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Update on Pest Management and Crop Development

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

July 30, 2012 VOLUME 21, No. 21 Geneva, NY

INSECTS

JULY KIT?

ORCHARD RADAR DIGEST

UNDER SUMMER SKIES (Art Agnello, Entomology, Geneva)

HOT SHOTS

❖❖ Most of the season's arthropod pest control decisions are likely to be completed this week and next. As you prepare to make what may be your final turn through the orchard for crop protection purposes before starting to concentrate on harvest activities, try to keep alert to any late-breaking pest developments that might be expected to round out a decidedly atypical summer. As in most years, forecast weather trends appear to be more of what we've been having in terms of heat (quite a bit) and rain (not so much), which will have their specific impacts on insect activity, depending on the species. Here's a quick rundown of some of the more important August pests to keep in mind during this homestretch.

Codling Moth

Codling moth development as of July 30: 2nd generation adult emergence at 83% and 2nd generation egg hatch at 50%.

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IN THIS ISSUE...

Apple Maggot

Adult numbers have been fairly sparse in the orchard sites where we're trapping for them this year. However, in historically high-pressure orchards, early to mid-August is the most active period for flies to be out and laying eggs. With some recent rains softening the ground and easing the task of adult emergence, we're sure to see an uptick in trap numbers during this period. As always, localized trapping can pay off in the event that some blocks are under greater pressure than others, even on the same farm, so please continue to monitor traps in representative blocks.

Internal Lepidoptera

This complex of fruit-feeding larvae continues to pose a threat in several problem sites. The second generation flights are under way, and are even heavy in some cases, so it still pays to stay on top of the situation in your specific orchard. Some spots with fruit damage have been noted, but in general, most orchards look to be in good shape.

Conditions are still favorable for good August flights, particularly for codling moth. Most areas of the state have reached at least the 50% mark of 2nd generation egg hatch, so we're definitely in the window for control sprays against the smallest larvae. This is an appropriate time for management sprays for oriental fruit moth as well, so prudence would dictate a critical evaluation of your late-season fruit protection status, to be sure you are adequately covered until the PHI for the various respective varieties.

Recommended options in apples include Altacor, Assail, Belt, Calypso, Delegate, or Voliam Xpress. In peaches, you can use Altacor, Assail, Delegate, or Voliam Xpress. Pyrethroids and OPs may be less suitable because of locally resistant populations. This is also a suitable time for Cyd-X, Carpovirusine, or (in apples, pears and plums only) Virosoft applications against codling moth. For control of OFM, alternate row middle applications will not be as effective as whole orchard sprays in high pressure blocks. Assess the pressure in your specific situations, check the pre-harvest intervals, and determine whether a full or border spray might be in order.

European Corn Borer

Recall that these moths have a final flight that extends to the middle of September, and that the offspring can inflict last-minute fruit feeding damage to later varieties. Delegate (PHI = 7 days) is a good option for control of European corn borer. Also, one or two late sprays of a B.t. product like Dipel can go a long ways toward minimizing this injury, and the 0-day PHI is compatible with any harvest schedule.

Mites

It can't be said often enough that mites are extremely good at exploiting any high temps to crank out a few more generations before they call it quits for the winter; twospotted spider mites are also possible, including in stone fruit plantings. A frequent (weekly) inspection of your foliage can pay big dividends if they happen to build rapidly before the crop is fully mature. The 7.5 mites/leaf threshold (sampling chart on p. 74 in the Recommends) would be appropriate at this point in the season.

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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 available online at:
http://www.scaffolds.entomology.cornell.edu/index.html

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Obliquebanded Leafroller

The second summer flight of OBLR is due to start this week or next, which means that the first larvae will be out looking for something to nibble on soon afterwards. If you struggled to manage the 1st summer brood, you might also cast a judicious eye on your fruits while you're in there checking the leaves for mites, to determine whether a late application of Altacor, Delegate, Proclaim, Rimon or a B.t. material such as Dipel, Deliver or Biobit might be of use in heading off late-season feeding damage.

And don't forget...

Review the comments in the June 4 issue regarding management options for woolly apple aphids, which are still present and may be increasing. ❖❖

GENERAL INFO

FIELD DAYS

EVENT REMINDERS

CORNELL FRUIT PEST CONTROL FIELD DAYS

❖❖ The N.Y. Fruit Pest Control Field Days will take place during Labor Day week on Sept. 5 and 6 this year, with the Geneva portion taking place first (Wednesday Sept. 5), and the Hudson Valley installment 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 they will view and discuss results from field trials on apples and other fruit crops. No pre-registration is required for either event. ❖❖

INSECT TRAP CATCHES (Number/Trap/Day)

Geneva, NY

	7/23	7/26	7/30
Redbanded leafroller	0.0	0.0	0.0
Spotted tentiform leafminer	6.1	11.2	12.1
Oriental fruit moth	0.1	0.5	0.4
American plum borer	0.8	0.7	0.8
Lesser appleworm	0.0	0.2	0.0
San Jose scale	21.0	36.7	15.5
Codling moth	0.0	0.5	0.3
Lesser peachtree borer	0.0	0.0	0.0
Peachtree borer	0.1	0.0	0.0
Obliquebanded leafroller	0.0	0.0	0.0
Apple maggot	0.8	1.0	0.5

* first catch

Highland, NY

	7/23	7/30
Redbanded leafroller	0.2	0.6
Spotted tentiform leafminer	36.9	32.4
Oriental fruit moth	3.8	1.1
Codling moth	0.8	1.0
Lesser appleworm	3.2	5.1
Tufted apple budmoth	0.0	0.3
Fruittree leafroller	0.0	0.0
Variegated leafroller	0.6	1.7
Obliquebanded leafroller	0.1	0.0
San Jose scale	79.6	14.7
Sparganothis fruitworm	0.0	0.0
Apple maggot	0.2	1.2

UPCOMING PEST EVENTS

	43°F	50°F
Current DD accumulations (Geneva 1/1–7/30/12):	2658	1850
(Geneva 1/1–7/30/2011):	2417	1689
(Geneva "Normal"):	2202	1466
(Geneva 1/1–8/6/12 predicted):	2888	2031
(Highland 1/1–7/30/12):	2835	1945
(Highland 1/1–7/30/11):	2547	1764

Coming Events:	Ranges (Normal ±StDev):	
Oriental fruit moth 2nd flight subsides	2061–2529	1368–1766
Oriental fruit moth 3rd flight begins	2326–2746	1577–1901
Apple maggot flight subsides	2772–3258	1907–2283
Redbanded leafroller 2nd flight subsides	2182–2742	1471–1891
Redbanded leafroller 3rd flight begins	2594–2976	1768–2070
Redbanded leafroller 3rd flight peak	2717–3207	1881–2225
Spotted tentiform leafminer 3rd flight begins	2253–2659	1508–1848
Spotted tentiform leafminer 3rd flight peak	2561–3021	1740–2104
Codling moth 2nd flight peak	1931–2735	1278–1892
Obliquebanded leafroller 2nd flight begins	2255–2655	1516–1838
Lesser appleworm 2nd flight peak	2131–3105	1422–2156
San Jose scale 2nd flight subsides	2639–3349	1785–2371

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.