## **Propagation by Seed and Cuttings**

by Warren Sheather

This article appeared in the Summer 2016 edition of our Newsletter.

Propagating your own plants is an interesting and inexpensive way to produce plants for your garden. Commercial Seed Raising Mix may be used for both seed and cutting propagation.

## **Seed Propagation:**

The majority of native plant seeds required no treatment before sowing.

Acacia or wattle seeds are the exception. They have a hard seed coat that needs to be treated before sowing. The seeds are placed in a container and covered with boiling water. Leave to soak for an hour or so before sowing.

Seeds may be sown into punnets, small pots, tubes or margarine containers with holes punched in the bottom for drainage.

Sow seeds on the surface of the propagating mix and cover to a depth about double the seed diameter. Fine seeds such as *Eucalypts*, *Callistemons* and *Leptospermums* only need to be covered by a sprinkling of the mix. Large seeds such as *Acacias*, *Banksias* and *Hakeas* should be covered to a depth of one centimetre.

Place the seed pot in a sheltered position that receives morning sun. Protect from rain as this may wash small seeds out of the mix. Seedlings are ready for transplanting, into individual tubes, when they are at

least one centimetre tall. Seedlings are ready to plant out when they as tall as the tube and the roots have reached the tube base. Use a good quality potting mix that meets the Australian regular standard for potting mix.



Image A shows a punnet of *Hakea* seeds ready for transplanting.

## **Cutting Propagation:**

Firstly we should mention why we propagate native plants from cutting.

- Some native plants do not produce viable seed or have seeds that are difficult to germinate.
- Some native plants do not produce viable seed or have seeds that are difficult to germinate.
- Hybrids should be propagated from cuttings to preserve their characteristics.
- Plants with variegated foliage must be propagated from cuttings
- Cutting grown plants usually flower sooner than those grown from seed.

Cutting material should be taken from firm, current season's growth. Hard, woody material and soft, limp growth are both usually unsuccessful.

- They should be between 8 to 12 centimetres long.
- Leaves are removed from the lower half of the cutting.

The bottom one centimetre of the cutting is dipped in a powder or gel containing root promoting hormones. We find Red Clonex gel has proved to be very successful in encouraging root development. A 50 ml bottle will treat many hundreds of cuttings.

Cuttings should be placed in pots filled with commercial seed raising mix. Make a hole with a pencil, place the cutting in the hole up to a third of its length and firm the mix around the cutting. A 7 cm diameter pot will accommodate up to 6 cuttings (Image B)



Pots containing the cuttings should be placed in a warm, humid place that receives the morning sun. A number of methods may be used to maintain warmth and humidity. With a small pot a clear plastic drink bottle could be used. Cut off the base and cover the pot with the bottle. Leave the cap on. This could be used to regulate humidity. Remove the cap to reduce humidity and replace to maintain a humid atmosphere. With larger pots maintain the warmth and humidity by covering with a clear plastic bag supported by a couple of wire hoops.

For a number of pots a cold frame will fulfil the requirements for cutting propagation. A cold frame is a rectangular box with no top or bottom with sloping sides and sitting on a bed of sand. The cutting pots are placed on

the sand bed and the cold frame covered with a plastic sheet or recycled window. In all cases keep the seed raising mix moist but not saturated.

To prevent the foliage drying out spray when necessary with a hand held spray.

When the cuttings take root they are potted into individual tubes using a potting mix that meets the Australian regular standard.

Cutting grown plants are ready to be planted when they are as tall as the tube and when the roots reach the base of the tube.

## Image C shows a range of cuttings that have taken root.

With both seeds and cuttings remember to label the pots.



Some of the native plants that are grown successfully from cuttings are:

Boronia sp.

Correa sp.

Crowea sp.

Eremophila sp.

Grevillea sp.

Prostanthera sp.

Westringia sp.

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