



Vol. 11 No. 13

June 29th, 2011

This issue contains:

- 2011 Degree Day Accumulations
- Diseases
- Insect Activity
- Horticulture

2011 Degree Day Accumulations

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

Table 1.0 Degree day accumulations as of June 27, 2011. All data taken from the Kentville weather station except for observations from April 11th to 28th inclusive which were taken from the Greenwood Airport. Degree day accumulations are calculated using the single sine method and are based on a start date of January 1, 2011.

Category	2008	2009	2010	2011	5 year average	10 year average
Plant development (Base 5°C)	599.9	614.5	687.6	569.0	636.1	591.5
Insect development (Base 10°)	279.8	299.1	327.1	244.4	307.0	287.0

DISEASES

Apple Scab

There was one secondary scab infection period recorded this past week. This resulted from the wetting period that began around 7:00 pm on Saturday June, 25th and ended on Sunday June 26th at 9:00 am. The average temperature during the 14 hour wetting period was 14°C. There is still new shoot growth which will need to be protected for the month of July, so stick with your cover spray program. I was looking at unsprayed plot trees in a fungicide trial and not a lot of fresh scab. This was likely the result of the June 15-16 infection period.

Fire Blight

I have heard about a couple more incidences of fire blight infections showing up. These were in orchards that were not sprayed for the blossom infections. If you do notice fire blight strikes it is advisable to remove them as soon as possible to slow the spread of the disease. Shoot infections will continue to take place until terminal bud which will be sometime in late July or early August.

Canker

It was reported at this morning's meeting that canker is a significant problem in several orchards. *Nectria galligena* (*Nectria Canker* more often referred to as European Canker) has been observed in young plantings at high numbers. This canker can appear on the trunk of the trees or on young shoots. Infected shoot can have a similar appearance to the die back caused by fire blight. Pruning is the main means to control this canker. The other canker that is showing up is *gloeosporium* canker which can result in limb loss and tree loss. The wet fall that has occurred for the past two seasons may have contributed to the spread of these cankers.

INSECT ACTIVITY

Codling Moth

The cooler temperatures this past week have slightly altered the treatment date. The model is predicting that treatments could begin on June 28 for the following products Confirm, Intrepid, Altacor, Rimon, Calypso, Deligate or Assail in orchard located on the floor of the Valley. In the Morristown area they could begin on June 30th. If an OP (Guthion/Sniper or Imidan) is to be used, the treatment period will not be until July 2nd for orchard on the floor of the Valley and July 4th for the Morristown area. Warmer temperatures will move these date ahead while cooler will delay the treatment window. The warm evening yesterday would have been ideal for CM flight and egg laying.

Codling Moth Decision Table

# of Moths	Percent of Full Crop						
	10-20%	21-50%	60%	70%	80%	90%	100%
10-19	-	-	-	-	-	-	-
20-39	-	¼ rate	¼ rate	¼ rate	¼ rate	-	-
40-99	¼ rate	¼ rate	¼ rate	¼ rate	¼ rate	¼ rate	¼ rate
100-199	½ rate	½ rate	½ rate	½ rate	½ rate	½ rate	½ rate

The reduced rates are for the Ops only.

Aphids

Rosy, Green and Woolly aphids can be found in orchards now. Rosy aphid will likely be presented well in to Jul before leaving apple trees for their alternate host. Green aphid is building on terminal shoot growth and can be found on young fruitlets. Orchard blocks should be checked and treatments applied where populations need to be controlled.

European Red Mite

If you have populations of European red mite that needs to be controlled, now is the time to treat. Acramite, Envidor and Kenemite are the best options at this time of the growing season. Remember to rotate miticides as using the same miticide from year to year will result in the selection for resistance and poor control. If rust mite needs to be controlled as well as red or two spotted mite then select Envidor.

Apple Maggot

Traps will need to be hung the second week of July. Hanging the traps up now will only add to the clutter that is captured by the traps and making the ID of maggot flies more difficult.

HORTICULTURE

Vegetation Control

Drier weather has allowed producers to get caught up on mowing and herbicide applications. If you are still applying herbicides remember that 2, 4-D has a 90 day pre-harvest interval. This means that early and mid-season cultivars cannot be treated with this herbicide. Growers should also start thinking about switching over from the use of glyphosate to another knock down herbicide. Once the trees and root sucker begin to send reserves to the root system, there is a risk that glyphosate could be translocated to the roots if it gets on the foliage.

Calcium Foliar Sprays

If you plan to apply more than 4 foliar applications of calcium to prevent pitter pit and reduce storage orders you should begin now. Growers that want to increase the level of calcium in the fruit can make use of foliar calcium sprays. These sprays have to land on the fruit to be effective and the more calcium you can get on the surface of the apple during the growing season the greater the increase in fruit tissue levels. Under Nova Scotia growing conditions four applications of calcium will generally correct a bitter pit problem and these four sprays can be timed at two weeks intervals working back from the anticipated harvest date which put it around mid-July for Honeycrisp. In terms of cost, calcium nitrate and calcium chloride are still the best options. The rate of calcium nitrate is 18 kg/ha and that for calcium chloride 13.5 kg/ha applied as a dilute spray. When applied as a concentrate the rate per ha should be reduced by at least half to avoid the risk of foliar burn or fruit spotting.

NSFGA Orchard Tour

Mark August 2nd on your calendar for the annual NSFGA orchard. This is a special year as AAFC Kentville is celebrating its 100th year working with the NS industry. Also CHC summer apple meeting are being held at the Old Orchard Inn and some of the delegates will be attending the tour. The tour will begin at Blair house with a meet and greet from 8:30 to 9:00 am.

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

Editor: Bill Craig, AgraPoint

