

# SCAFFOLDS Fruit Journal, Geneva, NY

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Update on Pest Management and Crop Development

July 16, 2012

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## COMING EVENTS

	43°F	50°F
Current DD accumulations		
(Geneva 1/1-7/16):	2238	1528
(Geneva 1/1-7/16/2011):	1941	1311
(Geneva "Normal"):	1813	1175
(Geneva 1/1-7/23 predicted):	2451	1693
(Highland 1/1-7/16/12):	2400	1608
(Highland 1/1-7/16/11):	2075	1390

### Upcoming Pest Events – Ranges (Normal +/- Std Dev):

#### American plum borer

2nd flight peak .....1991-2549 1339-1755

#### Apple maggot

1st oviposition punctures.....1605-2157 1144-1544

Apple maggot flight peak.....2102-2602 1408-1794

Codling moth 2nd flight peak.....1931-2735 1278-1892

#### Comstock mealybug

1st flight subsides.....1818-2132 1216-1418

#### Comstock mealybug

2nd gen. crawlers emerge.....2234-2624 1505-1781

Lesser appleworm

2nd flight begins.....1418-2002 918-1326

Obliquebanded leafroller

2nd flight begins.....2255-2655 1516-1838

Oriental fruit moth

2nd flight subsides .....2016-2529 1368-1766

Oriental fruit moth

3rd flight begins .....2326-2746 1577-1901

Redbanded leafroller

2nd flight subsides .....2182-2742 1471-1891

San Jose scale 2nd flight peak.....2118-2496 1426-1746

STLM 2nd flight subsides .....1986-2378 1306-1644

STLM 2nd 3rd flight begins .....2253-2659 1508-1848

## PEST FOCUS

### Geneva:

Apple Maggot trap catch resumes after 7/15 rain.

### Highland:

Codling Moth 2nd flight began today, 7/16.

## TRAP CATCHES (Number/trap/day)

### Geneva

	7/5	7/9	7/12	7/16
Redbanded Leafroller	0.2	0.0	0.3	0.0
Spotted Tentiform Leafminer	8.0	6.5	5.2	4.6
Oriental Fruit Moth	0.0	0.0	0.3	0.0

American Plum Borer	0.0	0.5*	0.3	0.0
Lesser Appleworm	0.2	0.0	0.0	0.0
San Jose Scale	1.7*	5.0	1.7	3.5
Codling Moth	0.0	0.1*	0.0	0.1
Lesser Peachtree Borer	0.0	0.0	0.0	0.0
Peachtree Borer	0.0	0.1	0.0	0.0
Obliquebanded Leafroller	0.7	0.3	0.2	0.1
Apple Maggot	0.0	0.0	0.0	0.6

### Highland (Peter Jentsch)

	6/25	7/2	7/9	7/16
Redbanded Leafroller	1.6	1.6	0.8	0.3
Spotted Tentiform Leafminer	49.4	49.4	55.1	35.7
Oriental Fruit Moth	0.0	1.6	3.4	1.0
Codling Moth	0.6	0.1	0.4	1.4
Lesser Appleworm	3.3	2.5	2.4	5.9
Tufted Apple Budmoth	5.4	2.0	0.7	<0.1
Fruittree Leafroller	1.2	0.2	0.0	0.0
Variegated Leafroller	0.0	<0.1	0.0	0.4
Obliquebanded Leafroller	1.4	2.5	0.6	0.0
San Jose Scale	0.4	0.6	497	692
Apple Maggot	0.5*	0.9	0.3	0.2

\* = 1st catch

ORCHARD RADAR DIGEST  
**[Box Text: JULY KIT?]**

## **Geneva:**

Roundheaded Appletree Borer

Peak hatch roughly: June 30 to July 19.

Codling Moth

Codling moth development as of July 16: 2nd generation adult emergence at 30%.

July 16 = target date for first spray where multiple sprays needed to control 2nd generation CM. July 25 = target date where one spray needed to control 2nd generation CM.

Spotted Tentiform Leafminer

Third optimized sample date for 2nd generation sapfeeding mines, if needed: July 16.

## **[Section: INSECTS]**

HUDSON VALLEY PEST MANAGEMENT UPDATE

(Peter Jentsch, Entomology, Highland;

[pjj5@cornell.edu](mailto:pjj5@cornell.edu))

## **[Box Text: FOR NOW]**

Insects of primary concern this upcoming week include apple maggot management beyond the 10–14-day insecticide residue *and* 5 fly per trap threshold, early emergence of codling moth larvae (1st application

this week at next available window), later emergence of oriental fruit moth (2nd applications if needed), orchards in which San Jose scale damage was observed in the field (1st application for crawlers this week, 19 July), European red mite control at 7.5 mite per leaf threshold, and European corn borer management in newly planted trees, as needed. Native stink bug has become problematic given the hot, dry weather we've had over the past two weeks. As a side note, we had our first trap capture of spotted wing *Drosophila* in Warwick, NY, on Friday, 13 July. Certainly small fruit, and to a lesser degree stone fruit, are primary hosts of spotted wing *Drosophila*, and should be monitored for the fly's activity.

### **Adult apple maggot (AM)**

Adults have been active in abandoned orchards and along the borders of commercial orchards. We have seen females laying eggs in untreated fruit over the past few weeks. We typically see that dry soil conditions delay adult emergence. However, this season we experienced high early emergence, with trap captures exceeding 5 flies per trap in many apple blocks nearly every week. The most susceptible varieties at this time are early cultivars including Ginger Gold, Gala, and Honeycrisp. In July, most flies stay in unsprayed

areas outside of orchards, and usually only a few immigrate into the edges of commercial orchards. Initial pesticide treatments should be applied as soon as trap catches exceed recommended threshold levels (average of 5 flies/volatile-baited sphere trap). If orchards have no previous history of damage, and are not located near any major source of outside AM infestation, spraying orchard perimeters may be sufficient. If trap catches are high and an orchard is near host trees, applications should be made to whole orchards or a greater number of perimeter rows. Refer to the following for pesticide information:

<http://treefruitipm.info/PesticidesForPest.aspx?PestID=19&GrowthStageID=12>

### **San Jose Scale (SJS)**

The pheromone-based degree-day model using the adult flight as a biofix has accumulated 244.1 DD. With the temperatures forecast, we predict first crawler emergence to begin on 19 July in the mid-Hudson Valley (emergence at 340–400 DD base 50°F). The model looks to be "on target" this season and the first of two contact applications should be made toward the end of this week. Refer to the following for management options:

<http://ipmguidelines.org/TreeFruits/Chapters/CH11/de>

[fault-5-8.aspx](#).

## **Codling moth (CM) Lesser appleworm (LAW) and Oriental fruit moth (OFM):**

Larvae will be hatching over the next two weeks. Some of the insecticides used to control apple maggot, such as Imidan, the pyrethroids, selected neonicotinoids, or pre-mix formulations such as Leverage 360 can be used to manage the 2nd emergence of CM and other internal worms. Adult CM will continue to fly, with egg laying and hatch being relatively heavy during this period. The majority of eggs are likely to hatch over the next few weeks, so control is critical, especially if internal Lepidoptera injury was noted during the spring last season. If OP or pyrethroid use in 2011 resulted in economic injury, especially in high-pressure blocks, it would be wise to choose an alternative insecticide with internal lep activity. Refer to the following for management options:

<http://treefruitipm.info/PesticidesForPest.aspx?PestID=24&GrowthStageID=12>:

## **European corn borer (ECB)**

Adults continue the summer flight, with high pheromone trap captures in New Paltz in mid-July. Shoot growth of young trees is susceptible to ECB

infestations, especially if tall weeds and grasses in tree rows are present. Hot, dry weather fosters high population survival. Although infestations of ECB are unpredictable, infestations can cause serious damage in blocks with no prior incidence of injury. ECB injury is most often seen in young or newly planted orchards that receive low input insect pest management programs. Injury to newly planted trees by larval tunneling occurs in the current season's growth and results in terminal leaf discoloration. Continued larval feeding will eventually kill the terminal shoots, causing die-back and malformation of the tree. Corn borer attack of young trees can occur from June through August. Two "broods" exist in NY, including the "Z race", which has one generation per season, and the "E & Z Race", which have two generations. Over the past few years, trap captures of one or both races have been shown to linger into late July throughout the mid-Hudson Valley. Fruit feeding can also occur late in the season through harvest. Delegate 25WG and Dipel 10.3DF are labeled for ECB management, and when used for OBLR management, will also control ECB infestations when applied at the onset of hatch and feeding.

**Native and Invasive stink bug (SB)**



These insects have become late season players over the past few years. The two native species causing damage to apple are the brown stink bug, *Euschistus sp.* and the green stink bug, *Acrosturnum hilare*. Their presence and feeding injury is often associated with the drought conditions experienced this season, increasing tree fruit attractiveness and the likelihood of late season stink bug feeding. The brown marmorated stink bug, *Halyomorpha halys* (Stål), has also been observed this week on peaches (Warwick) and vegetables (green bell pepper, Marlboro) in the mid-Hudson Valley. Insecticides for stink bug management include Danitol (2 appl/season; 21.33 oz/A; 14 DTH), Lannate LV (4 appl/season; 1.5-3.0 pt/A; 14 DTH), Endigo ZC (5.0–6.0 fl oz/A; 35 DTH), Leverage 360 (2.4-2.8 fl oz/A; 7 DTH), and Thionex 50WP (5 lb/A; 21 DTH). Follow label restrictions carefully, especially noting formulation pre-mix active ingredient allowances.

## **[SECTION: GENERAL INFO]**

EVENT REMINDERS

**[Box text: LAST CALL]**

LAKE ONTARIO CORNELL COOPERATIVE EXTENSION  
SUMMER FRUIT TOUR

Featuring New Technology in the Wayne Co. Fruit Industry  
Tuesday, July 24, starting 8:00 am: G & S Orchards, 825  
Atlantic Ave., Walworth

**Highlights of the tour** will include berry and odd fruit production and pest management issues, innovative CSA marketing, weed control treatment plots in young trees, alternative pollinators for fruit crops, update on strep-resistant fire blight in NY, controlling tree growth in a light crop year, climate, frost and crop protection methods, managing growth in grafted trees, using induction cones for safer pesticide mixing, using platforms and hedgers for increased labor efficiency in tall spindle plantings. Growers, industry, and Cornell faculty and specialists will share new technology and better ways to produce fruit.

Stops: G & S Orchards, Walworth; Mason Farms, Williamson; Orbaker Fruit Farm, Pultneyville; Knapp Orchards, Sodus; and VandeWalle Fruit Farms, Alton.

Thanks to Sponsors, there is no charge to attend!  
Please register by July 20: Call 585-798-4265 or email  
krh5@cornell.edu

For more information, visit:

<http://www.fruit.cornell.edu/lof>

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