



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

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***Can you believe we are already looking for topic suggestions for EXPO 2014?***

***Email Debbie or other team members with your ideas. We have an advisory meeting today to discuss ideas for winter meetings. Please call us or come to the meeting!***

### ***Pest Management Notes....***

**Spotted wing Drosophila:** Liz Tee of CCE-LOF has been running traps in 3 sites, one in Monroe, Orleans, and Niagara, and late last week noted a male SWD that was reared from black raspberry sample picked on 7/22. Trap counts are generally low, but fruit infestation always occurs before we see the flies in the traps. With the low trap counts across the Lake Ontario region, it is time to review the list of insecticides and protect the berries still to be harvested on the farm on a weekly (or 5 day schedule). Sanitation and clean picking will be critical to these crops. Day-neutral strawberries being harvested – options included malathion if you can wait 3 days before harvesting again; Danitol (2 days PHI); Assail, Radiant, or Entrust (1 day PHI), or Brigade (0 day PHI). We expect fruit infestation potential in late harvested blueberries, blackberries, and fall raspberries. In blueberries, Brigade or Mustang Max have a 1 day PHI; Entrust, Delegate, Danitol, Triple Crown, and Imidan have a 3 day PHI. In raspberries, Delegate, Entrust, Mustang Max, and Malathion have a 1 day PHI, and Brigade, Danitol, and Triple Crown have a 3 day PHI. For your reference, a quick guide to the insecticides labeled and available for use against SWD in the following crops have been posted on the Cornell Fruit website:

**Berry Crops:** <http://www.fruit.cornell.edu/spottedwing/pdfs/UpdatedLabeledInsecticidesNY-SWD-Final.pdf>.

**Stone Fruits and Grapes:** <http://www.fruit.cornell.edu/spottedwing/pdfs/TreeFruitGrapeSWDInsecticides2013.pdf>

**Codling moth** trap counts for the past week are still above threshold in my “high pressure” orchards on our trap network; but counts are lower in the low pressure sites indicating we are getting close to the end of the 2<sup>nd</sup> generation flight. But we are only about halfway through the egg hatch period so it is critical in high - moderate pressure sites to follow up 2 weeks after the last spray (which was the first spray for the second generation egg hatch between July 25-28). Oriental fruit moth trap counts are also increasing in some sites with mixed population of CM and OFM, and where peaches are grown but getting harvested and not sprayed. The OFM will move over into apples from the peaches. Recommended options for CM and OFM in apples include Altacor (5 day PHI), Assail (7 day PHI), Belt (14 day PHI), Calypso (30 day PHI), Delegate (7 day PHI), or Voliam Xpress (21 days PHI). In peaches for OFM, you can use Altacor (10 day PHI), Assail (7 day PHI), Delegate (1 day PHI), Belt (7 day PHI) or Voliam Xpress (14 day PHI). Pyrethroids and OPs are effective for OFM control especially in peaches but watch the PHI, but may be less suitable for codling moth in apples because of locally resistant populations. This is also a suitable time for virus applications (0 day PHI) against codling moth using Cyd-X, or Virosoft (in apples, pears and plums) or Carpovirusine in apples and pears only. **Good spray coverage is essential this time of year for works and diseases.**

**Apple maggot** trap counts are still active so include Imidan where Delegate or Altacor are being used for CM/OFM. Or use the higher labeled rate of Assail/Calypso, or pyrethroids to control AM. Do not stretch intervals past 10 days or an inch of rain for maggot control where you have a history of pressure. Altacor and Delegate only mention “suppression” at higher label rates so not the best choice for apple maggot control under high pressure. Research by Harvey Reissig shows that the new materials result in more stings from apple maggot since the newer insecticides do not kill adults like the old OP’s did. We also experienced much higher trap counts last season perhaps because we are not killing the adults when using neonics, Delegate, Altacor or Belt.

**Summer Disease protection in apples:** It has been a very green summer, and the risk of summer diseases continue. Captan alone provides moderate levels of protection of sooty blotch/flyspeck if applied on a 10-14 day interval. Inspire Super is very effective and might be a good choice (in combinations with Captan) in orchards where scab is still a concern and where the DMI fungicide group is still effective against scab. Flint and Sovran are also good options when combined with Captan, and of course Topsin M plus Captan is the old standard for summer disease

control on a 3 week interval. Finally, adding a phosphite fungicide to Captan will provide control of SB/FS equal to that provided by Topsin M plus Captan, or use Pristine if we have severe pressure later.

**Collecting budwood: Do you have Galas in a site where there has been no fire blight history?** Kerik Cox and I are studying the potential for *Erwinia amylovora* in budwood collected for nursery stock. If you have a site without fire blight pressure, please call Debbie (585-747-6039).

### ***Horticultural Notes....***

**Recommendations for use of Retain in Western NY for Fruit Drop Control in 2013** – T. L. Robinson and M. Miranda  
**Retain** is an excellent plant growth regulator for reducing preharvest drop, fruit cracking and fruit greasiness. It usually provides excellent drop control except in hot years. 2013 appears to be a more normal year without intense heat in August, thus normal use of Retain is recommended.

Our suggested timing for **McIntosh** in WNY during a normal year like 2013 is 3 weeks before expected harvest, which we estimate is between Aug. 22 and 27. In Western NY the choice between a full or ½ rate of Retain on Macs depends on the goals of the grower. A full rate of Retain (1 pouch per acre) will give the best drop control but will delay color development by 7-10 days. The ½ rate of Retain will also work and has a less negative effect on fruit color but the drop control will wear off sooner. Drop control of the ½ rate of Retain can be improved by the inclusion of 10ppm NAA in the Retain spray. If growers do not need more than 7-10 days of drop control and cannot wait for color to develop in Macs treated with Retain (because they must pick later varieties) then the ½ rate of Retain + 10ppm NAA is suggested. An alternative strategy for maximum drop control which we strongly recommend is to apply a split application of Retain plus NAA at 4 and 2 weeks before harvest (1/2 the normal rate of Retain + 10ppm NAA at 4 weeks before normal harvest (August 19-23 in WNY) and 1/2 the normal rate of Retain + 10ppm NAA 2 weeks before normal harvest (Sept. 1-6 in WNY).

With **Gala** we recommend the application of a ½ rate of Retain applied 3 weeks before expected harvest (Aug. 20-27). The full rate of Retain is never recommended since Retain at the full rate has a very strong negative effect on Gala color development. The 1/2 rate of Retain will permit Gala fruit to remain on the tree an additional 7-14 days resulting in improved fruit size, good color development and less stem end cracking. Retain delays maturity but results in a more even maturity on the tree. Multiple picks on Gala can be reduced to 2 or even 1 picking in some cases. By delaying harvest date, fruit size increases by 1% each day harvest is delayed. Retain also reduces fruit stem end cracking and greasiness that are problems as Gala fruits mature in the second and third picks.

**Honeycrisp** is a low ethylene producing variety that has very uneven ripening but can have significant pre-harvest drop in some hot years. We recommend a 1/3 rate of Retain applied 3 weeks before expected harvest in blocks which have had a drop problem in the past.

**For late September and October varieties the negative effect of Retain on fruit color development is much less than in early September varieties**, thus we suggest the use of the full rate of Retain to provide a consistent reduction of drop and greasiness. For late September and October varieties which are harvested under cooler conditions, application timing should be 3 weeks before normal harvest date. Treating **Empire, Delicious and Jonagold** provides some flexibility in harvest date since those three varieties need to be harvested at about the same time. Retain also allows some flexibility in harvest date to spread out the harvest of these 3 varieties. **Cortland and Jonagold** both suffer from greasiness problems as the fruit mature and Retain applied 3 weeks before normal harvest can be a very effective control strategy. **Idared and Rome** both suffer from internal flesh pigmentation (bleeding), which can result in rejection of the fruit at the processing plant. Our recent research indicates this problem can be controlled effectively with ½ rate of Retain applied in late September.

Two final reminders about the use of Retain: (1) Remember that the earlier Retain is applied the greater the negative effect it has on fruit color but waiting too long will result in some ethylene production and some fruit drop before Retain suppresses ethylene production, and (2) Remember to use an organosilicone surfactant such as Silwet (12 oz/100 gallon) with Retain.

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.

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**Apple Harvest Maturity** – We seem to be running on time so far (i.e. near “normal”) for harvest maturity timing of early apple varieties. As a reminder, if you’re not subscribed to the harvest maturity reports, there is a subscription form here. The first 2 reports will go out to all Fruit Fax subscribers as complimentary. The first Harvest Maturity Report will be out Friday, 8/9. Craig is looking at Ginger Gold samples in earnest this week.

### Harvest Maturity Fax Subscription

Please print and submit this form with a check for \$60, (\$100 for those who live and farm outside of Monroe, Niagara, Orleans, Oswego and Wayne counties) made payable to “Cornell Cooperative Extension”

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