



## APHIDS

### IDENTIFICATION

There are many species of aphids—they may be green, yellow, brown, white, gray, red or black depending on the species and the plants they feed on. They have soft, pear-shaped bodies about 1/8" long with long legs and antennae, and two tubes that project like exhaust pipes from their abdomens. A few species appear waxy or woolly due to the secretion of a white or gray substance over their body surface. Generally adult aphids are wingless but most species also occur in winged forms, especially during spring and fall or when populations are high.

Aphids often feed in dense groups on leaves or stems. Unlike leafhoppers and other insects that might be confused with them, aphids do not move rapidly when disturbed.



### DAMAGE

Aphids feed on all types of vegetation, sucking the juices from stems and leaves. Symptoms of aphid feeding include curling, yellowing and distortion of leaves, stunting of shoots, and loss of plant vigor. As populations grow, the sugary waste or “honeydew” that aphids excrete builds up on leaf surfaces. Although aphids seldom kill a mature plant, plant damage and unsightly honeydew sometimes warrant control.

Carefully inspect plants to catch infestations early. Ants are often associated with aphid populations, especially on trees and shrubs, and can be a tip-off that an aphid infestation is present.

### MANAGEMENT

Select non-chemical management options as your first choice! Most insecticides will also destroy the beneficial insects that prey on aphids.

#### *Biological Control*

Learn to recognize, attract and protect beneficial insects that feed on aphids, such as lady beetle adults and larvae, lacewing larvae, parasitic wasps and syrphid fly larvae. See fact sheet C177 for more information on Beneficial Insects.

*(Continued on back page)*

### *Cultural Control*

Where aphid populations are localized on a few curled leaves or new shoots, simply prune and dispose of them. In large trees, some aphids thrive in the dense inner canopy, so pruning out these areas can make the may be impractical. Avoid excessive pruning, as it stimulates aphid-attracting new growth.

An excellent way to reduce aphid populations on plants is to knock them off with a strong spray of water. Often a forceful spray of water will provide sufficient control even on large trees (when applied with appropriate equipment). Most dislodged aphids will not be able to return to the plant, and their honeydew will be washed off as well.

Because many vegetables are primarily susceptible to serious aphid damage during the seedling stage, losses can be reduced by growing seedlings under protective covers in the garden or a greenhouse, then transplanting them when they are well established.

In some situations, ants protect aphids and feed on the honeydew aphids excrete. If you see ants crawling up aphid-infested trees or woody plants, put a band of sticky material such as Tanglefoot around the trunk to prevent ants from climbing past it. Alternatively, ant stakes or baits may be used to control the ants without affecting the aphids or their natural enemies. Prune out other ant routes such as branches touching buildings, the ground, or other trees.

Never use more nitrogen fertilizer than necessary. High levels of nitrogen favor succulent new growth, which attracts aphids. Use a timed-release formulation that releases contents at a slower pace.

### *Chemical Control*

When considering application of pesticides for aphid control, remember that moderate populations of aphids attacking leaves of fruit trees or ornamental trees and shrubs do not cause long-term damage. Some damage can be tolerated in most situations and aphids will often disappear when natural enemies or hot temperatures arrive.

As always, read and follow label instructions! Insecticidal soap or neem oil provides temporary control if applied directly on feeding aphids. Spray these materials with a high volume of water and target aphids on the underside of leaves as well as on the tops. Soaps and neem oil only kill aphids present on the day they are sprayed, so repeat applications may be needed. Beneficial insects often become abundant only after aphids are numerous, so applying non-persistent insecticides like soap or oil may provide more effective long-term control. Although these materials do kill natural enemies that are present on the plant and hit by the spray, they leave no toxic residue and do not kill natural enemies that migrate in after the spray. Do not use soaps or oils on water-stressed plants or when the temperature exceeds 90°F. These materials may be damaging to some plants, so check product labels before use.

If aphids are causing serious damage to a plant and cannot be controlled by the above methods, several insecticides are effective. However, the insecticide must be registered for the host plant. You can find the registered pesticides for a specific plant by researching by plant name at <http://pep.wsu.edu/hortsense/>.