



Effective Control of Aphids



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Aphids are common garden pests. These tiny creatures are represented by hundreds of species and almost as many colours. Although aphid damage is most noticeable on fruit and shade trees, and ornamentals, they also infest flower and vegetable gardens. You will find aphid colonies on the undersides of leaves and the tips of branches or new growth.

Description



Aphids are small, soft-bodied, pear-shaped insects that have long antennae and a characteristic pair of cornicles (short tubes extending on either side of their abdomen). Their translucent bodies are most commonly green, brown, yellow or white.

The life cycle of aphids is unusual. In the spring, over-wintered eggs hatch into females that give birth to live young, all females (up to 10 or more per day). This allows a colony of aphids to grow in size very quickly, especially indoors. In the fall, males are also produced and the fertilized females produce eggs for over-wintering outdoors. These shiny black eggs are tucked into the crevices of bud scales and bark. Winged adults are produced only when it is necessary for the colony to migrate. For example, overcrowding or unfavourable climate conditions can stimulate the production of winged adults.

Signs of Infestation and Damage

Aphids damage plants by sucking the sap from the leaves, twigs, stems or roots. They sometimes transmit plant diseases in the process.

Leaves attacked by aphids have spotty yellow discolourations, usually on the undersides; the leaves may later dry out and wilt or curl. Some species of aphids form galls—swellings of plant tissues that are globular or spindle-shaped. The galls, which often turn brown, contain many aphids in all stages of development.

Do you see a clear, shiny sap on the top of the lower leaves on your plants? Many aphid species produce large amounts of honeydew, a sweet and sticky sap. The honeydew will accumulate on anything found under infested trees or plants (such as your car!). Because of its sweetness, the honeydew will attract other pests such as ants, flies and wasps. Occasionally, the honeydew develops a harmless black, sooty mould on it, making everything it has covered appear dirty and grey.

Control

Prevention

- Repair screens and weatherstripping around doors and windows to keep out winged adults. They may want to find a new home in your houseplants.
- Inspect new houseplants before bringing them into your home. If necessary, isolate and treat them.
- Nourish houseplants with slow-release fertilizers containing moderate amounts of nitrogen to prevent aphids from thriving.

- Keep infestations under control. Monitor house and garden plants frequently during the growing season.
- Prune and destroy infested leaves or plant sections. This will help prevent the spread of plant disease and the development of new colonies.



Control Methods

- Spray dormant oil on fruit trees in the spring (while trees are still dormant) to kill over-wintering aphid eggs.
- Spray the undersides of plants with strong jets of water to reduce aphid populations; repeat weekly. This may be enough to control infestations in the home garden.
- Soap sprays may also be effective. Use commercial insecticidal soaps or make your own: mix 10-25 mL of non-detergent soap in 4 litres of water (1-2 tablespoons per gallon).

Soaps may burn foliage so try a small area and wait two days to see how well the plant tolerates the soap. Do not use more than three times in a row.

Tie a yellow ribbon . . .

Since aphids like the colour yellow, add yellow food colouring to pans of water and place them nearby to attract and drown them. This method is useful in vegetable gardens and around gladioli.

In outdoor gardens place yellow, double-sided tape around the rims of pots and along garden edges to trap aphids.

Aluminum foil . . .

Stretching heavy aluminum foil along rows of plants will repel aphids. Unfortunately, the aphids will be attracted to other plants in the area.

In the company of friends. . .

Certain plants may protect some susceptible plants from infestation. They excrete an odour or an oil that is unattractive to aphids and may repel them from the area. For example, southernwood or wormwood planted around the border of the garden may discourage aphids from entering.

Beneficial Insects

Biological control of aphids is possible because the larvae of some natural predators like to eat maturing aphids.

- Attract natural aphid predators, like the lady beetle, the parasitic wasp, the midge, and the lacewing to the



garden with sugary bait. Paint or saturate wooden stakes or potted plants with a sugary liquid and position them near infested plants or trees. Running a double-sided tape at the base of the baited stakes or pots will trap any ants that are also attracted by the sugar.

- Check the predator baits daily. Remove the predator insects and re-deposit them on aphid-infested trees or plants.
- The dehydrated eggs of the natural predators can be purchased from a limited number of sources; sprinkle them around the infested host plant. The eggs will hatch and the larvae will feed on the aphids. Monitoring the infestation throughout the growing season is essential.

Pest Control Products

Infestations may also be treated with insecticide products. There are many active ingredients registered for domestic class use on aphids. A partial list includes: allethrin, diazinon, dimethoate, malathion, methoxychlor, methoprene, pyrethrin, rotenone and zineb.

Tall, heavily infested trees may be difficult to treat without special equipment. For infestations severe enough to threaten the health of a tree, you may want to consider the services of a licensed pest control operator.

“Inspect new houseplants before bringing them into your home. If necessary, isolate and treat them.”



Remember

Before Purchasing a Pesticide Product

- Identify the pest correctly.
- Use physical control methods and alternatives to pesticides.
- Read the label directions and safety precautions before buying the product. The label must include the name of the pest to be controlled and the treatment location (e.g., indoor, outdoor, garden uses, pet treatment).
- Purchase only the quantity of product needed for the treatment.
- Alternatively, you may choose to hire a licensed pest control operator.

When Using a Pesticide

- Carefully read all label instructions and precautions before using pesticides.
- Do not drink, eat or smoke while applying pesticides.
- Persons and pets should vacate the area during treatment. Cover or remove aquaria.
- If kitchen area is to be treated, cover or remove food, dishes and utensils.

After Handling a Pesticide

- Always wash your hands thoroughly after handling any pesticide product.
- Do not permit persons or pets to contact treated surfaces until residue has dried completely.
- Provide adequate ventilation of treated areas after use.
- Wipe clean all surfaces that comes in direct contact with food, such as counters, tables and stovetops, including indoor and outdoor surfaces.
- Always store pesticides out of reach of children and pets and away from food and beverages.

In Case of Accidental Poisoning

- Call a poison control centre immediately and seek medical attention.
- Take the pesticide container or label with you to the emergency facility or physician.
- Follow first aid statements on the label.
- In case of accidental poisoning of pets seek veterinary attention immediately.



When Disposing of Pesticides

Do not reuse empty pesticide containers. Wrap and dispose of in household garbage.

Unused or partially used pesticide products should be disposed of at provincially or municipally designated household hazardous waste disposal sites.

Use Common Sense

- These are general recommendations.
- Consult the label for specific instructions.
- When in doubt, contact a professional.

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