Fire Blight

The best forecast we have is the HRRR (High Resolution Rapid Refresh). You can see the HRRR rain forecast updated every hour at http://cci-reanalyzer.org/wx/fcst/#HRRR.USNW-CED.PRCP-MSLP (set the Fast Image Load button on top right side of map to “Off” to see every hour instead of every other hour.)

This is what the HRRR showed at 10pm Thursday night: brief but substantial rain 11pm to early Friday morning.
If that rain actually occurs, it will create perfect conditions for fire blight blossom infection for flowers that opened on or before Tuesday May 16. Flowers that opened on Wednesday May 17 technically would have accumulated about 600 Cougarblight heat units by the time of a midnight rain on Thursday night / Friday morning. But there is a good chance that there had not been enough time for insects to inoculate flowers before those heat units occurred, and so there would not be an over-threshold bacterial population.

Apple trees in the Monmouth and Bangor areas opened bloom on Thursday. Those blossoms should not be a risk of fire blight infection on their day of opening for the same reason. Dr. Tim Smith the author of Cougarblight, once told me that early bloom infection risk is overstated by models because of the inoculation timing issue.

But trees in southern Maine (e.g. Sanford, Limerick, Gorham etc.) that reached King Bloom well before Tuesday May 16 can take no comfort from this. Those blossoms would be exposed to intense infection pressure IF the rain occurs and IF there is a source of fire blight bacteria in or near the orchard.

While streptomycin before infection is preferable, a PROMPT postinfection application within the first 24 hours after the wetting event began can be very effective. Application during the first 12 hours is more likely to be effective than in hours 13-24. Relative humidity on Friday morning is forecast to be low, which reduces the risk of spray water inducing fire blight infection. That would be of little consequence for a spray application that contains streptomycin anyway. But making a spray application that does not contain streptomycin in the early morning hours on Friday or Saturday when relative humidity is highest is not recommended right after a bout of high heat such as we had on Thursday.

The good news for those southern Maine orchards is that the high heat on Thursday has pushed the expected 100% Petal Fall date a day earlier to end of the day on Saturday, May 20. That would be a full 24 hours before the new estimated 12am start time of the Monday morning rain. That one day margin will probably mean that there will still be some straggler bloom around, but hopefully not much.

The earlier estimated arrival of the Monday morning rain increases risk for apple trees in that area, as it brings the wetting closer to the heat unit days and there will be abundant blossoms remaining.

**Apple Scab**

For the Monmouth area, most of the year’s total primary scab infection risk will occur in the next week (if the rain forecast holds true). Having protection in place before these infection days AND using a postinfection fungicide (Inspire Super, Indar, Sovran, Flint, Pristine, Aprovia, Fontelis, Luna Sensation, Merivon etc.) shortly after the big infection events is the best way to keep scab infections from taking hold.
For the southern Maine orchards, next week will move scab towards the end of primary infection potential.
In both areas, a full dose captan or mancozeb fungicide application on Friday – Sunday should provide protection until Friday May 26.

In southern Maine, starting around Monday May 22, scab lesions from early infection periods should begin showing on foliage that was unprotected during those events.

**Tarnished Plant Bug**

Tarnished plant bug traps in three orchards at Highmoor Farm that averaged about 1 per trap on May 4 at Tight Cluster (well below threshold) had almost no new captures on Thursday May 18 when trees were approaching Full Bloom.

The rainy weather in early

**Closing Words**

“Old age is a special problem for me because I’ve never been able to shed the mental image I have of myself – a lad of about 19.”

~ E.B. White