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## Noon Hour Meeting

An orchard walk will take place on Thursday, June 10<sup>th</sup> for organic apple growers and those interested in organic apple production. The meeting will take place at the AAFC Sheffield Mills farm getting under way at noon (12:00pm-1:00pm). Insect, disease and crop load management issues will be discussed.

## 2010 Degree Day Accumulations

(Temperature data provided by Jeff Franklin, AFHRC, Kentville)

Table 1.0 Degree day accumulations as of June 7, 2010 taken from Kentville weather data. Degree day accumulations are calculated using the single sine method and are based on a start date of January 1, 2010.

Category	2007	2008	2009	2010	5 year average
Plant development (Base 5°C)	338.3	361.1	386.3	446.5	370.5
Insect development (Base 10°C)	147.2	140.1	165.3	182.6	149.1

## Rain Fall Accumulation

Since the first of June, Kentville has recorded 134.3 mm of rain and Greenwood 116.8 mm. This is quite a contrast to the month of May when Kentville only recorded 26 mm and Greenwood 20.5 mm.

## Diseases

### Apple Scab

One would almost be correct in thinking that we have had one long infection period since the first of June. However for the past week, the wet weather can be broken down into three secondary infection periods. The first infection period began at 6:00 pm on Thursday, June 3<sup>rd</sup> and lasted until 1:00 pm on Friday, June 4<sup>th</sup>. The average temperature during the 19 hour wetting period

was 12°C. The second infection period began at 11:00 pm on Friday, June 4<sup>th</sup> lasting until 10:00am on Sunday, June 6<sup>th</sup>. The average temperature during this 35 hour wetting period was 14°C. The final infection period began at 3 pm on Sunday, June 6<sup>th</sup> and lasted until noon on Monday, June 7<sup>th</sup>. The average temperature during this 21 hour wetting period was 17°C.

The heavy rain fall during this past week would have washed off any fungicide on the foliage. Growers would be wise to apply a fungicide prior to the next rain if you have not already done so. For all the dry weather that occurred during May I am seeing more scab than one would expect to see. Lots of fresh lesions have shown up during this past week.

### **Fire Blight**

The only good thing about cool temperatures is that fire blight bacteria are developing at a slow rate. The risk of an infection for the remainder of the week is predicted to be low to moderate. Warmer temperatures however could change the prediction to high. The trees that will be at risk for the next week or so are newly planted trees that are or may come into bloom. Growers should start checking for signs of blossom infection as the symptoms should start to show any day now.

### **Powdery Mildew**

Continue with a fungicide that will control both mildew and apple scab where necessary. The cool wet weather is not conducive to the rapid spread of this fungus.

### **Insect Activity**

#### **Codling Moth**

The following information was supplied by Jeff Franklin.

The degree day an accumulation since the biofix date of May 29 was 151.8 as of Tuesday morning June 8<sup>th</sup>. Average accumulated heat units since biofix have been 4.08 degree days per day. Based upon historical weather data, estimated time to treatment is 14 days (June 21) for Altacor, Calyso, Confirm Intrepid, Delegate, Rimon and 24 days (July 1) for Ops.

Based on forecasts from Environment Canada, estimated heat units for the next 5 days could be 3.2 degree days per day. Based on this forecast data, estimated time to treatment is 18 days (June 25) for Altacor, Caylso, Confirm Intrepid, Delegate, Rimon and 31 days (July 8) for OPs

Confirm, Rimon, Intrepid, Calypso and Altacor applications should be timed for approximately 210 DD after biofix while OPs should be applied at 250 DD.

## Sting Bugs

Growers that applied insecticides last week to control brown bug and mullin bug should recheck orchard blocks for the presence of this pest. Control from last week's sprays is questionable given the amount of rain fall that occurred.

## Aphids

The same story holds true for green apple aphid and rosy apple aphid. Check orchard blocks that were treated last week to determine how effective the pesticide application was in controlling these aphids. There is a good chance that you will have to retreat. Keep a close watch out for rosy apple aphid as it is continuing to build. Aphids appear to do well in cool wet weather.

## European Apple Saw Fly

Damage from this pest is now showing on apples. Refer to the first picture as to the symptom that is now showing. The apples that have a hole drilled into them by the feeding larvae will drop from the tree. It is harder to see the scar (second picture) that is cause by larvae feeding just under the skin at this time of year and unfortunately these apples will not drop from the tree.



## European Red Mite

Mites are hatching so Apollo treatments could now go on where mite populations are at a treatable level. It's not too late to make use of Agri-Mek plus oil as a control product however this treatment should not go on within 14 days of a Maestro/Captan treatment.

## Horticulture

### Freezing Damage to Apples

I continue to hear reports of fruit scaring due to the low temperatures in April and May. This damage will become even more apparent as the fruit sizes. Hand thinning will provide an opportunity to remove this fruit from the tree so that it does not end up in the bin at harvest time.

## **Apogee**

Growers that applied Apogee the last week of May will need to put on the second application which is timed at 14 days following the first application. Weather looks good for the next four days.

## **Fruit Set and Thinning**

With the exception of early flower cultivars most cultivars have not passed the stage where they can be thinned. A lot of fruit is still under the 12.5 mm size.

## **Nutrient Sprays**

The foliage is looking a bit poor in some blocks which may be due to all of the rain or light fruit set or the fact that fertilizer has yet to be applied. Nitrogen, boron and magnesium can be applied as foliar nutrient which will provide a boost to the trees. The need to apply should be based upon observation or tissue analysis report which indicates a deficiency. Urea can be applied to increase the foliar level of nitrogen, Solubor to supply boron and reduce cork rot around the core of apples and Epsom salts to reduce a magnesium deficiency. Do not use boron or oil with Epsom salts. The dilute rate for these products is Solubor 1.5kg/1000L, Epsom salts 20kg/1000 L and Urea 6 kg/1000L. When applied as a concentrate spray the rates should be cut by a half to reduce the risk of foliar burn.

## **Young Trees**

Now is the time to be walking through young plantings and removing shoots that are competing with the terminal shoot and pinching out the growing points on laterals that are too vigorous.

## **Nursery Trees**

Now is the time to be staking nursery trees and tying the new shoot to the stake. The longer this is delayed the greater the risk of blow outs. Likewise the main shoot on grafted shoot should be supported by a metal conduit or bamboo stake. The shoot growth on grafted over trees can be quite rapid and vulnerable to blow out during periods of high wind. You took time and effort to graft the tree over which is wasted when shoots are blown out.

*Contributions and consultations were made in the preparation of this newsletter with the Orchard Outlook Committee*

*Editor: Bill Craig  
AgraPoint*