



## Aphids in home yards and gardens

### Quick facts

- Aphids are very common insects and are found on most plants in yards and gardens.
- In most cases they cause little or no damage to the health of plants.
- Signs of severe aphid feeding are twisted and curled leaves, yellowed leaves, stunted or dead shoots and poor plant growth.
- Treating aphids for the health of plants is usually unnecessary.
- Aphids can often be managed with only non-chemical options or low risk pesticides.

### How to identify aphids

Aphids are small, 1/16- to 1/8-inch-long (2-4 mm), pear-shaped, soft-bodied insects. They can range in color from green, black, red, yellow, brown or gray.

- Mature aphids can be wingless or can have wings.
- Winged aphids are similar in color but are a little darker.
- Immature aphids (nymphs) look like adults but are smaller.

The best way to identify aphids is to check for two tail pipes (cornicles) found at the end of the abdomen. All aphids have cornicles, but some are smaller and less obvious.

Aphids shed their exoskeletons (skins) as they grow. These white cast skins can be found on leaves or stuck in honeydew secretions of the aphid.



Adult and nymph aphids



All aphids have tailpipes

### Life cycle

## Common aphids in Minnesota

### Garden aphids



Tree and shrub aphids

## Damage caused by aphids

Aphid feeding

Honeydew

## Aphids and plant viruses

### How to protect your plants from aphids

Check plants for aphids regularly throughout the growing season. Because aphid populations can explode, it is important to monitor plants as often as possible. Carefully check leaves and stems for the presence of aphids.

#### Remove weeds

Use a high pressure water spray

Natural enemies help reduce aphid numbers

## Using pesticides

In most cases, aphids cause little to no damage to plants and can be ignored. If aphids are causing problems, and it is necessary to treat them, you may want to consider using insecticides.

## Low risk pesticides

Several insecticides are low risk to people, beneficial insecticides and the environment.

Neem (azadirachtin) is a plant based pesticide that discourages aphid feeding. Insects are not killed quickly, but it makes them stop feeding and they slowly die.

Insecticidal soap, horticultural oil and pyrethrins can be effective at controlling aphids.

- Remember to spray the underside of leaves as well as the top.
- These materials will only kill aphids that they come in contact with. Repeat applications may be needed.

## Residual pesticides

These products are effective for one week or more. While they are longer lasting, they also kill a variety of insects, including natural enemies. This can make aphid problems worse. Do not spray trees or shrubs that are blooming.

Common examples of pesticides available to consumers include acephate, permethrin, bifenthrin, lambda-cyhalothrin, cyfluthrin and malathion.

## Systemic pesticides

Systemic products, like imidacloprid and dinotefuran, are applied to the base of trees and transported through the sap to the leaves, stems and branches where the aphids are feeding. When the aphids consume the pesticide they will die.

This process can take between two to four weeks depending on the product used and the size of the tree. Most of these products will also kill other insects feeding on foliage in trees. The use of systemic insecticides avoid pesticide drift, especially when treating large trees.

Systemic pesticides don't directly contact natural enemies. However, imidacloprid and dinotefuran are very toxic to pollinators. Either avoid applying these insecticides to bee attractive plants or wait until the plants have finished blooming before treating them.

## Professional services

You can also hire a professional landscape company to treat aphids on trees and shrubs. They have the training and experience to successfully manage an aphid problem. See [How to hire a tree care professional](#).

**CAUTION:** Read all pesticide label directions very carefully before buying and again before using to ensure proper application. Be sure that the label specifies it can be used on the specific plant you wish to treat. The label is the final authority on how you may legally use any pesticide.

Whenever using any pesticide, including low impact, natural or organic pesticides, follow all label directions and use standard pesticide safety practices for transporting, storing, mixing, applying and disposing of pesticides to protect yourself, your neighbors and the environment.

## Woolly aphids

Woolly aphids are found on trees and shrubs.

They are similar to true aphids, but have white waxy strands covering their pear-shaped bodies.

The wax filaments make these aphids look fluffy and cottony, as if they are covered with wool. The wax also keeps predators away from these aphids and helps them move easily around plant hairs.



Woolly alder aphids

## Life cycle of woolly aphids



Damage caused by woolly aphids

Common woolly aphids

## Managing woolly aphids

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