



Worm Farming

Worm farming is an easy way to dispose of kitchen waste. You can keep a worm farm inside in a garage or spare room, or outside in the shade.

You can buy worm farms from hardware or gardening stores. Alternatively, you can make your own from two polystyrene boxes.

One small worm farm can consume the kitchen waste created by a two or three-person household. Worm farms can also be made on a larger scale in old bathtubs and other containers.

Make your own worm farm

Materials

You will need:

- Two polystyrene boxes, such as broccoli boxes (one should have a lid). Additional boxes will be required as you harvest worm castings.
- A piece of fly screen or shade cloth to fit in the bottom of the box
- A piece of hose or tubing about five centimetres long
- 1000 worms
- 4 bricks
- Garden soil and/or compost, shredded paper and food scraps
- Screwdriver or pen.

Method

In the box which will be the base, place the hose or tubing through the end of the box close to the bottom. The base box is needed to harvest 'worm tea' when your worm farm is established. Using a screwdriver, make evenly spaced holes in the bottom of the box which will be on the top (this will be for drainage).

Place the screen (or similar) in the bottom of the box over the holes. This will stop the worms from falling through into the tray below. Place this box on top of the other box.

Spread garden soil and/or compost over the screen in the top box. You can add shredded newspaper at this time and mix with the soil. Lightly water the soil and paper. The paper will help feed the worms for about a week if you do not have any food scraps.

Spread the worms evenly over the soil. If you have food scraps, cut them into small pieces and add to the top of the soil and worm mixture. Place the lid on top of the box. If you do not have a lid, you can use a moistened hessian bag, newspaper or something similar.

Your worm farm will produce worm castings and liquid known as 'worm tea'. The 'tea' is an excellent replacement fertiliser in your garden or pot plants. Place a bucket under the hose at the bottom of the box to capture the liquid as it drains out. Before using the 'tea' you must first dilute it until it is the colour of weak tea (approximately 1:10 ratio).

Set up the worm farm on the bricks in a nice cool place away from heat.

Feeding your worms

Feed your worms in the top tray. You can feed your worms every day or even once a week.

If you produce a lot of food waste, you may have to use a compost bin to take care of the rest or make another worm farm.

FACT SHEET

Worm Farming Fact Sheet

Compost worms eat almost all nitrogen-rich materials you would add to a compost heap, such as food scraps, lawn and garden clippings and paper. The smaller the material is, the faster it will be consumed.

Feed the worms with hard vegetables such as celery, pumpkin, carrots and broccoli stems if you are going to be away for an extended period of time.

There are some ingredients you should avoid placing in a worm farm:

- citrus
- onions and garlic
- chilli
- dog and cat manure
- meat and dairy.

Harvesting the castings

As the worms consume the food in the main tray, they produce castings that are nutrient-rich, dark in colour and resemble soil. When the main tray is full of castings, it is time to add another feed tray to your worm farm. Create a new tray the same way as the original top tray to add a third layer to your farm. The worms will move up to the new tray when there is no food left in the first feed tray. This may take several months. Once the worms have migrated to the new tray, you can harvest the castings.

Alternatively, you can expose the castings to the sun and the worms will burrow away from the light. Scrape off the top layer of castings.

You can use the finished casting in a variety of ways –

- Make potting mix using an equal amount of castings to garden soil.
- Digging the compost/castings into the top 10-15 centimetres of soil in your garden beds before planting or into your established garden beds, taking care to keep it away from plant stems.
- Using it as a top dressing for your lawn.



Hanging Worm Farm

Solving worm farm problems

| Problem | Cause | Solution |
|---------------------------------------|---|---|
| Smelly | Too much food Not enough worms Not enough oxygen Too acidic | Reduce food Add worms Aerate by stirring Add dolomite or garden lime |
| Slow to break down | Food pieces too big Too much food Cold weather | Cut food into smaller pieces Reduce food Feed less during cold weather |
| Other creatures in worm farm | It is normal for small insects or other creatures to be attracted to the food. Some animals can help with the decomposition, others may harm the worms. | Place feet of worm farm in bowls of water, or wipe Vaseline on the legs (ants) Stir food scraps into castings Add extra water |
| Vinegar flies around worm farm | Too much food Exposed food | Reduce food Stir food through |
| Worms are dying | Too wet Too dry Not enough food | Add shredded paper Add water, place in shade Feed more often |

Source: Brisbane City Council website

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