

Bring Bokashi to Your Backyard

By Jan Eppard

Note: Jan Eppard learned about bokashi at the Sustainability Fair in Fredericksburg. For several years she has been perfecting bokashi procedures in her backyard.

“Bokashi” is a Japanese term meaning “fermented organic matter”. In bokashi composting, an “EM Inoculant” is sprinkled over food waste in an airtight container. EM inoculant is an inert carrier, such as rice hulls, wheat bran or saw dust, infused with effective micro-organisms or EM. The EM are natural lactic acid bacteria, yeast, and phototrophic bacteria that act as a microbe community within the kitchen scraps, fermenting and accelerating breakdown of the organic matter. Once the fermentation is complete, the compost can be buried, placed in a modified compost pile or put into the bio-digester to complete its decomposition. The end product is rich, dark compost, ready for the garden.

- Who: Everyone can do it. It is simple to do and can be done in a home or an apartment.
- What: Bokashi is an anaerobic fermentation process, resulting in a much different end product than that produced via composting. Many people like bokashi because it is very easy, and generally free of bad odors. All that is needed is a bucket (with lid), some special bokashi mix, and organic waste.
- When: Just collect your food waste and throw in the bokashi bucket with bokashi mix (bran/sawdust inoculated with microorganisms). You’ll have results in two to four weeks.
- Where: Bokashi is convenient for all homes. Keep it in your kitchen, garage or patio. All you need is room for a container about the size of a 5-gallon bucket. You use a tight fitting lid, so there is no odor or mess if you store it inside. Unlike composting, it does not produce measurable gases and you will not notice any bad odors. It is safe to operate in the home. No methane gas is produced. The system is completely sealed, therefore no mice, rats, cockroaches, or other pests will be attracted to the fermenting organic waste. You will not be bothered by fruit flies or any other insects coming to the waste material, either.
- Why: Bokashi is used worldwide and reduces our dependency on chemical fertilizers and pesticides. Compost all of your food waste or organic matter including meat, fish, oily foods, and dairy. Organic waste makes up a considerable proportion of the total waste stream that ends up in the landfill (20-40%). You will be able to increase the nutrient level of your soil with the finished product. A by-product of the process is bokashi tea. This liquid forms during the process and is loaded with microbes and nutrients. If you dilute the tea 100 to 1 with water and then use it to water your indoor or outdoor plants, they will get the benefit of the nutrients and microbes. You may also pour the leachate down the drain to keep the drains clean. Bokashi leachate is safe for septic systems.
- How: There are 3 important things needed to get started with bokashi: 1) food waste materials ,2) a bokashi bucket, and 3) bokashi mix.
 - Waste Materials - You can add any type of food waste to a bokashi bucket. If you are an active composter you know that there are some materials not

recommended for a compost pile or worm bin: meats, oily foods and dairy. You can add these to your bokashi bucket. My first attempt included the turkey carcass from our Thanksgiving meal. I put it in the bokashi bucket, then the compost pile. It broke down completely within about 6 weeks.

- Bokashi Bucket: Experts typically recommend that you use a bucket with a spigot to drain the liquid that accumulates in the bottom as the waste materials decompose. You can purchase complete bokashi kits. Commercially made buckets have a false-bottom floor that keeps the waste materials separate from the leachate. Or, you can use a regular plastic bucket with a tight fitting lid. You can add a layer of shredded cardboard or simply newspaper in the bottom to help prevent excess moisture from pooling. You can also stack two buckets together. Just drill/poke holes in the bottom of the bucket in the top position so the leachate will drain into the bottom bucket.
- Bokashi Mix: The key component of a successful bokashi bucket is the bokashi mix - typically consisting of wheat bran inoculated with a special mixture of microbes, referred to as 'effective microorganisms', 'friendly microorganisms', or 'efficient microorganisms'. You may purchase this mix ready-made or you can also make it yourself.



For more information on Bokashi, try these websites:

<http://www.cityfarmer.org/bokashi.html>

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

http://www.bokashicycle.com/Merchant/merchant.mvc?Screen=CTGY&Store_Code=BS&Category_Code=PRDS&gclid=CL2B-fvk5q0CFYFgTAodXAwxFA