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MFGA 2013 Summer Meeting

Current degree day accumulations

Location: UMass Cold Spring Orchard, Belchertown, MA

	24-June, 2013
Base 43	1232
Base 50	820

Upcoming pest events

Coming events	Degree days (Base 43)

Pear psylla 2nd brood hatch	967-1185
Oblique-banded leafroller 1st flight peak	826-1208
Oblique-banded leafroller summer larvae hatch	1038-1460
San Jose scale 1st flight subsides	851-1233
San Jose scale 1st generation crawlers present	1033-1215
Lesser appleworm 1st flight subsides	990-1466
Apple maggot 1st catch	1243-1663
Oriental fruit moth 2nd flight begins	1286-1510
Redbanded leafroller 2nd flight begins	1252-1580

Orchard radar apple insect key dates

Here are insect key insect dates from [Orchard Radar, Belchertown, MA](#).

Codling moth (CM) 1st generation, first sustained trap catch biofix date: May 16, Thursday. Codling moth development as of June 25: 1st generation adult emergence at 96% and 1st generation egg hatch at 70%. In most orchards, insecticide targeted against plum curculio and apple maggot prevent codling moth damage. If targeted codling moth control is needed, key management dates are: 1st generation 20% CM egg hatch: June 14, Friday = target date for first spray where one spray needed to control 1st generation CM.

Obliquebanded Leafroller (OBLR) 1st generation OBLR flight begins around: June 8, 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, Proclaim, Intrepid, Rimon, Altacor, Belt, pyrethroid or other insecticide effective against OBLR (with follow-up applications as needed): June 24, Monday. Optimum sample date for late instar summer generation OBLR larvae: July 2, Tuesday. If first OBLR late instar larvae sample is below threshold, date for confirmation follow-up: July 6, Saturday.

Plum curculio (PC) earliest safe date for last PC insecticide spray: June 8, Saturday. If relying on repellance by Surround instead of PC mortality by insecticide, Surround coverage should be maintained until PC egg laying begins to naturally decline around Thursday, June 27.

Spotted tentiform leafminer (STLM) 2nd flight begins around: June 17, Monday. Rough guess of when 2nd generation sap-feeding mines begin showing: July 4, Thursday. Optimum sample date for 2nd generation STLM sapfeeding mines is July 11, Thursday.

European Red Mite (ERM) Optimum monitoring period for 3rd ERM generation is: Tuesday, June 25 (nymphs hatched) to Sunday, June 30 (egg laying starts for 4th generation).

Upcoming meetings

<http://extension.umass.edu/fruitadvisor/upcoming-events>

WEDNESDAY, July 10, 2013: Summer Meeting of the Mass. Fruit Growers' Association in cooperation with the University of Massachusetts Fruit Program, Honey Pot Hill Orchards, 138 Sudbury Rd., Stow, MA. 10 AM to 2:30 PM. For meeting flyer and registration info, click here: <http://massfruitgrowers.org/2013/2013summermeeting.html>. Or you can fill out and mail the form attached at end of this week's HF.

The way I see it

Rain, rain go away, 7 plus inches in the past 30 days at Belchertown. More elsewhere I suspect. I feel sorry for anyone still battling scab, and there is no end to the rain in sight in the 7-10 day forecast. So, where does that lead me? -- disease issues including apple scab, brown rot on ripening stone fruit, fabraea leaf spot in pears, and now summer diseases must all still be on our minds. And what about fire blight? Has anyone seen much? I have not had any reported, but savvy growers treated with streptomycin during bloom. If you do have blight in your orchard, and you get a windstorm with rain and/or hail with you better be on top of it with streptomycin. Insect-wise, the only thing that seems worth treating right now is oblique banded leafroller (OBLR) as the timing is perfect to apply such hi-tech insecticides as Delegate, Altacor, Belt, Proclaim, Rimon, etc. for this pest. After seeing potato leafhopper nearly a month ago in one southern Massachusetts orchard, I have not seen any yet in Belchertown. Where are they? Can we wait until after July 4 to hang apple maggot traps? Have you voted today? Oh, and I would be watching for mite build-ups and treat as necessary. We have very good miticides to choose from, just consult the [2013 New England Tree Fruit Management Guide](#).

Don't forget to register for the 2013 Summer Meeting of the Massachusetts Fruit Growers' Assoc. on July 10 at Honey Pot Hill Orchards (Andrew Martin and family) in Stow, MA. You can sign up on the Mass. Fruit Growers' Assoc. website: <http://massfruitgrowers.org/>. Or you can fill out and mail the form attached at end of this week's HF.

Insects

This last week in June is traditionally the timing for a targeted application to treat the egg-hatching stage of **oblique-banded leafroller (OBLR)** and this year is right on track according to the degree-day model and the NEWA website:

Obliquebanded Leafroller Results for Belchertown

First Trap Catch:

First Trap Catch date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the protection period after first trap catch more accurately.

Accumulated degree days (base 43°F) first trap catch through 6/24/2013: 399 (0 days missing)

Pest stage:

The pest stage above is estimated. Select the actual stage and the model will recalculate recommendations.

Pest Status	Pest Management
<p>First hatch of summer OBLR eggs. Adult catches in pheromone traps are near peak numbers.</p>	<p>In order to verify model predictions, monitor growing terminals at 600-700 DD base 43F after biofix to check for the detection of the first summer generation larvae. It is too early now to monitor populations of summer larvae at this time to determine if control sprays are necessary because most eggs will hatch later during the summer. However, applying protective sprays with the first spray timed to coincide with the first hatch of larvae at approximately 350 DD base 43F after biofix followed by a second spray 10-14 days later are recommended in orchards that have had a past history of severe OBLR fruit damage or if populations of overwintering larvae were high. Pesticide information</p>

Please consult the [2013 New England Tree Fruit Management Guide](#) for spray/control recommendations for **OBLR**.

I hope everyone (including your all your staff) is on the lookout for **Brown Marmorated Stink Bug (BMSB)** this year. The UMass Fruit Program has just rolled out a new page on BMSB on the UMass Fruit Advisor, <http://extension.umass.edu/fruitadvisor/brown-marmorated-stink-bug>. I would appreciate knowing about any potential sightings/findings. (Picture would be helpful.)

I am not much of an expert on **pear psylla**, but I did get a call from at least one grower last week who appears to be struggling with them. According to Mike Fargione in the Hudson Valley, egg and nymph numbers of the 2nd generation are particularly high in some pear orchards down there. He says Delegate with a *penetrating surfactant* would be a good control choice right now, whereas pyrethroid insecticides seem to be having decreasing efficacy. (Pyrethroids do not generally perform well in hot weather either.) I would also suggest that Movento would be a good treatment choice right now. For more options, see the pear spray table in the [2013 New England Tree Fruit Management Guide](#).

Diseases

It's probably time to get serious about summer diseases issues based on the NEWA assessment

below. This means fungicide spray intervals of 5-21 days typically from now through harvest depending on the amount of rain received. NEWA has a neat little trick where you can enter your most recent fungicide spray date and will determine the concurrent risk level, however, it depends somewhat on the kind of fungicide used. [Orchard Radar](#) perhaps has a better tool for determining how long your fungicide application is good for, however, it is a lot to digest. Suffice it to say for the time being there are three groups of fungicides with decreasing amount of time to wear-off (i.e., sooner re-application will be necessary). They are:

1. Pristine (or similar) with 21 day or 2.5 inch rain protection/depletion
2. Topsin-M, Flint, Sovran, phosphite + Captan (or similar) with 21 day or 2.0 inch rain protection/depletion
3. Captan, Ziram (full-dose) with 14 day or 1.5 inch rain protection/depletion

Sooty Blotch and Flyspeck Risk Predictions for Belchertown

Petal fall date for McIntosh:

Petal fall date above is estimated based on degree day accumulations or user input.

Enter the actual date for blocks of interest and the model will calculate the accumulated leaf wetness hours since petal fall more accurately.

Most recent fungicide application date:

If petal fall has passed, enter the date of your most recent fungicide application.

If no fungicide applications have been made, do not enter a date.

In the Risk Summary table, note the accumulated leaf wetness hours since petal fall (Leaf Wetness Hours) and the Risk Level. Leaf wetness hours, rain events, and the last fungicide application date are taken into consideration in assessing risk level. To estimate risk in the near future, look at the probability of rain.

Consult the Risk Level IPM Guidelines below the **Risk Summary** table.

Sooty Blotch and Flyspeck Risk Summary - Northeastern US Model								
	Past	Past	Current	5-Day Forecast			Forecast Details	
Date	Jun 23	Jun 24	Jun 25	Jun 26	Jun 27	Jun 28	Jun 29	Jun 30
Days since petal fall	36	37	38	39	40	41	42	43
Accumulated Leaf Wetness Hours - ALWH	370	383	397	416	432	441	448	453
Risk Level	High	High	High	High	High	High	High	High

For all fungicide spray options for summer diseases, consult the [2013 New England Tree Fruit Management Guide](#).

Horticulture

In case you missed it, a repeat of the following four from 2 weeks ago:

1. Calcium should be included in all apple cover sprays and/or supplemental sprays now. Many sources of calcium are available, see [Foliar Calcium Sprays for Apples](#) for specifics.
2. Very soon you should consider going on an ethephon or NAA program to enhance return bloom of apples in 2014. These sprays should start by mid-June, and either ethephon (Ethrel) or NAA (Fruitone) should be applied 3-4 times depending on cultivar and degree of bienniality. Consult [Enhancing Return Bloom of Apples](#) for details.
3. Hand thinning of both peaches and apples should commence ASAP and you know you have too many fruits (a given with peaches).
4. I see many young trees seriously damaged by herbicide application where trunk contact was made (picture on left). I urge all growers to protect trunks of first leaf tress before making a contact herbicide application. This includes using glyphosate (Roundup), paraquat (Gramoxone), and glufosinate-ammonium (Rely, if you can get it). Thanks to Mo Tougas and Win Cowgill for sourcing these inexpensive, milk-carton type trunk guards: <http://monarchmfg.com/protectivewrapsshelters.aspx>

Keep stripping side shoots of young trees to protect the leaders of 1st and 2nd leaf apple trees ([before stripping](#), [after stripping](#))

Useful links

UMass Fruit Advisor: <http://umassfruit.com>

UMass Fruit Notes: <http://umassfruitnotes.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, <http://www.facebook.com/umassipmteam>)

2013 New England Tree Fruit Management Guide (<http://fruit.umext.umass.edu/2013netfmq/>)

The next Healthy Fruit will be published on Tuesday, July 9 (in TWO weeks) or thereabouts, 2013. As always feel free to get in touch with any member of the UMass Fruit Team (<http://extension.umass.edu/fruitadvisor/team-members>) if you have questions or comments.



Massachusetts Fruit Growers' Association, Inc.
P.O. Box 9632, North Amherst, MA 01059-9632

Annual Summer Meeting

in cooperation with the University of Massachusetts Fruit Program

Wednesday, July 10, 2013, 10:00 AM to 2:30 PM

Honey Pot Hill Orchards

138 Sudbury Road, Stow, Massachusetts

10:00 AM	Welcome to Honey Pot Hill Orchards -- Andrew Martin
10:15 AM	Orchard Tour
NOON	Honey Pot Hill Orchard Lunch provided with the registration charge
1:30 PM	Welcome to the Annual Summer Meeting and announcements-- Andrew Martin, <i>President</i>
1:35 PM	Presentation of the Annual Ronald J. Prokopy Award in Recognition of Outstanding Support of Massachusetts Agriculture -- Ken Nicewicz
1:40 PM	Educational Program -- Win Cowgill, <i>Rutgers University</i> , and Jon Clements, <i>University of Massachusetts</i>
2:30 PM	Adjourn

One hour of pesticide-license-recertification credit will be offered for the day

Directions to Honey Pot Hill Orchards:

From Rt. 2: Take the Rt. 62 West exit, this is an left turn, 1/3 mile after Emerson Hospital (on your left). Travel Rt. 62 West 7 miles into Stow, 62 is a twisty road with many left's and right's- please watch 62 west signs carefully. In Maynard, Rt. 62 & Rt. 117 merge for a few miles into Stow. At the lights in Stow they separate, be sure to take left staying on 62 West. Watch for orchard signs on Rt. 62.

Directions From Rt. 128: Take the Rt. 20 West exit, (Exit 26) for 5 mi. to Rt. 27 North for 3.5 mi. to Sudbury center - straight through lights for 1/3 mi., then bear left onto Hudson Road (leave Rt. 27) for 3.3 mi., then right onto Sudbury Rd. for 2 mi. to the orchard.

Directions From Rt. I-495: Take the Rt. 62 East exit, (Exit 26). At bottom of ramp turn right towards Hudson, getting on 62 East for 5.5 mi. into Stow and watch for orchard signs on Rt. 62.

Cost of registration for the meeting is **\$20 per MFGA Member and \$25 per non-member**, which includes lunch. Please return the bottom of this announcement, along with the appropriate payment by **July 5** to assure the availability of the lunch. You can alternatively register online with a credit card at:

<http://www.massfruitgrowers.org/>

Name

Number Attending

Total \$ Enclosed
(\$20 or \$25/person)

Mail along with a check for the appropriate amount (made out to MFGA) to: Doreen York, 201 Natural Resources Road, 210 Bowditch Hall, University of Massachusetts, Amherst, MA 01003-9294.