

NH Integrated Pest Management Newsletter

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Flyspeck, Anyone?

The recent humid, overcast weather got me thinking about flyspeck. The flyspeck fungus needs high humidity to grow, not necessarily rainfall. We sure have had plenty of high humidity. Fungicides for flyspeck management include those with erradicant activity (such as Topsin-M, Flint and Sovran), and protectants such as Captan and Ziram. I note that mancozeb, manzate and Polyram are also listed as effective, and I assume they are protectants.

ReTain Deadline

I'll repeat Bill Lord's caution that apple growers who anticipate using the pre-harvest drop management chemical ReTain, should apply it 28 days before they plan to begin harvest for that variety. You do the math—by the time you read this it may be too late for some blocks.

Leaf Samples for Nutrient Analysis in Tree Fruit

Last week (Aug. 3-9) was the ideal time to take samples; but if you are fast, you can still get it done in time if you act NOW. See your county Agriculture Extension Educator for forms and details.

Apple Maggot

Apple maggot captures in the Durham area seem to be progressing about on schedule. In some dry years we see delays and/or reduced emergence, but that hasn't been the case this year. This week I cleaned my apple maggot traps. They had so many insects on them, that they didn't look red anymore, nor was there much sticky space left. I just scraped off most of the junk onto an old magazine, then added a new thin layer of tangletrap. Traps that are really dirty don't work well, so I want mine to function properly.

Second Generation of Redbanded Leafroller, CM, LAW

Apple maggot time is also when the second generation of redbanded leafroller, codling moth, and lesser appleworms fly and lay eggs. If you have lots of nearby wild or unmanaged

apple trees, you might have large flights of these moths. If not, then often we have relatively low numbers **if you controlled 1st generation well**. So apple maggot sprays actually do double (triple/quad?) duty, by handling several species. It is good to keep this in mind, if apple maggot catches are low enough that you consider not treating a block. If the risk from these moths is high, then you might want to apply an insecticide.

Mites

Included in this newsletter is the chart for late summer mite counting. In late summer, apple trees are able to withstand more mites than they could earlier, so the chart has the threshold shifted upwards, compared to earlier. The sampling method remains the same; details are below the chart. Warm temperatures shorten mite life cycles, so they can build up rapidly. Cool temperatures stretch out the life cycle, slowing down population buildup. Heavy rainfall washes some mites right off the leaves. (Did they have that scene in “A Bug’s Life?”)

Pith Moth

Most pith moth eggs should have hatched by now. The larvae bore into the new shoots during the first several days of August, leaving tiny piles of brownish-orange frass at the entry site. For most of us, the larvae are no longer vulnerable to pesticides. They will overwinter as partly grown larvae, just under the surface of the twig, usually around a bud.

Late Leafhoppers on Apple

Occasionally a grower calls during late August or September, concerned because there are very high numbers of white apple leafhopper, and they are bothering pickers or customers. Yes, you can apply a pesticide then (check the days-to-harvest first!), but our thresholds are designed to prevent that situation. We’d prefer that you check soon after petal fall, to prevent the problem I just described.

Late Leafminers — Hands off!

The third generation of spotted tentiform leafminer and apple blotch leafminer occur as harvest commences. The levels can be very high, but it is too late then to use insecticide to lower the chance of pre-harvest drop. Also, the third generation is usually very heavily hit by parasites, so spraying then will heavily hurt leafminer parasites. I **do not** recommend spraying third generation leafminers on apple. By now we have passed the time that spraying can affect leafminers this year; very few if any are left in the vulnerable sap-feeding stage.

Are You Keeping Up With Mowing?

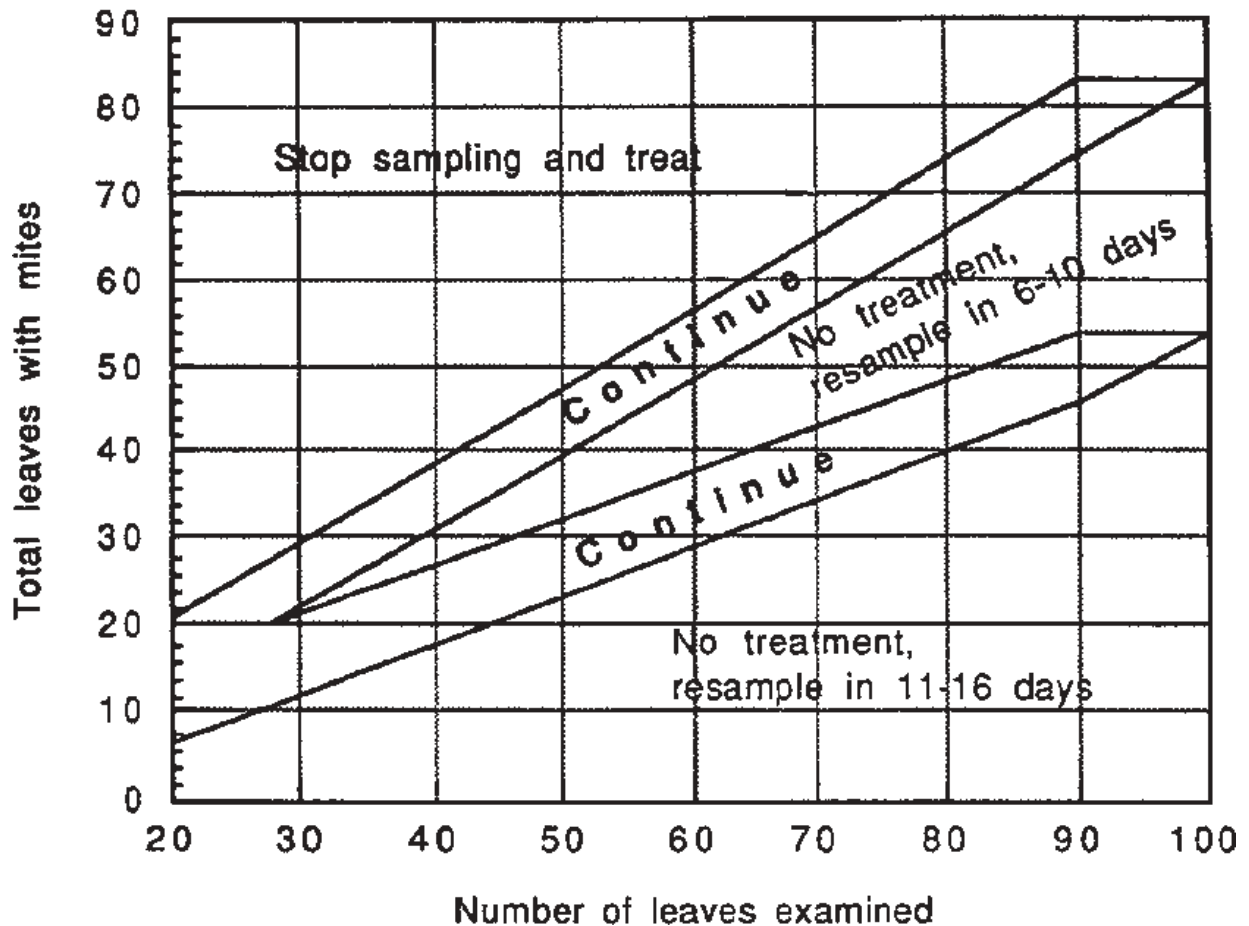
I’ll bet it has been tough, with all the rain. A major advantage of keeping the orchard well mowed is that meadow vole populations cannot build up easily if the vegetation is short. They are

left exposed to the many predators that look for them, both day and night. Red and gray foxes, skunks, coyotes, weasels, hawks, owls, cats and dogs all prey on voles, and find it difficult when the vegetation is high.

A handwritten signature in black ink that reads "Alan T. Eaton". The signature is fluid and cursive, with the first name "Alan" being the most prominent.

Alan T. Eaton
Extension Specialist,
Integrated Pest Management

Mite Sampling Chart - Threshold = 7.5 mites/leaf (August 16 - September 1)



- This procedure involves examining middle aged leaves for motile mites (any stage except eggs). Use this chart, which corresponds to a mite density of 7.5 mites per leaf, from August 16 until September 1. 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 or foliar terminal.

- 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 the resample date falls after September 1, there should be no further need for additional samples or miticide sprays this season.

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