Worm Farms

Worm farms for offices and businesses

Worm farms enable offices and businesses to turn waste organic matter such as kitchen scraps, food leftovers, grass clippings, and coffee grounds into rich healthy soil. This can be used in the grounds of your site or taken home for domestic gardens. Sending less waste to the landfill cuts down on your waste removal costs, extends landfill life, and reduces the air and water pollution that landfills produce.

What do worm farms produce?

Worm farms produce three products, all of which are useful. These are:

- Worm casts or faeces, which are high in nutrients. These can be mixed with potting mix, garden soil or used as mulch.
- Vermi-liquid, which is the liquid that drains through into the collection bin. This is very high in nutrients and can be used as a liquid fertiliser once it has been diluted with 10 equal parts of water. Diluted vermi-liquid can be used on office plants and in the garden.
- More worms. Over time your worms will breed and outgrow the space available. You can then remove some worms and give them to other people to start their own worm farms.

What is a worm farm?

A worm farm consists of a "collection container" (the bottom bin), one or more "working bins", and a secure lid. The lid needs to have tiny holes to allow the worms to breathe but not escape. The working bins are stacked on top of the collection container. Divider lids separate and support the working bins. These have larger holes in them that allow the worms to move between the layers, and the vermin-liquid to drain through to the collection bin (see drawing) It is ideal to get a collection container with a tap, so that you can easily collect the vermin-liquid.



How do I set up my worm farm?

Once you've got your bins, setting up the worm farm is straightforward.

- Fill your working bin about 1/3 full of soil or potting mix.
- Place the working bin on top of the divider lid and collection container
- Spray water over the soil or potting mix to moisten, add your tiger worms or red worms, and a little food
- Place some form of bedding over the soil and worms. This can be damp newspaper or sack and carpet (newspaper will need to be replaced at a later date as the worms will eat it. It is a great source of fibre for them).
- Finally place the lid on top of the working bin

Where do I get worm bins and worms?

Worm bins are available from the Warehouse, Pickwick worms <u>www.worms.co.nz</u> and Natural Waste Solutions <u>www.wormsrus.co.nz</u>. The latter two sell the whole system (worms and worm containers).

What do worms eat?

Worms need to be fed regularly small amounts of fresh, food scraps. These should be mixed into the worms' bedding area. Take care not to over feed the worms. If rotting food accumulates on the top of the bedding mix you are giving too much food to the worms.

What can go in a worm farm?

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Food leftovers	Meats, Fat and oils
Vegetable peels	Bones
Coffee grounds	Acidic food such as lemons, oranges & kiwifruit
Tea Bags	Spicy food such as onions, garlic or curry
Grass Clippings	
Sawdust	
Vacuum Cleaner Dust	
Shredded Newspaper	
Egg shells	
Wood Ash	
Blood & Bone	

How do I look after the worm farm?

To prevent unwanted insects in your worm farm, mix the worms, their food and bedding in the working bin every few weeks. A layer of newspaper also helps prevent flies from laying eggs on the food scraps.

After several months the working bin will become full of worms and worm casts. At this stage you can collect your worm casts to use on your garden, but first you need to separate your worms from their casts. The easiest way to do this is to add a second working bin on top of the existing one. As fresh food is placed in this top bin the worms will slowly crawl through the divider lid and come up from the lower bin.

The vermi-liquid in the collection bin needs to be removed every few weeks. This can be used as a liquid fertiliser once diluted. Using vermi-liquid means gardeners do not need to use chemical fertilisers.