Scale Insects

Prepared by M.W. Last September 1994

Scale is the common name of an insect which is usually found stuck to the stems and leaves of plants. Some species have a cottony, felted, mealy or waxy covering, while others have a leathery or hard covering. They feed by sucking sap from the plant and when present in large numbers, the health of the tree or shrub deteriorates.

There are many different types of scale including red, brown and black. The most common type in Central Australia is brown scale and it lives on fruit trees including fig and citrus. It can also be found on some native plants.

The leaves of fruit trees should be checked during the spring months and if young scale is present, spray should be used to control its growth and reproduction. Examine the main vein of the leaf on the top and under side as this is usually where they are found. Some scale grows to the size of a match head but usually a little smaller.

Some types of scale produce a honey dew on the leaf which is a good medium for a black sooty mould to live on. This sootiness is very easy to see on citrus leaves. The saliva of other types is toxic and will cause dieback in the branches and death of the plant. This situation needs checking quickly.

The females give birth to living young as well as eggs. The young scale, called crawlers, have legs and can move freely on the plant. Eventually their mouth parts become attached to the plant as they suck the sap and their legs become reduced or lost. Hence when scale is found on a leaf, it is usually mature and has become stuck in one place.

Scale insects are eaten by birds, marsupials, bugs, ladybird beetles and the lavae of some moths. If there are only a few on a leaf, they can be removed by squashing with the fingers. To avoid spreading young scale to other plants, wash hands after removing established scale.

Plants can also be sprayed with White Oil which effectively covers and suffocates the scale. This seems to be the most effective treatment, as well as being harmless to humans. Other chemicals can be added to the White Oil if a harsher treatment is required.

In Central Australia, the presence of black ants on trees or shrubs, is an indicator that scale is present. If this is the case, the scale is usually well established on the plant and systemic pesticides may be required to kill the scale through the sap. The best practice is to spray susceptible plants with White Oil in early spring ie. late August and September. White Oil smoothers young scale much more effectively than when it's older, harder and more waxy.

The above information was sourced from local knowledge and from the book, "Friends and Foes of Australian Gardens" by F. D. Hocking.

