

Nursery Information Sheet No.1

Teak

Raising teak as stumps

Pre-treatment of seed

Soak the seeds in a bucket of water for 24 hours. Dry in sun for a day (spread them on a copra sack if available). The seeds are now ready for sowing.

Germination

This is done in a germination bed. The bed must be well drained. This can be achieved by building a frame with 4 x 2 timber (or logs), which sits on the ground. Fill this frame to about half way with river stones about 1 to 2 inches in diameter, fill the gaps with fine river gravel and then finally fill to the top with fine river sand. It is best to “cook” (or sterilise) the sand before using it. This can be done over a fire using a drum cut in half. Heat all the sand until it is too hot to touch. Mix it well to make sure that it is all heated through. Heating the sand in this way will kill insects and fungi that otherwise may damage the young seedling.

Before sowing the seeds the germination bed must be well watered.

The seeds can be sown close together with about 1” (2cm) between seeds. Sow with the helum (the stork that attached the seed to the tree) facing downwards. There should be about ½” (1cm) of sand covering the seed. The sand must be kept moist at all times. Covering the bed with a copra sack will help to keep the sand moist. When the shoots appear above the sand then the young seedling can be pricked out and transferred to a nursery bed.

Not all seeds will germinate at the same time. Each fruit has up to 4 seeds and these seeds may germinate over a period of some months. Usually the first plants will be ready 7-10 days after sowing. To begin with there will just be a few and over the next few weeks there will be many. After a month or two there will be fewer and fewer until they stop altogether. When there are very few germinating then the sand can be raked or sieved to remove the ungerminated seeds and old seed cases and the sand “cooked” or sterilised ready for a new batch of seed.

Pricking out

When the seedlings have 2 to 3 leaves then they can be “pricked out”. Pricking out is very carefully lifting the seedling out of the sand. Before pricking out the sand must be watered. Use a small stick to lift the seedling taking care not to break off too many of the very fine roots. Hold the seedling by the leaves and place in a container that must be covered to stop the seedlings drying out. Prick out a few at a time and transplant them immediately. Then prick out some more and transplant them. You should try and make the time between pricking out and transplanting as short as possible.

Nursery bed preparation

The nursery bed must also be well drained. A similar frame to the germination bed should be built on the top of ground and this time filled with good black gardening soil. The soil should be well cultivated, that is worked so that it is fine and with weeds, stones, sticks and other rubbish removed. If the soil is “heavy” (forms solid mass when it dries) then mix with river sand (NOT beach sand).

Transplanting

The freshly pricked out seedlings can now be planted in the nursery bed. Plant in straight lines with 8” (20cm) between lines at 6” (15cm) between seedlings. The soil should be moist at the time of transplanting. Make a hole in the bed using a “dibble stick” (small pointed stick that will make a hole large enough to take the seedling). Carefully place the seedling in the hole making sure that the roots hang down. Hold the seedling by the leaves using one hand and squeeze the hole shut with the other hand.

Shade

The bed should be covered by shade for several weeks until the seedlings are established. Shade can be provided by nursery shade cloth or using coconut or ginger leaves. To begin with you need to block out about 60-70% of the sun. After 2 weeks the shade can be reduced to about 40-50%. After 4 weeks the shade should be removed altogether.

Watering

For the first two weeks the beds should be kept moist. After two weeks watering should be reduced to the morning and evening. After a month then water only once a day in the evening. Two weeks before planting, stop regular watering. Water only if there has been no rain for 4 or 5 days.

Stumping

It is usual to plant teak as “stumps” which are produced by removing the leaves and the roots.

When the seedlings are about ½”-1” (1-2cm) in diameter at ground level (they will be about 2ft (40-60cm) high) they can be stumped in readiness for planting. Before stumping it is important that the planting site has been prepared. It is best to plant the stumps as soon after they have been prepared as possible.

To prepare the stump the seedling is pulled out of the ground. It is best to loosen the soil with a gardening fork or spade first. Remove the plant from the bed and shake off the soil. Hold the seedling by the root collar (the point between the root and the stem where ground level was). Using a sharp bush knife cut the root off cleanly about 2 ½ ins (6cm) from the root collar and similarly cut the shoot off about 2 ins from the root collar. Any side roots can be removed taking care not to damage the bark (skin) on the main root.

Planting

It is important to have the planting area ready before the stumps are prepared. The preparation of the planting site and the nursery operation need to be planned to ensure that the planting area is ready when the plants are ready.

Teak is a light demanding species. That means that it will not grow in shade (if there is a small amount of shade teak will grow but very slowly). That means that the land needs to have all its trees and shrubs felled.

Planting lines should be cleared. It is usual to have 5m between lines. The planting spots are best marked with a small stake (so the plants can be easily located for weeding). Trees should be planted at a spacing of 2m between trees. Use a spade or planting stick to make a hole and plant the stump so that the root collar is about ½” (2cm) below the surface. Make sure that the hole is closed properly around the stump with soil touching the whole of the stump below ground (there must be no air pockets). Also make sure that the stump is planted with the root end down!

Maintenance

The first few months after planting are very important. The stumps must be kept free of weeds and especially vines. Use a bush knife to clear around the young plants. Check two weeks after planting and clear all weeds around the trees. Check again every month (or more if the weed growth is very vigorous).

After a year the trees should be about 2 metres tall. They will need less weeding but the more they are weeded the better they will grow.

