## Seed Collection

For a revegetation project the plants most likely to thrive are often those grown from locally produced seed. Some trees don't seed every year and some only retain their seed for a short period so collection may include several visits. Important considerations while collecting seed:

1. Try to collect from a minimum of 10 trees, hopefully a distance of twice the height of each tree from each other, to minimise self-pollination. Collection from shelter belts is not recommended because trees growing in linear formation are unlikely to have pollinated with any other than their nearest neighbour.

2. Collect from a wild population to maintain genetic diversity. Where a mix of trees have been planted, the flowers from one species are likely to have crossed with another species.

3. The trees chosen should be healthy specimens which are typical of the species.

For Eucalypts, Acacias, Callistemons, Melaleucas and Casuarinas, dry the branches of seed pods out in the sun on a tarpaulin. Sieve out the seed as soon as the seed has been released from the pods and store in an airtight container in a cool place.

Soak berries in water until the flesh is soft, then rub through a sieve to clean the seed ready for sowing.

*The trees chosen should be healthy specimens which are typical representatives of the general population.*

## Mole Station Native Nursery

Situated west of Tenterfield on the Northern Tablelands of New South Wales, Mole Station Native Nursery specialises in the production of frost hardy native shrubs and farm trees.


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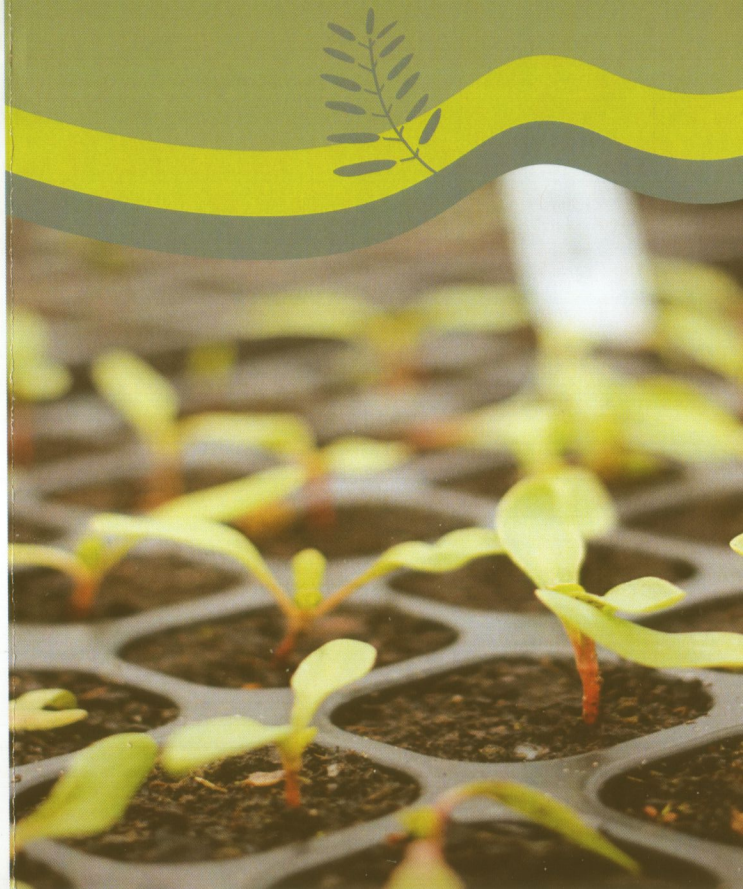
# MOLE STATION

## NATIVE NURSERY

## A Guide to the Propagation of Native Plants



## Propagation by Seed

Plants for revegetation are usually grown by seed because genetic diversity leads to a more natural plant community and hopefully in the future some species may regenerate themselves. Where possible sow the seed directly into the pot as the most reliable method of growing them without compromising their root systems.

When planting eucalypts, barely cover the seed with potting media and keep consistently moist until germination. Most eucalypts germinate without pretreatment within 5 to 10 days.

Some seeds are more difficult to germinate and a variety of strategies are required to break their dormancy.

Acacia seeds require heat or abrasion to facilitate germination. Place the required number of seeds in a mug and fill with just boiled water. Leave overnight to soak. Strain off the water and sow 1 to 2 cm below the level of the potting media. Cover with media and water in thoroughly.

After germination young seedlings damp off very easily if kept too moist. Water in the morning and allow to dry off during the day. Drench with a fungicide if required.

## Propagation by Cutting

**The most important requirements for success with cuttings are:**

1. Cutting material must be healthy and at the correct stage of growth. The cuttings need to be from new growth which is just beginning to become firm.
2. The cuttings need to be given a humid atmosphere in which to strike.

*Often the younger or more juvenile the plant material, the easier it is to strike.*

It is easier to strike cuttings taken from a grevillea which is 6 months of age than a grevillea which has been in the ground for 10 years.

**The propagation medium needs to be a well-drained mix with varying water holding capacity depending on the plant material. For most plant varieties the following recipe may be used:**

- 6 parts per liter
- 1 part peat moss
- Mix together and add
- 1 g slow release fertiliser/litre

Each cutting is made by cutting just above and below a leaf node and then dipping into a rooting hormone to encourage adventitious roots. Synthetically produced indolebutyric acid is similar to a hormone plants produce in very small quantities. By dipping the base of the stem cutting into the hormone, roots will often develop faster.

## Propagation by Grafting

Grafting is usually slower and more expensive than propagation by cuttings or seed so there needs to be an advantage to use this type of propagation.

1. Some plants propagate more readily by grafting than by cuttings
2. A hardier plant can be produced by using a tough rootstock. e.g. Eremophila nivea is much easier to grow grafted onto Myoporum insulare than on its own roots.
3. If mature material is grafted on to the rootstock, the plant may be induced to flower early or even while still in the pot. This makes the plant much easier to sell.