

easy tips

On how to get the most out of your Earth Bokashi food waste recycling system.

#### Why recycle your food waste?

Other than being wasteful, when dumped into a landfill food waste emits 627kg/tonne of environmentally dangerous greenhouse gases.

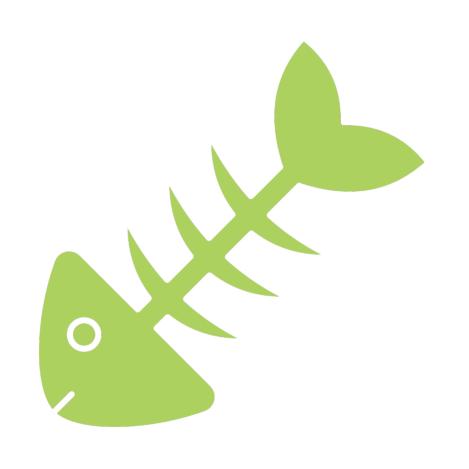
It also rots, stinks, attracts rats and flies, and pollutes our environment.

Recycling food waste turns this waste into a valuable source of nutrients for growing food. It enhances soil health by adding valuable organic matter and micro and macro nutrients.

And reduces greenhouse gas emissions by 617kg/tonne.

If the emission from food waste were calculated as a country, it would be the world's third largest emitter (after the USA and China).

Bokashi is a very simple way to pre-treat food waste so that it can be safely composted, trenched directly into soil, used to feed composting earthworms, or finished in an Earth Factory.



## What is "Earth Bokashi"?

"Bokashi" means "fermented organic matter" in Japanese.

Bokashi composting is a two step process. First, food waste is added to a closed bin and the inoculant (bokashi) is sprinkled on top of each layer of food waste. This starts a fermentation process, after which the contents of the bin can be trenched under soil, added to a compost heap, fed to composting earthworms, or processed in an Earth Factory.

Unlike other "bokashi", **Earth Bokashi** uses indigenous South African micro-organisms and waste materials (which would otherwise have gone to a landfill).



# What do you need to "bokashi" your food waste?

You only need an air-tight bin (for fermenting the food waste) and Earth Bokashi (for starting the fermentation process).

Once you have fermented your food waste you need to have a strategy for converting the fermented waste back to soil (it looks the same as what it looked liked when you added it to the bin): earthworms, compost, trenching, planters.

Fermented food waste should always be covered in this second process. The contents of the bin have been 'preserved' by the Earth Bokashi microbes and will look the same as when you added the waste to the bin.



## What can you add to an Earth Bokashi bin?



#### What about tea bags?

To the shame of the tea industry, tea bags are sealed with a plastic polypropylene heat resistant glue. When composted this glue becomes a micro-plastic.

Many bags are also made from a type of plastic called epichlorohydrin.

Rather empty the tea leaves out of the bag and compost that.

Or, even better, brew your tea with loose leaves (it's also less expensive).



## What are the rules of bokashi food waste composting?

There are only three rules:

- 1. Only add food waste (no plastic, foil, metal, etc.).
  - 2. Between fillings, keep the bin closed.
    - 3. Always add Earth Bokashi.



## Do I have to fill the Earth Bokashi bin all at once?

No. You can gradually fill the bin with your daily food waste. Just remember to add a layer of Earth Bokashi over each layer.

It's very important that you layer Earth Bokashi between layers of food waste; not only at the bottom and top of the waste. You want the microbes to multiply throughout the bin (not only at the bottom and the top).

Think of making a lasagne!



## What's the Earth Bokashi process?

In the kitchen, collect your food waste in a small bin or bucket.

After you've finished cooking and the serving is over, add the contents of the collection bin to the Earth Bokashi bin.

Sprinkle a measure of Earth Bokashi on to the layer.

Close the bin. Repeat.

When the bin is full, leave it sealed for two weeks to finish the fermentation process; the last couple of food waste layers haven't had enough time to ferment.

After fermentation, do one or all of the secondary processes.



# How much food waste should I add per layer?

In a small 25L home Earth Bokashi bin, not more than 5cm per food waste layer.

For a commercial Earth Bokashi 50L bin, add 10cm.



## Will the contents of the Earth Bokashi bin rot and stink?

The Earth Bokashi method is a fermentation process. Food waste is fermenting and not rotting. The smell would be a fermentation smell (not a rotting smell).

The smell would depend on what is being fermented; just as fermented onion would smell different to fermented cucumber or cabbage.



## Will the bin attract roaches, flies and other vermin?

The Earth Bokashi bin is sealed (and needs to be sealed). As long as you keep the bin clean and closed roaches, flies and other undesirables will have no access to the the bin's contents.



# How do you fill the bin if it needs to stay closed?

As much as possible the Earth Bokashi bin needs to stay closed. When you are adding waste into the bin, take the lid off and promptly add the waste into the bin.

Have your waste ready to go and then close the bin after you've added this layer into the bin.

Don't treat it like an open dustbin or trash can!



# There is mould in my bin! What's gone wrong?

#### Nothing!

White mould in your bin is a sign of a successful fermentation. This fungus—mould—is beneficial and helps break down material rich in lignin.

In soil it binds particles together and helps with water retention.

In forests fungi forms communication networks through which trees communicate with one another.



#### **About Earth Probiotic.**

Earth Probiotic was founded in 2010 by Karen and Gavin Heron. Earth Probiotic has always focused on providing scalable on-site solutions for food waste.

While our focus is on food waste, our mantra of "Enriching Earth" drives our philosophy of, firstly, being planet friendly.

We are always available to advise, quote, provide input to your recycling or gardening initiative.

If we can't, we can always put you in touch with someone who can.

Earth Probiotic's solutions are being used by households, businesses, game lodges and hotels, shopping malls and industrial sites across Southern Africa.

For more information email info@earthprobiotic.com.

All Earth Probiotic food waste solutions and equipment are developed and manufactured in South Africa.

