VERMICOMPOST BIN

Don't think you have any room for composting -- small yard, apartment or condo dweller? How about a worm bin? Now, don't make that face. Worm bins are easy, don't smell, are a great way to recycle food, and are lots of fun (kids love them) . . . and you end up with a great amendment/fertilizer for your plants (including house plants).

You can buy commercial worm bins, but making your own is easy and inexpensive.

MATERIALS & TOOLS

- Two 8-10 gallon plastic storage bins
- Drill (with 1/4 in. & 1/16 in. bits) for making drainage and air holes
- Shredded Newspaper or coconut fiber (coir)
- About a pound of redworms (available from worm farmers or your local nursery)

STEP 1

Drill about 10 ventilation holes on each side of the bins near the top edge using the 1/16 in. bit. Keeping the holes small will help prevent fruit flies from entering the bin.

STEP 2

Drill about 20 evenly spaced 1/4 in. holes in the bottom of the upper bin. These holes provide drainage; do not drill holes in the bottom of the lower bin.

STEP 3

Prepare bedding for the worms by shredding newspaper into 1-in. strips or soaking the coir in water for 30 minutes. (You can add coffee grounds to the mix, as well!) Worms need bedding that is moist but not soggy. Moisten the newspaper by soaking it in water and then squeezing out the excess. Cover the bottom of the bin with 3 to 4 inches of moist newspaper or coir.

STEP 4

Add your worms to the bedding. One pound of redworms will process 3 to 4 pounds of food scraps a week. There are about 1,000 worms in a pound. If you start out with less than a pound, don't worry -- they multiply very quickly. Add a handful of soil or finely ground eggshells to the bin to provide the worms with grit to help them digest.

STEP 5

Place bin in a well-ventilated area, such as a laundry room, garage, balcony, under the kitchen sink, or outside in the shade. Use the bin without drainage holes to catch liquid (leachate) that drains from the upper bin. This leachate is a great liquid fertilizer.

STEP 6

Feed the worms slowly at first. As the worms multiply, you can add more food. Bury the food in a different section of the bin each week. The worms will follow the food scraps around the bin. Covering the bedding and food with a damp piece of burlap or a sheet of newspaper or cardboard will keep down fruit flies.
WHAT DO WORMS LIKE TO EAT?

They are happiest on a vegetarian diet. Scraps that you would normally put down the garbage disposal can be put into your worm bin. Your worms will eat some foods faster than others - they have preferences just like we do. Worms need calcium to reproduce and grit to grind up their food, so add eggshells every once in a while.

**WORMS LOVE TO EAT:**
- Fruit Pieces & Peels
- Vegetable Pieces & Peels
- Coffee Grounds & Filters
- Tea Bags (no staple)
- Egg Shells
- Shredded Newspaper

**WORMS EAT SMALL AMOUNTS OF:**
- Citrus Peels & Pieces
- Spicy Foods
  (Hot Peppers, Onions)
- Plain Bread, Cereal & Pasta
- Leaf Litter

**WORMS DON'T LIKE:**
- Meat & Fish
- Dairy Products
- Oily Foods
- Salty Foods
- Woody Yard Waste
- Glossy/Shiny Paper

**STEP 7**

Harvest the finished compost when the first bin is full and there are no recognizable bedding materials. Do this by placing food scraps in one corner of the bin to draw the worms over to a compact area. Once the worms have migrated to one corner, you can scoop out the (virtually) worm-free castings from the rest of the bin. New bedding and food can then be added to restart the process over again. (Leaving in some finished castings is okay, and may help speed up decomposition in the new bin).

**TROUBLESHOOTING & TIPS**

<table>
<thead>
<tr>
<th>PROBLEM: Worms are dying or trying to escape</th>
<th>LIKELY CAUSE:</th>
<th>SOLUTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Too Wet</td>
<td>Add more bedding</td>
</tr>
<tr>
<td></td>
<td>Too Dry</td>
<td>Moisten bedding</td>
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<tr>
<td></td>
<td>Too Acidic</td>
<td>Less coffee grounds, citrus</td>
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</tbody>
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<table>
<thead>
<tr>
<th>PROBLEM: Bin smells bad</th>
<th>LIKELY CAUSE:</th>
<th>SOLUTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not enough air</td>
<td>Leave lid off or drill more ventilation holes</td>
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<tr>
<td></td>
<td>Too much food</td>
<td>Do not add food for a week or two</td>
</tr>
<tr>
<td></td>
<td>Too Wet</td>
<td>Add more bedding</td>
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<table>
<thead>
<tr>
<th>PROBLEM: Fruit flies</th>
<th>LIKELY CAUSE:</th>
<th>SOLUTION:</th>
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<tbody>
<tr>
<td></td>
<td>Exposed food</td>
<td>Bury food</td>
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<tr>
<td></td>
<td></td>
<td>Cover bedding with a damp sheet of newspaper or piece of burlap</td>
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> **Chop food into small pieces and bury it** to encourage faster processing and to prevent odors and pests.
> A worm bin takes about 3 months to turn to castings (if no bedding is added in the last 2 months).
> Other decomposers (bacteria, fungi, ants, sow bugs, etc.) will become part of the worm bin, especially if it is an outdoor bin. This diverse community is essential to the process!

**QUESTIONS? Call our ROTLINE: (760) 436-7986 ext. 700**

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