

## RAISING PERSONIA LONGIFOLIA FROM ROOT CUTTINGS

by

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During the Spring of 1971 several unsuccessful attempts were made at Manjimup Research Headquarters to raise *Personia longifolia* from seed as it was desired to try these as an ornamental species. A small quantity of seed had been collected locally in the course of normal duties. This seed was sown in seed trays as fresh seed, stratified seed and also after treatment in hot water, but with no success. A visitor from King's Park Botanic Gardens who saw the seed boxes said that they had had very little success in raising this species from seed. Observations in the natural state suggest that it does not regenerate very readily from seed.

Having noticed that *P. longifolia* suckered freely from root stock cut off in quite deep road cuttings, it was decided to try raising the species from root cuttings.

Cuttings were taken from the roots of a small tree on 1st March, 1972. A range of diameter size cuttings were taken, approximately 3/8 to 1 inch diameter, and these were cut into pieces four to six inches in length. The top ends of the cuttings were cut off square while the lower ends were cut at an angle of forty five degrees. The cuttings were treated with hormone cutting powder at the lower end and planted in a 3:1 mix of sterilized sand and European peat in the glasshouse and kept moist. Cuttings were supposed to be planted with the top end level with the soil mix although several were up to one quarter inch deep under the mix, after watering, due to the uneven surface of the mixture in the pots.

Ten cuttings were tried and for several months no growth was evident, when several showed signs of bud development and after some weeks sent out shoots. The buds appeared first on an inner layer of bark and did not grow through the outer bark, but rather sloughed this away and grew up between the layers. By early June, six cuttings had developed green shoots up to one and a half inches in length.

The cuttings that have shown signs of growth to date are generally the larger ones although the largest was the last one to shoot, suggesting that a cutting of one half to three quarters of an inch diameter would be the most desirable size. Cuttings which were covered did not shoot and this appears to be undesirable. It is possible that other times of the year may be better suited for the striking of root cuttings of this species and it is also realized that root development may not be satisfactory but indications to date are most encouraging.