



Solar Cone Food Waste Digester

84. Bwiru Girls

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Introduction: Green cone food waste digester is a device for decomposing food wastes or leftovers at homes, school and any where else where food stuffs are available for living consumption.

The device is made up of two cones (black cone fitted into the green cone), pitted bucket attached at the base of the two cones. The lower side of the device i.e pitted bucket below the ground level with soluble food wastes enables the enzymatic reactions to take place on the food wastes under the favorable conditions brought by a double walled cone under the sunlight (energy source) where natural micro organisms and worms migrate freely in and out of a pitted bucket and break down the waste thus the organic fertilizers are made then in soluble form seeps into the surrounding ground and the soil filters out smells and prevents access by flies.

Organic fertilizers sound good but most are incomplete in their nutritional value. They contain only one or two nutritional elements so blending different varieties of food waste is necessary for large scale plant growth but for home plants (domestic) the device is reliable since they are tolerant to incomplete and balanced nutrition components. The result is uncontrollable, difficult to measure, and usually carries an odor. You never really know what plants get although the plants within 2m around the device grow healthier than plants away.

The device provides the conducive environment for decomposing food wastes into organic compound that support plant growth and reduces hazards and costs which occur due to poor disposal of food waste.



Method:

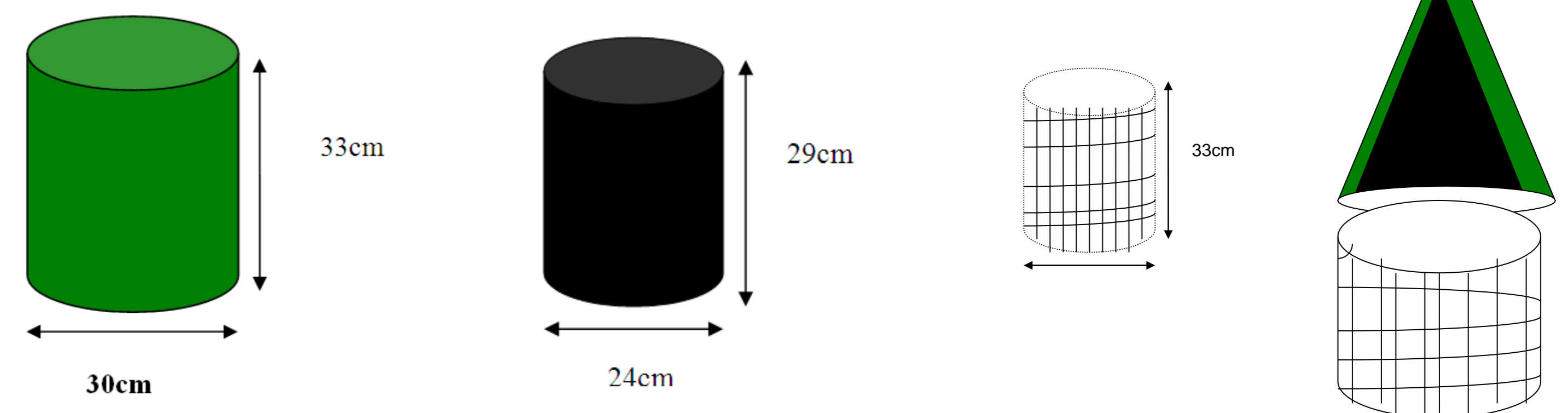
A bucket of 30 cm in diameter and 33 cm in height.

A small bucket of 24.5cm in diameter and 29 cm in height.

A pitted bucket having the same size as the green bucket.

A bucket top cover green in colour, with a 10cm diameter.

The collection of the above illustrated experimental design led to the construction of the green cone food waste digester as illustrated below.



Results

The experiment was successful since the plants around the device grew healthier than those away from the experimental area. This signifies that food wastes provide nutritional varieties to plants when decomposed in a specified area.



Conclusions:

The Green cone food waste digester assists in decomposing food wastes to provide nutrition components which are reliable for plant growth and thus reduces costs of disposing food wastes at homes and schools not only the cost but also reduces the bad odor and diseases eruption.

The double walled cone creates a heat trap of circulating air to encourage bacteria growth and also insulates water in winter. Therefore the enzymatic reactions occur successfully.

People living in urban area are advised to use the green cone food waste digester because from the recent published researches, the bad odor/smell in town damps is caused by food wastes from homes by 96%, therefore the microorganisms causing diseases are produced at a high rate and make people suffer from diseases.

References:

<http://www.hydro-orchids.com/lc-Nutrition-Basics.html>
www.foodnavigator.com/...Nutrition/Complex-ca...

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Further information:

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