



Managing wine quality

Volume 1: Viticulture and wine
quality

Edited by Andrew G. Reynolds

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CRC Press
Boca Raton Boston New York Washington, DC

WOODHEAD PUBLISHING LIMITED

Oxford Cambridge New Delhi

Published by Woodhead Publishing Limited, Abington Hall, Granta Park,
Great Abington, Cambridge CB21 6AH, UK
www.woodheadpublishing.com

Woodhead Publishing India Private Limited, G-2, Vardaan House, 7/28 Ansari Road,
Daryaganj, New Delhi – 110002, India
www.woodheadpublishingindia.com

Published in North America by CRC Press LLC, 6000 Broken Sound Parkway, NW,
Suite 300, Boca Raton, FL 33487, USA

First published 2010, Woodhead Publishing Limited and CRC Press LLC
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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library.

Library of Congress Cataloging in Publication Data
A catalog record for this book is available from the Library of Congress.

Woodhead Publishing ISBN 978-1-84569-484-5 (book)
Woodhead Publishing ISBN 978-1-84569-928-4 (e-book)
CRC Press ISBN 978-1-4398-2967-7
CRC Press order number: N10166

The publishers' policy is to use permanent paper from mills that operate a sustainable forestry policy, and which has been manufactured from pulp which is processed using acid-free and elemental chlorine-free practices. Furthermore, the publishers ensure that the text paper and cover board used have met acceptable environmental accreditation standards.

Typeset by Ann Buchan (Typesetters), Middlesex, UK
Printed by TJ International Limited, Padstow, Cornwall, UK

Managing wine quality

Related titles:

Winemaking problems solved

(ISBN 978-1-84569-475-3)

Arranged in practical question-and-answer format, *Winemaking problems solved* provides brief, quickly accessible solutions to issues of frequent concern to winemaking professionals. The contributions, which are written by leading experts from industry and academia, span major aspects of the winemaking process from grape handling and fermentation processes to filtration, bottling and winery sanitation.

Brewing: science and practice

(ISBN 978-1-85573-490-6)

Brewing: science and practice updates and revises the previous work of this distinguished team of authors, producing the standard work in its field. The book covers all stages of brewing from raw materials, including the chemistry of hops and the biology of yeasts, through individual processes – such as mashing and wort separation – to packaging, storage and distribution. Key quality issues such as flavour and the chemical and physical properties of finished beers are discussed.

Yeasts in food

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Yeasts play a crucial role in the sensory quality of a wide range of foods. They can also be a major cause of food spoilage. Maximising their benefits whilst minimising their detrimental effects requires a thorough understanding of their complex characteristics and how these can best be manipulated by food processors. This book provides a comprehensive review of the methods for their detection, identification and analysis as well as the role of yeasts in several food products including dairy products, meat, fruit, bread and beverages.

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Preface

A common adage is that 'wine is made in the vineyard'. Volume I of *Managing wine quality – Viticulture and wine quality* – emphasises this point with 15 fundamental chapters from leading experts around the world. We anticipate that this book, and its companion volume dealing with oenology and wine quality, will provide a valuable and useful resource for students, scholars and members of the wine industry. The two volumes might potentially form the basis for a senior level undergraduate or graduate level course in wine science. Volume I is divided into three sections dealing with: (I) Understanding grape and wine sensory attributes; (II) Measuring grape and wine properties; and (III) Viticulture technologies, grape composition and wine quality attributes. Topics range from the biochemistry of aroma (Chapter 1), taste and mouthfeel (Chapter 2) and wine colour (Chapter 3) to methods of analysis of grapes and wines, including conventional methods (Chapter 4) as well as new non-destructive techniques (Chapter 5), methods for the authenticity and traceability of wines by sophisticated analytical means (Chapter 8) and of course sensory analysis (Chapter 7). Viticulture is well represented also, with topics that include the definition of terroir (Chapter 9), precision viticulture (Chapter 12) and vineyard management practices influencing wine quality (Chapter 11). Related chapters include genetic and genomic approaches for the improvement of wine quality (Chapter 10) and a comprehensive look at grape processing up to the point of the beginning of fermentation (Chapter 15). Fundamental microbial aspects are also included in this volume, including fungal contaminants in the vineyard (Chapter 13), the control of ochratoxin A (Chapter 14) and microbial quality (Chapter 6). Volume I and its companion volume on oenology and wine quality represent the state of the art on winemaking science and technology from the vineyard to the glass. I hope that the reader finds *Managing wine quality* both edifying and enjoyable, and that it will be considered a valuable resource for years to come.

Andrew G. Reynolds
Editor

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Part I

Understanding grape and wine sensory attributes

