



**Aphids** Aphids are small, soft-bodied insects that feed on stems, leaves, and other tender plant parts and suck out plant fluids. Aphids seldom kill a mature plant. Large populations cause curling, yellowing, and distortion of leaves and stunting of shoots. They can also produce large quantities of a sticky substance known as honeydew, which often turns black with the growth of a sooty mold fungus.



**Bagworms** Bagworm caterpillars make distinctive 1.5 to 2 inch long spindle-shaped bags that can be seen hanging from twigs of a variety of trees and shrubs. Sometimes the bags are mistaken for pine cones or other plant structures. When many small bagworms are present and feeding, an insecticide may be needed to prevent serious damage.



**Lace Bugs** Lace bug damage is first noticed as yellow spots on the upper leaf surfaces of affected plants. These are similar to leafhopper and spider mite damage but usually more extensive. Positive identification of lace bug damage is confirmed by the presence of shiny, black droplets of excrement on the underside of damaged leaves. Frequently, the cast skins of the nymphs remain attached to the underside of the leaves.



**Mealy Bugs** Mealy bugs are white and are covered in a woolly white fuzz with distinct filaments. Damage is caused by mealy bugs feeding and injecting toxins or plant pathogens into host plants. They also secrete honeydew. Their feeding can cause premature leaf drop, dieback, and plant death. Once female mealy bugs have deposited their eggs, they can hatch in 6 to 14 days into "crawlers". The crawler stage is the most easily controlled stage.



**Scale** Scale insects damage the plants by extracting sap and nutrients. They are small insects that attach themselves to the plant and are covered with a shell or armor plate. They are inconspicuous and usually go unnoticed until the plant show severe damage. The adult scale will remain attached to the plant even after it has died. This can give the impression that the plant is still infested with the insect.



**Spider Mites** Spider mites have a simple, oval shaped body and no wings or antennae. Prolonged, heavy infestations cause yellowing or bronzing of the foliage and premature leaf drop similar to drought stress. Severely infested plants may be stunted or even killed. Most of the mites feed from the undersides of leaves, although the damage is most evident from the upper surface.



**Webworms** The webworm is a common pest of trees that attacks more than 88 different kinds of plants, including many fruit, nut and ornamental trees and shrubs. They are known for the large, unsightly webs they produce. Heavy infestations are rarely fatal, but if they occur over several years they can stress trees and make them more susceptible to drought, disease or other insect pests which can be fatal.



**White Fly** White flies are minute insects with piercing and sucking mouth parts that suck plant juices. They hide in huge numbers on the undersides of leaves, flying out in great clouds when disturbed. They're common on citrus, greenhouse and foliage plants. Plants will appear weak, and black sooty mold fungus may be evident on stems and leaves.