

introductions to the diversity, comparative biology, history of cultivation and social and economic importance of cereals, but the main body of the work concerns the technologies of storage, processing and production. It is aimed at teaching environments, each chapter concluding with a self-assessment exercise. Otherwise, its main appeal will be for those involved in practical handling and utilization of grain, although the depth of coverage may discourage general readership, while specialists may seek more restricted subject areas.

Another problem, for a single author, is the quality of coverage in areas outside his personal specialities. Here, those areas where the author is able to cite his own references convey his knowledge and enthusiasm, but other sections seem heavily reliant on published sources, with geographic, technical or scientific limitations not always appreciated. While grading of samples is well covered, classification, especially of wheat, receives limited attention, despite the biochemistry and genetics, underlying differences between hard and soft milling, being well understood. Additionally, European maltsters and brewers would take issue with diastatic activity as the most important malt attribute, which only applies when brewing, as in the USA, uses large quantities of starch-based adjuncts. Despite these limitations, however, the book is a significant achievement and, with regard to global deployment of cereals for human and animal nutrition, will prove an extensive and valuable source of information.

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Controlled Atmosphere Storage of Fruits and Vegetables. 2nd edition. By A. K. Thomson. Wallingford, UK: CABI (2010), pp. 288, £85.00. ISBN 978-1-84593-646-4.

With the importance of international trade of fruit and vegetables, postharvest technologies capable of cutting waste and reducing energy consumption are of increasing interest. Controlled or modified atmosphere storage, the subject of this book, involves the manipulation of the storage atmosphere to slow down produce metabolism, maintain quality and hence extend storage life.

The strength of this book, a revised edition, is not so much in the explanation of the principles and technologies involved, but in the thorough coverage of available information. The author covers several aspects of the subject. For example while most of the book concentrates on science, the introduction provides a very interesting overview of the historical development of controlled atmosphere storage. In subsequent chapters the author supports the description of aspects of postharvest handling with a wealth of specific commodity information. The fact that fruit and vegetables vary so much in their behaviour often causes confusion for those handling them, making this a particularly important feature of this book. Chapter 9 provides a particularly detailed review of the recommendations for controlled atmosphere storage of an extensive range of crops. Having been written by someone with an understanding of the practical applications of postharvest technology in addition to research, the book provides interesting insights into why some technologies have been taken up commercially while others have not.

Altogether this book is an invaluable source of information, and an excellent reference book for professionals and researchers involved in postharvest technology of perishable food crops.

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Plant Cell Culture: Essential Methods. Edited by M. R. Davey and P. Anthony. Chichester, UK: John Wiley & Sons Ltd (2010), pp. 341, £60.00. ISBN 978-0-470-68648-5.

For anyone working in the area of plant tissue culture, micro-propagation or transformation this book is essential reading. Learn how to set up your own mutagenesis experiment, perform protoplast fusions or grow your own hairy root cultures. From comprehensive protocols that take you step-by-step through each experimental procedure to troubleshooting guides that pass on all the trade secrets, this is a treasure trove of facts. Key