

wary of trying to bring all plant breeding under a single umbrella of legislation, regulations, or management – it is all too easy to devise protocols which, while seemingly general, are really built around the constraints of a particular set of organisms.

One might add, though, that with new technology for propagation and genetic manipulation many constraints will doubtless go. This will make for new groupings with respect to breeding methodology for different organisms, but may not make plant breeding less diverse.

The main weakness of the book is in the organisation and coverage of the general topics. The article on Novel Genetic Techniques, for instance, has been tacked on to the section on Forestry and Soil Conservation. While it may have considerable application to trees it currently relates more to other types of plants. Additionally, the chapter is slanted (unlike the rest of the book) towards a general exposition of principles, and does not focus on what the future applications may be in the New Zealand context. Yet, looking into the future is a necessary exercise, even if it is a recipe for being wrong. The crystal ball motif on the cover implies some pretensions, but in respect of them the book has failed to deliver.

The other three general chapters are tacked on to the Pasture section. Two of them, namely Cultivar Management and Breeding for Resistance, have the limitations of incomplete or uneven coverage of various groups of plants. In fairness, it would be very hard to attempt even coverage, and the Breeding for Resistance chapter, after cursory treatment of principles, makes it clear that only examples are being considered.

Perhaps the biggest omission has been the cursory or incidental treatment of developments in vegetative propagation, such as tissue culture, which are less radical than actual genetic manipulation. This is doubly unfortunate in regard to forestry where, since the articles were prepared, advances in propagation technology have become an important element in forward thinking and even the present strategy.

Other omissions are inevitable, but I would have preferred a clearer indication in the Ornamentals chapter that breeding work on some genera was omitted.

Criticisms notwithstanding, the Editors and contributors are to be congratulated on a really excellent volume. Though changes may come thick and fast, the historical perspective will make the book of enduring value.

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FUELWOOD: THE ENERGY CRISIS THAT WON'T GO AWAY

by Erik Eckholm, Gerald Foley, Geoffrey Barnard, and Hoyd Timberlake.

Earthscan, 3 Endsleigh Street, London WC1H 0DD. 1984. 105 pages.

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For most New Zealanders fuelwood is not the stuff of an energy crisis. Hearing that term we are more likely to think of some aspect of the international oil market. Yet there are more than a hundred million people who already are unable to obtain sufficient

fuelwood to provide for even their minimum energy needs. Another 1000 million are affected to some degree by shortages and, if present trends continue, this number is likely to increase to some 2500 million by the year 2000.

In the 10 short chapters of this book the authors' knowledge of this energy crisis comes through clearly; so too does their concern for its victims. This is a book written by people who care.

The book begins by outlining the scope of the crisis, the relationship between fuelwood demands and deforestation, and the collection and consumption of fuelwood. In Chapters 4 and 5 reasons why people are willing or unwilling to grow trees are discussed, and the next three chapters deal with various aspects of helping people to grow trees. Improved wood-burning stoves are the topic of Chapter 9, the authors making the point simply yet forcefully that these stoves are unlikely to save much wood, nor to slow deforestation, at the national level. Their view is that the greatest benefit of these stoves comes from improvements that they bring to the health, safety, and quality of life of the cook. In the final chapters the authors argue that the "fuelwood crisis" is part and parcel of the crisis of under-development and poverty. "People are short of firewood because they are poor [and] without development, they will find no escape".

As an introduction to the many issues involved in the fuelwood crisis this book is excellent. It is easy to read and the many black and white photographs interspersed throughout the text help illustrate the ideas/points being discussed. The one disappointment, and the one thing that severely limits the usefulness of the book, is the complete lack of referencing and of bibliographical detail. The reader interested in following up ideas or points made in the book or in sighting the sources for most findings mentioned is going to face some difficulty in deciding where to begin looking. Despite this, the book is worth reading as an overview of the subject for those who need or want no more.

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