



Worm farms

What is worm farming?

Worm farming is a great way to compost food scraps. Worms are wonderful creatures. They will eat most of your kitchen waste and turn it into a high-quality fertiliser, which can be added to your garden soil and your potted plants.

Why use a worm farm?

Worm farming is a great way to recycle organic waste, like food scraps from your kitchen, and help the environment by reducing the amount of waste going to landfill.

Stopping your food scraps going to landfill cuts down on greenhouse gas emissions because food waste in landfill doesn't properly decompose and instead creates methane – a greenhouse gas 21 times more potent than CO₂.

Did you know 50 per cent of household garbage is food and garden waste? Worm farming is an innovative and easy way to use this waste sustainably!

Worm farms are ideal if you live in a unit or are short of outdoor space, and really want to recycle or compost your kitchen scraps.

How do I get started?

Choose a Site

Pick a well-shaded spot so that your worms don't get too hot, especially in summer.

Collect Worm Food

Worms like to eat vegetable and fruit peelings, pulp from the juicer, tea bags, crushed eggshells, bread and small amounts of soiled paper and cardboard (such as shredded egg cartons). Smaller scraps are easier and quicker to digest so blend your scraps with water before feeding your worms. Worms' least favourite foods are dairy products (like butter and cheese), meat, fish, cooking fat, citrus peel and onions – so it's best to leave these out if you're new to worm farming.

Make a Worm Farm or Bed

You can buy worm farms ready to go - for example from Tumbleweed, your local nursery, or the Canberra Environment Centre.

If you don't want to buy a worm farm you can build one with boxes or make a worm bed in your garden. Use clean boxes made from wood, styrofoam or other plastic materials, with lids. Worm farms are typically 30 cm deep, 60 cm wide and 90 cm long, have holes in the base to allow air in, have good drainage and are covered with hessian or underfelt.

A base or tray underneath will provide good drainage and catch liquid that you can use on your garden.

Make some bedding from a combination of finished compost, leaves and soggy paper. The bedding should be torn or shredded to allow the worms to move easily. Make the bedding layer 10–15 cm deep. Now add between 1000 and 2000 worms. You can buy worms directly from commercial worm growers or through your local nursery. Spread the worms out gently on the surface and allow them to burrow down.

Start adding your kitchen scraps regularly and in small amounts by placing them in the box and covering them with bedding material or a handful of soil or compost.

Only add more food once most of the worms' previous meal has been eaten.

Harvest Worm Castings and Liquid

Worm farms turn your food leftovers into rich soil-like 'castings' which are great for feeding house plants, adding to seedling mixes and potting soils or top-dressing around plants.

To harvest the castings, move the worm castings / compost (vermicompost) all to one side of the worm farm and add fresh bedding to the empty side. The worms will migrate to the fresh bedding in a few days so that the valuable worm castings can be taken out and used. Dig the castings into the soil around your veges.

The liquid 'worm tea' produced by your worm farm is full of nutrients too – dilute and use it on your pot plants. Make sure you check the base tray and remove the liquid regularly, especially

after rain, or the worms might drown! They're not the best of swimmers. Dilute the liquid to the colour of weak tea and pour on your veges' leaves or the soil around the plant.

What kinds of worms can I use?

Compost earthworms, which go by such names as: tiger worms, red wigglers, and Indian blues, can tolerate the rich conditions of worm farms.

Ordinary garden earthworms do not do well in worm farms, as the concentration of organic matter is too high for them. In the garden, though, they also aerate the soil and their castings increase a soils ability to hold water and nutrients.

Troubleshooting in your worm farm

Worms dying

- Too hot: Move to a cooler spot
- Too dry: Add water

Worms trying to escape

- Insufficient material: Add more bedding
- Too dry: Moisten bedding
- Too wet: Mix food with bedding
- Too hot: Move to a cooler spot

Worm farm smells

- Too much food: Mix food with bedding daily
- Not enough air: Leave the lid partially open and add more ventilation holes
- Feeding with wrong foods: Remove any meat or fats
- Worms have died due to very hot conditions: Move to a cooler spot and get more worms

Suggestions for further reading and viewing

Canberra Environment Centre

www.ecoaction.com.au/resources/backyard/worm-farms/

Tumbleweed

www.tumbleweed.com.au/WormFarming.aspx

NSW Environment & Heritage

www.environment.nsw.gov.au/downtoearth/worm.htm
