GUIDELINES FOR THE USE OF COMPOST ON TEA LANDS

Composting is a method of utilising plant residue whereby, the organic component is biologically decomposed under controlled conditions to a state in which it can be applied to crops without adversely affecting the environment.

Any green material that can be collected like loppings of shade trees, vegetation growing in ravines or unutilised areas, prunings, refuse tea, sugarcane residues, coir dust, etc., could be composted along with cow dung and wood ash or dolomite.

Preparation of Compost

1. Spread a thin layer of well decomposed leaves and twigs or even old compost to a height of about 7.5 cm (3 in) to help start the process. The size of the bed is 7.5 m (25 ft) in length and 2 m (6 ft) in width.

2. Chop the branches of green manure trees, grasses, etc. and heap up to 45 cm (1 1/2 ft) high.

3. Spread a layer of farmyard manure or a slurry of cow dung up to about 7.5 cm (3 in) thick. The farmyard manure is prepared by mixing 1 part manure to 3 parts green material. Alternatively, a suspension of fresh cow dung can be poured over the green manure layer.

4. Spread a thin layer of wood ash or factory ash (100 kg) or dolomite (50 kg). The compost heap will now be about 0.6 m (2 ft) high.

5. Repeat the layers to a manageable height of 1.2 m (4 ft).

6. The final dimension of the heap would be 7.5 m (25 ft) long
   2 m (6 ft) wide
   1.2 m (4 ft) high
Proportionately smaller heaps could be prepared depending on availability of materials.

7. During dry days water the heaps adequately.

8. Turn over the heap once/twice a month.

9. The compost heap must be protected from rain and surface run off water. This could be done by either plastering with mud or covering the heap with thatching material or cutting a shallow drain right round the heap.

10. The compost heap will be ready for use in 2-3 months.

Usage of compost

a) In New Clearings

1. The planting hole should be cut 45 cm (18") deep with an open diameter of 30 cm (12"). Fill the bottom 3/4 th of the planting hole with equal amounts of soil and compost (about 2 kg) along with 15 to 25g of T 200 fertilizer, all of which should be properly mixed.

2. As a prophylactic measure against white grubs or scavenging termites, granules of ‘Suscon Fore’ (‘Marshall Suscon’) can be mixed into the soil/compost/fertilizer mixture at the rate of 2 - 5 g per hole.

Alternatively, Carbofuran 3% G at the rate of 10 g per planting hole can be used at the time of planting. In spite of this treatment, if the foliage turns yellow after 3 months, dig the base of affected plants to check for white grub activity. If white grubs are seen, or else, earthen runways of termites are observed, spray the bases of affected plants with 0.1-0.5 % solution of chlorpyrifos (1:200 - 5:200 by volume with 20% E.C. formulations or 1:400 - 5:400 by volume with 40% E.C.).

b) For Infills

Application rate of compost for infills can be the same as above along with ‘Suscon Fore’ (‘Marshall Suscon’) added at 2 - 5 g per hole or Carbofuran at 10 g.
Cost of preparing compost manure

Compost stack = 7.5 m long x 2 m breadth x 1.2 m high
(25 x 6 x 4 ft)
= 18 cub. m (600 cub. ft).

One cub. m. of fresh material weighs 420 kg.

Total fresh weight of stack = 420 x 18
= 7560 kg or 7.5 tons.

Approximate costs including transport

- 2000 kg cow dung (One Canter load) = Rs 3000
- 7000 kg green leaf = Rs 4800
- 100 kg dolomite = Rs 200
- 16 labour costs including watering = Rs 1600

7560 kg costs = Rs 9600
Final dry weight (air dried) = 3.8 tons

cost/ton = Rs 9600/3.8
= Rs. 2526/= (approx.)

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