SCAFFOLDS Fruit Journal, Geneva, NY
Volume 20, No. 20
Update on Pest Management and Crop Development
August 1, 2011

COMING EVENTS

Current DD accumulations
(Geneva 1/1-8/1): 2449 1714
(Geneva 1/1-8/1/2010): 2588 1804
(Geneva "Normal"): 2249 1504
(Geneva 1/1-8/8 Predicted): 2673 1889
(Highland 1/1-8/1): 2612 1815

Coming Events – Ranges (Normal +/- Std Dev):
American plum borer
  2nd flight peak .........................1976-2544  1328-1748
Apple maggot flight peak.........2104-2542  1413-1743
Codling moth 2nd flight peak......1931-2735  1278-1892
Comstock mealybug
  2nd gen crawlers peak .............2380-2624  1658-1737
Lesser appleworm
  2nd flight peak .........................2131-3105  1422-2156
Obliquebanded leafroller
  2nd flight begins....................2255-2655  1516-1838
Oriental fruit moth
2nd flight subsides .................. 2049-2515  1358-1752  
Oriental fruit moth
   3rd flight begins .................. 2315-2735  1569-1889  
Redbanded leafroller
   2nd flight subsides .................. 2192-2668  1482-1830  
Redbanded leafroller
   3rd flight begins .................. 2594-2976  1768-2070  
San Jose scale 2nd flight peak..... 2115-2503  1422-1752  
STLM 3rd flight begins .................. 2246-2644  1502-1832

TRAP CATCHES (Number/trap/day)

<table>
<thead>
<tr>
<th>Location</th>
<th>Date 1</th>
<th>Date 2</th>
<th>Date 3</th>
<th>Date 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geneva</td>
<td>7/21</td>
<td>7/25</td>
<td>7/28</td>
<td>8/1</td>
</tr>
<tr>
<td>Redbanded Leafroller</td>
<td>1.5</td>
<td>1.3</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Spotted Tentiform Leafminer</td>
<td>8.2</td>
<td>8.0</td>
<td>1.8</td>
<td>4.8</td>
</tr>
<tr>
<td>San Jose Scale</td>
<td>9.5</td>
<td>13.8</td>
<td>9.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Oriental Fruit Moth</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>American Plum Borer</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Obliquebanded Leafroller</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Apple Maggot</td>
<td>0.2</td>
<td>0.5</td>
<td>2.7</td>
<td>1.0</td>
</tr>
</tbody>
</table>

| Sodus Center (Wayne Co.)  | 7/15   | 7/19   | 7/22   | 7/28   |
| Oriental Fruit Moth       | 1.5    | 2.5    | 3.5    | 10.5   |
| Lesser Appleworm          | 0.5    | 1.0    | 0.5    | 0.0    |
| Codling Moth              | 0.5    | 1.0    | 0.5    | 1.0    |

| Highland (Peter Jentsch)  | 7/11   | 7/18   | 7/25   | 8/1    |
Redbanded Leafroller  1.9  0.9  0.6  <0.1
Spotted Tentiform Leafminer  32.3  24.4  39.0  19.5
Oriental Fruit Moth  4.4  3.1  3.8  0.4
Lesser Appleworm  0.5  0.6  1.6  3.0
Codling Moth  1.1  1.9  2.7  1.3
Obliquebanded Leafroller  1.0  0.5  0.2  0.1
Apple Maggot  0.0  0.0  0.4  0.6

* = 1st catch

PEST FOCUS
Highland: Apple Maggot trap catches increasing.
Dutchess Co: Brown Marmorated Stink Bugs starting to show up in light trap, Fishkill.

ORCHARD RADAR DIGEST

[Box Text: GEAR DOWN]

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

Dogwood Borer
   Peak DWB hatch roughly: July 31 [G].

Codling Moth
   CM development as of August 1: 2nd gen adult emergence at 91% [M]/66% [G] and 2nd gen egg hatch at 66% [M]/27% [G].
   2nd generation 30% egg hatch: July 24 [M]/August 2 [G] = target date where one spray needed to control 2nd generation CM.
White Apple Leafhopper
   2nd generation WALH found on apple foliage: August 4 [G].

[Section: INSECTS]

MIDSUMMER DRAMAS
(Art Agnello, Entomology, Geneva)
[Box Text: LAST LAP]

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 yet another notable summer. 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.

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. 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 flights are under way, although not very heavy in all cases, but it still pays to stay on top of the situation in your specific orchard. Some spots with fruit damage are known, 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 will reach the peak of 2nd generation egg hatch soon, which signals the timing for control sprays against the smallest larvae. This is an appropriate window 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.

For now, we're recommending that problem sites be kept covered with at least another spray, and we'll see what the tail end of the pre-harvest period looks like. Recommended options in apples and pears 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 pump 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) perusal of your foliage can pay off big dividends if they happen to build rapidly before the crop is fully mature. The 7.5 mites/leaf threshold (sampling chart on p. 73 in the Recommends) would be appropriate at this point in the season.

**Obliquebanded Leafroller**

The second summer flight of OBLR is due to start within the next 1-2 weeks, which means that the first larvae will be out looking for something to nibble on by the 2nd to 3rd week of August. 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.

**Spotted Tentiform Leafminer**

It's been a while since these were a regular pest problem, so the temptation has been to ignore them recently. Nevertheless, a few orchards, particularly in eastern NY, have continued to see populations crop up, which underscores the reality that they don't ever really go away. Any second brood sap-feeding mines necessitating treatment should be showing up this week. Two or more per leaf is the suggested threshold; possible control options include the neonics, pyrethroids, Agri-Mek, Altacor, Belt or Delegate.

**And don't forget...**

Review the comments in the July 18 issue regarding management options for Comstock mealybug (particularly in pears) and woolly apple aphid, which are still both on the job.

[Section: GENERAL INFO]

EVENT REMINDERS
SUMMER FRUIT TOUR
Wednesday, August 3, from 7:45 am
Registration at Lamont Fruit Farm, Stillwater Rd., Waterport, NY

Don't miss this tour for commercial fruit producers and supporting businesses. Featuring super spindle, tall spindle and V-axe apple planting systems, equipment innovations for improving labor efficiency, sprayer technology, new pest management technology, weed management, and all about sweet cherries in Orleans and Niagara Counties. Join 250 growers, Cornell faculty, and many supporting business representatives for the day. Chicken BBQ lunch, courtesy of industry sponsors and donors.

Free attendance, but PLEASE RSVP to Kim hazel (585-798-4265 x26 or krh5@cornell.edu).

Program:

WAYNE COUNTY FRUITGROWER TOUR
Wednesday, August 10, from 10:00 am
Registration and 1st stop at Morgan Fruit Farms, Goosen Rd., Marion, NY

Sponsored by agr.assistance, this large, informative and entertaining tour is in its 13th year, and will feature presentations on apple storage; PGR, return bloom, improved fruit finish, rootstocks, wind and solar energy technologies, GAP compliance; updates on apple disease, insect, and deer control, herbicide programs; bitter pit; herbicide options, plus much more. Door prizes, lunch, some levity, a BBQ/clambake dinner with a live band, growers and industry representatives from NY and surrounding states — tough to beat on a midsummer day. Free attendance.

Contact Lindsay LaMora (585-734-8904; lindsaylamora@agrassistance.com) for RSVP pre-registration and tour information.

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.
Scaffolds 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 p.m. Monday to:

Scaffolds Fruit Journal
Editors: A. Agnello, D. Kain
Dept. of Entomology, NYSAES
630 W. North St.
Geneva, NY 14456-1371
Phone: 315-787-2341  FAX: 315-787-2326
E-mail: ama4@cornell.edu
Online at
<http://www.scaffolds.entomology.cornell.edu/index.html>