



Healthy Fruit, Volume 20, Number 13. June 26, 2012

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Current degree day (DD) accumulations

Through June 25. Location: UMass Cold Spring Orchard, Belchertown, MA
Base 43: 1580 Base 50: 1092

Upcoming pest events

based on current DD accumulations: Base 43 at 1580 on 25-June

Lesser appleworm 2nd flight begins	1418-2002
Oriental fruit moth 2nd flight peak	1466-1996
Obliquebanded leafroller 1st flight subsides	1612-1952
Apple maggot 1st catch	1235-1653
Codling moth 1st flight subsides	1280-1858
Redbanded leafroller 2nd flight begins	1235-1627
Redbanded leafroller 2nd flight peak	1554-2002
Spotted tentiform leafminer 2nd flight peak	1373-1795
STLM 2nd gen. tissue feeders present	1378-1795

Orchard Radar key dates

Below are key dates for insects and mites from Glen Koehler's (U. of Maine) Orchard Radar output from Belchertown, MA. You can look at Orchard Radar for Belchertown here: <http://pronewengland.org/AllModels/MAModel/RADARMA-Belchertown.htm>

Codling moth (CM): Codling moth development as of JUNE 26: 1st generation adult emergence at 100% and 1st generation egg hatch at 91%. In most orchards, insecticide targeting plum curculio and apple maggot prevent codling moth damage. If targeted codling moth control needed, key management dates are: 1st generation 3% CM egg hatch: MAY 26, Saturday = target date for first spray where MULTIPLE sprays needed to control 1st generation CM. See CM tables for follow-up spray dates to maintain protection through 1st generation CM egg hatch. 1st generation 20% CM egg hatch: MAY 31, Thursday = target date where ONE spray needed to control 1st generation CM.

Obliquebanded leafroller (OBLR): 1st generation OBLR flight begins around MAY 26, Saturday. 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 insecticide against young larvae): Early egg hatch and optimum date for initial application of B.t., Delegate, Altacor, Proclaim, Intrepid, Rimon, Belt, pyrethroid or other insecticide against OBLR (with follow-up applications as needed): JUNE 13, Wednesday. Where waiting to sample late instar OBLR larvae to determine need for treatment is an option, or to check on results from earlier sprays: Optimum sample date for late instar summer generation OBLR larvae: JUNE 22, Friday. If first OBLR late instar larvae sample is below threshold, date for confirmation follow-up: JUNE 26, Tuesday.

Oriental fruit moth (OFM): 1st generation 55% egg hatch and first treatment date, if needed: MAY 16, Wednesday. 2nd generation OFM flight begins around: JUNE 18, Monday. 2nd generation - first treatment date, if needed: JUNE 24, Sunday. 2nd generation - second treatment date, if needed: JULY 6, Friday.

Spotted tentiform leafminer (STLM): 2nd STLM flight begins around: JUNE 1, Friday. Rough guess of when 2nd generation sap-feeding mines begin showing: JUNE 23, Saturday. Optimum first sample date for 2nd generation STLM sap-feeding mines is JULY 6, Friday.

Apple maggot fly (AMF): Rough guess of date of first AMF are caught on traps is: WEDNESDAY, June 20. Rough guess of peak AM trap captures is: JULY 26, Thursday.

Upcoming meetings

June 26: 4-7:30 PM, Vegetable & Fruit Program Twilight Meeting, Ward's Berry Farm, 641 South Main St., Sharon, MA

July 16: Massachusetts Fruit Growers' Association Summer Meeting, UMass Cold Spring Orchard, 391 Sabin St., Belchertown, MA

July 26-27: International Fruit Tree Association 2012 Quebec Study Tour, Montreal PQ, Canada. More information: <http://www.ifruittree.org/?page=2012StudyTour>

The way I see it

Off to the twilight meeting at Ward's Berry Farm tonight. Consider attending if you don't get this too late. Otherwise, 'Orchard Radar key dates' and 'Scaffolds re-cap' pretty well sums it up. Dogwood borer and peachtree borer pheromone traps catches have been high at the UMass Orchard (see pictures of dogwood borer). Come to the twilight meeting tonight to learn about peachtree borer control options, and see the short article below on dogwood borer control. Good luck. J. Clements

Scaffolds re-cap

Summarized from Scaffolds Fruit Journal, June 25, 2012. <http://www.scaffolds.entomology.cornell.edu/index.html>

Obliquebanded leafroller (OBLR) sampling of mid-late instar larvae should be taking place now in orchards where OBLR pressure was not sufficient to warrant early treatment. An action threshold is 3% terminal infestation as per page 79 of the NETFMG. Delegate, Belt, Altacor and Proclaim are best treatment options if over threshold. If under threshold, do a follow-up sample in 3-5 days.

Green aphids are a general summer nuisance, sucking sap from terminals and stunting growth, and/or leaving honeydew on fruits resulting in sooty mold. 10 terminals from each of 5 trees throughout the orchards should be sampled to determine percentage infestation. If 30% of terminal are infested, treatment is warranted unless many predators are present. Note that aphid predators will often take care of the problem except in heavily sprayed (insecticide) orchards. There are many spray options, check the NETFMG and particularly the tables on efficacy and impact on beneficials. (Tables. 7.1.1 and 7.1.3, pages 70 and 73 respectively.)



Japanese beetle adults emerge about the first week in July (maybe earlier this year?) and fly to shrub and tree foliage to feed. Peaches, cherries, and apples are all susceptible to Japanese beetle feeding. Ripening fruits (peaches) are particularly attractive. Apple fruit and foliage may be protected from damage by using Assail, Calypso, Sevin, Voliam Xpress; stone fruits, use Admire, Assial, Sevin, Endigo, Leverage, or Voliam Xpress when the beetles first appear.

Good central leader growth (pictured on left) needs to be prioritized in 1st-leaf plantings, particularly with weak-growing varieties like

Honeycrisp. Use frequent irrigation, removal of leader-competing shoots, and a final ground nitrogen application to keep the leaders growing! Frequent fertigation very effective at promoting leader growth. Also, be sure to install the support system ASAP!

Vegetable & fruit program twilight meeting

June 26 4 pm-7:30 pm. Ward's Berry Farm, 614 South Main Street, Sharon, MA 02067

Ward's Berry Farm is diverse in both crops and markets, growing a full range of vegetables, many small fruits including blueberry, strawberry, and grape, and an expanding peach orchard. Their markets include wholesale, restaurants, a large farmstand, as well CSA shares both on-farm and delivered. They apply IPM to both conventional and organic systems on their farm and have used reduced tillage for many years.

Ward's Berry Farm is participating in a 3-year IPM project with farms that have a diverse crop mix. How can one farmer plan, monitor, and manage such a wide ranges of crops, and use the latest and most effective IPM strategies at the same time? What tools can make this daunting task easier? Come and find out!

The farm tour will include:

- Using farm weather station network and NEWA for disease forecasting, temperature and degree-day date, and more! How can this help with IPM decision making on the farm?
- New pest: Spotted Wing Drosophila – monitor and manage destructive new pest of small fruit, cherries and other fruits.
- New pest: Brown Marmorated Stink Bug – learn about scouting program around the state for this potentially serious new pest.
- Peaches: using mating disruption to control peach borer. Jon Clements will demonstrate this method for controlling the borer and its damage.
- Sweet corn and pepper: using biocontrols and reduced-risk products for European Corn Borer and corn earworm. This season Wards is releasing parasitic wasps (*Trichogramma ostrinae*) in peppers as well as early corn – aiming for an abundant & healthy red pepper harvest!
- Fungicide programs for cucurbits and tomatoes/potatoes: covering all the bases for the wide range diseases that impact both of these crop groups. We will talk about a seasonal strategy to manage resistance and the changing complex of diseases.
- Deep Zone Tillage and No-Till strategies & equipment—Wards have grown no-till corn successfully for years, and they are comparing it to deep zone tillage this years. The UMass DZT 'zone builder' will be onsite for demonstration.

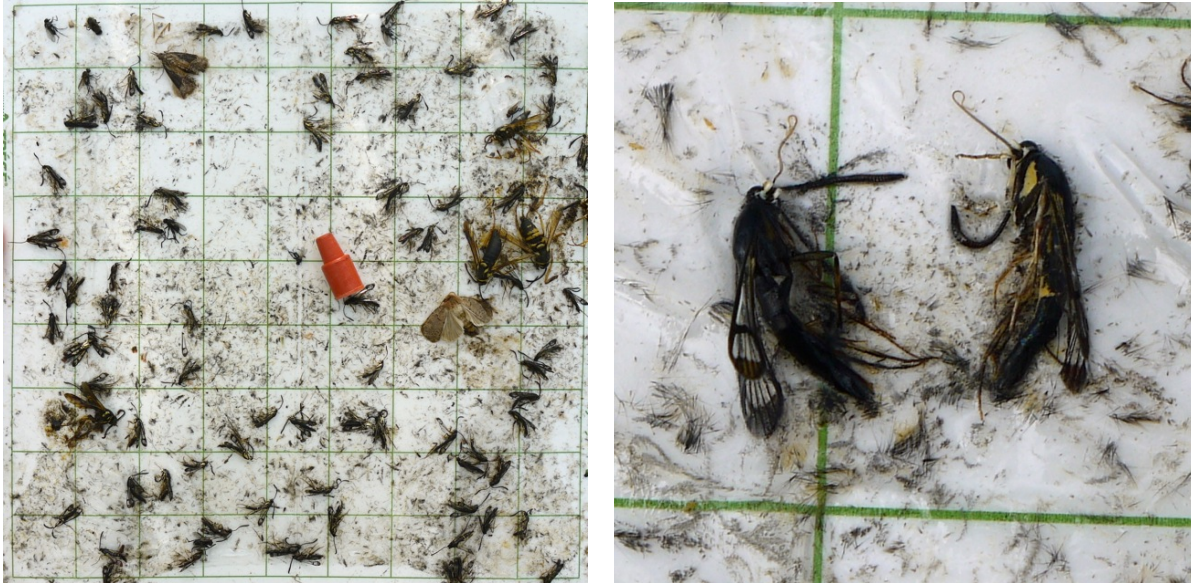
For more information contact Ruth Hazzard, 413-45-3696,
umassvegetable@umext.umass or Jim Ward ----
Pesticide credits have been requested

Got dogwood borer?

Yes, we do at the UMass Orchard if the pheromone trap catch is any indication. (See picture.) Dogwood borers are a particular problem in dwarf apple trees where the graft

union is planted high and burr knots -- where the adults like to lay their eggs -- are prevalent. Left to their own, high dogwood borer populations and the cambium-destroying larvae can seriously compromise and kill dwarf trees outright.

Where dogwood borer are present, there are really only 2 treatment options: 1.) a directed trunk spray with Lorsban, particularly the area below the graft union where there are burr knots, and 2.) ISOMATE DWB mating disruption for dogwood borer. Both treatment options should be implemented ASAP, it may be a little late for the ISOMATE DWB.



All the smaller insects caught in this DWB pheromone trap (left) are dogwood borer. Close-up (right) of male and female (female with yellow markings) dogwood borer caught in pheromone trap.

Useful links

- UMass Fruit Advisor: <http://umassfruit.com>
- Scaffolds Fruit Journal: <http://www.nysaes.cornell.edu/ent/scaffolds/>
- Network for Environment and Weather Applications (NEWA): <http://newa.cornell.edu>
- Follow me on Twitter (<http://twitter.com/jmcextman>) and Facebook (<http://www.facebook.com/jmcextman>)
- UMass Vegetable & Fruit IPM Network (on Facebook, <https://www.facebook.com/umassipmteam>)

The next Healthy Fruit will be published Tuesday, June 26 or thereabout, 2012. As always feel free to get in touch with any member of the UMass Fruit Team (<http://extension.umass.edu/fruitadvisor/about/members>) if you have questions or comments.



Annual Summer Meeting

of the
Massachusetts Fruit Growers' Association, Inc.
in cooperation with the
University of Massachusetts Extension



MONDAY, July 16, 2012

University of Massachusetts Cold Spring Orchard Research & Education Center

391 Sabin Street, Belchertown, MA 01007

- 10:00 AM **Cold Spring Orchard Research & Education Center field tour.**
A variety of topics will be discussed, include fruit thinning, growth control, containment spraying, rootstocks, training systems, grapes, and pollinators.
- 12:15 PM **Lunch** will include a spectacular meal from Outlook Farm in Westhampton, Massachusetts. Several BBQ specialties will be available, along with all the fixings.
- 1:30 PM **Welcome, Introductions, and Brief Remarks.**
Andrew Martin, *President, Massachusetts Fruit Growers' Association*
- 1:35 PM **An Update from Capitol Hill**
Jim McGovern, *U.S. Representative from the Third Massachusetts District and member of the House Agriculture Committee*
- 2:00 PM **Ronald J. Prokopy Award for Outstanding Support of Massachusetts Agriculture.**
Ken Nicewicz, *Massachusetts Fruit Growers' Association*
- 2:05 PM **Featured speaker: New problem insect pests: a preview from down south**
Dean Polk, *Rutgers University*
- 3:00 PM **Adjourn**

Registration for this meeting will be \$25 for Mass. Fruit Growers' Association members (\$35 for non-members) and will include the tour, educational program, pesticide recertification credits, and lunch.

To ensure the availability of the meal, please pre-register by returning the bottom of this form, with a check made out to M.F.G.A. for \$25 per person (\$35 for non-MFGA members) or go to massfruitgrowers.org and pay by credit card.

We must receive pre-registrations by Wednesday, July 11.

Send to: Doreen York
Agriculture & Landscape Program

Bowditch Hall, University of Massachusetts
Amherst, MA 01003-0910

With check made out to
M.F.G.A. for **\$25 (\$35 non-MFGA members) per person**
by **July 11.**