



Bokashi is the Japanese word for "well fermented organic matter".

It is the most efficient way to replenish the soil with organic matter.

In contrast to traditional composting, there is virtually no emission of CO₂, and almost all the energy is retained.

By fermenting your green waste according to the Bokashi method, a saving is made on the cost of transporting the waste elsewhere and the Bokashi compost provides optimal nutrition for the soil and its microbiota. The cost of making Bokashi is lower than the cost of removing the material and buying new fertiliser. All fresh organic matter is suitable and can be used in the Bokashi compost method.

Examples include grass, leaves, crop cuttings, bulb waste, sub standard potatoes, onion and chicory remains.

Woody material needs to be shredded first.

FARMERS - EQUINE - HORTICULTURE MUNICIPAL COUNCILS/HIGHWAYS

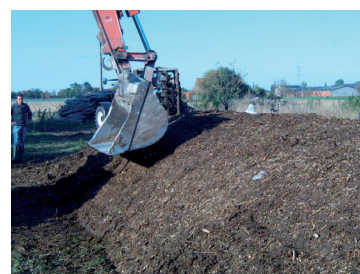
DAIRY FARMER Slurry and straw are an ideal base for making Bokashi. Furthermore all organic waste material can be used including hedge clippings and grass mowings.

ARABLE FARMER AND HORTICULTURAL GROWER Leaf waste, general green waste and substandard vegetable crops such as potatoes, onions, chicory residues can be used to make great fertiliser for the soil in preparation for the next crop. The microbial content in the Bokashi contributes to the life in the soil increasing the soils natural resistance to disease.

FRUIT GROWERS AND WINEGROWERS Windfalls, prunings and clippings are ideal for Bokashi composting.

EQUINE Horse manure is ideal for making Bokashi compost. Healthy pastures contribute to the health and well being of horses. Improving soil quality and depressing soil borne disease has a direct effect on animal health.

COUNCILS Landscaping pruning waste, leaves, cuttings and household green waste (Green bin) can be converted by fermentation into the ideal fertiliser for municipal gardens and highways.



Bokashi

Fermenting organic matter

Fermenting organic matter

to improve the humus and
organic matter in soil

Your supplier:

Effective Micro-organisms Ltd

Ebear Farm, Westleigh, Tiverton, EX16 7HN, Devon, UK.
email: info@effectivemicro-organisms.co.uk

www.effectivemicro-organisms.co.uk

ADVANTAGES

- Optimal nutrition for the soil
- Soil minerals replenished
- Improved balance in organic matter
- Increased plant vitality
- Disease-suppressing soil
- Environmentally friendly (less CO₂ and NH₃)
- Reduced transport cost of green waste

RECIPE (depending on dry matter %)

- 1 m³ fresh biomass (slurry, farmyard manure, green waste, crop cuttings, pruning waste)
- 10kg Ostrea Crushed Seashell Grit
- 10kg Edasil Clay Minerals
- 2L Actiferm

INSTRUCTIONS (example using slurry)

Ensure proper distribution of the slurry over the residual material (grass, straw, plant residues.) Preferably this is done layer by layer (like a lasagna). Distribute evenly layer by layer the Ostrea Seashell grit, Edasil Clay Minerals and active microbes, Actiferm. The heap must have adequate moisture and airtight covering, which, after closing should be left to ferment for 8 - 10 weeks, after which the bokashi is ready for application.

PRACTICAL BOKASHI RULES

- 25% minimal Dry matter and a maximum of 50% DM. (The bacteria cannot establish themselves If the green waste is too dry and woody.)
- Aim for a C/N ratio of 20:1 (Best achieved using a combination of green wastes)
- Fermentation is anaerobic process which is why the Bokashi heap is sealed just like a silage clamp.

ADDED INGREDIENTS

- **ACTIFERM** The fermentation is kick-started by the microbes in Actiferm. Actiferm is a liquid mixture of beneficial micro-organisms including lactic-acid bacteria, fungi , yeasts , phototrophic bacteria and actinomycetes. Promotes the conversion of biomass which the organic material has become. Moreover Microferm enhances the natural balance and biodiversity.
- **Ostrea®** Crushed Seashell Grit, soil conditioner prevents pH swings and provides a slow release calcium carbonate with a stable pH 6.
- **Edasil®** Clay Minerals bind minerals and other important nutrients which are available during the fermentation.

Example: Small scale Bokashi project



Step 1: Place layer of Biomass



Step 2: Apply a layer of slurry



Step 3: Apply a layer of both Ostrea Seashell Grit & Edasil Clayminerals



Step 4: Sprinkle or spray the Actiferm

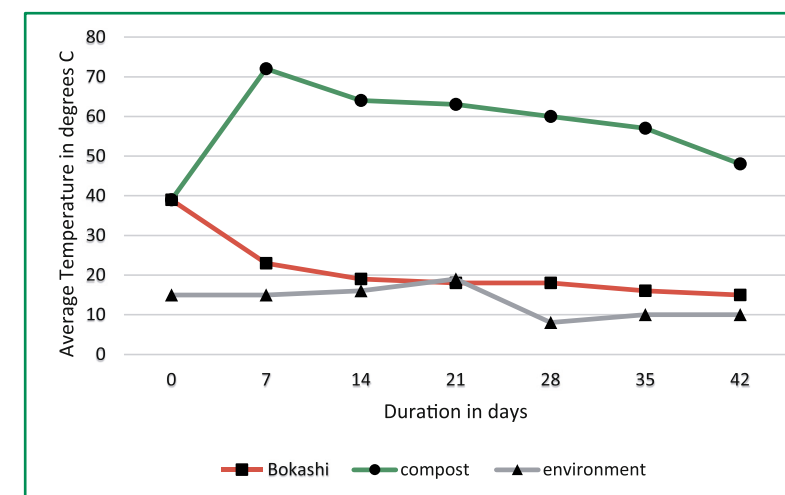


Step 5: Repeat steps 1-4 to achieve a good layered "lasagne" heap



Step 6: Cover heap to an achieve anaerobic process / Leave for at least 6-10 weeks

TRIAL RESULTS



MAXIMUM EFFICIENCY

When organic matter is fermented almost all the carbon (C) is retained and found in the endproduct.

This is clearly shown in the table of research figures. Bokashi is therefore the ideal way to raise the level of organic matter in your soil. Moreover, there is more energy (MJ) in the material to stimulate the Life in the soil, improving soil fertility.

	hedging, grass, clippings, arable	traditional compost	Bokashi
Kg product	13.400	5.070	13.870
Ds = dry matter	2.706,8	1.384,1	3.079,1
organic matter	2.130,6	882,2	2.080,5
C total	1.072,0	441,1	1.040,3
N total	48,2	43,6	52,7
N minerals	6,7	1,5	2,8
N organic	41,5	42,1	49,9
C/N ration	22	10,1	19,5
pH	7,3	7,9	7,1
Bruto energy (MJ)	215,9	67,9	193,9

Results Traditional compost and Bokashi compost after 6 weeks



Compost heap releases CO₂ into the atmosphere

Carbon footprint

In contrast to traditional composting there is virtually no loss of carbon in the form of CO₂.

This makes Bokashi compost the most environmentally friendly method to recycle green waste effectively increasing sustainability to the farm and workplace.

