LETTER TO THE EDITOR

CO-OPERATIVE RESEARCH REPORTS

Sir

I was pleased to see the papers by Hunter *et al.* and Gordon & Graham in your last issue (Vol. 16 No. 1, 1986).

Both of these papers have arisen largely out of co-operative trials between the Forest Research Institute and field foresters which I instigated in the 1970s. The idea of using a series of standard designs over a range of sites came from the way co-operative research was being undertaken in the United States. The C.R.I.F.F. (Co-operative Research in Forest Fertilisation) programme in Florida is a good example.

The reasons for using a series of standard designs in the New Zealand plantations were:

(1) The perceived need to obtain fertiliser response data over a wide range of sites, with the eventual aim of being able to predict the response over a range of sites, etc.;

(2) The need to look at the potential of fertilisers on sites which are not acutely deficient, such as the phosphate problem sites in Northland;

(3) The desire to overcome the tendency of foresters to "throw a bit of fertiliser on and see what happens" and to channel their energies into better experimentation.

So it was always intended that the results should be drawn together, although it was not quite clear how this would be achieved. Efforts were made to ensure that the experiments covered a range of sites, but this was partly dependent on the co-operation available. In established stands the design used invariably consisted of three replications of a limited number of treatments. This was done deliberately so that it would be possible to get interim results on a stand basis before the over-all analysis was attempted. There were two reasons for this. Firstly, it was important for the individual co-operators to be given response information as it became available for the trials they were involved with. Secondly, replication within sites ensured that if the attempts to generalise did not succeed then the efforts were not lost.

It was therefore pleasing to see a paper which looked at site factors that determine response of radiata pine to nitrogen. The second paper which analysed the changes in stem form was an added bonus.

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