

and few topographical errors. It should be of some use in introducing food scientists to these important analytical techniques, though its price may prove prohibitive.

F. F. Morpeth

Modern Methods of Food Analysis. Edited by K. K. Stewart and J. R. Whitaker. IFT Basic Symposium Series, Avi Publishing Co. Inc., Westport, Connecticut, USA. 421 pp. Price: £49.50.

This book represents the proceedings of a symposium held in New Orleans, 17–18 June 1983, under the auspices of the IFT. Divided into 16 chapters, it is intended to provide information regarding the most modern methods available to the food analyst. The text is descriptive rather than giving specific methods and all authors are from institutes in the USA and Canada.

The first six chapters serve as an introduction to the subject, covering analysis on a general basis. Subjects include systems approach to food analysis, factors affecting nutrient determination, use of computers in analysis, sample preparation and standards for analysis and quality assurance implications. The remaining chapters deal with food analysis either from a methodology or from a component viewpoint. Atomic absorption, reflectance spectroscopy, and gas and liquid chromatography are discussed. The more recent techniques involving biological and microbiological assays are described. Sensory methods of analysis are briefly mentioned.

Two chapters deal with applications of these techniques, to pesticides and flavour analysis. The role of automation in food analysis is also discussed. Each chapter provides an introduction to the subject in question, dealing with basic principles, problems and developments, leading on to the field of application and future trends and has a bibliography to provide further reading in specific areas. Chapter length varies considerably from about 10–40 pages and one criticism of the book might perhaps be that it tries to cover too much in too little space. However, if the book is treated as a text which summarises the developments in key subject areas and gives the 'state of the art' in these areas it comes into perspective and fulfils this role well.

Whilst some prior knowledge of the subject is desirable when reading a book on food analysis, sufficient background is given with each chapter to enable the reader to grasp the essentials of the process prior to reading the more detailed later work. The book should stimulate discussion and research on new applications for the techniques whilst at the same time provide a useful source of information to the established analyst.

Malcolm W. Kearsley

Coffee: Botany, Biochemistry and Production of Beans and Beverage. Edited by M. N. Clifford and K. C. Willson. Croom Helm, Beckenham, UK, 1985. xiii + 457 pp. ISBN 0-7099-0787-7. Price: £35.00.

This book covers all aspects of coffee in 15 chapters. The authors are experts in the various coffee areas. Chapter 1 is a light-hearted introduction on the origins of coffee and its spread around the world. Chapters 2 to 10 cover the botany and agronomy of coffee, dealing with: 2, Botanical Classification; 3, Selection and Breeding; 4, Climate and Soil; 5, Physiology of the Coffee Crop; 6, Mineral Nutrition and Fertiliser Needs; 7, Cultural Methods; 8, Pest control; 9, Control of diseases; 10, Green Coffee Processing. The remaining chapters are as follows: 11, World Coffee Trade; 12, The Microscopic Structure of the Coffee Bean; 13, Chemical and Physical Aspects of Green Coffee and Coffee Products; 14, The Technology of Converting Green Coffee into the Beverage; and 15, The Physiological Effects of Coffee Consumption.

A useful glossary is provided at the end and the book has a good index. To cover all aspects of coffee in a single text is ambitious but has been done well here. However, the reviewer was disappointed by the poor coverage of coffee volatiles. The book title includes 'Beverage', yet instant coffee is only briefly covered. The book is well edited, errors appear to be few, although the trinuclear structure on p. 344 is missing a double bond in its centre ring. Chapter 11 seems wrongly positioned. The book is general and should be of interest to botanists, agriculturalists and food scientists, well as coffee specialists.

A nicely presented, easy to read, well-edited book at a good price.

Rosemary O'Reilly