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Spraying seedlings with fine mist is also acceptable but care must be taken not to expose the seed—which would die if allowed to dry out.

Sowing

The time to sow into plastic pots is around September to October when temperature has warmed to 20-25°C. Jiffy pots may be sown as late as January. Place the soil in the containers and tamp it down to 1.5 cm from the rim. A pinch of eucalypt seed and chaff, or 2 or 3 seeds of other species, is placed in each pot. Very fine seed such as melaleuca can be diluted with sand and spread over the containers. A covering layer of sand is placed over the seed—the rule for the depth—twice the smallest diameter of the seed.

Keep the seedlings moist by bottom watering or misting until they are at least 3 cm high. At this stage the seedlings are thinned leaving the strongest in each container.

After Care

The nursery should be in partial shade or under shadecloth during hot summer months. In late summer seedlings can be slowly “hardened”.

After the first juvenile leaves have replaced the cotyledons liquid fertiliser may be applied at fortnightly intervals. The young trees should be planted the following winter after the first soaking rains.

Further Information

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Raising trees for farms

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Tree Care Series

PAM01714



Forests Department of Western Australia

Raising trees for farms

The establishment of a farm tree nursery can be a very rewarding occupation, both in the personal satisfaction of growing seedlings and in the cost savings gained from raising instead of buying stock for your farm tree planting programme. Success will come easily if you follow these simple guidelines.

Species Selection

Choose the trees that are growing naturally, or introduced species obviously growing well in soil types similar to those on which you propose to plant, and in the same rainfall belt or lower.

Collecting Seed

Wait until capsules, pods or nuts are 'woody', or the green colouration has browned. In eucalypts up to three crops may be on the tree at once; pick the oldest looking fruits with the valves still closed.

Seed Extraction

Eucalypts, wattles (acacias) and some hakea seed capsules or pods will open if placed in a paper bag and left in a warm dry position for a fortnight. This may be speeded up by gentle heat (up to 60°C) in an oven or glasshouse.

Seed

Eucalypt species have "chaff" (infertile seed ovules) in the capsule with fertile seed. Chaff is usually different in shape, colour and size to fertile seed, and

often more numerous. Separating chaff and seed is difficult, and if allowance is made at sowing time, unnecessary. Seed should be stored in a cool dry place until sown.

Sowing Pretreatment

Most hard-coated seed such as acacias and other legumes need heat treatment to break their coat. Place the seeds in a cup and cover them with boiling water and allow to cool. After twelve hours the swollen fertile seed should be sown.

Soft-coated seed such as eucalyptus, hakea, casuarina and melaleuca require no treatment.

Pots or Containers

The least labour intensive method is to sow directly into pots. This also alleviates the need to transplant seedlings thus avoiding setbacks and losses common to that process. Pots can be 10 cm (4") square plastic pots, or "jiffy" peat pots. Both should be housed in a tray with drainage holes.

Soil Mixture

The sand or sandy loam of most wheatbelt areas is suitable for raising seedlings. If heavy soil has to be used it should be broken down with sand and peat or compost. Soil should be collected from 30 cm (1 foot) below the surface; this eliminates the presence of most seeds and common pathogens.

If further sterilisation is necessary the best method for the backyard nursery is to use formalin. A solution of

one part formalin to 24 parts water is applied at 1.5 litres per square metre up to 15 cm deep. The soil should then be watered and covered with bags or plastic for forty-eight hours.

Soak implements such as garden forks and shovels in the solution, then when the soil has dried a little, turn it over with a spade to assist in the escape of gases. The soil can be used after a fortnight or when no formalin smell can be detected.

Fertilising and Watering

A handful (60 g) of potato manure E should be mixed with each barrow load of sterilised soil.

The best method of watering is to place the trays of pots into another tray filled to half the depth of the pots with water. When the surface soil is soaked the pots are removed and excess water will drain out. To prevent the soil from washing out of the plastic pots place 1 cm of blue-metal or cinders in the bottom of the pots. (see diagram).

