

foods in perspective as a potential problem that is avoided with great success by the food industry. Most chapters include useful references and recommendations for further reading.

This book will be a valuable text for industrial scientists concerned about the dangers of rancidity development in foods. Students of food science will also find much of interest in the book.

**M. H. Gordon**

**Principles and Practices for Harvesting and Handling Fruits and Nuts.** Edited by M. O'Brien, B. F. Cargill and R. B. Fridley. Avi Publishing Company Inc., Westport, Connecticut. 1983. 636 pp. Price: £48.35 (US \$55.00).

The book consists of 20 chapters in 4 parts on various aspects of the harvest and handling of fruits and nuts. The chapters are written by numerous authors including a major input from the editors.

The subject of fruit and nut harvesting and handling is vast and, as the editors state 'The book is intended as a reference and supplementary textbook for individuals familiar with the production of fruits and nuts'. Whilst some prior knowledge of the subject may be implied by this, the book is nonetheless very readable for the non-technical, non-engineering person with extensive diagrams and photographs. Although the practices described are mainly those in use or under development in the United States the principles discussed are much wider ranging and the book is therefore of interest to a worldwide audience. Part I (3 chapters) provides an introduction to fruit management on a general basis, including planning, economic, marketing and social implications of the subject. Part II (6 chapters) discusses harvesting principles in relation to the replacement of manual labour by mechanical methods. The engineering concepts involved in harvesting are presented with reference to actual fruits and nuts, with illustrations to clarify details not easily explainable in the text. Part III (3 chapters) describes post-harvest operations and whilst from a personal viewpoint this may be rather short, in the context of the remainder of the book it is in the correct proportions, since the book is primarily concerned with production and engineering applications. Part IV (8 chapters) describes harvesting systems for various crops on a general basis but dealing with specific fruits or nuts where necessary to illustrate a

point. The constraints and problems imposed by different commodities are discussed. Each chapter has associated with it an adequate list of references for further reading.

The book provides a useful reference work to all with an academic or commercial interest in fruits and nuts. The text is fully illustrated making the book very readable and the work is highly recommended.

**Malcolm W. Kearsley**