



## *Aphids*

**Dr Glynn C. Percival & Donald C. Booth**

Small sap feeding insects, generally 1-5mm long with soft bodies. Aphid colonies often consist of winged and wingless individuals.



### **Aphids feeding on spring foliage of woody plants**

Aphid mouth parts contain very fine stylets which are inserted into plant tissue to extract sap which then passes directly into the digestive system. Large volumes of sap are ingested by most species and excess sugar and water excreted as drops of what is commonly known as honeydew. This usually falls from the aphid or in some species is tended by ants which protect the aphids from other predators and parasites i.e elder aphid.

### **SYMPTOMS**

Primary damage to plants results from the effects of feeding upon young tissue, which weakens and distorts new growth. Secondary effects result from fouling of the leaves and stems with honeydew which encourages the growth of a fungus known as sooty mould. Transmission of viruses carried from

diseased to healthy plants on the stylet and in the saliva is also a problem.

### **CONTROL**

The main danger period for trees is from March-October and non-chemical control is seldom effective in these conditions. Reduction of the use of nitrogenous fertilisers so that young growth is less attractive while theoretically feasible rarely works in practice.

Chemical controls include:

- 1) Pyrethroid based insecticides in combination with spray oil are used on growing plants and kill aphids mainly by direct contact.
- 3) A soil drench using the insecticide Admire in February/March or October/November will provide a high degree of control over aphids feeding in protected situations such as rolled or curled leaves, in galls or on the higher branches. This product is absorbed by the plant tissues and poison the sap aphids feed upon.
- 4) Adult convergent ladybird beetles are effective: Release at 500 (3 tablespoons) per small tree.