

OrganicA

a resource for organic apple production

Orchard Observations

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Showers and More Showers...

We have had on and off showers for the last few days. The trees need the rain. We are monitoring soil moisture to help determine our irrigation schedule -- I happened to be out in the orchard on Monday when the soil moisture measurements were being taken...



Soil Moisture Monitoring

On Monday, May 4, -- a day when it was not raining -- bud development ranged from Early Pink on Honeycrisp trees to Late Pink on Ginger Gold and Zestar! trees. As of today (Friday), a few blossoms have begun to open in trees across both Orchard 1 and 2. Lime sulfur was applied this morning for scab management so I was not able to get into the orchards for updated pictures.



Honeycrisp on May 4



Zestar! on May 4

Insect Activity -- Tarnished Plant Bug trap captures indicate some “hot spots” in both orchards. The insect was also observed in blossoms early Monday morning.



Tarnished Plant Bug in blossom on Monday

European Apple Sawflies (EAS) are of concern at this time in the growing season. Pink through Petal Fall is the time to monitor adults. Thus, white sticky traps were placed in both orchards this week. This insect poses a significant risk to both orchards this growing season.



TPB trap (lower trap) and EAS trap (upper trap)

The EAS overwinters as a mature larva in a cocoon in the soil. The adults start to emerge around the pink bud stage. Developing fruit are injured by the adult laying an egg into the fruit during bloom; the hatched larva tunnels just under the skin of the apple producing a winding scar. It can then tunnel to the core of that same apple, feeding on the seeds that cause the fruit to abort, or it can migrate to an adjacent apple and bore to the core leaving brown moist frass at the surface thus damaging another fruit (this damage can be confused with that caused by codling moth larvae, but it is too early in the season for the latter). [Pictures of the various stages of EAS and damage can be viewed at: <http://nysipm.cornell.edu/factsheets/treefruit/pests/eas/eas.pdf>]

The EAS is of particular concern to us this year because over the winter we removed a number of neglected/abandoned crabapple trees around the perimeter of the organic orchards which were significant reservoirs for insect pests (and fungal pathogens). The crabapple trees did exhibit EAS damage last year and we assume the larvae are in the ground ready to emerge. We are concerned that given the crabapple trees are gone, the organic apple trees are at a higher risk this year for damage (i.e., the insects will be more attracted to them). We will be monitoring the situation closely.

Green Pug Moth (GPM) larvae -- None were observed in the two organic apple orchards but I always like to check our non-managed apple orchard which is located in a different part of the Hort. Farm to see “what’s happening” there -- to give us an idea of what potentially might become a problem in our managed organic orchards. And, green pug moth larvae were observed feeding on developing blossoms.



GPM larva (above & left of thumb) and damage



GPM larva (at pencil tip) and damage

The insect is common in Nova Scotia and has been found in all of the New England states. It overwinters in the egg stage and egg hatch starts at bud break. The larvae are yellow-green and develop a dark “racing stripe” down its back (see picture below). They feed on developing foliage in blossoms and bore into developing flowers feeding on flower parts, especially anthers. Feeding usually stops by petal fall. When numerous, the insect can significantly reduce fruit set. The guideline for intervention is if there are 6 or more GPM larvae per 100 fruit clusters at tight cluster to pink.



GPM larva with “racing stripe”

The GPM larva is an inchworm and exhibits typical inchworm movement. The following link is to a brief video taken in the orchard of this insect showing inchworm movement:

<http://www.youtube.com/watch?v=qRbWUeeOQh0>

[Note: I definitely have to work on my video skills !!]

Horticultural Activities -- Clothes pins were placed in trees in Orchard I to help train developing branches.



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 document if it is in conflict with the label.**

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/>

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