

## WORM COMPOSTING (VERMICOMPOSTING)

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### What do I need to get started?

- Worm Bin - wood or plastic
- Bedding - Soil-less mixture of material high in cellulose (fiber) such as cardboard, newspaper, office paper, leaves. Should be moist and fluffy!
- Worms - Red Wigglers
- Food scraps
- Handful of soil or sand

### About The Red Wiggler(*Eisenia fetida*, *Lumbricus rubellus*)

- Leaf litter worms, not soil dwellers
- Consume one-half their body weight in organic matter, daily (2 pounds of worms can eat 1 pound of materials per day)
- Castings are 5-11 times richer in NPK than original food source
- Need lots of oxygen and moisture, they breathe through their skin!
- Sensitive to light and heat, they need a cool and dark environment
- Reproduce quickly and self regulate
- Become reproductive after 2-months Produce 2-3 egg cocoons weekly, which hatch 2-3 baby worms after 3 weeks

### Setting up the bin-

- Prepare bedding, not too wet or densely packed
- Fill bin 1/2 full with fresh bedding, add worms and fresh bedding on top
- Put in the worms and feed them
- Bury and cover food scraps with at least 1-2 inches of bedding
- Worms will not eat too much food during their first few weeks
- As the bedding becomes converted into castings, it is time to harvest.

### Worm Food

- Vegetable and fruit scraps
- Pasta & bread
- cooked beans
- Coffee grounds
- Tea leaves and bags
- Coffee filters & Paper towels/ napkins
- Eggshells

- Yard trimmings & cut flowers

NO: Animal feces or products, oil, cheese, dairy, meat, citrus or bones

### **Monitor your worm bin**

- Weekly feeding - but do not over feed. There should not be rotting produce in your bin
- Check moisture and temperature - move out of direct sunlight in summer, drain water from plastic bins regularly
- Harvest as needed - Too many castings can harm the worms

### **When and how to harvest**

- Harvest after 3-4 months of feeding
- Cut-off feeding 1-2 weeks before harvesting
- **Horizontal Harvest:** Move contents of the bin to one side. Add fresh bedding to empty side. Bury food scraps in the fresh bedding only. Worms migrate towards food source, leaving the other side as vermicompost.
- **Dump and Sort Harvest:** Remove top layer of bedding. Dump remaining contents onto a tarp or plastic sheet, form into small piles Remove tops and sides of each small pile, worms will continue to move towards the center. Add fresh bedding to bin and put worms and fresh food into the bin, cover with more fresh bedding

### **Troubleshooting**

- Worm Bin smells bad
  - Problem: not enough air flow, too much food, wrong food choices
  - Solution: add fresh bedding, feed less frequently, remove bad food choices
- Worms are dying
  - Problem: not enough food, too wet/too dry, not enough bedding/too many castings
  - Solution: add food, add dry bedding/wet bedding, harvest casting and add fresh bedding
- Fly infestation
  - Problem: food exposed
  - Solution: cover food scraps with bedding, cover bedding with sheet of plastic or newspaper

### **Use your worm compost**

- Add to potting mix
- Place inside holes for seeds and transplants in the garden
- Top dress around established plants, shrubs, trees
- Add to house plants and containers

### **Make Worm Tea**

Worm tea is a great organic fertilizer that you can use in your garden!

Step 1: Harvest castings and place in cheesecloth or old shirt creating a "teabag"

Step 2: Fill a five gallon bucket with water and place castings “teabag” in bucket

Step 3: Add one tablespoon of molasses to feed the microorganisms in your compost

Step 3: Let sit overnight and water plants with the castings in the morning

Step 4: (optional but recommended) Use a bubbler to aerate the worm tea