

Heap composting; Pile composting

Organic manure is the along nutrient providing manure to the plants and the quality is determined by the technology of composting, type of composting raw materials and the period of composting.

As organic matter hold soil moisture, ways of composting are aerobic and anaerobic. In bio dung composting, a unit base is setup using bricks and sticks. This allow aeration from base which flow through composting pile.

Manure composting

When composting, dont use any renewable energy and materials required include bricks, sticks, organic matter, liquid dung for provision of micro organisms. At the base of first layer, carbon rich materials are at 9-10 inch of height. When setting up the pile, remove plastics.

Similarly, sprinkle diluted cow dung on top of litre for quality manure and put on green litre on top of first layer. The dimensions of heap are a minimum of 4*4*4 ft for L *W*H to encourage generation of more heat.

In absence of cow dung, use goat dung or yoghurt. To use yoghurt, allow it to go sour for 3-4 days first to allow the multiplication of micro- organisms called lacto bacilli and in absence of yoghurt, chop the vegetables, add brown sugar in it ferment for 14-15 days and then use it. Layers should contain litre followed by green litre to produce too much heat in it due to too much energy.

Additionally, C-N balance is essential when setting up compost in a ratio of 30:30. After 2-3 days, heat begins to be generated hence check for temperature however in absence of

thermometer, at 3-4 days insert a stick in middle of compost, leave it for 15 minutes, remove it and feel it as this must be warm. Temperature increase is needed to kill pathogens and destroy seeds.

Cover compost with polythene to half way to prevent water loss and rainfall as well. Leave space down for continuous aeration. Temperatures go up to 55-60 degrees centigrade and starts reducing during 12th and 15th day. After 15 days, turn the compost and dont use hard leaves for composting.

After another 2 weeks, compost is ready however after turning, cover it with polythene and in 15-20 days it is ready. To check for readiness of manure, get sample and put it in polythene for 24 hours. After check for temperatures using hand and if it is warm, composting process is not over while cool temperatures indicate that process is done and so its ready for application.

Finally apply 1-10 kg for a big tree while a hand full for potted plant.