

WORM FARMING

Did you know the average red lidded waste bin within the Canada Bay Local Government Area contains more than half food waste? This food waste, instead of being sent to landfill, can be utilised in a worm farm where it will be converted into a nutrient rich soil-like material for your garden.

What is a worm farm?

A worm farm is a tiered structure that houses compost worms, the food waste fed to them and the nutrient soil-like material referred to as worm castings that they produce. Worm farms also produce a nutrient-rich liquid referred to as worm 'tea' or 'juice' that can be diluted and utilised on gardens. Every worm farm is a living system with a life cycle of its own. By having a worm farm you can reduce your food waste and receive free fertiliser for your garden that improves moisture retention and nutrient levels in your soil.

You can feed worms

- ✓ fruit and vegetable scraps
- ✓ vacuum cleaner contents
- ✓ coffee grounds
- ✓ egg shells
- ✓ cotton rags
- ✓ pulp from the juicer or blender
- ✓ paper towels/napkins and serviettes
- ✓ woody twigs, sticks, weeds and prunings
- ✓ tea leaves and bags (string and all)
- ✓ small amounts of bread
- ✓ small amounts of wet newspaper and unbleached cardboard

Do not feed worms

- ✗ dairy products
- ✗ bones, meat and seafood
- ✗ citrus, onion and garlic
- ✗ dog, cat or human faeces

How to establish a worm farm

Step 1: Worm farms can be created using a standard worm farm, tiered boxes (for example, polystyrene boxes) or a worm farm bed made in your garden. Worm farms are typically 30 cm deep, 60 cm wide and 90 cm long and have holes for drainage and air flow. Whichever system you choose, make sure it is easily accessible and in a temperate well-shaded location so the worm farm does not get too hot.

Step 2: Establish a base or tray for the collection of the worm juice. This tray must have a hole or tap and ideally be positioned on legs or a crate so a bucket can collect the liquid. Always keep the tap open to allow the liquid to drain.

- Step 3:** Add a second tray on top of the base tray. This tray will have holes in its base so liquid can drain through to the base tray. This second tray will be the 'home' for the worms. Fill this with a mixture of mature compost, potting mix, wet torn paper and/or leaves to form the bedding.
- Step 4:** Now add between one and two thousand worms. You can purchase worms from a local nursery or hardware store, a commercial worm grower such as Compost Revolution or harvest some from an established worm farm. The worms will burrow into the bedding as they do not like light.
- Step 5:** Place the third 'feeding' tray on top of the home tray, ensuring that the bedding meets with this top tray. This will allow the worms to move between the trays (worms can't jump). Add some compost or potting mix to this layer, followed by some food scraps. Worms do not have teeth so the smaller the scraps, the faster the worms will consume it. When adding food waste to the worm farm, it is best to sprinkle some potting mix or compost over the waste as this provides some grit for the worms to grind the food.
- Step 6:** Cover the feeding tray with a worm blanket or a hessian sack, followed by a lid. This will deter pests while keeping the worms moist. Always place the food waste under the blanket when feeding the worms. A brick or something weighty might be helpful in keeping the lid on top of the feeding tray and deterring large pests.

Frequently asked questions

1. How much food should I put in my worm farm?

This will depend on the number of worms and the temperature of your farm. Worms like soil temperature around 20 – 25 degrees Celsius. If it is too hot or cold, the worms will slow down and eat less. If you over-feed the worms, the worm farm will start to smell. To rectify this, use a stick or your hands to aerate and mix the contents of the feeding tray and add some more soil to provide the necessary grit. Avoid feeding for a few days while monitoring the progress. Practice makes perfect and you will soon form a routine for feeding your worm farm.

Solutions to common worm farm problems

1. **Odour** – if your worm farm smells it is because it is either too wet and doesn't have enough air or the worms are over-fed. Aerate and mix the feeding tray to aerate it. Avoid feeding for a few days and remove any mouldy food scraps. When pouring water through the worm farm no more than weekly, ensure the tap is open and water is not stored in the base tray.
2. **Attracting vermin** – vermin such as rats or mice are attracted to meat, bread and dairy products so avoid putting these in the worm farm. Aerate the feeding tray if vermin such as cockroaches are present (they dislike disturbance). Add some garden lime to reduce acidic conditions that attract cockroaches, vinegar fliers or maggots. Ensure the worm farm is covered to reduce the likelihood of vermin.