



DIY Worm Compost Bin



What is Vermicomposting?

- “Vermi” is the latin word for worm.
- It is the process of breaking down food scraps using worms (red wigglers).
- Worms work in partnership with fungi and microbes.
- A vermicompost bin can make compost in as little as three months!

What is Vermicompost?

- Vermicompost is worm castings or ‘poop’.
- It is ready for harvest when it is dark, crumbly and moist, and has a faint, earthy smell.

Benefits for you and your garden

- Provides a nutrient-rich, organic fertilizer and soil conditioner that contains water-soluble nutrients.
- Reduces waste and recycles a valuable natural resource.
- Teaches children about recycling, natural life-cycles and gardening.

How to Build and Use a Worm Bin

1. The Container

- Choose a shallow bin (20 to 30 cm deep) such as a wooden box or plastic tub.
- Drill 15-20 5 mm holes in the lid for air circulation.



2. Worms and their Home

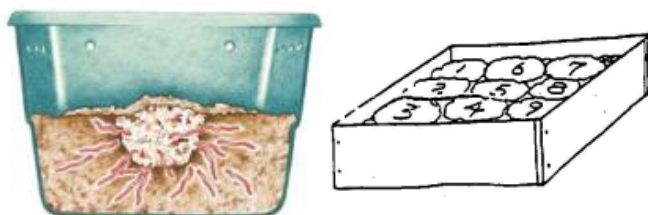
- Bedding provides the worms with a balanced diet and a damp, aerated home.
- Bedding should be light and fluffy to allow for air flow.
- Common bedding materials include a combination of garden soil, dry leaves shredded newspaper or cardboard, coarse sawdust, coconut coir, peat moss, etc.
 - Consider using equal parts garden soil, coconut coir and dry leaves.
- Add water to the bedding slowly, until it is moist like a wrung-out sponge.
- Now you can add the worms. Typically, one pound (~1,000 worms) of red wiggler worms works best for a family of four; however you can use fewer worms and let them multiply in your bin.

3. Collecting Worm Food

- Keep a container under your sink or on your counter for food scraps, such as:
 - Vegetable and fruit peels, coffee grounds/filters, tea bags, crushed egg shells, pizza crust, cereals, etc.
- Foods to be avoided:
 - Meat, cheese, butter, oily foods (peanut butter, salad dressing), or citrus peels (in large amounts).

4. Feeding your Worms

- Once your kitchen container is full, empty the contents into the worm bin (about once per week).
- Dig a hole and bury your food waste in the bin. A nine-spot system works well. If you bury your food scraps about once a week, you won't have to dig into a region that has food for nine weeks. By then, most of the food in that spot will be composted.
- Cover the food scraps with at least 3 cm of bedding materials.



5. Temperature

- The ideal temperature for worms is between 16 to 27°C (60-80°F).
- If your worms are outdoors, be sure to bring them in if the temperature drops below 5°C (40°F).

6. Harvesting Vermicompost

- The worms will have consumed most of the bedding in 3-6 months and worm castings can be harvested.
- There are two ways to harvest castings:

Move & Migrate Method:

- Move compost to one side of the bin.
- Add fresh bedding to the other side.
- Only bury food on the new side.
- In 6-8 weeks, the worms will have moved to the new side and you can harvest the finished compost.

Tiered/Layered Method:

- Obtain another shallow bin (same size as your original container).
- Drill 100-150 holes in the bottom.
- Place the new bin on top of the compost in the original bin so that the holes in the new bin are touching the compost.
- Add fresh bedding material to the new bin.
- In 6-8 weeks, the worms will migrate through the holes into the new bin and you can harvest the finished compost.
- Place the new bin (with the holes in the bottom) inside the old bin, so any extra liquid is caught by the old bin.



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Using Vermicompost

- Use as a top dressing for potted houseplants
- Add to base of bushes, shrubs and perennials
- Add to furrow when planting garden
- Add to seed starting medium
- Steep in water to make compost tea for watering your plants