

## Book reviews

**R.S. Jackson, *Wine Science: Principle, Practice, Perception*, 2<sup>nd</sup> Edition, Academic Press, London, 2000 (xi + 648 pp., £79.95, ISBN 0-12-379062-X).**

Wine is a very popular drink in the world. The archaeological record of it may go back more than seven and a half thousand years. However, wines began to take on their modern expression in the 17th century because the use of sulphur in barrel treatment increased the likelihood of producing better-quality wines and extended their aging potential. There are three major interrelated topics involved in the science of wine: grapevine growth, wine production, and wine sensory analysis.

*Wine Science: Principle, Practice, Perception* provides a structured and comprehensive, up-to-date account of the current processes and methods in wine science, and is composed of 12 sections. The first six sections are all about grapevine growth. They provide general information about grapevine structure and function, origins, classification, the quality and chemical constituents of wine, grape species and constituents; and how to select a vineyard, respectively. The next two chapters focus on wine production, and describe the basic procedures, various types of fermentation, post-fermentation treatment and related topics. The next section compares the specific and distinctive wine styles, while wine laws, authentication, and geography are covered in Section 10. The penultimate section deals with sensory analysis and wine assessment, and recent wine research related to the health is addressed in the final section. Comprehensive references are provided in each chapter, as well as a list of suggested reading to guide further study. A detailed index is provided to help locate information, along with a glossary of wine terminology.

The informative volume provides an up-to-date, clearly written and comprehensive account of wine science, and is therefore of value as an essential reference tool for students of enology and viticulture. It will also be of value to grape growers, wine makers and people interested in wine and its production.

John F. Kennedy\*, Meng M. He  
Chembiotech Laboratories,  
Institute of Research & Development,  
University of Birmingham Research Park,  
Vincent Drive, Birmingham B15 2J, UK

Available online 1 October 2004

\*Corresponding author.

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doi:10.1016/j.carbpol.2004.08.014

**J. Davey, M. Lord (Eds.), *Essential Cell Biology, Volume 1: Cell Structure*, Oxford University Press, Oxford, UK, 2003 (v + 398 pp., £79.00, ISBN 0-19-963831-4).**

It is an age-old scientific adage but function is determined by structure. As even the most junior of scientists appreciate function can only be elucidated once structure has been discovered. With the rate of change in this particular area to compile a comprehensive guide of all the techniques used in cell structure is impossible. *Essential Cell Biology Volume 1: Cell Structure* distils the essential components in this area and presents them in a manner that would provide scientists of all levels a useful guide to the area. In essence its success lies in the ability of it to outline and explain the most relevant techniques. Having on numerous occasion used methods from journals we have found that the practicality of this methods proved very difficult. However, the clarity with which the authors outline the methods and the suggested points for trouble-shooting give ample opportunity for success in the various techniques they describe.

*Essential Cell Biology Volume 1: Cell Structure* provides an excellent practical approach, especially for the student, to cellular structure and its investigation. The book is divided into chapters that initially outline the basics of cell structure investigation and microscopy. The text excellently develops and builds on the chapters laid down in the first chapters. For instance when the reader reaches the latter topics of the cytoskeleton and processes such as apoptosis many of the concepts and ideas of cellular structure are ingrained on the reader mind. The success of the book lies in the fact that each chapter begins with a broad overview of the particular area, followed by protocols to investigate or study particular cellular structure, microscopy and sub-cellular fractionation. The danger with many books that they try to explain methodologies but instead harp on continuously about the intricacies of each methods and lose the reader in