



***Vermont Apple IPM Alert***  
***Lorraine P. Berkett***  
***June 11, 2008***

**Apple Scab:** At the UVM Hort. Res. Center (HRC), we are assuming that we had the last release of ascospores from overwintered leaves on June 3 when it rained during the day. It also turned into an infection period so we are waiting until next week to do a thorough evaluation of the foliage for the presence of apple scab before we start to extend our spray intervals. At the HRC, we have had 7 primary infection periods. Scab was very evident this morning on non-sprayed McIntosh trees (see below). When the average daily temperature is 54F, it takes about 14 days for lesions to develop from the last primary infection period. Please refer to the 2008 New England Tree Fruit Management Guide for scab management options.



Non-managed McIntosh leaves with scab.

**Sooty Blotch and Fly Speck -** The very warm, humid nights we have been experiencing over the past week are very favorable for the development of sooty blotch and fly speck. At this point in time, many of the fungicides used for apple scab should manage these diseases. As we have done in the past, we have been monitoring the hours of leaf wetness from Petal Fall at the HRC to get an idea when 270 hours of leaf wetness have accumulated, which is when fly speck inoculum is assumed to be available from non-managed alternate host plants around the orchard perimeter. Before yesterday's thunderstorms, we had accumulated approximately 110 hours of leaf wetness. We will keep you posted as we approach 270 hours.

**Cedar Apple Rust** - As of this morning, we have observed very few rust lesions on non-managed Prima trees at the HRC which we use as “indicator” trees of level of potential infection.



Rust lesion on Prima tree

**Plum Curculio** - As was mentioned in the last Apple IPM Alert, we are tracking degree-day accumulation for use in the Cornell PC Oviposition Model at four sites around the state. As of June 9, the following DD (base 50F) had accumulated:

UVM HRC = 230  
Shoreham = 276  
So. Hero = 225  
Dummerston = 249

Based on the Cornell PC model, no additional PC sprays are necessary whenever the date of accumulation of 308 DD falls within 10–14 days after a previous spray (i.e., you need to be ‘covered’ through the date when 308 DD are reached).

**European Apple Sawfly** -- The pictures below were taken this morning in a non-managed orchard at the HRC. We are at the point where EAS larvae have borrowed to the core of fruit. These damaged fruit can easily be detected by the pile of moist, orange/brown frass that accumulates at the entry hole. Below is also a picture of the EAS larva that was at the core. It looks like a codling moth larva but does have some distinctive characteristics (different number of prolegs (7 versus 5), absence of “hooks” on prolegs) and at this point in time, CM larvae are just hatching from eggs and are not this big.



**European Apple Sawfly** damage and larva that had burrowed to core (above and below pictures)



**Codling Moth** - As of June 9, 249 DD (base 50F) had accumulated from the biofix of May 17 at the UVM Hort. Res. Center. In orchards where one insecticide application is sufficient for management, optimal timing is at 360 DD after the biofix. If two treatments are needed, the first application should be applied at 250 DD which is targeted at the beginning of egg hatch, with the second application 3 weeks later.

**Obliquebanded Leafroller** - As was stated in the last IPM alert, this insect overwinters as a second or third instar larva in a hibernaculum under fragments of bark or in cracks or crotches on the tree. They become active in the spring and feed on bud clusters, flowers, and developing fruit. Most of the severe damage caused from the overwintering larva occurs after petal fall and sprays applied at this time prevent damage. At the UVM Hort. Res. Center, we hung pheromone traps to monitor adult flight activity on May 20 and as of this Monday, June 9, have not trapped any moths yet. The optimal time to begin to scout for second generation OBLR is about 600 DD (base 43F) after the beginning of the first gen. moth flight.

## Other insects and mites --

We have observed the following at the HRC: a few **Potato Leafhoppers**; a few **Rosy Apple Aphids**; no **Leafminer mines**; a little stippling from **White Apple Leafhoppers**; very few **European Red Mites**; no **Green Apple Aphids**; and some **T.pyri** and a lot of **Lady Bug Beetles**. I hope you also have low levels of arthropod pests/damage in your orchard.

**Sampling Procedures and Thresholds** -- please see the 2008 New England Tree Fruit Management Guide for sequential sampling procedures for leafminers and mites.

In addition, the following is a “**quick**” summary of some thresholds --

**Leafhoppers** -- Examine leaves for presence of first generation nymphs and adults. Threshold: 25 / 100 leaves.

**ERM** - Examine middle-age fruit cluster leaves. Threshold:  
June 1- June 15 -- 45% leaves with motile mites  
June 16 - June 30 -- 55% leaves with motile mites

**GAA/SA** - Threshold is when more than 50% of vegetative terminals are infested and predators are present on less than 20% of infested terminals Or when 10% of fruit have honeydew or aphids.

**Reminder** -- It is time to start to thinking about **Apple Maggot traps** to give enough time to clean previously-used traps or to order new ones.

**Hail Damage** -- We did experience some hail “dents” on the fruit from the thunderstorm on June 10 at the HRC. It was not extensive and could have been worse. Hopefully, no or little damage occurred around the state.



Hail “dent” on Ginger Gold at HRC

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