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Stage of Development

The June-July drop is still ongoing and has been quite heavy to date. In many situations, clusters have singled down to the king fruit. If you think you have over thinned at this point in the growing season, there is a strong chance that you have done a great job. The real time to judge your crop is at harvest. Up until now, tree fruits have sized well under good growing conditions.

2008 Degree Day Accumulations

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

Table 1.0 Degree day accumulations as of July 7, 2008 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, 2008.

| Category | 2005 | 2006 | 2007 | 2008 | 5 year average |
|---------------------------------------|-------|-------|-------|-------|----------------|
| Plant development (Base 5°C) | 691.3 | 884.8 | 688.4 | 765.3 | 722.6 |
| Insect development (Base 10°C) | 342.5 | 482.3 | 349.2 | 390.1 | 376.9 |

Apple Scab

Same as last week, just one infection period was recorded at Kentville. This was the result of a heavy shower that began around 5:30 pm on Wednesday July 2nd resulting in a wetting period lasting until 9:00 am on Thursday. This was localized shower activity so not all areas of the Valley would have had this infection period. Continue with a cover spray program for the remainder of this month.

Fire Blight

By now you should have a good idea if fire blight infection occurred during the bloom period and/or from over wintering cankers. Symptoms of blossom, canker shoot and shoot infection should now all be visible. A good checking of all orchard blocks should prevent a nasty surprise later in the growing season. Prune out infections as soon as they are observed. Pruning out the infection will help to slow or reduce the spread of this bacterial disease to healthy shoots and or trees. Pay particular attention to young and newly planted trees that are actively growing. A shoot

infection on these trees can lead to the loss of the tree. As stated last week, observations to date indicated that growers have done a better control of control this disease compared to previous years. Yes, I have observed blossom blight infection, so the prediction models were correct. Based upon my observation yesterday I would have to say the Apogee is also helping to prevent shoot infection. In trees that had blossom infection, the disease had not spread to terminal shoot growth. This may change with time but it does look good at this point in the growing season. Refer to last week's Orchard Outlook on the proper procedure for removing fire blight.

Apple Maggot

It was reported at this morning's Orchard Outlook meeting that apple maggot flies were caught late last week at the Kentville Research Station. This should serve as notice to growers that have yet to place maggot traps in their orchard blocks, they should do so this week. Even though maggots may now have been caught on a trap it is still too early to apply a maggot spray. On early maturing cultivars, a spray could be applied as early as July 18th. On mid-season cultivars such as McIntosh, treatment should not be required prior to July 25th. Imidan, Guthion, Zolon applications within the past week for codling moth would also pick up early maggot flies.

Codling Moth

Codling moth stings have been observed on fruit. Continue to monitor traps and re-treat blocks were trap captures indicate a second treatment is required. The capture of an additional 10 months following an OP treatment would indicate that a second treatment is required. In blocks that were treated with one of the following – Assail, Altacor, Calypso, Confirm, Delegate, Intrapid and Rimon – sustained trap captures (10 +) from now on would indicate that a second treatment is required.

Aphids

Rosy apple aphid would have moved out to the tips of shoots, and adults continue to leave the trees. This aphid will still be around for another week or two but at this point in the growing season it would be questionable if a spray for just this aphid is justifiable. Green aphid continues to build on young and mature trees.

Mites

At this point in the growing season, European red, two spotted and rust mite could be at treatable levels in your orchard blocks. These mites could be an issue well into August so blocks should be monitored on a regular basis to determine if control is required. Once your foliage has been bronzed, the benefits of a mite control are greatly reduced. If rust mite is an issue, be sure to select a miticide that also controls this mite. The spray guide has a number of miticides to choose from and growers are encouraged to rotate through these materials and not continue to use the same product year-after-year for resistance management purposes.

European Fruit Tree Borer

I was looking at young trees that appeared to have a collar rot problem and noticed that these weakened trees had European apple tree bore wounds which were weeping sap. This pest caused significant tree losses in the early 2000's when it attacked weakened and healthy trees. If you do come across a tree that is doing poorly and notice small buck shot size holes that are weeping sap, it would be advisable to remove these trees and burn them. Sanitation is one step in preventing this pest moving into healthy trees.

Pear Psylla

Pear trees should be checked for the presence of this sap-feeding pest. At this point in the growing season, adults, eggs, newly hatched nymphs and old nymphs can be found. Select one of the

products listed in the spray guide. Pyramite, Assail and Actara will provide better control than an OP or one of the pyrethroids in pear blocks where psylla has developed resistance to these class of insecticides.

Horticultural Tips

Hot and Dry

The weather that occurred during the past week has stressed shallow rooted crops and should serve as a warning to growers to take steps to conserve soil moisture. Keeping the grass well mowed will reduce leaf area and loss of soil moisture. Likewise, maintaining control of weed and grass growth under the tree will reduce moisture loss. It is too late to start thinking about soil moisture conservation when trees start to show sign of moisture stress.

Deer Feeding

Deer have found apple leaves to their liking this past week. Check young plantings for 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). Failure to control deer feeding can lead to tree losses or stunted trees that never fill their space. You have spent thousands of dollars in planting a new orchard which could be lost because of this feeding. Make the final investment and fence off your new planting while they are young.

NSFAG Orchard Tour

Tour date is Tuesday August 12, 2008 with the start and stop location being at Boat's U-pick in Woodville. Details of the tour stops will be provided later this month.

Noon Hour Meeting

The organic apple orchard working group will be holding a noon hour meeting at Richard Hennigar's organic block located on the Middle Dyke Road near Blomidon Produce apple storage and packing facility in Schfield Mills. The main topic of discussion will be apple maggot with the session starting at 12:00 pm.

Contributions and consultations were made in the preparation of this newsletter with the Orchard Outlook Committee and Dick Rogers of Wildwood Labs.