

OrganicA

a resource for organic apple production

Orchard Observations

Lorraine P. Berkett
June 11, 2008

Apple Scab - 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 decide on our next step in disease management. We ended up having a total of 7 primary infection periods.

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. We used sulfur in our last spray for apple scab and this should give some protection from these fungi. We have been monitoring the hours of leaf wetness from Petal Fall 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 do not anticipate a problem with these diseases since our trees are open and have good air flow.

Cedar Apple Rust - As of this morning, we have observed very few rust lesions on non-managed Prima trees which we use as "indicator" trees of level of potential infection. This is good news !



Rust lesion on non-managed Prima tree.

Plum Curculio (PC) - Based on the Cornell PC Oviposition Degree Day Model, we are still in the period when PC are active. As of June 9, we had accumulated 230 Degree Days (base 50F) from Petal Fall. It is recommended that PC be managed until 308 DD have been reached. We have been using kaolin (Surround) to suppress ovipositioning.

European Apple Sawfly (EAS) - The pictures below were taken this morning in a non-managed orchard at the Hort. Research Center. We are at the point where EAS larvae have burrowed 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 the 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 standard IPM 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. We will be using Dipel to manage this insect and will be including this material in a spray that will be applied this week.

Obliquebanded Leafroller - As has been mentioned previously, 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. 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.

The Lady Bug Beetles have returned !! I am happy to report that lady bug beetles have returned to both Orchard 1 and 2. As I walked through both orchards this morning they were quite prevalent.



Lady bug beetle adult and eggs

Branch Training -- a good use of clothespins in Orchard 1



Hail Damage -- We did experience some hail “dents” on the fruit from the thunderstorm on June 10. It was not extensive and it could have been a lot worse given the dire forecast of very severe weather. We did not have any foliage shredding or damage to terminals or the trunks from the high wind and hail -- which is good.



Hail "dent" on Ginger Gold tree in Orchard 1

The "Team" hard at work hand-thinning Orchard 2



Sarah Kingsley-Richards, Research Technician



Morgan Cromwell, Graduate Student and Intern



Ben Crockett, Undergraduate Student Intern

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

IMPORTANT: It is the grower's responsibility to ensure that any crop production practice or material used in the orchard is acceptable in their particular state's organic certification program. Some materials deemed organically acceptable on the National List may not be acceptable in some states. Contact your [federally accredited certifying agency](#) to know what is acceptable and to ensure compliance with regulations in your state.

Where trade names or commercial products are used for identification, no discrimination is intended and no endorsement is implied. Always read the label before using any pesticide. **The label is the legal document for the product use. Disregard any information in this newsletter if it is in conflict with the label or organic certification.**

We Value Your Input and Want to Address Your Needs

Please send your comments and suggestions to lorraine.berkett@uvm.edu

For more information on the OrganicA Project please see:

<http://www.uvm.edu/organica/>

**The OrganicA Project is being funded by a grant from the
USDA Integrated Organic Program**