

scaffolds

Update on Pest Management
and Crop Development

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

July 18, 2011

VOLUME 20, No. 18

Geneva, NY

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HOT
WINGS

ORCHARD
RADAR
DIGEST



Spotted Tentiform Leafminer

Optimum first sample date for 2nd generation STLM sap-feeding mines: July 15 [G].

White Apple Leafhopper

2nd generation WALH found on apple foliage: July 25 [M].

[M = Marlboro, Ulster Co.;
G = Geneva]

Roundheaded Appletree Borer

Peak RAB hatch: July 2 to July 20 [M]/July 10 to 29 [G].

Codling Moth

CM development as of July 18:: 2nd gen adult emergence at 39% [M]/11% [G] and 2nd gen egg hatch at 8% [M]/1% [G].

2nd generation 7% CM egg hatch: July 17 [M]/July 25 [G] = target date for first spray where multiple sprays needed to control 2nd generation CM.

2nd generation 30% egg hatch: July 24 [M] = target date where one spray needed to control 2nd generation CM.



Oriental Fruit Moth

2nd generation – second treatment date, if needed: July 18 [G].

Redbanded Leafroller

2nd RBLR peak catch and approximate start of egg hatch: July 4 [M]/July 13 [G].

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PEST FOCUS

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WORKING (THE BUGS) OUT

FEEL THE BURN
(Art Agnello,
Entomology, Geneva)

❖❖ We're arguably past the midpoint of the summer season now, especially if you follow the orchard calendar rather than the paper one hanging on the wall, so it's only natural to begin paying less attention to the arthropod pests that have either been with us for too long already or may yet make an appearance, but there are still a few to be aware of, including some that have been covered in previous issues.

European Red Mite

There have already been a few sites identified with some growing red mite populations in this warmer-than-normal period, perhaps even with some foliar bronzing damage showing up, and we're not done yet. Keep an eye on your foliar populations, using the 5.0 motiles-per-leaf threshold that we recommend during July (see p. 72 in the Recommends), in case there is a need for any mid-season miticide applications; Acramite, Kanemite, Nexter, Portal and Zeal are all potential choices for later-season infestations. Twospotted spider mite can also show up at this time of year, and has a tendency to increase its numbers in response to high temperatures more rapidly than ERM.

Apple Maggot

The next two weeks traditionally see the heaviest flight of this pest in commercial orchards, although the drier-than-normal stretch we have been experiencing may delay or impede successful adult emergence of adults from their developmental sites in the soil. Nonetheless, diligent attention to either your protective sprays (in blocks that are perennially high-population areas) or monitoring traps (in blocks that are hard to predict) would be advised.

Comstock Mealybug

In pears especially, this begins the period of greatest migration of 2nd generation nymphs into the fruit calyx, where they will be concealed until detected as unwelcome surprises at packinghouse inspections postharvest. Blocks with mealybug "issues" should receive a protective spray of Actara, Assail, Centaur, Diazinon, Movento, Portal, or Provado; Calypso applied for internal worms should also be effective. In apples, infestations tend to result in blooms of sooty mold, particularly over the bottom half of fruits; choices here are restricted to Assail, Centaur, Movento, Portal, plus whatever incidental control you might obtain from Calypso sprays for internal leps.

Woolly Apple Aphid

If you failed to prevent their migration from the lower trunk areas in June, there could be aerial colonies evident in canopies now. This is a difficult pest to control completely, but now will be better than later in the month. The best material we have available (still) is Diazinon; Movento and Thionex are other, possibly less effective, options. Assail and Beleaf are also labeled for this pest, but we have no efficacy data on these particular products. Alternatively, if you're not on a captan program, a summer horticultural mineral oil application, using as much water as you can manage, has been shown to be effective.

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Oriental Fruit Moth & Codling Moth

The earliest feeding injury from the second generation larvae should be starting to become noticeable in problem blocks (apples and peaches). By next week, most western NY sites will reach the 1260 DD mark corresponding to the preferred spray window for contacting the first 20% or so of the hatching second brood CM larvae. And OFM 2nd brood emergence is under way, so an application against these larvae is advised in problem sites.

Japanese Beetle

These have become stalwart interlopers until mid-August, so it's mainly a matter of keeping a diligent eye on your trees to try to stem the amount of damage they can do. In stone fruits, protective insecticides include: Assail, Leverage, Provado, Sevin, and Voliam Xpress; in apples: Assail, Calypso, Sevin, and Voliam Xpress. ❖❖

FOR
BMSB

NEW 2(ee) ACTARA
REGISTRATION

❖❖ The NYSDEC has recently approved a 2(ee) recommendation for Actara insecticide (EPA Reg. No. 100-938) against Brown Marmorated Stink Bug for use on pome fruit and bushberries. Actara is a restricted-use pesticide in NYS and is not for sale or use on Long Island. ❖❖

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INSECT TRAP CATCHES (Number/Trap/Day)

	Geneva, NY			Highland, NY		
	<u>7/11</u>	<u>7/13</u>	<u>7/18</u>		<u>7/11</u>	<u>7/18</u>
Redbanded leafroller	–	0.0	0.6*	Redbanded leafroller	1.9	0.9
Spotted tentiform leafminer	11.6	17.8	3.7	Spotted tentiform leafminer	32.3	24.4
San Jose scale	–	2.5	12.4*	Oriental fruit moth	4.4	3.1
Oriental fruit moth	0.1	1.3	0.0	Lesser appleworm	0.5	0.6
Lesser peachtree borer	0.0	0.0	0.0	Codling moth	1.1	1.9
American plum borer	0.1	0.0	0.0	Obliquebanded leafroller	1.0	0.5
Obliquebanded leafroller	0.1	0.3	0.0	Apple maggot	0.0	0.0
Apple maggot	0.5*	0.0	0.2			
Sodus Center trap catches:	<u>7/8</u>	<u>7/12</u>	<u>7/15</u>			
Oriental fruit moth	0.0	5.5	1.5			
Lesser appleworm	0.0	0.0	0.5			
Codling moth	1.0	1.0	0.5			
* first catch						

PEST FOCUS

Geneva: **Obliquebanded leafroller** estimated 100% egg hatch in DD base 43°F after biofix - 950. Current DD43 since biofix (June 13): 956.

Western NY: **Obliquebanded leafroller** DD43 since biofix (June 7): Sodus, 1032; Williamson, 1080; Farmington, 1057. Albion (June 9 biofix): 1022. Appleton North (June 14 biofix): 779 [estimated 90% egg hatch - 810 DD].

Highland:

Very high **fabraea** observed on Bosc pear with significant leaf drop occurring. **Obliquebanded leafroller** DD43 since biofix (June 1): 1176.

UPCOMING PEST EVENTS

	43°F	50°F
Current DD accumulations (Geneva 1/1-7/18/11):	2015	1372
(Geneva 1/1-7/18/2010):	2188	1502
(Geneva "Normal"):	1864	1217
(Geneva 1/1-7/25 Predicted):	2263	1572
(Highland 1/1-7/18/11):	2137	1439
<u>Coming Events:</u>	<u>Ranges (Normal ±StDev):</u>	
Apple maggot 1st oviposition punctures	1605-2157	1144-1544
Apple maggot flight peak	2104-2542	1413-1743
Codling moth 2nd flight begins	1569-2259	1023-1515
Codling moth 2nd flight peak	1931-2735	1278-1892
Lesser appleworm 2nd flight begins	1418-2002	918-1326
Oriental fruit moth 2nd flight peak	1455-1995	924-1342
Oriental fruit moth 2nd flight subsides	2049-2515	1358-1752
Redbanded leafroller 2nd flight peak	1546-1978	991-1323
Redbanded leafroller 2nd flight subsides	2192-2668	1482-1830
Obliquebanded leafroller 1st flight subsides	1612-1952	1048-1302
STLM 2nd gen. tissue feeders present	1378-2035	913-1182
Spotted tentiform leafminer 2nd flight subsides	1977-2371	1299-1637
San Jose scale 2nd flight begins	1602-1948	1037-1307
San Jose scale 2nd flight peak	2115-2503	1422-1752
Comstock mealybug 1st flight subsides	1818-2132	1216-1418
American plum borer 2nd flight peak	1976-2544	1328-1748

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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