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Update on Pest Management
and Crop Development

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

August 27, 2007

VOLUME 16, No. 24

Geneva, NY

LAST
TRACE

ORCHARD
RADAR
DIGEST



LAST LICKS
(Art Agnello,
Entomology,
Geneva)

INSECT
BITES

Geneva Predictions:

Codling Moth

Codling moth development as of August 27: 2nd generation adult emergence at 100% and 2nd generation egg hatch at 93%.

[NOTE: Consult our mini expert system for arthropod pest management, the Apple Pest Degree Day Calculator:

<http://www.nysaes.cornell.edu/ipm/specware/newa/appledd.php>

Find accumulated degree days between dates with the Degree Day Calculator:

<http://www.nysaes.cornell.edu/ipm/specware/newa/>

Powered by the NYS IPM Program's NEWA weather data and the Baskerville-Emin formula]



❖❖ This season has been more hot and dry than last year, a situation that opened up the potential for outbreaks from some typical warm-weather pests. However, most arthropod pest problems have been fairly well attended to by NY growers, so surprises and crisis infestations have been relatively few. As the harvest approaches, we're nearly done with the last of the pest management duties.

Of greatest potential concern are the **internal leps**, which have been plentiful enough in the normal trouble spots, and there are still oriental fruit moths and even a few codling moths flying in some blocks. Therefore, to be

continued...

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- ❖ End of season pest concerns

GENERAL INFO

- ❖ Events reminder

PEST FOCUS

UPCOMING PEST EVENTS

INSECT TRAP CATCHES

cautious, we're not ruling out the possibility that blocks with a history of internal worm problems might need a last-minute application of a short-PHI material to help stave off the final feeding injury caused by young larvae. Before the harvest period begins in earnest, a fruit examination could help determine whether the last brood of any of the likely species needs a final deterrent before the sprayer is put away. Some thought might be given to using an alternative material such as a B.t., a pyrethroid, Calypso, Assail, or a sprayable pheromone, as appropriate (watch your PHIs).

Another season-end problem that may deserve attention now is **pearleaf blister mite**, a sporadic pest of pears that shows up in a limited number of commercial pear orchards and is a fairly common problem in 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.

For those plantings that might be suffering from this errant pest, 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 Thionex 50WP (1/2–1 lb/100 gal). A second spray of oil plus Thionex, in the spring, just before the green tissue begins to show, will improve the control. ❖❖

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is published weekly from March to September by Cornell University—NYS Agricultural Experiment Station (Geneva) and Ithaca—with the assistance of Cornell Cooperative Extension. New York field reports welcomed. Send submissions by 3 pm Monday to:

scaffolds FRUIT JOURNAL
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This newsletter is available on the World Wide Web at: <http://www.nysaes.cornell.edu/ent/scaffolds/>

FRUITS OF OUR LABOR

EVENT LINEUP

Final Reminder — Tree Fruit Pest Control Field Day

❖❖ Please remember to make plans to attend this year's N.Y. Fruit Pest Control Field Day, which will take place during Labor Day week on Sept. 5 and 6. The Geneva installment will take place first (Wednesday Sept. 5), with the Hudson Valley segment on the second day (Thursday Sept. 6). Activities will commence

in Geneva on the 5th, 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 6th, participants will register at the Hudson Valley Laboratory starting at 8:30, after which we will view and discuss results from field trials on apples/pears. ❖❖

[NOTE: Collier Dr., the entry road adjacent to Barton Lab, is under repair and will probably still be closed off, so it will be easier to drive into the Station using the Pre-Emption Rd. entrance closest to the Ag Tech Park, and then take the southern road around the back of the greenhouses to get to the Barton parking lot.]

INSECT TRAP CATCHES (Number/Trap/Day)

	Geneva, NY			Highland, NY			
	8/20	8/23	8/27	8/6	8/13	8/20	
Redbanded leafroller	0.3	1.0	3.5	Redbanded leafroller	0.4	0.5	1.9
Spotted tentiform leafminer	5.5	3.7	5.5	Spotted tentiform leafminer	26.9	22.4	12.9
Oriental fruit moth	1.0	1.3	3.3	Oriental fruit moth	2.3	2.7	1.9
Lesser appleworm	0.0	0.8	0.9	Codling moth	2.4	0.9	0.4
San Jose scale	65.8	55.8	39.4	Lesser appleworm	3.9	5.2	2.1
American plum borer	0.0	0.0	0.1	Obliquebanded leafroller	0.7*	0.0	0.0
Lesser peachtree borer	0.0	0.0	0.0	Variiegated leafroller	0.2	0.1	0.3
Obliquebanded leafroller	0.0	0.0	0.0	Apple maggot	0.5	0.9	0.5
Peachtree borer	0.0	0.0	0.0	Tufted apple budmoth	0.1	0.0	0.0
Apple maggot	1.7	2.0	0.8				

* first catch

UPCOMING PEST EVENTS

	43°F	50°F
Current DD accumulations (Geneva 1/1–8/27/07):	2967	2054
(Geneva 1/1–8/27/2006):	3065	2108
(Geneva "Normal"):	2955	2000
(Geneva 1/1–9/4/2007, Predicted):	3188	2219
(Highland 3/1–8/27/07):	3207	2310

<u>Coming Events:</u>	<u>Ranges (Normal±StDev):</u>	
Redbanded leafroller 3rd flight peak	2761–3249	1899–2337
Spotted tentiform leafminer 3rd flight peak	2606–3050	1782–2124
Obliquebanded leafroller 2nd flight peak	2620–3016	1784–2108
Oriental fruit moth 3rd flight peak	2641–3249	1821–2257
Oriental fruit moth 3rd flight subsides	2962–3381	2000–2288
San Jose scale 2nd flight subsides	2639–3349	1785–2371
Lesser appleworm 2nd flight peak	2159–3213	1443–2229
Lesser appleworm 2nd flight subsides	2883–3467	1973–2387
Peachtree borer flight subsides	2523–3157	1708–2202
Apple maggot flight subsiding	2772–3374	1908–2368
Codling moth 2nd flight subsides	2859–3583	1944–2536

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.

This material is based upon work supported by Smith Lever funds from the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.