



# ORGANIC PEST CONTROL IN THE GARDEN

An A-Z guide to problems you can solve  
without hazardous products

We've put together this list of safer, effective and thrifty solutions to common garden problems. For some problems, there's even a couple of solutions for you to try.

Before you leap into these jobs, however, always use your judgement and test the application on a small area first. And please be careful using hot or boiling water. You're one resource that can never be replaced.

## Aphids

Ants frequently nurture plant pests such as aphids, scale insects, mealy bugs, feeding on their sweet honeydew. Sticky barriers made of non-drying organic glues can be used to protect trees and other ornamental plants, such as roses from ants.

If the infestation is slight you can squash them between your thumb and your finger.

Or use a high-pressure jet of water to hose them off the plants.

Alternatively, plant onions, garlic or nasturtiums beneath plants prone to aphid attack to deter this pest.

As a last resort use a soap spray, a eucalyptus oil spray or a vegetable oil spray. Or dab with cotton wool soaked in methylated spirits.

## Caterpillars

Hand pick them off and squash them.

**All pesticides are toxic to some degree. The following hints should assist you in dealing with garden pests organically, without the use of harmful pesticides.**

Or, lightly dust them with flour or white pepper.

Or, use a weak clay or hot water spray.

Or, use Dipel.

## Mites and other tiny insects

For indoor plants, simply wipe the leaves with a soapy cloth.

Outside in the garden, blast them off the foliage and stems with a high-pressure jet of water.

Use an old toothbrush to remove those clinging too tightly to be hosed

off. Or, use a soap, milk, clay or pyrethrum spray.

## Scale

Cut away badly affected foliage or scrub scale insects gently from twigs using a soft brush and soapy water.

Use a soap, vegetable oil, eucalyptus oil or clay spray to smother this pest.

You can also use white oil to kill scale. White oil has a relatively short residual life, as well as low impact on beneficial insects.



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### Snails and slugs

Snail baits mostly consist of powders or pellets, which contain metaldehyde or methiocarb and are spread on garden beds. It is not known how metaldehyde works but methiocarb acts like all carbamates to interfere with the transmission of nerve impulses.

Snail baits are a hazard to pets, animals and birds and a safer alternative such as the one listed below should be considered.

A slug trap consists of a dish sunk level with the ground baited with equal parts of stale beer and sweetened water. This will trap the snails and slugs.

Physical barriers to deter slugs can be made using soot, lime, sawdust, grit, eggshells or wood ash to protect seedlings. The grit will stick to the snail's slimy surface and deter it.

### Homemade organic sprays

Organic sprays break down more rapidly than chemical pesticides. But please remember that although many sprays are made with "natural ingredients" they may never the less be toxic to humans and garden friendly creatures, as well as the organisms you seek to control.

You should always wear protective clothing, a facemask, long sleeves and gloves when applying sprays such as pyrethrum, wormwood and Dipel. Also label and store organic sprays as carefully as you would other chemicals. Keep them away from children and pets.

### Baking soda (bicarb soda) spray

This spray prevents fungal spores from establishing themselves and developing on your plants. It is effective in treating any mould or mildew problem on grape or passion fruit vines.

Simply combine 1 teaspoon of bicarb soda with a few drops of liquid soap, then dissolve in 2 litres of water. The soap helps the spray stick to the leaf surface. During times of greatest risk (high temperature and humidity) spray twice weekly with this solution.

### Chamomile spray

This easy to make spray acts against powdery mildew, rust, stem rot, brown spot, brown rot, leaf spot and other fungal diseases. It is the gentlest fungicide possible.

Simply make a pot of ordinary chamomile tea, and then leave it to brew for 10 minutes. Cool, then spray every few days.

### Clay spray

This spray suffocates creatures such as mites, thrips, caterpillars and aphids, however, remember that useful creatures such as ladybird larvae will be affected as well, so restrict your spraying to creatures you can actually identify. The spray has no residual effect, so it can be reapplied every few days.

Using pure clay, dilute the clay with sufficient water to make a spray.

### Dipel spray

This is a commercial product containing bacterium *Bacillus thuringiensis*. It is an example of biological control, being largely non-toxic to animals. Lethal effects are not passed on down the food chain to birds or any other predator.

Dipel spray needs to be reapplied about every seven days, as the bacterial spores are destroyed by sunlight. It is effective against moth and butterfly caterpillars, which readily ingest it, resulting in paralysis of their digestive tract.





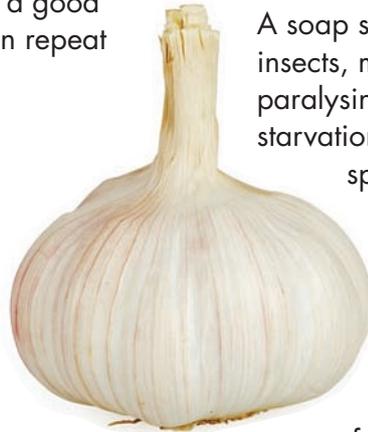
### Eucalyptus oil spray

Eucalyptus oil, like many essential oils, kills scale insects, aphids, earwigs, slugs, slaters, whiteflies, mites and many other pests. It is a non-residual spray, best applied around seedlings and at the base of plants.

To make the spray, combine 1 teaspoon of eucalyptus oil with 500 ml of soapy water. Generally speaking a solution of about 2% eucalyptus oil in water is considered a good general-purpose insect spray. You can repeat the spray every three days.

### Garlic spray

To make a safe, general garlic spray, soak 85 grams of chopped garlic in 2 tablespoons (40ml) mineral oil (paraffin oil) for 24 hours. Dissolve 7 grams of soap in 600ml of water. Slowly add the soap to the garlic and stir well. Strain the liquid through a fine gauze and store in a china or glass container (not metal). Dilute 1 part mixture to 50 parts water for general use. Label the container. Good against aphids, caterpillars, flies and snails.



### Hot water spray

Many soft-bodied insects are killed by a simple spray of hot water (between 45 degrees Celsius and 55 degrees Celsius). This will not harm most foliage.

### Milk spray

Milk is lethal to red spider mites and mildew. A milk spray can be used on plants such as zucchinis, lettuces, cucumbers and tomatoes.

To prepare your milk spray, mix equal parts milk and water. The spray needs to be repeated every few days.

### Soap spray

A soap spray will kill caterpillars, thrips, scale insects, mites, whiteflies and aphids. It does this by paralysing its victim, which then eventually dies of starvation. By killing aphids and scale insects, soap spray also controls sooty mould.

For this spray start off with soft soap, that is, soap that is neither a detergent nor contains caustic soda. Mix together soap and water until you have a frothy milky solution. Allow the spray to dry on the leaves, then rinse the leaves clean the following day. Spray every 2-3 days for two weeks. If your plants are drought or heat stressed, or weakened in any way, use a more dilute solution. Commercial pesticides, herbicides, soil sterilants and fungicides can pose an unnecessary danger to your family and the environment. There is almost always an alternative to using these products.

#### References:

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