

VERMICOMPOST

Vermicomposting is an appropriate technique for efficient recycling of animal wastes, crop residues and agro-industrial wastes. The process of conversion of organic materials into manure is chiefly microbiological. Earthworms are important for producing vermicompost from organic wastes.

Vermicompost can be prepared from all sorts of organic residues.

Examples:

- Agricultural residues – dry organic wastes (like sorghum straw, rice straw after feeding cattle, dry leaves, pigeon pea residues, groundnut husk and wheat husk) – waste vegetables – soybean residues – weeds (particularly Parthenium hysterophorus, also called Vayyaribhama or Pander full or Congress weed, before flowering) – sugarcane trash
- Sericultural residues from silk production
- Animal manures
- Dairy and poultry wastes
- Food industry wastes
- Municipal solid wastes
- Biogas sludge

- Bagasse from sugarcane factories

21.7.1 Steps in Making Vermicompost

S tep 1: Cover the bottom of the cement ring with a polythene sheet. (Or use the sheet to cover the ground of the area you're using).

S tep 2: Spread a layer (15-20 cm) of organic waste on top of the sheet.

S tep 3: Sprinkle rock phosphate on top of the organic material (2kg).

S tep 4: Prepare cow dung slurry (15kg) and add the slurry as a layer on top of the mixture.

S tep 5: Fill the ring completely and evenly with the layered material.

S tep 6: Paste cow dung or soil over the top of the material.

S tep 7: Allow the material to decompose for 20 days. After 20 days, put the earthworms on top. They will find the cracks and enter the material.

S tep 8: Cover the ring with wire mesh or gunny bags to prevent birds from eating the worms.

S tep 9: Sprinkle water over the whole mixture at 3-day intervals for 2 months, to maintain adequate moisture and body temperature of the worms. Note: when the compost is ready, it is black, quite lightweight and has a pleasant, earthy smell.

Step 10: After 2 months, (or when the compost is ready), remove the ring and heap the material in a cone shape on the floor . Leave the heap undisturbed for 2-3 hours, to let the worms move slowly to the bottom.

Step 11: Separate the upper portion of the heap.

Step 12: Sieve the lower portion of the heap to separate the worms. They can be used again for preparation of more vermicompost.

Step 13: Pack the compost in bags and store them in a cool place.

Source : <http://nagahistory.wordpress.com/2014/03/20/sustainable-development/>