

Integrated Pest Management Program Department of Plant Science and Landscape Architecture UConn Extension

Fruit Update: April 20, 2022

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Blueberries are at bud burst to late tight cluster, location and variety dependent. There is no problem with the cold temperatures expected tonight/tomorrow morning. Blueberries can tolerate temperatures down to 23°F at TC.

Stone Fruit are in bloom, a frost is predicted for tonight/tomorrow morning. Temperatures are predicted to be in the low 30s, likely a bit colder in low lying areas. In bloom, the critical temperature for stone fruit is $28^{0}F$ – at that temperature for 30 minutes will result in ~10% bud kill, longer or colder and a higher percent will be killed. Think positive thoughts – it's going to be warm, relatively speaking. **Apples** and **pears** are at early TC to early Pink depending on location and variety. Apple critical temperature is $27^{0}F$ at TC, $28^{0}F$ at early pink, and $24^{0}F$ for pears at TC.

Stone Fruit Pruning. This is a reminder not to prune or wound stone fruit when the weather is wet. Bacteria move with rain to open wounds causing the spread of bacterial canker. Wait until dry weather arrives for at least a couple of days.

Brown rot is a critical issue now and for 3 weeks after bloom. It will again become a critical issue for the 3 week period prior to harvest if we have a wetting period(s). Infections that occur on early developing fruit may not show up until closer to harvest which is why you can not let up on protection at petal fall and MUST maintain coverage for at least 3 weeks after bloom.

For a list of materials and their efficacy, go to the New England Tree Fruit Management guide.

Foliar nutrient applications: Nitrogen applied at <u>pink</u> to apples will help to strengthen buds and lengthen the time the ovules are receptive. A foliar application of nitrogen in the form of urea at 3#/100 at pink will help improve this situation. This is NOT for use on pears and stone fruit.

Boron plays a significant role in pollen tube growth, bud development and fruit set. A foliar application of Solubor at 3#/Acre at tight cluster-pink is recommended. If the trees are deficient (foliar analysis from last year would answer that question), follow up at 1^{st} and 3^{rd} covers.

Zinc plays a role in pollination, fruit set and early season shoot growth. Foliar application of Zn EDTA at TC and 2^{nd} cover at the rate of 3 qt or 3#/acre; or Zn sulfates or mancozeb which has zinc in it.

Please note that micronutrient applications should only be made in blocks that have a need based on tissue analysis. There is a thin line between toxicity and deficiency with micronutrients because plants use it in small quantities.

Diseases to be concerned with now:

Tight cluster is the time that **cedar apple rust** infections need to begin to be managed. It only takes 4-6 hours of leaf wetness for an infection to occur. Those infections won't be seen on the leaves until after bloom. Infections on the fruit will make them unmarketable.

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Powdery mildew is a fungal disease but unlike other diseases we deal with, this one DOES NOT require rain or 'free moisture' for an infection to occur. It likes warm dry weather. Infections were high last year all over the state so in blocks where this disease was not controlled by terminal bud set, the pathogen overwintered in the terminal buds. The shoots growing from those terminal buds will be covered in powdery mildew. If left unchecked, fruit infections will also occur. Infection potential remains until terminal bud set in the summer. If you had it last year, check blocks carefully from TC on. <u>Click</u> here for effective materials.

Fabraea leaf spot is a fungal disease that infects foliage and fruit of pear from this time of the year through the summer. Wetting events are required and only 12 hours of wetness at 50° F, 8 hours at 68° F to 77° F are needed for an infection to occur. Like scab, this disease will make your fruit unmarketable and if severe, can cause defoliation. For a list of effective materials click <u>here</u>.

Fireblight is a concern once flowers of apples and pears are open AND there is a rain event AND temperatures are warm. I realize next Tuesday is almost a week away and forecasters are not always reliable that far out, BUT rain is predicted with temperatures in the mid 60s. So it would be a good idea to be prepared just in case conditions are conducive for an infection.

With that in mind, we need to be aware of the EIP (epiphytic infection potential), which is an indicator of infection risk based on heat units. It uses degree hours (versus degree days for insects) to accumulate heat units. When the EIP reaches 100 there is a high risk of infection. Check <u>NEWA</u> for infection information, both the Cougar blight and EIP tables –scroll to the bottom and click on 'All Tools', then 'Fireblight', then select the weather station near you. Enter your first bloom date.

For a list of materials and rates click here for apples and here for pears.

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