

OrganicA

a resource for organic apple production

Orchard Observations

Lorraine P. Berkett

May 28, 2008

Apple Scab Ascospore Maturity - It is estimated that 95% of the ascospores have matured. We have entered the final phase of the primary scab period. Conservatively, the final ascospores are released when 900 degree-days have accumulated and there is a daytime rain of at least 0.10 inch and the temperature is at least 50F during the wetting period. As of May 26, we had accumulated 806 degree-days (base 32F) from green tip.

Fire Blight - We were very fortunate this year. The cool temperatures kept the bacterial population from reaching the threshold used in the Maryblyt program to predict that infection will occur. This was quite different from the 2007 growing season when the risk for fire blight infection at the Hort. Res. Center was the highest it had been over the last 20+ years and treatment was necessary. We often complain about our cool springs -- but they are beneficial when it comes to fire blight !!

Cedar Apple Rust - We had high levels of Cedar Apple Rust lesions on apple foliage last year so this year we made a significant effort to find the galls on juniper trees in the area. We were unsuccessful in finding any galls until this week when they were very evident because the tendrils had swollen and expanded. Now we can begin to reduce this important source of inoculum.



Cedar apple rust gall on juniper.

Plum Curculio (PC) - Plum Curculio are active. It was very easy to find fresh injury this morning on some non-sprayed Liberty trees at the UVM Hort. Res. Center. As mentioned in the last issue, we are tracking degree-day accumulation for use in the Cornell PC Oviposition Model to estimate the end of the period of risk for injury. The link to the degree-day accumulation page that includes the UVM Hort. Res. Center is:

<http://orchard.uvm.edu/uvmapple/pest/insects/2008PCddAccumulation.html>



PC oviposition injury. The injury in the picture on the left has ooze indicating it is more recent than the damage in the picture on the right.

Codling Moth (CM) - As of May 26, 59 DD (base 50F) had accumulated from the biofix of May 17 at the UVM Hort. Res. Center. In standard IPM orchards where CM have been a problem necessitating using an insecticide application, if one application is sufficient for management, optimal timing is at 360 DD after the biofix, which is related to egg hatch and when the larvae are vulnerable. If two treatments are needed, the first application should be applied at 250 DD, with the second application 3 weeks later. However, since we are using organic practices in Orchard 1 & 2, we will use both the weekly pheromone trap captures and degree-day accumulation to determine if is necessary to take any action.

Obliquebanded Leafroller - 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. At the UVM Hort. Res. Center, we hung pheromone traps to monitor adult flight activity on May 20 and 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. This insect concerns us because we had high levels of damage on fruit on the 'nurse limbs' in Orchard 2 in 2007. We will keep a keen eye on population levels this year.

Weed Management -- As was mentioned last week, we used a weed badger in Orchard 1 and the good news is that the 'badgered' weeds are turning brown and dying (see picture). We will be using the weed badger again and in preparation for further use, we have elevated the irrigation lines



Picture shows dying weeds and elevated irrigation lines in Orchard I.

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**