

Vermicomposting (Composting with worms)

Why compost with worms?

Approximately 1/3 of a community's waste stream is food. Red wiggler worms (Eisenia fetida) can efficiently break down this waste and convert it into exceptional "dirt" known as worm castings. This process is called vermicomposting. The advantage of vermicomposting is that it can be done indoors and year round in a small amount of space.

Getting Started

Locate your worm bin in a cool location where the temperature will stay a constant 50-80 degrees. Place drip pan under base and one tray on the base. Soak bedding in chlorine free water and add to the bin with red wiggler worms (not provided). Place lid on top of the tray. Within the first couple of days, add a small amount of food to the bin. Mix in moist bedding as well. Add food in small amounts and make sure worms are eating well before adding more. Over-feeding your worms will cause problems. A good rule of thumb is to mix in an equal amount of moist bedding to food. Bedding should feel like a wrung-out sponge.

Good Bedding: shredded newspaper, sawdust, coconut coir, hay, shredded cardboard, peat moss, dried leaves. If using hay or leaves, be careful of introducing bugs.

Avoid: cat litter, glossy paper from newspapers, magazines, coated cardboard.

Good Food: Any fruit or vegetables, coffee grounds (and filters), tea bags (minus tag, string and staple), bread, grain **Avoid:** Meat, grease, fat, bones, dairy

Worms will eat their body weight in food and bedding each week, process a bin in 5-6 weeks and double in population in 4 months. It is recommended that you start with 1 lb. of worms (1000) for a 3 bin, 1-1.5 lbs for a 4 bin and 2 lbs for a 5 bin.

Managing your vermicomposter

When your bottom tray is filled (to within 1 inch from the top), add a new tray on top. The empty bin should be resting on the filled bin so worms can migrate. Add some moist bedding, a little food and more bedding. Within a couple days, worms will begin to move up into the new bin. Keep adding food and bedding until filled. Monitor moisture in both bins! Because the bins are wood, corners especially can dry out. It is virtually impossible for the bins to get too wet. Remember, the liquid from the top bin will filter into the lower bin. Repeat until all your bins are filled. Then remove the bottom bin, remove worms, remove castings and place on top of stack. One trick to getting worms out of the bin is to place bin on top of stack with the lid off and mix contents several times a day. Worms hate light and will move into the lower bin within a few days. The liquid collected in the bottom pan is "worm tea" and favorite treat for house plants.

Troubleshooting

Most problems encountered with vermicomposting are moisture related. Because your **Sacred Resource** vermicomposter is wood and not plastic, many of these problems are lessened.

Your vermicomposter should not smell. Strong odors are usually due to an overabundance of wet waste in the bin from too much nitrogen combining with hydrogen to form ammonia. Because your composter has exceptional air flow, bins being too dry is more likely. The bedding should feel like a wrung-out sponge. Don't over-feed your worms.

If your worms are exiting the bin, they are too hot or too dry. Happy worms will stay put. The solution is the same as above. Sometimes worms will "wander" so a single sheet of newsprint in the bottom of the bottom bin will help them stay put. Only do this in the bottom to start as newsprint will prevent worms from moving into upper layers.

If your worms are dying, check moisture and temperature. Worms need a constant temperature between 50 and 80 degrees and a **moist** environment.

Pests such as fruit flies may be attracted by certain materials and odors. They can get into the box, but they do no harm. Always bury your food to prevent fruit flies from laying eggs. Dry bedding such as shredded paper or sawdust on top of food should take care of the problem. An even better solution for fruit flies is to **make a simple trap**: take a clean glass jar and put an inch or so of apple cider vinegar (not white vinegar) or red wine into it. Add a few drops of dish soap to the liquid. Fruit flies will then slip in and drown. Place the jar on the floor next to the composter. Fruit flies are very easy to deal with **before** they get established.

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