

Apple Canker

Caused by the fungus 'Neonectria galloigena' this is the most serious of the diseases, which affects apples because it will kill the tree if left unattended for long. Some varieties of apple are more prone to canker than others, notably 'Worcester Pearmain', 'James Grieve' and 'Cox's Orange Pippin'. Pears

also suffer from a related pear canker but to a lesser extent. Young trees may suffer severely and should be watched carefully, but do not seem to be so much affected as they grow older. An old or over-mature tree may, however show increased susceptibility.



DAMAGE

The canker first appears as sunken bark close to buds or wounds. As it develops the bark becomes discoloured and then shrinks and cracks, forming concentric rings of flaky bark, extending lengthwise along the stem. Distortion and swelling occurs and the wood beneath the bark is killed. Eventually the canker encircles the whole branch and kills it. White fungus spores are visible on the sunken bark in the summer and these will infect other branches. Developing fruit may rot and fall.

The fungus is spread during the spring as wind-borne spores enter through a wound caused by pruning cuts, scab infection, frost crack or attack by woolly aphids.

CONTROL

Non Chemical Control

Cankered branches should be removed and burnt as soon as they are seen and the cuts painted with a wound paint (e.g. Growing Success 'Prune & Seal', Bayer 'Arbrex Seal and Heal' or Vitax 'Medo'). Make sure that you cut back well into healthy wood that shows no signs of brown staining in the cut surface. On larger branches that have not yet been totally encircled, it may only be possible to cut out the affected area, rather than the whole branch, this should be done using a sharp knife and again slicing back into healthy green tissue and treating with a wound paint afterwards. Secateurs, pruning saws or any other tools used should be sterilised in boiling water for five or ten minutes before being used again on apple or pear trees.

Soil drainage should be improved since wet soil may aggravate the disease. Vigorous trees are more susceptible, so avoid over fertilizing, especially with nitrogen.

Chemical Control

Due to the withdrawal of copper based fungicides, there are currently no chemicals available on the market to treat this condition.

USE CHEMICALS SAFELY: ALWAYS READ THE LABEL

When using chemicals it is most important to follow the manufacturer's instructions precisely. Only use on the fruits that are listed on the manufacturer's label. An accurate weighing machine and measuring cylinder should be obtained. Chemicals can be wasted by making concentrations unnecessarily strong or by making them too weak and ineffective. Furthermore, if chemicals are too strong they may cause damage to the foliage.