

How to make & use COMPOST

English

What is compost?

Compost is a natural fertiliser. It is made by putting materials like crop residues, straw, vegetable waste (from the kitchen) and manure in layers in a particular order. The materials will start to heat up (cook) and decompose. The compost heap gets turned to help the decomposition process. The compost is ready when it is a dark, rich material. Add the compost to soils to make them strong and healthy.

What you need:

- ▶ 20 bags brown material: straw, hay, hulls, maize stover, rice husks, dried leaves.
- ▶ 5 bags green material (as available): weeds, vegetable waste like peels, green grass and leaves of green manure crops.
- ▶ 1 bag animal manure.
- ▶ Water (moisture) to keep micro-organisms alive. Micro-organisms are small living things that you cannot see with your eyes, but they decompose the heap. They live also in the soil, where they help to keep soils healthy.
- ▶ Twigs/small sticks.
- ▶ Soil.

Do not use:

- ▶ Diseased or poisonous plants (like castor beans).
- ▶ Plant materials that take a long time to break down.
- ▶ Acidic and toxic plants (acacia and eucalyptus) or plants containing things that prevent breakdown (pine needles).
- ▶ Cat and dog manure as it can contain dangerous pathogens.
- ▶ Animal bones and other animal food waste as they bring rats.
- ▶ Any man-made materials, like plastics, glass and aluminium. These materials cannot break down.
- ▶ Hazardous materials like old batteries, razor blades and chemical waste.
- ▶ Fatty foods and oil.



SELECT AND CLEAR SITE

Choose a place that is shady (under a tree), flat, near to the materials you need (animal manure, crop residues and water). If possible, choose a site close to the field where compost will be used. This saves on time and labour. Clear the site.



MARK AND PEG SITE

Measure and mark the size of the heap. Put long pegs in the four corners of the heap. A good size for a heap is 1 metre wide and between 1 to 1.5 metres high. The available material will determine the length of the heap.



ADD BASE LAYER

Place a coarse/rough layer of material such as maize husks, twigs and maize stalks on the ground. This layer should be 20 centimetres high.



ADD BROWN LAYER

Add a layer of brown material like straw, dry leaves or rice husks. The layer should be about 20 centimetres high.



WATER HEAP

Add water to the heap after every layer of brown material.



ADD GREEN LAYER

Add a layer of green plant material, preferably leaves from legumes like cowpeas, beans, velvet and beans. You can include kitchen waste (vegetable peels or rotten vegetables) or weeds. The layer should be about 10 centimetres high.



ADD MANURE LAYER

Add a layer of manure. Manure is a source of nitrogen for the compost heap. The manure layer should be between 2 and 5 centimetres high. Add some mature compost or soil to the heap if you have it. This adds micro-organisms to the compost heap and speeds up the process of decomposition.



KEEP LAYERING MATERIALS

Keep adding layers. Add another layer of brown material, sprinkle with water, add a layer of green material, then a layer of manure (adding some soil or old compost if you have it). Repeat this process until heap is maximum 1.5 metres high.



COVER HEAP

Cover the whole heap with a layer of grass or straw to protect it from direct sunlight and rain.



CHECK TEMPERATURE

Put a long stick into the centre of heap at an angle and leave it for 2 to 3 days. Take the stick out and feel it. If it is warm, the compost heap is working well.



TURN THE HEAP

If the stick is warm, then turn the heap after 7-10 days. Turning means bringing the inside of the heap to the surface and the outside of the heap to the inside. Sprinkle the heap with water when turning. Repeat measuring and if temperature is right, turn every 7-10 days until compost is ready.



FIXING THE HEAP

If the stick in the heap is too hot to hold in your hand for 30 seconds, you will need to turn the heap immediately. If the stick is not heating up, then the heap is not working well, and you may need to add extra manure and/or extra water (if the heap is too dry).



CHECKING COMPOST IS READY

The compost should be ready after the fourth turning or after 6 to 8 weeks. Hold the compost in your hand. If it is dark brown and fine like soil it is ready, if it is still rough, then turn the heap again and check after another week.



USING COMPOST

Compost can be applied in different ways. Add a small amount in the hole where a seed is going to be planted; dig it into the bed where crops are going to be planted; or sprinkle it at the base of an already growing crop. If putting it into a hole or sprinkling at plant base, cover compost with a little bit of soil.

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