



# Aphids

Aphids are small, soft-bodied insects with long, slender mouth parts that they use to pierce stems, leaves, and other tender plant parts and suck out plant fluids. Identification of species is normally not necessary to control aphids. Aphids often feed in dense groups on leaves or stems. Most aphids do not move rapidly when disturbed. Aphids can have many generations a year. Aphid populations often decrease with summer heat and winter cold.



**Green peach aphid colony.**  
Photo by Jack Kelly Clark.

## Damage

Low to moderate numbers of leaf-feeding aphids are usually not damaging in gardens or on trees.

- **Distortion and discoloration.** Viruses spread by aphids or large aphid populations can cause curling, yellowing, and distortion of leaves and stunting of shoots.
- **Fungal growth.** The sticky exudate from aphids known as honeydew can turn black with the growth of a sooty mold fungus.
- **Galls and root damage.** A few aphid species can cause gall formations and others (e.g., The lettuce root aphid) may attacks lettuce roots, causing plants to wilt and die if populations are high.

## Management

Check your plants regularly for aphids--at least twice weekly when plants are growing rapidly. Aphids seldom kill mature plants, however, the damage and unsightly honeydew they generate sometimes warrant control.

**Biological Control** Natural enemy populations generally increase only when aphids begin to be numerous. The most important natural enemies include parasitic wasps, lady beetle, lacewing, and syrphid fly, fungal diseases.

## Cultural Control

- **Remove hosts and Prune.** Remove surrounding host plants such as weeds (e.g., sowthistle and mustards). Prune and dispose infected leaves or new shoots.
- **Reduce Nitrogen.** High levels of nitrogen fertilizer favor aphid reproduction. Never use more nitrogen than necessary.
- **Protect seedlings.** Many vegetables are more susceptible to aphid damage during the seedling stage. Reduce losses by growing seedlings in protected areas (e.g., covers or in greenhouses). Transplant when plants are older and more tolerant of aphid feeding.
- **Remove aphids.** Reduce aphid populations on sturdy plants by knocking them off with a strong spray of water. Use water sprays early in the day to allow plants to dry off in the sun and so be less susceptible to fungal diseases.

**Chemical Control** Insecticidal soap, neem oil, and narrow-range oil (e.g., supreme or superior parafinic-type oil) provide temporary control if applied to thoroughly cover infested foliage. Use a high volume of water and target the underside of leaves as well as the top. Insecticidal soaps plus pyrethrins may provide slightly more knockdown than soaps alone.

**Remember.** Low populations of aphids can be tolerated in most situations and aphids will often disappear when natural enemies or hot temperatures arrive.

**Prepared by Frank Zalom and Mark A Bell April 15, 2008**

**Reference:** Statewide IPM Program, Agriculture and Natural Resources, University of California. <http://www.ipm.ucdavis.edu/index.html>

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