

Book Reviews

An Introduction to Tropical Food Science. By H. G. Muller. Cambridge University Press, Cambridge, UK, 1988. ISBN 0-521-33488-8. x + 316 pp. Price: £15.00.

Why do we need a text book on tropical food science? What makes it different from the many general introductions to food science already on the shelves? Food science involves the fundamental properties of food, the reactions between and among foods, as well as the environment and the body. The author has succeeded in presenting a clear and simply written text on the science of food in the context of the tropics, particularly of developing countries.

The author has written this book for two groups of readers: for those who live in the tropics, as a simple introductory text; and for people in temperate zones concerned with food problems in the tropics, but without first-hand knowledge of the environment.

The first six chapters of the book deal with the foundations of food science. An introduction to the tropical climate and its effect on food is followed by a general discussion of the nutritive value of food. The first part also covers aspects of nutritional requirements and malnutrition, food texture, colour and flavour, and food microbiology. The second part discusses the composition of food commodities which are important in the tropics (cereals and legumes, fruits and vegetables, non-alcoholic beverages, sugar and other sweeteners, and foods of animal origin). The final part covers food preservation and preparation, ranging from the traditional kitchen small-scale processing technologies to capital-intensive industrial food technology.

The author attempts to cover a very broad field and succeeds in showing the complexity of food science. The section on food preparation and processing, for instance, discusses Western technologies and contrasts them with traditional and intermediate technologies. It will be a very valuable book for first-year students in food science and related courses in tropical countries, and thus serve the author's first target group well.

In the case of the second group of readers for which this book is intended, the text is probably too basic. The chapter on food commodities, from which those readers would have benefited most, is very short. Tropical oilseeds, for instance, are discussed in only three pages of text. No references are given in the text, but suggestions for further reading are listed at the end of the book, which again limits the book's value for this group of readers.

I have found very few mistakes. One which should be mentioned is the process description for the extraction of oil from copra (p.137, screw expelling followed by hydraulic pressing), which is certainly not the technology commonly applied.

It is probably inevitable that this broad approach fails to differentiate problems. For example, kwashiorkor may be a problem in certain parts of Africa, but in most of the developing world malnutrition shows itself primarily in the form of energy deficiency. This book is strongly recommended for food science and technology students in tropical countries. It also provides good reading for those who teach students from developing countries.

Martin Dietz

Studies in Natural Products Chemistry, Vol. 2: Structure Elucidation (Part A). Edited by Atta-ur-Rahman. Elsevier Science Publishers, Amsterdam, 1988. ISBN 0-444-43038-5. x + 470 pp. Price: US\$ 155.25/Dfl. 295.00.

Natural products chemistry was founded on the techniques of isolation, purification and structure elucidation; but in recent years attention has been focused more on synthesis and biosynthesis, especially the former. Innumerable books and reviews have been published during the last 20 years, and synthetic approaches to almost every class of natural products have been described. During the same period major advances have also occurred in the methodologies of chromatography and spectroscopy, particularly in the fields of mass spectrometry and nmr spectrometry. However, these revolutionary developments have received much less exposure in textbooks of natural products chemistry. This book seeks to make good this deficiency, and we are promised a series of books on structure elucidation.