Spider Mites

There are many different species of spider mite, but the most important ones as far as gardeners growing fruit are concerned are the fruit tree red spider mite *Panonychus ulmi* and the two-spotted spider mite *Tetranychus urticae.* Both types live on the undersurfaces of leaves, feeding on the sap from the leaf cells.

The fruit tree red spider mite is a widespread and important pest of apple and other fruit trees, including plum and damson and to a lesser extent cherry, pear and walnut. They can also be found on raspberry and loganberry canes, currant and gooseberry bushes. The mites, which measure less then 1mm in length, are related to the spider and are just about visible to the naked eye, but can be better seen with the aid of a hand lens. The female is more noticeable then the male and is blackish red in colour, laying tiny spherical eggs. The male is smaller and ranges from pale green to bright red. Spider Mites can be seen on the lower leaf surfaces feeding on mass near the main leaf veins. A fine, transparent, silk-like webbing may also be noticed.

The two-spotted spider mite is an important pest of a wide range of glasshouse crops. It also attacks fruit crops grown outside in late summer, especially in hot, dry weather, including raspberry, blackberry, strawberry, blackcurrant and gooseberry and fruit trees grown trained against walls, particularly peaches, nectarines and apricots although apples, pears, cherries and plums can also be affected. The mites again are less than 1mm long, spider-like, yellowish-green in colour with two large dark markings towards the head end of the body. They only become orange-red in the autumn and winter. When plants are heavily infested, mites can be seen crawling over a fine silk webbing spun between the leaves and stem.

DAMAGE:

The Fruit Tree Red Spider Mite sucks out the sap, causing a fine mottling of the foliage at first, but as mite populations and damage increases, leaves become dull green, brownish and finally silvery bronze. Such foliage is brittle and may drop prematurely. Leaf symptoms are usually most evident from July to September. Heavy infestations affect fruit yield and fruit bud formation, so the following years crop may be reduced.

The Two-spotted Spider Mite causes fine pale mottling of the foliage which becomes firstly dull green and later increasingly yellowish white. The leaves dry up and fall prematurely. Fruit yields and plant vigour will be

reduced with serious infestations. On strawberry plants, severe attacks before harvest will also reduce fruit size and quality.

CONTROL:

Non chemical Control - For the Two-spotted Spider Mite only

In the glasshouse, Spider Mites can often be successfully controlled biologically with the predatory mite *Phytoseiulus persimilis* if it is introduced before a heavy infestation has developed. To be effective and for it to breed faster than the pest it needs daytime temperatures of 21ºC (70ºF), so can normally only be used between April to October in greenhouses. The same predatory mite can also be used on outdoor plants during the summer (June to September). Natural predators are available from Green Gardener (Tel: 01493 750061). Please note that it will not control other species of red spider mite, such as fruit tree red spider mite or citrus red spider mite.

Chemical Control (For both the Two-spotted & Fruit Tree Red Spider Mite)

Commercially available organic sprays

Edible plants can be sprayed with plant oils, plant extracts or fatty acids. The short persistence of these pesticides may require more frequent applications are needed.

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

Doff Universal Bug Killer
Doff Greenfly and 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 mites leaving beneficial insects such as bees and ladybirds are unharmed.

Bug Clear for Fruit & Veg
Growing Success Fruit & Veg Bug Killer
Vitax Organic Pest and Disease Control

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

SB Plant Invigorator

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.