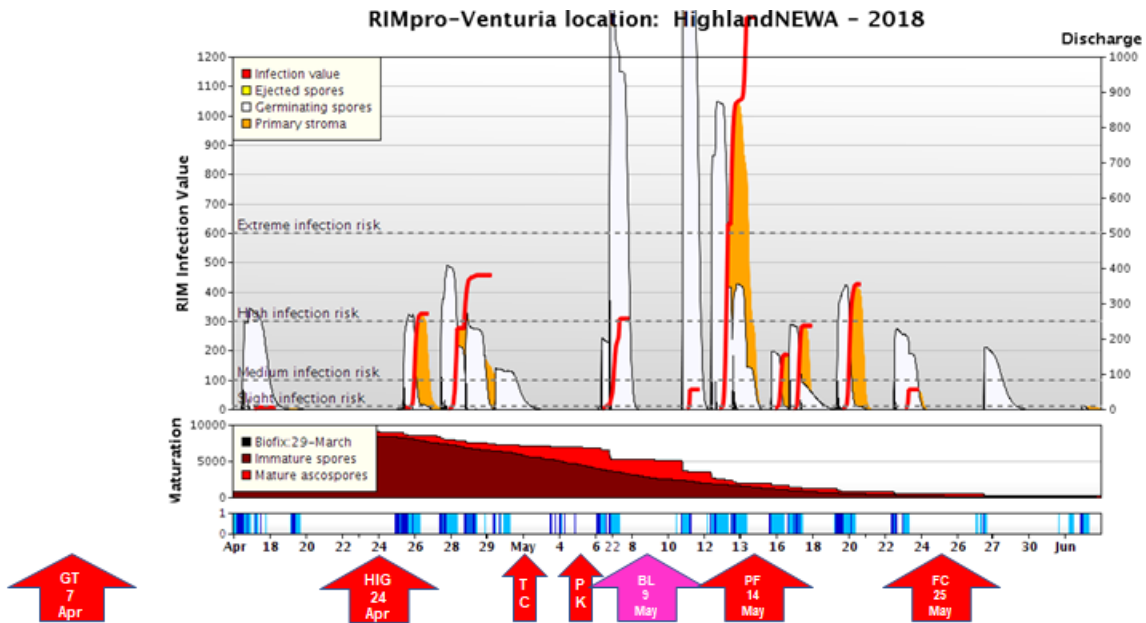
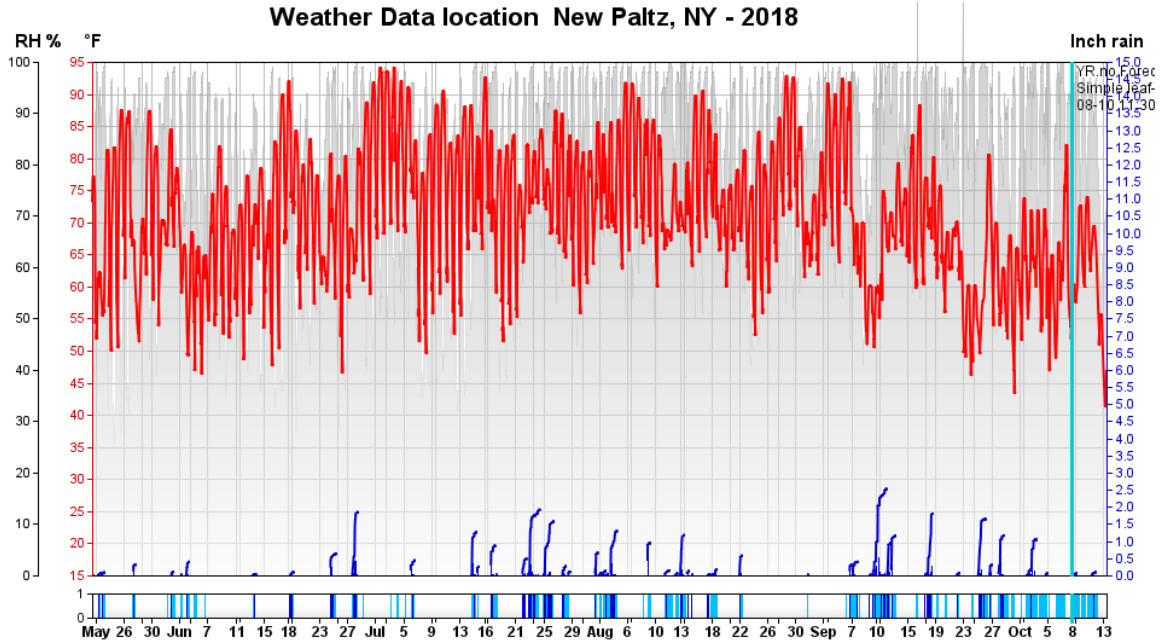


## Disease Status in Hudson Valley of New York - Hudson Valley Research Laboratory

Person(s) Reporting: Srdjan Acimovic (PPMB)

Rainfall accumulations, temperatures, and humidity for:

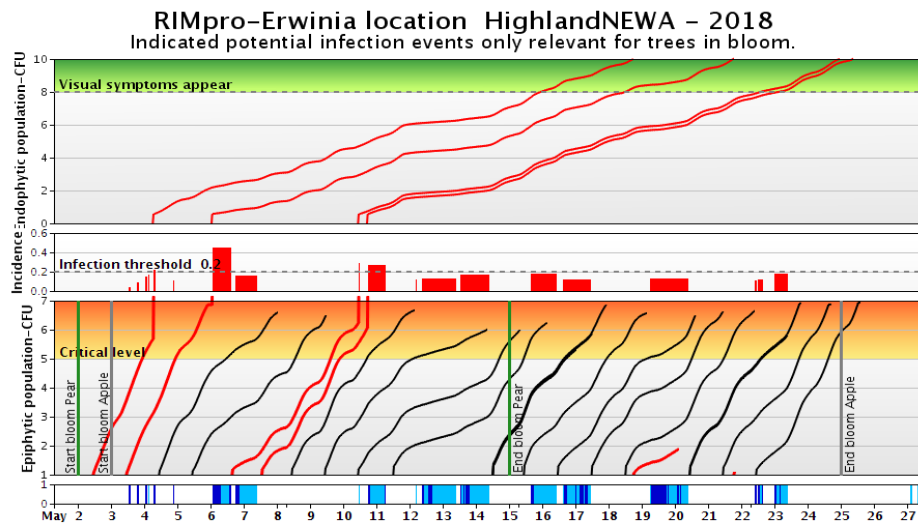
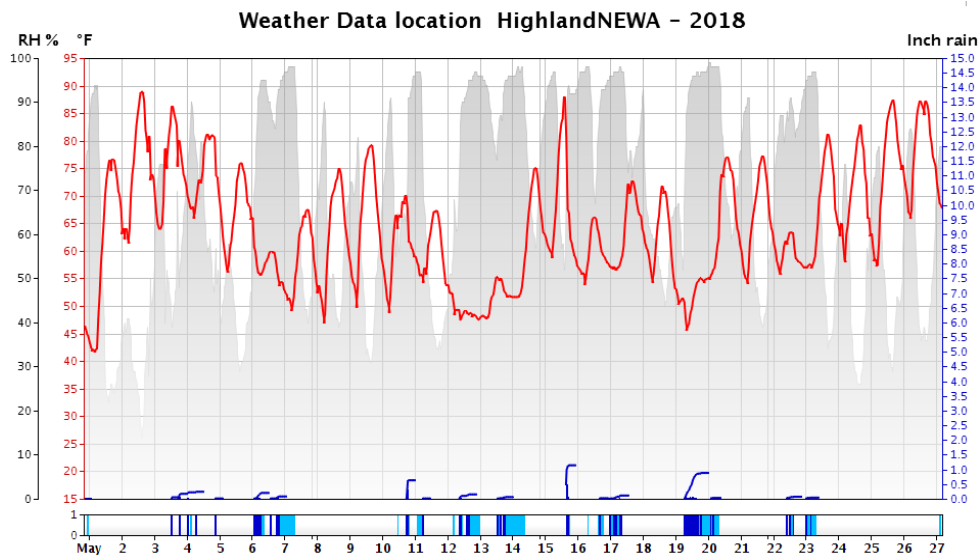


**Apple scab** had 8 major infection periods based on RIMpro prediction model (image above). Before the first major infection on the 25 April at HIG, one ascospore germination period did not lead to significant infection warranting protection since conditions after rainfall were too cold. Using the scab tower, we found mature ascospores in leaf litter on 31 March in Highland, on 5 April in Rexford, and on 13 April in Peru, NY. From 17 Apr to 21-29 May almost all ascospores were discharged from pseudothecia according to RIMpro. In Highland we found the first scab

symptoms on 11 May on Cortland leaves. This infection were probably initiated on the first major scab infection period of 25 April. First scab symptoms were visible on 7 June in Peru.

**Cedar apple rust and quince rust** symptoms in Highland NY started showing on apple leaves from May 17 onward. Infection periods for rust were prolonged since there was a lot of rain. Some growers, but especially organic growers, complained to us that rust was an issue in apples in 2018.

**Fire blight** conditions in Hudson Valley were very favorable. Several streptomycin applications were needed in orchards with fire blight history. Warm and rainy conditions during bloom favored growth of fire blight populations on flowers. In our inoculated trees, we found first fire blight ooze on 27 May on ‘Honeycrisp’ flowers and first blossom blight symptoms on the 31 May (we rated first blossom blight on 4 June). There were 3-4 major infection periods for fire blight in the Hudson Valley. RIMpro reported infection periods on 4, 6 and 10 May 2018. More southern locations had more than 3 infection periods, while more northern locations 1-2 infection periods.



**SBFS - Sooty Blotch & Flyspeck** in Hudson Valley were first found on 6 Aug 2018 on 'McIntosh', 'Ginger Gold' and 'Golden Delicious' fruit. With ample rain we had in 2018, the incubation period requirement of accumulated 190 hr of wetting from PF was fulfilled and/or exceeded on 25 July.

**Bitter Rot** again was a big problem in the orchards across southern NY State that have not applied fungicide cover sprays on a shorter time interval than usual. We found first natural symptoms of bitter rot on Gala in Milton NY on 14 July. Frequent rains favored this disease. This was a year where all, early and late maturing varieties, required a good fungicide coverage for efficient control and where fungicide deposits on fruit had to be maintained after 2" rainfall.

**Marssonina Leaf Spot on apple.** Again, as in 2017, in more than several locations in lower-Hudson Valley and in south NY typical symptoms of this disease were observed on Rome, Mutsu, Winesap, Northern Spy, Gala and several other cultivars. However, Rome trees were severely affected and defoliation of leaves was noticed when fungicide cover sprays for summer rots and SB&FS were not as frequent as we recommended.

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