



Healthy Fruit, Volume 20, Number 7. May 15, 2012

Contents

- Current degree day (DD) accumulations
- Upcoming pest events
- Orchard Radar key dates
- Upcoming meetings
- The way I see it
- This weeks comments on apple fruit thinning and vegetative growth control
- Useful links

Current (through May 14) degree day (DD) accumulations

Location: UMass Cold Spring Orchard, Belchertown, MA
Base 43: 638 Base 50: 391

Upcoming pest events (based on current DD accumulations: Base 43 at 638 on 14-May)

Lesser appleworm 1st flight peak	355-773
Lesser peachtree borer 1st catch	482-684
Codling moth 1st catch	400-578
Obliquebanded leafroller pupae present	601-821
Codling moth first flight peak	574-1008

Orchard Radar key dates

Note: Beginning this week we will publish key dates output 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): 1st generation sustained trap catch biofix date: MAY 2, Wednesday. Codling moth development as of MAY 15: 1st generation adult emergence at 15% and 1st generation egg hatch at 0%. 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: JUNE 6, Wednesday = target date for first spray where MULTIPLE sprays needed to control 1st generation CM. 1st generation 20% CM egg hatch: JUNE 6, Wednesday = target date where ONE spray needed to control 1st generation CM.

Obliquebanded leafroller (OBLR): 1st generation OBLR flight begins around MAY 27, Sunday. 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 15, Friday.

Oriental fruit moth (OFM): 1st generation 55% egg hatch and first treatment date, if needed: MAY 16, Wednesday.

Plum curculio (PC): Increased risk of PC damage as McIntosh and similar cultivars increase fruit size: MAY 7, Monday. Earliest safe date for last PC insecticide spray: MAY 19, Saturday.

Spotted tentiform leafminer (STLM): 1st generation sapfeeding mines start showing: MAY 6, Sunday. Optimum sample date is around Monday, MAY 7, when a larger portions of the mines are visible.

Upcoming meetings

May 15, 16, 17: Fruit Twilight Meetings:

- May 15: Apex Orchard, 153 Peckville Rd., Shelburne Falls, MA
- May 16: Carlson Orchards, 115 Oak Hill Rd., Harvard, MA
- May 17: Noquochoke Orchards, 594 Drift Rd., Westport, MA

- Special guest speaker Win Cowgill, Rutgers Cooperative Extension
- Tree fruit twilight meetings start promptly at 5:30 PM.
- 1 (one) pesticide recertification credit will be offered.
- There will be a \$25 meeting admission charged at the door. (\$20 for Massachusetts and Rhode Island Fruit Growers' Association FULL members.)
- A light meal or snack will be served at all meetings.
- For more information, call Jon Clements: 413-478-7219

July 16: Massachusetts Fruit Growers' Association Summer Meeting, UMass Cold Spring Orchard, 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 (J. Clements)

It's becoming a bit clearer how we might be shaping up for a fruit crop in 2012, and it's all over the place. Apples will be very valuable this year, so be conservative when doing fruit thinning. I am more nervous about stone fruit than I was because I don't see it growing much and reports of peaches falling off down the east coast. We will see, hopefully they will persist, but keep an eye on that. Looking back we all said it would be a miracle if we pulled through this early spring, and for some growers the miracle materialized while others have a much diminished tree fruit crop. It has indeed been a LONG spring.

Hope to see you at this week's twilight meetings, I think they should be very interesting if the rain holds off and we can go outside to look at newly planted orchards.

Native Pollinator Conservation Baseline Assessment (S. Schloemann)

UMass Extension is undertaking some training activities over the next 3 years on native pollinator conservation. This is in response to concerns about the availability and reliability of traditional pollinators (honey bees) for many crops due to multiple factors such as colony collapse disorder (ccd), varroa mites and other pests/pathogens, increased rental fees, reduced hive availability, etc.

In order to establish the current extent of knowledge about native pollinator conservation and use of practices that can help conserve them, a baseline survey is needed.

Please consider taking a few minutes to fill out a survey that can be found at: <http://www.surveymonkey.com/s/D9KGM23> to help us establish this baseline. The survey is anonymous and should take only a short time to fill out. Please fill it out regardless of whether you are signed up for any planned trainings.

You may receive this request more than once (sorry!) but please try to only respond one time. Many thanks!

This weeks comments on apple fruit thinning and vegetative growth control (D. Greene)

We are now entering the stage of development for many growers when chemical thinning of apples is traditionally done. The 7 to 14 mm stage of development is the stage when fruit are most susceptible to chemical thinners. While the precise mode of action of thinners is not known, they are believed to work in part by increasing the carbohydrate deficit thus causing more fruit to abscise.

Traditionally, we suggest that orchardists look for a period of time after the fruit reach 6 mm when temperatures are predicted to reach into the 70s. We have also stressed the involvement of light. Cloudy weather accompanied by warm temperatures make thinning much easier and there is a greater response to thinners. Until recently our descriptions of these weather events have been verbal and interpretation by orchardists has sometimes been difficult. Now available is the carbohydrate model (developed by Alan Lakso and Terence Robinson) which takes the interactive influences of temperature and light and quantifies these into a number that is much more easily

interpreted and thus used in the thinning program. This number generally falls between -80 g/tree to +80 g/tree. The lower the number the easier it will be to thin and the higher the number the more difficult it will be to thin.

Rain is predicted until midweek after which sunny and with moderate temperatures. Model runs suggest that the carbohydrate status in the tree will be moderate to high (+36 to +60). This is interpreted to mean that thinner sprays applied over the next few days will be only moderately successful, but thinning will be possible. Up until now we have encouraged you to be somewhat conservative in your thinning approach, at least until you had a good idea what the initial set was and once you established that the fruit that remain are growing at a somewhat normal rate. Most of you can make that determination now. Given that the weather forecast is correct and that you have a crop to thin, this is a time to be out and applying thinners. The degree of aggressiveness is up to you, but given the forecast and the model prediction, over thinning is unlikely. I say this given that you have confirmed that fruit have adequate seed number and no interior brown is found in the developing fruit. More aggressive thinning is in order on trees that are heavily set and that have the tendency for biennial bearing.

The second application of Apogee is generally done 2 to 2.5 weeks after the first. We are approaching that time now. Apogee can increase fruit set. It does this not by increasing initial set but by reducing June drop. Application of Apogee might be useful in some blocks where increased fruit set and reduced June drop are desired. Apogee is also useful in blocks that have been frozen out or the crop load was severely reduced. The high rates suggested on the label for fire blight control are not necessary to get good vegetative growth control. Rates above 6 oz/100 gal are not recommended and properly timed follow up sprays require only 2 to 4 oz/100 to adequately control growth.

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/jmccextman>) and Facebook (<http://www.facebook.com/jmccextman>)
- UMass Vegetable & Fruit IPM Network (on Facebook, <https://www.facebook.com/umassipmteam>)

The next Healthy Fruit will be published Tuesday, May 22 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.

May 15, 16, 17 -- 2012



Extension Fruit Program Twilight Meetings

in cooperation with Massachusetts and
Rhode Island Fruit Growers' Associations

Tuesday, May 15 – Apex Orchard

153 Peckville Rd., Shelburne Falls, MA

413-625-2744

Host: Tim Smith

Wednesday, May 16 – Carlson Orchards

115 Oak Hill Rd., Harvard, MA

800-286-3916

<http://www.carlsonorchards.com/>

Host: Frank and Bruce Carlson

Thursday, May 17 -- Noquochoke Orchards

594 Drift Rd., Westport, MA

508-636-2237

<http://www.noqorchards.com/>

Host: George and Sue Smith

note: May 17 Meeting in collaboration with Rhode Island Fruit Growers' Association -- Rhode Island growers are encouraged to attend. Come a little early (5 PM) for food...

- Special guest speaker Win Cowgill, Rutgers Cooperative Extension
- Tree fruit twilight meetings start promptly at 5:30 PM.
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