Agra Point
ORCHARD OUTLOOK
10 Webster St., Suite 210 | Kentville, Nova Scotia B4N 1H7 | (902) 678-7722 | www.agrapoint.ca

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This issue contains:

Stage of Development

The June drop, which in most years takes place in July, is under way. It was reported that, with the exception of Gravenstein, the over set cluster were thinning out quite nicely to singles and doubles. If you are concerned by the extent of drop and think you do not have enough fruit on your trees there is a good chance that you will have a very nice crop at harvest.

2007 Degree Day Accumulations

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

Table 1.0 Degree day accumulations as of July 2, 2007 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, 2007.

Category	2004	2005	2006	2007	5 year average
Plant development (Base 5ºC)	583.4	624.6	806.0	625.6	656.3
Insect development (Base 10º)	271.6	295.9	415.0	309.6	322.3

Apple Scab

Just one infection period was recorded this past week. Thunder shower activity beginning around 11:00pm on Wednesday evening June 27th resulted in a wetting period in the Kentville area lasting until noon on Thursday June 28th. This 13hr wetting period was long enough for a secondary infection period. The start and length of the wetting period would have varied throughout the Valley. The comments at this morning's Orchard Outlook meeting were that this is likely one of the worst years for apple scab in the past several years. Fungicide use and timing did make the difference between scab and no scab. In

blocks where scab is easy to find continue to use cover rates and do not lengthen the spray intervals during periods of wet weather.

Fire Blight

Orchard blocks should be checked for infection. Blossom and shoot infections are now appearing in orchard blocks where the bacteria was present. Prune or break out infected shoots or limbs during periods of dry weather. Make the break or pruning cut 25-35 cm behind the infection and leave a stub. Quite often a canker is formed on the stub preventing the bacteria from moving further down in to larger limb or tree trunk. These stubs along with the canker are removed during the dormant pruning period. Shoot infections will continue well on into the growing season as long as there is active vegetative growth. The speed at which infections take place will depend upon temperature with warm humid weather speeding up the process. Insects such as leaf hoppers and sting bugs can spread the disease thus should be controlled in blocks with infections. Driving rain storms can also spread the disease and orchard blocks should always be checked several days after one of these events for new shoot infections. The best control measure for the remainder of the season is a sanitation program with weekly removal of infections. Infected wood should be removed from the orchard and burnt. If you are not sure if shoot die back is related to fire blight or nectaria cankers, have it checked.

Calyx-End and Dry-Eye Rots

These two fungal diseases can infect apples during the bloom period and show up about a month after petal fall. Calyx-End rot is caused by the fungus Sclerotinnia sclerotiorum and Dry-Eye rot by Botrytis cinerea. Infections begin as brown rotted tissue developing adjacent to the blossom end. In the case of Sclerotinnia the rot is soft and often expands to one-third or more of the fruit while for Botrytis the infection is dry and shallow and surrounded by a red boarder. The application of Captan/Maestro during the bloom period can help reduce the incidents of these diseases. Apple scab infection and the need for a Si or Stroblin fungicide may result in growers observing an increase in these diseases.

Powdery Mildew

There is some powdery mildew showing up in orchard blocks however this is not turning out to be a mildew year. The cooler temperature to date and as of the Si and Stroblin fungicides pre-bloom are likely the reason for the lower incidents of mildew. A few mildew strikes at this time of year would not warrant the application of a fungicide for mildew.

Codling Moth

Jeff Franklin reported that the degree day accumulation for codling moth model was at 244 on July 2nd. The timing for the organophosphates insecticide treatments is at the 250 degree day mark thus growers who plan to use Guthion/Sniper, Imidan or Zolon for codling moth should be applying these products now. The application rate should be based upon trap capture numbers. For growers who will be using Guthion/Sniper - remember that the orchards have to be posted with a warning sign. The re-entry interval for Guthion is 14 days while that for Imidan and Zolon is one day.

Aphids

It is getting a bit late in the growing season to treat for rosy apple aphid in relation to the cost benefit. At this point in the growing season beneficial insects start catching up to the rosy apple aphid and may take care of this pest. Green aphid on the other hand will continue to spread as long as there are active growing shoots thus growers should do regular checks for this pest. In mature apple trees this pest is more of a concern when it can be found on the fruit and damage will appear as a red hallow on the apple. On young trees a heavy green aphid population can distort shoot growth and reduce growth.

Apple Maggot

Apple maggot traps can be placed in orchards next week. Treatment period for this pest will not be until the later part of this month.

Mites

Dick Rogers reported that European red and two- spotted spider mites are at the egg to adult stages. Growers who plan to use Envidor for mite control need to remember that one application of this product can be made per growing season. In the case of Acramite use the higher rate where European red mite needs to be controlled and the lower rate if two-spotted is the only mite needing control. The higher rate of Pyramite should be used where two-spotted needs to be controlled. In the case of apple rust mite, Envidor and Pyramite will both control this best.

Horticultural Tips

Herbicides

The use of 2, 4-D Amine and glyphosate is one of the more commonly used herbicide treatments for grass and broadleaf weed control in orchards. That point in the growing season has been reached when the use of 2 4-D is not an option for bearing orchard as the pre-harvest interval is 80 days. Care should be taken from now on in applying glyphosate in young orchards or orchards with root suckers as there is a risk that the product can be translocated to the roots. This risk will increase as the growing season progresses. Options to these herbicides would be Ignite and Gramoxone which burn of the vegetation and should control late season lamb quarters growth.

Deer Feeding

Deer have found apple leaves to their liking this past week. Check young plantings for the signs of feeding. Thiram applied on a regular basis will discourage feeding. The rate of Thiram is 2 kg/ 100 gal (450 L) and should be applied as a dilute spray (to the point of runoff).

NSFAG Orchard Tour

Tour date is Thursday August 2nd, 2007 with details to be provided later this month.

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