



VERMICULTURE:

USING WORMS IN THE GARDEN

Vermicompost is using earthworms to create amazing compost from your regular food scraps. (vermi is Latin for worm.)

The end product, worm castings and compost, creates a beautiful rich soil amendment. Many people call it "Black Gold" since it is so rich in nutrients. You will create larger yields in your garden, boost aeration of your soil, and reduce the impact of pests.



Creating your worm beds:

1. Purchase a system at your local garden center or online.
2. Build a wooden container using plans found on many online sites.
3. Purchase a tote bin and create your own.

Storage Bin Worm Bed:

Get a large storage tote with a lid. You will want something that will handle the amount of waste your family produces in a week. A general rule of thumb is 1sq. ft. of surface area per pound of food discards per week. You can start small and put the excess into your compost pile as usual.

To create your worm bin, you need aeration holes. You can do that a few different ways:

- 1) On either short end of the bin, using a hole saw, drill a 3 in. hole. Get a soffit vent and just insert it into each hole, or
- 2) Drill 4- 1/2 in. holes along the long sides of the tote bin. Either leave open or cover with hardware cloth, or
- 3) Drill 1/2 in. holes all along the top of the bin, or
- 4) Create drainage holes in the bottom of your bin. Drill 6, 1/4 in. holes around the bottom of the bin.



Add bedding:

Bedding materials include black and white newspaper strips, paper bags, office paper, cardboard, decaying leaves and coconut pith fiber (coir).

Whatever bedding you choose to use, soak it in a bucket of water for 5-10 min.

Wring it out well and fill your bin about half full. Let the bedding be like a wrung-out sponge, not dripping wet.

Add in a good handful of soil from the garden. This aids in digestion for the worms and will add some beneficial bacteria.

Add your worms:

There are well over 9,000 species of worms in the world and only 7 of them are used generally for Vermicomposting. Only one is recognized world-wide as being the best: the Red Wiggler, (*Eisenia Fetida*). It is recommended that worms be purchased from a reputable worm farm because there are so many species of worms. They can be bought for approximately \$30 for a pound of worms (about 1000 worms). Red Wigglers, (also known as Garlic Worm, Tiger Worm, and Manure Worm) are shallow dwellers. They are usually found within the first few inches of soil. They love to eat manure, decaying animal and plant matter, and rich compost. You will often find them munching away on your outdoor compost piles. Red Wigglers are a rust brown in color with alternating bands of maroon and yellow. They can grow up to 3 in long.

They like temperatures between 59 and 77 degrees F. So, in our area, keeping your bin in a protected area, like a garage or basement, is recommended. They will survive temperatures of 32-95 degrees F, if well

protected. If your container is outdoors, keep it covered from rain and from sun. Worms need some moisture so that they can breathe, but too much and they can drown.

How do I feed my worms?

Use a 3-prong garden tool to gently move bedding to one side. Be careful, as you don't want to injure your worms! Put in your food waste and cover again with bedding.

What to feed your worms:

Vegetable and fruit scraps

Crushed egg shells

Tea bags

Coffee grounds

Shredded paper coffee filters

Shredded garden debris

Pizza crusts

Breads and cereals

They love cantaloupe, watermelon and pumpkin.

DO NOT FEED:

Citrus

Garlic

Onion

Meat scraps

Oily food

Dog, cat or human manure

Compost:

Your worm bed will be ready to harvest anywhere from a few weeks to 6 months. You will know it is ready when the bedding has been changed to a brown to black, earthy-looking Vermicompost. One way to harvest your new compost, is to stop feeding the worms for a few weeks. Then, put new food only on one side of your bin. The worms will migrate to that side and you can safely harvest your compost. Repeat on the other side.

Resources:

"The Complete Guide to Working with Worms" by Wendy Vincent

"Worms Eat My Garbage" by Mary Applehof Rhonda Sherman, NC Extension Solid Waste Specialist

Rhonda has written many books and publications and has podcasts available. She is considered an expert in the field of vermicomposting.

You can purchase worms through several sources:

Your local garden center

A local Vermicompost expert

Online at:

Amazon

Uncle Jim's Worm Farm

CONTACT US:

Washington County Master Gardeners

wcmastergardeners.com

www.facebook.com/wcwimastergardeners

