

## Propagation and Establishment of Timber Trees in the Top End of the NT

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### MAY/JUNE

Collect or obtain seed for sowing. If gathering your own seed, make sure you collect it from vigorous healthy trees. When buying seed from suppliers, provide as much information as you can on the physical and environmental conditions of your property. This will enable them to select the best provenances for your area. The supplier will also give you more information on the origin of the seed such as its latitude, longitude and altitude, the number of mother trees in the collection and seed viability. Other useful information may be supplied such as the germination rate and the pretreatment (if any) of the seed, to help germination.

### JUNE/JULY

Pretreat the seed and sow it in nursery beds or germination trays. The trays should contain a loose, friable mixture of 50/50 coarse river sand and peat moss.



**Figure 1.** Lines free of grass and weeds prior to plant seedlings

Timing depends on germination rates and how quickly the plants grow in the nursery. For example, teak seed should spend at least six to seven months in nursery beds before being planted out in the field. However eucalyptus or acacias need only about three months in the nursery. Seedlings should be pricked out from the germination trays into pots as soon as possible. A good potting mix should have 40% coarse river sand, 40% peat moss and 20% perlite with 6 kg/m<sup>3</sup> of a slow release fertiliser added to the mix. The seedlings need to be kept under shade cloth for a few months, then transferred to full sun to harden off. A few weeks before the time of planting out, it is common practice to 'harden off' the nursery stock by

reducing the amount of water and frequency of foliar fertiliser applications. This slows down growth, reduces lush foliage, encourages “woodiness” and generally makes seedlings sturdier and better able to withstand the shock of planting in the ground.

## OCTOBER

After the first few rains the area to be planted should be sprayed with a knock-down herbicide at recommended rates and planting lines deep-ripped to a depth of at least 50 cm. If the soil is too acidic, lime can be added at this stage, depending on the species being planted.

Two weeks before planting spray again with a mixture of a knock-down herbicide at recommended rates and residual herbicide at label rates to prevent any new weed growth.

## DECEMBER

Planting should commence as soon as there is sufficient moisture in the soil to a depth of 25 cm.

Individual trees should receive 200 g of NPK fertiliser soon after planting. Alternatively, this can be split into two applications: one application of 100 g soon after planting and another 100 g just before the wet season ends when the heavy rains have stopped. The contents of the fertiliser will vary with the soil requirements, but something like N6, P14, K14, S11, Ca5 is sufficient for most Top End soils. The fertiliser should be placed in two pockets about 20 cm on either side of the tree.



**Figure 2.** Eucalyptus seedlings in “hyco” trays, ready for planting

## WEED CONTROL

Weed control is an essential part of initial and post-establishment management practice in woodlots and plantations. Failure to keep young plants free from weed competition can lead to high mortality, delayed canopy closure and increased fire risk. The frequency and timing of weeding will depend very much on site, climate and method of suppression. The first year is the most important in a woodlot or plantation, which has been well prepared and well fertilised. Once the canopy of a stand of trees begins to close, weeds become suppressed by shade and the frequency of weeding can usually be greatly reduced. The removal of weeds before they flower and seed, reduces subsequent weed growth.

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Published: Tuesday 11 April 2006.

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