

Grevillea Propagation

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We have been producing grevilleas for a number of years. During that time we have used many different techniques to propagate them. In this paper I will discuss some of the techniques we are currently using to propagate grevilleas.

There is always something new to try and there are all the old standard rules to keep as well. Whenever we are forced to compromise these rules, we will have less successful propagation results or even total disasters. Two of the most important of these rules are, good, well-managed stock supply and a high regard to hygiene throughout all the propagation procedures.

Stockplants, for us are very important for two reasons. One reason is to ensure the availability of cutting material to cover the numbers of cuttings we need to put down for a batch. The other is to ensure that the quality of cutting material is high. We found it to be a difficult and expensive task to meet these two criteria as our nursery was only a propagation nursery with no containers from which to gather cuttings. We had an acre of stockplants at one stage as well as extensive gardens to supply cutting material. The work and upkeep of such a system was great. We now have a different system of providing cutting material which we feel is more effective for us. We now grow container lines and use the nursery as a source of cutting material which gives us high-quality, young, well-nourished cuttings from which a good strike rate is almost always achievable. In addition, we utilize public and private gardens, and other nurseries for a backup and for extra numbers. So we in effect have two sources of most stock requirements. Disadvantages of taking cuttings from containers are that you may need to sell containers or leave cutting material on the container plant to get it ready for a sales deadline.

Having established a good, reliable, and healthy source of cutting material the task of making cuttings efficiently and choosing the environmental conditions you need to put roots on as quickly as possible begins.

Many different techniques have been tried for making cuttings, but at present we are using cuttings of mature wood from current seasons growth using as clean a cut as possible and slightly scaring the side of the cutting. Leaf area is reduced and we have had encouraging results with some species in reducing the leaf area greatly.

Two contrasting techniques are used for different grevilleas. With *Grevillea* 'Poorinda Royal Mantle' and *G. asplenifolia*, we reduce leaf area and cutting size to a minimum. With *G.* 'Sandra Gordon', *G.* 'Honey Gem', and *G.* 'Moonlight', we find that larger cuttings carrying two to three nodes and leaves are more successful than single-node cuttings.

Another technique used for cuttings is to leave all the leaves on the stem. We used this method with *G. juniperina* 'Prostrata Red' to save the cutters from being spiked by the sharp leaves when stripping and we found the strike rate of these cuttings surprisingly good.

When making cuttings of grevilleas you must make any cuts to the stem as clean as possible. We usually ensure this by using budding knives. During this past year we have tried making grevillea cuttings using a tiny pair of secateurs. Results from

this technique have been adequate, although I prefer to use a budding knife.

One technique we have used on all cuttings, including grevilleas, is a very successful way of reducing the handling of individual cuttings. Instead of throwing cuttings into a pile as we make them up, we place them into slots that have been cut into a foam fruit box. The cuttings are held altogether with their ends ready to have hormone powder applied. The hormone powder is applied with a small paint brush, then a small bunch of cuttings can be removed from the box and dibbled into the prepared medium.

We put our cuttings on a heated bed with mist inside a polyhouse. After roots are formed, they are moved out into a shade house for hardening off and fertilized with liquid feed to encourage growth if it is needed.

An environmental aspect of propagating grevilleas which ties in with hygiene is the dilemma of how wet to keep the environment. We have found that grevillea cuttings must not be kept too wet with mist as they tend to be affected by fungal problems. Also, we have found that grevilleas prefer a light, open rooting mix with very good drainage.