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## DO YOU RECYCLE?

Here is a way to increase the amount of materials you can recycle.

Using EM and EM Bokashi you can recycle, or pickle, food waste to make a valuable fertilizer for your gardens or potted plants. This is done by inoculating food waste in an airtight bag or bucket with a dried material known as EM Bokashi. EM Bokashi is fermented organic material made from EM, molasses, water and an inexpensive organic (high carbon) material such as rice or wheat bran, sawdust, dried leaves, etc. The EM Bokashi will ferment the food waste, preventing it from rotting, and therefore eliminate odor or the attraction to flies. You can make your own EM Bokashi or purchased from a Certified EM Provider or EM Distributor of EMRO USA([www.emrousa.com](http://www.emrousa.com))

When the bucket is full, it is left for at least one week to ferment (pickle) the food waste inside. The fermentation results in breaking lignin (fibers) in the food waste so the materials inside the buckets break down within two weeks after buried in the ground or incorporated into an existing compost pile. Please note the materials inside the bucket will not break down in the bucket. The fermentation is a stabilizing or preserving method during which vitamins, amino acids, and antioxidants are increased that will then be excellent nutrient sources for plants.

## HOW TO MAKE EM BOKASHI

### MATERIALS:

- 2 buckets with easy to open lids
- EM Bokashi (directions to make Bokashi are available at [www.emtechnologynetwork.org](http://www.emtechnologynetwork.org) in a separate leaflet)
- Food waste

## METHODS

1. Sprinkle a small amount of EM Bokashi on the bottom.
2. Add food waste (meat and dairy are fine, try to keep out extra moisture like, milk, etc.)
3. Sprinkle EM Bokashi on the food waste enough to cover it.
4. Incorporate the EM Bokashi into the new food waste to coat it with EM Bokashi.
5. After the bucket is full (which generally takes one week for two-three people), let it sit, tightly closed, for at least one week to ferment. (Allowing it sit longer is fine, just make sure the materials aren't too moist. This will cause rotting and odor.)
6. After fermenting, bury the contents and cover with at least 8 inches of soil so as not to attract animals.
7. After another two weeks, you can plant directly into the soil.

1



### ALTERNATE METHOD

1. Follow steps 1-6 above.
2. Incorporate the materials from the bucket into your compost pile, covering with at least 8 inches of compost materials.
3. Turn the compost pile as you normally would. The materials from the bucket will boost the anaerobic bacteria in your compost and add valuable vitamins, antioxidants, and amino acids to your compost materials. EM also encourages the growth of other beneficial microbes and prevents putrefaction in the compost pile.

## TROUBLESHOOTING

### THE MATERIALS IN THE BUCKET SMELL:

- Check to make sure you are putting enough EM Bokashi in the bucket. You should be averaging about 3lbs. per 5 gallon bucket.
- Check to make sure the lid is always closed tightly. When air enters during the fermentation stage, unwanted microbes can enter and begin putrefying the food waste.
- Add a handful of table sugar and incorporate into the food waste. Wait a day and check for foul odor.
- It still smells. For a 5 gallon bucket, mix a small batch (one Liter) of pre-activated EM1(1:1:20) and pour into bucket. Incorporate and let it sit overnight. Bury contents or incorporate into an existing compost pile.

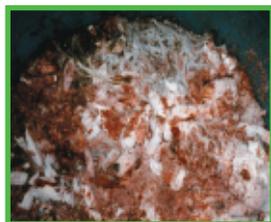
### THERE IS MOLD IN THE BUCKET:

- White mold is good. This is beneficial fungus that helps produce antibiotics (to suppress pathogens) and antioxidants. When applied to the soil, this fungus will also help with water retention in the soil.
  - Green or Black mold. This is not good. These are putrefying fungus and are usually the result of air infiltration, excess moisture, and/or not enough EM Bokashi.
- Dig a hole twice as deep as the bucket. Get an equal amount of EM Bokashi (if your bucket is 5 gallons, fill a 5 gallon bucket with EM Bokashi).
  - Place 1/4 of the EM Bokashi into the bottom of the hole. Add the contents of the "bad" bucket and cover with the remaining EM Bokashi.
  - Cover with 8 inches of soil and do not plant in for at least two weeks.

2



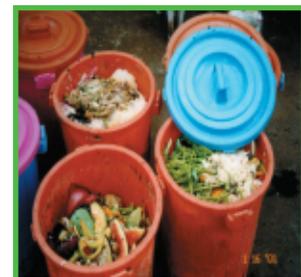
1. Fermented food waste in a bucket.



2. White mold on the EM Bokashi.



3. Fermented food waste incorporated into a compost pile that will be turned.



4. Food waste collected to be fermented in airtight buckets.