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LIVESTOCK CATALOGUE





LIVESTOCK MANAGEMENT



Advances in precision livestock farming

NEW

Editor: Professor Daniel Berckmans, Katholieke University of Leuven, Belgium

This collection reviews recent advances in developing precision livestock technologies. It assesses developments in continuous, automated, real-time monitoring of production, health and welfare traits of livestock to improve the efficiency, welfare and environmental impact of livestock farming.

Print ISBN: 978-1-78676-471-3 Pub. Date: June 2022 eBook ISBN: 978-1-78676-474-4 Price: £150/\$195/€180 Pages: 442 Series No: 105

CHAPTER TITLES

Part 1 Data collection and analysis; 1.Developments in on-animal sensors for monitoring livestock; 2.Developments in thermal imaging techniques to assess livestock health; 3.Developments in acoustic techniques to assess livestock health; 4.Machine vision techniques to monitor behaviour and health in precision livestock farming; 5.Developments in activity and location technologies for monitoring cattle movement and behaviour; 6.Developments in data analysis for decision-making in precision livestock farming systems; Part 2 Applications; 7.Monitoring and control of livestock housing conditions using precision livestock farming techniques; 8.Developments in individual-animal feed efficiency monitoring systems for livestock; 9.Developments in automated systems for monitoring livestock health: mastitis; 10.Developments in automated systems for monitoring livestock health: lameness; 11.Developments in automated monitoring of livestock fertility/pregnancy; 12.Advances in robotic milking systems; 13.Developments in monitoring grazing behaviour and automated grazing management in extensive systems



Seaweed and microalgae as alternative sources of protein

Editor: Professor Xin Gen Lei, Cornell University, USA

This collection summarises current developments in utilising seaweed and microalgae as alternative sources of protein. Chapters focus on identifying the different types of macroalgae and microalgae, cultivation and processing, as well as the practical application in human and livestock diets.

Print ISBN: 978-1-78676-620-5 Pub. Date: September 2021 eBook ISBN: 978-1-80146-623-6 Price: £140/\$180/€170 Pages: 344 Series No: 107

CHAPTER TITLES

Part 1 Types of macroalgae and microalgae; 1.Seaweed as a potential protein supplement in animal feeds; 2.Solar energy conversion, oxygen evolution and carbon assimilation in cyanobacteria and eukaryotic microalgae; 3.Extraction of proteins and other functional components from red seaweed (*Rhodophyta*); Part 2 Cultivation and processing; 4.Developments in commercial scale farming of microalgae and seaweeds; 5.Developments in algal processing; 6.Bioprocessing of microalgal proteins and their applications in the cosmetic, nutraceutical and food industries; 7.Environmental impacts of seaweed cultivation: kelp farming and preservation; Part 3 Applications; 8.Nutritional and anti-methanogenic potentials of macroalgae for ruminants; 9.Developing seaweed/macroalgae as feed for pigs; 10.Microalgae: a unique source of poultry feed protein; 11.Developing macroalgae and microalgae as feed for fish



Reducing greenhouse gas emissions from livestock production

Editor: Dr Richard Baines, Royal Agricultural University, UK

This collection reviews measurement and modelling of methane emissions and current mitigation strategies, including improving breeding and health, manure management as well as the role of grassland and feed supplements.

Print ISBN: 978-1-78676-439-3 eBook ISBN: 978-1-78676-442-3 Pub. Date: July 2021 Price: £150/\$195/€180 Pages: 358 Series No: 95

CHAPTER TITLES

Part 1 Analysis; 1.Measuring methane emissions from livestock; 2.Greenhouse gas emissions from livestock production: modelling methods, methane emission factors and mitigation strategies; Part 2 Breeding, animal husbandry and manure management; 3.The contribution of animal breeding to reducing the environmental impact of livestock production; 4.Quantifying the contribution of livestock health issues to the environmental impact of their production systems; 5.Sustainable nitrogen management for housed livestock, manure storage and manure processing; 6.Developments in anaerobic digestion to optimize the use of livestock manure; Part 3 Nutrition; 7.The impact of improving feed efficiency on the environmental impact of livestock production; 8.Improving grassland/forage quality and management to reduce livestock greenhouse gas emissions; 9.The use of plant bioactive compounds to reduce greenhouse gas emissions from farmed ruminants; 10.The use of feed supplements to reduce livestock greenhouse gas emissions: direct-fed microbials; 11.Modifying the rumen environment to reduce greenhouse gas emissions



Developing animal feed products

Editor: Dr Navaratnam Partheeban, formerly Royal Agricultural University, UK

This volume reviews key research and the challenges faced in developing new livestock feed products that promote growth whilst also enhancing both product quality and safety. It also summarises recent key developments in the sector, including a better understanding of gut function.

Print ISBN: 978-1-78676-463-8 eBool
Pub. Date: June 2021 Price:

eBook ISBN: 978-1-78676-466-9 Pages: 256
Price: £150/\$195/€180 Series No: 101

CHAPTER TITLES

Part 1 Developing animal products; 1.Techniques for identifying new animal feed ingredients and additives; 2.Effect of processing techniques on the quality of animal feed; 3.Processing techniques to optimize digestibility and nutritional value of animal feed; 4.Trends in analytical techniques for testing animal feed; Part 2 Quality and safety assurance; 5.Developments in techniques to test the efficacy of animal feed products; 6.Advances in understanding key contamination risks in animal feed; 7.Risk management systems for prevention and control of contaminants in animal feed; 8.Developing effective product dossiers for regulatory approval of new animal feed products

LIVESTOCK MANAGEMENT



Improving rumen function

Editors: Dr C. S. McSweeney and Professor R. I. Mackie

This collection reviews what we know about rumen microbiota and the role of nutritional strategies in optimising their function for more sustainable livestock production.

Print ISBN: 978-1-78676-332-7

Pub. Date: June 2020 Price: £190/\$245/€230

eBook ISBN: 978-1-78676-335-8 Pages: 862 Price: £190/\$245/€230 Series No: 83



Improving organic animal farming

Editors: Dr Mette Vaarst and Dr Stephen Roderick

This collection addresses recent research on challenges facing organic animal farming such as more targeted breeding, improved grazing and feed rations, as well as better methods of health and disease management.

eBook ISBN: 978-1-78676-183-5

Print ISBN: 978-1-78676-180-4

Pub. Date: March 2019 Price: £170/\$220/€205

Pages: 406 Series No: 46

See what others are saying about this book:

"Organic livestock production has come a long way since any major, comprehensive summary of it was last published so this book is hugely welcome. The cast of editors and authors, all leaders in their field, makes the book a reliable reference work for years to come."

Dr Malla Hovi, Veterinary Epidemiologist, Consultant, Preventable Surprises



Improving grassland and pasture management in temperate agriculture

Editors: Professor Athole Marshall and Dr Rosemary Collins

This collection reviews current research into the more sustainable use of agricultural grassland.

Print ISBN: 978-1-78676-200-9 Pub. Date: July 2018 eBook ISBN: 978-1-78676-203-0

Price: £190/\$245/€230

Pages: 486 Series No: 51

DAIRY



Advances in sustainable dairy cattle nutrition

NEW

Editor: Professor Alexander N. Hristov, The Pennsylvania State University, USA

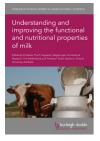
Global demand for milk and other dairy products continues to grow. As a result, the sector's greenhouse gas emissions have risen drastically. This collection reviews the recent advances in understanding and improving dairy cattle nutrition to reduce the carbon footprint of the dairy sector.

Print ISBN: 978-1-80146-205-1 Pub. Date: March 2023 eBook ISBN: 978-1-80146-208-2 Price: £150/\$195/€180 Pages: 436

Series No: 133

CHAPTER TITLES

Part 1 Nutritional requirements; 1.Advances in understanding carbohydrate requirements and utilisation in dairy cattle; 2.Advances in understanding protein requirements and utilisation in dairy cattle; 3.Advances in understanding lipid requirements and utilisation in dairy cattle; Part 2 The use of dietary supplements to optimise dairy cattle nutrition: plant extracts; 4.The use of plant extracts as dietary supplements in dairy cow nutrition: plant essential oils; 5.The use of plant extracts as dietary supplements in dairy cow nutrition: condensed tannins; 6.The use of plant extracts as dietary supplements in dairy cow nutrition: saponins; Part 3 The use of direct-fed microbials (DFM) and other supplements to optimise nutrition; 7.The use of direct-fed microbials (DFM)/probiotics as dietary supplements in dairy cow nutrition: lactic acid bacteria and other bacterial DFM; 8.The use of exogenous enzymes as dietary supplements in dairy cow nutrition; 9.The use of amino acids as dietary supplements in dairy cow nutrition; 10.The use of supplements to mitigate enteric methane emission in dairy cattle; Part 4 Assessing alternative feed sources from agricultural co-products; 11.Assessing alternative fibre sources from by-products; 12.Assessing alternative protein sources from by-products



Understanding and improving the functional and nutritional properties of milk

NEW

Editors: Professor Thom Huppertz, Wageningen University & Research, The Netherlands and Professor Todor Vasiljevic, Victoria University, Australia

This collection reviews our current understanding of the functional and nutritional properties of milk to ensure it can be optimised both as a food and as a key ingredient in dairy products.

Print ISBN: 978-1-78676-819-3 Pub. Date: March 2022 eBook ISBN: 978-1-78676-822-3

Price: £160/\$210/€190

Pages: 774 Series No: 114

CHAPTER TITLES

Part 1 General; 1.The role of the dairy matrix in the contribution of milk and dairy products to the human diet; 2.Digestion of milk protein and milk fat; 3.Milk composition and properties: interspecies comparison; Part 2 Proteins and lipids; 4.Caseins and casein micelles; 5.Advances in dairy protein science: whey proteins; 6.Understanding nutritional and bioactive properties of whey; 7.Functional ingredients based on bioactive peptides from milk proteins; 8.Advances in dairy lipid science: physicochemical aspects; 9.Advances in understanding the biosynthetic pathways of milk lipids, their health benefits and bioactive properties; Part 3 Carbohydrates and other components; 10.Lactose in milk: properties, nutritional characteristics and role in dairy products; 11.Nutritional properties and biological activity of lactose and other dairy carbohydrates; 12.Advances in understanding of indigenous milk enzymes; 13.Advances in understanding milk salts; Part 4 Optimising milk composition and quality; 14.Advances in instrumental techniques for monitoring the quality of cow's milk; 15.Genetic factors affecting the composition and quality of cow's milk; 16.Dietary factors affecting the composition of cow's milk; 17.Sensory properties of milk: understanding and analysis; 18.Microbial quality and spoilage of raw cow's milk; 19.Understanding the contribution of milk constituents to the texture of dairy products: fermented products; 20.Understanding the contribution of milk constituents to the texture of dairy products: fermented products; 21.Understanding the contribution of milk constituents to the texture of dairy products: fermented products; 21.Understanding the contribution of milk constituents to the texture of dairy products: fermented products; 21.Understanding the contribution of milk constituents to the texture of dairy products: fermented products; 21.Understanding the contribution of milk constituents to the texture of dairy products: fermented products; 21.Understanding the contribution of milk constituents to t

DAIRY





Improving dairy herd health

Editor: Professor Emeritus Émile Bouchard, University of Montreal, Canada

This volume reviews advances in on-farm herd health management to prevent and limit disease amongst dairy cattle. It also surveys advances in disease epidemiology and monitoring.

Print ISBN: 978-1-78676-467-6 Pub. Date: July 2021 eBook ISBN: 978-1-78676-470-6 Price: £150/\$195/€180

Pages: 490 Series No: 102

CHAPTER TITLES

Part 1 Principles; 1.Key issues in dairy herd health management; 2.Key issues and challenges in disease surveillance in dairy cattle; 3.Advances in techniques for health monitoring/disease detection in dairy cattle; 4.Data-driven decision support tools in dairy herd health; Part 2 Prerequisites; 5.Advances in understanding immune response in dairy cattle; 6.Dairy cattle welfare and health: an intimate partnership; Part 3 Health at different stages in the life cycle; 7.Optimising reproductive management to maximise dairy herd health and production; 8.Managing dry cow udder health; 9.Managing calves/young stock to optimise dairy herd health; 10.Managing replacement and culling in dairy herds; Part 4 Particular health issues; 11.Optimising udder health in dairy cattle; 12.Optimising foot health in dairy cattle; 13.Preventing bacterial diseases in dairy cattle



Understanding the behaviour and improving the welfare of dairy cattle

Editor: Professor Marcia Endres, University of Minnesota, USA

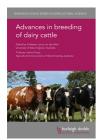
This collection summarises and reviews the wealth of research relating specifically to dairy cattle, including understanding behaviour, monitoring welfare and improving current welfare practices.

Print ISBN: 978-1-78676-459-1 Pub. Date: February 2021 eBook ISBN: 978-1-78676-462-1 Price: £150/\$195/€180

Pages: 274 Series No: 98

CHAPTER TITLES

1.Dairy cattle welfare and other aspects of sustainability; Part 1 Understanding behaviour; 2.Advances in understanding cognition and learning in cattle; 3.Advances in understanding pain and stress in cows; Part 2 Welfare indicators and monitoring; 4.Developing effective welfare measures for cattle; 5.Advances in precision livestock farming techniques for monitoring dairy cattle welfare; 6.Developing effective training and certification schemes for improving on-farm dairy cattle welfare; Part 3 Improving welfare practices; 7.Developments in housing of cattle to promote health and welfare; 8.Advances in understanding behavioral needs and improving the welfare of calves and heifers; 9.Advances in understanding the needs and improving the welfare of transition dairy cows; 10.Optimizing welfare in transport and slaughter of cattle



Advances in breeding of dairy cattle

Editors: Professor Julius van der Werf and Professor Jennie Pryce

Dairy cattle breeding faces several major challenges. This book reviews the latest research on genetics, genetic diversity and advanced methods of genetic evaluation and selection.

Print ISBN: 978-1-78676-296-2 Pub. Date: December 2019

eBook ISBN: 978-1-78676-299-3 Price: £180/\$235/€215

Pages: 658 Series No: 72



Achieving sustainable production of milk - Volume 1

Milk composition, genetics and breeding

Editor: Dr Nico van Belzen

This first volume provides a detailed review of current research on key components and quality traits of milk as well as ways of measuring milk quality.

Print ISBN: 978-1-78676-044-9 Pub. Date: March 2017

eBook ISBN: 978-1-78676-047-0 Price: £150/\$195/€180

Pages: 360 Series No: 08



Achieving sustainable production of milk - Volume 2

Safety, quality and sustainability

Editor: Dr Nico van Belzen

The second volume in this three-volume collection reviews current research on understanding and managing the major pathogens present on dairy farms.

Print ISBN: 978-1-78676-048-7 Pub. Date: June 2017

eBook ISBN: 978-1-78676-051-7 Price: £170/\$220/€205

Pages: 432 Series No: 09



Achieving sustainable production of milk - Volume 3 Dairy herd management and welfare

Editor: Emeritus Professor John Webster



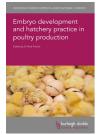
This third and final volume looks at the key issues affecting dairy herd welfare as well as ways of optimising dairy cattle nutrition.

Print ISBN: 978-1-78676-052-4 eBook ISBN: 978-1-78676-055-5 Pub. Date: August 2017

Price: £190/\$245/€230

Pages: 606 Series No: 10

POULTRY



Embryo development and hatchery practice in poultry production

NEW

Editor: Dr Nick French

This collection reviews the latest research on embryo development, as well as the effects of incubation and the hatching stage on chick health, welfare and production traits.

 Print ISBN: 978-1-80146-252-5
 eBook ISBN: 978-1-80146-254-9
 Pages: 504

 Pub. Date: May 2023
 Price: £150/\$195/€180
 Series No: 134

CHAPTER TITLES

Part 1 Parental influences and embryo development; 1. Genetic selection of breeder poultry for improved hatchability; 2. Managing breeder poultry flocks to optimise hatchability and chick health; 3. Key stages in embryo development in poultry; 4. Assessing poultry semen quality; 5. In ovo sexing in poultry chicks; 6. Poultry chick embryo development and skeletal growth; 7. Advances in understanding the development of defences against pathogens in the chicken egg; 8. In ovo vaccination of chicken eggs; 9. Chicken egg storage and transport; Part 2 Incubation; 10. Advances in incubator technology for poultry eggs; 11. Understanding the effects of incubator temperature on embryo and post-hatch chick development; 12. Understanding the effects of light on embryo and post-hatch chick development; 13. Understanding the effects of humidity/air composition on embryo and post-hatch chick development; 14. The role of egg turning in embryo development; Part 3 Managing the hatching stage; 15. Managing the poultry hatcher environment; 16. Key issues in chick hatchery management; 17. Key issues in transportation of chicks to farms for rearing as pullets



Improving poultry meat quality

NEW

Editors: Professor Massimiliano Petracci, Alma Mater Studiorum -Università di Bologna, Italy and Dr Mario Estévez, Universidad de Extremadura, Spain

This collection summarises recent research on genetic and environmental factors affecting the development of quality traits in poultry meat and their implications for breeding, husbandry and postharvest processing.

 Print ISBN: 978-1-80146-103-0
 eBook ISBN: 978-1-80146-106-1
 Pages: 414

 Pub. Date: December 2022
 Price: £150/\$195/€180
 Series No: 127

CHAPTER TITLES

Part 1 Poultry muscle development and meat quality; 1.Advances in understanding the development and morphology of the poultry breast muscle: impact on meat quality; 2.Understanding the genetics of poultry muscle development; 3.Nutritional strategies and management practices to improve poultry meat quality; Part 2 Individual quality attributes: sensory, nutrition and health; 4.Advances in understanding color development in poultry meat; 5.Understanding texture development in poultry meat; 6.Advances in understanding flavour development in poultry meat; Part 3 Poultry myopathies and shelf life; 7.Breast meat abnormalities associated with ischaemic necrosis: dorsal cranial myopathy and deep pectoral myopathy; 8.Quality defects associated with poultry muscle development: pale, soft and exudative meat; 9.Quality defects associated with poultry muscle development: wooden breast; 11.Quality defects associated with poultry muscle development: spaghetti meat; 12.Factors affecting shelf life of poultry meat



Optimising poultry flock health

NEW

Editor: Professor Sjaak de Wit, Royal GD and University of Utrecht, The Netherlands

This collection reviews the range of recent research on improving our understanding of the mechanisms of disease transmission and how this understanding can be used to improve poultry flock health.

Print ISBN: 978-1-78676-887-2 Pub. Date: September 2022

eBook ISBN: 978-1-78676-890-2 Price: f150/\$195/€180

Pages: 414 Series No: 119

CHAPTER TITLES

Part 1 Understanding infectious diseases in poultry; 1. Understanding the molecular biology of avian viruses and their role in poultry health; 2.Advances in understanding bacterial diseases in poultry: challenges and perspectives; 3.Advances in understanding parasite infections of poultry: protozoa and the red mite; Part 2 Preventing diseases in poultry; 4. Improving biosecurity in poultry flocks; 5. Nutritional strategies to boost immune response in poultry; 6.Developments in vaccines to protect poultry against diseases; Part 3 Optimising health at differing stages in poultry production; 7. Optimizing the health of broilers; 8. Optimizing the health of poultry layers; 9. Optimizing the health of broiler breeder birds

See what others are saying about this book:

"The result is a refreshing balance between readability and practicality, underpinned by true science and the appliance of science... as a comprehensive resource on the breadth of information available with the combination of general principles, up-to-date advice, coupled with an excellent provision of further reading and resources for every chapter, makes this an essential addition to any poultry library!"

Book Review Published in Avian Pathology – Dr Stephen A. Lister, Crowshall Veterinary Services LLP, UK



Understanding the behaviour and improving the welfare of chickens

Editor: Professor Christine Nicol

This book reviews recent research on understanding chicken behaviour, as well as the technologies currently available to monitor this behaviour.

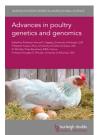
Print ISBN: 978-1-78676-422-5

eBook ISBN: 978-1-78676-425-6

Pages: 688 Series No: 91

Pub. Date: September 2020 Price: £170/\$220/€205

POULTRY



Advances in poultry genetics and genomics

Editors: Professor Samuel E. Aggrey, Professor Huaijun Zhou, Dr Michèle Tixier-Boichard and Professor Douglas D. Rhoads

This volume addresses the key advances in genomic selection and their practical application in breeding improved breeds of layers and broilers.

Print ISBN: 978-1-78676-324-2

Pub. Date: July 2020

eBook ISBN: 978-1-78676-327-3 Price: £190/\$245/€230

Pages: 580 Series No: 79

See what others are saying about this book:

"This book gives a good overall review of the advances that have recently occurred in the fields of poultry genetics and genomics...one thing that really struck me about this book was the calibre of the editorial team and the international range and expertise of the contributing authors. With over 550 pages this book is well worth its place on the bookshelf of anyone who is interested in poultry breeding and genomics."

Book Review Published in International Hatchery Practice



Improving gut health in poultry

Editor: Professor Steven C. Ricke

This collection summarises current research on the composition and function of the gastrointestinal tract in poultry, the factors that affect its function, and nutritional strategies to optimise poultry nutrition and health.

Print ISBN: 978-1-78676-304-4 Pub. Date: November 2019

eBook ISBN: 978-1-78676-307-5 Price: £180/\$235/€215

Pages: 546 Series No: 73





Achieving sustainable production of poultry meat - Volume 1 Safety, quality and sustainability

Editor: Professor Steven C. Ricke

This volume discusses the main pathogens affecting poultry production, as well as how meat quality traits can be optimised to meet consumer expectations.

Print ISBN: 978-1-78676-064-7 Pub. Date: January 2017

eBook ISBN: 978-1-78676-067-8 Price: £180/\$235/€215

Pages: 502 Series No: 13



Achieving sustainable production of poultry meat - Volume 2

Breeding and nutrition

Editor: Professor Todd Applegate

This book discusses the recent significant advances in poultry breeding and nutrition, focussing on key developments such as marker-assisted breeding.

Print ISBN: 978-1-78676-068-5 Pub. Date: July 2017 eBook ISBN: 978-1-78676-071-5 Price: £150/\$195/€180 Pages: 342 Series No: 14



Achieving sustainable production of poultry meat - Volume 3

Health and welfare

Editor: Professor Todd Applegate

This collection reviews our understanding of bacterial, viral and other diseases affecting poultry and their effective management.

Print ISBN: 978-1-78676-072-2 Pub. Date: August 2017 eBook ISBN: 978-1-78676-075-3 Price: £160/\$210/€190 Pages: 350 Series No: 15



Achieving sustainable production of eggs - Volume 1

Safety and quality

Editor: Professor Julie Roberts

This first volume considers recent developments in understanding egg composition and chemistry, as well as the key pathogens in eggs.

Price: £170/\$220/€205

Print ISBN: 978-1-78676-076-0 Pub. Date: March 2017 eBook ISBN: 978-1-78676-079-1

Pages: 430 Series No: 16



Achieving sustainable production of eggs - Volume 2

Animal welfare and sustainability

Editor: Professor Julie Roberts

This second volume reviews nutrition and other aspects of husbandry affecting laying hens, as well as how egg production can be made more sustainable.

Print ISBN: 978-1-78676-080-7 Pub. Date: February 2017 eBook ISBN: 978-1-78676-083-8 Price: £130/\$170/€155 Pages: 234 Series No: 17

SHEEP



Achieving sustainable production of sheep

Editor: Professor Johan Greyling

This collection reviews the latest research on issues such as meat quality, genetics and breeding. It also discusses animal nutrition, health and welfare as well as ways of improving the sustainability of sheep production.

Print ISBN: 978-1-78676-084-5 Pub. Date: September 2017 eBook ISBN: 978-1-78676-087-6

Price: £180/\$235/€215 Serie

Pages: 474 Series No: 22

BEEF



Ensuring safety and quality in the production of beef - Volume 1 Safety

Editors: Professor Gary Acuff and Professor James Dickson

The first volume reviews the key research trends in ensuring safe beef production, both on the farm and during slaughter.

Print ISBN: 978-1-78676-056-2

eBook ISBN: 978-1-78676-059-3

Pages: 252 Series No: 11

Pub. Date: June 2017

Price: £130/\$170/€155

Ensuring safety and quality in the production of beef Valent Country (Valent Country) (Valent Country)

Ensuring safety and quality in the production of beef - Volume 2 $\ensuremath{\text{Quality}}$

Editor: Emeritus Professor Michael E. Dikeman

The second volume in this collection reviews developments related to quality, starting with the way breeding and growth affect meat quality.

Print ISBN: 978-1-78676-060-9

Pub. Date: April 2017

eBook ISBN: 978-1-78676-063-0 Price: £170/\$220/€205 Pages: 442 Series No: 12

See what others are saying about this two-volume collection:

"Overall, this new Burleigh Dodds text, 'Ensuring safety and quality in the production of beef', is a breath of fresh air. It covers a mountain of factors that can contribute to beef demand. It assembles a truly remarkable set of authors; scientists that have spent a career on their specific topics. This text is a 'must read'!"

Book Review published in Meat Science

PIGS



Optimising pig herd health and production

NEW

Editors: Professor Dominiek Maes, Ghent University, Belgium and Professor Joaquim Segalés, Universitat Autònoma de Barcelona and IRTA-CReSA, Spain

This collection summarises the wealth of research on optimising pig health to prevent the occurrence and spread of major diseases known to the pig industry, such as African Swine Fever.

Print ISBN: 978-1-78676-883-4 Pub. Date: October 2022 eBook ISBN: 978-1-78676-886-5 Pages: 596
Price: £150/\$195/€180 Series No: 118

CHAPTER TITLES

Part 1 Understanding and identifying disease; 1.Advances in understanding mechanisms of porcine viral disease transmission/epidemiology; 2.Understanding and identifying bacterial disease in swine; 3.Improving disease surveillance and monitoring systems in pig herds; 4.Surveillance on swine farms using antemortem specimens; Part 2 Understanding immunity and disease resistance; 5.Advances in understanding the development of immune function in pigs; 6.Advances in understanding gut function and immunity in pigs; 7.Nutritional strategies to boost immune function in pigs; 8.Host–pathogen interactions and genetic tools for resistance to porcine reproductive and respiratory syndrome virus; Part 3 Disease prevention; 9.On-farm strategies for preventing pig diseases: improving biosecurity; 10.Managing feed to optimize pig health; 11.Managing housing and stocking density to optimize health, welfare and production in pig herds; 12.Advances in the development and use of vaccines for prevention of endemic diseases in pigs; 13.Advances in developing vaccines for emerging diseases in pigs; Part 4 Optimising health through the life cycle; 14.Optimizing the health of gilts and sows during pregnancy and parturition; 15.Optimising the health of weaned piglets; 16.Optimising the health of finisher pigs



Understanding gut microbiomes as targets for improving pig gut health

NEW

Editors: Professor Mick Bailey and Emeritus Professor Chris Stokes, University of Bristol, UK

This collection summarises current research on the structure and function of the gastrointestinal tract in pigs, the factors that can influence its effectiveness, as well as the nutritional strategies that can improve gut development and function.

Print ISBN: 978-1-78676-487-4 Pub. Date: January 2022 eBook ISBN: 978-1-78676-490-4 Price: £150/\$195/€180 Pages: 504 Series No: 103

CHAPTER TITLES

Part 1 The gut microbiome and pig gut health; 1.Microbial ecosystems as targets for improving pig gut health; 2.Metabolic services of intestinal microbiota of swine: metabolism of carbohydrates and bile salts; 3.Microbiological services delivered by the pig gut microbiome; Part 2 Analysing the pig gut microbiome; 4.The gut microbiota in pigs: ecology and biotherapeutics; 5.Understanding the relationship between the microbiome and the structure and function of the pig gastrointestinal tract; 6.Understanding the development of the gut microbiome in pigs: an overview; Part 3 Techniques to optimise gut function by manipulating gut microbiomes; 7.The use of prebiotics to optimize gut function in pigs; 8.The use of dietary fibre to optimize microbial gut function in pigs, with particular consideration of dietary cereal grains and legumes; 9.The use of exogenous enzymes to optimize gut function in pigs; 10.Improving gut function in pigs to prevent dysbiosis and postweaning diarrhoea; 11.Improving gut function in pigs to prevent pathogen colonization; 12.Microbial protein metabolism in the monogastric gastrointestinal tract: a review

PIGS



Understanding the behaviour and improving the welfare of pigs

Editor: Emerita Professor Sandra Edwards, Newcastle University, UK

This collection reviews the genetic and developmental factors that affect pig behaviour and assesses ways of optimising pig welfare at different stages of production, from breeding to slaughter.

 Print ISBN: 978-1-78676-443-0
 eBook ISBN: 978-1-78676-446-1
 Pages: 594

 Pub. Date: February 2021
 Price: £150/\$195/€180
 Series No: 96

CHAPTER TITLES

Part 1 Determinants of behaviour; 1.Advances in understanding the genetics of pig behaviour; 2.Developmental influences on pig behaviour; Part 2 Management of behaviour in different production stages; 3.Optimising pig welfare in breeding and gestation; 4.Optimising sow and piglet welfare during farrowing and lactation; 5.Optimising pig welfare at the weaning and nursery stage; 6.Optimising pig welfare in the growing and finishing stage; 7.Optimising pig welfare during transport, lairage and slaughter; Part 3 Current welfare issues; 8.Evidence of pain in piglets subjected to invasive management procedures; 9.Alternatives to castration of pigs; 10.Understanding and preventing tail biting in pigs; 11.The role of enrichment in optimizing pig behaviour and welfare Part 4 Assessment of welfare states; 12.Physiological and behavioral responses to disease in pigs; 13.Assessing emotions in pigs: determining negative and positive mental states; 14.Welfare assessment of pigs; 15.Advances in technologies for monitoring pig welfare



Achieving sustainable production of pig meat - Volume 1 Safety, quality and sustainability

Editor: Professor Alan Mathew

This volume addresses the main zoonoses affecting pigs and how they can be controlled, as well as the latest research on the key aspects of meat quality.

 Print ISBN: 978-1-78676-088-3
 eBook ISBN: 978-1-78676-091-3
 Pages: 290

 Pub. Date: June 2018
 Price: £130/\$170/€155
 Series No: 23



Achieving sustainable production of pig meat - Volume 2 Animal breeding and nutrition

Editor: Professor Julian Wiseman

This volume discusses advances in breeding to improve both productivity and quality. It also reviews key developments in improving animal nutrition.

 Print ISBN: 978-1-78676-092-0
 eBook ISBN: 978-1-78676-095-1
 Pages: 340

 Pub. Date: October 2017
 Price: £160/\$210/€190
 Series No: 24



Achieving sustainable production of pig meat - Volume 3 Animal health and welfare

Editor: Professor Julian Wiseman

This volume reviews the effective management of diseases affecting pigs as well as ways of defining and promoting animal welfare in pig production.

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