Virus Diseases

One of the main causes of fruit stocks failing to crop satisfactorily is infection by virus diseases. Viruses differ from other pathogens in three important ways; firstly, they are so small that they cannot be seen even with the aid of an optical microscope; secondly, once a plant becomes infected there is no practical method of ridding the plant of the virus; thirdly, every part of the plant is infected by the virus. The main effects of virus infections are that the plants become less vigorous, yields decline, growth may be distorted, the leaves may develop irregular yellow blotches and streaks and some viruses kill outright.

Viruses on raspberry leaves

Viruses are spread from infected to healthy plants by greenfly but also by eelworms, leaf hoppers, mites and even bees carrying infected pollen. Good pest control, particularly of greenfly, will help to slow down the spread of viruses within a plot of fruit plants. Fortunately the majority of viruses are slow to cause serious reductions in vigour and fruit production.

Provided healthy stocks were planted in the first place, cane and bush fruits normally go on cropping for ten to twelve years (strawberries for three to four years) before virus infections make their retention no longer worth while. Tree fruits are not drastically affected by viruses but they may cause slight reductions in yield or vigour. Viruses of tree fruits are mainly graft transmitted and so if healthy stock is obtained the tree should remain ‘virus free’ for the rest of its life.