



Healthy Fruit

Volume 14, 2006

Prepared by the University of Massachusetts Fruit Program

Healthy Fruit, Issue 16, July 25, 2006

<http://www.umass.edu/fruitadvisor/>

Upcoming meetings/events

Date	Meeting/ event	Location	Time	Information
Aug. 9	Tree Fruit Twilight Meeting	UNH Woodman Horticultural Farm Durham, NH	--	George Hamilton 603-641-6060

The way I see it -- J Clements

Early peach harvest has commenced. At the UMass Cold Spring Orchard in Belchertown I have been picking Earlystar (FA-101) and have been impressed with the color (90% red) and quality of this early season peach. The hot weather is good for peaches, but remember to maintain fungicide coverage for brown rot as fruit mature. Apple size looks really good for this time of the year, no doubt the abundant rain has helped. Potato leafhopper and Japanese beetles have been pests of note, but apple maggot is undoubtedly out there too. Speaking of which, be sure to note the important proposed change to the Imidan label as discussed below -- Imidan has been an important tool for managing apple maggot in New England orchards. (Although there are options.) Note that Healthy Fruit is going on a bi-weekly publication schedule -- the next Healthy Fruit will be published August 8, 2006.

Japanese beetles troublesome -- J Clements

Japanese beetles have been numerous this year and can do some serious damage in a short-time if neglected. Case in point – an unsprayed group of 30 Honeycrisp apples at the UMass Cold Spring Orchard in Belchertown was colonized by Japanese beetles last week resulting in significant veined foliage (up to 25% in some trees) and fruit injury. (See pictures.) Interestingly, the preference for Honeycrisp by the beetles was dramatic, as nearby varieties Macoun, McIntosh, Cameo, Golden Delicious were comparatively untouched. You don't have to be a rocket scientist to come to the conclusion that the beetles have a clear preference for Honeycrisp! Ripening peaches and nectarines are also favored by Japanese beetles. Control options are several – Provado on apples has proven effective and lasts awhile. Anecdotal evidence suggest Provado combined with Surround give about as long-lasting and effective control of this pest as you can get. Other effective insecticides on apples include Guthion, Imidan, Sevin, Asana, Danitol, Assail, and Warrior. Best options for peaches/nectarines include Guthion, Imidan, Sevin, and Provado -- but be sure to watch pre-harvest intervals.

Time to do leaf analysis (again) -- J Clements

Late July to early August is the time to collect leaf samples from apples and stone fruit for foliar nutrient analysis. Blocks should be sampled every few years to get an accurate assessment of the nutritional status of your orchard. Attached are directions and the required form for submitting your sample to the UMass Soil and Plant Tissue Testing Laboratory. (Accidentally omitted from the last Healthy Fruit.) You can also download the form and instructions at:

- http://www.umass.edu/soiltest/list_of_services.htm

Proposed Imidan label changes -- G Koehler, U of Maine

Editors note: Glen Koehler just sent this message to the Maine State Pomological Society and was happy to have it reprinted in Healthy Fruit. Thanks Glen for this heads-up. J Clements

EPA has proposed revisions to phosmet (Imidan) labels for use on apples and other tree fruits. The key points are:

- Extend Restricted Entry Interval from current 3 days to 7 days.
- Preharvest interval stays at 7 days for agricultural workers.
- **Current 14 day PHI for pick your own operations changes to eliminating use of phosmet in pick your own orchards.**

All supporting documents, including the worker and ecological risk assessments, and the crop-by-crop grower impact assessments are available at: <http://www.regulations.gov> under docket number EPA-HQ-OPP-2002-0354. Public comments will be accepted until August 8, 2006. Then EPA will review all comments received and issue its final decision later this Fall.

The rationale for these changes is given in the attached Word file. I have included the key section from the Word file at the bottom of this message. (Available on request.)

As people with frequent exposure, it is in the interest of Maine apple growers to support safety measures to protect tree fruit growers, workers, and customers from pesticide residue. It is also true that additional use restrictions for a commonly used pesticide such as Imidan impose an operational hardship on growers. It is appropriate for Maine growers to evaluate and comment on proposed changes. EPA specifically requests such comments so that they can accurately balance the benefits and risk from pesticide use in regulatory decisions.

For what it's worth, my personal interpretation is that the rationale for the decision to extend the REI from 3 to 7 days seems reasonable. However, I do not see the same attention given to the proposal to eliminate use of Imidan for pick your own operations. The attached EPA document does not explain the ban on use in pick your own orchards.

My concern is that EPA may have added the elimination of pick your own use as an additional measure to ameliorate residue exposure concerns without full awareness of the consequences on insecticide selection by diversified apple growers in Maine and other states, many of whom rely on pick your own for a substantial part of their marketing. It seems likely that rather than try to identify and separate the pick your own trees from the rest, if the proposed label change becomes final many Maine growers will in effect lose the use of Imidan as a pest management tool. Given that Imidan has been an effective, commonly used, relatively inexpensive, and IPM-compatible tool, which seems to have been safely used for many years, the loss of Imidan as an option for pick your own orchards would be a significant change for apple pest management in Maine.

A significant change deserves full consideration of possible unintended consequences. The EPA comment period is provided to generate input to consider in finalizing the proposed changes. Your opinion only counts if EPA knows about it. EPA has asked for your opinion by August 8.

If the Executive Committee decides not to reply on behalf of the membership, but to provide information for individual members to respond on their own, feel free to cite me as a contact person. While I do not have more information than shown in this email, I do know how to reach the documents in the EPA docket and can provide survey results on use of Imidan by New England apple growers

– Glen

Of Pomes and Stones -- Summer Pruning – W Lord, former UNHCE Fruit Specialist

Editors note: Bill Lord former UNHCE Fruit Specialist has returned to his duties on a part-time basis to help NH apple and peach growers. Bill shared this article with us and I thank him. J Clements

Despite the incessant rains, especially during the bloom period, the apple crop is not bad and the peach crop may be as good as it gets. And given the plentiful water and vigorous growth I am seeing, fruit size should be excellent. One practice that could be of real value for apples is summer pruning. The primary benefit we see from summer pruning is fruit color development and most mature blocks on rootstocks as dwarfing as M.26 will benefit this year as will those with larger trees.

July 15 through August 15 is the preferred window for summer pruning. If an aggressive pruning approach is taken, earlier pruning will reduce fruit size somewhat while pruning later within this window will have a minimal effect – the harder you prune, the bigger the gains in fruit color and the greater the reduction in fruit size. Pruning can vary from simple suckering to removal of most of the peripheral shoots that shade fruits. In general, you can prune out what you would normally remove during the next dormant pruning except that we recommend limiting cuts to wood 1 inch in diameter or less. Wood an inch or more in diameter is difficult to remove from the tree without a significant risk of fruit bruising.

While fruit color gains are impressive, especially on larger trees, there are other benefits to consider. This summer promises to offer perhaps more summer disease pressure than normal, and summer pruning reduces that risk by promoting more rapid drying of fruits and foliage. Summer pruning offers a chance to use harvest labor efficiently – bringing pickers in a couple of weeks early to summer prune and harvest stone fruits and early apples. And summer pruning may increase flesh calcium levels in apples, reducing the risk of calcium related, fruit disorders.

Summer pruning of peaches should also be considered to improve development of red skin color and ease of harvest.



Japanese beetles on Honeycrisp leaves, 24-July 2006, UMass Cold Spring Orchard



Japanese beetles on Honeycrisp fruit, 24-July 2006, UMass Cold Spring Orchard

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Bag #:

Plant Tissue Analysis Questionnaire

Please READ the instructions on the reverse side of this questionnaire.

TAPE QUESTIONNAIRE TO PAPER SAMPLE BAG.

See instructions for PAYMENT on Reverse Side.

(1) _____ (2) _____
Name of Sender Name of Farm/Orchard/Vineyard

(3) _____ (4) _____
Street Address City & State

(5) _____ (6) _____
Zip Code Telephone #

(7) _____ (8) _____ (9) _____
Crop Variety Rootstock (if applicable)

(10) _____ (11) _____ (12) _____
Date Sampled Sample Collected by Soil Type (if known)

(13) Customer Sample ID (block, field name, location, etc.): _____

(13) Stage of growth: (1) Early (2) Mid (3) Mature

(14) Soil Moisture Level: (1) Very Dry (2) Dry (3) Moist (4) Wet

(15) Anticipated Yield: (1) Light (2) Moderate (3) High

(15) Plant Vigor: (1) Weak (2) Moderate (3) Vigorous

(17) Pruning: (1) None (2) Light (3) Moderate (4) Heavy

(18) Plant Age: _____ (19) Plant Spacing: _____

(20) Fertilizer applied last year: _____

(21) Fertilizer applied this year: _____

(22) Purpose of sample: Normal Nutrient Check Problem

(23) Comments: _____

HOW AND WHEN TO SAMPLE: Samples should be taken from the specific plant part, at a specific location on the plant, at a specific stage of growth for which research data has been evaluated. In other words, to assess the nutritional status of your plant tissue one must have data from comparable plants of known nutritional status. Generally the most recently developed mature leaves are sampled, and timing is often critical. See the list below for guidelines for typical crops. Contact the lab for specific procedures for other plant types.

- Apples (Pears): sample fully expanded leaves from mid-shoot of current growth during late July or August
- Strawberries: sample from the first fully expanded new leaves after renovation.
- Blueberries: sample healthy leaves during July or August
- Raspberries: sample healthy leaves on non-fruiting canes in early to mid-August
- Grapes: sample **petioles** from most recently matured leaves on shoots at beginning of veraison in mid-August
- Cranberries: sample top 2 inches of at least 50 randomly chosen new upright tips (leaves and twigs, mixed flowering and vegetative) between mid-August and mid-September

PROCEDURE:

1. When there is a plant growth problem, always attempt to sample the problem areas and then take a second sample from the same variety showing satisfactory growth. Send these two samples in separate containers with separate payments.
2. When no plant growth problem exists, but there is interest in assessing the nutritional status, your results will be compared with those in the scientific literature or from previously sampled crops.
3. Remove leaves (or selected plant part) from a representative area. For example, remove leaves from 10-20 plants scattered through the area to be sampled (rather than 10-20 plants from one end of the planting).
4. Make certain management practices have been uniform within the sampling area. If soil characteristics vary significantly over the area, sampling should be refined to reflect these differences.
5. Take 10-50 leaves (or selected plant part), depending on crop, rinse thoroughly with tap water to remove any chemicals, foliar applied fertilizer, and soil particles. Place them on clean paper to air-dry.
6. Once air-dried, carefully place tissue (avoiding contamination with foreign material) in a paper bag (using the one provided if you have a UMass Tissue Kit). Please PRINT (do not write)
7. Answer all questions on the reverse side of this sheet, and enclose questionnaire in an envelope along with your sample to the Soil and Plant Tissue Testing Lab.

PAYMENT PROCEDURE	FEES: Tissue Analysis without Nitrogen	\$14.00
	Tissue Analysis including Nitrogen	\$20.00
Enclose CHECK made PAYABLE to University of Massachusetts along with completed questionnaire. Please DO NOT send cash. If more than one sample is being submitted, please indicate which sample contains payment for the group.		

 (Cut at dotted line and save bottom for your records)

Bag #: _____ Your Sample ID: _____ Date Sent: ____ / ____ / ____.