



Brian Mogeni (in a white coat) takes the lead in the preparation of compost manure.
Photo Credit: Brian Mogeni

Preparing compost manure: the do's and don'ts

By Brian Mogeni

COMPOST manure is a natural or an organic material added to crops to boost nutrient supply, improve soil quality, retain moisture, and boost plant growth. Compost manure is environment-friendly, making it key to climate-smart agriculture, organic agriculture, and regenerative agriculture. Steps in preparation

1. Collection of materials:

To prepare compost manure, you need a mix of organic materials such as crop residues, animal manure, and kitchen waste. These materials should be fresh and free from chemicals such as pesticides or herbicides. Composting requires organic materials that are rich in nitrogen and carbon. Nitrogen-rich materials include kitchen

scraps, manure, grass clippings, and green leaves. Carbon-rich materials include dry leaves, straw, sawdust, and newspaper. You can also add some soil to provide microorganisms that will break down the organic materials. Use topsoil because it's the one that contains the microorganisms.

2. Building the compost pile:

Choose a location with good drainage and enough space to build a compost pile. Begin by creating a layer of about 3 feet of organic materials on the ground. The first layer should be carbon-rich materials like twigs, dry leaves or straws. You can alternate between dry and moist materials to ensure good aeration. It's important to keep every layer moist and not too

wet. So sprinkle water after every layer. Too much water will make the layers too wet and this will cause the materials to rot instead of composting. Add a thin layer of soil on top of each organic layer to introduce microorganisms that will break down the materials. Incorporate manure like cow dung to add nitrogen and speed up your compost heap. If you are using a bin, make sure it has ventilation holes to allow air to circulate.

3. Cover your compost pile:

cover using a polythene bag. Covering will help retain the moisture and heat important for your compost. Covering will also protect your compost from getting soaked by rainwater.



Compost manure preparation. Photo Credit: Brian Mogeni

4. **Turn the compost pile:**

After a few days, the compost pile will heat up as the organic materials break down. This is a good sign that composting is taking place. You need to turn the pile to ensure that all the materials are evenly exposed to air (oxygen) and moisture. You can use a pitchfork or a shovel to turn the pile. Ensure that you turn the pile every 3 to 4 days for the first few weeks.

5. **Monitor the compost pile:**

As the composting process continues, you must monitor the pile regularly to ensure it remains moist and aerated. If the pile becomes too dry, you can add some water. If it becomes too wet, you can add some dry materials such as straw or leaves. You can also add some organic matter such as grass clippings or coffee grounds to boost the composting process. The compost should start to smell earthy and crumbly. If the compost smells bad, it may be too wet or too dry, or it may not have enough oxygen.

6. **Harvest the compost:**

After about 2 to 3 months, the compost should be ready for use. It will have a dark brown colour and a pleasant earthy smell. You can harvest the compost by sifting it through a mesh or sieve screen to remove any large materials that have not broken down. Or simply remove the top unfinished compost using a shovel or hands. The compost can then be applied to your garden or farm as a natural fertiliser.

For hastened decomposition E.M (Effective Microorganism) or B.M (Bio-Mate) is used. In this case, water that is sprinkled in every layer is mixed with E.M or B.M at recommended ratio. Where E.M. or B.M. is used, turning materials is not necessary.

You need to identify materials that will compost like sawdust, grass and shrubs, young weeds, vegetable wastes, straws, and eggshells. Materials like bones and dairy products, and diseased plants should be avoided.

Always opt for a method or size of compost that will help you the only time you need it. Making excess or extra will lead to waste.

Benefits of composting

- Utilises or reduces wastes: through composting you will get to utilise wastes like kitchen refuse instead of throwing them away
- Improves soil condition and soil health: compost manure will help to replenish soil fertility instead of using inorganic fertilisers that are not safe for the environment.
- Compost is also convenient to any farmer or gardener as he or she need not get expensive resources to prepare compost.

In conclusion, preparing compost manure is a simple process that can help farmers improve soil quality, retain moisture, and boost plant growth. By following the above guide, farmers can produce their own compost manure and reduce their reliance on chemical fertilisers, which can be costly and harmful to the environment.

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