



---

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

From FAX: 585-798-5191 D. Breth & M. Miranda S. May 28, 2013

---

The weather forecast is for average temperatures for today, but the southern breezes will warm western NY into the upper 80 and even 90 for inland sites through the weekend, and the mid-80's closer to the lake. The low temperatures will be in the 60's for the rest of the week. Showers are expected for today, with a smaller chance for Wednesday, and even less on Thursday. Summer is here this week!

### ***Pest management notes...***

**Fire Blight in new plantings!** The risk of fire blight has been low over the past weekend, but as you are all busy with petal fall and thinning sprays, don't forget about your newly planted orchards that are in full bloom now. The risk of blossom blight will increase to extreme tomorrow through the weekend. This is not the time to be removing blossoms of cutting or twisting on new trees. It is time to protect the open blossoms with streptomycin tomorrow and possibly a second time if bloom continues to open 2 days later.

**Fire blight streptomycin resistance?** Blossom blight symptoms should be showing up from the early infections in inland sites where an infection occurred on May 8. If you see any infections, please call Debbie (585-747-6039) to come and collect the sample to test for strep resistance. It will benefit you in knowing how to manage FB on your farm and it will contribute to the information needed to pursue a SEC 18 label for Kasumin for NY. There is no regulatory action taken against your farm if strep resistance is detected.

**Scab/mildew** – the 90°F weather will help us reduce the risk of scab lesions. We had a long scab infection event starting on May 21-24. Symptoms of any infections from this time should show up in another week. Until you know there is no primary infection, maintain scab protectant fungicide for at least 1 more week. And include fungicide for powdery mildew: Rally at 8 oz./a, Topguard, Flint/Sovran, Fontelis. However, we also know that using Inspire Super at petal fall or 1<sup>st</sup> cover will also give you a head start and make a significant impact on sooty blotch and flyspeck control. I would avoid using sulfur with the heat in the forecast this week.

**Bugs?** The warm weather now will compress the egg laying activity of **Plum curculio** adults. We will generate about 20-25 DD 50°F every day from Wednesday through Saturday. For those of you along the lake just finishing up petal fall sprays, remember obliquebanded leafrollers are present in orchards where control was cut back last season. Research and experience has shown that controlling these larvae will help to prevent a larger generation in July and then again in August. The best insecticides where OBLR are present include Proclaim, Rimon, or Intrepid at petal fall. Delegate, Altacor, and Belt all offer very good efficacy against not only OBLR, but also the internal leps. I prefer to wait until codling moth egg hatch and OBLR summer generation to bring these out. You will need to include Imidan, Calypso, Avaunt, or Actara for plum curculio and European apple sawfly. If rosy apple aphids have not been controlled, Actara or Calypso will also control this pest.

**Codling moth** biofix has been set for May 15 in high pressure sites inland, and May 17 for high pressure sites closer to the lake. In orchards with moderate populations, biofix is set for May 20. We have accumulated 120-140 DD50°F since biofix in inland sites with high populations (sites with trap counts in the 50's and damage last year!). If no Rimon at petal fall, we want to apply the first CM spray at 200-250 (should be completed by Jun 1 in high pressure sites, by Jun 3 in sites with a biofix for May 20) using Assail, Calypso, Delegate, Altacor, Belt, Imidan at a high rate, or high rate of Voliam Xpress or Voliam Flexi. This is **critical spray timing** even if you have installed mating disruption pheromones this season. Missing the egg hatch timing for the first generation of codling moth will result in a larger population for the second generation! Using Sevin for thinning will not control codling moth!

**Pear psylla:** Before the heat hardens off the leaf cuticle, Now is the time we start to knock back the pear psylla nymphs using abamectin if it still works on your farm, or use Calypso for control of psylla, plum curculio and Comstock mealybug but you will need to use the high rate of Calypso for psylla. Agri-flex is also a good choice for psylla but you may need to add another small dose of Actara for plum curculio. We have already discussed that

Syngenta suggests you will need an additional ounce of Actara in Voliam Flexi for plum curculio pressure. You will need to add 2 oz./acre of Actara for PC control using Endigo. But watch the total seasonal application of Actara; only 11 oz./acre/season are allowed in NY.

**Scout for mites** while you are evaluating fruit set. If no miticide yet this season, and you have 35 of 50 spur leaves infested – that exceeds the recommended 2.5 mites per leaf threshold and it is time to treat. If less than 12/50 leaves with mites, no treatment is necessary at this time.

**Horticultural notes... from Mario and Terence**

**Carbohydrate Model to Guide Thinning Decisions:** The carbohydrate model is now available on the web at the NEWA website (<http://newa.cornell.edu>) under the crop management tab. Run the model before each thinning spray and adjust thinner rate based on the recommendation in the last column of the output (see some of the output results below for today and the following two days). The four very simple steps are: (1) Go to the NEWA Apple Carbohydrate Thinning Model Page, (2) Choose a station and click “Continue”, (3) Enter your green tip (@ April 16-17) and full bloom dates (@ May 7-8) and click “Calculate”, (4) Move the scroll bar on the right to find today’s date on the table. The last column gives the recommended adjustment in thinning rates for today based on the model. The model is limited by the accuracy of the forecasted temperatures and sunshine, which change daily.

For today and the following two days the carbohydrate model suggests that growers apply standard rates or decrease chemical thinner rates by 15-30% depending on the NEWA location that you use.

Table 1. Thinning recommendations for five locations for May 28, 29, and 30 in the Western NY fruit region (based on the apple carbohydrate thinning model at <http://newa.cornell.edu>).

Weather Station	Day	Thinning Recommendation
Appleton North	Today May 28 Tomorrow May 29 Thursday May 30	Decrease chemical thinner rate by 15% Decrease chemical thinner rate by 15% Decrease chemical thinner rate by 15%
Appleton South	Today May 28 Tomorrow May 29 Thursday May 30	Apply standard chemical thinner rate Apply standard chemical thinner rate Increase standard thinner rate by 30%
Williamson (DeMarree)	Today May 28 Tomorrow May 29 Thursday May 30	Apply standard chemical thinner rate Apply standard chemical thinner rate Increase standard thinner rate by 30%
Knowlesville	Today May 28 Tomorrow May 29 Thursday May 30	Apply standard chemical thinner rate Apply standard chemical thinner rate Apply standard chemical thinner rate
Kendall (Zingler)	Today May 28 Tomorrow May 29 Thursday May 30	Apply standard chemical thinner rate Apply standard chemical thinner rate Apply standard chemical thinner rate

**Precision Thinning – Fruit Measurement Studies**

The results of fruit measurements in Orleans County by Mario Miranda, Jeff Smith, Eric Brown and Jim Misiti that petal fall thinning sprays around May 19<sup>th</sup> or 20<sup>th</sup> provided significant thinning on Gala but that additional thinning is needed. In these blocks where fruit size was measured, chemicals reduced Gala fruit set on mature trees by about 70% however the target is to reduce fruit set by 90%. Thus substantial thinning on Gala still remains to be done. This suggests another spray today or tomorrow at full rates of Maxcel + Sevin on mature trees and half rates on young trees. These study results point out of what might be done in similar blocks with excellent bloom and set. Of course, you know best conditions on your farm and how individual blocks respond to thinners.

**Thinning recommendations:** We have a large crop this year which will require an aggressive thinning effort to ensure large fruit size this week. The most successful thinning programs include a 2 or three spray program beginning with a petal fall spray followed by a 12mm spray and if needed a 18mm spray. Most of the petal fall sprays were applied between Friday May 17 (inland sites) and Monday May 21 (lake sites). The next spray

should be applied when fruitlets are about 11-12mm (today and tomorrow). (1) For hard to thin varieties, a full rate of thinner is either 3oz NAA + 1pt Sevin/100 gal TRV dilute basis or 64 oz Maxcel + 1pt Sevin/100 gal TRV dilute basis, and (2) For easy to thin varieties a full rate of thinner is either 2oz NAA + 1pt Sevin/100 gal TRV dilute basis or 48 oz Maxcel + 1pt Sevin/100 gal TRV dilute basis.

**Chemical Thinning for Young Trees:** For newly planted trees where you desire to totally eliminate the crop try a heavy rate of Maxcel (64 ounces) + Sevin (2pts) + Oil (1pt) /100 gallon TRV dilute. For 2nd year trees where we want a small crop use only hand thinning and the Cornell young tree thinning guide to adjust cropload. For 3rd year trees use Sevin alone + follow-up hand-thinning. For 4th year trees use 1/2 of our suggested full rate of NAA + Sevin. For 5th year trees use 75% of a full rate of NAA + Sevin. For 6th year trees use a full rate of NAA+Sevin or Maxcel+Sevin.

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. **-END-**