

**Cornell University**  
Cooperative Extension

# Eastern NY Commercial Horticulture Program

**Vol. 2 Issue 15**  
**October 16, 2014**

## Tree Fruit News

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### Weather Data

Degree Day Accumulations (03/01 through 10/15/2014, via NEWA)		
Location	Base 43	Base 50
Peru	3557.3	2347.1
Watermill	3743.8	2467.5
Clifton Park	3751.6	2503.4
Marlboro	4020.8	2720.6
Hudson	4135.2	2834.8
Highland	4167.6	2846.8

### In this issue of Tree Fruit News:

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### Harvest Update for the Eastern New York Region

*By Anna Wallis and Dan Donahue,  
CCE ENYCHP*

In the Champlain Valley, harvest has all but wrapped up. After the cooler temperatures experienced over the weekend, we returned to a brief spell of summer weather early this week. A change in weather is expected over the weekend with a return to cooler temperatures and some precipitation. It is possible we will see 0.5" of rain and wind up to 15 mph. Most fruit is expected to be off the tree by the end of the week, the exception being a couple of late varieties for our region such as NY-2 and any Red Delicious pollinizers. With warm weather and wind, be on the lookout for drops.

Apple harvest in the Hudson Valley is coming to a close. Typically unstable October weather, such as early morning rainfall, has slowed harvest from the breakneck pace that has characterized this year. Empire, Red Delicious, and Golden Delicious are being wrapped up this week. Mutsu harvest is well underway, but has been slowed by recent wet weather. "Yellow" varieties are

particularly difficult to pick without bruising when conditions are wet. Cameo is currently being harvested. The PYO business appears to be brisk this year, with some farms nearing completion of the PYO season.

The major Hudson Valley varieties remaining to be picked are Fuji, Rome, and Pink Lady. The early "Maslin" strain of Pink Lady is ready for spot picking. While some Law Rome have been picked, eating quality will improve by next week. Volume harvest of standard Fuji will be underway next week. Rome Beauty will need a little more time on the tree, and original Pink Lady is looking like the first week in November. Overall, the crop continues to look like 80% of an expected "average" crop, varying up or down by variety and farm. Please scout for BMSB injury in these late varieties, and report damage to either Peter Jentsch or Dan Donahue at the Hudson Valley Lab. It will be helpful to future management programs if we know where this pest is becoming a problem, and to what degree.

## BMSB Update: Increasing Damage to Pink Lady Apple Observed in Columbia County

By Peter Jentsch, Cornell University Dept. of Entomology, posted to online blog October 14, 2014 available at <http://blogs.cornell.edu/jentsch/>

Warming temperatures (mid to low 70's in the Hudson Valley today) are predicted over the course of the next three days. The mild temps today prompted yet another wave of BMSB movement to urban structures and orchard fruit remaining on the tree. Adults are likely to continue feeding on late season varieties such as Pink Lady through the end of harvest. We continue to recommend maintaining a tight program in orchards where populations of adult BMSB are present.

In previous years we have seen increasing levels of fruit feeding injury within the first 90' from the orchard edge near woodlands through the harvest of our latest variety, 'Pink Lady' in mid-November. Today we observed 1% BMSB injury from a commercial block in Columbia County, NY of Pink Lady along the orchards wooded edge. Clean fruit going into storage have seen dramatic increases in BMSB damage expression coming out of storage. As with earlier harvest dates, it's likely the fruit injury expression will increase while it hangs on the tree and if BMSB keep feeding through harvest, once the fruit is out of storage along the packing line.

We continue to use a 'Provisional Trap Threshold' of 10 adults per trap per week was developed by Tracy Leskey's team at USDA ARS-W.V. The threshold provides growers with a scientific basis for management, one that we will continue to test as an action threshold this season.

Since the adults will be moving in and out of orchards, scouting will need to be retained to confirm their presence in late season fruit. The insect will seek host food sources to stock up on reserves to take them through the winter while seeking and moving to urban structures and forest trees (upper canopy of dead trees with 'flaking' bark) as overwintering sites. Lack of substantial rainfall leading to dry conditions will likely increasing fruit injury from BMSB as the insect seeks a source for water.



Newer feeding injury with 'invisible feeding site' with undisturbed visible feeding tube.



Tedders trap using pheromone combination lures in peach.

Trap Capture and Scouting Threshold: Throughout the Hudson Valley there is a large disparity between orchards of both presence and abundance of BMSB. In some sites management will need to intensify until the last variety is completely harvested, while in other sites BMSB will not be found in traps in numbers that warrant control measures. In all sites scouting should also continue through the remainder of harvest.

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BMSB Damage of Pink Lady Apple. 10.14.14

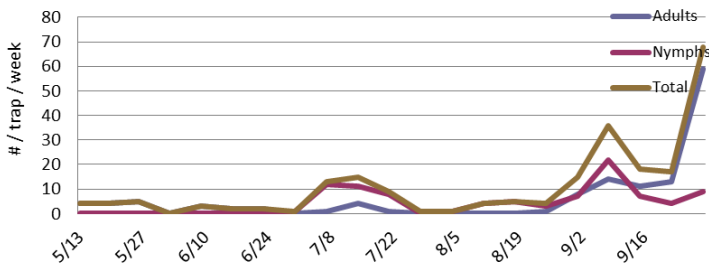


**BMSB Update: Increasing Damage to Pink Lady Apple Observed In Columbia County, continued from previous page**

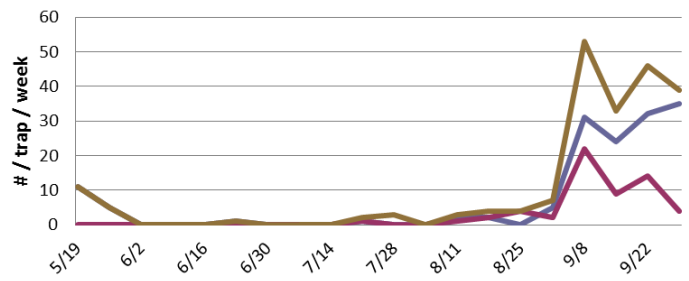
Using the 'Provisional Trap Threshold', if BMSB adult captures exceed 10/ trap per week, or if the insect is observed on the tree, using 1 BMSB per 100 feet of perimeter orchard linear row, applications for management of BMSB should be made. Employ the first available window using one of the most effective insecticides that will best fit your harvest schedule.

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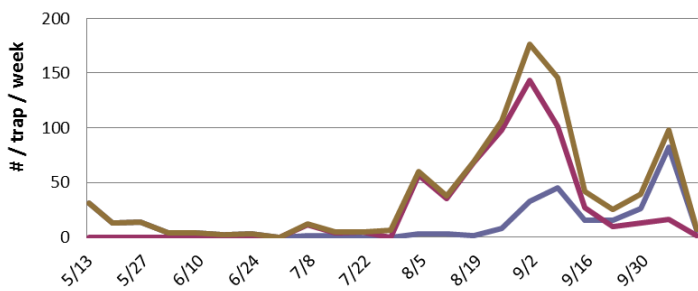
### BMSB Pheromone Trap Captures Warwick, NY 2014



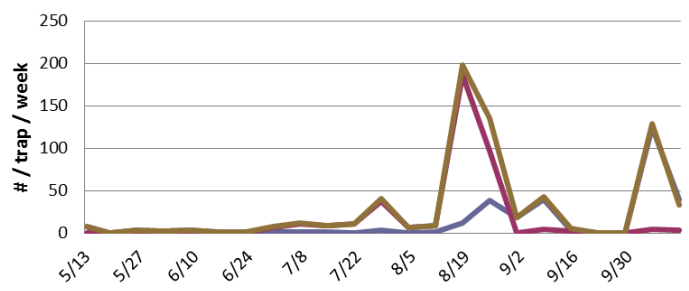
### BMSB Pheromone Trap Captures Tivoli, NY 2014



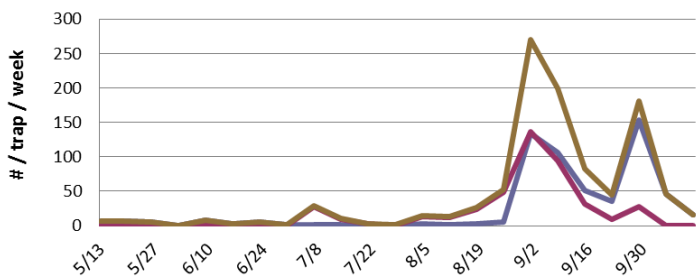
### BMSB Pheromone Trap Captures Milton East, NY 2014



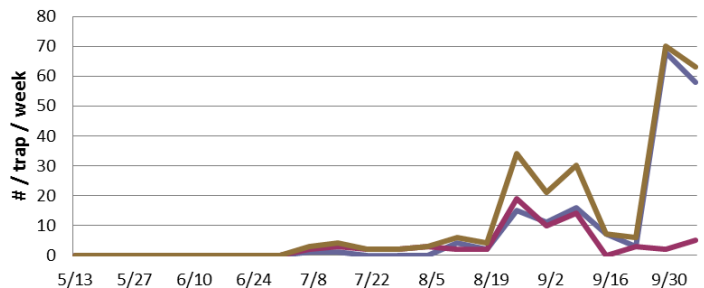
### BMSB Pheromone Trap Captures Highland, NY 2014



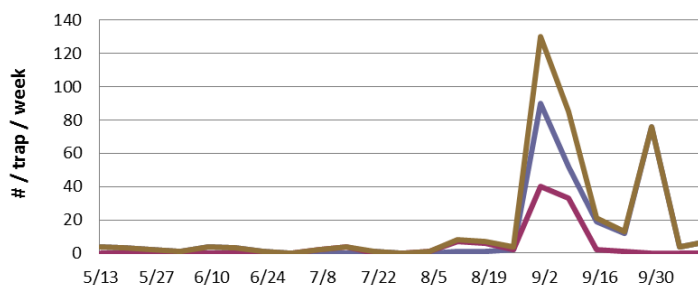
### BMSB Pheromone Trap Captures Milton West, NY 2014



### BMSB Pheromone Trap Captures Fishkill, NY 2014



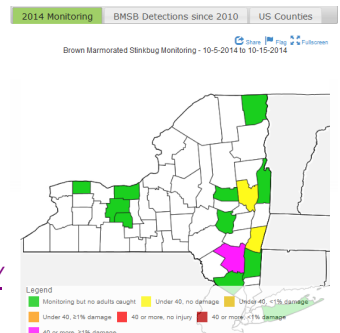
### BMSB Pheromone Trap Captures Campbell Hall, NY 2014



### BMSB Trap Graphs

Also see *BMSB Mapping in NY 2014* using EDDMapS.

Click on image at right or see <http://www.eddmaps.org/bmsbNY/>



*BMSB Update, continued from previous page*

For a list of the most effective insecticides for BMSB management, go to <http://blogs.cornell.edu/jentsch/files/2014/05/NY-BMSB-Insecticides-Efficacy.AMA.xlsx-NY-BMSB-Insecticides-Efficacy-Update-8-9-13-11fv6o8.pdf>. NYS labeled insecticides effective for use against the BMSB are available in four major classes including pre-mix formulations.

Thionex and Bifenthrin are the most effective insecticides for use against the BMSB. However, at this point in the season early blocks should be managed using Bifenthrin, Danitol and Lannate (14d PHI), with later harvested blocks employing Thionex (21d PHI). Blocks being harvested next week should use Leverage 360 (7d PHI).

Boarder applications to cover most vulnerable blocks should be considered.

Bifenthrin received an emergency exemption use permit (Section 18) to control brown marmorated stink bug (BMSB) on apples, peaches, and nectarines in Orange, Dutchess and Ulster Counties of NY. Products include Bifenture and Brigade, showing the greatest degree of efficacy of the pyrethroid group. However, bifenthrin has a 30d re-application interval, a 14d PHI and 12h REI. When applying either formulation of bifenthrin for BMSB control on apples, peaches, or nectarines, growers must have possession of the Section 18 label, which can be found at <http://pmep.cce.cornell.edu/regulation/sec18/2014/index.html>.

Table below shows 2014 BMSB Tedders Trap Catch Data for the Lower Hudson Valley.

[Click here](#) or click on table for larger viewing size.

	Warwick			Crist - CH			Milton-West			Milton-East			Tivoli			Highland-HVL			Fishkill		
Date:	Adults	Nymphs	Total	Adults	Nymphs	Total	Adults	Nymphs	Total	Adults	Nymphs	Total	Adults	Nymphs	Total	Adults	Nymphs	Total	Adults	Nymphs	Total
5/13	4	0	4	4	0	4	6	0	6	31	0	31	0	0	0	7	0	7	0	0	0
5/19	4	0	4	3	0	3	6	0	6	13	0	13	11	0	11	0	0	0	0	0	0
5/26	5	0	5	2	0	2	5	0	5	14	0	14	5	0	5	3	0	3	0	0	0
6/2	0	0	0	1	0	1	0	0	0	4	0	4	0	0	0	2	0	2	0	0	0
6/9	3	0	3	4	0	4	8	0	8	4	0	4	0	0	0	3	0	3	0	0	0
6/16	2	0	2	3	0	3	3	0	3	2	0	2	0	0	0	1	0	1	0	0	0
6/23	2	0	2	1	0	1	5	0	5	3	0	3	1	0	1	1	0	1	0	0	0
6/30	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	1	6	7	0	0	0
7/7	1	12	13	0	2	2	1	28	29	1	11	12	0	0	0	1	11	12	1	2	3
7/14	4	11	15	0	4	4	1	9	10	1	4	5	0	0	0	1	8	9	1	3	4
7/21	1	8	9	1	0	1	0	3	3	0	5	5	1	1	2	0	11	11	0	2	2
7/28	0	0	1	0	0	0	0	0	1	0	0	6	0	0	3	3	37	40	0	2	2
8/4	0	1	1	0	1	1	2	13	15	3	57	60	0	0	0	0	6	6	0	3	3
8/11	0	4	4	1	7	8	1	12	13	3	35	38	2	1	3	1	8	9	4	2	6
8/18	0	5	5	1	6	7	2	24	26	1	68	69	2	2	4	12	186	198	2	2	4
8/25	1	3	4	2	2	4	5	48	53	8	98	106	0	4	4	38	97	135	15	19	34
9/1	8	7	15	90	40	130	134	136	270	33	143	176	5	2	7	18	0	18	11	10	21
9/8	14	22	36	52	33	85	106	94	200	45	101	146	31	22	53	39	4	43	16	14	30
9/15	11	7	18	19	2	21	51	31	82	15	27	42	24	9	33	3	2	5	7	0	7
9/22	13	4	17	12	1	13	36	9	45	15	10	25	32	14	46	0	0	0	3	3	6
9/29	59	9	68	76	0	76	154	27	181	26	13	39	35	4	39	0	0	0	68	2	70
10/6				4	0	4	46	0	46	82	16	98				125	4	129	58	5	63
10/13				7	0	7	16	0	16	6	1	7				39	3	33			

## Candidate Search for the Research Horticulturalist Position at the Cornell Hudson Valley Research Laboratory Has Begun

A postdoctoral research associate position is available to study orchard management systems. A primary research focus will be on precision agriculture in fruit production. Research will include crop load management by chemical and hand thinning, nutritional studies via fertigation, rootstock effects on scion attributes, sweet cherry planting systems, pre-harvest stop drop and post harvest assessments. Pruning and training systems research will also include the development of management plans for a planting at the Hudson Valley Laboratory and at grower trial sites. After the first year, the position will continue as a two year renewable appointment, contingent on available funding. If you have any questions or comments, please contact Peter Jentsch at (845) 691-7151.

## Buffalo CBP Intercepts First in Nation Invasive Pest

Source: Press Release October 10, 2014, U.S. Customs and Border Protection, Buffalo, NY

On Wednesday October 8, a U.S. Department of Agriculture (USDA) entomologist confirmed that U.S. Customs and Border Protection (CBP) agriculture specialists at the Lewiston Bridge border crossing intercepted an invasive insect, *Phaenocarpa fernaldana* Walsingham, a moth from the Tortricidae family. This is a first in nation pest discovery and is not known to exist in the Western Hemisphere.

This moth poses a potential significant threat to the agriculture industry because it is known to feed on apples, apple buds, leaves and shoots.

“CBP agriculture specialists in the Port of Buffalo do an excellent job of detecting invasive pests that could cause harm to the United States agriculture industry,” said Randy Howe, Director of Field Operations for the Buffalo Field Office. “We have an excellent working relationship with USDA and this is another example of CBP and USDA working closely together to protect the nation’s agriculture resources.”

On October 6, CBP agriculture specialists at the Lewiston Bridge border crossing inspected a truck hauling an ocean container full of pump valves which originated in China. During the inspection, a pest resembling a moth was discovered and forwarded to a USDA Animal and Plant Health Inspection Service (APHIS) – Plant Protection and Quarantine (PPQ) entomologist and identified as *Phaenocarpa fernaldana* Walsingham, a moth from the Tortricidae family.

CBP issued an Emergency Action Notification to the importer and following CBP procedures, the shipment will be re-exported to Canada.

CBP Agriculture specialists have extensive training and experience in the biological sciences and agriculture inspection. Please visit <http://www.cbp.gov/border-security/protecting-agriculture> for more information about CBP’s mission to protect the nation’s agriculture industry.



*Phaenocarpa fernaldana* Walsingham, a moth from the Tortricidae family.

## Mark Your Calendars for the NYS Fruit & Vegetable EXPO

By Anna Wallis and Dan Donahue, CCE ENYCHP, and Mario Miranda Sazo, LOFT

Tree fruit experts from across the country will speak about the most pressing issues in tree fruit production in several sessions of this year’s EXPO. Cornell scientists, Terence Robinson, Susan Brown, and Chris Watkins, will present information on their recent findings. Stefano Musacchi, Italian native and recently hired faculty member of Horticulture Department at Washington State University, will offer his expertise during two of the sessions on high density training systems and mechanization as well as the new DA meter used to gauge fruit maturity. An entire session will be devoted to the management of Honeycrisp, from orchard establishment to post harvest conditioning and storage.

These sessions will be held on Tuesday January 20<sup>th</sup> from 9-11am, Midday from 1-2:30pm, and Wednesday, January 21<sup>st</sup> from 1-2:30pm. Additional information on the 2015 EXPO will be published as it becomes available.



## ***Upcoming Meetings***

### **2014 Cornell Agribusiness Strategic Marketing Conference**

***“New, Niche, and Non-Traditional Market Opportunities:  
Developing a successful and profitable relationship for all”***

**November 11-12, 2014 at The Inn on the Lake  
770 S. Main St., Canandaigua, NY 14424**

For full details on the conference schedule and topics, registration, lodging, the networking culinary dinner, and more go to [http://dyson.cornell.edu/outreach/strategic\\_marketing\\_conference.php](http://dyson.cornell.edu/outreach/strategic_marketing_conference.php). This premier conference provides in-depth discussion on topics and issues that are critical for sellers of agricultural products.

Topics this year will cover changing/adding market channels, market/product diversification from both a wholesale and direct-consumer vantage point, highlighting such practices as season extension, extending into ethnic and export markets, CSA to wholesale markets, group purchasing organizations, farm-to-institution, and CSA rebate programs.

The conference is developed with a mind towards building grower and agency skills through session topics. Sessions will include specific keys to success from both growers as well as agency personnel, such as staff from GrowNYC FARMroots, Norwich Meadows Farm, and The Good Food Collective. The presenters are individuals who are actively working to develop local farm to table distribution in the urban and rural areas of the New York and New York City area.

To round out the conference there will be a session to present detailed information on cost identification with various market channels and activities. These costs will then be utilized in pricing models for price determination so that individuals entering new markets have a thorough and complete understanding of these market opportunities and how best to balance them in their business model.

The conference features:

- Marketing insights to access ethnic markets
- Increasing marketing opportunities with non-traditional partners
- Tips when adding new and diversified market channels to your selling mix
- Price determination tutorial and research guidance to successfully price products for a market

**Exhibit Space:** Limited exhibit space is available. Please let us know if you would like to bring materials for your company or organization. Contact Carol Thomson at 607-255-5464 or email [cmt8@cornell.edu](mailto:cmt8@cornell.edu).

**Networking Dinner at the New York Wine & Culinary Center:** There will be an optional networking culinary demo dinner on Tuesday, Nov. 11 at 6pm in the Demonstration Theater at the NY Wine & Culinary Center (next door to the Inn on the Lake). The meal will consist of a three course Culinary Demo and an optional wine pairing. More information to follow.

For more information, contact Bob Weybright at 845-797-8878 or email [rw74@cornell.edu](mailto:rw74@cornell.edu).

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.

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.