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Update on Pest Management
and Crop Development

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

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Geneva, NY

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FINI

ORCHARD
RADAR
DIGEST



Codling Moth

Codling moth development as of August 9:

2nd generation adult emergence at 100% and 2nd generation egg hatch at 89%.

BAN THE BORERS

FALL BORER
CONTROL
CONSIDERATIONS
(Dave Kain and
Art Agnello,
Entomology, Geneva)

We tested a number of insecticides against these borers over a number of growing seasons. Lorsban is very effective for this use and we have urged growers to take advantage of it where needed. In 2001–2003 we compared some other materials, including white latex paint, endosulfan, Avaunt, Surround, Intrepid, Danitol, Imidan, spinosad and Esteem with Lorsban, with varying results. To make a long story short, only Avaunt, Danitol and, possibly Esteem, applied two or three times in midsummer, provided control comparable to one application of Lorsban. Assail and Altacor were effective when applied only once in midsummer but, obviously, will control only the summer generation.

Our tests have shown that borers can be controlled season-long by applying Lorsban at various times in the spring and summer. While a postbloom trunk application of Lorsban is still

continued...

[Ed. note: This is an update from our annual article on borer management, reprinted because of its timeliness and applicability to the situation in many commercial orchards recently.]

❖❖ There is increasing concern throughout the Northeast about damage done to apple trees by borers. The species of primary concern is dogwood borer, but American plum borer can be prevalent in western New York apple orchards that are close to tart cherry and peach orchards. While we do not yet fully understand the effects these borers have on dwarf trees, we do know that they reduce vigor and can, in time, completely girdle and kill trees.

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INSECT TRAP CATCHES

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allowed, enabling growers to spray at the peak of the dogwood borer flight, applying this material prebloom as early as half-inch green works well, too, and may be more convenient. Fall also may be a good time to control dogwood borer. Results from 2002 indicated that Lorsban applied postharvest the previous year (sprays went on in October 2001) controlled both the overwintering and the summer generations of dogwood borer. An October 2002 application of Lorsban similarly provided season-long control of dogwood borer in 2003. Lorsban works when applied in the spring or fall because it infiltrates burrknot tissue and kills larvae concealed within. It is also very persistent in wood so it continues to work for a considerably long time after it is applied (apparently 9–12 months in our trials). Fall application may offer growers a more convenient alternative for applying borer control sprays. Recall that new Lorsban label restrictions allow only ONE application of any chlorpyrifos product in apples, whether as a foliar or trunk spray, so these recommendations pertain only if no earlier applications have been made.

In a survey we conducted recently, we observed some relationships between borer infestation and various orchard parameters such as the proportion of trees with burrknots, proximity to stone fruit orchards and presence of mouseguards. Conventional wisdom has held that borer problems are worse where mouseguards are in place. Mouseguards can contribute to increased expression of the burrknots that borers invade, and may shield borers from predators and insecticide sprays. This has led some growers to contemplate removing mouseguards under the premise that mice are easier to control than the borers. However, results of our survey indicate that dogwood borer larvae may be found as readily in trees without mouseguards as in those with them. (American plum borer may be a different story in orchards near tart cherry or peach trees.) The orchard in which we have conducted borer control trials has never had mouseguards and there is no shortage of dogwood borers. If mouseguards are deteriorated and no longer protect the tree, there may be some small

advantage, in terms of borers, to removing them. But, in orchards where mouseguards still provide protection against rodents, removing them for the sake of borer control is probably not worth the risk. Instead, we would recommend the use of trunk sprays to control borers. Even with mouseguards on, insecticides will give adequate control if they are applied carefully (i.e., a coarse, low-pressure, soaking spray with a handgun).

Bottom line: as we go into fall, consider using Lorsban after harvest to control borers, and reconsider removing mouseguards on trees where they still afford protection. ❖❖



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Regional Trap Numbers**Week Ending 8/16, Avg No./trap**

<u>Location/County</u>	<u>Date</u>	<u>STLM</u>	<u>OFM</u>	<u>LAW</u>	<u>CM</u>	<u>OBLR</u>	<u>AM</u>
Lyndonville/Orleans	8/12	80.7	0.0	10.3	2.3	0.0	10.0
Waterport/Orleans	8/12	44.7	0.0	9.0	0.3	0.0	12.7
Hilton/Monroe	8/12	217	0.0	3.0	0.0	0.0	4.7
Lincoln/Wayne	8/11	65.7	2.3	12.7	2.3	0.0	6.3
Sodus-Lakesite/Wayne	8/10	17.7	0.7	0.7	0.3	0.0	2.3
Sodus-Inland/Wayne	8/10	31.0	0.0	0.0	0.0	0.3	2.0
Alton/Wayne	8/10	104	0.0	9.7	0.7	0.0	1.7
Wolcott/Wayne	8/10	86.0	0.0	2.7	4.0	1.0	4.0
Newfield/Tompkins	8/9	459	0.0	0.3	2.7	0.7	38.5
Lafayette/Onondaga	8/10	78.5	0.0	18.3	2.7	3.3	3.3
Chazy/Clinton	8/10	741	0.3	6.7	0.0	0.3	9.3
Valcour/Clinton	8/10	93.0	0.0	11.3	0.0	0.3	6.3
Peru/Clinton	8/10	718	0.0	3.0	0.0	1.7	21.3

INSECT TRAP CATCHES (Number/Trap/Day)

	Geneva, NY			Highland, NY		
	<u>8/9</u>	<u>8/12</u>	<u>8/16</u>		<u>8/2</u>	<u>8/9</u>
Redbanded leafroller	0.0	0.0	0.1	Redbanded leafroller	0.0	0.7
Spotted tentiform leafminer	14.1	15.0	14.8	Spotted tentiform leafminer	14.6	41.1
Oriental fruit moth	2.0	1.2	2.6	Oriental fruit moth	0.5	3.1
Lesser appleworm	0.0	0.0	0.0	Lesser appleworm	1.4	1.4
American plum borer	0.0	0.7	0.3	Codling moth	1.2	2.9
Lesser peachtree borer	0.0	0.0	0.0	Obliquebanded leafroller	1.5	3.0
San Jose scale	0.5	1.0	0.5	Apple maggot	0.6	0.6
Peachtree borer	0.0	0.0	0.0			
Apple maggot	2.8	1.5	2.1			
* first catch						

LAST DANCE

EVENT REMINDERS

CORNELL FRUIT PEST CONTROL FIELD DAY

The N.Y. Fruit Pest Control Field Day will take place during Labor Day week on Sept. 8 and 9 this year, with the Geneva installment taking place first (Wednesday Sept. 8), and the Hudson Valley installment on the second day (Thursday Sept. 9). Activities will commence in Geneva on the 8th, with registration, coffee, etc., in the lobby of Barton Lab at 8:30 am. The tour will proceed to the orchards to view plots and preliminary data from field trials involving new fungicides, bactericides, miticides, and insecticides on tree fruits and grapes. It is anticipated that the tour of field plots will be completed by noon. On the 9th, participants will register at the Hudson Valley Laboratory starting at 8:30, after which they will view and discuss results from field trials on apples and other fruit crops. No pre-registration is required for either event.

UPCOMING PEST EVENTS

	43°F	50°F
Current DD accumulations (Geneva 1/1–8/16/10):	3034	2145
(Geneva 1/1–8/16/2009):	2484	1632
(Geneva "Normal"):	2653	1827
(Geneva 1/1–8/23 predicted):	3240	2302

<u>Coming Events:</u>	<u>Ranges (Normal ±StDev):</u>	
Oriental fruit moth 3rd flight peak	2649–3239	1819–2241
Oriental fruit moth 3rd flight subsides	2928–3412	1978–2310
Redbanded leafroller 3rd flight begins	2594–2976	1768–2070
Redbanded leafroller 3rd flight peak	2717–3207	1881–2225
Lesser appleworm 2nd flight peak	2120–3130	1412–2172
Lesser appleworm 2nd flight subsides	2794–3488	1918–2422
San Jose scale 2nd flight subsides	2639–3349	1785–2371
Apple maggot flight subsides	2772–3258	1907–2283
American plum borer 2nd flight subsides	2929–3365	2015–2381
Codling moth 2nd flight subsides	2845–3493	1922–2472
Peachtree borer flight subsides	2480–3138	1672–2190
Lesser peachtree borer flight subsides	2996–3446	2017–2433
Obliquebanded leafroller 2nd flight subsides	3095–3473	2121–2457
Spotted tentiform leafminer 3rd flight peak	2543–3007	1725–2087

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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