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Agriculture and Natural Resources
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Healthy Garden Tips

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WORMS ARE NATURE'S RECYCLERS

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WORM COMPOSTING

Worm composting (or vermicomposting) is a natural and efficient way to "recycle" your organic kitchen waste. Even in cool winter weather where outdoor compost piles lie dormant, you can compost your food scraps indoors with worms, and reduce the volume of your household garbage by as much as 25%. The end result is worm compost, unsurpassed as an organic soil builder and plant fertilizer. Worms will compose 90% of all the materials given to them.

BENEFITS

- Worm compost contains 5 times more nutrients than regular garden soil.
- Saves you money by lowering garbage bills and replacing store bought soil conditioners.
- Helps garden and house plants by improving the soil fertility and health of your soil.
- Benefits the environment by recycling valuable organic resources and extending the life of our landfills.

GETTING STARTED

To get started you will need a worm bin, bedding materials, water, food scraps and a crew of hungry red wiggler worms.

CHOOSE A BIN

Buy a bin, or build one out of wood, plastic, an old dresser drawer, shipping crate or barrel. Make ¼" holes in the sides and bottom of the bin so that air can circulate. Worms breathe through their moist skin. You may also use a large compost bin for outdoor composts. Your bin should be at least 10 to 16 inches deep. Because red worms are surface feeders, deep bins are not necessary. The rule of thumb for bin size is two square feet of bin surface area per person in your household. A 2' x 2' worm bin would handle the kitchen waste from an average two person household.

LOCATION FOR THE BIN

Locate your bin where it will not freeze or overheat; in a pantry, kitchen corner, laundry room, garage, basement, patio, deck or in your garden. During the cold winter months it should be out of the rain or covered with a tarp.

MAKE A WORM BED

Worms like to live under lots of damp paper and/or leaves. This helps keep them cool and moist, gives them fiber to eat and prevents fruit flies from getting to their food. To prepare bedding tear black and white newspaper into 1" strips, mix with equal parts of dry leaves and soak them in water. Wring out and let drip until they are as moist as a damp wrung out sponge. Other items which may be added to basic bedding are

shredded, corrugated cardboard, compost, sawdust and straw. You may also sprinkle bedding with a few handfuls of soil or composted chicken manure. Do not use glossy newspaper or magazines.

FEED THE FIRST MEAL

Begin feeding your worms only a little at a time. As they multiply, you can add larger quantities of food wastes. Bury the kitchen wastes into the bedding regularly, rotating around the bin as you go. When you return to the first spot, most of the food you buried there should have been eaten. If not, just feed the worms less for awhile. Under proper conditions, two pounds of worms will process (eat) about seven pounds of kitchen scraps per week.

MAINTAINING YOUR WORM BED

FEED YOUR WORMS about a quarter (one pound) of fresh food scraps per square foot of surface area in your bin per week. To avoid fruit flies and odors, always bury food under bedding.

ADD FRESH BEDDING every 1-3 months. Always keep a 4" to 6" layer of fresh bedding over worms and food in your bin.

KEEP BEDDING SLIGHTLY MOIST as moist as a wrung out sponge. In a plastic bin, add dry bedding to absorb excess moisture. Wooden bins may require adding water occasionally.

HARVESTING WORM COMPOST

After a few months, you will notice that the bedding has been eaten. Used-up worm bedding is called worm compost or worm castings. This drops to the bottom of the container. You can begin harvesting the compost, which will look like rich, dark soil. Harvesting the compost and adding fresh bedding at least twice a year is really necessary to help keep your worms healthy. Here's how to harvest the finished compost and return your worms to the bin.

Using hardware screening, put the finished compost on it and place it on top of new bedding. Place the bin under a bright light or in the sunlight. Worms are light sensitive and will move down into the lower bedding. Pick out any wigglers or worm eggs and return them to the bin. If you plan to use the compost immediately, you do not need to dry it. However if you plan to store and use later, be sure to dry it so it will not mold.

Another method is to push the decomposed material to one side of the bin and fill the other side with new, moist bedding and fresh kitchen scraps. After a few days, the worms will move to the freshly filled side of the bin.

DO'S AND DON'TS IN WORM COMPOSTING

Worms are vegetarians who eat decaying plant material. Your kitchen scraps of vegetables, fruit, egg shells, coffee grounds, tea bags, clean paper towels, dead flowers and the manure of grain eating animals is the perfect diet. They do not eat seeds, cat and dog feces, meat, bones, and dairy products. If your delicious casserole was made with milk or cheese, the worms won't eat. Also, the smaller the food scraps the faster the worm will decompose them.

TROUBLESHOOTING

If your bin starts to smell, is too wet or there are many fruit flies then you need to correct this problem. Do not feed the worms; make fresh bedding and put it on top of the older bedding. Leave the bin for 2 weeks before you feed again.

USING YOUR COMPOST

After you harvest your worm bin and have nice compost, either wet or dry, you can begin to use it in many ways. You can add it to seed starter mix to give an extra boost to new seedlings. It can be dissolved in water with air and make a nice tea to feed your plants; it can be spread around your garden in a thin layer and then watered in. If you decide to store the compost, it should be dried first and kept in a container.