

# Bokashi

Bokashi is a Japanese term meaning “fermented organic matter”. Different from composting, which is aerobic, it is an anaerobic process that allows a person to deal with a wide variety of food waste on-site. Bokashi harnesses the power of effective microorganisms (EM) dehydrated onto a cereal base to carry out the fermentation process. **It is best used as a partner to a compost pile, because you will need a place to compost the ‘spent’ material once it has finished going through the bokashi process.** It is a great alternative to the digester (see Factsheet #3) as it breaks down the same types of materials but doesn’t need sunlight or to be buried down 2 feet in your garden work. You can make your own system or purchase a ready-to-use unit.

## Effort Scale:

Easy	1	2	3	4	5	Hard	Requires timing your bokashi operation so you can accommodate a constant waste stream and allocating a place to bury the residual fermented material, like a compost pile.
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## How to Use a Bokashi System

A bokashi system consists of a 5 gallon plastic bucket with a lid and spigot and the dehydrated EM or ‘bokashi bran’. The spigot allows you to drain off the nutrient-rich liquid that is a byproduct of the fermentation process. This liquid can be diluted and used as a plant fertilizer or even poured down the sink to unclog the drain! Because you will need to stop adding fresh materials and let the system sit and ferment until it’s finished, you will need a second bucket. Here’s what the process looks like:

1. Add your food scraps to the bokashi bucket. All food scraps can go into this system including meat, dairy, grains, oils, cooked food, as well as raw fruit and vegetable scraps.
2. Add a handful of the bokashi bran. You can use a plate to press down on the materials to squeeze out any air.
3. Continue adding food scraps as you have them available until the bucket is full.
4. Once the bucket is full, make sure the lid is on tightly and set it aside for 1-2 weeks.
5. While your first bucket sits and ferments, start a second bucket and repeat steps 1-3.
6. Drain off liquid at any time to dilute and use as fertilizer.
7. After 1-2 weeks, open the first bokashi bucket and place the decomposed material into a compost pile or trench it into the ground. Do not plant on top of this material right away, as it is still full of volatile organic acids that can harm plant roots. Allow another 2 weeks to pass before planting or using compost with this material in it.



<http://www.compostauy.com/bokashi-resource-page/>

## Resources and Places to Buy Bokashi

The Organic Gardener;s Pantry  
250-216-3733  
[www.gardenerspantry.ca](http://www.gardenerspantry.ca)

Cowichan Compost  
[www.cowichancompost.com](http://www.cowichancompost.com)

Eco Living Bokashi  
[www.ecolivingbokashi.com](http://www.ecolivingbokashi.com)

## Aerobic vs. Anaerobic Decomposition

*Aerobic decomposition* takes place in an oxygenated environment, like a compost pile or worm bin. It smells sweet and earthy and breeds beneficial microorganisms for your garden soils and plants.

*Anaerobic decomposition* takes place in the absence of oxygen, like when layers of organic material get too compacted or when you “drown” weeds in a bucket of water. This leads to *putrefaction*, which can have a sulfuric smell (or just a plain bad smell!) and breeds non-beneficial bacteria.

*Fermentation* is a form of anaerobic decomposition, however it is different from putrefaction due to the presence of specific strains of bacteria which the organic material is inoculated with. This is what is happening in a bokashi system, and what results in the ‘pickled’ smell. The bacteria involved are still beneficial to your garden. Because fermentation doesn’t lead to complete breakdown of your organic waste, you need to transfer the spent material (or ‘ferment’) to a compost pile or bury it in the ground for it to complete the decomposition process.

## Making Your Own Bokashi Bucket

1. Obtain two 5 gallon buckets, one bucket lid and one spigot from your local hardware store.
2. Drill drainage holes in the bottom of one bucket, insert this bucket into the second bucket.
3. Drill a hole in the side at the bottom of the second bucket that is just slightly smaller than the circumference of your spigot.
4. Twist the spigot into the hole. Presto!



<http://www.loveeverafter.com/blog/2012/4/16/diy-bokashi-bucket-composting.html>

## Making Your Own Bokashi Bran

One disadvantage to using bokashi system can be that you have to keep purchasing the bran inoculated with effective microorganisms. It is possible to make your own, however, if you have a food dehydrator.

1. Purchase effective microorganisms from the Organic Gardener’s Pantry.
2. Mix 1 part EM to 1 part molasses to 100 parts water.
3. Add to dry bran and mix until moist, but not wet.
4. Pack firmly into an air tight container, tightly place lid on top.
5. Let sit in a warm place for 1-2 weeks.
6. Dehydrate the bran in a food dehydrator.



<http://www.ecolvingbokashi.com/the-bokashi-store.html>



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