

PesTopics: Aphids

Aphids: A Sticky Situation

Aphids are a seasonal problem **affecting** many plants and tree species. The aphids are usually present every year, but are much more noticeable in some years when weather conditions favour their development.

Aphid feeding usually has little impact on tree health, although they can be a nuisance due to the dripping of sticky “honeydew” from infested leaves. Sometimes a black sooty mould grows on the honeydew, or ants, flies or wasps may be attracted to the sugary solution.

Identification and Biology:

Adult aphids are tiny, soft-bodied insects with two characteristic projections (“cornicles”) near the hind end (Fig. 1).

Many aphid species are known to occur on trees and shrubs, but most feed only on one or on a few closely related hosts. Therefore, if you have aphids on one type of tree or shrub in your yard, it is highly unlikely that they will spread to other plants in your yard.

Aphid colonies can expand very rapidly when weather is warm, as adult females can give birth to live young without mating.

Control:

Aphid problems are seasonal, and heavy infestations usually only last a few weeks until a variety of parasites and predators bring populations in check (biological control). Therefore, chemical control is rarely necessary. Natural enemies such as ladybird beetles, lacewing larvae, hover flies, parasitic wasps or “pirate” bugs are extremely effective. Have a look at the underside of the leaves. In addition to the aphids you will start to see a number of “good” bugs. Some people mistake these good guys for pests, particularly the ladybug larvae, which look like tiny black alligators (Fig. 2).

Some of the steps that you can take to help mitigate or prevent the problem include:

- Proper pruning, watering and other cultural practices can help prevent severe infestations by improving overall tree health. Don’t top or excessively prune, as this stresses the tree and leads to sucker growth which can be attractive to aphids.



Figure 1

- Avoid excessive fertilization, as increased succulent growth can exacerbate the aphid problem.
- On some trees, such as cherries, aphids usually only appear on suckers. Prune out the suckers to remove the infestation.
- Conserve beneficial insects by avoiding toxic chemical sprays, and by planting flowering shrubs or flowers nearby. Many beneficial insects also require nectar or pollen from flowering plants (see below).
- Ants protect aphids from predators in return for their honeydew. Placing a sticky band around the trunk of your tree (available from your local garden centre) can help enhance biological control by keeping ants off the tree.
- Releasing commercially produced predators or parasitoids may help to augment native beneficial populations. Check your local garden centre for availability of beneficial insects.
- On small trees or shrubs, regularly wash aphids and honeydew off the leaves with a pressurized hose. Simply spraying aphids with a jet of water will kill many of them.
- Oils applied during the dormant season may be effective, but only if the aphids are known to over winter on their host plant. Check with a pest management professional first to find out if dormant oil will work against a particular type of aphid.
- If chemical control is required for a severe infestation, use soap or a product with a very low toxicity to minimize impacts on beneficial insects. Keep in mind that chemical control only knocks the aphids back temporarily, so you may have to spray again in a few weeks time. Also, by the time you notice the damage, aphid populations are usually already declining and will soon disappear on their own.



Figure 2. Ladybird beetle larvae look like tiny black alligators, and are voracious predators of aphids.

Some plants that attract beneficial insects:

SOURCE:

Attracting Beneficial Insects, Virginia State University, Cooperative Extension, <http://www.ext.vt.edu/departments/envirohort/factsheets2/insectpest/jan94pr1.html>

Many members of the Apiaceae (formerly known as Umbelliferae) family attract beneficial insects, including: Fennel, angelica, coriander, dill, wild carrot. Clovers, yarrow, and rue also attract parasitoid and predatory

insects. Low-growing plants, such as thyme, rosemary, or mint, provide shelter for ground beetles and other beneficial insects. Composite flowers (daisy and chamomile) and mints (spearmint, peppermint, or catnip) will attract predatory wasps, hover flies, and robber flies. The wasps will catch caterpillars and grubs to feed their young, while the predatory and parasitoid flies attack many kinds of insects, including leafhoppers and caterpillars.