

# Orchard Outlook Newsletter

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## This Issue Contains:

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Another spray season is upon us and I have observed orchard sprayers already out applying oil sprays for pear psylla control. It is hard to believe that apple buds in the warmer areas were starting show a bit of green tissue on April 15<sup>th</sup> last year. The way things are going this season we will be lucky to see green tissue by next week. However it only takes a few warm days and nights to get things going and above average temperatures will put the season back on schedule. I know that there is still lots of pruning to be done, however, growers should try and keep up with brush removal next week in case they have to apply a fungicide for scab control.

## **Apple Scab**

Last year was a relatively good year for apple scab and I didn't see or hear of major scab problems like those encountered in the 2001 growing season. There were no new fungicides registered for apple scab in the past year. You will have noted in the new spray guide that Benlate has been removed. If you have Benlate it can still be used, however once existing stocks have been used up it will no longer be available. The one thing that I have noted with regard to apple scab control, from reading newsletters on the internet, is that many growing regions are rethinking the strategy of waiting until tight cluster to start spraying for scab. This strategy was being promoted for blocks with little or no carryover scab lesions from the previous season. The decision to use a delayed fungicide program was based on an assessment of the orchard block for scab lesions. Any scab infection that became established from green tip to tight cluster was cleaned up with a sterol inhibitor(SI) spray such as Nova. There is concern now that this procedure could accelerate the establishment of resistance to these fungicides. In fruit producing areas such as the state of New York they encourage growers to start the year off at green tip with spray of broad-spectrum fungicides such as Captan. As stated above the concept of using an early season protectant spray is to reduce the use of the SI and strobilurin fungicides, to burn or eradicate scab, and to slow down the development of resistance to these fungicides. Fruit buds on April 21 were still quite dormant so hopefully fungicide applications will not be required this year until May. Stay tuned.

## **Stone Fruit Diseases**

Cool temperatures during April mean there has been very little fruit bud development. Growers who have plums and peaches probably still have time to make fungicide applications to control either one of these fungal diseases:

**Peach Leaf Curl:** This is a fungal disease of peaches, which, if left untreated, can cause severe early defoliation and crop loss. The treatment opportunity for this disease is very early in the growing season when growers are often not prepared for spray, and travel conditions within the orchard are less than ideal. Growers may also miss the window for good control when warm temperatures advance bud development. Treatment for the disease in the spring should go on early to mid-April depending on temperatures. The disease overwinters as blastospores in protected crevices in the bark and around the buds. Primary infections are the most damaging and occur during the early spring from bud swell, when bud scales loosen, until the first young leaves are fully emerged from the bud. Infected leaves are severely deformed and often display a variety of colours ranging from light green and yellow to shades of red and purple. The leaves become wrinkled, puckered and curled. Infected fruit may drop early and go unnoticed while others may become crooked at the stem end like a small yellow squash, and some may develop reddish to purple wart-like deformities on the fruit surface. Growers should obtain adequate control of this disease with one well-timed spray, either in the fall after 90% leaf fall, or in the spring before bud swell. For commercial orchard plantings Bravo or Ferbam are recommended. In recent years growers have obtained excellent control with Bravo. The recommended rate of Bravo 500 is 7.0 litres per hectare while that of Ferbam is 6.75 kg per hectare.

**Plum Pockets:** Plum pockets, which should not be confused with the virus plum pox, is a fungal disease that infects plums. One of two closely related fungi, *Taphrina communis* and *Taphrina Pruni*, could cause the disease. In NS plum pockets is more commonly observed on Japanese-type plums which is a bit unique as US literature states that it is more commonly found in wild species of American plums, less common in European plums and uncommon on Japanese plum. Infected fruit buds will produce abnormally large misshapen, bladder-like fruit with thick, spongy flesh. The center of infected fruit is hollow due to the failure of the young seed to develop. The best way to describe the fruit is that it looks like a large pea pod. Infections occur in April as the buds swell and bud scales separate. Like peach leaf curl, a spring fungicide application prior to bud swell will control this disease. For commercial plum plantings the fungicide Thiram 75 WP applied at a rate of 6.73 kg per hectare should control this disease.

### **Pear Psylla**

During my travels throughout the valley I often observe pear orchards where the wood has a black sooty appearance. The trees can also have an appearance of lacking vigour. These visual symptoms are most often associated with pear psylla feeding. Pear psylla nymphs honeydew serves as a substratum for the growth of a black fungus which gives the tree a smoky, sooty appearance. If psylla populations are allowed to build to high levels the foliage may wilt and drop to the ground. Trees that are heavily infested for a long time produce little growth and set fewer fruit buds. The fruit remains undersized, fails to mature and may fall off the tree when only partly grown. The tree shows symptoms of "psylla shock" caused by the toxin the psylla have injected into it. Prolonged infestations may eventually kill the tree.

Pear psylla have the ability to develop resistance to chemical compounds which may explain why some growers are failing to control this pest especially if they are using the same insecticide each year for psylla control. Adult psylla hibernate on the trunk of the tree and become active in the spring, early to mid April, on bright sunny days when the air temperature rises above 10°C. The adult female lays most of her eggs by bud break. In Nova Scotia a dormant oil treatment is recommended for psylla control. The oil acts as a deterrent to egg laying. If you plan to use oil as part of your control program for psylla it should now be on the trees. The recommended rate of oil is 65 L/ha.

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