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BOOK REVIEWS

Cultivated Vegetables of the World. By S. J. Kays and J. C. S. Dias. Athens, Georgia, USA: Exon Press (1996), pp. 170, US$29.95. ISBN 1-888168-51-8.

The current expansion in international consumption, export and importation of novel and exotic vegetables has accentuated the problem of accurately identifying unfamiliar crops from only their local or regional common names. These may vary widely, even within relatively limited geographical areas, particularly where different ethnic groups are involved in production.

The authors of this book have made a valuable contribution to solving this problem and encouraging consistency in terminology by providing, in 15 languages, a ready cross-reference to the family and botanical names from the common names of over 400 commercially grown vegetables. They have also made identification relatively simple by listing the known common names both alphabetically and by language in separate tables.

The five tables which comprise the contents of the book are clearly arranged and all are cross-referenced. Table 1 lists the family, botanical name and common names of each species and also indicates the edible part of the plant and its preparation for consumption.

The book is an essential international guide to the classification and nomenclature of a very wide range of cultivated vegetables and it is written in a format which is easy to follow. It also illustrates the considerable diversity of vegetable production and utilization worldwide.

H. D. Tindall

Governments, Farmers and Seeds in a Changing Africa. By E. Cromwell. Wallingford, UK: CAB INTERNATIONAL (1996), pp. 174, £30.00. ISBN 0-85198-976-4.

The supply of improved seed to farmers remains an important cornerstone to sustained agricultural development but is difficult to establish. It is also a subject which lends itself to confident pronouncements based on one political dogma or another, and to over-simple how-to-do-it texts. Elisabeth Cromwell's book is the antithesis of such approaches. It is valuable to anyone involved with seed production and distribution policies in developing countries, and especially for those concerned with Africa. It is a scholarly book in the best sense of the word – clearly written, well researched and appropriately illustrated with facts, figures and case histories.

In particular, the book is valuable for its analysis of the advantages and disadvantages of the public and private sectors in the national systems, concluding that a balanced mixture may well be appropriate in most cases.

Eric Roberts

Land Quality Indicators. By C. Pieri, J. Dumanski, A. Hamblin and A. Young. Washington DC: The World Bank† (1995), pp. 63, US$7.95. ISBN 0-8213-3511-1.

Indicators and standards are basically expected to give quick and uniform testing, but their

†Pricing of publications by The World Bank. The World Bank has agreements with sole distributors in most countries. The prices quoted in US$ are for the USA. For UK prices it is necessary to consult the UK agent, Microinfo Ltd, PO Box 3, Alton, Hants, UK.

reliability must always be questioned. Land quality is a very imprecise concept, especially with the definition used here, that is, that land quality is the condition of land relative to human needs. Land has many uses, characteristics, and scales, and the attempt to concentrate this variability into a few terms – or even a single indicator – must be problematical.

This book covers agriculture, forestry and managed ecosystems, with a policy slant. The three major land issues are: inappropriate land-use systems, land degradation, and inadequate policy environments. Most agriculturists will understand land degradation well, but many indicators are socio-economic. The boundaries of natural land units and of administrative units frequently differ, causing serious difficulties.

The underlying theory is that separate indicators monitor the 'pressure' (stress) on a land system, the state and the changes induced by that pressure, and the response by society (not the land system) to those changes. The book mentions a 'rigorous scientific basis', but this must be optimistic. This is cheap and broad information, but if it can be shown to be useful, so much the better.

The final chapter deals with sources of reliable information for the indicators. Some existing databases are good, but their scale may be too large. Modelling is mentioned, but surprisingly, remote sensing is hardly touched upon.

The book contains the results of some regional workshops, but much of this needs more thought and clarification. The subject is important, because it is being used to inform and influence politicians, but it still needs more clarity in its concepts.

P. B. Tinker

The Tropical Rain Forest. Second Edition. By P. W. Richards. Cambridge University Press (1996), pp. 575, hardback £90.00; paperback £32.00. ISBN 0-521-42194-2.

This is the second Edition of Professor Richards' classic book, which was first published in 1952. In fact, it has been completely rewritten, and takes account of the enormous increase in knowledge and interest in the subject, as well as the dramatic depletion of primary forest since 1952. The book is a beautifully written, well indexed and authoritative work of reference on tropical rain forest ecology primarily from the botanical viewpoint. It is also a compelling read, and the chapters unfold like a series of inspired lectures on the subject. It has a wide subject spread, and uses a broad definition of the rain forest to include evergreen seasonal forests of moderately seasonal tropical regions as well as the true rain forest of ever-wet climates. Richards draws on his own wide experience and some 1000 literature references to develop the themes with detailed descriptive examples from Africa, America, Asia and Australasia. The focus is on the characteristics and dynamics of primary forest, with extensive coverage of transition of the forest to other forms, including semi-deciduous forest and savanna at altitudinal and latitudinal limits. There are also clear accounts of the changes to second-growth in response to human interference by shifting cultivation and timber felling. This is a most timely and valuable contribution to understanding, and it provides an excellent record of the forests and the dramatic changes now threatening their future existence.

G. D. Holmes

The RGA History of the Plantation Industry in the Malay Peninsula. By D. J. M. Tate. Oxford University Press/OUP Southeast Asia. (1997), pp. 647. £42.00. ISBN 983-56-0004-X.

The author of this weighty work (commissioned by the Rubber Growers Association) is a historian, long resident in Kuala Lumpur, who clearly knows his subject. It is a large, truly learned book, complete with all the usual apparatus of scholarly footnotes and appendices. The emphasis is very much on the historical, on the bureaucratic, and on the commercial wheeling and dealing that accompanied the rise of the great plantation industry of Malaysia, the greatest the world has ever

seen. The author is weaker on technical matters and seems not to notice that the two great crops upon which Malaysia ultimately depended succeeded because they were tolerant of acid-aluminiferous soils.

Tate describes very well the rise from early beginnings in Penang, Singapore and Malacca, through cycles of very diverse crops and shifting cultivations, all more or less disastrous, and the rise of immigrant labour, to the impact of rubber and oil palm early in this century. Politico-economic crises notwithstanding, both crops prospered and their histories, including that of the 'Emergency' of 1948–60, are well described. The general pattern seems to have been one of vigorous, but professionally incompetent, private enterprise belatedly corrected by decent research. One of the few shining lights was the great Sir Eric Macfadyen who understood nearly everything marvellously well.

Few will read this book word-by-word but any serious student of plantation agriculture will want to know about it and read parts with care. It is readable, adequately annotated and indexed and the price, I suppose, is not unreasonable for a well-made book. It will surely be a basic reference for years to come.

N. W. Simmonds

Fundamentals of Soil Ecology. By D. C. Coleman and D. A. Crossley. London: Academic Press (1996), pp. 205, £24.95. ISBN 0-12-179725-2.

This book presents a quite unconventional approach to the subject. The authors are well respected in the field and are entitled to present a different view. The first chapter highlights some of the interesting aspects of soils as a subject for ecological study. The unusual structure of the book emerges in the second chapter where the only identified biological entities are the roots of plants. The illustrations are not of a uniformly high standard and Fig. 2.3 is only of value if the reader has a good idea of what a mini-rhizotron is in advance. Similarly it is disconcerting to find a section on mycorrhizal techniques presented before any other mention of soil fungi. The chapter on 'secondary production' gives an overview of the activities of heterotrophic organisms, but with only brief descriptions and a number of poorly described electron micrographs.

The lack of balance emerges again in chapter four where some 17 pages of the chapter on soil animals are given over to large illustrations of very variable quality. In the chapters on cycling a similar proportion of space is given over to large diagrams which do not receive detailed discussion in the text. Altogether, the book is something of a disappointment given the authorship. It is not expensive and might justify a place on the bookshelf as an 'alternative view', but only if accompanied by more comprehensive accounts.

Peter Harris

Readers may be interested to know about the following publications received but not reviewed because of their limited relevance to the majority of readers of *Experimental Agriculture*.

Banana Improvement: Research Challenges and Opportunities (Environmentally Sustainable Development Agricultural Research and Extension Group Series. Banana Improvement Project Report No. 1). Edited by G. J. Persley and P. George. Washington DC: The World Bank (1996), pp. 47, £7.50. ISBN 0-8213-3740-8.

Fostering Riparian Co-operation in International River Basins. The World Bank at its Best in Development Diplomacy. World Bank Technical Paper No. 335. By Syed Kirmani and G. Le Moigne. Washington DC: The World Bank (1997), pp. 19, US$7.95. ISBN 0-8213-3732-7.