

Eco gardening tips

The human race has been cultivating plants for thousands of years and pesticides have only been available for the last 50. By combining knowledge of the “old ways” to control pests, along with some new ideas, we can make pests and pesticides less of a worry in our gardens. Some synthetic chemicals remain in the soil for many years and others concentrate through the food chain. Synthetic pesticides frequently kill beneficial insects as well as the pests. These pesticides are harmful to frogs and fish when they enter waterways via drains, runoff and the sewerage system.

Keep your garden and yard clean and healthy

Pick plant varieties that are disease and pest resistant, eg;

- Sweet pittosporum (*Pittosporum undulatum*) is inevitably attacked by pittosporum leaf mine
- Certain Lillypilly varieties (especially *Syzygium australe*) are attacked by lillypilly psyllid

Check with your local nursery for alternative resilient varieties.

Choose plants that are suitable for your site, eg;

- If your site is naturally wet, consider a bog garden or choose plants that don't mind wet feet
- If your site is hot and dry consider plants that are drought tolerant. A native garden would be a good idea
- If you choose plants that require good drainage and your site is known to hold moisture for long periods, grow plants in raised beds.
- Grow a mixture of plants, not the same kind of plant in rows or over a large area, and rotate crops.
- Add compost to soil for health and vitality.

Use least harmful pest management

- Identify the problem to find out what you are dealing with. Know the “goodies” from the “baddies” - not all insects and other garden creatures are pests. Most ladybirds, lacewings, wasps and hoverflies attack aphids. Ants, however, are an indicator that aphids are present. They feed on honeydew secreted by aphids, and ants also deter their natural predators.
- Be aware of the seasonal activities of pests (Good reference: Judy McMaugh's “What Garden Pest or Disease is That”).
- Remove pests by hand (remember to wear gloves), eg, snails, caterpillars (some caterpillars have very fine hairs that can set off a severe allergic reaction), spined citrus bug, bronze orange bug alias “stink bug” (knock this one off with a stick, into a container of water with detergent or kerosene added).
- Use a strong hose spray to wash off aphids or drench with a soapy solution to pour between upright leaves.
- Install barriers, eg;
 - Netting - to keep birds, possums and bats from food crops;
 - Mesh - to keep out rabbits and other animal visitors;
 - Bands or collars made from axle grease, aluminium foil or other slippery material - to prevent insects crawling or walking up stems;
 - Sand, sawdust or crushed volcanic scoria - to deter snails and slugs.
- Attract pest into a trap that it can't escape from, eg;
 - Sticky traps made preferably with yellow background for white fly;
 - Beer filled traps for slugs and snails.

- Use soap spray in winter to spray undersides of citrus leaves to control the early stages of “stink bug”.
- Use white oil spray to suffocate scales.

Biological control

- Introduce the pest’s natural enemies and provide a natural habitat for them: ladybirds, frogs, birds, lizards, bats, ducks.
- Use bacterium (*Bacillus thuringiensis*) commonly sold as Dipel, which causes stomach paralysis in caterpillars. Least toxic treatment - remember natural doesn’t necessarily mean nice.
- Use registered commercial natural or low toxicity pesticides containing garlic, pyrethrum and powdered borax (all readily available).
- Pyrethrum is a broad-spectrum insecticide – it kills beneficial insects as well as the pest. Since pests, like weeds, grow very fast they tend to come back first, and whenever we kill a beneficial insect we inherit its job.

There are lots of do-it-yourself low-toxic alternative pesticides. Details are available in books and on the Internet; however legislation prevents us from recommending recipes.

Note: some of these “old” remedies are fatal to humans as well as insects, eg, Rhubarb spray.

Tips for natural pest management

Eliminating weeds

- Hand-pull carefully, soak in water and use as liquid fertiliser (only after removing seed heads).
- Feed the soil to improve its quality.
- Spread mulch to prevent weed growth.
- Use boiling water to kill weeds between pavers.

Try companion planting

- Grow plants in groupings, eg, for potatoes use marigolds and nasturtium, for tomatoes use sweet basil.
- Mixing plants is always helpful in reducing pests.

Encourage beneficial insects and other species

- Grow flowers, eg, parsley, daisies, marigolds, sunflowers, Queen Anne’s lace, cosmos, tansy, coriander, yarrow, baby’s breath, nasturtium, white alyssum.

Sources:

McMaugh, Judy. 1998, What Garden Pest or Disease is That, Lifetime Distributors NSW
French, Jackie. 1997, Organic Control of Common Weeds, Aird Books Melbourne
Little, Brenda. 1989, Companion Planting in Australia, Reed Books P/L
Woodward, Penny. 1997, Pest Repellent Plants, Hyland House Publishers
Northern Sydney Waste Board
Guilds or Companion Planting
Canberra Organic Growers Society www.cogs.asn.au/;

Disclaimers

This information was believed to be correct at the date of its publication.

This Fact Sheet is for general information purposes only and should not be relied upon for legal advice.