

Facts

- Tiger worms (*Eisenia fetida*) eat as much as their own weight per day.
- They are omnivorous, eating both plants and meat tissue, so most organic waste can be composted.
- Chopping food scraps into smaller pieces speeds up the composting process especially in indoor worm farms.
- Two handfuls of top soil in a worm farm provides the grit that worms need to grind their food and the micro-organisms required to break down the food.
- In ideal worm farm conditions the worm population will double their numbers every 40 days.
- Regular small amounts of food per day is recommended for your worms. The ratio of worms to food is 500 grams of worms per 400 grams of food.
- Worms dislike light and burrow deeper into the bedding to avoid it.
- 4 mm yellow/pink oval shaped cocoons contain baby worms.
- The 'Worm Tea' that is generated from the worm farm is highly nutritious as a fertiliser. Before applying it to your garden, dilute it to a very weak tea coloured solution with water.
- Worms breathe through their skin and cannot eat or process cooking oils, oily foods or dairy products.

Advice

- A monthly light sprinkle of dolomite or garden lime is desirable to ensure a non acid environment for your worms.
- Grass clippings and garden waste are not suitable for the worms as the material heats up too quickly and can kill them.
- During the winter the worms may need an extra blanket to keep them warm as they do not generate heat
- Conditions can become toxic for worms if they have been overfed. The farm becomes compact and the airflow restricted.
- If odours and flies are troublesome it could be because:
 - Conditions have become slimy from feeding oily foods or dairy products. Remove these foods from the worms diet.
 - Freshly applied food has not been covered with light bedding material. Bury just below the surface of the farm (not too deeply) in the bedding.



Christchurch City Council

A Guide to Worm Composting



For more information

Telephone 941 8999. Email: waste@ccc.govt.nz
Or visit our website: ccc.govt.nz/composting

What is worm composting?

A wormery is a self-contained composting system which has leftover organic materials, worms and other micro-organisms. When properly maintained it is odourless.



Why compost with worms?

It is an easy way to recycle kitchen food waste requiring minimal effort and a little knowledge.

Worms are a simple, cost effective and natural way of making rich compost from organic waste.

Worm compost (Vermicast) and Worm Tea (liquid fertiliser) can be added to soil to improve soil fertility, moisture retention and plant growth.



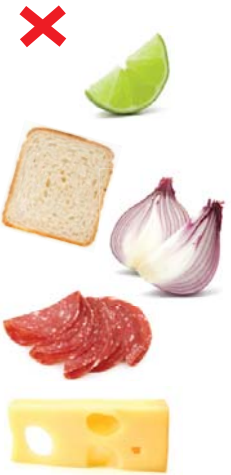
On the Menu:

- Fruit
- Tea leaves and coffee grinds
- Egg shells crushed
- Vegetables

(Chop the food for faster consumption)

Off the Menu:

- Citrus
- Bread
- Onion and garlic
- Meat
- Cooking oil
- Dairy products



1. Setting up a wormery

Find a suitable container, bedding material and worms. A suitable container can be an old bath, a wooden or plastic crate, a stack of car tyres or alternatively you could buy a ready-made worm farm. The container must have a drainage hole in the bottom.

2. Choose a site

Find a shady spot inside or outside, the ideal temperature for worms is between 12–25 degrees celcius.

3. Making the wormery

Ingredients

- Shred and soak newspaper. Squeeze out some of the moisture and spread across the bottom of your container. Leaves and straw may also be used plus a few handfuls of soil.
- Add food scraps.
Refer menu overleaf for recommended worm diet.

4. Add worms

The species of worm recommended for worm composting is the Tiger Worm (*Eisenia fetida*).

- Cover new food and worms with moist shredded newspaper to discourage flies.
- Cover your worm farm to provide insulation from the heat and cold. Place a heavy cover on top of the farm to conserve moisture and provide a dark environment for the worms.
- Place a container under the worm farm drainage hole, to capture the Worm Tea that is produced from the farm.

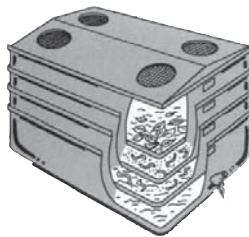
5. Harvesting the compost

Within six months the bedding, along with the food waste, is converted to worm castings (Vermicast). It becomes heavier and more compact, and changes to a dark brown soil-like material. The quality of the worms environment has diminished so it is now time to remove some or all of the compost.

- Simply add food scraps to one side of the bin only. The worms will gradually move over to these food scraps. The Vermicast can then be removed.
- Place fresh bedding in the space created.
- Vermicast and Worm Tea is nutrient rich. Mix into your garden soil or top dress container plants.



Plastic wormery bins



Different types of commercial wormeries are available



Use an old bathtub, a wooden or plastic crate or make a stack of rubber tyres

Food scraps



Recycled into



Vermicast

