

# A Pest Free Garden – The Organic Way

By Sam Adams

A gardener's worst nightmare has to be entering the garden and seeing the beloved veggie patch destroyed overnight by an army of invisible pests. If this has happened to you, you've probably found it immensely frustrating and somewhat discouraging.

When I first started gardening, my garden would suffer badly from pest attacks. Sometimes it was the aphids munching holes in my fat cabbage leaves. Other times it was the snails doing the damage. Occasionally, the chickens got out of their coop and ate my spinach and tomatoes. One time the goats escaped and ate nearly the entire garden!!

Through these trials and errors, I have learnt some natural pesticide remedies. Our garden is entirely organic, so I've worked hard at understanding what naturally deters the unwanted creepies. Now, our garden is entirely pest free. Here are some tips for you to avoid further heartache and frustration. I have divided the advice into short and long term solutions.

## Short Term Solutions

A short term solution is simply to **make your own organic pesticide spray**. This is easy, cheap, and effective against aphids and a variety of other flying insects. While commercially made organic pesticides are available at garden centres I like to make my own as there is immense satisfaction in being so industrious and you can even use some of your vegetables as the ingredients.



Tomato and basil grow well together

**The recipe** is very simple:

Mix together 5L of **warm water** with the following chopped veg: **two onions, four chillies, and four cloves of garlic**. Add 50ml of **liquid paraffin**, which is readily available at most pharmacies. Let this stew for a couple of days and then strain into a spray bottle. I use one of those bags used to hold oranges as a sieve. After that, use bar soap to create a lather with your mixture. Spray directly onto plants every seven to ten days or as needed. The strong smelling ingredients is what acts as a repellent.

For **snails and slugs**, there are a couple of very simple solutions. Firstly, for those who don't know already, these little critters cannot resist a drop of beer. To catch them, all you need to do is place a small beaker in

the ground and fill it **half way with beer**. The snails will be drawn to this and will be unable to get out of the beaker.

Because of their soft underbellies, snails and slugs need a soft surface to crawl upon. Covering your soil with **crispy and sharp mulch** is therefore another way of deterring these pests. Use **crushed egg shells** or **sea shells**. A dry and crispy leaf will also work such as oak leaf.

For the snails, you may also want to try running a piece of smooth pipe such as those used for irrigation. Place it on top of your soil and the snails are likely to enjoy the smooth plastic and travel along the pipe, away from the plants. At the end of the pipe, place an upturned pot. The snails will naturally hide in the dark and damp pot, ready for you to collect each morning.

### **Long Term Solutions – Intelligently Designed Gardens**

Far more effective and sustainable than the short term remedies are long term solutions. **An intelligently designed garden will naturally be pest repellent**. If you can design your garden wisely and plant specific species that are complimentary and naturally pest repellent, your garden will become **pest free without the need for any pesticides**. It requires careful and wise planning as well as patience for the garden to mature.

The key principle with this approach is ‘companionship’. Very simply, some plants are ‘friends’ and others are ‘enemies’. Some vegetables help others to grow. Some other plants should be included in your garden solely because they are pest repellent. The rule of thumb is that **whatever smells strong to you, will also smell strong to the pests**. Here are three easy steps for designing an intelligent garden:

1. **Create a ring of defence.**
2. **Use different structures and shapes.**
3. **Plant companion crops.**

**Ring of Defence** - Around the edges of your garden, plant strong smelling plants. Edible plants include the onion (**allium**) family – grand onions, spring onions, chives, garlic, shallots, and leeks. Non-vegetable plants can be placed around the edge of your garden too. These include lavender, nasturtium, geranium,



Growing vegetables in raised beds

and marigold. **Wormwood** is another useful plant. It is a very strong herb that has medicinal properties and it is renowned to repel all sorts of pests. Plant this at the edge of your garden, well away from any other crops as it will also deter their healthy growth!

**Use Different Structures** - Pests attack at different levels. If you have a variety of structures than there wont be a build up of one specific type of pest. On my farm, we've got climbing plants against the wall, standard flat beds, a raised circular brick bed, a raised oblong tyre bed, and a variety of different height and shape trellises.

Another key repellent is **mulch**. It is absolutely imperative that an organic garden has a thick layer of mulch on all the beds. In short, **exposed soil is bad**. Mulch is a top cover that protects and insulates the soil. In an organic garden it can be made of anything natural as long as there are no seeds. Try woodchips, bark, small twigs, dry leaves, dry grass clippings.

**Mulch decreases water evaporation by up to 60%**. This is a massive cost and environmental benefit. Mulch also decreases the soil loss caused by heavy rainfall or strong winds. In winter the mulch keeps some heat in. Lastly, the layer of mulch is like one enormous worm farm and a blanket of compost. The worms love the warm and dark layer beneath the mulch. They also eat and process the mulch and enrich the soil.

Lastly, the most important 'structure' in the garden is the soil. The **stronger the soil, the stronger the plants** will be. And strong plants will be naturally more able to repel and resist pests. Improve your soil quality by adding compost, worm castings, and mulch.

**Plant Companion Crops** - As I've said above, some plants are friends and others are enemies. Those that are friends help each other to grow strong, to produce larger fruit, and to resist pests. Those that are enemies have the opposite effect and will inhibit the healthy growth of each other. I include below a table of the most common winter plants and their companions.



Marigolds repel pests

Plant	Friends	Enemies
Beetroot	Garlic, Mint	Pole/runner bean

Broccoli	Rosemary, dill, onion family (allium)	Mustard
Carrot	Rosemary, allium, sage,	Dill, radish
Cauliflower	Rosemary, dill, allium	Mustard
Garlic	Carrot	Parsley, bean
Lettuce	Carrot, bean	Celery, parsley
Onion	Tomato, celery, pepper, carrot	Parsley, bean
Parsley	Tomato	Garlic, onion, rocket
Pea	Carrot, Bean	Onion, potato
Potato	Mint, carrot, allium	Dill, brassica, bean
Radish	Pea, lettuce	Hyssop
Turnip	Pea	Potato

**Good luck and happy gardening!** Remember to keep on going, even if there are discouraging set backs. Growing your own food is a journey of learning. You will only get better as each season goes by.




---

Sam Adams is based in Cape Town and runs Living Green, an eco-consultancy and vegetable gardening business. Visit his website [www.startlivinggreen.co.za](http://www.startlivinggreen.co.za), email [info@startlivinggreen.co.za](mailto:info@startlivinggreen.co.za), or phone 021-7892392.