



Fruit Update – 5/23/24

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Thinning:

Carbohydrate Model:

There have been lots of questions rolling in about thinning this week. Just to reiterate, temperatures over 70°F are great for thinning.

For those of you who are worried about overthinning, this model will let you know when you are in danger of overthinning (See *image below*). If anyone is unsure, I'm happy to run the models for you and let you know what they say about your specific location and conditions. You'll need to provide your green-tip date, bloom date, and percent flowering spurs. The model can be found at: <https://nwa.cornell.edu/apple-carbohydrate-thinning/>

Date (2024)	Max Temp (°F)	Min Temp (°F)	Solar Rad (MJ/m2)	Tree Carbohydrate Status (g/day)		Accum 4°C DD since bloom ≥ 200 & ≤ 250	Thinning Recommendation L = Low Risk of Overthinning C = Caution D = Danger of Overthinning
				Daily	6-Day weighted average		
May 16	62	55	6.7	-67.14	-50.87	194.6	Thinning Rate by 30% C
May 17	74	53	18.3	-40.15	-39.13	208.1	Decrease Chemical Thinning Rate by 15% L
May 18	59	51	5.6	-53.37	-32.2	216.9	Decrease Chemical Thinning Rate by 15% L
May 19	68	54	11.5	-47.14	-30.64	228.9	Decrease Chemical Thinning Rate by 15% L
May 20	78	52	25.6	-12.59	-27.13	243.3	Decrease Chemical Thinning Rate by 15% L
May 21	83	53	25.5	-17.61	-20.7	259.3	Apply Standard Chemical Thinning Rate L
May 22	86	58	27.3	-20.45	-15.83	277.3	Increase Chemical Thinning Rate by 30% L
May 23	79	62	11.4	-57.48	-13.02	294.8	Increase Chemical Thinning Rate by 30% L
May 24 Forecast	81	62	24.8	-7.93	-6.86	312.8	Increase Chemical Thinning Rate by 30% L

Notes on Sevin [Carbaryl] Usage (from the label):

Rates: 1-3 quarts per acre. Carbaryl is for use in fruit up to 16mm in size. Higher rates should be used for you hard to thin varieties, but only early on, up to 6 mm in size. Lower rates should be used for the easier to thin varieties and can be used when fruit is 10-16 mm in size.



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Climatic Factors: For best results, applications should be made under good drying conditions, with daytime temperatures between 70 and the low 80's for the following three days. Applications made when temperatures are in excess of 80°F.

Notes on Fruitone [NAA] Usage (from the label):

Varieties	Thinning Rates	Application Timing
<u>Easy-to-thin:</u> Braeburn, Cortland, Empire, Ginger Gold, Paulared, Idared, Jonathan, Northern Spy, McIntosh, Red Delicious, Winesap and others.	5-10 ppm	Petal Fall (3-7 mm) and/or early fruit set (8-10 mm) Use lower concentrations for weaker trees, cooler weather, less food reserves and lower fruit set potential and slow drying conditions.
<u>Moderate-to-thin:</u> Jerseymac, Rome, Jonamac, Spartan, Gala, Mutsu and others.	10-15 ppm	
<u>Difficult-to-thin:</u> Fuji, Golden Delicious, Lodi, Wealthy Spur Delicious, Macoun, York, Rhode Island Greening, York Imperial and others.	15-18.6 ppm	

Notes on tank Mixing Sevin and Fruitone (from the label):

“Tank mix combinations of Fruitone N (5 to 7.5 ppm) and Carbaryl (e.g. Sevin® 4F and Sevin® XLR Plus) have successfully thinned several early maturing, heavy-setting varieties as well as hard-to-thin apple varieties. A petal fall application of Fruitone N followed 7 to 10 days later by an application of Fruitone N (5 to 7.5 ppm) + Carbaryl (0.5 lbs. AI per 100 gallons) has improved thinning of hard-to-thin apple varieties. Fruitone N should not be mixed with any product containing a label restriction against such mixing. Always apply in accordance with the limitations and precautions of the most restrictive label.

Another Great Thinning Resource for WSU:

I found this resource helpful when fielding some of your questions. It has a lot of good information condensed and organized for your review. [Check it out here.](#)

Petal Fall & Insect Pests:

Petal fall is one of the most critical times for insect pest control in our apple blocks. Some of our main target insects currently are Plum Curculio, European Apple Sawfly, Rosy Apple Aphid, and Oriental Fruit Moth. However, what we spray for should be informed by what we find while trapping/scouting. Below are some recommendations of materials rated as having **High Efficacy** for each of these pests:

- Plum Curculio – Imidan, Actara, Avaunt eVo, Exirel, Verdepryn, and Voliam Flexi
- European Apple Sawfly – Imidan, Actara, and Altacor



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- Rosy Apple Aphid – Admire Pro, Assail, Exirel, Voliam Flexi
- Oriental Fruit Moth – Imidan, Assail, Delegate, Altacor, Exirel, and Voliam Flexi
- San Jose Scale – Movento
- Leaf Rollers – Delegate, Entrust, Proclaim, Dipel, Exirel, Altacor, and Voliam Flexi

For more information on materials and rates, please consult the [New England Tree Fruit Management Guide](#).

Apples:

Codling Moth first capture was last week. CM egg laying begins 220 DD after first capture, which is about next Monday/Tuesday. At 250 DD post first capture, your first spray should be applied to control this pest, especially if you have had an issue with this pest last year.

DATE (2024)	Degree Days (base 50°F BE)		
	DAILY	FROM JAN 1	FROM MAY 15
May 21	18	361	81
May 22	22	382	103
May 23 Forecast	21	403	124
May 24 Forecast	22	425	146
May 25 Forecast	18	443	164
May 26 Forecast	19	462	183
May 27 Forecast	17	478	200
May 28 Forecast	17	495	217

Options for control:

- Exirel is rated as having excellent efficacy against CM (also rated excellent against Plum Curculio)
- Altacor is great for those of you with established populations.
- Volum Flexi is also rated highly for CM (and PC).

For more information on materials and rates please visit the [New England Tree Fruit Management Guide](#).



Grapes:

Early Fungal Infections: Now that we have green tissue out on our grapes, they are susceptible to early infections of various fungal pathogens. Given the right climactic conditions, infection will occur. To help understand what these conditions consist of, NEWA has a neat [Grape Disease Model](#) for Phomopsis, Powdery Mildew, and Black Rot (see below).



This picture is likely early Anthracnose or Phomopsis. For information on rates and materials please visit the [NE Small Fruit Management Guide](#).

DATE (2024)	PHOMOPSIS	POWDERY MILDEW	BLACK ROT
May 21	No	No	No
May 22	No	No	No
May 23 Forecast	No	No	No
May 24 Forecast	No	-	No
May 25 Forecast	No	-	No
May 26 Forecast	No	-	No
May 27 Forecast	No	-	No
May 28 Forecast	No	-	No

Phomopsis - calculates when weather conditions may allow spores to infect susceptible tissue.

Powdery Mildew - calculates primary infection when weather conditions may allow overwintered, primary spores (ascospores) to infect susceptible tissue; runs from bud break until pre-bloom. Once primary infections have occurred, secondary infections (disease spread) are possible every day. The threat is greatest when temperatures are between 65 to 90 degrees F and is particularly high when conditions are cloudy.

Black Rot - calculates when weather conditions may allow spores to infect susceptible tissue.



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Irrigation Pond Survey

A colleague of mine is looking to investigate the challenges of aquatic weed and invasive plant management in irrigation ponds. Through my conversations with some of you, I've heard that managing the weeds in and around irrigation ponds can be quite troublesome. If you have issues with weeds in your ponds or have a pond that you use for irrigation, please consider answering these few questions.

[Please use this link to fill out the very short \(2 min.\) survey.](#)

The CT Pomological Society and UConn Extension are holding a field day, hosted by **Holmberg Orchards**.

Date: **Tuesday, June 11**

Time: Equipment demonstrations beginning at **4 pm**

Address: 12 Orchard Lane, Gales Ferry CT

Demonstrations (including a self-leveling platform, hedger and more), check out what and how the Holmbergs are growing fruit, and information tables beginning at 4 pm, followed by dinner and a short educational meeting and pesticide credits.

The field day and dinner are **FREE**, however, we need a headcount for the dinner. Please RSVP [here](#).

We look forward to seeing you June 11!

If you would like to have a vendor/information table or demonstrate equipment, contact Mary Concklin at mary.concklin@uconn.edu

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