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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

FIT
TO BE
TIED

LOOSE ENDS
(Art Agnello,
Entomology,
Geneva)



❖❖ This has been another one of those seasons that wasn't able to make up its mind, with a delayed arrival and steadfast alternating patterns of hot and cool temperatures, punctuated with severe bouts of rain and brimstone. You'd think we should be used to this unpredictability by now, but it's still difficult to accommodate to all the curves that get thrown. At any rate, the impact on arthropod pests has varied accordingly, with our normal pests there, as usual, plus a few head-scratching outbreaks but not many actual crises, as most of this year's problems have been met appropriately by NY growers. Now, with harvest approaching, there may be just a few remaining pest management duties.

Of greatest potential concern are the **internal leps**, which have been noticeable, as usual, but not overwhelming in the normal trouble spots; however, there are still oriental fruit moths and even codling moths flying in problem sites. Therefore, to be cautious, we shouldn't rule out the possibility 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. 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 (and PHIs) include

Altacor (5/10 days, pome/stone fruits, respectively), Assail (7 days), a B.t. (0 days), Belt (14/7 days, pome/stone fruits, respectively), Calypso (30 days), Delegate (1 day, peaches; 7 days, apples/pears/plums), a pyrethroid (PHI varies), or a sprayable pheromone (0 days), as applicable.

Apple maggots are also continuing to emerge, often in healthy numbers; possible late-season options include Assail (7 days), Calypso (30 days), Imidan (7 days), and various pyrethroids.

A couple of less common last-minute pests can surfaced in certain cases. One is **western flower thrips**, particularly in nectarines growing in drought-stressed areas. Adults move from alternate weed or crop hosts to fruit just prior to and during harvest, feed on the fruit surface in protected sites, such as in the stem

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end, the suture, under leaves and branches, and between fruits. This results in silver stipling or patches; injury is particularly obvious on highly colored varieties. An application of Delegate immediately before the first harvest may prevent subsequent losses; however, an additional application may be needed if pressure is severe. The PHI varies from 1 day (peaches and nectarines) to 7 days (plums and prunes) to 14 days (apricots).

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.

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. Options include Sevin XLR Plus (1.5–3 qt/A) or 80S (1.88–3.75 lb/A), or 1–1.5% oil plus Diazinon 50WP (1 lb/100 gal).❖❖

PEST FOCUS

Geneva: **Redbanded leafroller** 3rd flight began today, 8/18.

Highland: **Spotted tentiform leafminer** 3rd flight occurring.

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MITE
ASIDEENVIDOR MITICIDE
LABELED IN NYS

❖❖ The NYS DEC has announced that they have approved a FIFRA 24(c) Special Local Need label for Envidor 2SC miticide (Bayer CropScience, EPA Reg. No. 264-831) for use against mites, including European red mite and Twospotted spider mite, on pome fruit. A maximum of 1 application per season is allowed at a rate of 16–18 fl. oz./A, with a PHI of 7 days; this product is not for sale, distribution or use in Nassau and Suffolk Counties. As we are past the normal time during the season when rescue miticide applications should normally be required, since mite populations are normally subsiding now with decreasing foliar quality, it is not expected that this material will actually be needed at this time unless mites have been uncontrolled all season and have built up to numbers that are still damaging the trees. The normal recommended threshold in August is 15 motile forms per leaf. ❖❖

FRUIT
TOUREVENT
ANNOUNCEMENTSCORNELL FRUIT PEST CONTROL FIELD
DAY

The Geneva Fruit Pest Control Field Day will take place during Labor Day week on Sept. 3 this year. Activities will commence 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. Because of the recent retirements and personnel changes at the Hudson Valley Lab, there will be no corresponding Highland component this year. However, cooperators desiring one-on-one tours of their individual research plots can contact Peter Jentsch to make arrangements. No pre-registration is required for the Geneva tour.

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INSECT TRAP CATCHES (Number/Trap/Day)						
Geneva, NY				Highland, NY		
	<u>8/11</u>	<u>8/14</u>	<u>8/18</u>		<u>8/11</u>	<u>8/18</u>
Redbanded leafroller	0.0	0.0	0.3*	Redbanded leafroller	0.9	0.7
Spotted tentiform leafminer	14.6*	6.7	8.6	Spotted tentiform leafminer	50.2	39.2
Oriental fruit moth	0.1	0.3	3.0	Oriental fruit moth	2.2	2.1
Codling moth	1.5	0.5	0.6	Codling moth	2.2	2.4
Lesser appleworm	0.1	0.0	0.1	Lesser appleworm	0.3	2.4
San Jose scale	200	75.0	33.8	Variigated leafroller	0.6	0.6
American plum borer	0.3	0.0	0.0	Tufted apple budmoth	0.3	0.8
Lesser peachtree borer	0.1	0.5	0.1	Sparganothis fruitworm	0.0	0.0
Obliquebanded leafroller	0.5*	0.3	1.1	Obliquebanded leafroller	0.6	0.6
Dogwood borer	0.0	0.0	0.0	Apple maggot	0.2	0.1
Peachtree borer	0.1	0.3	0.4			
Apple maggot	4.8	4.2	5.3			

* first catch

UPCOMING PEST EVENTS		
	43°F	50°F
Current DD accumulations (Geneva 1/1–8/18/14):	2587	1759
(Geneva 1/1–8/18/2013):	2674	1849
(Geneva "Normal"):	2797	1863
(Geneva 1/1–8/25/14, predicted):	2773	1896
(Highland 1/1–8/18/2014):	2670	2063
<u>Coming Events:</u>	<u>Ranges (Normal ±StDev):</u>	
American plum borer 2nd flight peak	2005–2575	1351–1777
Comstock mealybug 2nd gen. crawlers peak	2380–2625	1658–1737
Comstock mealybug 2nd gen. crawlers subside	2735–2771	1794–1958
Codling moth 2nd flight peak	1943–2727	1288–1888
Spotted tentiform leafminer 3rd flight peak	2568–3022	1748–2110
Apple maggot flight peak	2115–2665	1417–1845
Obliquebanded leafroller 2nd flight peak	2593–3011	1758–2098
Redbanded leafroller 3rd flight peak	2717–3207	1881–2225
Lesser appleworm 2nd flight peak	2131–3105	1422–2156
Oriental fruit moth 3rd flight peak	2643–3221	1818–2232
Peachtree borer flight subsides	2478–3126	1672–2180
San Jose scale 2nd gen. crawlers emerging	2746–2852	1916–2104

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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