

SCAFFOLDS Fruit Journal, Geneva, NY

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Update on Pest Management and Crop Development

June 20, 2011

COMING EVENTS

	43°F	50°F
Current DD accumulations		
(Geneva 1/1-6/20):	1196	737
(Geneva 1/1-6/20/2010):	1369	872
(Geneva "Normal"):	1121	671
(Geneva 1/1-6/27 Predicted):	1386	866
(Highland 1/1-6/20):	1348	845
Coming Events – Ranges (Normal +/- Std Dev):		
American plum borer		
1st flight subsides	1211-1425	751-919
Apple maggot 1st catch	1230-1632	785-1039
Codling moth 1st flight subsides	1280-1858	811-1225
Comstock mealybug		
1st adult trap catch	1308-1554	809-1015
Lesser appleworm		
1st flight subsides	990-1466	604-932
OBLR summer larvae hatch	1038-1460	625-957
Oriental fruit moth		
2nd flight begins	1281-1491	788-968

Redbanded leafroller

2nd flight begins

1244-1576

764-1028

San Jose scale crawlers present

1033-1215

619-757

TRAP CATCHES (Number/trap/day)

<u>Geneva</u>	<u>6/9</u>	<u>6/13</u>	<u>6/16</u>	<u>6/20</u>
Redbanded Leafroller	0.2	0.0	0.0	0.0
Spotted Tentiform Leafminer	0.0	0.1	0.2	4.1*
San Jose scale	1.3	1.5	1.5	0.5
Oriental Fruit Moth	0.2	0.3	0.3	0.1
Lesser Peachtree Borer	0.0	0.0	0.0	0.0
American Plum Borer	0.5	0.4	0.2	0.1
Pandemis Leafroller	0.2	0.0	0.0	0.0
Obliquebanded Leafroller	0.0	0.1*	0.0	0.1
Peachtree Borer	-	-	0.3*	0.0

<u>Sodus Center (Wayne Co.)</u>	<u>6/7</u>	<u>6/10</u>	<u>6/14</u>	<u>6/17</u>
Oriental Fruit Moth	30.5	0.5	3.5	2.0
Lesser Appleworm	3.0	3.5	1.0	0.5
Codling Moth	0.5	5.0	2.0	1.5

<u>Highland (Peter Jentsch)</u>	<u>5/31</u>	<u>6/6</u>	<u>6/13</u>	<u>6/20</u>
Redbanded Leafroller	0.5	0.0	0.0	1.1
Spotted Tentiform Leafminer	2.5	10.6	49.0	42.8
Oriental Fruit Moth	4.4	1.4	0.5	0.8
Lesser Appleworm	0.3	0.1	1.6	0.2
Codling Moth	6.1	3.9	7.1	2.2
Obliquebanded Leafroller	0.0	0.2	13.3	6.4

* = 1st catch

PEST FOCUS

Geneva: Peachtree Borer 1st trap catch 6/16.
Spotted Tentiform Leafminer 2nd flight beginning.
Obliquedbanded Leafroller DD43 since biofix (June 13): 154; treatment against newly hatched larvae advised at approximately 350.

Wayne Co: Obliquedbanded Leafroller DD43 since biofix (June 7): Sodus, 300; Williamson, 307; Farmington, 302
Woolly Apple Aphid aerial colonies are beginning to appear in a number of sites around the county (J. Eve).

Highland: 1st Obliquebanded Leafroller trap catch 6/1.
We have accumulated 371 DD50 since then.

ORCHARD RADAR DIGEST

[Box Text: WORMS CRAWL IN]

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

Roundheaded Appletree Borer

Peak RAB egg laying period roughly: June 17 to June 30 [M]/June 25 to July 10 [G].

First RAB eggs hatch roughly: June 14 [M]/June 22 [G].

Codling Moth

1st generation CM development as of June 20: 1st gen adult emergence at 98% [M]/90% [G] and 1st gen egg hatch at 80% [M]/49% [G].

Obliquebanded Leafroller

Where waiting to sample late instar OBLR larvae is not an option (= where OBLR is known to be a problem, and will be managed with an insecticide against young larvae) – Early egg hatch and optimum date for initial application of an effective insecticide: June 16 [M]/June 25 [G].

Optimum sample date for late instar summer generation OBLR larvae: June 25 [M]/ July 4 [G].

Oriental Fruit Moth

2nd generation OFM flight begins around: June 20 [M]/June 29 [G].

2nd generation – first treatment date, if needed: June 27 [M]/July 7 [G].

San Jose Scale

1st generation SJS crawlers appear: June 9 [M]/June 19 [G].

[Section: INSECTS]

NOTES ON THE FLY

(Art Agnello and Harvey Reissig, Entomology, Geneva)

[Box Text: HEY, MAGGOT!]

It is once again the time of year when we expect the first appearance of apple maggot (AM) flies in wild apple trees and abandoned orchards, particularly in eastern N.Y.; western N.Y. could be about a week later, depending on what kind of temperatures and rainfall we get over the next week or so. Crop scouts and consultants have used traps to monitor AM populations for a long time, but this approach, useful as it is, nevertheless is not recommended in all cases. Some orchards have such high or such low AM populations that monitoring for them is not time-efficient. That is, in some blocks, sprays are necessary every season, often on a calendar basis; however, in some blocks the populations are so low that they are rarely needed at all. However, most commercial N.Y. orchards have moderate or variable pressure from this pest, so monitoring to determine when damaging numbers of them are present allows growers to apply only the number of sprays necessary to protect the fruit from infestation.

Sticky yellow panels have been in use for over 40 years, and these can be very helpful in determining when AM flies are present. These insects emerge from their hibernation sites in the soil from mid-June to early July in New York, and spend the first 7–10 days of their adult life feeding on substances such as aphid honeydew until they are sexually mature. Because honeydew is most likely to be found on foliage, and because the flies see the yellow panel as a "super leaf", they are naturally attracted to it during this early adult stage. A few of these panels hung in such an orchard can serve as an early warning device for growers if there is a likely AM emergence site nearby.

Many flies pass this period outside of the orchard, however, and then begin searching for fruit only when they are ready to mate and lay eggs. That means that growers don't always have the advantage of this advance warning, in which case the catch of a single (sexually mature) fly indicates that a spray is necessary immediately to adequately protect the fruit. This can translate into an undesirable risk if the traps are not being checked daily and are used signal an immediate response, something that's not always possible during a busy summer.

To regain this time advantage, traps have been developed that have the form of a "super apple" — large, round, deep red, and often accompanied by the smell of a ripe apple — in an attempt to catch that first AM fly in the orchard. Because this kind of trap is so much more efficient at detecting AM flies when they are still at relatively low levels in the orchard, the traps can usually be checked twice a week to allow a 1–2-day response period (before spraying) after a catch is recorded, without incurring any risk to the fruit. Research done in Geneva over a number of years indicates that some of these traps work so well that it is possible to use a higher threshold than the old "1 fly and spray" guidelines recommended for the panel traps. Specifically, it has been found that sphere-type traps baited with a lure that emits apple volatiles attract AM flies so efficiently that an insecticide cover spray is not required until a threshold of 5 flies per trap is reached.

The recommended practice is to hang three volatile-baited sphere traps in a 10- to 15-acre orchard, on the outside row facing the most probable direction of AM migration (towards woods or abandoned apple trees, or else on the south-facing side). Then, the traps are periodically checked to get a total number of flies

caught; dividing this by 3 gives the average catch per trap, and a spray is advised when the result is 5 or more. Be sure you know how to distinguish AM flies from others that will be collected by the inviting-looking sphere. There are good photos for identifying the adults on the Apple Maggot IPM Fact Sheet (No. 102GFSTF-I8); check the web version at:

<http://www.nysipm.cornell.edu/factsheets/treefruit/pests/am/am.asp>.

In home apple plantings, these traps can be used to "trap out" local populations of AM flies by attracting any adult female in the tree's vicinity to the sticky surface of the red sphere before it can lay eggs in the fruit. Research done in Massachusetts suggests that this strategy can protect the fruit moderately well if one trap is used for every 100–150 apples normally produced by the tree (i.e., a maximum of three to four traps per tree in most cases), a density that makes this strategy fairly impractical on the commercial level.

A variety of traps and lures are currently available from commercial suppliers; among them: permanent sphere traps made of wood or stiff plastic, disposable sphere traps made of flexible plastic, and sphere-plus-panel ("Ladd") traps. The disposable traps are cheaper

than the others, of course, but only last one season. Ladd traps are very effective at catching flies, but are harder to keep clean, and performed no better than any other sphere trap in our field tests. Brush-on stickum is available to facilitate trap setup in the orchard. Apple volatile lures are available for use in combination with any of these traps. These tools are available from a number of orchard pest monitoring suppliers, among them:

- Gempler's Inc., 100 Countryside Dr., PO Box 328, Belleville, WI 53508; 1-800-382-8473, Fax, 1-800-551-1128 <<http://www.gemplers.com/>>

- Great Lakes IPM, 10220 Church Rd. NE, Vestaburg, MI 48891; 800-235-0285, Fax 989-268-5311 <<http://www.greatlakesipm.com>>

- Harmony Farm Supply, 3244 Hwy. 116 N, Sebastopol, CA 95472; 707-823-9125, Fax 707-823-1734 <<http://www.harmonyfarm.com>>

- Ladd Research Industries Inc., 83 Holly Court, Williston, VT 05495; 800-451-3406, Fax 802-660-8859 <<http://www.laddresearch.com>>

By preparing now for the apple maggot season, you can simplify the decisions required to get your apples through the summer in good shape for harvest.

[Section: CHEM NEWS]

CHANGES TO THIONEX LABEL

[Box Text: CAN 'EM!]

On May 17, 2011, the DEC approved revised labels for Thionex 50WP and Thionex 3EC, both of which list reductions in the allowable rates in apples plus increased REIs (Restricted-Entry Intervals). The new labels show a rate of 0.75 lb/100 gal or a maximum of 4 lb/A (50WP), and 1/2 qt/100 gal or a maximum of 2-2/3 qt/A (3EC) for apple pests such as aphids green fruitworm, tarnished plant bug, spotted tentiform leafminer and white apple leafhopper. The new REIs are 20 days for the 50WP and 7 days for the 3EC. As on the previous labels, pomace or culls from treated fruit may not be fed to livestock. Additionally, be aware of newly imposed restrictions on Thionex-treated fruit destined to be sold to a number of buyers and distributors, particularly those outside of the US.

Labels for these products will expire July 31, 2012 for: apricots, cherries, peaches, plumes, prunes; on July 31, 2013 for pears; and on July 31, 2015 for apples.

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