
VERMICOMPOSTING

COMPOSTING WITH WORMS

WHY VERMICOMPOSTING?

Using worms to decompose food waste offers several advantages:

- It produces a free, high-quality soil amendment (compost)
- Worm poop, or vermicast, recycles nutrients back to the soil.
- It requires little space, labor, or maintenance;
- Free worms for fishing!



EQUIPMENT AND SUPPLIES

The materials are simple and inexpensive. All you will need are a worm bin, bedding, water, worms, and your food scraps.

WORM BIN

The bin size depends on the amount of food produced by your household. The general rule of thumb is one square foot of surface area for each pound of garbage generated per week.

The average family generates four pounds of food waste per week, so a box 2 feet wide, 2 feet long, and 8 inches deep should be adequate.

To provide the worms with air and for drainage, drill nine ½ -inch holes in the bottom of the 2-foot-by-2-foot bin. Drilling holes on the upper sides of your bin will also help your worms get needed oxygen and prevent odors in your worm bin. Place a plastic tray under the worm bin to collect any moisture that may seep out. Keep a lid on the bin, as worms like to work in the dark.

GETTING WORMS

It is important to get the type of worms that will thrive in a worm bin. Compost worms are NOT the worms you find in the soil. Soil worms require soil to survive so do not put them in a worm bin. It is **illegal to import worms** into the state of Hawaii*. Do not mail-order worms from the U.S. mainland or any other location outside Hawaii. Within Hawaii, there are various suppliers of compost worms - check the internet for details. Search "worms Hawaii".

*(and can result in fines of up to \$200,000)

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PREPARING THE BIN

The worms need bedding material in which to burrow and bury the garbage, in addition to food. Shredded paper or newspaper, and shredded cardboard are good bedding materials for worm composting. Do not use glossy paper or magazines. Soak the bedding well with clean water and then squeeze it to remove excess liquid. The bedding should be damp, like a wrung-out sponge. Worms will eat the bedding, so you will need to add more within a few months.



- Spread a 1–2 inch layer of damp bedding on the bottom of the bin
- Add compost worms to the bedding; no need to spread them out.
- Add a small amount of food scraps to the bin, about 1–2 cups.
- Cover the scraps with another layer of damp bedding. Make sure all food scraps are covered with bedding material.
- Replace the lid. Excess moisture will drain to the tray below the bin. Remove any liquid and use it in your garden or outdoor compost pile.

MAINTAINING YOUR BIN

Worms like the “3 Ds” - Damp, Dark, and Dinner!

DAMP: worm bin bedding should be damp, like a wrung-out sponge, but not soggy. Worms will die or try to escape if the bin is too wet or dry.

DARK: worms are sensitive to light and should be kept in a *dark* environment. If worms are trying to escape, it is a signal that conditions are not ideal inside the bin. If the bedding dries out, use a plant mister to spray some water on it.

DINNER: worms love to eat! Feed your worms any non-meat organic waste such as vegetables, fruits, eggshells, tea bags, coffee grounds, paper coffee filters, and shredded garden waste. Break or cut food scraps into small pieces so they break down easier. Do not add meat scraps or bones, fish, greasy or oily foods, fat, tobacco, or pet or human manure. A pound of worms can eat up to 2 pounds of food scraps each day.

For more information: Small scale vermicomposting
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/HG-45.pdf>