Handbook of Brewing

edited by Priest, F. G., & Stewart, G. G. (2nd ed.), Published by: CRC Taylor and Francis, 853 pages, 2006, ISBN: 10-: 0-8247-2657-X

The second edition of the Handbook of Brewing is a partial update of a text first published in 1995. The first edition of this book was a 'must have' for brewing scientists and industrial microbiologists. However, neither edition is truly a 'Handbook' in the traditional sense, as they do not contain the kind of tables one associates with such handbooks (e.g., listings of unit conversion factors between British, American and SI units, extensive listings of raw ingredient components or economic data, etc.). The first edition contained a section on beer properties listing typical ranges of flavour compounds, vitamins, etc. The earlier version also contained a most useful chapter on brewing calculations not found in many brewing texts. Unfortunately, neither of these two chapters was included in this later edition. As well, the second edition also continues the confusing practice of mixing units with the reporting of British Gallons, Hectoliters and US barrels in chapters 5, 10 and 18, respectively.

The new edition contains 22 chapters, one more than the first edition. The book can be broadly divided into five sections. An introductory portion contains chapters on Brewing History, Beer Styles, and an Overview of the Brewing Process (including malting). The next six chapters discuss the raw ingredients: Water, Barley and Malt, Adjuncts, Hops, Yeast and Miscellaneous Ingredients (i.e., minor additives). These chapters are followed with a discussion of the brewing process in chapters entitled, Brewhouse Technology, Brewing Process Control, Fermentation, Aging and Finishing, Packaging: A Historical Perspective and Packaging Technology. A series of chapters concerned with Quality follows: Microbiology and Microbial Control, Sanitation and Pest Control, Brewery By-Products and Effluents, Beer Stability and Quality. Finally, the book concludes with a two new chapters: one on Microbrewing and a last chapter called Innovation and Novel Products. Of these 22 chapters, most are totally new or have had substantial revision. However, the chapters on Adjuncts, Miscellaneous Ingredients, Fermentation as well as Aging and Finishing remain unchanged in the second edition.

The second edition does not replace the initial edition. However, notwithstanding the minor caveats noted above, I would recommend the text to any brewing scientist as a welcome addition to their reference library.

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Detecting Allergens in Food

edited by Stef. J. Koppelman and Sue L. Hefle, Published by: Woodhead Publishing, 2006, ISBN: 1 85573 728 0, price $255.00

In the past decade, consumers and the food industry have been facing the challenge of a rapid and substantial increase in food allergies characterized by an increase in the prevalence and also in the severity of the clinical manifestations. Additionally, there has been an increase in the number of foods incriminated in the allergic reactions. Food allergy has thus become a major public health concern. This book, edited by internationally recognized editors with well renowned international contributors, is timely. The contents are well organized which allows for a better understanding of ''detection of food allergens''. The book consists of four parts. The first part is an introduction to food allergy which enables readers to understand the basics of food allergy and allergens. Part 2 deals with methods of food allergen detection and describes various techniques such as immunochemical and molecular techniques. Part 3 gives an overview of current commercially available food allergen detection methods including advantages and limitations. Part 4 discusses current issues facing the food industry in their struggle to deal with allergic food residues in a production environment. This section also includes risk management and government legislation issues.

Each chapter covers up-to-date information making this book a useful reference text. The field of food allergy is a rapidly moving field which has captured substantial high-profile interest. A shortfall of the book was its limited coverage of the impacts of food processing on food allergies. Food processing procedures can clearly modify allergens, altering their IgE reactivity. However, the effect of food processing on allergenicity of foods is complex. A clearer understanding of this relationship has the potential to result in both improved diagnosis of food allergies and allergen detection quality control, and should be the focus of a future edition. In conclusion, this book will help readers understand the breadth and depth of work in this discipline. The primary target audience for this book would be food scientists, nutritional biochemists, biomedical scientists, biochemists, biotechnologists, food safety and toxicologists, and health care professionals. This book is also recommended for food industry and government agencies whose mandate is food safety. The book would also be appropriate for food science and technology as well as medical school students at both the undergraduate and graduate levels.

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