# Garbage Enzyme Making Demonstration

USE OF GARBAGE ENZYME,
REDUCE GREEN HOUSE EFFECT!

#### WHAT IS GARBAGE ENZYME?









Fruit Waste

Dr. Rosukan from Thailand is the founder of Garbage Enzyme

> Actively involved in enzyme research for more than 30 years

Brown Sugar and water



Organic Enzyme

Make use of the garbage, ease global warming!

#### WHAT IS GARBAGE ENZYME?

- Garbage Enzyme is an organic solution produced by the simple fermentation of fresh vegetable waste, brown sugar and water, in much the same process that wine is made.
- This fermentation creates natural chains of proteins, mineral salts and enzymes. This solution has the capacity to breakdown, change, create and catalyse functions that make it a wonderful cleaning aid.
- Garbage enzyme solution was developed by Dr. Rosukon from Thailand. She has been actively involved in enzyme research for more than 30 years and encourages people to make garbage enzyme at home to ease global warming.

#### WHY IS GARBAGE ENZYME SO IMPORTANT?

- 1) A good cleaning substance.
- It can be mixed with chemical cleaning agents which is to reduce the harm to the environment.

#### 2) Reduce pollution

 Since garbage enzyme is made from garbage, it can help to reduce the number of landfills.

#### 3) As a Commercial Fertilizer

To reduce the usage of chemical fertilizers

#### BENEFITS AND USES OF GARBAGE ENZYME

- Save Money! Reduce usage of by mixing Garbage enzyme and water
- Save Space! Reduce the clutter in your kitchen cabinet with one multi-purpose cleanser instead of a host of specialized, toxic ones.
- Save Waste! Reducing and recycling waste

 Save The Earth! The fermentation of kitchen/ fruit waste in making Garbage Enzyme creates a gas that lowers the levels of carbon dioxide in the air.

#### GARBAGE ENZYME'S MANY USES



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• **Purify air** (see Save The Earth point above): Ozone produced in the creation of Garbage Enzyme kills air-borne bacteria and increases oxygen levels in the air.

**Deodorise air**: Diluted and sprayed into a room from a bottle, it removes odours the air.

- Cleaning the house: Just 2 tablespoons of garbage enzyme in a bucket of water as you mop will clean the floor and kill bacteria.
- Cleaning the toilet: Use undiluted to clean the toilet. It kills harmful
  microorganisms, breaks down heavy stains, freshens the air, and keeps ants and
  roaches away.
- Cleaning the kitchen: Use diluted. It can effectively clean most stubborn kitchen stains. Pour it into the sink and let it sit overnight to keep your drains running freely.
  - **Cleaning vegetables**: Wash fruits and vegetables with a light dilution of Garbage Enzyme to remove traces of pesticide on them.

#### GARBAGE ENZYME'S MANY USES

- Cleaning clothes: Pre-soaking your laundry with a little Garbage Enzyme will
  make your usual laundry detergent work better, and you don?ft have to use
  as much detergent.
- **Skin care**: Discover softer hair and skin when you add a little diluted enzyme (1:10) to shampoo and shower gel. It makes them work better without using as much. It also adds an anti-bacterial property to your favorite bath products.
- Pet care: Great uses here for keeping your pet smelling clean, and their litter tray or kennel fresh!
- Car care: A little Garbage Enzyme in your radiator water will help keep it running cooler and more smoothly. You can deodorize the car, as you would a room, with a light misting of diluted enzyme water.
- Garden care: Water plants with water with some diluted enzyme added to help plants grow more healthily, and reduce pest attacks. Watering barren ground can be revived when it is constantly watered with enzyme treated water for three months.

## HOW TO MAKE GARBAGE ENZYME

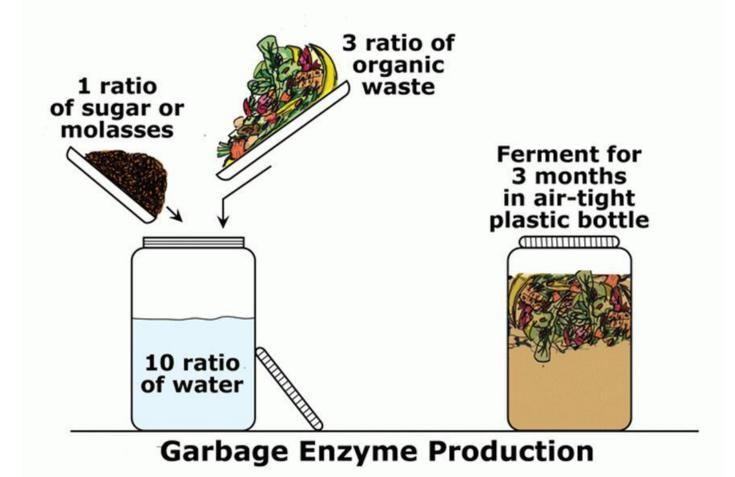
#### STEPS:



1. Use Black sugar, Brown or any raw unprocessed sugar but never use white sugar.



2. Use Kitchen waste / Fruit skins like apple, orange, pineapple, pear, watermelon, grape, lemon, guava but don't use durians! Never use meat!



#### An example:

- Add 300g of sugar + 900g of fruit skins + 3000g (ml) of water and mix well in a 5000cc plastic bottle and cap tightly.
- Keep in a cool dry place at room temperature.
- •Release the gases formed once a day for the first month. Make sure it is re-capped tightly each time after the gas release.
- For the 2nd and 3rd months, only release any gases if necessary.
- Sometimes, there is a white layer on the surface of the enzyme solution during fermentation.

  Should worms appear in your enzyme solution, don't panic. Add in a handful of sugar, mix well and cap the bottle tightly. They will disappear overnight!

#### GARBAGE ENZYME: IN PROCESS TO READY





These bottles of garbage enzyme are ready for dilution with water to be used

- These bottles contain kitchen waste with sugar and water.
- Fermentation will take place in the bottles for 3 months.
- Then after filtration and removal of the residue, garbage enzyme is obtained.
- The residue can be used again for a new batch of production by adding fresh garbage. The
  residue can also be dried, then blended and buried in the ground as a fertilizer.

Adopting and using Garbage Enzyme daily helps to reduce and recycle waste!

### Thank you!