THE EFFECT OF LOW PRUNING ON INCREMENT OF P. RADIATA

by F. H. McKinnell

In April 1964 an early pruning trial was laid out at Grimwade, by J. Gilchrist, located in pines planted in June 1960.

The pruning prescription was:

- (a) Prune to 6' all trees 12' in height and over.
- (b) Prune to half height all trees under 12' height
- (c) Leave a minimum of two whorls.

Five plcts were pruned and 5 were kept unpruned as a control and the height and D.B.H.O.B. of all trees measured. Re-measurements have been carried out by the Research Branch in July 1965 and April 1966.

The results to date are as follows:

A. Height Growth

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Mean height increment April 64 - July 65 pruned plots = 6.6 ft.

" " " " unpruned plots = 8.6 ft.

" " July 65 - April 66 pruned plots = 6.0 ft.

" " unpruned plots = 5.7 ft.
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B. Diameter Growth

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Mean D.B.H.O.B. increment April 64 - July 65 pruned plots = 1.40 in.

" " " unpruned plots = 1.60 in.

" July 65 - April 66 pruned plots = 0.75 in.

" " unpruned plots = 0.75 in.
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The indications are that pruning at age 4 results in a relatively small loss on increment during the first year, but growth has returned to normal in the second year after pruning. It is stressed that figures do not constitute a proof as the layout of the plots precludes any statistical analysis. The loss in growth and the duration of the loss are, in fact, both considerably less than that found in N.S.W. and reported by Shepherd in 1961.

In order to obtain more complete and reliable figures under local conditions a new project with a better layout is planned to commence in June 1966.

Reference:

Shepherd, K.R. (1961). The effects of low pruning on increment on radiata pine plantations. For. Comm. of N.S.W. Research note no. 6.