



Stage 5 Agricultural Technology: Plant nursery production

Practical: Breaking dormancy in seeds

Aim:

To identify the best way of breaking dormancy in native plant seeds.

Materials:

A range of native plant seeds, e.g. Wattle, Grevillia, Eucalyptus (these may be available from your local *Society for Growing Australian Plants*).

Sandpaper

Smoked water

Petri dishes

Cotton wool

Method:

Each group in the class could be responsible for preparing part of the experiment, e.g. a species or a method each.

1. Prepare smoked water by bubbling smoke from a bee smoker through water.
2. Treat each species of plant with each method, that is,
 - a) Smoke water.
 - b) Pre-soaking.
 - c) Chilling.
 - d) Scarifying by giving the seeds an abrasion with sandpaper.
 - e) Hot water.
 - f) Control.
3. Place the treated seeds onto damp cotton wool and allow to them to germinate in a suitable place.

Results:

Measure the % germination of each species with each method, and tabulate the data.

Conclusions:

For each species you should be able to identify the most appropriate method for breaking dormancy and communicate this in the practical write up.