

## PROPAGATION OF *EUCALYPTUS UROPHYLLA* X *EUCALYPTUS GRANDIS* CLONES BY ROOTED CUTTINGS: INFLUENCE OF GENOTYPE AND CUTTING TYPE ON ROOTING ABILITY

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### Abstract

The genus *Eucalyptus* is of immense importance, consisting of more than 700 species, some of them being used as ornamental and for landscaping. Propagation by rooted cuttings of *Eucalyptus urophylla* × *Eucalyptus grandis* mature clones was assessed in Pointe-Noire, Congo, using two types of cuttings. B0 cuttings were derived from field sprouting stumps whereas B1 cuttings were produced from intensively managed container-grown stock plants. Overall, B1 cuttings rooted much earlier and in greater proportions than their B0 homologs with more than 95% of success after 25 days of rooting for every clone. Rooting rates varied markedly according to the genotypes up to the 30<sup>th</sup> day of rooting, and more especially for B0 than B1 cuttings. The number of adventitious roots produced was observed to be significantly influenced by the genotype and the type of cutting, as well as by the interaction between these two factors during the whole rooting period. The incidence of these results on the subsequent development of the rooted cuttings further to field planting was discussed. Experimental and more practical observations based on several millions of B0 and B1 rooted cuttings-derived plants produced and planted so far plead strongly for the use of cuttings produced by intensively managed container-grown stock plants rather than originating from field sprouting stumps. This view is argued with regard to mass clonal propagation systems of eucalypts in general.

**Key words:** clonal propagation, cuttings, *Eucalyptus urophylla* x *Eucalyptus grandis*, rooting ability, stock plant management

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