

DO YOU BOKASHI?

By Dee Nangle of The Big Green Directory

(www.thebiggreendirectory.co.za)

– type in Bokashi into the **keyword search**, or **category search by Recycling – Composting**)



I am the kind of person who likes useful gifts. I must have inherited that from my Mum. We love things like gardening/DIY equipment, plants, gadgets, gift vouchers to buy our own “needful things” and going to pantomimes!

So, the look on my husbands face when I said that my latest “needful thing”/hint for a gift for one of the “honour your wife/mother of my child/birthday” days of the year, was an absolute picture when I said the words, “I would really really like a **BOKASHI BIN**”. His reply was “A WHAT bin”? looking very dubious about what this item was now going to bring to the family home. My two wormeries are one thing - he sees and appreciates the amazing products that these two precious bins yield, acknowledges that are an integral part of our recycling system, but what was I now getting us all into. **Why do I want one.....** well, you see, **wormeries can't take ALL your scraps and waste** and it irks me that I can't put all my waste to good use.

Amazingly, everyone I have spoken to about a Bokashi Bin asks the same question, so, **as this is probably one the most amazing “new” HAVE-TO-HAVE items that any conscious homeowner can add to their toolkit of reducing the amount of kitchen waste** we throw away daily, (and with which each of us could be making you the most amazing compost and natural cleaner), this is what a **BOKASHI BIN** is all about.

What is a Bokashi Bin/Bucket?

The Bokashi Bin/Bucket system is a practical and convenient alternative for transforming kitchen waste into a nutrient rich soil conditioner. This unique composting system uses the revolutionary EM (Effective Micro-Organism) Bokashi to create the ideal conditions for airtight (anaerobic) composting, eliminating the odours and unpleasantness associated with putrefaction and decaying organic matter. There are many different versions of this system, all of which use the same EM to biodegrade kitchen waste into incredible compost you can use in your gardens.

Here are just 3 examples of ones available in SOUTH AFRICA:

(go to www.thebiggreendirectory.co.za and type in **BOKASHI** for listed suppliers):



How do you use a Bokashi Bin?

If you wish to Bokashi successfully, **you actually need TWO BINS**. One to use immediately, and when full, to allow it to stand and decompose and use the liquid from, and a second one to use while the first one decomposes and makes juice.

The key to the success of this system is the specifically designed Bokashi Bin/Bucket, and the use of EM Bokashi. Bokashi is a Japanese term that means “fermented organic matter”. EM Bokashi is a pleasant smelling product made using a combination of sawdust and bran that has been infused with Effective Micro-organisms (EM).

Obviously, your Bokashi Bin/Bucket will come with set up instructions from the supplier. Follow those and then:

- Place a 3-4 cm layer of organic waste on top of the grate in the bucket/bin before coating evenly with a layer of EM Bokashi. Use approximately one handful of EM Bokashi to every layer of waste.



Use more EM Bokashi when adding high protein foods such as meat, fish, cheese and eggs. Press down to remove air after every application a spatula does a good job to compress the waste.

In order to reduce the oxygen and create the conditions for the anaerobic fermentation process to take place, ensure that the lid is closed tightly after each application. A plastic bag can be used on top of the waste to further reduce exposure to oxygen).

- Repeat this layering process until the bucket is full, and top-up with a generous layer of EM Bokashi.
- ***Once the bucket is full to capacity, let the contents ferment for a period of 10-14 days at room temperature, continuing to drain off the Bokashi Juice regularly. While this full bucket of waste is fermenting, begin the process again in your second bucket. Wash the Bokashi Bucket after each use.***
- Once the fermentation period is over, you will see that the food has been preserved and now has an appearance similar to pickles.
- Now the waste can be buried.
- ***If you have only One Bokashi Bucket the waste can be buried as soon as it is full,*** obviously the waste on the top has not had much or any chance to ferment, even so, the waste will still break down quickly because of the micro-organisms mixed in.
- With two Bokashi Buckets the waste gets extra time to ferment, you will get more of the valuable Bokashi Juice and it is more convenient, however, this wonderful composting system will still work with just one Bokashi Bucket.

What can you put in your Bokashi Bin/Bucket?

You can compost almost every kitchen food waste including fresh fruit and vegetables, prepared foods, cooked and uncooked meats and fish, cheese, eggs, bread, coffee grinds, tea bags, wilted flowers and tissues. ***Do not include liquids such as milk and fruit juice, paper and plastic wrap, or meat bones.***

How do I know when I should transfer the contents of my Bokashi Bin into the soil?

Bokashi Compost will look different to other compost that has decayed. As the food waste does not breakdown or decompose while it is in the bucket, much of its original physical property will remain and it will have a pickled appearance. Breakdown of waste will occur after it has been transferred to the soil.

This is what it should look like before you bury the waste.



Why should I bury the Bokashi Compost in the soil?

Burying Bokashi Compost in the garden will supply the plants with a nourishing food source and condition your soil with enriching microbes. EM Bokashi has traditionally been used to increase the microbial diversity and activity in soils and to supply nutrients to plants.

To bury the Bokashi Compost:

- Dig a hole, add your fermented Bokashi Compost, mix with some soil and cover.



- If you do not have a lot of garden space you can create a Bokashi Compost Heap, by burying a large bottomless bucket with lid (30 litres and above is ideal). Mix in a bit of garden soil each time you add more Bokashi Compost to the bucket.

Or, you can use your Bokashi Compost in planter boxes, tubs or pots by placing it directly into the container for further fermentation and covering with soil. Complete breakdown of waste will occur a few weeks after it has been transferred to the soil. Fill 1/3 of the container with potting mix (new or used) then add the Bokashi Compost and mix with soil. Fill the remaining 1/3 of the container with potting mix and cover with a plastic bag to maintain anaerobic conditions. Wait two weeks before planting you favorite veggies or flowers, or transfer potting mix into smaller pots for planting.

Why is it so good for my garden?

Burying Bokashi Compost in the garden will supply the plants with a nourishing food source and condition your soil with enriching microbes.

The **Bokashi Bin/ Bucket composting system** significantly accelerates the composting process of organic waste. **Bokashi Compost is acidic when first dug in, but neutralizes after 7-10 days, so be sure plant roots do not come directly into contact with the compost, as it may burn the roots, particularly if the plants are very young.**

Fresh compost can be stressful to new plants so it is best to wait two weeks before planting your favorite veggies, flowers etc.

What can I use the BOKASHI JUICE for?

The amount and colour of the Bokashi Juice produced will depend on the type of foods you have put into The Bokashi Bin/ Bucket. Fruit and vegetables tend to release more liquid than other foods. Do not be concerned if little or no Bokashi Juice is produced.

Gardening:

Bokashi Juice can be diluted with water and makes a fantastic liquid fertiliser for the veggie, garden plants and pot plants. To fertilise an existing garden or pot plants use 1 teaspoon to 2-3 litres of water and apply directly to the soil. For trees and shrubs use 2 teaspoons to 2-3 litres of water. **Do not apply directly to foliage.** It is rich in nutrients and beneficial organisms that improve the health of the soil.

Cleaning:

It can be poured down kitchen and bathroom drains, toilets, and it is safe to use in septic tanks.

The microorganisms also break down slime and other organic matter in drains, helping to keep them clear and free of blockages, prevents algae build-up and controls odours.

Finally, when used for drains, it will help to clean up our water ways by competing with harmful bacteria.



Bokashi Juice cannot be stored and must be used within 24 hours after draining from the bucket.

What (if any) problems can occur with a Bokashi Bin/Bucket and what can be done to remedy them?

A successful Bokashi Bucket composting process has the following indicators:

The smell: Well fermented Bokashi Compost should have a smell similar to that of pickles or cider vinegar.

Appearance: Occasionally, particularly for longer fermentation periods a white cotton-like fungi growth may appear on the surface. This shows that a good fermentation process has occurred.

Unsuccessful composting can be detected by the following results:

The smell: A strong rancid or rotten smell

Appearance: The presence of black or blue green fungi indicates that contamination has occurred and the process has putrefied.

What are the causes of unsuccessful Bokashi Composting?

If you have noticed any of the above signs it is probably the result of:

- Not adding enough EM Bokashi
- Not replacing The Bokashi Bucket lid tightly after every use
- Not draining the Bokashi Juice frequently from the bucket
- Prolonged and direct exposure to sunlight or extreme temperatures

What should I do with the contents of the bin if this should happen?

If your fermentation process has struck problems, find a spot in the garden, away from plants and dig a 30-35 cm hole. Place 3 handfuls of Bokashi into the bottom of the hole tip the poor batch of compost into the hole and mix with some soil. Sprinkle another 3 handfuls of Bokashi onto the poor compost and fill the hole in with soil.

USEFUL TIPS:

- You can never add too much EM Bokashi; better too much than too little to ensure complete fermentation and good smelling compost.
- Only add fresh food waste to The Bokashi Bin/Bucket, never rotten or mouldy wastes.
- Break or chop large waste into smaller pieces.
- Remember - the less air that comes in contact with the compost the better so compact the waste by pressing it down to remove air. A plastic bag can be used for this.
- Always close the lid tightly and drain the Bokashi Juice that accumulates at the bottom frequently.
- Do not add water, excessive amounts of fluids or place the bucket in the sun.
- Wash the bucket after each use.
- The Bokashi Bin/Bucket has been designed to be used with EM Bokashi. Used with other products may result in putrefaction rather than fermentation of food wastes.

This is a new approach to composting. Don't be afraid to experiment with it until you get a feel for how this process can work for you.

So! **As a Bokashi Bin/Bucke system is extremely affordable (R399 and upwards) why don't YOU make a difference to your waste disposal** and be rewarded with a tangible byproduct? **If worms freak you out, here is a fantastic alternative to dealing with your scraps and organic kitchen waste.** I know mine is on the way and it will be such a delight to know that I say "born up a tree" (bon appétit) with absolute sincerity knowing that anything left over will never be wasted with my new **Bokashi Bin**.

"We do not inherit the earth from our ancestors, we borrow it from our children"
-Native American Proverb