INTRODUCTION

Layering comprises a set of techniques where the culm (nodes) and branches (nodes) are brought in contact with the rooting medium (soil, sand, litter) to enable sprouting and rooting at nodes / buds. This can be a successful method to get new plants to grow at the nodes / buds while attached to the parent plant. There are three methods of layering: a) simple layering b) air layering/ marcotting c) seedling layering.

METHODS OF LAYERING

A) Simple Layering
1. Identify bamboo culms of 1 to 2 years of age.
2. Make a partial cut at the bottom portion of the culm (2-3 nodes above the ground) to enable bending.
3. Bend the culm to the ground; chop the top portion of the culm to induce lateral branches.
4. Keep branches (2 or 3 internodes) close to culm.
5. Trim the leaves and branches to avoid water transpiration.
6. Place them on the shallow trench and peg it with stone or any other local material.
7. Cover it with soil or any other rooting medium (5 cm deep in sand, soil, dense leaf litter, etc.). Rooting medium should be kept moist by watering (if no rain); and should not be water logged.
8. Once the new plant is established (roots rhizome, stem and leaves); the plants can be separated & transplanted to polybags.
METHODS OF LAYERING

B) Air layering/ Marcotting

1. This involves rooting of the branches with strong buds and aerial roots while attached to the parent plant.
2. Cut one third of branches (location where culm and branches are connected) on both the sides.
3. The rooting medium can be soil, manure or a combination of leaf litters, rice straw etc. Rooting medium should be moist at all times. So, undertake marcotting only in rainy season.
4. Once roots are well developed, the plant can be separated from mother culm and transplanted to polybags.

STEP BY STEP- TRANSPLANTING PROCESS

1. Use hand saw or sharp knife to dissect each plant from the mother stem. Each plant should have well developed rhizome, roots, stem and leaves.

2. Before separation of plants, trim branches / leaves to minimize water stress. Separation and transplanting should be carried out in evenings or in rainy days.

3. Immediately after separation, transplant the plants to polybags and water thoroughly.

Keep the separated plants in partial shade (50 % shade) and water them daily.
After one month, the plants can be transferred to direct sunlight.