

Beneficials in the backyard

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Plant Pests

Do you know what types of insects or mites feed on plants? Some common insects and mites that feed on fruit trees, vegetables, ornamental or native plants include grasshoppers, caterpillars, beetles, sucking bugs, thrips and mites.

The damage symptoms on plants can sometimes be examined to determine what type of insect or mite has been feeding on the plant. For example chewing damage is generally caused by grasshoppers, caterpillars or beetles.

Sucking damage is seen as spots or distortion to shoots, flowers or developing fruit and this type of feeding is carried out by insects such as sucking bugs, aphids, mealybugs or scales.

Rasping and sucking damage may be caused by thrips or mites. This damage can be seen as shoot distortion, scarring, silvering or bronzing to the new shoots or developing fruit.

Parasites and predators of plant eating pests

There are many insects and mites that predate or parasitise plant feeding pests in your yard.

Spiders

Spiders are general predators and feed on a large range of insects. Ground dwelling spiders feed on crawling insects. Spiders that build webs in trees generally feed on flying insects that are captured in their web.



Wolf spider

Praying mantises

Praying mantises have large eyes and powerful front legs for catching prey. They are general predators of many types of flying insects.



Praying mantis attempting to capture insects

Ladybirds

Ladybirds are circular or oval-shaped beetles that feed on a large range of pests including scales, mealybugs and whiteflies.



Mealybug ladybird adult and larva

Lacewings

Lacewing larvae or “antlions” capture and eat insects such as aphids, caterpillars, thrips, mealybugs, various moth eggs and whiteflies.



Lacewing larva ready to attack a thrips



Adult lacewing

Predatory mites

Predatory mites feed on plant feeding mites or other small insects such as thrips. Predatory

mites are generally bigger and move faster than their prey.



Predatory mite attacking a two-spotted mite

Parasitic wasps

Parasitic wasps are generally small and have a specific range of “hosts or prey”. They lay their eggs into the body of their prey. The eggs hatch and develop while feeding inside their host.



Wasp parasite ready to lay eggs into a palm leaf beetle larva

Predatory wasps

Predatory wasps are generally larger wasps that capture and feed on other insects.



Papernest wasp

Predatory bugs

Predatory bugs kill their prey with their piercing mouthpart (called a proboscis) and suck out the body contents. There are many different types of predatory bugs, some are small such as the minute pirate bugs which feed on aphids or thrips. Other predatory such as the big eyed bugs feed on mites, thrips, whiteflies, moth and butterfly eggs. Predatory shield bugs and assassin bugs feed on caterpillars.



Predatory shield bug

Predatory and parasitic flies

Hover fly larvae predate on small insects such as aphids, whiteflies, thrips or scales. They capture the prey and suck out the body contents. Adult hover flies are pollinators of garden plants and ops.



Hover fly larva

Tachinid flies are parasitoids of caterpillars. Adult flies glue their eggs to the body of a caterpillar, when the egg hatches the maggots tunnel into the caterpillar's body where they feed and eventually kill the host. The adult flies feed on nectar.



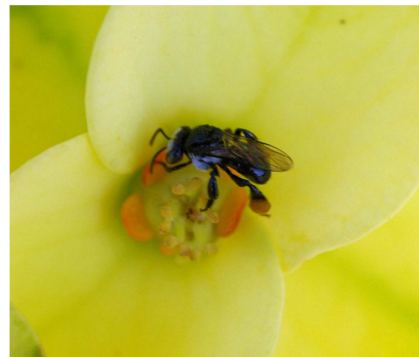
Tachinid fly depositing eggs onto a caterpillar

Pollinators

Other beneficial insects such as bees, flies, wasps and ants pollinate flowers. Pollination is especially important for the production of fruit and some vegetable crops.



Hover fly



Bush beef

Are ants pests or beneficial?

Ants may be considered as pests or beneficials. They can be pests when they “farm” scale insects or mealybugs but they can also be beneficial by attacking plant feeding pests such as caterpillars.

How do you encourage beneficial insects to live in your yard?

- Reduce or avoid using pesticides
- Plant a range of flowering plants and shade trees (nectar provides an alternative source of food for some beneficials)
- Irrigated gardens provides a source of water for beneficial insects

For further information on this leaflet contact Entomology at insectinfo.dpir@nt.gov.au. Agnotes or factsheets on other pests are available from www.dpir.nt.gov.au.

Department of Primary Industry and Resources

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