

## NH Integrated Pest Management Newsletter

June 15, 2004

Volume X

No. 6

### Scales on Blueberry

I've just received my third report this month of an armored (hard) scale on blueberry. I think all three cases (Hillsborough, Cheshire and Sullivan counties) are European fruit lecanium scale. No, it isn't a common enough problem that it is mentioned in the New England Small Fruit Pest Management Guide. This picture was taken by Seth Wilner, in the Sullivan County Cooperative Extension office (Thanks, Seth!!)

The scales are just FULL of eggs right now, waiting to hatch. I assume that hatching will begin fairly soon, and will be strung out over 2 weeks or more. (We don't have a lot of info on this one, regarding timing in NH). Having said that, I assume that sprays directed toward cranberry and cherry fruitworm will help control these critters. If not, carefully, thoroughly applied oil spray before pink bud stage next spring should help.



Why so many of these this year? It might be because one of the parasites that attacks this species had a bad year last year. That's just a guess.

### Joint MA/NH Fruit Twilight Meeting

George Hamilton gave me this announcement. There will be a joint tree fruit twilight meeting on June 16, 2004 from 5:30 to 7:30 PM. Hosts this time are Don and Bill Fitzgerald, at Mann Orchard, Methuen. The focus will be on mid-summer disease and insect management. For those of you with pesticide applicator licenses, you'll be interested to know that 1.5 PAT recertification credits will be offered. Since this is a Massachusetts-sponsored event, I should remind you that attendees are charged \$10 per person (maximum of \$20 per orchard) to attend this meeting. UMass Extension has been charging for twilight meetings for a while now.

Need directions? Take the Route 213 exit off of I-495 (or the 213 exit off of I-93). Then take the Pleasant Valley Street exit (route 113). The orchard is right across from a large

shopping mall, on route 113. That's what I have for directions. I've never been there myself.

## Plum Curculio?

Curculios seem to be winding down in the spots I check, but that might not be the case for your orchard. The degree day model that **sometimes** is helpful relative to curculio activity predicts an end to curculio activity in apple orchards about 340DD (base =50F) after petal fall. For Durham, the data I have shows 225 curculioDD have accumulated as of Monday June 14. If the next days are warm, we might accumulate 25DD per day, reaching 340 in only a few days. So if you think you have enough insecticide residue to control curculio through the next several days, you may be fine for the season.

For growers farther North, you may have a bit longer. As always, don't depend on the model to predict for you. Use it as ONE of the tools to help you decide. Checking your orchard perimeter for fresh injury is a good idea.

## Yes, Rose Chafers Are Out

We found rose chafers Monday on flowers and raspberries in Cheshire and Sullivan counties. By the time I got farther east, it was too dark to check here. They chew flowers, and also foliage of raspberry, blackberry, grape. Flower growers have fits sometimes, as the beetles chew petals of roses and lots of other flowers. On small fruit, it takes a fair amount of defoliation to get me worried. These should wind down in a week or two, just as Japanese beetles appear.

## Leafminers Progressing to Tissue-feeding Stage

The spotted tentiform and apple blotch leafminers are maturing to the tissue-feeding stage now. Those that have reached this stage are recognizable by the fact that the mines become visible from the **upper** leaf surface, as a series of white dots. The mines also puff out a bit; therefore, the name "tentiform". Once they have reached this stage, insecticides are no longer effective to control them. Don't worry. If you missed them, you'll have another chance next month, on the second generation.

## Potato Leafhoppers

I'm still checking. With my luck, I'll probably find them right after sending out this newsletter. They usually appear roughly around now. When they do appear, apple growers should be most concerned on **young trees**. The primary effect of their feeding is stunting of the shoots and burning of foliage on shoots and suckers. For young trees, this could be a problem. For old trees, this isn't very serious.

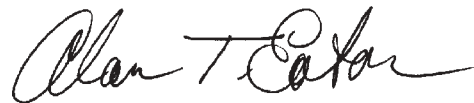


## **Mites**

Now that warmer weather has arrived, the development rate of mites is short enough that they can build up quickly. In today's newsletter I'll include the mite counting chart and instructions for this time of year, when the threshold is lower than later on. Counting is simple enough that it can really pay to check on their progress in your orchard, and write down and save the results. Delicious is one of the varieties that can have high buildup of mites, so it is often a variety I check first.

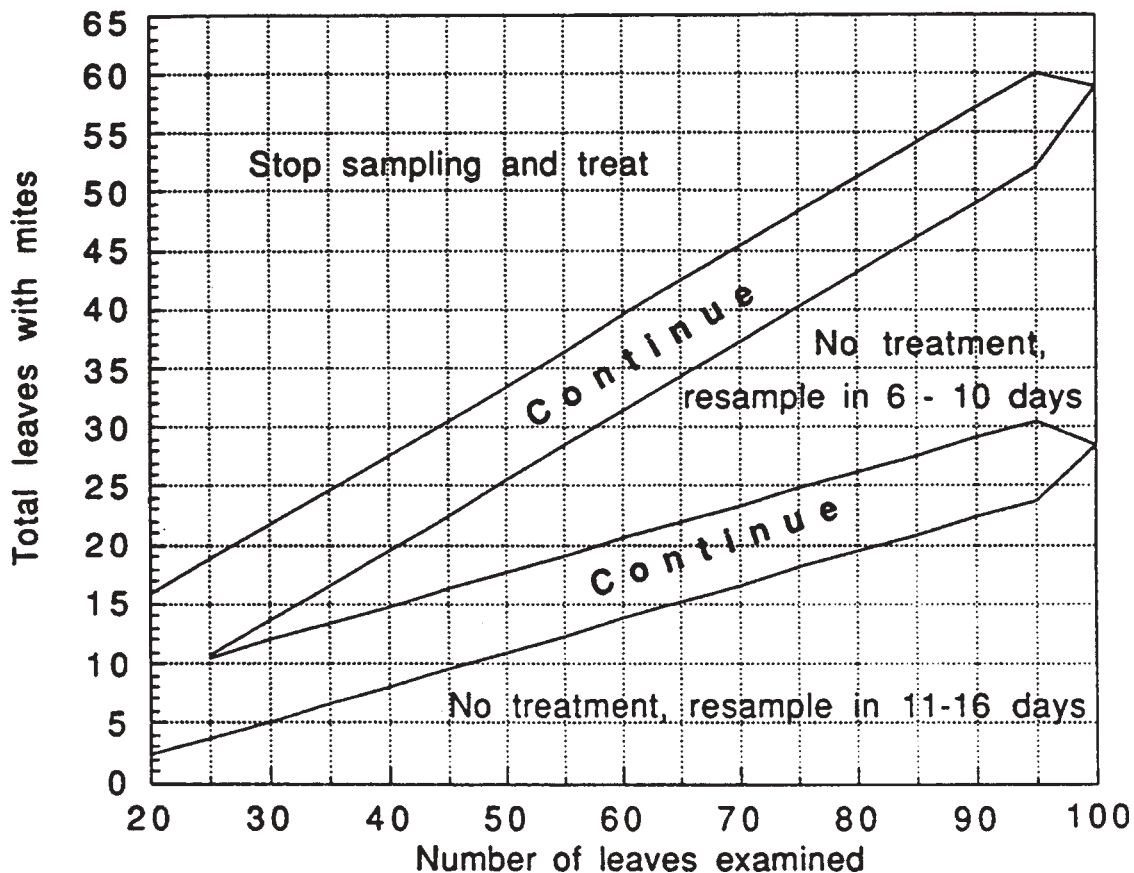
## **Next Issue will be Mid-July**

I'll continue my pattern of the last few years, with the newsletter being every 2 weeks through curculio time, and every 4 weeks after that. I will be in Canada soon, collecting parasitized European apple sawflies. I'll try to keep the Fruit Pest Update Telephone going every Tuesday, as usual. If I end up in Quebec on a Tuesday, that will mess up things a bit...

A handwritten signature in black ink that reads "Alan T. Eaton". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

**Alan T. Eaton**  
**Extension Specialist**  
**Integrated Pest Management**

## Mite Sampling Chart - Threshold = 2.5 mites/leaf (June 15 - July 15)



\* This procedure involves examining middle aged leaves for motile mites (any stage except eggs). Use this chart, which corresponds to a mite density of 2.5 mites per leaf, from June 15 until July 15. You will not be counting mites, but will only determine whether they are present or absent on each leaf sampled.

\* Starting with a random tree and sampling every other tree, collect 4 leaves in a plastic bag from each of 5 trees, choosing from each quadrant of the canopy. To make sure the leaves are of intermediate age, pick them from the middle of the fruit cluster.

\* Using a magnifier, examine the top and bottom surface of each leaf for motile mites and keep track of the number of leaves containing motile mites. When all 20 leaves have been examined, compare this number with the decision lines on the above chart. If you are in either of the "Continue" zones, take more leaf samples in batches of 10 (5 per tree, for simplicity), adding the number with mites present to your original value while checking the chart again. Continue until you have passed out of the "continue" zone to arrive at a decision. If you reach "Stop sampling and treat", the population is above the threshold and a miticide application is recommended. If you reach one of the "Resample" zones, the population is below threshold, and should remain so for at least the number of days stated. Return at the designated time and conduct another sample. If "6-10 day" resample date falls during 5.0 mites/leaf Threshold period, you can wait for a total of 11-16 days before resampling.

Modified from: Apple IPM; A Guide for Sampling and Managing Major Apple Pests in New York. Agnello, A., J. Kovach, J. Nyrop, H. Reissig, W. Wilcox.