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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

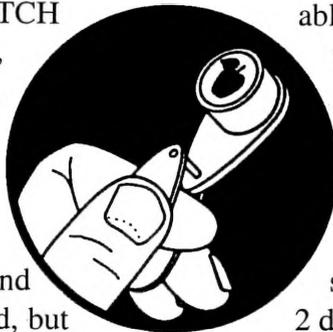
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LARVA
MESSAGE,
PLEASE

WORM WATCH
(Art Agnello,
Entomology,
Geneva)



❖❖ The summer state of mind may have ended this past weekend, but some of the last arthropods of the season are still out there, and may pose a final concern even now as the harvest activity gears up. Of greatest consequence are the internal lepidopteran pests that are still flying, laying eggs, and taking a last meal before fall — codling moth, oriental fruit moth, and lesser appleworm, European corn borer — one or all of which have already begun to turn up in bins of apples, peaches, or pears being gathered for packing now. We're in the middle of the last flight of these species, with high numbers of at least OFM being seen in some Niagara and Orleans County sites. Blocks with a history of internal worm problems may need a last-minute application of a short-PHI material to help stave off the final feeding injury caused by young larvae. Early reports indicate that even regular schedules using the OP standards may not have succeeded in completely preventing this damage in all cases, so some thought should be given to using an alternative material such as a B.t., a pyrethroid, or Spintor, as appropriate.

Because of the multiple variables (different crops, different spray programs, and several pest species) involved in the management of internal worm problems that may occur, we are asking for the industry's assistance in gathering information that will enable us to address these problems and formulate the best strategies for solving them. This can only be done properly if we are

able to identify sufficient numbers of the worms found infesting fruit during the harvest and packing process. We are therefore requesting that packers, inspectors, consultants, etc., finding more than nominal infestations of internal worms please put aside and save a good sample (on the order of 1-2 dozen) of the infested fruits so that we can dissect out the insects and identify them. We'll also ask for the block location and spray records from each lot of infested fruit, to help in the process of determining cause and future action. It's not necessary to dig out the insects for us; just keep the fruits in a refrigerated room and contact one of the following people to make arrangements for pickup: Deb Breth (585-589-5561), Julie Carroll (315-787-2430), Art Agnello (315-787-2341), or Harvey Reissig (315-787-2336).

PEARLEAF BLISTER MITE

Another season-end problem that may deserve some attention now is this sporadic pest of pears that shows up in a limited number of commercial pear orchards and is a fairly common problem in

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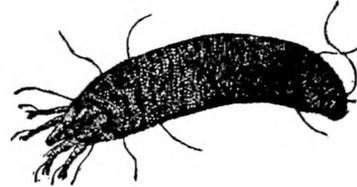
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 - ❖ End of season insects
- UPCOMING PEST EVENTS
- INSECT TRAP CATCHES

home plantings. The adults are very small and cannot be seen without a hand lens; the body is white and elongate oval in shape, like a tiny sausage. The mite causes three distinct types of damage. During winter, the feeding of the mites under the bud scales is believed to cause the bud to dry and fail to develop. This type of damage is similar to and may be confused with bud injury from insufficient winter chilling. Fruit damage is the most serious aspect of blister mite attack. It occurs as a result of mites feeding on the developing pears, from the green-tip stage through bloom, causing russet spots. These spots, which are often oval in shape, are usually depressed with a surrounding halo of clear tissue. They are 1/4-1/2 inch in diameter and frequently run together. A third type of injury is the blistering of leaves; blisters are 1/8-1/4 inch across and, if numerous, can blacken most of the leaf surface. Although defoliation does not occur, leaf function can be seriously impaired by a heavy infestation.

The mite begins overwintering as an adult beneath bud scales of fruit and leaf buds, with fruit buds preferred. When buds start to grow in the spring, the mites attack developing fruit and emerging leaves. This produces red blisters in which female blister mites then lay eggs. These resulting new colonies of mites feed on the tissue within the protection of the blister, but they can move in and out through a small hole in its center. The mites pass through several generations on the leaves but their activity slows during the warm summer months. The red color of the blisters fades and eventually blackens. Before leaf fall, the mites leave the blisters and migrate to the buds for the winter.

A fall spray is recommended sometime in early October, when there is no danger of frost for at least 24-48 hr after the spray. Use Sevin 50 WP (2 lb/100), or 1-1.5% oil plus either Diazinon 50WP (1 lb/100 gal) or Thiodan 50WP (1/2-1 lb/100 gal). A second spray of oil plus Diazinon or Thiodan, in the spring, just before the green tissue begins to show, will improve the control. ❖❖



PEST FOCUS

Geneva: **Stink bug** observed on peach.

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UPCOMING PEST EVENTS

	<u>43°F</u>	<u>50°F</u>
Current DD accumulations (Geneva 1/1-9/3):	3233	2270
(Geneva 1/1-9/3/2001):	3152	2182
(Geneva "Normal"):	3000	2111

Coming Events:

Ranges:

Codling moth 2nd flight subsidies	2518-3693	1705-2635
American plum borer 2nd flight subsidies	2841-3698	1907-2640
Lesser appleworm 2nd flight subsidies	2775-3466	2002-2460
Oriental fruit moth 3rd flight subsidies	2987-3522	2018-2377
Lesser peachtree borer flight subsidies	2782-3474	1796-2513
Peachtree borer flight subsidies	2230-3255	1497-2309
San Jose scale 2nd flight subsidies	2494-3582	1662-2477
Spotted tentiform leafminer 3rd flight subsidies	3235-3471	2228-2472
Apple maggot flight subsidies	2764-3656	1904-2573

INSECT TRAP CATCHES (Number/Trap/Day)

Geneva, NY

Highland, NY

	<u>8/26</u>	<u>8/29</u>	<u>9/3</u>		<u>8/12</u>	<u>8/20</u>
Redbanded leafroller	0.3	0.2	0.4	Redbanded leafroller	1.4	4.2
Spotted tentiform leafminer	28.0	20.8	15.7	Spotted tentiform leafminer	38.3	40.1
Oriental fruit moth	1.6	5.7	2.6	Oriental fruit moth	0.4	0.2
Lesser appleworm	23.5	30.2	13.9	Codling moth	1.5	1.2
Codling moth	4.4	1.0	1.3	Lesser appleworm	0.7	2.5
San Jose scale	1.3	2.0	1.0	Tufted apple budmoth	0.2	0.0
American plum borer	0.3	0.2	0.3	Variiegated leafroller	0.9	0.6
Lesser peachtree borer	0.9	0.0	0.2	Obliquebanded leafroller	0.3	0.3
Peachtree borer	1.1	0.2	0.5	Apple maggot	0.0	0.2
Obliquebanded leafroller	0.0	0.2	0.0	Sparganothis fruitworm	0.8	1.9
Apple maggot	0.0	0.0	0.06	Fruittree leafroller	0.0	0.0
				Dogwood borer	0.1	0.0

* first catch

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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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