

Technical Bulletin #77:

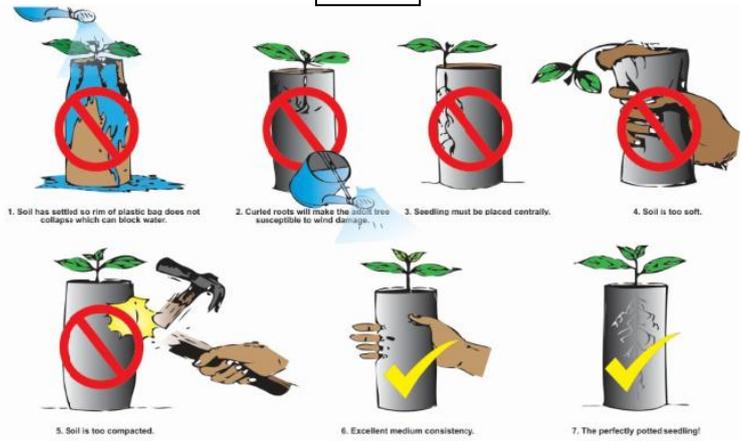
Tree Nursery Practices

SEED PLANTING

When planting seeds, it is important that appropriate steps are taken or considerations made. For example (Fig. 1):

1. Soil has settled so rim of plastic bag does not collapse which can block water.
2. Curled roots will make the adult tree susceptible to wind damage.
3. Seedling must be placed centrally.
4. Soil is too soft.
5. Soil is too compacted.
6. Excellent medium consistency.
7. The perfectly potted seedling!

Fig. 1



*It is recommended that the soil be composed of 1/3 compost, 1/3 sand, 1/3 local soil.

WEEDING

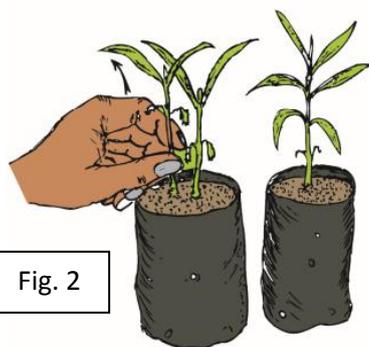


Fig. 2

Water thoroughly before weeding, then carefully remove weeds by hand and water again after weeding (Fig. 2).

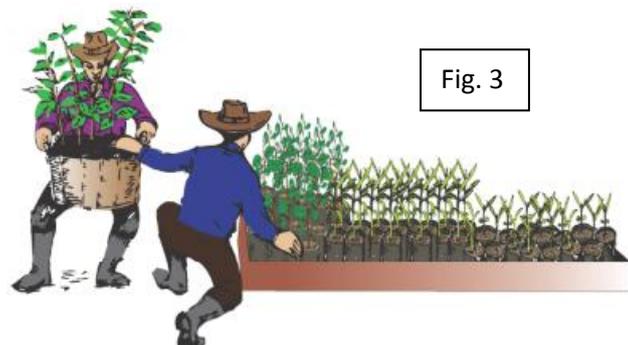
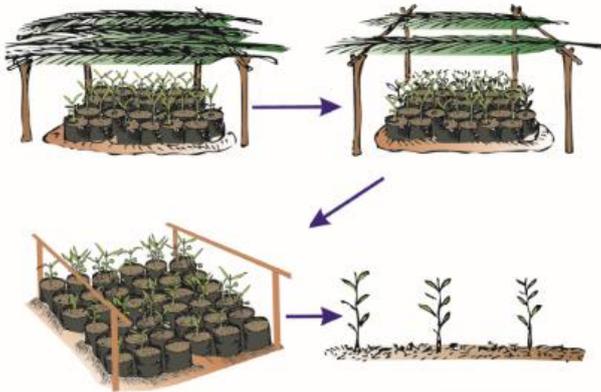


Fig. 3

GRADING

Grading involves arranging the growing seedlings in order of size, whilst at the same time removing stunted, diseased or weak individuals. In this way, only the most vigorous and healthy seedlings are selected for hardening-off and planting-out, which maximizes post-planting survival (Fig. 3).

HARDENING OFF



Hardening off is the process of preparing saplings for the difficult transition from the ideal nursery environment to the harsh conditions of deforested sites. If they are not tough enough to cope with the hot, dry, sunny conditions of the planting sites, they will suffer transplantation shock and die.

Approximately 3 months before planting, move all saplings to be planted to a separate area in the nursery and gradually reduce shade and the frequency of watering. They should stand in full sunlight for their final month in the nursery (Fig. 4).

Fig. 4

ROOT PRUNING

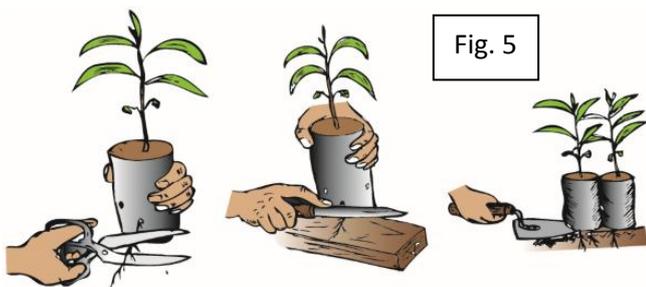


Fig. 5

Cutting the roots outside the plastic bag prevents the seedling from rooting into the ground, which would result in difficulties when removing from the nursery. Start to prune the root when the seedlings are three months old (Fig. 5).

SPACING

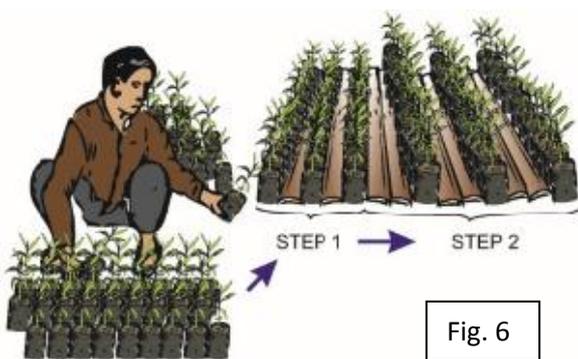


Fig. 6

Give wider spacing between bags, allowing sunlight to assist in killing fungi and bacteria. This will enable the seedlings to become healthier with large, strong stems and helps to minimize seedling deformities (Fig. 6).

Cambodia HARVEST
 No. 46 Street 310 | Sangkat, Beong Keng Kang 1
 Khan Chamkamorn | Phnom Penh, Cambodia
 Tel: 855 (0) 23 996419

This bulletin is made possible by the support of the American People through the United States Agency for International Development (USAID). The content is the sole responsibility of Fintrac Inc. and does not necessarily reflect the views of USAID or the United States Government.