



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

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Fruit FAX will be sent out on Tuesdays for the remainder of the season so make sure your paper is loaded, the ink is still full in your fax machine and your email mailbox is not so full it cannot accept any more messages.

Pest Management Notes....

SCAB! I think the drought is over and all this rain is causing problems including secondary scab where scab was not controlled well during primary scab season. I am also seeing some “burned out” lesions and I am concerned there will be more with it. Maintain captan or mancozeb (77 days to harvest) applications if you can see scab lesions on leaves at this point; you need to protect from secondary infection of fruit and leaves. If scab is not resistant to dodine, and you have scab coming through in some of your orchards, treat it with 3 pt. of Syllit plus Captan 80 W at 2.5lb/acre in 2 sprays on a 7-day interval (max of 3 applications and 9 pt. per acre per season). Dave Rosenberger prefers Syllit or Inspire Super for orchards with scab problems. There is no longer any processing apple restriction on Syllit. There is no confidence in using Fontelis for burning out scab. The high relative humidity will increase the **powdery mildew** pressure. Maintain fungicide protection for powdery mildew **through terminal bud set** – Rally at 8 oz./acre, Topguard, Fontelis, or sulfur (when temperatures are not exceeding 85F). If you are looking for another fungicide to mix with Fontelis to minimize the phyto risk with captan, perhaps Ziram will be an option. But try it on a limited scale since this combination may not have been tested for efficacy or phyto.

Codling moth egg hatch is well underway with high trap counts last week, but numbers are down this week. So the peak flight for CM was Jun 3, also the week for the first spray for egg hatch. You must reapply insecticide for CM ASAP so you do not lose control of the first generation. Dr. John Wise conducted research a few years ago to see how rainfast insecticides for codling moth are and how soon after a spray they need to be replenished depending on how much rain. The most rainfast are Delegate, Altacor, or Belt if 1 inch of rainfall 1-7 days after the application, but must be reapplied if 2 inches of rainfall. Calypso and Assail are rainfast with 0.5 in of rainfall, but must be reapplied if 1 inch of rain. Proclaim is rainfast 1 day after application (but not 7 days) with 0.5-1 inch of rain. **None of the insecticides can survive 2-3 inches of rainfall.** If you would like to read the whole research report, see the excellent publication at http://msue.anr.msu.edu/news/rainfast_characteristics_of_fruit_crop_insecticides. Later this week is the critical timing for CM egg hatch sprays at the 350 dd50°F for low pressure sites where biofix was set for May 20.

There is still some risk of plum curculio and with no insecticide residue, high pressure orchards especially around the perimeters should be renewed. Obliquebanded leafrollers are flying and biofix for the degree day timing model in early sites was Jun 6, but some sites still have not marked first flight.

Fire Blight! Do you still have blossoms in your new plantings and replants? The models are predicting more blossom blight infections with the warmer temperatures and showers unless you are very close to the lakeshore. When we get a good, dry day, pick off blossoms in replant trees. Apply copper on a preventative program in new plantings. The best control in new plantings, especially where infections are in or next to the central leader, is to remove the whole tree – **do not try to start it over**. In new trees, if you plan to do any leader selection or other tree training, do it on a dry, sunny day. Canker blight infections are oozing and the infections need to be removed! But you will need to wait for some dry weather now before you start. In mature, large trees, cut back at least 1 foot into wood that is at least one year older than the infected portion – put some of it in a trash bag and hold it in a cool spot and call Debbie (585-747-6039) so we can arrange pickup for testing for streptomycin resistance. Until you can respond to the infections in the planting, apply copper to keep some of the inoculum at bay – but it will not cure systemic infections. Do not drag infections through trees and remove the prunings from tightly spaced orchards and nurseries. In the meantime, unless you get a clear hailstorm, do not apply streptomycin where existing infections are apparent because this is the recipe for resistance. Try Apogee but it is getting late.

Sweet cherries are beginning to color – so brown rot and cherry fruit fly become concerns. It is time for the expensive, strongest fungicides for brown rot including Indar or Quash where not resistant to DMI's, rotating with Pristine. Cherry fruit fly can be controlled with pyrethroids (watch PHI), or Assail (7 day PHI), or Delegate (7 day PHI, Sevin (3 day PHI), Actara or thiamethoxam in premixes (14 day PHI).

Berry rots and bugs! We have high pressure for botrytis and other fruit rots in strawberries at harvest, botrytis in red raspberries and blackberries in bloom, and mummyberry and anthracnose in blueberries. Use label restrictions on sequential sprays of specific fungicides – Captevate, elevate, Switch, Pristine, Cabrio, iprodione for botrytis in red raspberries and blackberries. Blueberries still need protection for plum curculio and cranberry and cherry fruitworm using Imidan or Assail among other choices. If you are done with your bumblebees, move them to a safe location before you apply insecticides. For mummyberry and anthracnose in blueberries – Captevate, Indar, Quash, Switch, or Pristine. No reports of spotted winged drosophila in western NY yet. Stay tuned.

Horticultural notes... (from Terence and Mario)

An Update on the Progress of Thinning from Fruit Diameter Measurements: More fruit diameter measurements were submitted by cooperating growers, Extension educators, and consultants during the rainy weekend and yesterday (also a rainy afternoon!). The results show that the three sprays applied so far (bloom, petal fall and 10mm) were effective and showed significant thinning on Gala and Honeycrisp in all regions of Western NY (Table 1). The first 3 thinning sprays reduced fruit set to about 20% (range 13-24% for Gala and 5-9% for Gala). Despite the significant thinning achieved so far, Gala trees still have significant more fruit still on the trees than the target fruit set assigned for each study. Thus there is still a big thinning job. Growers can hand thin to reduce crop load (a big job requiring the removal of many fruits /tree) or they could chemically thin again this week (weather permitting for this last “rescue” spray). The largest fruits are about 25-27mm and the smallest that are still growing are about 13-15mm. The larger fruits are very resistant to thinners but the smallest ones could be knocked off to get closer to the target fruit number per tree at each site.

Table 1. Summary of effect of bloom, petal fall, and 10-12mm sprays in 10 fruit diameter studies conducted by cooperating NY growers, consultants, and CCE personnel in Western NY during May-June 2013.

Orchard	Variety	Initial Flower Bud Number/ Tree	Initial Fruitlet Number/ Tree	% Set After Bloom and/or Petal Fall, and 10-12mm Sprays	Current Fruit Number / Tree	Target Fruit Number / Tree	Target Fruit Set %
Lamont	Gala	126	630	23	146	65	10
Lamont	Honeycrisp	115	575	24	140	40	7
Brown	Gala	235	1175	22	254	135	12
Bentley	Honeycrisp	1072	5360	9	486	144	3
Russell	Gala	191	955	15	142	93	10
Smith	Gala	488	700	15	360	231	10
Furber	Gala	456	2280	19	438	140	6
Woodworth	Honeycrisp	225	1125	5	54	65	6
Woodworth	Gala	470	2350	13	301	135	6
NYSAES	Gala	866	4430	17	756	300	7

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.