

CONTROLLING APHIDS IN YOUR GARDEN



Aphids can be an important food source to many beneficial insects. Most plants can tolerate low to moderate numbers of aphids without noticeable damage. On some plants, however, large numbers of aphids can distort foliage and flowers and stunt plant growth. Some species of aphids can also transmit plant diseases when they puncture plant tissues to feed.

Aphids excrete “honeydew,” a sweet substance that forms a harmless but sticky coating on leaves. The honeydew is soon colonized by a fungus called “sooty mold,” which is also harmless, but makes leaves look black and dirty. Ants love to feed on honeydew, and to ensure a continuing supply, they protect aphids from their natural enemies. When this happens, aphid management must include ant management (see the Eddy Approved Ant fact sheet)

DETECTION

Aphids are very small insects with soft, pear-shaped bodies. They have long legs and antennae, and most have two tube-like structures called cornicles on their hind end. Adults of some species have wings. Aphids can be many colors and are usually on buds or the undersides of leaves.

TOLERATE SOME APHIDS

- **Aphids have many natural enemies** such as spiders, ladybugs, lacewings, and minute parasitoids

(tiny non-stinging wasps) that often keep aphid numbers below damaging levels. So it’s best to tolerate low to moderate numbers of aphids as long as they aren’t causing noticeable plant damage. Beneficial insects rarely appear on the scene until after aphids have begun attacking plants. This “lag-time” can be a day or two or as long as several weeks. As the season progresses, aphid control by these natural enemies improves because more natural enemies are attracted to your garden and more stay to breed.

- **Aphids commonly found on trees will not infest your garden annuals**, and these aphids can help attract natural enemies that will attack pests on other plants.

LESS-TOXIC CONTROLS

- **Learn to recognize beneficial insects.** Among the most important natural enemies of aphids are the tiny wasp parasitoids that lay their eggs inside the bodies of aphids. These tiny wasps cannot sting people. A parasitized aphid (called a “mummy”) looks puffed-up, and its skin hardens and changes color, often to tan, light brown, or black.
- **Attract beneficial insects to your garden** by planting a wide variety of flowering plants. (See

fact sheet in this series called “Growing a Healthy Garden to Manage Pests Naturally”). The adult forms of many beneficial insects, including tiny wasps and lacewings, feed on pollen and nectar. Consider buying beneficial insects. Lacewings are more likely to stay in your garden than commercially available ladybugs.

- **Buy beneficials before aphid numbers are high.** If you have an aphid emergency, first use soap or oil sprays to reduce the population. Then, if necessary, release natural enemies. On the other hand, don’t purchase beneficial insects before you have aphids. You will be releasing them into your garden to starve.
- **Wipe off or prune away** colonies of aphids from leaves and buds.
- **Use a forceful stream of plain water** to wash off aphids and honeydew. Do this on a warm, sunny day so that foliage dries off before night.
- **Use insecticidal soaps** to kill aphids on contact and spare beneficials such as lacewings. These products do not leave toxic residues.
- **Use spray (horticultural) oils** to control aphids without leaving toxic residues for natural enemies.



PARTNERS FOR CLEAN WATER

Choose less-toxic pest controls for your home and garden.

Note: Soaps and oils must coat the bodies of the insects to be effective.

PREVENTION

- **Use slow-release fertilizers.** Some aphids reproduce more quickly on plants with high levels of nitrogen in their leaves and buds. Fertilizers such as compost, sewage sludge, or encapsulated materials are better because they slowly release moderate levels of nutrients.
- **Avoid excessive pruning** because it stimulates aphid-attracting growth.
- **Use a row cover** to exclude aphids and other pests but allow air, light, and irrigation water to reach plants.
- **Control ants** by spraying or painting a 4" wide sticky barrier around woody shrubs or trees. (See the Ant fact sheet in this series.)

APHIDS SO MANY, SO FAST

The remarkable life cycle of aphids helps to explain how they can quickly appear in large numbers. In spring in temperate climates, female aphids called "stem mothers," emerge from 44 "overwintering" eggs. These plump, distinctive, looking aphids do not need to mate to reproduce. Stem mothers give birth to live daughters, and these offspring give birth to more live daughters - all without the need of mating. The swiftly growing female aphid colonies cluster around the stem mother and continue to multiply long after her death. At the end of the season, aphids begin to produce both sons and daughters. When these males and females mature, they mate and the females lay eggs on bud scales or bark to "over, winter" and begin the cycle again.

WATER POLLUTION

Common household pesticides (a term which includes all chemical control such as herbicides, insecticides, rodenticides, etc.) can make their way into treated wastewater and local waterways, and may be at levels that can harm sensitive aquatic life. Pesticides can also get into ground water which may be used as drinking water. Water pollution prevention agencies have teamed up with participating retail stores, and professional pest control associations to reduce the risks associated with improper pesticide use.

Use pesticides according to label directions, paying close attention to surface and ground water advisories. Dispose of unwanted or leftover pesticides at a household hazardous waste collection facility or event; or through the Idaho State Department of Agriculture (ISDA) Pesticide Disposal Program (PDP). Clean, plastic pesticide and fertilizer containers may also be recycled through ISDA's Container Recycling Operation Program (CROP). Please call 208-465-8442 or visit: www.agri.idaho.gov for more information. For additional information on pesticide disposal, call 1-800-CLEANUP or visit: www.1800CLEANUP.org.

FOR MORE INFORMATION

Active ingredients are listed on the front of the product. Pesticide information profiles can be found on the Oregon State University hosted webpage <http://extoxnet.orst.edu/pips>. The University of Idaho's Extension Educators, located in most counties, can often assist in local pest management questions. No endorsement of specific brand name products is intended, nor is criticism implied of similar products that are not mentioned.

For more information, contact:

Partners for Clean Water

www.PartnersForCleanWater.org

Idaho State Department of Agriculture

www.agri.state.id.us/

University of Idaho IPM website:

www.extension.uidaho.edu/

University of Idaho Cooperative Extension Master Gardeners in your area

www.extension.uidaho.edu/idahogardens/

Western Integrated Pest Management Center

www.wripmc.org/

IPM Institute of North America

www.ipminstitute.org/

National Pest Management Association

www.PestWorld.org

THINGS TO AVOID AND WHY

These considerations will reduce the potential indiscriminate use of chemical control products and therefore reduce the potential exposure of pesticide residues to humans, animals and the environment.

- Use of pesticide products without:
 1. knowing what pest you are trying to control,
 2. consideration of alternative control options (IPM),
 3. selecting the most appropriate product for your situation, and
 4. reading and following the label directions.
- Automated aerosols and plant feeders: These devices may disperse chemicals in a way that can increase the risks of exposure to unintentional targets.
- Careless use of ground sterilants: These can leach; either use great care or alternative control methods to prevent damage to desired plants or water contamination.

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www.PartnersForCleanWater.org