

# sustainable illawarra

## fact sheet - waste



### Worm Farming

#### Introduction

Worms are wonderful garbage disposers. In ideal situations they can eat equivalent to their body weight of food scraps a day. Worm castings are a rich soil conditioner or plant food. Worms can be used to recycle organic wastes from the kitchen into valuable garden fertiliser (liquid and solid). Worm castings make nutrients up to 10 times more available to plants as they are so highly refined and easy to assimilate by small roots. Castings are mostly around pH 7 (neutral) – ideal for most plants. Worm castings increase the water holding capacity and drainage of soils and the level of essential microbial activity in the soil. As well as all this, castings also improve drainage and aeration (porosity) of the soil.

#### Setting Up A Worm Farm

- You can use small containers (such as styrofoam box) with drainage, or purchase a commercially produced worm farm.
- Locate the container in a shaded area that will not get too hot or too cold, worms prefer temperatures between 20 and 25°C.
- Place a few sheets of moistened newspaper on the base of the tray. Some commercial bins include cardboard for this.
- The worms need bedding to live in. Bedding is easy to make. It is a mixture of shredded newspaper and either composted horse or cow manure, worm castings or coco peat. Add some soil for grit, then add water so that the mixture is as wet as a lightly squeezed sponge (i.e., you can just squeeze drops from it). Some commercial bins include a fibre material for use as bedding.
- Make the layer of bedding 10-15cm deep.
- Add 1000-2000 worms to the surface. There is no need to bury them as they will quickly move away from the light (see over for worm suppliers).
- Cover with a damp hessian sack or newspaper and leave for a week. This allows the worms to adapt to their new home.



#### Adding food scraps

- Begin adding small amounts of food scraps in shallow troughs.
- Only add more food scraps when the worms have worked through the existing scraps. After a number of months, you will be able to increase the amount of food.
- Add small sprinklings of lime if a lot of acidic materials (fruit peelings, etc.) are used.
- Shredding food scraps will speed up the worm system. Add water if the bedding material becomes drier than a lightly squeezed sponge.



waste

## Harvesting worms and castings from a single box

When the entire container has been converted to castings (worm manure) you can harvest the castings and the worms as follows:

- Empty the contents of the container onto a table or other flat surface.
- Leave the material for a few minutes to allow worms to bury away from the surface
- Scrape away the outside layer of material. This should be mostly free of worms.
- Leave the material again to allow the worms to burrow further.
- Continue scraping the castings away, layer by layer.
- At the end, you will be left with a ball of worms, ready to use again.



## Uses For Worm Produce

- Plant food—add a 3 to 6cm layer of castings around plants and the drip line of trees. Cover with mulch. Dilute the worms juice so that it is the colour of weak tea. Pour the juice around the drip line.
- Potting mix—add 10—20% castings to a poor potting mix

## What should I feed my worms?

Feed your worms a variety of materials, and try to chop up food before adding to your worm farm.

- Fruit and vegetable scraps
- Coffee grindings & tea bags
- Paper
- Damp cardboard
- Hair & vacuum cleaner dust



## What shouldn't I feed my worms?

Try and avoid feeding your worms the following materials to avoid attracting maggots or having a smelly

- Manures
- Acidic Foods (onions, citrus, garlic, shallots)
- Garden waste
- Dairy products
- Meat
- Materials contaminated with toxic chemicals

## Further Information

Kiama Municipal Council (business hours) 4232 0444

Shellharbour City Council (business hours) 4221 6111

Wollongong City Council (business hours) 4227 7111