



APHIDS

Importance. - Aphids infest hardwoods and conifers throughout the United States. They can be found almost anywhere on a tree, particularly on new growth. Heavy infestations distort foliage, cause terminal dieback, reduce tree vitality, weaken the tree, and cause branch and crown dieback. In young trees and seedlings, mortality can occur from heavy infestations. Aphids are usually of greatest concern in nurseries, seed orchards, and shade and ornamental trees. Honeydew and sooty mold, associated with aphids, usually mar the beauty of ornamentals.

Identifying the Insect. - Aphids vary in bodycovering and range in size from 1/50 to 1/4 inch (1/2 to 6 mm) long. However, they are all soft-bodied insects. Most aphids are pear-shaped, with a pair of cornicles at the posterior of the abdomen. They may be transparent, yellow, green, pink, brown, almost black, or spotted. Some may be covered with a white woolly wax. Some are winged, while others are not.



Typical soft-bodied aphid on pine.

Identifying the Injury. - Aphids feed on various parts of a tree. Some feed on the undersides of leaves, causing stunting, curls, and folds in the leaves. Other symptoms to look for are: leaf discoloration; dieback or "flagging" of newly formed terminals, branch ends, and new leaves; early leaf drop; and ringlike swellings or knots at nodes and buds. Trees with poor vigor or with branch and crown dieback should be examined closely for aphids. Sooty mold and ants frequenting a tree are good indicators of an active or recent aphid attack.

Biology. - Overwintering can occur in any life stage, but the most common is the adult or egg. Eggs hatch and live births usually occur in the spring, and nymphs begin feeding on selected parts of the plant. Some aphids migrate as nymphs; others spend their life in one place. Some aphids have only one generation per year; other have several. Some aphids require alternate hosts in alternate generations.

Control. - Parasites and predators are effective in controlling aphid outbreaks and maintaining low populations. However, insecticides are often used to protect high value trees and are most effective against the nymphs.
