

Scale Insects

There are many different types of scale insects. The most common are the **Woolly Currant Scale** which is a pest of currant and gooseberry bushes and **Brown scale** which attacks a wide variety of hosts including currant, gooseberry, blackberry, raspberry, plum and peach.

DAMAGE:



The **Woolly Currant Scale** becomes active in early spring. The adult female is 4-6mm long, dark brown and roughly oval shaped. In May each adult female spins a sac of white waxy threads which over a period of two to three weeks, approximately one thousand eggs are deposited. The adult then dies and soon afterwards the egg mass, which live under the dead scale insect, forces the hind part of the scale away from the branch. The presence of the pest then becomes very obvious as the woolly secretion beneath the scale wafts around in the wind, covering many of the shoots and branches of infested bushes. The eggs hatch over a six week period. After a few days the young nymphs wander over the young shoots and leaves to begin feeding. Heavy infestations will weaken the bush and the strands of 'wool' are a nuisance during picking.

The **Brown Scale** adult female is 4-6mm long, oval shaped and reddish brown. She deposits several hundred eggs in May and June and then dies. Her body remains on the plant however, protecting her eggs (she may persist on the host plant for several years). The eggs hatch from about mid-June to mid-July. The young nymphs then wander over the young shoots and leaves and feed on the sap leaving their sugary honeydew excrement on the leaves and stems, which in turn acts as a medium for the growth of black sooty mould. Heavy infestations weaken the host plant and causes premature leaf fall. Attacks tend to be heaviest in sheltered, unsprayed sites.



CONTROL:

Late June/early July is the best time to treat scale insect when the newly hatched insects are crawling around looking for a place to feed and settle. A winter wash based on plant oils is also effective if applied to dormant fruit trees, canes, vines and bushes between December and January on the overwintering scale nymphs.

Non chemical Control

Where there are only small numbers of scale insects present they can simply be scraped off using your nails or alternatively brushed off using an old toothbrush and some soapy water.

Biological Control (Treats Brown Scale insects only on crops grown indoors)

In the glasshouse, Brown Scale can often be successfully controlled biologically with the predatory wasp *Metaphycis helvolus*, which is totally harmless to everything apart from the scale insect. This tiny creature lays its eggs on the scale insects and feeds off of it and should be used when temperatures are above 24 degrees centigrade. Natural predators are available from 'The Green Gardener'. For more information please contact Tel.01493 750061.

Chemical Control

It is important when using insecticides to only spray first thing in the morning or late in the evening when fewer bees are foraging. Avoid using sprays when fruit trees are in blossom as any residue could harm pollinating insects.

Commercially available organic sprays

The following sprays are derived from plants or other natural substances and although effective, will require more frequent applications than when using synthetic pesticides, as they have a shorter persistence.

Sprays based on mineral lattice/urea a natural foliar feed that controls aphids by blocking breathing pores or gumming the pests to the leaf surface.

SB Plant Invigorator

Sprays based on fatty acids derived from plant and animal oils.

Doff Universal Bug Killer

Doff Greenfly & Blackfly Killer

Sprays based on plant and/or fish oils. Plant oils include those derived from rape seed and sunflowers which block the breathing pores of pests leaving beneficial insects such as bees and ladybirds are unharmed.

Bug Clear for Fruit & Veg

Growing Success Fruit & Veg Bug Killer

Vitax Organic Pest & Disease Control

Winter Tree Washes

The following washes are based on natural oil based products which smoother over-wintering eggs.

Aphids usually over-winter as eggs but in mild winters some adults may survive, therefore a winter tree wash is advisable. The following washes are based on natural oil based products which smoother over-wintering eggs.

Growing Success Winter Tree Wash

Vitax Winter Tree Wash

Commercially available synthetic pesticides

Synthetic pesticides generally give a higher level of control however care must be taken when using on edible plants in respect to the number of applications being made and the length of time that should be left between spraying and harvesting. The following synthetic sprays can be used on selected fruit trees and bushes.

Westland Resolva Bug Killer (*Lambda cyhalothrin*)

Bayer Sprayday Greenfly Killer (*Deltamethrin*)

Bayer Provado Ultimate Fruit & Vegetable Bug Killer - concentrate or ready to use (*Deltamethrin*)

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.