

Welch, and that neither author was aware of the other. They do not cover quite the same ground but there is a great deal of overlap nevertheless and if one's interest is primarily in horticultural cultivars, Welch's text is more detailed.

The other authoritative text with which this book must be compared is Gerd Krussman's 1985 Manual of Cultivated Conifers which in fact deals with nearly all the recognised species and most of the cultivars: 2376 in total. Here, the area of overlap is even greater. It would be fair to say that Vidakovic's descriptions of the commoner Eurasian and North American conifers are at least as detailed as Krussman's and are more clearly presented. However, although neither deals adequately with the southern hemisphere conifer genera, Vidakovic is particularly skimpy in his treatment. Even Dallimore and Jackson, which is very dated now, is more authoritative on *Agathis*, *Dacrydium*, *Podocarpus*, *Phyllocladus*, *Libocedrus* and the smaller southern genera.

There is no doubt that this new book is a pleasure to use, and that it should be available to professional foresters and botanists. It is a pity that it has to compete for space on library shelves with at least two other recent authoritative texts and a plethora of other good books on this group of plants.

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PROPAGATION

Rapid Propagation of Fast-growing Woody Species, edited by F.W.G. Baker and published by C.A.B. International, U.K. in 1992. The retail price is £30.

This book is a collation of the papers presented and the recommendations of a conference held in 1989, organised by CASAF (Committee on the Application of Science to Agriculture, Forestry and Aquaculture) of the International Council of Scientific Unions. The papers discuss propagation of a range of tropical and temperate species, particularly *Eucalyptus*, *Acacia*, *Musa* (bananas), and bamboos. Conventional cuttings and tissue culture propagation systems are discussed, and also some aspects of clonal plantations.

There are 12 chapters in the book of 125 pages, although only six of them exceed 10 pages. Most of the chapters

concentrate on tissue culture rather than cuttings propagation methods, as these are envisaged as the methods most suitable for large-scale propagation for clonal forestry and offering technology for germplasm storage and germplasm exchange between countries.

A chapter by V.J. Hartney and J.G.P. Svensson covers tissue culture of Australian tree species, and this gives a very good background on general tissue culture methods for tree species, particularly eucalypts, and some of the advantages and problems with tissue culture. There is also a comprehensive chapter on tissue culture of *Musa* species (bananas and other plantains) by J. Schoofs, and two chapters on propagation of bamboos by conventional propagation and tissue culture methods by I.V.R. Rao, I.U. Rao and F.N. Roohi, and I.U. Rao, I.V.R. Rao, and V. Narang. The two chapters on bamboo propagation could have been combined into a single chapter to avoid repetition.

Implementation of a clonal forestry strategy has a number of problems to be resolved, including clonal testing, maintenance of juvenility and deployment of clones in mixtures or as single clone stands. These issues are discussed in a number of chapters, particularly in two interesting chapters, one by H.J. Muhs and one by L. Zsuffa. Muhs discusses the laws governing the marketing of clonal material in Sweden and Germany. In Germany, the use of bulk propagated, untested material is not allowed, and the clonal composition of any plantations of a major forestry tree species must consist of at least 500 clones in a mixture. Hopefully this situation will not occur in New Zealand, where vegetative propagation by cuttings is used to bulk up scarce high genetic quality seed, and clonal forestry is envisaged to require around 100 clones probably planted in single clone blocks.

The chapter on tissue culture propagation of Australian species, and the chapters discussing clonal forestry will be of interest to foresters who wish to become aware of what clonal forestry might offer in the future.

Not all of the species discussed will be of interest to New Zealand foresters, and unfortunately many of the chapters are too brief to cover much discussion of the implications of high multiplication rates and clonal forestry. However, readers will become aware of some of the issues involved, and some of the problems still to be researched before clonal forestry becomes a reality.

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FUNGI GUIDE

An illustrated guide to Fungi on Wood in New Zealand, Auckland University Press, \$39.95, 424 pages. By Ian Hood, New Zealand Forest Research Institute, Rotorua.

Ian Hood is well equipped to put together this comprehensive field guide on forest wood fungi, having worked on the subject for 23 years as a scientist.

Most foresters and forestry staff will confess shortcomings to their knowledge on the subject. Here is their chance at last to fill the gap.

The book has as very useful introduction section covering the biology and ecology of wood decay fungi. This is a preliminary to a detailed identification key that does not get you caught up with technical terminology.

The format is usually two pages to each fungus – one giving a detailed description that includes usual hosts and habitat. The technical descriptions are scientific, using understandable terminology. These are enhanced by references to excellent descriptive drawings by the author on the adjoining page. 48 colour photographs add to the drawings.

This is a book essential for your shelf or one that can be taken out with field equipment. It is an excellent student textbook and many of us will wish we had this reference to New Zealand fungal flora many years ago.

Dave Kershaw

HANDLING CHEMICALS MADE EASIER

Richmond Company ICI Crop Care Research Group has won a top Australian industry award for development work to make the handling of concentrated agricultural chemicals a much easier, accurate and safer procedure.

The technology developed by the group allows agricultural chemicals to be made in the form of water dispersible granules, which are very user-friendly compared to conventional powder or liquid formulations.

ICI Crop Care New Zealand Manager Mr Shane McManaway said development of water dispersible granules was a breakthrough which makes the use of agricultural chemicals a clean and safe process.