Red Worm Composting

Red Worm Composting (vermicomposting) is composting food waste using earthworms and microorganisms, generally in an enclosed bin. Vermicomposting turns organic waste into black, nutrient-rich humus, which is a good source of plant nutrients. It is an easy way to reduce garbage sent to landfills and to make very high-quality compost for your plants. Red wiggler worms (Eisenia foetida) are used because they process the largest amount of food waste of any worms, and they reproduce well in confinement.

Worm castings (also called vermicompost) are a great slow release organic fertilizer for your garden and containers. You will be amazed at the impact such small creatures can have in your garden.

Sky sells cedar worm boxes for outside use and the stackable worm factory for indoor use. You can also make your own worm box. The box should be well ventilated and reasonably vermin-proof. A long low shape is best; red worms prefer to live near the surface, so the bedding should not be deeper than it is wide.

Allow one square foot of surface area per pound of food waste per week. (Example: if you built a box 18" deep, 18" wide, and 3 feet long, your worms would have 4 ½ feet of surface area and could compost 4 ½ pounds of food waste per week.) We recommend weighing your food scraps for a couple of weeks until you have a sense for how much food waste you need your worms to process.

Food wastes to compost:

- Raw vegetable and fruit peels, cores, etc.
- Cooked vegetables, grains, and beans
- Egg shells
- Coffee grounds and filters, tea leaves or bags
- Leftovers: anything not greasy and not moldy

Keep OUT of your worm bin:

- Meat scraps or bones
- Cheese or milk products
- Greasy foods of any kind
- Cat or dog excrement
- Moldy leftovers

Setting up your worm box:

Choose a convenient location not subject to extreme heat or cold. If outside, place it close to the house in a shady area; direct sunlight could cook your worms. Some people have even have worm boxes indoors!

The worms need an absorbent bedding material. Shredded newspaper, peat moss, coco peat, or dried leaves can all be used. Soak your bedding thoroughly then squeeze out excess water. You

want the bedding to be just barely moist, like a dampened sponge. Ideally, let it sit for a day before adding the worms. It is important to maintain consistent moisture in your bin. When the weather heats up, placing a few sheets of damp newspaper on top of your bedding can help to maintain a good moisture level.

For the cedar worm boxes Sky sells (30" X 15") you'd usually start with 2 pint containers of worms (approximately 300). Just dump the worms in; they'll disappear into the bedding. "Feed" the worms with your food wastes lightly for the first few weeks while they adjust; after that you can feed according to your box capacity. Always bury your food wastes completely in the bedding so you don't attract fruit flies or other pests. Having extra bedding on hand to cover the scraps is helpful.

Harvesting your compost:
After about 6 months your worm compost will be ready. About two to four weeks before you want to harvest, push all the bedding into one half of the box. Add fresh damp bedding to the other side and start burying your food scraps in the new side only. After a few weeks, most of the worms will have migrated to the new side where the fresh food is. Dig out the old bedding; it should be dark and earthy smelling. Use it as you would any compost. Earthworm castings are considered especially rich in plant nutrients.

Recommended reading: Worms Eat My Garbage, by Mary Appelhoff.