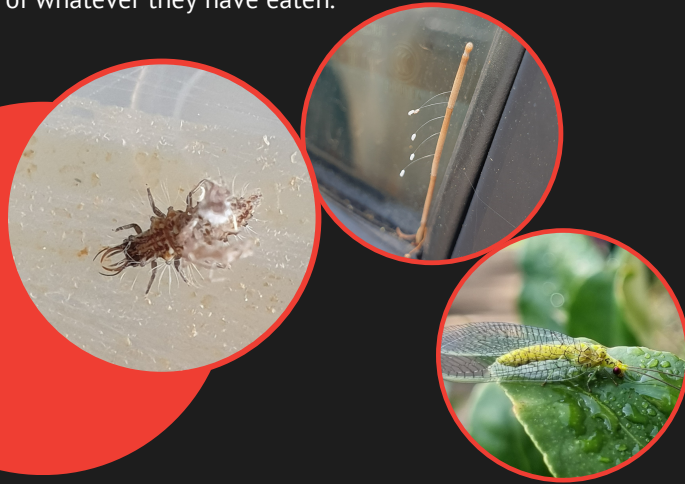


Green Lacewings

Green lacewings are larger than brown lacewings (as adults) and their eggs are laid on stalks. Larvae have spines on their backs which they use to impale the bodies of whatever they have eaten.



Hoverflies

Hoverflies are true flies (Diptera) although they are sometimes thought to be bees. The adults are not predatory, but the larvae will consume very many aphids as they develop to adults. Eggs are white and slightly pointed.



BIOLOGICAL CONTROL OF APHIDS



Damsel Bugs

Damsel bugs (also known as nabids) are true bugs but they do not feed on plants, only on insects. They prefer to eat small caterpillars but will also feed on aphids.



IPM Technologies P/L
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Introduction

Aphids are pests in many crops not only because of their feeding damage but often because they can vector diseases such as plant viruses. They can form large colonies and excrete a sugary waste (“honeydew”) which can lead to the development of sooty mould. Insecticides are often applied to control aphids but there are also naturally occurring biological control agents that can have a significant impact on pest populations. The biological control agents can be predators, parasitoids or pathogens. Here are some of the common insect predators and parasitoids that attack aphids. Knowing how to recognize them is the first necessary step and knowing which pesticides are safe to use with them allows biological control and pesticides to work together.



Aphids

Aphids have a double life cycle and can be either winged or wingless as adults. They give birth to live young and there is no external egg stage.

Winged adult aphid (centre) with a wingless adult giving birth to an aphid nymph (upper right).

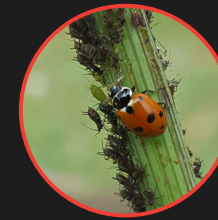
Parasitic Wasps

Adult wasps are tiny and sting (put their eggs into) aphids. These eggs turn into maggots that eat the aphids from inside. When they are ready to pupate, they turn the aphid skin into their own pupal case (a “mummy”). These photos show apparently healthy aphids alongside “mummies”. Ones with holes in them are those where the wasp has already emerged.



Ladybird Beetles

There are many species of ladybird beetles that eat aphids. Most are native to Australia but there are also species that have arrived relatively recently (top left photo). Adult females lay yellow eggs in clusters and from these the larvae hatch out. Larvae eat more aphids than adults.



Brown Lacewings

These insects are native to Australia and are found in a wide range of crops and native habitats. Eggs are pearl coloured and smooth. Larvae are smooth with large hollow jaws projecting forward.

