

Book Reviews

Chemistry and Technology of Soft Drinks and Fruit Juices

Second edition

Edited by Philip Ashurst

Publication: Dec 2004

Publisher: Blackwell Publishing

Hardcover, 374 p.

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Available from www.blackwellpublishing.com

This book will be of interest to anyone working in the beverage industry and is an excellent reference book. It provides an overview of the chemistry and technology of soft drinks and fruit juices. The original edition published 6 years earlier has been revised and extended. New chapters include Trends in Beverage Markets, Fruit and Juice Processing, Carbohydrate and Intense Sweeteners, Non-Carbonated Beverages, Carbonated Beverages, and Functional Drinks. It is directed at graduates in food science, chemistry or microbiology entering production, quality control, new product development or marketing in the beverage industry. As a reference book it will be useful for academia, researchers and suppliers to the beverage industry. The book is well illustrated and clearly written. This book will have value for those working in the beverage alcohol industry since there are now many specialised alcoholic beverages that include ingredients that at one time were only considered of importance for non alcoholic beverages. The chapter on Carbohydrate and Intense Sweeteners is comprehensive and of special interest. The chapter on Processing and Packaging and the chapter on Packaging Materials are especially noteworthy and welcome. This is an area too often ignored in reference books.

The book's chapter titles and authors are as follows:

Chapter 1. Introduction. Philip R. Ashurst, Consulting Chemist to the Food Industry, Hereford, UK

Chapter 2. Trends in beverage markets. Gary Roethenbaugh, Zenith International, Bath, UK

Chapter 3. Fruit and juice processing. Barry Taylor, Danisco Ingredients, Wellingborough, UK

Chapter 4. Carbohydrate and intense sweeteners. Kay O'Donnell, Forum Products, Redhill, Surrey, UK

Chapter 5. Other beverage ingredients. R.B. Taylor, Danisco Ingredients, Wellingborough, UK

Chapter 6. Non-carbonated beverages. Philip R. Ashurst, Consulting Chemist to the Food Industry, Hereford, UK

Chapter 7. Carbonated beverages. David Steen, A.G. Barr Soft Drinks, Manchester, UK

Chapter 8. Processing and packaging. Robert A.W. Lea, GlaxoSmithKline, Weybridge, Surrey, UK

Chapter 9. Packaging materials. Geoff A. Giles, GlaxoSmithKline, Brentford, Middlesex, UK

Chapter 10. Analysis of soft drinks and fruit juices. D.A. Hammond, Reading Scientific Services, University of Reading, UK

Chapter 11. Microbiology of soft drinks and fruit juices. Peter Wareing, Leatherhead Food Research Association, Leatherhead, Surrey, UK

Chapter 12. Functional beverages. John Whitehead, The Botanical Extract Consultancy, Linslade, Bedfordshire, UK

Reviewed by Inge Russell
Ph.D., D.Sc., FIBiol., FIBD.

Stored Malting Barley: Management of Quality Using an Expert System

Edited by F. Fleurat-Lessard, A. Ndiaye and J.D. Knight

Publication: 2005

Publisher: INRA Editions, Paris (Les Colloques n° 101)

Softcover, 320 p.

Price: €43

ISBN: 2-7380-1179-9

Available from www.inra.fr/Editions/

Preventing quality changes in malting barley during long term storage is critical for quality preservation. The QualiGrain European Project was established with the objective of investigating the limiting factors for safe storage of malting barley and to develop effective and practical solutions to overcome current problems encountered by malting barley storage managers. The project started in 1998 and lasted 40 months. This book is the product of twenty five experts working in different areas of research in seed science and storage technology in four European countries: Denmark, France, Germany and the United Kingdom. The publication encompasses the proceedings of an International Symposium held May 28–29, 2001 in Reims, France. This book will be of interest to both maltsters and brewers as it offers a very in depth look at the

use of a knowledge based system that can use either qualitative or quantitative criteria for logical reasoning about integrated aspects of overall quality maintenance. It is not a general book on malting but rather addresses a very specific area – malting barley storage and management of that barley quality using an expert system. As can be seen by the list of chapters below the book is primarily written in English but a number of the chapters are written in French.

At a price of only €43 the book offers good value for money.

Chapter 1. Introduction

Predicting quality changes in stored grain ecosystems: feasibility of integrated quality management by an expert system. F. Fleurat-Lessard, D.R. Wilkin and A. Ndiaye

Chapter 2. Knowledge base implementation

Drying, heating and their effects on dormancy break and germination rate decline. E.E. Jacobsen, B. Møller, L. Münck and J.L. Woods

Ventilation de refroidissement de l'orge de brasserie à l'air ambiant. B. Berhaut, P. Boivin et G. Niquet

Modelling germination changes during the storage of malting barley: dormancy and viability. J.L. Woods, D.J. McCallum and E.J. Robson

The development of *Sitophilus granarius* and *Oryzaephilus surinamensis* on malting barley and the implications for the quality of the malt. F. Fleurat-Lessard, J.M. Le Torc'h and P. Boivin

Des moisissures aux mycotoxines : signification éco-physiologique de marqueurs biochimiques de croissance fongique et prévision des durées de conservation sans risque de détérioration. B. Cahagnier, E.E. Jacobsen and F. Fleurat-Lessard

The fate and efficacy of pesticides applied to malting barley during storage and processing. D.M. Armitage, D.E. Baxter and D.A. Collins

Quality aspects of the fumigation of malting barley with carbon dioxide and phosphine for insect disinfestation. C. Reichmuth, A. Wudtke and F. Rath

Chapter 3. Rapid methods for quality assessment and monitoring

Interest in rapid methods for the detection of mould spoilage on malting barley. P. Boivin

Relationships between the new rapid germination tests and conventional tests of germinative energy assessment. B. Møller and L. Münck

Automatic acoustical surveillance system of grains in silos. L.Schwab and P. Degoul

Chapter 4. Developing the decision support system software

QualiGrain: a decision support system for management and control of quality of malting barley after harvest. A. Ndiaye

Encyclopædia of malting barley storage. J.D. Knight, D.R. Wilkin and J.P. Proudman

Economics of storing malting barley. J.D. Knight, J.P. Proudman and D.R. Wilkin

Chapter 5. Validation of the DSS prototype and communication

Farm-scale experiments to compare infestation and quality changes in malting barley stored at three moisture contents. D.M. Armitage, D.A. Cook and D.E. Baxter

Validation of the DSS software – Pilot scale experiments: malting barley drum-drying and storage. E.E. Jacobsen and B. Møller

Utilisation du système expert dans un silo commercial en conditions réelles. S. Oustrain

Chapter 6. Conclusion

Futurs développements et nouvelles applications du SAD pour la préservation des grains stockés. F. Fleurat-Lessard et G. Véron-Delor

Reviewed by Inge Russell
Ph.D., D.Sc., FIBiol., FIBD.