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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

AT THE GATE

ORCHARD
RADAR
DIGEST
(Art Agnello,
Entomology,
Geneva)



that blocks with a history of internal worm problems might need a last-minute application of an appropriate-length PHI material to help stave off the final feeding injury caused by young larvae, especially with the late-season warmup we've experienced over the past 2 weeks or so.

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. Potential choices now include Altacor, Assail, a B.t., Calypso, Delegate, a pyrethroid, or a sprayable pheromone, as applicable (pay attention to PHIs).

Also in response to our long-anticipated summer temperatures, last week saw the appearance of some sizeable outbreaks of European red mite and even twospotted spider mite in more than one location around the state, particularly in the more highly favored varieties (e.g.,

continued...

❖❖ Geneva Predictions:

Codling Moth

Codling Moth development as of August 24:
2nd generation adult emergence at 88% and
2nd generation egg hatch at 60%.



GET THE FLIES OUT

FISH ARE JUMPIN'...
(Art Agnello, Entomology,
Geneva)

❖❖ Similarly to last year, this has been another season that is more cool and wet than normal, which has discouraged outbreaks of some arthropod pests, but encouraged others. However, most of this year's problems have been met appropriately by NY growers, so surprises and crisis infestations again have been relatively few. With harvest approaching, there are just a couple remaining pest management duties.

Of greatest potential concern are the internal leps, which have been noticeable but not overwhelming in the normal trouble spots, but there are still oriental fruit moths and even a few codling moths flying in some blocks. Therefore, to be cautious, we're not ruling out the possibility

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PEST FOCUS

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UPCOMING PEST EVENTS

Delicious, Honeycrisp, Fuji, Empire). Although it is essentially too late for these populations to have much measurable effect on this year's (or even next year's) crop, they may still be able to cause some leaf bronzing, which is unsightly but generally not of concern unless there is significant defoliation. More likely is that ERM adults could lay overwintering eggs in the fruit calyx as they prepare to shut down for the season; in some cases, the deposition could be heavy enough to be detected by a potential buyer, so growers will have to make their own determination whether this would be of sufficient concern to justify a late-season spot miticide treatment.

Another season-end problem that may deserve consideration 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 XLR Plus (1.5–3 qt/A) or 80S (1.88–3.75 lb/A), or 1–1.5% oil plus either Diazinon 50WP (1 lb/100 gal) or Thionex (50WP, 0.5–1 lb/100 gal; 3EC, 0.33–0.67 qt/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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Dept. of Entomology
NYSAES, Barton Laboratory
Geneva, NY 14456-1371

Phone: 315-787-2341 FAX: 315-787-2326
E-mail: ama4@cornell.edu

Editors: A. Agnello, D. Kain

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FIELD DAYS

EVENT REMINDERS

***N.Y. FRUIT PEST CONTROL FIELD DAYS**

Wednesday Sept. 9 (Barton Lab, NYSAES, Geneva) 8:30 am

Thursday Sept. 10 (Hudson Valley Lab, Highland) 8:30 am

After registration in the respective labs' lobbies, the tours 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. No pre-registration is required for either event.

PEST FOCUS

Geneva:
Redbanded leafroller 3rd flight beginning.



INSECT TRAP CATCHES						
(Number/Trap/Day)						
	Geneva, NY			Highland, NY		
	<u>8/13</u>	<u>8/17</u>	<u>8/24</u>		<u>8/17</u>	<u>8/24</u>
Redbanded leafroller	0.8	0.4	1.8*	Redbanded leafroller	3.4	10.7
Spotted tentiform leafminer	23.0	4.3	1.0	Spotted tentiform leafminer	85.5	37.8
Oriental fruit moth	0.5	0.4	1.3	Oriental fruit moth	0.5	1.9
Lesser appleworm	0.2	0.0	0.2	Lesser appleworm	26.1	21.6
Codling moth	0.5	0.0	0.5	Codling moth	1.9	1.4
San Jose scale	1467	650	42.9	Lesser peachtree borer	1.0	0.1
American plum borer	0.7	0.1	0.1	Obliquebanded leafroller	0.0	0.1
Lesser peachtree borer	0.0	0.3	0.3	Dogwood borer	0.1	0.0
Peachtree borer	0.0	0.0	0.0	Peachtree borer	1.3	0.3
Obliquebanded leafroller	0.0	0.0	0.0	Tufted apple budmoth	0.1	0.0
Apple maggot	1.0	2.0	1.3	Variegated leafroller	0.6	0.0
				Apple maggot	1.8	1.9

* first catch

UPCOMING PEST EVENTS

	<u>43°F</u>	<u>50°F</u>
Current DD accumulations (Geneva 1/1–8/24/09):	2732	1824
(Geneva 1/1–8/24/2008):	2857	1944
(Geneva "Normal"):	2854	1984
(Geneva 1/1–8/31 Predicted):	2895	1939
(Highland 3/1–8/24):	3008	

<u>Coming Events:</u>	<u>Ranges (Normal ±StDev):</u>	
Codling moth 2nd flight peak	1921–2747	1275–1905
Comstock mealybug 2nd gen. crawlers emerging	2234–2624	1505–1781
Comstock mealybug 2nd gen. crawlers peak	2380–2624	1658–1737
Spotted tentiform leafminer 3rd flight begins	2258–2652	1518–1838
Spotted tentiform leafminer 3rd flight peak	2570–3014	1753–2091
Obliquebanded leafroller 2nd flight begins	2255–2655	1516–1838
Obliquebanded leafroller 2nd flight peak	2593–3011	1758–2098
Oriental fruit moth 3rd flight peak	2657–3257	1832–2254
Lesser appleworm 2nd flight peak	2093–3141	1393–2185
Apple maggot flight subsides	2772–3258	1907–2283
Peachtree borer flight subsides	2525–3145	1710–2194

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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