

# Orchard Outlook



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July 8, 2015

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## Fruit Development

Fruitlet drop in apple is progressing while cherries are turning yellow to red on the earlier cultivars.

### 2015 Degree Day Accumulations

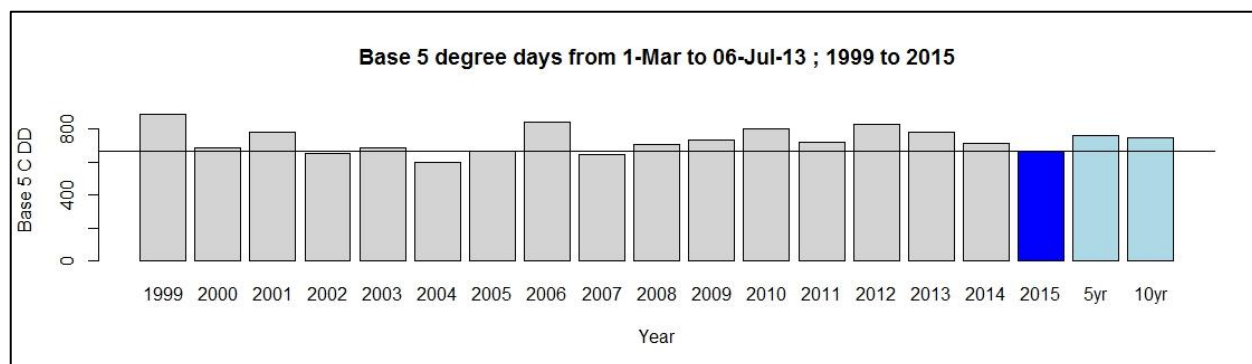


Figure 1: Degree day accumulations from March 1st for the past 17 seasons. Provided by Jeff Franklin (AAFC).

To date heat accumulation since March 1<sup>st</sup> is (Figure 1):

- About 13% fewer plant development heat units compared to the 5-year average.
- About 7% fewer plant development heat units compared to 2014.
- About 12% fewer insect development heat units compared to the 5-year average.

## Diseases

### Apple Scab

There was a single secondary scab infection period recorded during the past week at Kentville. Wetting began at 9:00 pm on Sunday, July 5<sup>th</sup> and lasted until 9 am Monday morning on July 6<sup>th</sup>.

## **Powdery Mildew**

Continue to watch for powdery mildew in nurseries and young plantings which can interfere with terminal development and tree growth. See the Orchard Management Schedule for registered products for mildew control.

## **Fire Blight**

I have now observed shoot blight in multiple locations and the Maryblyt models indicate all three symptoms of fire blight should be found in all areas now.

With active blossom blight, canker blight, and shoot blight infections observed in some Valley orchards, scout your orchards on a weekly basis to look for signs of infection and prune off these infections where feasible to reduce secondary inoculum production. The most important areas to focus on are 1-5 year old trees with a few strikes.

With the presence of ooze a possibility in the orchard, work only in dry conditions as ooze is spread much more easily during wet conditions. Also work in clean blocks first before moving into infected blocks. Practice sanitation wherever feasible.

## **Wanted: Shoot Blight Strikes for Streptomycin Resistance Survey**

AAFC is conducting a national survey for streptomycin resistance in apples. This would be very valuable for the Nova Scotia industry to know its status regarding streptomycin resistance. I am collecting shoot blight strikes to forward onto AAFC. **If you have active shoot blight in your orchard, I would appreciate if you contact me by either phone or text (902-679-7908) or email ([cduyvelshoff@perennia.ca](mailto:cduyvelshoff@perennia.ca)) as I would like to take a sample from several commercial orchards.**

## **Brown Rot**

Cherries are beginning to change colour, however, it will still be another 2-3 weeks before the bulk of the cherries ripen. Stone fruits become susceptible to brown rot infections again as they start to ripen. Regular preharvest fungicide applications are critical, especially during periods of wet weather. With periods of heavy and frequent rainfall, the interval between fungicide applications may need to be as short as 3-5 days. Once brown rot has appeared on picked fruit it is too late to do anything about control. If you are treating more than one type of stone fruit make sure that the product is registered for all the crops that you are spraying. Also check the pre-harvest interval. Check the Stone Fruit Management Schedule for products and rates. Rotate fungicide classes for resistance management.

## **Insects**

### **Codling Moth**

If populations warranted treatment and no codling moth applications have been made yet, it should be made ASAP. A second application should be made 10-14 days later where there has

been heavy pressure in the past. Dr. Suzie Blatt (AAFC) indicates that trap captures have been generally low this season.

### **Apple Maggot**

Suzie Blatt also notes that no apple maggot flies have been captured yet. The first capture would be expected any day now with plenty of soil moisture for fly emergence. Growers should hang yellow sticky traps in the orchard next week. The economic spray threshold is 1 maggot fly per orchard. Apply an insecticide 7-10 days after the first fly is captured on a yellow sticky board. Registered products for control are limited to Imidan (2.68 kg/ha), Assail (240 g/ha), Calypso (440 mL/ha), or Exirel (1.5 L/ha). Avoid combinations with Exirel and Captan. Growers that are using Altacor, Delegate, or Twinguard for Codling moth or OBLR control will have some suppressive activity on AM, but these products should not be relied upon for control.

In organic orchards, Surround can be used to deter egg laying and GF 120 fruit fly bait can be used for suppression of adult flies. Both Surround and GF 120 application should begin as soon as flies are present in the orchard.

### **Obliquebanded Leafroller (OBLR)**

If you have noted damage from the obliquebanded leafroller (OBLR) last year, the summer generation of larvae will begin their prolonged hatch in the coming couple of weeks. These larvae will roll leaves together and feed on the surface of the fruit – especially where two apples are touching (Figure 2). Where OBLR has been a problem in the past or where there was a high overwintering population, an application of a spinosyn (Delegate, Entrust, Success) or diamide (Altacor, Exirel) will provide good control. Twinguard (Delegate + Closer) could be used as well, particularly if aphids are also a target. Check your scouting reports for timing recommendations. This application would also serve as a second treatment for codling moth. Where OBLR pressure has been high in the past, a second application 10-14 days later may be required. Imidan would also have good activity on OBLR if you're applying it for apple maggot.



**Figure 2: Surface chewing and late season pinpoint damage to Cortland from summer obliquebanded leafroller (OBLR) in Port Williams in 2014.**

### **Aphids**

Continue to check for green aphid pressure on mature blocks and young plantings. Young plantings are particularly susceptible to aphid damage. There are several classes available for aphid control.

## **Mites**

Summer miticide options include Acramite, Kanemite, Nexter, Envidor, and Nealta. Scout your orchards or check your scouting reports to see if there is a treatable population. Mites have many generations per year and therefore have a high potential to develop resistance. For resistance management, it is critical to rotate miticide classes. The use of dormant oil applications will also help to delay resistance selection for European Red Mite.

## **Horticulture**

### **Fruit Thinning**

Fruit drop has accelerated over the past week with the warm weather and the results of chemical thinning are now becoming apparent. This is a good time to make a few notes on thinner performance. Hand thinning can begin in blocks where chemical thinning did not adequately reduce crop load. Start with the highest value varieties such as Ambrosia, Honeycrisp, Gala, and Club varieties. Two hand tools have been developed to help growers with crop load management decisions during hand thinning, the Young Apple Thinning Gauge and the Equalifruit Disk. If you have one but don't know how to use it, their use is discussed in the July 10, 2013 Orchard Outlook: <http://perennia.ca/Orchard%20Outlook/2013/Orchard%20Outlook%20July%2010,2013.pdf>

### **Young Tree Training**

Young plantings should have trellis installed and trees supported and trained as soon as possible. It has been demonstrated that the earlier the support is provided, the better the tree growth. Shoots competing with the leader should be pinched out and young trees that have not yet reached the top wire or filled their space should be defruited to avoid runting out the tree, especially on young Honeycrisp plantings.

### **Weed Control**

Young plantings, especially on dwarf rootstocks, should be maintained weed free through the end of July. Recent studies in New York (Deborah Breth, Cornell University) indicate that poor weed control in young plantings reduced crop potential by nearly \$3,000 per acre by the third leaf!

### **Apple Maggot Eradication Technician**

Please contact Elizabeth Nichols to report wild trees to schedule their elimination.

Please also contact Elizabeth Nichols if you have completely removed blocks so records can be updated for apple maggot inspections.

Elizabeth Nichols

Apple Maggot Eradication Technician

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## Events

### **Summer 2015 Fire Blight Management Tour & Workshop – Thursday, July 9<sup>th</sup>**

Perennia will be hosting a tour and workshop on Thursday, July 9<sup>th</sup> to discuss the outcome of fire blight management efforts this season. Dr. George Sundin of Michigan State University, a plant pathologist with extensive expertise in fire blight management, will be joining the tour and will be making presentations in the evening workshop.

The event will begin with an orchard tour beginning at 1:30 pm at Embree Organics followed by an evening workshop at 7 pm at the Kentville Agriculture Centre. There is no cost to attend.

Attendance at this event will provide you with a generous 4.0 PCRPs credits.

For the full agenda, see: <http://perennia.ca/Events/Sundin%20Visit.pdf>

### **Orchard Tour – Wednesday, August 5<sup>th</sup>**

The **NSFGA Annual Orchard Tour will be taking place on Wednesday, August 5<sup>th</sup>**. The tour will begin at Scotian Gold Cooperative in Coldbrook at 8:30 am and will return to the same location at approximately 4:30 pm. Further information will be published in the coming weeks.

**This Orchard Outlook has been published with the input of the Orchard Outlook Committee and Erika Bent (APM).**

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