



## Main insect pests of vegetables in home gardens

By John Burt, Horticulture, Harald Hoffmann, Biosecurity Communications, Darryl Hardie, Entomology and Hossein Golzar, Plant Pathology, South Perth

Various insects and mites can damage vegetables in home gardens at all stages of growth. A description of some of the more important insect pests is given here, together with general methods for control. There are occasions when a home gardener may notice a new pest, which is different to the pests they have seen in the past. Exotic pests are a concern for the farming community, as they could threaten the agricultural and horticultural industries and increase the price of production and cost to the consumer. Please report anything unusual to the Pest and Disease Information Service (see last page).

When using pesticides, always follow the directions on the label. Spraying in the evening is the most effective. The active ingredients of pesticides are shown in the text and there are often a number of commercial pesticides that are available with the same active ingredient.

### Insects

#### Aphids

Aphids are small (1 - 3 mm), soft-bodied insects that vary in colour (green, grey, or black). Most commonly seen in spring and autumn, aphids can be winged or wingless and are usually slow-moving. Aphids cluster on the tips of the shoots, sucking the sap from the plant, which reduces plant vigour. Aphids can also spread viruses which can severely reduce yields and quality.

A number of natural enemies such as lacewings and ladybugs will give some biological control. If required, control with sprays such as dimethoate, imidacloprid, garlic extract or maldison. Soapy water and insecticidal soaps may also reduce numbers.

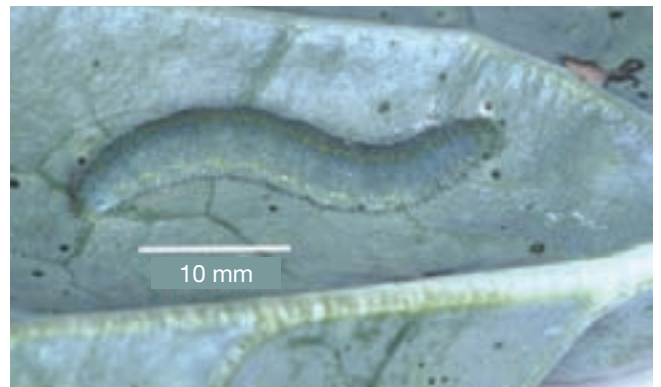


Aphids

#### Caterpillars

Caterpillars are usually the larval stages of moths or butterflies. They are normally hairless, with a long cylindrical body (10 - 50 mm long) and range in colour. Caterpillars may attack leaves, stems, flowers, fruits and roots.

Green caterpillars of the large cabbage white butterfly and the small diamond-back (cabbage) moth can severely damage the leaves of the Brassica family (such as broccoli, cabbage and cauliflowers).



Cabbage white butterfly grub



Cabbage white butterfly

### Important Disclaimer

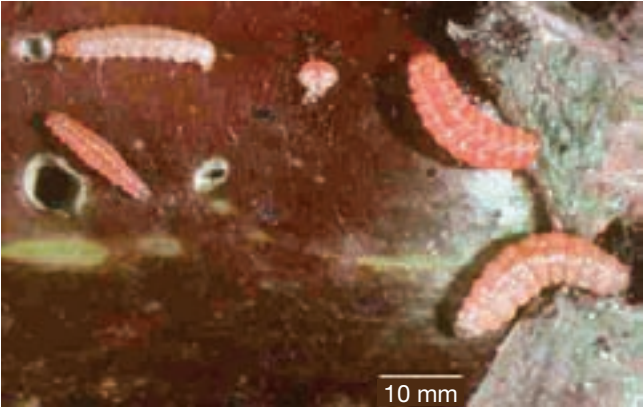
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Cluster caterpillar



Looper caterpillar



Egg fruit caterpillar



Native budworm



Potato moth adult and pupa



Brown cutworm

Cluster caterpillar and looper caterpillars will attack the leaves of many vegetables.

The egg fruit caterpillar bores into eggfruit and the native budworm will bore into the fruit of many vegetables, especially, capsicums, tomatoes and sweet corn. These fruit pests are hard to kill and early spraying is required to kill the caterpillars before they enter the fruits.

Other caterpillars attack the roots and stems. Potato moth caterpillars will 'mine' potato leaves and bore into potato tubers.

Cutworms hide in the soil by day and attack plants at night. They damage the stem of young seedlings at the base causing the plant to collapse.

Control with carbaryl, fluvalinate, garlic extract or maldison. *Bacillus thuringiensis* var. *kurstaki* is a biological insecticide.

### Grasshoppers and locusts

In some years, grasshoppers, (that is, winged grasshopper) and locusts (that is, plague locust) can appear in plagues in summer and are capable of destroying all plants.

Apply a bait containing carbaryl.



Australian plague locust



*Wingless grasshopper*

### Thrips

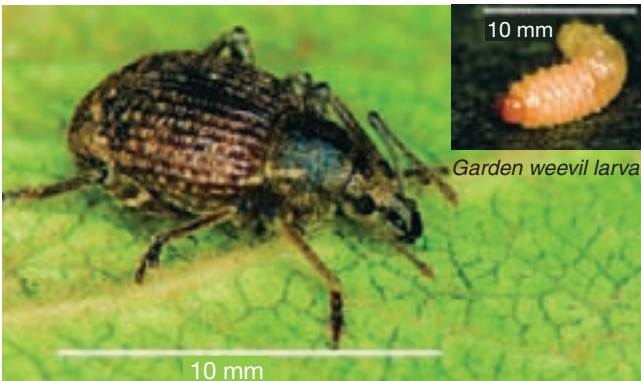
Thrips are small (1 to 2 mm long) torpedo-shaped insects, varying in colour (yellow, green, grey, or black). Thrips suck the sap of leaves, fruit and flowers and this feeding results in white streaks on the plants. Some species are carriers of tomato spotted wilt virus. Control with dimethoate, garlic extract, maldison, omethoate or pyrethrins.



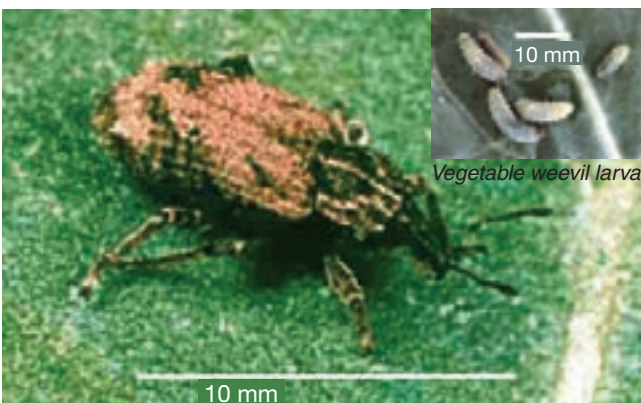
*Tomato thrip*

### Weevils

A few species of weevils are pests, such as the garden and vegetable weevils.



*Garden weevil adult*



*Vegetable weevil adult*

At night, the adults (10 mm in size) may attack stems and leaves of asparagus, beetroot, carrots, parsnips, peas, potatoes, rhubarb, silver beet and spinach. The larvae (12 mm) may bore into the tubers of carrots, potatoes and sweet potatoes.

### Whiteflies

Whiteflies are tiny (1.5 to 2.0 mm) sap-sucking insects that can damage vegetables grown in the open and in greenhouses.

Damage is worst in spring and autumn. The adults resemble small moths and fly in large numbers when disturbed. The young stages have no wings and look more like scale insects. Insects such as lace-wings, ladybirds and hoverflies will feed on whiteflies.



*Whitefly*



*Ladybird (beneficial insect)*

Whiteflies can be difficult to control using pesticides. Control with sprays such as dimethoate, garlic extract, maldison or pyrethrins. Insecticidal soaps and soapy water may also reduce numbers.

### Mites

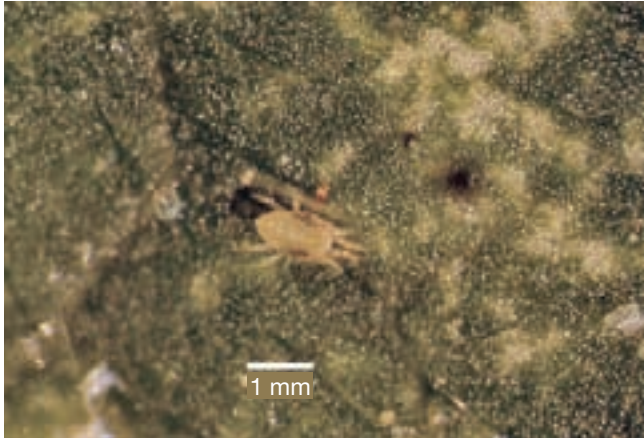
Mites have eight legs compared to insects (which have six legs) and are much smaller than most insects (less than 1 mm). Mites are sap-suckers and damage can range from stippling on the leaves of the plant, to bronzing of the stems and leaves. Control with dicofol. Early spraying is essential to obtain good control.

#### Tomato russet mite on tomatoes

Most people are unaware of this pest because it cannot be seen with the naked eye; a lens which magnifies 20 times is needed to see them. In summer, the damage they cause is easily identified. The stems of the plant become bronzed, the lower leaves wither and die and the skin of the fruit becomes leathery.

### Two-spotted mite or red spider mite

A serious summer pest of most crops, two-spotted mites are usually first noticed by the yellow stippling of the leaves, which look russetty and dry. The undersides of the affected leaves usually have fine webs, under which there are hundreds of small yellow to red mites (1 to 2 mm) and pearly eggs. The mites suck the sap of the leaves.



*Two-spotted mite*

### Other pests

Slaters, snails and slugs may be controlled with baits that contain methiocarb. Slaters may also be controlled with chlorpyrifos granules. Do not expose these granules to children or pets.

#### Slaters

Slaters or woodlice are small crustaceans that hide in damp situations in the garden. Slaters feed on organic matter, but at high densities they can damage new seedlings and ripe fruit such as melons, strawberries and the roots of pot plants.



*Slaters*

### Snails and slugs

These molluscs can attack most crops and chew holes in leaves and kill seedlings. They are most active at night, especially in moist weather. Control is especially important in April and May when the adults lay eggs.



*Common garden snail*



*Slug*

### Further reading:

'Whitefly'. Department of Agriculture Western Australia, Gardennote No 05.

'Pest snails and slugs of Western Australia'. Department of Agriculture Western Australia, Gardennote No 11.

'Control of pest snails and slugs'. Department of Agriculture Western Australia, Gardennote No 12.

'Slaters and their control'. Department of Agriculture Western Australia, Gardennote No 15.

'Tomato pests'. Department of Agriculture Western Australia, Gardennote No 34.

### Specimen identification requirements

When sending or delivering samples, the following information is required:

- Collector's name, location (where the specimen was found), full address, telephone number and e-mail address, description of the damage and date collected.

Department of Agriculture and Food  
Pest and Disease Information Service  
3 Baron Hay Court, South Perth WA 6151  
Freecall: 1800 084 881  
E-mail: [info@agric.wa.gov.au](mailto:info@agric.wa.gov.au)