

How to use Bokashi

1. Soil fertility improvement

Continuously applying “Bokashi” can improve soil fertility due to the organic carbons and beneficial microbes returning into the soil. The importance of rich balanced microflora is known well for good soil fertility, and the “Bokashi” can work as core microbes and antagonistic microbes.



Application :

- Use bokashi as basal or top dressings.
- Use bokashi with green manure (50kg/acre at plowing).
- Use bokashi 0.1 % v/v (= 1/1000 v/v) added FYM.

2. Soil biological sterilization (+ basal fertilization)

Trichoderma is one of the important useful microbes naturally existing in leaf mold in healthy natural forest surface soil. “Bokashi” fermented with *Trichoderma*, this can reduce soil borne disease risks in combination with other alternative/integrated biodiversity control methods. If you do rice bran soil sterilization , no need the basal fertilization.



Application
and
plowing



Watering



Covering and waiting

Application :

- Materials are grain bran (rice, wheat, buckwheat...) Grain bran 0.5-1kg/m² + Bokashi 5-10g/m² (or mustard green)
- Apply and immediately plow into the soil. After watering enough, cover the soil by vinyl sheets. Additional 1-2 times plowing the area recommended.
- The sterilization period is 1 month. Keep soil moisture until transplanting or sowing.

3. Organic fertilizer

“Bokashi” can work efficiently and quickly in combination with increasing soil fertility, biodiversity, and better quality yields. You can partially or totally replace chemical fertilizer depending on the amount of “Bokashi”.

Application :

Equivalent Nitrogen
amount per acre;

Bokashi 250-500kg
= Suphala 50-100kg
= Compost 2500-5000kg



4. Decomposing accelerator

“Bokashi” can improve manure/compost quality and speed up fermentation. It highly depends on temperature and water content, however, mixing in 1% (=1/100 v/v) “Bokashi” is effective for this purpose.

Application :

Mix bokashi.
(0.1% volume of compost)



5. Feed for livestock

“Rice/wheat/buckwheat Bran Bokashi” made precisely can be used as feed, a special feed for improving livestock health as an antagonistic microbial supplement.



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Organic material
- Bokashi -

Starter Guide

Second edition

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Integrated Horticulture Promotion Project
2016-2021



Background

“Bokashi” fermented organic fertilizer is a Japanese word, originating from a situation of fungus with visible filaments and spores. The various reasons for making “Bokashi” in organic farming are, improving garden/farm quality, integrated disease control, or utilization of organic wastes. “Bokashi” making is not difficult but requires some preliminary skills and experiences to produce even quality “Bokashi”, because the quality depends on the freshness, materials and inoculant microbes. Rice/wheat/buckwheat bran are the most suitable material for making “Bokashi” in Bhutan and all inoculant microbes available around farm yard.

Bokashi usage

The purpose of “Bokashi” usage is also an important consideration before making “Bokashi”.

1. As Fertilizer: for all basal and top dressing with or w/o chemicals.
2. As soil sterilization starter: use with grain bran or green manure for quick decomposition and improve soil microflora.
3. Disease control: Use top dressing and furrow application (as an antagonistic microbe functions).
4. Pest control: sprinkle bokashi from the top of leaves for army worms (young instars) and hairy caterpillars.
5. Composting enhancer (promoter): inoculants usage for any type of compost for better quality and quick composting.
6. And feed grade.

How to make Bokashi using rice bran

Basic materials

70L or 80L bucket : 1 pcs



2m×2m plastic sheet : 1 sheet



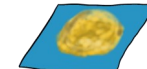
Used newspapers : 3-4 pcs



Jute rope : 4-5m



Rice bran : 50kg



Water : 10L



Follow the instruction correctly and measure the amount firmly.

2

Sugar : 500g



Natural salt : 50g



Phum (Yeast) : 1 small spoon



Plain yogurt : 1 large spoon



Over ripen fruit : 100g

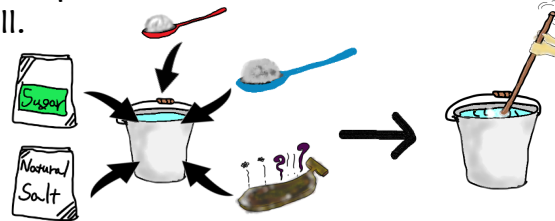


Additional microbial materials

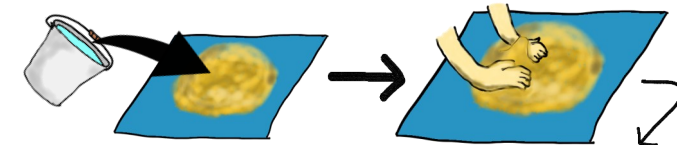
Trichoderma : 10ml etc.



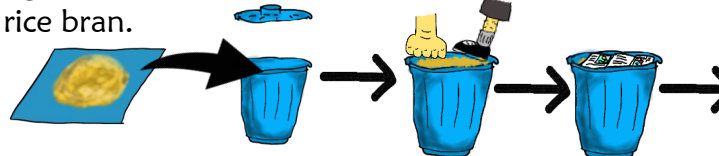
1. Put sugar, salt, dried yeast, plain yogurt and over ripen fruit into 10L water bucket and stir well.



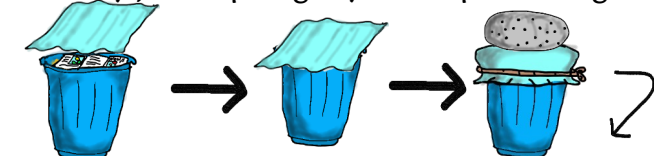
2. Add and mix the above dissolved water gradually and evenly a whole of rice bran. Mix well as avoid lumpy.



3. Fill the mixed rice bran up into the bucket tightly and expel the air. Lay newspapers on the rice bran.



4. Next, cover the bucket by plastic sheet and bind it by jute rope tightly. Then put a weight.



5. Store the bucket in some cool place. Sometime, smell the inside of the bucket for checking the fermentation. Fruity and sour fragrance like ‘Ara’ is a proof of success, but the failure freaking stink.

