



### Maintenance of Nursery

- Sprouting of cuttings starts in 10-12 days, root initiation starts in 30 days and root system develops after 70-80 days of planting the cuttings.
- From each sapling allow only one shoot to develop.
- Undertake weeding once after 25 to 30 days and again after 55 to 60 days.

### Fertilizer application

- After second weeding, apply 150 g of ammonium sulphate or 35 g of urea per bed and then irrigate.

### Plant protection

- Stem canker, cutting rot, collar rot and die back are the major diseases during nursery stage.
- Use Bavistin/Dithane solution for managing the common diseases.



### Planting of saplings

- Three to four months old saplings (90 to 120 cm height) are suitable to establish bush system of plantation.
- Six to nine months old saplings (above 150 cm height) are preferred to establish tree plantation or for raising high bush and high crown height plantation.
- Two or three days before uprooting of saplings, nursery bed should be adequately watered for easy removal.
- Loosen the nursery bed with crowbar or *guddali* or pick axe to a depth of 30 cm and then take out the saplings, without damaging the main roots.
- Saplings must be planted immediately in the pits prepared and kept ready for regular plantation.
- If long distance transportation is required, saplings must be packed in bundles, covered with wet gunny cloth or green leaves and take to the planting site during cooler hours.

### For further details Contact:

DIRECTOR  
 Central Sericultural Research & Training Institute  
 (ISO 9001 : 2008 Certified)  
 Central Silk Board, Min. of Textiles  
 Govt. of India, Srirampura, Mysuru -570 008  
 Tel: 0821-2362757, 2362406  
 Fax: 0821-2362845  
 Web: [www.csrtimys.res.in](http://www.csrtimys.res.in)  
 Email: [csrtimys.csrb@nic.in](mailto:csrtimys.csrb@nic.in)

## Raising of Mulberry Saplings in Nurseries



**Central Sericultural Research & Training Institute**  
 (ISO 9001 : 2008 Certified)  
 Central Silk Board, Min. of Textiles  
 Govt. of India, Srirampura  
 Mysuru-570 008

# Raising of Mulberry Saplings in Nurseries

Mulberry saplings are rooted cuttings with well developed root system. Planting saplings instead of cuttings is advantageous as it gets established uniformly and quickly for the mulberry leaf production. In order to establish a saplings nursery, a systematic and scientific approach is needed to draw maximum benefit out of it. From six months old one acre mulberry garden, six MT seed material is obtained. From one MT seed material, 27,000 cuttings are obtained, *ie.*, 1.62 lakhs of cuttings from one acre.

## Preparation of nursery bed

- Select a flat land with sufficient water source. Well drained land with loamy soil is ideal.
- Plough or dig 30-40 cm deep and allow for weathering in sun for 2-3 weeks.
- Plough again 2-3 times to bring the soil to a fine tilth and level.
- Remove root stocks, pebbles and weeds.
- Prepare small beds of size 300 cm x 120 cm.
- Provide irrigation channels of 25-30 cm for effective irrigation.
- Add 5 pans of organic manure to each bed. In case of clayey or black cotton soil, add additional 5 pans of sand per bed and mix with soil.

## Preparation of cuttings

- Select healthy, 6-8 months old shoots with 10-15 mm diameter.
- The shoots should be free from any *tukra* or scale insect infestation.
- The stout lower portion and tender green upper portion of the shoots are not fit.
- For raising saplings, use 15 to 20 cm long cuttings with 3 to 4 good buds.
- To get clean cut ends, use sharp knife, secateurs or mulberry cuttings preparation machine.

## Caring of cuttings

- Plant the cuttings immediately after preparation.
- If not planted immediately, keep the cuttings in wet gunny cloths.
- If cuttings, are to be stored, bundle it with all buds in one direction and keep in wet sand beds pointing upwards under shade and cover it with hay.
- This must be sprinkled with water daily and can be stored for 2 to 3 days in unavoidable circumstances.

## Planting

- Wet the nursery beds one or two days earlier to planting.
- To raise 3 to 4 month old saplings, plant cuttings at 8 cm distance in rows of 20 cm distance.
- To raise 6 to 9 month old saplings, plant cuttings at 10 cm distance in rows of 30 cm distance.
- Mark each row with the help of a thread and make small holes at the desired distance to insert the cuttings.
- To avoid fungal attack, dip the cuttings in 0.2% Bavistin for 15 min. or 0.1% Dithane-M45 solution for 30 min. before planting.
- Plant cuttings firmly in a straight position, exposing only one bud above the soil.

## Irrigation

- Immediately after planting, irrigate the nursery beds.
- Subsequently irrigate once in 4 to 5 days in case of sandy loam and red soil and once in 6 to 7 days in case of black cotton or clayey soil.

