

## Propagation using Cuttings

### Why Grow Plants from Cuttings?

- It can be personally satisfying to have plants in your garden that you have grown yourself either from seed or cuttings.
- The cutting grown plant is identical to its parent. Plants grown from seed are not always identical.
- It's economical.
- Cutting grown plants flower sooner than seed propagated plants.

### What is a cutting?

A cutting is a short piece of stem, which can grow into a new plant.

Some plants can be grown from cutting pieces just pushed into the ground. Some cuttings will form roots in a glass of water. But most cuttings require a little preparation and after-care to get good results.

Propagate cuttings in the warmer months after the spring growth has firmed, for best results.

Many of the recently introduced hybrids must be grown from cuttings, as they rarely produce fertile seed.

Cuttings grown from plants granted a PBR (Plant Breeders Right) cannot be sold without permission from the registered grower.

Cuttings grow best in a propagating medium.

### What's in a Propagating Medium?

- Coco peat or Peat moss hold moisture.
- Sand: washed, coarse sharp river sand. Beach sand is not suitable.
- Coco peat is made from the husks of the coconut and so is a renewable product.
- Peat moss is dug from ancient sphagnum moss bogs and is not a renewable product.
- Perlite is heat treated rock particles, with excellent aeration properties.

### A Basic Medium for Growing Cuttings.

- 2 parts sand
- 1 part Coco peat/ Peat moss
- 1 part Perlite.
  
- **OR** 3 parts commercial seedling mix with 1 part perlite.

A good medium needs to;

- support the cutting so it does not move,
- have been sterilised and free of weed seeds, insect pests and disease,
- retain moisture around the base of the cutting, but let excess moisture drain freely
- allows air to circulate within the medium,
- have a ph 4.5-5.5 (to initiate root development),
- provide nutrients for the developing roots,
- be moist but not wet.

What are the Best Containers for Growing Cuttings?

- Use dark plant pots 50 to 100mm diameter. Light coloured containers let light in, so that algae grow and block drainage holes.
- Wash used pots in disinfectant or bleach to prevent the spread of disease.
- Fill containers to the top with the cutting medium.

Taking Cuttings

- Select mature plants.
- Cuttings are best taken early morning.
- Choose plant material that is firm but not woody (semi hard).
- Use a VERY SHARP knife or secateurs to produce a clean smooth cut. Blunt equipment will damage tissue, which lets disease enter.
- Cut the stem just below a node (the bump in a stem where the leaves join)

Preparing the cutting material

- Prepare cuttings in a shaded sheltered area away from direct sun and drying winds.
- Select firm young growth as these make the best cuttings, ideal length is between 50-100mm.
- Remove the lower leaves from each cutting carefully, by pulling or cut with secateurs.
- Do not strip the bark from the stem of the cutting.
- Dip the lower end of the cutting in rooting hormone (comes in gel, liquid or powder from most nurseries).
- Make a hole in the medium. An old knitting needle or skewer makes a great dibbler. Insert the cutting gently, firming the medium and "bump" the pot to settle the mix. Several cuttings of the same plant species can be put in the same pot.
- Water in gently.
- Do not mix plant species in the same pot, as they can take different times to form roots.
- Write a label for each pot. Include plant name, and the date processed.
- Place pots in a shaded, warm, humid environment.
- Polystyrene boxes with a glass or plastic cover make an excellent small propagating unit.
- For just a few small pots, use a plastic bag inverted over some canes to make a little tent, or use a plastic drink bottle with the bottom removed. Watch for mould in humid weather.

## Hardening off and potting on

When plants are grown in warm humid conditions, they are soft and can be easily burnt by full sun and wind. They should be hardened off by placing the pots of rooted cuttings in a shade house to acclimatise for a few days

After potting into single pots, they should be placed in a shaded position until established.

Use a good quality potting mix, one that has a fertiliser added.

Some species that have proven easier to grow from softwood cuttings

<i>Astartea fascicularis</i>		Grevillea 'Pink Pearl'	
<i>Baekea species</i>	Heath myrtle	Grevillea rosmarinifolia	Pink spider flower
<i>Bauera rubioides</i>	River rose	Hibbertia procumbens	Spreading guinea flower
<i>Bauera sessilifolia</i>	Grampians Bauera	Hypocalymma cordifolium	
<i>Brachyscome multifida</i>	Cut-leaf daisy	Isotoma axillaris	Rock Isotoma
<i>Bracteantha bracteata</i>	Dargan Hill Monarch	Melaleuca micromera	Wattle honey myrtle
<i>Callistemon 'Kings Park Special'</i>	Fringe myrtle	Melaleuca violacea	Purple honey myrtle
<i>Calytrix tetragona</i>		Myoporum parvifolium	Creeping boobialla
<i>Correa species</i>		Orthosiphon aristatus	Cats whiskers
<i>Dampiera diversifolia</i>		Prostanthera species	Mint bush
<i>Eremophila maculata</i>	Yellow emu bush	Rhodanthe anthemoides	Paper baby
<i>Grevillea australis</i>		Rulingia prostrata	
<i>Grevillea dimorpha</i>		Thryptomene saxicola	Paynes Thryptomene
<i>Grevillea juniperina</i>	Yellow prostrate	Westringia fruticosa	Coastal rosemary

Some plants will develop roots if placed in a glass of water

<i>Brachyscome multifida</i>	Cut leaf daisy
<i>Isotoma axillaris</i>	Rock isotoma

<i>Orthosiphon aristatus</i>	Cats whiskers
<i>Piper novae-hollandiae</i>	Native pepper
<i>Viola hederacea</i>	Native violet

There are a number of plants which are difficult to propagate from cuttings, if not impossible!

<i>Acacia</i>	Use seed	Persoonia	Very slow
<i>Allocasuarina</i>	Use seed	Big leafed Grevilleas	Need bottom heat
<i>Eucalyptus</i>	Use seed	Palms	Use seed
<i>Eriostemon</i>	Very slow		

#### Further Reading

"Let's Propagate", Angus Stewart, ABC Books Sydney

"Propagation, Cultivation and use in Landscaping". Reed New Holland Sydney

"Encyclopaedia of Australia. Plants suitable for cultivation" Vol.1 Lothian Sydney

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