Spray after the storm - update

I hope your trees and fruit made it through the storm OK. Recommendations for propping up bent over trees were covered in the newsletter sent Friday, August 26. I don’t have any kind of a statewide impression to relay, but have heard Maine orchard reports of both “no big deal” on one extreme to “lots of trees blown over” on the other.

Even though it appears that in most Maine orchard locations the amount of rain from Irene was less than the forecast 4+ inches, there was still enough, and often intense, rain to remove reliable fungicide protection. With harvest of early cultivars underway and for mainstay cultivars approaching, a decision to respray is most feasible sooner than later.

The thinking behind estimated dates for when new flyspeck infections initiated after this weekend’s rain could have enough development time to show up as black discoloration on fruit is same as expressed in newsletter sent last Friday, August 26. But here are a couple of updates that may be of interest if you are on the fence about need to reapply fungicide protection. (There's nothing new to say about need to reapply insecticide protection).

1) Using the temperature adjusted flyspeck development model, for fruit that lost protection on Sunday August 28, hypothetical new flyspeck infections that started on Monday August 29 could develop visible colonies by:
   - October 18 in the Monmouth area, and by
   - October 9 in the Sanford area.

2) There's no reason to think that hordes of flyspeck spores are going to land on fruit starting Monday August 29, so in a sense those dates are worst case estimates. Any flyspeck infection that starts with a spore landing on fruit X or Y days after August 29 will accumulate the required amount of growth time at roughly the same number of X or Y days later in October.

3) But it is also true that these date estimates are based on the assumption that flyspeck colonies were not already growing before August 28. Development time (= wet hours at suitable temperature without fungicide protection in place) already accumulated before August 28 would presumably reduce the amount of flyspeck growth hours needed after August 28 before colonies would become visible. I say "presumably" because flyspeck biology is not as well understood as apple scab or even fire blight (which has enough of its own mysteries).
4) The flyspeck phenology models do seem to work pretty well in hindsight when you have all the input data. But there is no way to know what the weather is going to be like over the coming 3 to 6 weeks. The outcome from losing fungicide protection will vary according to whether September and early October turn out to be warm and rainy, or cool and dry, or something in between. At their best, the flyspeck growth estimates are only as reliable as the weather forecast data they are based on.

5) Disregarding temperature effect on flyspeck growth, and looking at the expected accumulation of leaf wetness hours alone gives an earlier possible flyspeck appearance date of October 3 for both the Monmouth and Sanford areas.

   My guess is that the later dates given in item #1 above are more realistic estimates, but that is just an opinion. And as above, forecasting based on leaf wetness hours leaves relies on climatic average input values, not specific knowledge of future weather. Thus, it is less of a prediction or a specific forecast than a general "outlook".

6) Flyspeck infection on fruit does create a carryover inoculum problem for next year, is not highly contagious, will not continue developing once cool temperatures are reached in storage. Apart from the cosmetic effect, it does appreciably harm fruit quality of longevity. “Sooty blotch” may develop before or after “flyspeck”, but these names are really just code words to represent a group of fungi comprised of 60+ species. For practical purposes, if you control flyspeck you also control sooty blotch.

7) So what does it all mean? “It depends”. You knew we would end up here, because it so often comes to down to this. Every orchard is unique. Every grower and marketing situation is unique. I am tempted to throw in that every year is unique, and bolster that with data about cumulative leaf wet hours in June – August 2011 versus past years as an indicator of relative flyspeck pressure this year. But that would take time and delay this message, and would be an entirely speculative relationship. My guess is that 2011 has been an average flyspeck year so far.

   And every cultivar tree is unique. Yellow skinned fruit show flyspeck more than red fruit. Big thick trees near the woods get more flyspeck than small trees with good air drainage. Late harvested cultivars are more at risk than McIntosh other early or mid-season cultivars. This part of your orchard is more at risk than that part. And maybe that is where we can bring all this back and forth down to something “actionable.” It does not have to been all or nothing response.

   Assuming you have had some kind of protection in place through most of the summer, and do not have a nightmarish history of past flyspeck problems, the risk of late season flyspeck infections appearing before October 1 seems low.

   Given the uncertainty about September – October weather, it’s worth considering renewed fungicide protection on any trees not likely to harvested until after October 1, especially if there is any history of flyspeck problems on fruit from those trees.

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**Apple maturity report**

Next report on Thursday, September 1.
Birds sing after a storm; why shouldn’t people feel as free to delight in whatever remains to them?
~ Rose Kennedy

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Orchard Radar weather and pest tracking models at http://pronewengland.org/AllModels/DecisionModels.htm

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