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Orchard Outlook Meetings

The last Orchard Outlook for the 2009 growing season was held this morning. At this time I would like to thank the AAFC staff, retired AAFC, and Larry Lutz, Scotian Gold Co-op who attended these meetings and provided information. I would also like to thank Dr. Rob Smith for his e-mail updates on insect activity.

2009 Degree Day Accumulations

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

Table 1.0 Degree day accumulations as of July 13, 2009 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, 2009.

Category	2006	2007	2008	2009	5 year average
Plant development (Base 5°C)	967.5	755.8	848.3	815.3	803.8
Insect development (Base 10°C)	535.9	391.9	448.2	421.4	422.2

As you will note from Jeff’s information degree days have fallen behind that of last year. Cool day time and night time temperatures are the reason. Good temperatures for sleeping and working but not for growing.

Diseases

Apple Scab

There were no scab infection periods recorded at Kentville during the past week. Growers should continue with fungicide application until the end of the month. This will help with the control of secondary diseases such as fly-speck and sooty mold and pin point scab.

Powdery Mildew

The one benefit from cool temperatures is that mildew does not spread very rapidly. No reports at this time of serious powdery mildew infection. As mentioned last week keep checking your young plantings as new mildew on terminal shoots will shut growth down.

Fire Blight

Continue to monitor blocks for fire blight as its spread will not start to slow down until terminal shoot buds are set. It appears Nova Scotia is not the only area having a difficult time with fire blight this year. The most recent Illinois Fruit and Vegetable news letter <http://ipm.illinois.edu/ifvn/volume15/frveg1509.html#notes> reported serious fire blight infections with some trees having upwards of 70% of the shoots being infected.

Frog Eye Leaf Spot

This disease is caused by the fungus *Botryosphaeria obtusa* and is considered to be a secondary disease but in some years it can have a significant impact on the foliage and crop. Infection from this fungus can appear on the leaves (frog-eye spot) the wood as cankers and the fruit as a brown firm rot. In Nova Scotia we tend to see the leaf symptoms more often than the wood or fruit symptoms. Extensive leaf infection can result in early leaf drop which can adversely affect tree health and impact the crop.

The fungus overwinters in cankers on twigs, branches or tree trunks and on mummified fruit. Mummified fruit is more commonly observed on Cortland and Spy that have been chemically thinned or on trees with fire blight infection. Spore release begins early in the growing season with peak release occurring 4 to 6 weeks after petal fall. Optimal conditions for leaf infections is a temperature of 26°C and 4.5 to 13 hours of wetting while that for fruit infections is 20-24°C and 9 hours of wetting. Risk of infection is low when temperatures are below 10° C and none when temperatures are below 8°C. Secondary infections can take place during the growing season. The types of fungicide applied for apple scab can have an impact on the spread of this disease. Captan, Sovran and Flint are considered to have excellent control while the EDBC have a poor rating along with Nova and Nustar.

Sanitation is also a step in the control of the fungus which involves the removal of black rot cankers during dormant pruning. Brush piles or piles of fire wood within or near the orchard should be removed. Removal of mummified fruit is also suggested but I do not know how practical this would be given the number of mummified fruit that exists in some orchard blocks.

Insects

Apple Maggot

Trap captures of apple maggot have been reported as of last weekend. Based upon trap capture; treatments on early maturing cultivars would not need to go on until around July 18th. Treatments if required on mid and late season cultivars could begin mid week of the week of July 22th - 28th. If additional maggot flies are caught 10-14 days after treatment then apply another treatment.

Codling Moth

Codling moths are still being caught; however the trap numbers are dwindling. Continue to monitor traps and apply a second treatment if 10 additional moths have been caught.

Green Apple Aphid

Continue to monitor for this aphid as it will continue to build as long as there is succulent shoot growth. The aphid can move back into an orchard block that was previously treated and will need to be controlled again.

Mites

All stages of two-spotted mite can now be found on apple leaves as well as that of European Red Mite. The weather to date has not been ideal for the rapid built up of mites however once warmer weather arrives mite populations could flare up quite quickly. If you are doing your own monitoring for mites; the presence of mites on 44 out of 50 leaves examined would indicate a treatment. An average of 10 mites per leaf at this time of year would also be an indicator that treatment is required.

Horticultural Tips

2009 Orchard Plantings

Growers that are planning to set out orchard in 2009 should now be preparing the site. This could involve tile drainage, ditching, ripping and soil cultivation to bring the soil into seed bed condition. I noticed that the tile drainage equipment is presently working in the valley and now would be the time to get necessary drainage work done. Soil fumigation is a consideration on old orchard land. Fumigation in the fall is more practical than in the spring. Just ask those growers that planted trees late because of spring time fumigation then had to be concerned about fire blight infection on these trees that were still blooming

in late June. If you plan to have custom fumigation done the site should be ready for fumigation by early September.

Organic Apple Production Field Meeting

There will be a noon hour field meeting on Tuesday, July 21 at Doug Nichols organically managed block in Factorydale. Insect, diseases and production issue relating to organic production will be discussed. The meeting is open to all interested individuals. Discussion will get underway shortly after 12:00 pm.

Second Orchard Renewal Plan

Notice to all Nova Scotia's Apple Growers re a "Second Orchard Renewal Program"

Early in 2009 the Nova Scotia Fruit Growers' Association (NSFGA) submitted a request to the NS Department of Agriculture (NSDA) for funding to partially support a "Second Orchard Renewal Program, 2010-2015" (2nd ORP). The program is proposed to start when the "Honeycrisp Orchard Renewal Program 2005-2010" (HCORP) concludes March 31, 2010. Funding levels proposed for the 2nd ORP are \$235,000 per year for five years (\$1.175M). Because the final HCORP planting year was 2009 and because the NSFGA would like to see renewal planting continue uninterrupted, the NSFGA is suggesting that growers who wish to plant Honeycrisp, Ambrosia, Gala or Minnesota 1914 in 2010, and who meet the current HCORP Guidelines submit a 2nd ORP planting application for 2010.

The NSFGA cautions growers that acceptance of their 2010 2nd ORP applications is dependent on NSDA supporting the program.

Current HCORP Guidelines and 2nd ORP Application Forms may be found on the NSFGA website www.nsapples.com or by calling the NSFGA office (678-1093). The deadline for 2nd ORP application submission to the NSFGA is July 31, 2009. If you have any questions please contact Dela Erith, NSFGA (678-1093)

NSFGA Orchard Tour

Tour date is Tuesday, August 4, 2009 with the start and stop location being at Noggin's Corner Farm. This year the IFTA tour to Nova Scotia will be joining us on the NSFGA tour as part of their three day tour. Details of the tour stops will be provided later this month.

IFTA Lobster Boil & Barbeque

The IFTA Summer Tour will be held in Nova Scotia from August 3-5. Growers can register on the website, or if they would just like to meet some growers from away, they are invited to attend the lobster boil which is being held at Sarsfield Farms the evening of August 5th. The Spinney Brothers bluegrass band will provide entertainment. Tickets are available at a cost of \$50 per person, by calling Larry Lutz at 679-6790 or 680-5027 or Lloyd Dyck at 538-3083 or 698-3515. The deadline for registering for the tour or the lobster boil is July 17.

Contributions and consultations were made in the preparation of this newsletter with the Orchard Outlook Committee and Dr. Rob Smith

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The logo for MOVENTO, featuring the word in a bold, yellow, sans-serif font with a registered trademark symbol. The letters are slightly shadowed, giving it a 3D appearance.

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