

Healthy Fruit, Volume 20, Number 2. April 10, 2012

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Current (through April 9) degree day (DD) accumulations

Location: UMass Cold Spring Orchard, Belchertown, MA

Base 43: (246)

Base 50: (129)

Current bud stages

Location	Honeycrisp apple early tight cluster	McIntosh apple tight cluster +	Rainier cherry bud burst +	BlazingStar peach pink-bloom
UMass Cold Spring Orchard, 9-April 2012				

Upcoming meetings

April 12: USDA Good Agricultural Practices (GAP) Training Program, Marlboro, MA. 12:30 PM to 5 PM. More information: <http://extension.umass.edu/fruitadvisor/events/usda-gap-training-program>

April 17: UMass Fruit Team Twilight Meeting, UMass Cold Spring Orchard, 393 Sabin St., Belchertown, MA. 5:30 PM

April 18: UMass Fruit Team Twilight Meeting, Dowse Orchards, 98 North Main St., Sherborn, MA. 5:30 PM

April 19: UMass/URI Fruit Team Twilight Meeting, Jaswell's Farm, 50 Swan Rd., Smithfield, RI. 5:30 PM

For more information on twilight meetings, see last page of this Healthy Fruit or go to <http://umassfruit.com>

The way I see it

This WILL be your last Healthy Fruit unless you send in your check with the form attached. (Or go to: <http://massfruitgrowers.org/fruitsubscriptions.htm>.)

Weather appears to be improving with no frost/freeze weather predicted. Last week there was some pretty low temperatures (low 20's) in eastern Massachusetts leading to some apple flower bud damage.

This has been ideal weather to plant trees. Given how dry it is, you should probably be thinking about irrigating new plantings and young trees.

Otherwise it is really pretty quiet and will remain so until the weather warms. Hope to see you at twilight meetings next week.

2012 New England Tree Fruit Management Guide Available

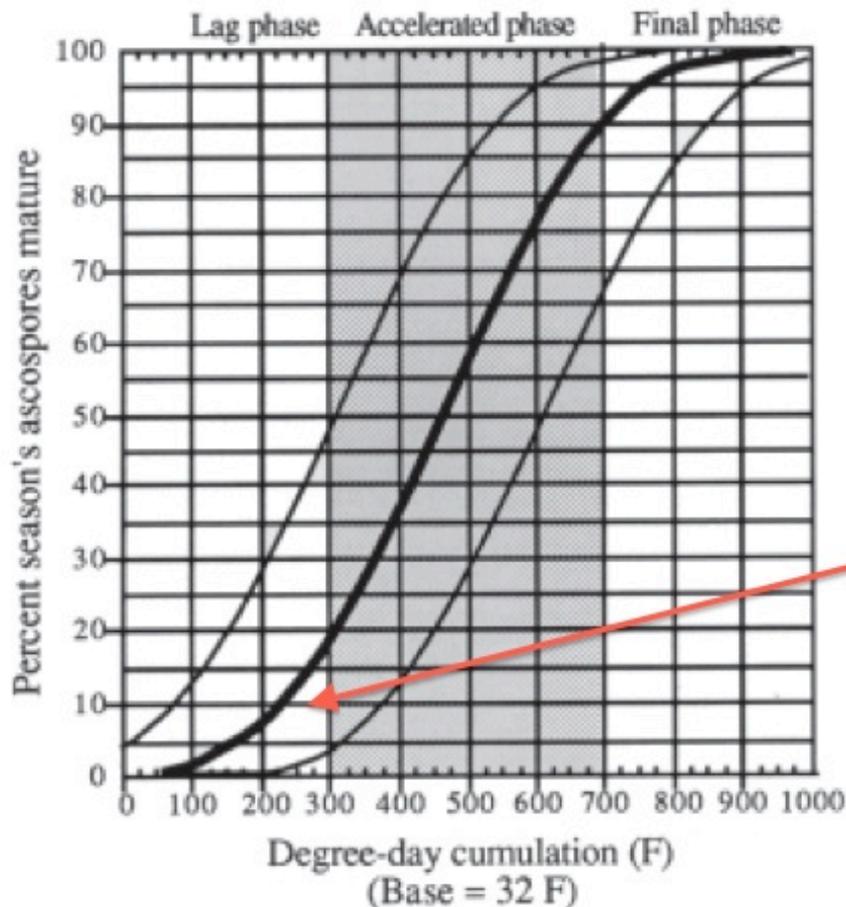
Be sure to order your 2012 New England Tree Fruit Management Guide soon given the early start to the growing season. Attached is an order form.

INSECTS

- the window is still open a bit longer to apply oil for mites. Don't apply when freezing weather predicted and drop the rate to 1 to 1-1/2 % now. Once mite eggs start hatching (during pink), then the oil will become less effective.
- if you have a problem with tarnished plant bug (unlikely) or rosy apple aphids (seems to be increasing) apply an insecticide at late tight-cluster to pink; good-excellent options for tarnished plant bug include: Ambush, Asana, Danitol, Warrior, Beleaf, and Baythroid XL. For rosy apple aphid applied at late tight cluster: MPEDE + Oil, Lorsban, Assail, Calypso, and Beleaf.
- it's definitely time to hang traps for Oriental Fruit Moth; pheromone traps are the best way to monitor presence (and lesser-so, abundance) and time insecticide sprays.
- see Guest Article below by Alan Eaton on leafminer management.

DISEASES

- we STILL have not had a scab infection period yet, however, with warmer weather forecast and rapidly increasing ascospore maturity from here on out ('accelerated' phase, see chart below), we WILL have one during the next significant wetting event; be well-covered with a protectant fungicide prior to the rain.
- peaches (and apricots and plums and cherries) in bloom will DEFINITELY need to have a brown rot spray on during wet weather; don't underestimate the importance of beginning brown rot control NOW. Best fungicides include: Indar, Rovral, Rally, Elite, Adament, and Bravo.



We
are
here!

HORTICULTURE

- soak tree roots in water for 24-48 hours before planting; this fully 'hydrates' the tree, very important given how dry the soil is now; water-in trees and/or apply irrigation ASAP.
- use Gallery/Prowl H2O for newly planted trees.
- forsythia are still in bloom so good time to apply pre-emergent herbicide(s) to existing orchards; a GOOD right-now herbicide mix would include: Prowl H2O, 3 qt./acre; PLUS Matrix, 4 oz/acre; PLUS Karmex, 1.5 to 2.5 lb./acre (use reduced

rate on dwarf/young trees and do not use on dwarf/young trees on sandy soil); PLUS Gramoxone or Rely. The Prowl H20 is for grasses, Karmex for broadleaf weeds, Matrix for both grasses and broadleaf weeds, and the Gramoxone/Rely for burn-down of existing weeds. Note that you must have relatively weed-free ground first for the pre-emergent herbicides (Prowl, Karmex, Matrix) to be effective.

- apply a foliar spray of micro-nutrients to apples at tight cluster to pink to strengthen flower buds; use 3 lb. spray urea, 1 lb. Solubor, and 1 qt. zinc chelate EDTA per 100 gallons water; might be very useful this year to help flower buds recover from the cold.

Guest article – Timing of Leafminer Insecticides:Apples

Alan Eaton, UNH Cooperative Extension, NH IPM Newsletter, April 10, 2012
(http://extension.unh.edu/Agric/Docs/April4_2012IPMnewsletter.pdf)

If your traps show there are enough moths to make it worthwhile to spray, you have your choice of several times and materials. If the materials are applied correctly, you'll only need to do it once this season for leafminers.

Some pesticides are designed to kill the adults, so they are used early, when the adults are flying (often about half-inch green or tight cluster stage). Thiodan and Thionex are in this category. Maybe by the time I get this newsletter out, it will be too late for that option. To treat first generation adults, aim the spray at the ground cover, lower trunk, and lower limbs. This wording is on the Thionex label, with the instructions to begin as soon as moth flight begins. That is hard to do if you are counting the catch first. We do have more reliable options.

Insect growth regulators (like Intrepid and Esteem) are most effective on eggs and very young larvae, so they would be targeted at that time, which is usually at tight cluster or pink stage. Actara is targeted at this period. The Actara label now says that a spray adjuvant (to help the material spread & penetrate leaf tissue) isn't required, but can help. Aza-direct is OMRI listed, and works by ingestion. I don't think significantly penetrates foliage, so the preferred timing would be in the egg stage so they can consume the material before mining into the leaf tissue. Vydate is still an option. **Timing for that is at pink, because spraying Vydate soon after pink may heavily thin the fruit.**

Materials that are effective on the young larvae ("sap-feeders") come next. For most, that is at or after petal fall. Proclaim is one example. You use it with a surfactant, and it has some translaminar (foliage penetrating) action. The Voliam xpress label has similar language --- apply right after petal fall. Other labels say just during the sap- feeding stage, so that could be a little after petal fall this year (??). Agri-Mek, Altacor, Belt, Calypso, Lannate, Leverage, Provado, Sherpa and SpinTor are in this category. Some require a surfactant to be effective, so check the labels! Delegate is the replacement for SpinTor, which is no longer available.

There are pyrethroid insecticides that work on leafminers. I believe they affect adults (or eggs, if you have high enough gallonage to hit them), not the immatures, which are inside the leaf layers. Pyrethroids (in general) are persistent and broad spectrum, so they can be very harmful to beneficial insects. I usually downplay them as an option for leafminers: Asana, Baythroid, Danitol, Delegate, Pounce, Proaxis, Warrior.

Lastly, I'll mention Avaunt. It is registered to "suppress" leafminers.

If you apply an insecticide this generation for leafminers, you should need only one treatment. In the vast majority of cases, if you treat (correctly) for the first generation, you won't need to later in the season, when the second generation appears. I NEVER recommend spraying for the third generation, which typically occurs towards harvest time.

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>)



Perpendicular-V peaches in bloom at UMass Cold Spring Orchard, April 7, 2012

The next Healthy Fruit will be published Tuesday, April 17 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.



Fruit Publications Order Form

Please note the following:
Healthy Fruit and *Fruit Notes* subscribers will receive issues either as printed copies in the US Mail **OR** as electronic copies. *Berry Notes* and *Grape Notes* subscribers will receive electronic copies.

- Healthy Fruit* Paper copy -- \$70, Electronic copy -- \$50 _____
- Fruit Notes* Paper copy -- \$25, Electronic copy -- \$20 _____
- Berry Notes* Electronic copy -- \$10 _____
- Grape Notes* Electronic copy -- \$10 donation _____
- New England Tree Fruit Management Guide -- \$50 _____
- New England Small Fruit Pest Management Guide -- \$16 _____
- Donation to the UMass Fruit Program _____

Total Enclosed: _____

To receive the electronic copy, you must include your email address below.

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Please make your check out in U.S. currency to UNIVERSITY OF MASSACHUSETTS and send it and this form to the following address:

Doreen York
UMass Fruit Program
210 Bowditch Hall
University of Massachusetts
Amherst, MA 01003-9294

April 17,18,19 -- 2012



Extension Fruit Program Twilight Meetings

in cooperation with Massachusetts and
Rhode Island Fruit Growers' Associations

Tuesday, April 17 – UMass Cold Spring Orchard

391 Sabin St., Belchertown, MA

413-323-6647

<http://www.coldspringorchard.com>

Host: UMass fruit team

Wednesday, April 18 – Dowse Orchards

98 North Main St., Sherborn, MA

508-653-2639

<http://www.dowseorchards.com>

Host: Alex and Jonathan Dowse

Thursday, April 19 -- Jaswell's Farm

50 Swan Rd., Smithfield, RI

<http://www.jaswellsfarm.com>

401-231-9043

note: April 19 Meeting in collaboration with Rhode Island Fruit Growers' Association -- Massachusetts Fruit growers are encouraged to attend

- 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 (MA): 413-478-7219, or Heather Faubert (RI): 401-874-2967

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