

Apple Mildew



Apple Mildew is caused by the fungus *Podosphaera leucotricha* and is a major problem, particularly in the warmer, drier parts of the country. This pathogen can also affect pear and quince trees and is often aggravated by over-crowding of branches and poor air circulation. The chief danger from this disease is the destruction of the foliage and stunting of shoots, though when many spurs are affected a direct reduction of the crop follows.

Some varieties of apple are less susceptible to mildew these are Discovery, Egremont Russet, Ellison's Orange, Kidd's Orange Red, Tydeman's Late Orange, Falstaff, Pixie, Scrumptious, Red Devil, Winter Gem, Bountiful and Bramley Seedling.

DAMAGE:

Shoots which are infected with mildew produce very small, narrow, curved leaves which are covered with a grey-white felty powder. Flower trusses present a similar appearance, and the flowers are small and distorted and fail to open. These primary outbreaks are caused by the fungus hibernating in buds which had become infected the previous season.

The spores on the leaves of these primary infected shoots become dispersed by the wind and cause secondary infection of the leaves, shoots and fruit during the spring and summer. Badly infected shoots are often leafless and appear shriveled and whitish-brown all over. Buds may be killed outright, but usually they survive, only to develop into mildewed shoots the following year. Infection of the fruit is not usually very serious.

CONTROL:

Non Chemical Control

Infected twigs may be recognised in the winter by their pale grey colour. They should all be pruned out before the trees come into leaf. In spring when the foliage appears, promptly prune out and burn any infected shoots to help reduce subsequent infection. Overcrowded trees should also be pruned to improve air circulation. In the autumn rake up fallen leaves to help reduce the amount of infectious spores around the following spring.

Mildew tends to be more severe on trees suffering from water stress (dryness at the roots). It is therefore important to water before the soil dries out completely. It is also advisable to mulch trees in the spring to help conserve moisture.

Compounds With A Physical Mode Of Action (Non-organic)

'SB Plant Invigorator', which can be used to treat powdery mildew on all fruits, works by physical means only to remove the mildew spores and may give some incidental control. It is a non-chemical and non-biological product and should be applied on a regular basis as a drench spray to both the upper and lower surfaces of leaves from early in the season.

Chemical Control

There are no fungicides currently approved for use by amateur gardeners.

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.