indicates warm weather beginning Thursday and extending through next week, so chemical thinning can be expected to work if applied before or during this warm spell. Orchards where the temperature dropped below 29 °F should use less aggressive rates of thinner. At Highmoor Farm, fruit look strong with no sign of freeze damage, but nearby, freeze damage is visible in a few weeds. Orchards in the northern regions of the state should be at petal fall soon. Examine fruit and foliage for signs of freeze damage and postpone thinning until fruit set is more obvious. The calyx at the tip of the fruitlets will fold over the end of the fruitlets that have “set”. In contrast, the calyx will extend out at an angle from the fruit if they have not “set”.

Carbaryl, NAA, and BA work during early fruit set, but become ineffective when fruit reach a diameter of 15 mm (0.7 inches). After this, ethephon may be effective for thinning, but has not worked consistently and is considered a “last chance” thinner.

For variety-specific recommendations and rates for each chemical, refer to the Tree Fruit Guide chapter on chemical thinning:

<https://netreefruit.org/apples/plant-growth-regulators/apple-fruit-thinning>

Pears

Pears can be thinned with NAD, NAA or BA. For rates of each and product names, refer to the Tree Fruit Guide section on thinning pears:

<https://netreefruit.org/pears/fruit-thinning-branching-and-stop-drop>.

Predicting Thinner Efficacy

To monitor how well a thinner is working, repeatedly measure fruit diameter on a number of fruit in each orchard. Fruit that have been effectively thinned will not grow as much as fruits that will persist. Seven days after application, they stop growing. This method was developed by Duane Greene, and a website with a spreadsheet that does the calculations was developed by Phil Schwallier and Amy Irish-Brown. It is available online at:

<https://www.canr.msu.edu/uploads/files/PredictingFruitset1-21-14.pdf>

Apple Scab

If the light showers showing as possible in the forecast for Wednesday June 3 actually occur, they do not look to bring enough rain to either release all of the available ascospores, and if light and short-lived, may not foliage wet enough to initiate scab infection. The forecast shows most orchard locations in Maine receiving real rain on Saturday night – Sunday morning June 6 – 7. Normally that would be the last significant primary scab infection period of the year. However due to the prolonged dry conditions, scab maturity may be lagging behind the normal correlation with apple tree development. That may result in a final batch of apple scab ascospores being released with the next rain after June 7.

Plum Curculio

A key apple, peach, and plum pest at this time is plum curculio. Temperatures on Wednesday June 3 are on the cool side for PC activity. As temperatures rise on Thursday and Friday, June 4 – 5, PC activity will increase, especially in orchards where fruit diameter is exceeding 8mm. Saturday and Sunday June 6 – 7 bring both warmth and the overcast, humid conditions PC prefer AND by then apples in Maine orchards will be over the minimum diameter threshold for PC egg-laying. Therefore, some insecticide coverage, including carbaryl used as thinner, should be in place by Saturday night.

Disinfectants for COVID-19 sanitation

There are currently no EPA-registered disinfectants that specifically include the SARS-CoV-2 virus on the product label. The EPA has a list of products that control the virus at <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

That list is easier to sort when the data are in an Excel file, a copy is attached to the newsletter email message. It is sorted by Contact Time required to kill virus, then by Brand name. But you can sort it any column you choose.

The EPA page has links to additional resources, including:
a two-page Cleaning and Disinfecting Decision Tool at <https://www.epa.gov/coronavirus/guidance-cleaning-and-disinfecting-public-spaces-workplaces-businesses-schools-and-homes>

and a 9-page “Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools and Homes” at https://www.epa.gov/sites/production/files/2020-04/documents/316485-b_reopeningamerica_combo_placard_infographic_4.19_6pm.pdf

 The text below is from a factsheet published by the National Pesticide Information Center, which is attached to the newsletter email.

Porous	Semi-porous	Non-porous
Bedding and pillows Carpeting Ceiling tile Clothing and fabrics Leather Mattresses Upholstered furniture Wall insulation	Concrete Drywall Hardwood floor Linoleum Tile grout Wood	Glass Metal Some sealed countertops Some tiles

Using products effectively:

- To kill the virus, the surface must stay wet for the entire time on the label. Look for “contact time” or “dwell time”.
- Surface wipes can dry out during use. They must remain wet to be effective.
- Each product has only been shown to work where the label says it can be used. Look for “use sites” on the label.
- Disinfectants may not work on all surfaces. Follow the label carefully. Examples of surface types are listed in Table 1 below.
- “Cleaning” wipes do not kill viruses. They do not make claims to disinfect and are not registered by the U.S. EPA.

Consider these steps to reduce your risk when using disinfectants:

- To avoid chemical exposure when using disinfectants, follow the label’s “precautionary statements”. If no label guidance is provided, consider wearing gloves, eye protection, shoes with socks, and long sleeves/pants.
- Keep children, pets, and other people away during the application until the product is dry and there is no odor.
- Open windows and use fans to ventilate. Step away from odors if they become too strong.
- Wash your hands after using any disinfectant, including surface wipes.
- Keep lids tightly closed when not in use. Spills and accidents are more likely to happen when containers are open.
- Do not allow children to use disinfectant wipes. Keep cleaners and disinfectants out of reach from children and pets.
- Throw away disposable items like gloves and masks after use. They cannot be cleaned.
- Do not use disinfectant wipes to clean hands or as baby wipes.

In addition to the Maine Board of Pesticides Control, the NPCI also answers questions about disinfectants and other pesticides: 1-800-858-7378 12:00am - 4:00pm EDT) email: npic@ace.orst.edu, web: npic.orst.edu

Respirator PPE Shortage

The EPA has released temporary guidance on “Respiratory Protection for Agricultural Pesticide Handlers During COVID-19”

“EPA has heard from states and stakeholders about Personal Protective Equipment shortages in the agricultural sector. To respond to these reports and to help ensure the health and safety of America’s farmers, EPA is providing temporary guidance regarding respiratory protection requirements for agricultural pesticide handlers. Our guidance aligns with recent OSHA memos on respirators while addressing EPA’s responsibilities under FIFRA and the Agricultural Worker Protection Standard (WPS).

The **temporary** guidance outlines approaches to address the unavailability of required respiratory protection and respiratory fit testing that should **first be exhausted before considering any alternative options**. Options include:

- Use alternative NIOSH-approved respirators offering equivalent or greater respiratory protection than those required on the pesticide label;
- Hire commercial applicator services with enough respirators and respiratory protection capabilities;
- Use agricultural pesticide products that do not require respirators; or
- Delay pesticide applications until another compliant option is available.

If the above options are exhausted, EPA’s guidance provides additional options with strict terms, conditions, and exhaustion requirements to minimize potential incremental risks to workers:

- Reuse and extended use of disposable N95 filter facepiece respirator;
- Use of “expired” respirators;
- Use of respirators certified in certain other countries or jurisdictions meeting protective conditions outlined; or
- Delay the annual respirator “fit test.”

This is a temporary policy. EPA will assess the continued need for and scope of this temporary guidance on a regular basis.”

The full EPA statement is online at <https://www.epa.gov/sites/production/files/2020-06/documents/covid19statementrespirators.pdf>

Pesticide Applicator Recertification

The Board of Pesticides Control is offering testing to acquire Pesticide Applicator licenses. They have four sessions every Wednesday. Private applicators may also take exams with an inspector if they prefer. Contact the BPC for details (207) 287-2731.

Closing Words

"If I ran a school, I'd give the average grade to the ones who gave me all the right answers, for being good parrots.

I'd give the top grades to those who made a lot of mistakes and told me about them, and then told me what they learned from them."

~ Buckminster Fuller

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