parasites that may be present (lady beetles or praying mantids) because these insects do not feed on the plant. Systemics have been more effective against insects on container-grown plants than on field-grown plants.

The above systemic insecticides are available in different formulations and concentrations and the amounts may vary with different ornamental plants. Follow the directions and cautions on the manufacturer's container label for the amounts to use on the ornamental plants specified on the label.

Safety Precautions

- All insecticides are poisons, and the safety precautions on the container labels should be followed.
- Read the entire label, including the small print, before opening the container.
- Store pesticides in their original labeled containers out of reach of children, irresponsible people and pets. Preferably, keep under lock and key.
- Dispose of left-over spray materials and empty containers promptly and safely.
- Keep pesticides from getting into fish ponds, streams and water supplies.
- Avoid drift of pesticides to adjacent areas or to crops that may be eaten by man or animals.

Phytotoxicity — or Plant Injury

A pesticide or mixture of pesticides may cause injury to certain plants. The condition under which the injury occurs may vary considerably depending upon temperature, humidity and other environmental factors. In general, it is best to apply pesticides during the cooler part of the day. Plants are less likely to be injured when protected by at least broken shade as opposed to being in direct sun.

Some injury has been observed on hibiscus at times from malathion sprays. Lack of sufficient plant moisture may be a contributing factor to this injury. Malathion has caused injury to some varieties of roses including Caledonia, and some ferns such as Boston, maidenhair and pteris. Dimethoate (Cygon or De-Fend) has caused injury to several plants including burford holly, hibiscus, schefflera, golden raintree, crape myrtle, orchid tree and the foliage and flowers of carnations and mums.

Slight injury has been observed from diazinon and Kelthane on flowers of mums. Injury has been noted on flowers of roses and glads from Tedion sprays.

It is good practice to water or irrigate ornamental plants one to two days before applying pesticides. Some materials injure plants when there is a shortage of moisture. Be sure to check the manufacturer's label for the listing of plants which may be injured by the pesticide. Wettable powders are safer to plants than emulsifiable concentrates because they do not contain emulsifiers and solvents.

Florida researchers have done extensive work concerning phytotoxicity on ornamental plants. Your County Extension Office has listings of ornamental plants that have been damaged by various pesticides. Only a few examples of phytotoxicity have been mentioned here.

SPECIFIC PESTS AND THEIR CONTROL

Sucking Pests

Scales

There are many different kinds of armored and soft scales that attack ornamental plants. Most scale insects attach themselves to their host plant soon after hatching, and rarely do these insects move from their feeding site during their lives. Scale insects feed by inserting a tiny thread-like beak into the plant and sucking the plant juices.

Control: Scale insects are more difficult to control as they become older and larger, and also where the infestation builds up large numbers. Gardeners are urged to make frequent inspections of their plants and to make thorough spray applications when the scales are still in the young stages and before populations become large. Often, the presence of a scale infestation is not noticed because many scales are found primarily on the undersides of leaves. Be sure to examine these areas carefully. Scale egg hatch is closely correlated with the flush of a new growth in the spring. Plants that are likely to be attacked by scales (camellia, holly, etc.) should be sprayed in the spring shortly after the new growth hardens.