different nutritional aspects of legumes, cereals, okra, khesari dhal, and a range of green vegetables.

This book will be of use to the food chemist if only to be inspired by the range of crops and foods to be studied. The conference format also ensures that a high proportion of the work is contemporary. The quality of the individual papers varies considerably in scientific merit, relevance to the subject area, and reproduction. As a book hoping to *integrate* the sciences of the food chain it largely fails. The short nature of the majority of the papers does not allow the authors to fully introduce the topic of their contributions for readers from other subject areas. The editors could possibly have arranged the papers by crop family, rather than subject, and provided some commentary to link the various aspects.

M. J. Gooding

Food Authentication. Edited by P. R. Ashurst & M. J. Dennis. Blackie Academic and Professional, London, 1996. ISBN 0 7514 03415. xiv + 399 pp. £69.00

Food authentication is becoming ever more important as legislation governing food composition and requirements for food labelling become more extensive. In the trade of many foods, including wines, fruit juices and vegetable oils, there are strong financial incentives for disreputable producers to use illegal admixtures or misrepresent food products since these illegal practices can still yield products that have acceptable sensory characteristics. This book includes twelve chapters that discuss approaches available to analysts for the authentication of important food commodities. The authentication of fruit juices, jams, wine, meat, fish, cereals, vegetable oils, honey, coffee, egg products, milk products and other commodities is discussed by representatives from leading analytical laboratories. Each chapter contains an extensive list of references, and the book represents a useful starting point for analysts becoming involved in food authenticity studies. References up to 1994 are covered in most chapters, with very few references after this date being included. It is encouraging to read this book and find that methods for detecting adulteration of food commodities are developing rapidly in order to keep pace with the increasing sophistication of fraudsters. A wide range of analytical approaches to the detection of adulteration is covered, including HPLC, GC and other chromatographic procedures; immunoassay procedures for proteins in meat, fish, milk and cereals; analysis of minerals in wine; and stable carbon isotope ratio analysis for vegetable oils, coffee, tea and wine. This book is recommended for purchase by all analysts involved in the authentication of food commodites. With the rapid development of new analytical procedures, regular updating of this text will be required.

M. H. Gordon

Synthesis in Lipid Chemistry.Edited by J. H. P. Tyman. The Royal Society of Chemistry, Cambridge, 1996. ISBN 0 85404 716 6. x + 232 pp. £59.50

Lipids are classified by their solubility characteristics and therefore this class of compounds includes molecules with a wide range of chemical structures. This book is based on papers presented at a meeting of the Lipid Group of the Royal Society of Chemistry held at the University of Wales, Bangor in September 1994, and it includes contributions from several leading lipid chemistry groups. The book is divided into three sections that describe the synthesis of glycerides and fatty acids; phospholipids and glycolipids; and biological or biotechnological transformations and pheromones. The synthesis of cyclopropene fatty acids that act as inhibitors of fatty acid desaturases; pyrylium-based routes to polyunsaturated products including retinal; synthesis of plant fatty acids labelled with carbon or hydrogen isotopes; and the synthesis of long chain fatty acid derivatives are described in the first section. The synthesis of phosphatidylinositol phosphates, sphingolipids and acyl trehaloses are discussed in the second section. Herbicides that affect lipid biosynthesis, lipid biotransformations by hydrolase and oxidase enzymes, and developments in the synthesis of pheromones complete the book.

There is much interesting synthetic chemistry in this book. Nucleophilic addition reactions of pyrylium salts to yield E, Z dienals and acetylene chemistry for isotopic labelling, in particular, are ideas that are likely to be used widely for lipid synthesis. This, therefore, will be a useful book for the libraries of all chemists involved in lipid synthesis.

M. H. Gordon