Propagation of Pittosporums by Cuttings

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INTRODUCTION

The demand for pittosporums (*Pittosporum* spp.) in New Zealand has never waned, and with the introduction each year of exciting new hybrids, this trend is sure to continue. They are grown predominantly for their almost endless range of foliage colours. Couple this with their adaptability either as a hedge, a trimmed container plant, garden specimen, a floristry crop or contrast plant in the shrubbery, and it is not surprising that many New Zealand nurserymen consider these plants their "bread and butter" crop.

PROPAGATION

Pittosporums can be propagated by many methods. These include seed germination (for many of the hedge grade species), tissue culture (for rapid multiplication although some cultivars can be unstable), grafting (for the hardest cultivars to propagate) and cuttings. The last is the commonest method among nurserymen in New Zealand. Pittosporum cuttings can be taken and processed by many methods but these are not compared here. The following method is the one used at George Rainey Nursery

Source of Cuttings. A source of good material is essential for success. This may be stock plants or the nursery stock Many of the original stock plants, although still trimmed and shaped each spring, have served their purpose and are retained because they are decorative. A planting programme has been in progress for 5 years and is proving very beneficial. Autumn pruning of nursery stock provides us not only with most of our cuttings but also shapes the plants before winter-spring despatch and helps to make tube liners sturdier. A 10-15 cm cutting is taken and the terminal growth is removed to encourage branching at the outset.

Timing. As there are two main flushes of growth each year—September-October (spring) and March (autumn)—cuttings can be taken twice as this new growth hardens. Most propagation is done in late April-early May so as to fit into the bagging programme of the following summer. Average daily air temperature in November is 23°C and in April/May is 23-20°C.

The Rooting Environment. Cuttings are stuck in 100% pumice sand firmed into plastic propagation trays. They are placed in a propagation house consisting of a three-sided enclosure, open to the North and measuring 20 m long and 45 m wide. The side walls are 2.5 m high and there is no roof and no bottom heat. Misting is provided by 360 degree nozzles positioned throughout the structure and controlled by a timer set to 15 sec duration every 18-20 minutes. This varies depending on the weather.

Tubing. Because the cuttings have never been subjected to bottom heat nor fertiliser, they are relatively hardened off. The mist can be turned off once root initiation commences after 4-8 weeks and there is no need to move rooted cuttings to a hardening-off area. Rooted cuttings are tubed into 7 cm square pots in July-August (late winter-early spring) and shaded with portable shade covers for the first and last time for approximately 1 week. The plants are sheared in October-November (late spring-early summer) to encourage bushiness and for cuttings if they are needed