

Achieving sustainable production of milk

Volume 3: Dairy herd management and welfare

Edited by Emeritus Professor John Webster
University of Bristol, UK



burleigh dodds
SCIENCE PUBLISHING

New book advance information

Achieving sustainable production of milk Volume 3

Dairy herd management and welfare

Edited by: John Webster, Univ. of Bristol, UK

Endorsement:

"There can be few people in the world better qualified to edit a new book about nutrition, health and welfare of dairy cattle than John Webster. These have been the passions of a long and distinguished academic career. He has assembled a strong team of authors to provide comprehensive coverage of key topics, as well as the wide range of dairy production systems across developed and developing countries"

Richard Dewhurst, Professor of Ruminant Nutrition and Production Systems, SRUC, Edinburgh. UK

Key features:

- Reviews advances in understanding and improving the welfare of dairy cattle;
- Summarises current research on rumen biology, digestion and ways of optimising nutrition of dairy cattle from grazing to feed and feed supplements;
- Discusses latest developments in maintaining the health of dairy cattle, including the genetics of disease resistance and dairy herd health management

Description:

In meeting rising demand, more intensive dairying systems face a range of challenges such as maintaining high standards of safety in the face of the continuing threat from zoonoses entering the food chain, whilst sustaining nutritional and sensory quality. At the same time farms need to become more efficient and sustainable. Finally, farming must also meet higher standards of animal health and welfare.

Drawing on an international range of expertise, this book reviews research addressing the welfare, nutrition and health of dairy cattle. Part 1 begins by discussing key issues in welfare followed by topics such as genetic selection and welfare, housing and transportation. Part 2 looks at nutrition with chapters on rumen microbiology, feed evaluation and formulation, feed supplements and feed safety. The final part of the book covers aspects of health such as control of diseases and other disorders such as lameness as well as dairy herd health management.

Achieving sustainable production of milk Volume 3: Dairy herd management and welfare will be a standard reference for animal and dairy scientists in universities, government and other research centres and companies involved in beef production. It is accompanied by two other volumes which review milk composition, genetics and breeding as well as safety, quality and sustainability..

Editor details:

Dr John Webster is Emeritus Professor in Animal Husbandry at the University of Bristol, UK. Amongst his many achievements, Professor Webster was recently awarded an honorary degree by the Royal Veterinary College for his research in animal science, as well as the Universities Federation for Animal Welfare (UFAW) Medal for Outstanding Contributions to Animal Welfare. He established the Animal Welfare and Behaviour Group at the University of Bristol, one of the largest and most highly-regarded of its kind in the world, and was a founder member of the Farm Animal Welfare Council which pioneered the Five Freedoms for farm animals.

ISBN
Hardback: 978 1 78676 052 4
PDF: 978 1 78676 055 5
ePub: 978 1 78676 054 8
Mobi: 978 1 78676 053 1

Publication date
March 2017

Price
£240.00/\$300.00/€290.00

Length
480 pages

Trim
229 x 152 mm / 6.00 x 9.00 in

BISAC classification
TEC003070 - TECHNOLOGY &
ENGINEERING / Agriculture /
Sustainable Agriculture

BIC/Thema classification
TVHF - Dairy farming
TVD - Agricultural engineering &
machinery
TVF - Sustainable agriculture



9 781786 760524 >

New book advance information

Table of contents

Part 1 Welfare of dairy cattle

1. Understanding the behaviour of dairy cattle: *Clive Phillips, University of Queensland, Australia*
2. Key issues in the welfare of dairy cattle: *Jan Hultgren, Swedish University of Agricultural Sciences, Sweden*
3. Housing and the welfare of dairy cattle: *Jeffrey Rushen, University of British Columbia, Canada*
4. Genetic selection, milk yield and welfare of dairy cattle: *Jennie Pryce, DEPI-Victoria/La Trobe University, Australia*
5. Ensuring the welfare of culled dairy cows during transport and slaughter: *Carmen Gallo and Ana Strappini, Universidad Austral de Chile, Chile*
6. Ensuring the health and welfare of dairy calves and heifers: *Ken Leslie, University of Guelph, Canada*

Part 2 Nutrition of dairy cattle

7. Rumen microbiology and digestion: *Leluo Guan, University of Alberta, Canada*
8. Biochemical and physiological determinants of feed efficiency in dairy cattle: *John McNamara, Washington State University, USA*
9. Feed evaluation and formulation to maximise nutritional efficiency in dairy cattle: *Pekka Huhtanen, Swedish University of Agricultural Sciences, Sweden*
10. Nutrition management of housed dairy cattle in intensive systems: *Michel Wattiaux, University of Wisconsin-Madison, USA*
11. Nutrition management of grazing dairy cattle: *John Roche, Dairy NZ Ltd, New Zealand*
12. The use and abuse of cereals, legumes and crop residues in rations for dairy cattle: *Michael Blummel, International Livestock Research Institute (ILRI), Ethiopia*
13. Feed supplements for dairy cattle: *Jamie Newbold, University of Wales, Aberystwyth, UK*

Part 3 Health of dairy cattle

14. Prevention and management of disorders of digestion and metabolism: *Gregory Penner, University of Saskatchewan, USA*
15. Management of dairy cows in transition and at calving: *Kenneth Nordlund, University of Wisconsin-Madison, USA*
16. Causes, prevention and management of infertility: *Alexander Evans, University College Dublin, Ireland*
17. Detecting and managing mastitis in dairy herds: *Paolo Moroni, Cornell University, USA*
18. Preventing and managing lameness in dairy cows: *Nick Bell, The Royal Veterinary College, UK*
19. Control of infectious diseases in dairy cattle: *Wendela Wapenaar, University of Nottingham, UK*
20. Prevention and control of parasites in dairy cattle: *Jacqui Matthews, Moredun Research Institute, UK*
21. Genetic variation in immunity and disease resistance in dairy cows and other livestock: *Michael Stear, Karen Fairlie-Clarke, and Nicholas Jonsson, University of Glasgow, UK; Bonnie Mallard, University of Guelph, Canada; and David Groth, Curtin University, Australia*
22. Use and abuse of medicines in dairy health control: *David Barrett, University of Bristol, UK*
23. Dairy herd health management: an overview: *Jonathan Statham, Bishopton Veterinary Group and RAFT Solutions Ltd, UK*

Other products in this category

- Ensuring safety and quality in the production of beef Volume 1 Safety
- Ensuring safety and quality in the production of beef Volume 2 Quality
- Achieving sustainable production of milk Volume 1 Milk composition, genetics and breeding
- Achieving sustainable production of milk Volume 2 Safety, quality and sustainability
- Achieving sustainable production of sheep
- Achieving sustainable production of pig meat Volume 1 Safety, quality and sustainability
- Achieving sustainable production of pig meat Volume 2 Animal breeding and nutrition
- Achieving sustainable production of pig meat Volume 3 Animal health and welfare
- Improving organic animal farming