

Natural Herbicides and Pesticides

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“Prevention is better than cure”. The creation of a delicate balance between soil life (millions of unseen microbes, worms, etc), animal life (beneficial insects, and a multitude of other insects necessary for pollination) and plant life (companion planting, etc.) is the single most important thing we can do to deter pests. Monoculture should be avoided! * *See charts at end for beneficial insects and companion planting*

Herbicides

General herbicide:

- ½ cup common salt
- 2 litre white vinegar
- 2 tablespoons organic dishwashing liquid

Dissolve and then brush it directly on the weeds. This is **not** a selective weed killer. It will kill anything it touches so care needs to be taken in its use.

Other methods of weed control include:

- Solarisation
- Cardboard/newspaper, weed mat
- Mulching
- Animals
- Boiling water
- Flame weeding
- Steam weeding

Pesticides

Horticultural Oil/White Oil

2 cups vegetable oil

½ cup organic dishwashing detergent/ ¼ pure grated soap

Add 2 tablespoons of the concentrate to a litre of water and spray liberally on infected areas.

Horticultural Oil is effective in the control of scales, aphids, white fly, leaf miner, mealy bug and mites on roses, citrus, stone fruit, and most house plants. *Be careful not to spray in hot weather as it can burn and avoid spraying soft leaf plants like lettuce and ferns. Also avoid using oil sprays within a month of applying a sulphur based fungicide.

All –round Pesticide/Insecticide

- 4 onions
- 4 cloves of garlic
- 4 hot chillies

Chop up and mix all ingredients together. Cover with hot soapy water and leave to stand overnight. Strain off liquid and add it to 5 litres of water.

Fungicides

Powdery Mildew Fungicide

- 2 litres of water
- 1 teaspoon vegetable oil
- 1 teaspoon organic dishwashing liquid
- 4 level teaspoons bi-carb soda

Mix together and spray liberally. The bi-carb soda makes the leaf surface alkaline and this inhibits the germination of fungal spores

Powdery Mildew Preventative Fungicide

One part milk to 10 parts water can be effective before powdery mildew becomes entrenched.

On the warpath!

Grasshopper, Caterpillar and Possum deterrent: Mix a cup of molasses into 1 litre of water and spray it over new foliage.

Nematodes: Add ½ a litre of molasses to 2 litres of water and use per 1½ square metres.

Slaters:

- Move mulch away from the base of seedlings
- Use beer/yeast traps.
- Cut an orange in half, scoop out the flesh and put skins amongst plants. Slaters will hide in them during the day and are easily collected and disposed of in a bucket of hot soapy water.
- Crunch up some newspaper, place in an empty pot plant, collect and then dispose of.

White Cabbage Butterfly

- Get a butterfly net and get the kids on the job.
- Check brassicas daily for green caterpillars and remove
- Disperse half eggshells amongst brassicas
- Dissolve 1 tablespoon of molasses in 1 litre of water and spray plants. Repeat after rain.
- Cut out some butterfly shapes from thin plastic and string up around plants. * See template.
- If all else fails cover with fine netting

Snails and Slugs

- A nightly patrol with a torch is probably the most effective method of population control.
- Clean up the garden to reduce breeding sites.
- Copper Tape around beds or young seedlings will create a barrier.
- 1 part espresso coffee to 10 parts water sprayed over leaves and soil will deter snails.
- Use beer/yeast traps.
- Scatter crushed eggshells around perimeter of garden beds.
- Spread some wood ash, lime, diatomaceous earth, wood shavings and sawdust around plants.
- On raised beds tack strips of fly screen around the edges.
- There is now organic snail bait (Multigard Snail and Slug pellets) made from chelates available.
- Escargo-Go is a copper barrier that can be sprayed around any snail habitats that lasts for several months, does not wash off and is safe around pets, children and wildlife.

Avoid monoculture by interplanting some of the following herbs and flowers amongst vegetables:

Pest controlling plants come under two categories - those that repel or confuse insects with strong scent, such as **sage**, **oregano**, **lavender** and **basil**, and those that attract beneficial insects, such as **dill**, **borage** and **fennel**. These plants often have flowers or foliage that attract insects that prey on other pests in the garden.

Pest repellent plants actually work in three different ways. The first -masking plants - include **thyme**, **lavender**, **marigold** and scented **geranium**. These produce strong, volatile oils and scent that actually masks the plants the insects might be looking for.

There are also repellent plants such as **cotton lavender**, **tansy** and **wormwood**. These plants produce a scent or taste that is so bitter or putrid it drives insects away.

Finally, there are plants that contain natural toxins or poisons which can be used to make sprays or washes. These include **fennel**, which can be used as a flea repellent for animals, **feverfew**, or **chamomile**, which can be used as an anti fungal agent, and the dried flower of **pyrethrum** or chopped **chilli**, which can be used as insect sprays.