



Horticultural and Pest Management Notes,
produced by Lake Ontario Fruit Program, CCE

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Please Pre- register to attend the 2013 Geneva Field Day by July 29.

Aug 1, 8:00 a.m. to 5:30 p.m.

This is the year the LOF Summer Tour is run by the Geneva Faculty to show research plots and results. The field day will be composed of two concurrent day-long tours, one of tree fruit presentations and another tour of grapes, hops and small fruit presentations. Details of the stops were featured in the last ***Fruit Notes***. The cost of registration is \$30 per person (\$40 for walk-ins) for all-day attendance. Lunch will be provided. Pre-registration is required for the \$30 rate, register on-line at: <http://is.gd/ffd2013>.

Pest Management Notes....

Fire blight – I still see many new young plantings that fire blight was just noted last week for the first time. These plantings do not yet have trellis up and now the trellis work will begin, dragging wires and fire blight through the young trees. Although it has not been documented, this could spread FB through trauma right down the row. Remove the blighted trees and apply copper the day before you install trellis. **I would not let the workers who remove the trees install the trellis on the same day – again not documented! Or they should change clothes!**

Codling moth trap counts for the second generation are increasing with one farm exceeding 25 moths for the week. We have accumulated between 1150-1200 DD 50 F and are approaching 1260 DD (by the week's end), when the first spray should be completed for those orchards with moderate populations that have not needed biweekly sprays, but need 2 sprays per generation. **Oriental fruit moth** counts are also increasing where OFM have been historically documented in fruit at harvest. Delegate, Altacor, Belt, and Voliam Xpress (12 oz./a) are still the best choices if you have high CM/OFM pressure. **Obliquebanded leafroller trap counts are finally coming down.**

Mites: Peter Jentsch reports from the Hudson Valley on miticides available as we adjust our threshold up from 5 to 7.5 mites per leaf when we get into August. He says "We often see a shift in mite populations this time of year, from ERM to TSSM. Remember that TSSM causes higher levels of damage than ERM and the use of more conservative threshold levels should be employed. We presently have no less than 10 miticides plus a number of highly refined horticultural oils to work with on apple. However, Kanemite, Nexter, and Portal, only one of which should be used one time during a season, are METI based modes of action. Onager and Savey have the same active ingredient, and are limited to one application per season. So realistically, we only have the option of 6 miticides for mite management if we adhere to resistance management guidelines. In a study conducted on a running ERM population, we treated 10 miticides 5-days after petal fall on 16-year old Red Delicious. Pre-treatment populations averaged 4.7 ERM adults/leaf on 19 May. Single application handgun treatments delivering approximately 400 GPA were applied to drip. Given the results of this study, Onager 1EC, Zeal 72WS, Savey 50DF and Agri-Mek + oil performed well, maintaining low mite days up to mid-July. **The lackluster performance of Nexter was attributed to high water pH**, measured post-application to be 8.2, obviously critical to Nexter's efficacy. Envidor (not registered in NY), followed by Acramite, Danitol and 1% Damoil reduced populations compared with the untreated controls. Carzol, not labeled post-petal fall, performed poorly.

Apple maggots are starting to fly – Trap counts are starting to increase. So for those of you with apple maggot tunneling in fruit noted last season, you will not have to wait any longer for your apple maggot sprays. Growers on a Delegate or Altacor program for leafrollers/internal leps should get some protection against moderate AM pressure for now. But under higher pressure, for those not using Imidan in their cover sprays, Assail and Calypso will both provide excellent control of apple maggot as well as internal leps.

Spotted winged drosophila: Trap catches for the last week have increased in Greg Loeb's traps in Ontario county berry plantings. But Art and Julie have not caught any in stone fruit plantings in the Lake Ontario Fruit Region. The timing for raspberries and blueberries is imminent for us along the lake shore. If any of you have not yet received

the list of labeled insecticides for berry crops for SWD, call or email Debbie for a copy. **Brown marmorated stink bug** trap catches are still very low in the Lake Ontario region. Activity in the Hudson Valley is increasing and noting nymphs in traps.

Horticultural notes... (from Mario)

Dry mid-summer period immediately after harvest is a great time to **summer prune sweet cherries**: Steve Hoying recently spoke about his sweet cherry pruning research at the Cornell's 90th year of tree fruit research in the Hudson Valley lab last week. Here are some of his main remarks when summer pruning sweet cherries: (1) Pruning should be done during dry periods which allow cuts to dry out or heal before rain. The key to pruning is to leave a 6-12 inches heading stub (no flush cuts!) to reduce the movement of bacteria into the trunk or main limbs and to leave vegetative buds for regrowth of a new branch, (2) Cherry trees generally are so vigorous that removal of some wood does not affect carbohydrate accumulation for the winter and following season, (3) judicious summer pruning can improve the light environment within the tree strengthening fruit buds and possibly improving next year's bloom and fruit set. Research done in the west has shown that summer pruning reduced the overall vigor of the tree but did not affect subsequent yield or fruit size. This means that summer pruning is especially beneficial for overly vigorous trees. At this time it is easy to see bacterial canker infections that can be easily removed potentially reducing the potential for infections next spring. Immediately post-harvest is also the very best time to reduce tree height. Large cuts made in the tree top result in very little regrowth and any resulting winter injury has very little impact on the health of the tree. According to Steve, a single large cut at the desired tree height can contain tree height for up to 3 years.

The style of summer pruning used depends on **sweet cherry tree architecture**: Steve mentioned that dormant cuts made into 1 year old wood generally result in the production of 3 new shoots. Usually 2 are laterally placed (flat) while the third is upright. Simply removing the upright will sufficiently open the tree and allow much improved light penetration to the interior fruiting wood. Allowing a small stub to remain can increase the number of cherries since fruit buds generally form at the base of one year old wood. Leaving stubs might be an excellent practice for shy bearing varieties such as Regina, Ulster, and Attika. Shoots should be completely removed on cherries that bear excessively such as Whitegold, Rainier, and Sweetheart. Another reason to leave stubs is to limit the potential spread of bacterial canker on extremely susceptible varieties.

Apple summer pruning: Dr. Lakso reminds growers that excess summer pruning can have a significant inhibition of canopy photosynthesis and support for final sizing of the crop. This may not be so important if you have a light crop, but if it is a heavy crop that is already struggling to make size, excess summer pruning may hurt. His research has also found that leaves that are shaded most of the season lose photosynthetic capacity so even after they are re-exposed by summer pruning they don't recover. So even if the tree can capture about the same amount of sun energy, it can't make as many carbohydrate as before. As canopies have become denser this season, an excessive summer pruning could cause significant losses in canopy photosynthetic activity which results in a potential shortage of carbohydrate supply for final fruit size. Please consider the following recommendations: (1) summer prune very carefully this 2013 season!, (2) if done improperly, you can remove too much new shoots on the main trunk which are critical as replacement branches for limb renewal pruning of Tall Spindle and Vertical Axe apple trees, (3) Do not summer prune apple trees until they have filled their allotted space, (4) Start summer pruning AFTER the terminal bud shoots have stopped growing, (5) Generally, early maturing varieties should be pruned first, (6) Do as little cutting as possible when summer pruning, and (7) Cut into two year old or older wood.

Leaf sampling for foliar nutrition: Samples should be taken late July- early August 2013. Collect 100 leaves from the same variety in the orchard, taking a 1-2 leaves from each of several shoots (not spur leaves) from several trees. Please use paper bags, not plastic. I recommend that the nutritional status of some tart cherry orchards be also checked this season!

Keep applying calcium to large-fruited varieties that are prone to bitter pit this season: Providing enough Ca to fruit is critical for minimizing bitterpit development and other physiological disorders this year, especially for susceptible cultivars such as Honeycrisp, Cortland, Jonagold, Mutsu, and Northern Spy. This year more calcium will be needed in the fruit as the vigorous shoot growth will have a dilution effect on calcium fruit levels.

Every effort has been made to provide correct, complete, and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide. Copyright 2013. All rights reserved. No part of this material may be reproduced or redistributed by any means without permission. Cornell Cooperative Extension provides equal program and employment opportunities.

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