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Update on Pest Management
and Crop Development

F R U I T J O U R N A L

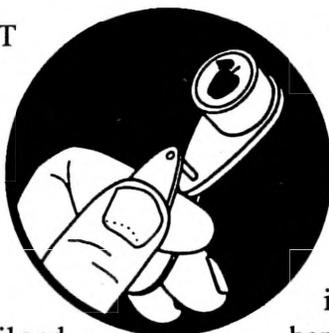
September 8, 1998

VOLUME 7, No. 25

Geneva, NY

THE
YEAR
THAT
WAS

1998 TREE FRUIT
ARTHROPOD
PEST REVIEW
(W.N.Y.)
(Art Agnello,
Entomology,
Geneva)



August. As often occurs during hot, dry seasons, **twospotted mites** were more numerous than usual in apples and stone fruits (we didn't hear of very many in pears), and **phytoseiid predator mites** became relatively scarce as the summer wore on, even in blocks with normally healthy numbers.

❖❖ In light of the Labor Day hail and wind storm that bulldozed its way through much of the state's fruit belt as harvest was just gearing up, it's difficult to know exactly when the final word will be written on the 1998 season. Next, for all we know, the lake level could rise three feet and flood out everything north of the ridge. We can, at least, pause at this time to try summarizing the events involving the insect and mite competitors for this year's fruit crop, and just preface our remarks by noting that most of what transpired in this category that was worthy of any mention, was generally attributable to the early season/ warm season/ long season/ dry season (pick your favorite).

Although the record early bloom in NY apples was preceded by a patch of fairly good weather for early season mite sprays, it didn't last long enough for many growers to actually take advantage of it. The result was a **European red mite** population that got off to a good early start, and the perennial problem blocks were in trouble by mid-June if they hadn't been attended to during the petal fall period. As it became clear that this would be a summer without plentiful rainfall, we had visions of some serious tree stress/mite damage combinations taking place. However, most of the early summer miticide treatments seemed to do what they were supposed to, and there were remarkably few reports of runaway mite populations during July and

The generally favorable conditions during the die-is-cast period (April and May) had both positive and negative effects on the region's insect populations. Pollination weather was good enough to give an acceptable fruit set in most cases, and the warm temperatures assured a fairly swift progression through **plum curculio** emergence, so few orchards seem to have been caught unprotected by a protracted period of curc egg-laying. However, the good weather was also a boon to several other species that are better able to get an early foothold if the conditions at this time of the year are favorable for mating.

Codling moth and **oriental fruit moth** were reported to be particularly plentiful in certain areas; trap catches of adults were quite high, and fruit damage was greater than normal in some peach and apple plantings. **Pear psylla** was likely also a beneficiary of the good spring conditions, but many pear growers stopped paying attention after the mid-May frost wiped out much of the Bartlett crop. There was notable development of **spotted tentiform leafminers** this year, although with an interesting twist. The trees' phenological stage was sufficiently advanced during the first STLM flight that eggs were laid fairly late into the bloom period; when the first

continued...

brood mines showed up, most of us didn't notice the large size of the population. This made it even more surprising when the second brood turned out to be very substantial, and generally earlier than expected (more high temperature effects). Some blocks ended up with high mine numbers in July, and several growers considered the need for a relatively a rare treatment against the third brood. **Comstock mealybug** continued to make unwelcome appearances in Niagara peach orchards.

Obliquebanded leafroller is one pest that just seems to maintain a steady course from one year to the next, regardless of the weather conditions. The first flight started early, of course, and the uniformly warm temperatures resulted in a larval emergence pattern that was a bit more synchronized than usual. We have yet to finish all of our plot evaluations, but the magnitude of this year's fruit damage appears to be at least as great as in past years. The newer chemistries in use against OBLR seem to be holding their own; a few growers who had access to SpinTor reported generally acceptable control, and our Confirm applications may have performed comparably to most standard programs, but all the details are not in yet.

Apple maggot once again suffered from the late summer lack of rain; adult catches were down overall, but the effect was localized — some areas saw a normal flush in early August, but in many others, it was simply too dry. This was another



instance in which it definitely paid off to hang traps in individual blocks to determine the need for sprays. A few other insects that didn't make much of a mark in the region included **tarnished plant bug**, **aphids** (green, rosy, even woolly), and **leafhoppers**, although the the last brood could be lying in wait for a September ambush, as it did last year. ❖❖



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2ND
CHANCE

APPLE POSTHARVEST TREATMENTS REVISITED
(Dave Rosenberger, Plant Pathology, Highland)

❖❖ **Clarification:** In last week's article on controlling postharvest decays on apples, I stated that "Captan provides good control of postharvest decays when used at the full label rate of 2.5 lb per 100 gallons of drench solution." That sentence should have read, "Captan **50W** provides good control of postharvest decays when used at the full label rate of 2.5 lb per 100 gallons of drench solution." Postharvest rates for other captan formulations are Captan 80W at 1.6 lb per 100 gallons or Captec 4L at 1.25 quarts per 100 gallons.

The rest of the story: The end of the article on postharvest decays was accidentally omitted from the hard copy version of last week's issue. Following are the last two of the six suggestions for controlling postharvest decays of apples that should have been included in last week's article.

5. Use the cleanest bins available for fruit that is most at-risk for decay. Thus, where possible, use new or sanitized bins for Empire fruit that will be held in long-term storage and be especially careful of drench-water sanitation when these fruit are being treated.

6. Rapid cooling can significantly reduce the incidence of decay that develops in storage. If CA rooms are being filled rapidly, fruit should be pre-cooled in separate rooms before it is loaded in the CA room so as to reduce the total cooling time.❖❖

INSECT TRAP CATCHES (Number/Trap/Day)						
Geneva, NY				HVL, Highland, NY		
	8/24	8/31	9/8		8/25	8/31
Spotted tentiform leafminer	107	73.3	7.9	Spotted tentiform leafminer	11.3	15.3
Redbanded leafroller	0.1	0.3	0	Redbanded leafroller	3.6	4.3
Oriental fruit moth (apple)	2.8	4.3	4.6	Oriental fruit moth	0	0.1
Lesser appleworm	1.5	0.7	4.3	Lesser appleworm	0.9	1.4
Codling moth	1.4	6.4	0.7	Codling moth	1.0	0.1
San Jose scale	0.6	2.9	0.4	Obliquebanded leafroller	0	0
American plum borer	0.9	0.4	0.06	Variiegated leafroller	1.0	0.5
Lesser peactree borer	0.4	0.9	0.06	Tufted apple budmoth	1.1	0.7
Obliquebanded leafroller	0	0	0.1	Fruittree leafroller	0	0
Apple maggot	0	0	0.04	Sparganothis fruitworm	1.6	1.7
				Apple maggot	0.3	0.14

(Dick Straub, Peter Jentsch)

UPCOMING PEST EVENTS

	<u>43°E</u>	<u>50°E</u>
Current DD accumulations (Geneva 1/1- 9/8):	3466	2402
(Geneva 1997 1/1-9/8):	2887	1939
(Geneva "Normal" 1/1-9/8):	3092	2232

Coming Events(Geneva):

Ranges:

OBLR 2nd flight subsides	2809-3656	1930-2573
Lesser appleworm 2nd flight subsides	2775-3466	2002-2460
Lesser peachtree borer flight subsides	2782-3474	1796-2513
STLM 3rd flight subsides	3235-3471	2228-2472
Oriental fruit moth 3rd flight subsides	2987-3522	2018-2377
San Jose scale 2nd flight subsides	2494-3257	1662-2302
Apple maggot flight subsiding	2764-3656	1904-2573
American plum borer 2nd flight subsides	2841-3698	1907-2640
Codling moth 2nd flight subsides	2782-3693	1796-2635

NOTE: Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are possible. These recommendations are not a substitute for pesticide labelling. Please read the label before applying any pesticide.

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