governing the texture of cooked meat to read Chapter 1 (the structure of muscle and its properties as meat), Chapter 2 (the chemistry of intramuscular collagen) and Chapter 5 (water holding in meat) at one sitting as much of the information, and the hypotheses so developed, are inter-related.

The book is well-prepared and free from typographical errors and all the figures and tables are clear and of relevance.

This book must find its way into the libraries of any institutes, universities and industrial companies interested in the science and technology of meat and at the relatively modest price of £15·00 may well be purchased by individual meat scientists who require frequent access to an easy to read yet comprehensive treatise on meat chemistry.

D. A. Ledward

Isopentenoids in Plants: Biochemistry and Function. Edited by W. D. Nes, G. Fuller and L. S. Tsai. Marcel Dekker, New York, 1984. xiii + 596 pp. Price: Swiss Fr 280.

This collection of review papers is derived from a symposium held in March 1982 at the USDA Western Regional Laboratories to honour the contributions of USDA scientists to the terpenoid field over the past 25 years. The contributors have many other affiliations but are largely based in the US from California or the Mid-West. Not surprisingly, in view of the research carried out in the USDA laboratories, the emphasis is on the triterpenoids; 16 of the 24 articles are devoted to saponins, limonoids, sterols, steroidal alkaloids and cardenolides. In addition, there are four chapters on monoterpenoids and sesquiterpenoids, two on gibberellins and two on carotenoids, mysteriously included here in a section of diterpenoids. Although much of the material presented is familiar, there is sufficient novelty in many of the essays that this volume deserves the attention of anyone seriously interested in terpenoid chemistry or biochemistry. The two-year delay in publication from camera-ready copy is unfortunate, especially since these days it is possible to do much better than this. For example, the proceedings of a similar symposium organized in April, 1983 by the Biochemical and Phytochemical Societies was published within six months and with typesetting as well (see *Biochem. Soc. Trans.*, **11**, 497–604).

There is increasing ecological evidence that some plant terpenoids are important in plant–insect interactions and several of the essays describe experiments in this area. Thus, Seiber and his colleagues at Davis provide an interesting review of the occurrence and distribution of cardenolides in *Asclepias* species, with comments on their sequestration and utilization by danaid butterflies. There are also accounts of insect steroids and the way that insects utilize plant compounds for ecdysone synthesis by J. A. Svoboda and K. S. Ritter, respectively. Plant–insect interactions are also considered in the review of insect juvenile hormones by L. M. McDonough.

Other reviews in this book deal with analytical methods (e.g. for gibberellins and sterols), with biosynthesis (e.g. of monoterpenes and carotenoids) and with fungal physiology. For the food scientist, two of the contributions may be of more than passing interest. There is a chapter by R. F. Keeler on the mammalian teratogenicity of steroidal alkaloids, which occur mainly in solanaceous food plants and in *Veratrum*. This author reaches the reassuring conclusion that, at least for humans, potato tubers present no real hazard while with the eggplant further evaluation is necessary. The other chapter is that on triterpenoid saponins by M. R. Malinow, in which evidence is presented that alfalfa top saponins when fed to animals reduce the intestinal absorption of cholesterol and increase the faecal excretion of neutral sterols. The author concludes that certain dietary saponins may have a beneficial effect on people with atherosclerosis associated with disturbed cholesterol metabolism.

Jeffrey B. Harborne

Challenges to Contemporary Dairy Analytical Techniques. Special Publication No. 49. The Royal Society of Chemistry, London, 1984. 350 pp. Price: £16.

This book comprises the papers presented at a seminar held at the University of Reading, March 28–30, 1984, where the object, as outlined in the introduction, was to appraise the problems that will be faced by analysts of dairy products in the future.

Section 1 deals with collaborative studies and reference methods. The first chapter on systematic errors is an excellent and timely presentation, and should be compulsory reading for science students, food science