



Polybag seedling

7.0 Shading and hardening

- Put a shade at 1.2 m (4 ft) above the poly bed
- Provide dense shade initially
- Harden seedlings by gradually reducing the shade
- Reduce shade by half when seedlings are
- 8 –9 months old
- Remove shade completely one month before transplanting.

8.0 Highlights on Good Agricultural/ Hygienic Practices

- Use planting materials from known sources to ascertain genetic purity
- Source seed ONLY from CRI

- Potting mixture should be free from either biological or chemical contaminants
- Establish nurseries in pollution free environments
- Use ONLY recommended pesticides



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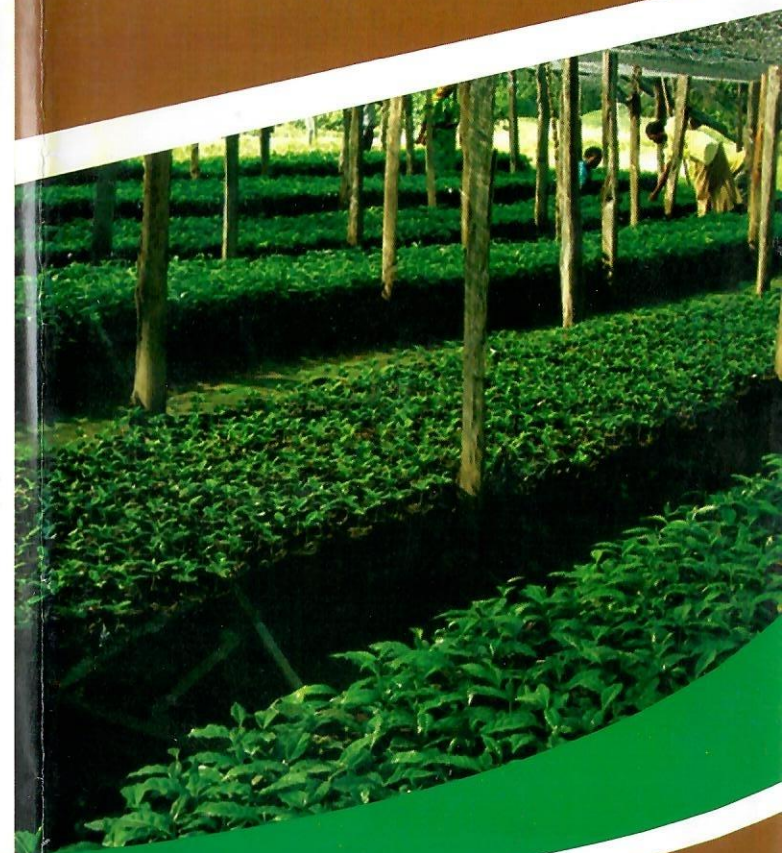
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COFFEE NURSERY MANAGEMENT



1.0 Site selection

Select and ensure that the site is:-

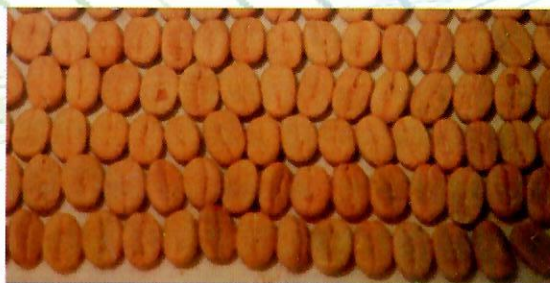
- Level /gently sloped
- Bench terraced (where % slope is greater than 4 –5%)
- Weed free (especially perennial weeds)
- Sheltered from strong winds
- Accessible - for ease of transport
- Has permanent /reliable water source

2.0 Nursery bed construction

- East - West Direction to avoid direct overhead sun
- Bed width should be 1m (3 ft) for ease of nursery operations
- The length can vary as per the need

3.0 Coffee Seed

- “Certified” seeds are only available at Coffee Research Institute (CRI) from where they must be obtained.
- Plant immediately after collection to avoid loss of viability hence ensure high germination rate
- Remove husk to shorten germination period (by half)
- To retain viability, stored seed should have a moisture content of around 41% and kept at 15°C
- 1 kg seed contains an average of 3,000 seeds



Certified Coffee seeds

4.0 Seed germination

- Germinate in river sand beds at 5 – 7 cm (2 – 3 inches) depth
- Spacing; 2.5 cm x 2.5 cm (1 x 1 inch)
- Place seed 1 cm deep (0.5 inch)
- Cover seed bed with a thin mulch cover
- Put Shade at least 60 cm (2 ft) above the germination beds
- Water adequately (avoid water-logging)
- Remove mulch on germination
- Seedlings emerge after 4 weeks and takes another 4 weeks before transplanting to recommended bags
- Transplant pre-germs at the two leaf stage into bags. Avoid deep planting
- Renew seed bed sand every time new seeds are being planted



Pre-germs

5.0 Potting mixture

- Potting mixture ratio; Top soil: 3, Sand: 2, Manure: 1

To the above mixture, add:

- Fertilizer (TSP or DAP)
- Soil acting pesticide (e.g. Temik)

For example, for 125 polybags (size 12.5 x 22.5cm) requires:

- 3 debes (20 l container) Top soil
- 2 debes (20 l container) Sand
- 1 debe (20 l container) manure
- 25 gm TSP (or 50 - 75 gm SSP)
- Appropriate pesticide e.g 10 g of Temik 15G

Advantages of poly bag seedlings

- Ensures minimal disturbance to roots during transplanting
- Long distance transportation of seedlings is convenient
- Minimal soil-borne pests
- Field establishment can be delayed to await favourable weather

6.0 Maintenance

- Water seedlings at least twice per week
- Control weeds by hand weeding
- Foliar feed e.g. Urea at 2-3 kg/1000 of water (40-60 g in 20 l)
- Control diseases (Damping-Off, Leaf Rust and Brown Eye Spot) using 0.5% Copper solution
- Control insect pests when noticed