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IN AGRICULTURAL SCIENCE

2021 PUBLISHING PROGRAMME



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About Burleigh Dodds

Burleigh Dodds Science Publishing is an award winning independent publisher founded by Rob Burleigh and Francis Dodds in 2015. Our mission is to bring you the key research and latest trends to empower you to make a positive impact on sustainable agriculture, climate change and the UN Sustainable Development Goals.

We now boast over 90 published titles and 1500 chapters with the anticipation of adding a further 300 chapters to our database and 20 books in 2021.

Our 2021 catalogue showcases how we are continuing our mission with new and exciting content on topics such as soil health, regenerative agriculture, supply chain management, as well as livestock health, welfare and nutrition.

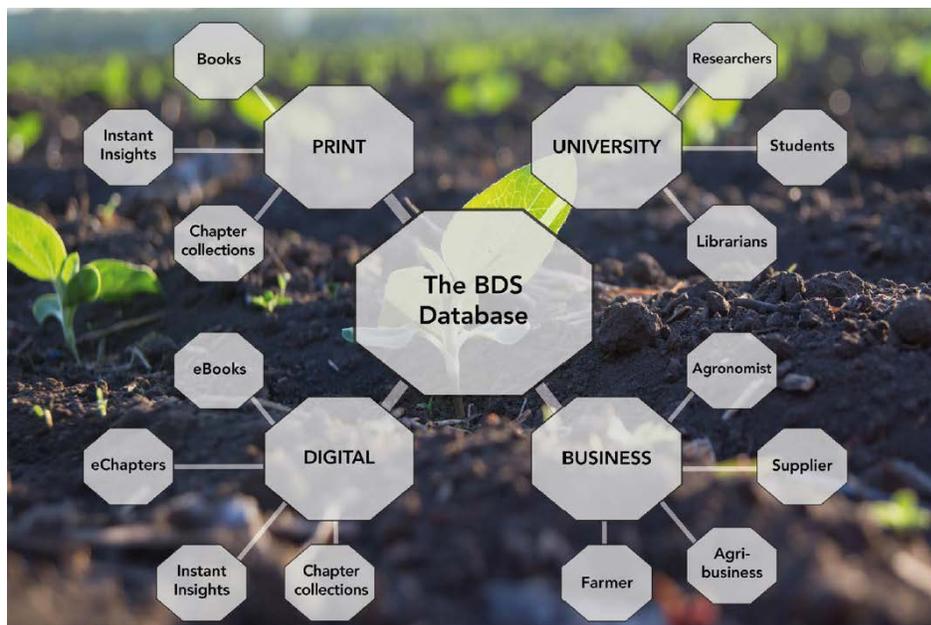
We hope you like the new Catalogue. All of us at Burleigh Dodds are looking forward to working with you in 2021 to meet your information needs. **The Burleigh Dodds Team.**

The Power of BDS

2020 has seen a global shift to online access and use of information. Our authoritative and comprehensive database of searchable agricultural content together with its flexible reading formats provides 24/7 access no matter your study/research requirements or location.

Our content brings with it an elite and unrivalled team of international experts in agricultural science.

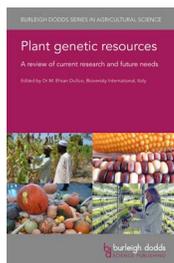
Whether you're working in a university, a corporation, an NGO, provide advisory services, or are a farm business/supplier, our versatile database provides a knowledge base on which to build your own research, improve product development or inform best practice on the farm.



That's the Power of BDS!

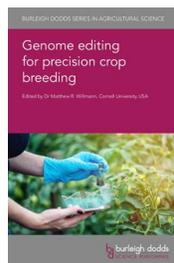
CROPS

CROP MANAGEMENT



Plant genetic resources
 A review of current research and future needs
 Editor Dr M. Ehsan Dulloo, Bioversity International, Italy
 ISBN - print 978-1-78676-451-5
 ISBN - ePub 978-1-78676-453-9
 ISBN - ePDF 978-1-78676-454-6
 Pages 352
 Pub. Date March 2021
 Price £160/\$210/€190/C\$270
 Series No AS100

NEW

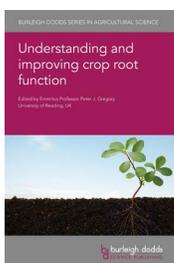


Genome editing for precision crop breeding
 Editor Dr Matthew R. Willmann, Cornell University, USA
 ISBN - print 978-1-78676-447-8
 ISBN - ePub 978-1-78676-449-2
 ISBN - ePDF 978-1-78676-450-8
 Pages 494
 Pub. Date April 2021
 Price £150/\$195/€180/C\$255
 Series No AS97

NEW

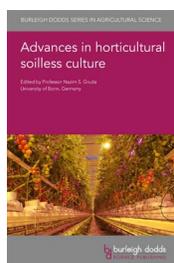
This collection starts by reviewing key issues such as valuing, identifying and monitoring plant genetic diversity. The book goes on to assess advances in *in-situ* strategies for protecting crop wild relatives such as community-based conservation.

This collection takes stock of the wealth of research on current genome editing techniques and their potential in crop breeding in improving traits such as yield, disease resistance, drought tolerance and nutrient use efficiency.



Understanding and improving crop root function
 Editor Emeritus Prof. Peter J. Gregory, University of Reading, UK
 ISBN - print 978-1-78676-360-0
 ISBN - ePub 978-1-78676-362-4
 ISBN - ePDF 978-1-78676-363-1
 Pages 686
 Pub. Date January 2021
 Price £180/\$235/€215/C\$305
 Series No AS90

NEW

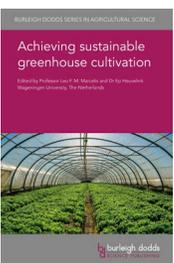


Advances in horticultural soilless culture
 Editor Prof. Nazim S. Gruda, University of Bonn, Germany
 ISBN - print 978-1-78676-435-5
 ISBN - ePub 978-1-78676-437-9
 ISBN - ePDF 978-1-78676-438-6
 Pages 442
 Pub. Date February 2021
 Price £160/\$210/€190/C\$270
 Series No AS94

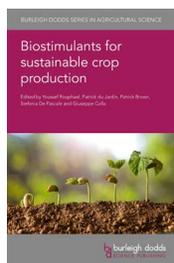
NEW

Recent decades have seen a dramatic increase in research on plant roots and their complex interactions with soils. This collection discusses the responses of plant roots to abiotic and biotic stresses and how understanding nutrient uptake can be exploited to optimise root function.

Soilless cultivation techniques have attracted growing attention. This collection reviews current research on optimising substrates for soilless cultivation and assesses recent advances in technologies, such as fertigation systems and process control.



Achieving sustainable greenhouse cultivation
 Editors Prof. Leo F. M. Marcelis and Dr Ep Heuvelink, Wageningen University, The Netherlands
 ISBN - print 978-1-78676-280-1
 ISBN - ePub 978-1-78676-282-5
 ISBN - ePDF 978-1-78676-283-2
 Pages 538
 Pub. Date September 2019
 Price £170/\$220/€205/C\$290
 Series No AS63

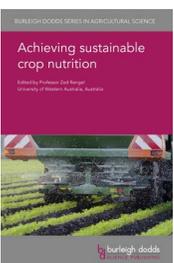


Biostimulants for sustainable crop production
 Editors Youssef Roupael, Patrick du Jardin, Patrick Brown, Stefania De Pascale and Giuseppe Colla
 ISBN - print 978-1-78676-336-5
 ISBN - ePub 978-1-78676-338-9
 ISBN - ePDF 978-1-78676-339-6
 Pages 386
 Pub. Date July 2020
 Price £150/\$195/€180/C\$255
 Series No AS84

NEW

This book reviews current research in efficient design, crop management and system control to optimise greenhouse use. It assesses the two main variables in protected cultivation: the aerial environment and root development.

Biostimulants stimulate natural processes in crops to enhance nutrient uptake, nutrient use efficiency (NUE), resistance to abiotic stress and quality traits. This collection reviews key advances in understanding and using biostimulants.



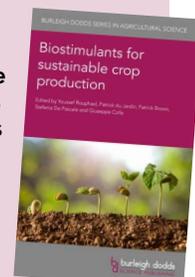
Achieving sustainable crop nutrition
 Editor Prof. Zed Rengel, University of Western Australia, Australia
 ISBN - print 978-1-78676-312-9
 ISBN - ePub 978-1-78676-314-3
 ISBN - ePDF 978-1-78676-315-0
 Pages 830
 Pub. Date February 2020
 Price £190/\$245/€230/C\$325
 Series No AS76

This collection reviews current research on understanding nutrient cycles, the ways crops process nutrients, the environmental effects of fertilizer use and how this understanding can be used to improve nutrient use efficiency for a more resource-efficient and climate-smart agriculture.

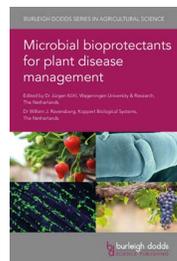
See what others are saying about Biostimulants:

"It is good news that a distinguished editor team led by Professor Youssef Roupael is putting together 'Biostimulants for sustainable crop production'. The interest in biostimulants is constantly increasing, making a book on this topic, written by a team of internationally-renowned scientists, timely and very welcome."

Professor Dimitrios Savvas, Agricultural University of Athens, Greece



INSECT PESTS, PLANT DISEASES & WEEDS

**Microbial bioprotectants for plant disease management****NEW**

Editors Dr Jürgen Köhl, Wageningen University & Research, The Netherlands and Dr Willem Ravensberg, Koppert Biological Systems, The Netherlands

ISBN - print 978-1-78676-813-1
 ISBN - ePub 978-1-78676-815-5
 ISBN - ePDF 978-1-78676-816-2
 Pages 734
 Pub. Date November 2021
 Price £150/\$195/€180/C\$255
 Series No AS108

This collection summarises and reviews the wealth of recent research on the development of more environmentally friendly biological methods to control plant diseases.

**Biopesticides for sustainable agriculture**

Editors Prof. Nick Birch, formerly The James Hutton Institute, UK and Prof. Travis Glare, Lincoln University, New Zealand

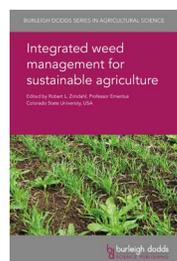
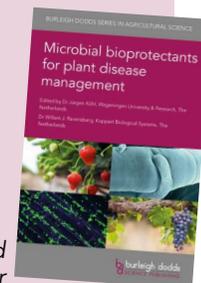
ISBN - print 978-1-78676-356-3
 ISBN - ePub 978-1-78676-358-7
 ISBN - ePDF 978-1-78676-359-4
 Pages 366
 Pub. Date March 2020
 Price £150/\$195/€180/C\$255
 Series No AS89

Part 1 of this collection reviews research on developing and assessing new biopesticides. Part 2 summarises advances in different types of entomopathogenic biopesticide. Part 3 assesses semiochemical, peptide-based and other natural substance-based biopesticides.

See what others are saying about Bioprotectants:

"The proposed content of the book is very comprehensive and relevant. It responds to a need from academics, scientists and practitioners. It provides researchers and students with meaningful insights, unique perspectives and critical analysis. I am confident...that this book will represent a significant contribution to the subject."

Dr Alba Marina Cotes, Senior Consultant and Emeritus Scientist – Colombian Corporation for Agricultural Research (AGROSAVIA), Colombia

**Integrated weed management for sustainable agriculture**

Editor Robert L. Zimdahl, Prof. Emeritus, Colorado State University, USA

ISBN - print 978-1-78676-164-4
 ISBN - ePub 978-1-78676-166-8
 ISBN - ePDF 978-1-78676-167-5
 Pages 476
 Pub. Date December 2017
 Price £190/\$245/€230/C\$325
 Series No AS42

Weeds remain a major obstacle to improved yields in agriculture. At the same time, established methods of control are being undermined by problems such as herbicide resistance. This major collection reviews key developments in integrated weed management (IWM) to manage weeds more sustainably.

**Advances in integrated weed management****NEW**

Editor Prof. Per Kudsk, Aarhus University, Denmark

ISBN - print 978-1-78676-745-5
 ISBN - ePub 978-1-78676-747-9
 ISBN - ePDF 978-1-78676-748-6
 Pages 400
 Pub. Date February 2022
 Price £150/\$195/€180/C\$255
 Series No AS113

This collection explores recent developments in integrated weed management that embrace a more holistic, landscape-based agroecological approach, including the application of technology to allow more informed decision-making and more targeted solutions.

**Integrated management of diseases and insect pests of tree fruit**

Editors Prof. Xiangming Xu and Dr Michelle Fountain, NIAB-EMR, UK

ISBN - print 978-1-78676-256-6
 ISBN - ePub 978-1-78676-258-0
 ISBN - ePDF 978-1-78676-259-7
 Pages 748
 Pub. Date September 2019
 Price £190/\$245/€230/C\$325
 Series No AS68

In the light of increasing restrictions on pesticides, this collection reviews advances in understanding key diseases and insect pests of tree fruit. It shows how this understanding can be used to improve integrated disease and pest management techniques.

See what others are saying about IPM in horticulture:

"This new book is both timely and important for the continued development, improvement and uptake of IPM for horticultural crops... This book provides not only the latest research but also practical solutions for key vegetable pests, via relevant case studies. I recommend this book to students and practitioners of IPM in horticulture."

Emeritus Prof. Nick Birch, formerly The James Hutton Institute, UK



INSECT PESTS, PLANT DISEASES & WEEDS



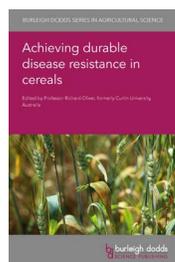
Integrated management of insect pests:
Current and future developments
Editors Emeritus Prof. Marcos Kogan, Oregon State Univ., USA and Emeritus Prof. E. A. Heinrichs, Univ. of Nebraska-Lincoln, USA
ISBN - print 978-1-78676-260-3
ISBN - ePub 978-1-78676-262-7
ISBN - ePDF 978-1-78676-263-4
Pages 1004
Pub. Date October 2019
Price £190/\$245/€230/C\$325
Series No AS69

This volume reviews current developments in integrated pest management (IPM), focussing on insect pests. It discusses advances in understanding species and landscape ecology on which IPM is founded.



Pesticides and agriculture:
Profit, politics and policy
Author Dave Watson
ISBN - print 978-1-78676-276-4
ISBN - ePub 978-1-78676-278-8
ISBN - ePDF 978-1-78676-279-5
Pages 418
Pub. Date August 2018
Price £170/\$220/€205/C\$290
Series No AS67

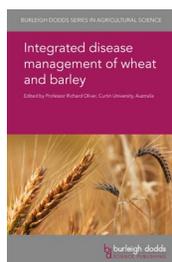
This book provides an authoritative account of the development of the modern pesticides industry in the context of broader developments in global agriculture.



Achieving durable disease resistance in cereals
Editor Prof. Richard Oliver, formerly Curtin University, Australia
ISBN - print 978-1-78676-601-4
ISBN - ePub 978-1-78676-603-8
ISBN - ePDF 978-1-78676-604-5
Pages 970
Pub. Date October 2021
Price £180/\$235/€215/C\$305
Series No AS106

NEW

This collection reviews advances in the key areas required to achieve durable disease resistance in cereal crops, from advances in understanding pathogen biology/epidemiology and plant pathogen interactions to identifying sources of resistance and advance techniques for breeding new varieties.



Integrated disease management of wheat and barley
Editor Prof. Richard Oliver, Curtin University, Australia
ISBN - print 978-1-78676-216-0
ISBN - ePub 978-1-78676-218-4
ISBN - ePDF 978-1-78676-219-1
Pages 366
Pub. Date October 2018
Price £170/\$220/€205/C\$290
Series No AS19

Diseases remain a serious problem in cereal cultivation. The first parts of the book review current research on fungal diseases of cereals and the challenge of fungicide resistance. The book then discusses breeding resistant varieties and methods for integrated disease management of cereals.



Rice insect pests and their management
Authors E. A. Heinrichs, Francis E. Nwilene, Michael J. Stout, Buyung A. R. Hadi & Thais Freitas
ISBN - print 978-1-78676-196-5
ISBN - ePub 978-1-78676-198-9
ISBN - ePDF 978-1-78676-199-6
Pages 292
Pub. Date June 2017
Price £180/\$235/€215/C\$305
Series No AS50

This book uses the unique expertise of leading rice entomologists from Africa, Asia and the Americas to provide the first global coverage of rice insect pests. It covers 150 individual pests, including images, as well as integrated pest management techniques to deal with them.

See what others are saying about Disease resistance in cereals:

“The proposed collection of chapters by leading scientists broadly covers all aspects of durable resistance in cereals and represents one of the most comprehensive resources available to scientists on this topic. It will serve as a key reference on disease resistance for many years to come.”

Mark E. Sorrells, School of Integrative Plant Science, Plant Breeding and Genetics, Cornell University, USA



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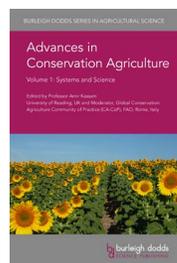
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Critical issues in plant health:
50 years of research in African agriculture
Editors Dr Peter Neuenschwander and Dr Manuele Tamò, IITA, Benin
ISBN - print 978-1-78676-232-0
ISBN - ePub 978-1-78676-234-4
ISBN - ePDF 978-1-78676-235-1
Pages 492
Pub. Date February 2019
Price £170/\$220/€205/C\$290
Series No AS58

This collection summarises 50 years of research on plant health by the International Institute of Tropical Agriculture (IITA) to improve the health of crops in Africa. It will be a standard reference on improving the management of pests and diseases in developing countries.

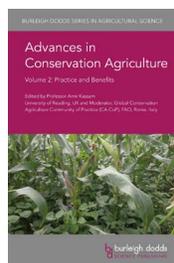
SUSTAINABILITY & ENVIRONMENT

**Advances in Conservation Agriculture - Vol 1
Systems and Science**

Editor Prof. Amir Kassam,
University of Reading, UK

ISBN - print 978-1-78676-264-1
ISBN - ePub 978-1-78676-266-5
ISBN - ePDF 978-1-78676-267-2
Pages 602
Pub. Date January 2020
Price £150/\$195/€180/C\$255
Series No AS61

By focussing on soil health, Conservation Agriculture (CA) is seen as more sustainable than conventional production. This volume summarises research on key components for successful CA including no-till techniques, soil cover and cropping systems as well as the role of livestock and agroforestry.

**Advances in Conservation Agriculture - Vol 2
Practice and Benefits**

Editor Prof. Amir Kassam,
University of Reading, UK

ISBN - print 978-1-78676-268-9
ISBN - ePub 978-1-78676-270-2
ISBN - ePDF 978-1-78676-271-9
Pages 498
Pub. Date January 2020
Price £150/\$195/€180/C\$255
Series No AS62

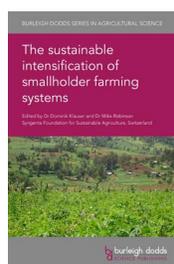
Volume 2 reviews research on optimising Conservation Agricultural (CA) practices and their benefits. Chapters cover soil management, crop nutrition and irrigation, pest and disease management, as well as broader issues such as managing carbon, biodiversity and ecosystem services.

**Advances in Conservation Agriculture - Vol 3
Adoption and Spread** **NEW**

Editor Prof. Amir Kassam,
University of Reading, UK

ISBN - print 978-1-78676-475-1
ISBN - ePub 978-1-78676-477-5
ISBN - ePDF 978-1-78676-478-2
Pages 400
Pub. Date January 2022
Price £150/\$195/€180/C\$255
Series No AS104

The final volume in this three-volume collection reviews the effectiveness of Conservation Agriculture in differing contexts (e.g. in drier conditions where water conservation is important or in areas with poor soil) and refers to the wealth of research and experiential evidence currently available.

**The sustainable intensification of smallholder
farming systems** **NEW**

Editors Dr Dominik Klauer and Dr Mike Robinson,
Syngenta Foundation for Sustainable
Agriculture, Switzerland

ISBN - print 978-1-78676-430-0
ISBN - ePub 978-1-78676-432-4
ISBN - ePDF 978-1-78676-433-1
Pages 466
Pub. Date November 2020
Price £180/\$235/€215/C\$305
Series No AS93

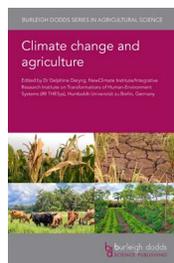
This volume reviews recent research on effective support to improve smallholder livelihoods. After discussing the economics of smallholder farming, the book looks at access to key inputs before assessing ways of improving extension and other services to support sustainable practices.

**Reconciling agricultural production with
biodiversity conservation** **NEW**

Editors Prof. Paolo Bàrberi and Dr Anna-Camilla
Moonen, Scuola Superiore Sant'Anna, Italy

ISBN - print 978-1-78676-348-8
ISBN - ePub 978-1-78676-350-1
ISBN - ePDF 978-1-78676-351-8
Pages 282
Pub. Date September 2020
Price £150/\$195/€180/C\$255
Series No AS87

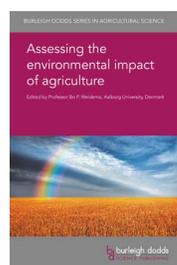
The first part of this volume assesses general issues such as landscape approaches, mapping and modelling. Part 2 reviews management practices promoting biodiversity such as field margins, hedgerows, improved pasture management and agroforestry.

**Climate change and agriculture**

Editor Dr Delphine Deryng, Leibniz
Center for Agricultural Landscape
Research (ZALF), Germany

ISBN - print 978-1-78676-320-4
ISBN - ePub 978-1-78676-322-8
ISBN - ePDF 978-1-78676-323-5
Pages 404
Pub. Date April 2020
Price £150/\$195/€180/C\$255
Series No AS78

Part 1 of this collection reviews current research on the impacts of climate change on agriculture. Part 2 assesses what we know about the contribution of agriculture to climate change, whilst Part 3 surveys mitigation strategies to achieve a more 'climate-smart' agriculture.

**Assessing the environmental impact of
agriculture**

Editor Prof. Bo P. Weidema,
Aalborg University, Denmark

ISBN - print 978-1-78676-228-3
ISBN - ePub 978-1-78676-230-6
ISBN - ePDF 978-1-78676-231-3
Pages 386
Pub. Date August 2019
Price £160/\$210/€190/C\$270
Series No AS57

This book reviews key methods for measuring the environmental impact of agriculture. Part 1 reviews life cycle assessment (LCA) methodology. Part 2 reviews ways of modelling particular types of impact whilst the final part covers particular agricultural sectors.

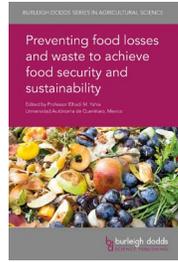
**Improving organic crop cultivation**

Editor Prof. Ulrich Köpke,
University of Bonn, Germany

ISBN - print 978-1-78676-184-2
ISBN - ePub 978-1-78676-186-6
ISBN - ePDF 978-1-78676-187-3
Pages 568
Pub. Date November 2018
Price £180/\$235/€215/C\$305
Series No AS47

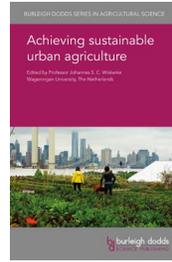
Organic crop cultivation needs to improve yields if it is to expand its share of agricultural production. This collection reviews ways of addressing this challenge, from developing better varieties to ways of improving crop nutrition and pest control.

SUSTAINABILITY & ENVIRONMENT



Preventing food losses and waste to achieve food security and sustainability
 Editor Prof. Elhadi M. Yahia, Universidad Autónoma de Querétaro, Mexico
 ISBN - print 978-1-78676-300-6
 ISBN - ePub 978-1-78676-302-0
 ISBN - ePDF 978-1-78676-303-7
 Pages 852
 Pub. Date March 2020
 Price £190/\$245/€230/C\$325
 Series No AS70

Around one third of all food production is lost or wasted. This book provides a comprehensive review of the causes and prevention of food losses and waste at key steps in the supply chain, for different commodities and across particular regions.



Achieving sustainable urban agriculture
 Editor Prof. Johannes S. C. Wiskerke, Wageningen University, The Netherlands
 ISBN - print 978-1-78676-316-7
 ISBN - ePub 978-1-78676-318-1
 ISBN - ePDF 978-1-78676-319-8
 Pages 408
 Pub. Date February 2020
 Price £150/\$195/€180/C\$255
 Series No AS77
 © Cover Image Brooklyn Grange Rooftop Farm

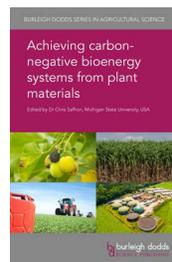
This volume reviews research on building urban and peri-urban agricultural networks, the use of technologies such as rooftop and vertical farming systems, as well as providing case studies of particular products from urban farming.



Seaweed and microalgae as alternative sources of protein
 Editor Prof. Xingen Lei, Cornell University, USA
 ISBN - print 978-1-78676-620-5
 ISBN - ePub 978-1-78676-622-9
 ISBN - ePDF 978-1-78676-623-6
 Pages 344
 Pub. Date September 2021
 Price £140/\$180/€170/C\$240
 Series No AS107

NEW

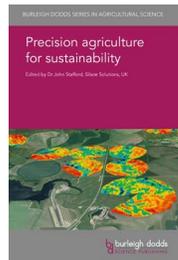
This collection summarises current developments in utilising seaweed and microalgae as alternative sources of protein. Chapters focus on identifying the different types of macroalgae and microalgae, cultivation and processing, as well as the practical application in human and livestock diets.



Achieving carbon-negative bioenergy systems from plant materials
 Editor Dr Chris Saffron, Michigan State University, USA
 ISBN - print 978-1-78676-252-8
 ISBN - ePub 978-1-78676-254-2
 ISBN - ePDF 978-1-78676-255-9
 Pages 410
 Pub. Date February 2020
 Price £150/\$195/€180/C\$255
 Series No AS64

This collection reviews advances in producing next-generation biofuels from plant materials. Part 1 discusses technologies such as biomass gasification, fast pyrolysis and torrefaction. Part 2 assesses advances in production of biofuels from crops such as jatropha, oilseeds, *Miscanthus* and switchgrass.

TECHNOLOGY & DATA



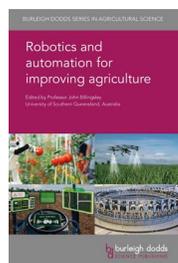
Precision agriculture for sustainability
 Editor Dr John Stafford, Silsoe Solutions, UK
 ISBN - print 978-1-78676-204-7
 ISBN - ePub 978-1-78676-206-1
 ISBN - ePDF 978-1-78676-207-8
 Pages 514
 Pub. Date November 2018
 Price £180/\$235/€215/C\$305
 Series No AS52

By using resources more efficiently, precision agriculture can make farming more productive and sustainable. This collection reviews current research on key technologies in precision agriculture and its applications.



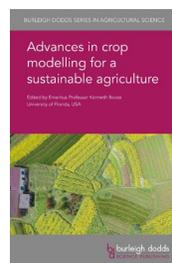
Improving data management and decision support systems in agriculture
 Editor Dr Leisa Armstrong, Edith Cowan University, Australia
 ISBN - print 978-1-78676-340-2
 ISBN - ePub 978-1-78676-342-6
 ISBN - ePDF 978-1-78676-343-3
 Pages 340
 Pub. Date April 2020
 Price £160/\$210/€190/C\$270
 Series No AS85

This collection reviews and summarises the wealth of research on key challenges in developing better data management and decision support systems (DSS) for farmers.



Robotics and automation for improving agriculture
 Editor Prof. John Billingsley, University of Southern Queensland, Australia
 ISBN - print 978-1-78676-272-6
 ISBN - ePub 978-1-78676-274-0
 ISBN - ePDF 978-1-78676-275-7
 Pages 326
 Pub. Date June 2019
 Price £160/\$210/€190/C\$270
 Series No AS44

Robotics has great potential in improving productivity and precision in agriculture. The book reviews advances in technologies such as machine vision and control systems, as well as applications from crop planting, fertilisation, pest and weed management to livestock production.



Advances in crop modelling for a sustainable agriculture
 Editor Emeritus Prof. Kenneth Boote, University of Florida, USA
 ISBN - print 978-1-78676-240-5
 ISBN - ePub 978-1-78676-242-9
 ISBN - ePDF 978-1-78676-243-6
 Pages 542
 Pub. Date December 2019
 Price £180/\$235/€215/C\$305
 Series No AS75

Chapters in Part 1 review advances in modelling individual components of agricultural systems. Part 2 addresses the challenges of combining modular sub-systems into whole farm system, landscape and regional models. The final part of the book reviews wider issues in improving model reliability.

SOIL & WATER MANAGEMENT

**Improving soil health**

Editor Prof. William Horwath, University of California-Davis, USA

ISBN - print 978-1-78676-670-0
 ISBN - ePub 978-1-78676-672-4
 ISBN - ePDF 978-1-78676-673-1

Pages 400
 Pub. Date April 2022
 Price £150/\$195/€180/C\$255
 Series No AS109

NEW

This collection summarises current research on the effects of different management strategies on the physical, chemical and biological properties of soils. It assesses the viability of these management strategies, including zero tillage and intercropping.

**Advances in measuring soil health**

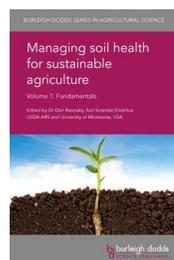
Editor Prof. Wilfred Otten, Cranfield University, UK

ISBN - print 978-1-78676-426-3
 ISBN - ePub 978-1-78676-428-7
 ISBN - ePDF 978-1-78676-429-4

Pages 382
 Pub. Date June 2021
 Price £180/\$235/€215/C\$305
 Series No AS92

NEW

This volume begins with a review of advances in measuring soil biological activity. Parts 2 and 3 survey developments in measuring soil physical and chemical properties. The collection concludes by reviewing soil health indicators and decision support systems for improving soil management.

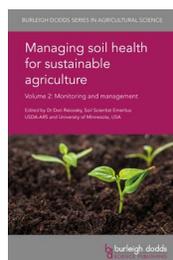
**Managing soil health for sustainable agriculture - Vol 1: Fundamentals**

Editor Dr Don Reicosky, Soil Scientist Emeritus USDA-ARS and University of Minnesota, USA

ISBN - print 978-1-78676-188-0
 ISBN - ePub 978-1-78676-190-3
 ISBN - ePDF 978-1-78676-191-0

Pages 352
 Pub. Date August 2018
 Price £160/\$210/€190/C\$270
 Series No AS48

There is a growing concern that both intensive agriculture in the developed world and rapid expansion of agriculture in the developing world is damaging soil health. This volume reviews advances in our understanding of soil structure and dynamics which form the foundation for effective soil management.

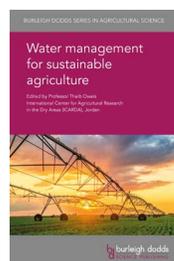
**Managing soil health for sustainable agriculture - Vol 2: Monitoring and management**

Editor Dr Don Reicosky, Soil Scientist Emeritus USDA-ARS and University of Minnesota, USA

ISBN - print 978-1-78676-192-7
 ISBN - ePub 978-1-78676-194-1
 ISBN - ePDF 978-1-78676-195-8

Pages 462
 Pub. Date August 2018
 Price £180/\$235/€215/C\$305
 Series No AS49

Soil health is critical to successful agriculture. This second volume reviews ways of classifying and measuring soils and their properties. It then discusses ways soil health can be maintained or enhanced to ensure sustainable agricultural production, as well as regional case studies of managing soil health in practice.

**Water management for sustainable agriculture**

Editor Prof. Theib Oweis, International Center for Agricultural Research in the Dry Areas (ICARDA), Jordan

ISBN - print 978-1-78676-176-7
 ISBN - ePub 978-1-78676-178-1
 ISBN - ePDF 978-1-78676-179-8

Pages 612
 Pub. Date July 2018
 Price £190/\$245/€230/C\$325
 Series No AS45

There is increasing competition for water resources with declining aquifer reserves and lower rainfall in some areas due to climate change. This volume reviews research into topics such as more sustainable use of groundwater, more efficient irrigation techniques and water management.

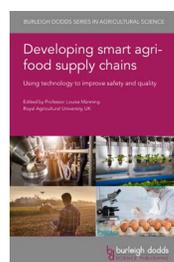
See what others are saying about Measuring soil health:

"Soil health is an equivocal concept that takes on different meanings depending on the application and the investigator. The proposed content of this comprehensive volume will give more meaning to 'soil health', bringing together a range of measurement approaches, modelling and decision support tools, with an ultimate aim to improve soils."

Professor Paul Hallett, University of Aberdeen, UK



POSTHARVEST/FOOD SCIENCE

**Developing smart agri-food supply chains**

Using technology to improve safety and quality

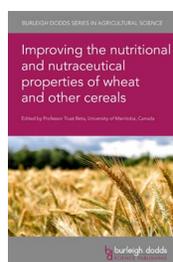
Editor Prof. Louise Manning, Royal Agricultural University, UK

ISBN - print 978-1-78676-749-3
 ISBN - ePub 978-1-78676-751-6
 ISBN - ePDF 978-1-78676-752-3

Pages 400
 Pub. Date November 2021
 Price £150/\$195/€180/C\$255
 Series No AS112

NEW

This collection provides an authoritative assessment of the current issues challenging the safety of agri-food supply chains and the recent technological developments implemented to improve safety and quality at all levels.

**Improving the nutritional and nutraceutical properties of wheat and other cereals**

Editor Prof. Trust Beta, University of Manitoba, Canada

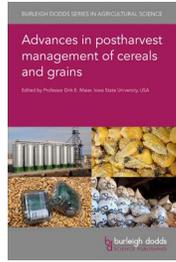
ISBN - print 978-1-78676-479-9
 ISBN - ePub 978-1-78676-481-2
 ISBN - ePDF 978-1-78676-482-9

Pages 380
 Pub. Date May 2021
 Price £145/\$190/€175/C\$245
 Series No AS81

NEW

This volume reviews the key research on the nutritional components of cereals, their interactions with the gut, the way processing can inhibit or optimise their benefits and what it means for developing the next generation of nutritionally-enhanced cereal products.

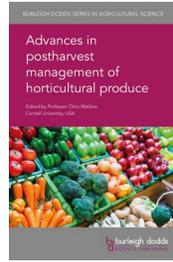
POSTHARVEST/FOOD SCIENCE



Advances in postharvest management of cereals and grains

Editor Prof. Dirk E. Maier, Iowa State University, USA
 ISBN - print 978-1-78676-352-5
 ISBN - ePub 978-1-78676-354-9
 ISBN - ePDF 978-1-78676-355-6
 Pages 478
 Pub. Date August 2020
 Price £150/\$195/€180/C\$255
 Series No AS88

NEW



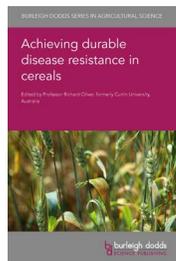
Advances in postharvest management of horticultural produce

Editor Prof. Chris Watkins, Cornell University, USA
 ISBN - print 978-1-78676-288-7
 ISBN - ePub 978-1-78676-290-0
 ISBN - ePDF 978-1-78676-291-7
 Pages 464
 Pub. Date January 2020
 Price £150/\$195/€180/C\$255
 Series No AS66

Part 1 of this collection assesses the causes of postharvest losses. Part 2 reviews advances in storage technologies, including management of insect pests using techniques such as fumigation, controlled atmospheres and biopesticides, as well as control of fungal contamination.

Postharvest losses remain a serious problem in the fresh produce sector. This collection reviews advances in preservation and disinfection, monitoring and management techniques to optimise safety and quality of fresh fruit and vegetables.

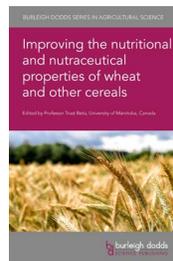
CEREALS



Achieving durable disease resistance in cereals

Editor Prof. Richard Oliver, formerly Curtin University, Australia
 ISBN - print 978-1-78676-601-4
 ISBN - ePub 978-1-78676-603-8
 ISBN - ePDF 978-1-78676-604-5
 Pages 970
 Pub. Date October 2021
 Price £180/\$235/€215/C\$305
 Series No AS106

NEW



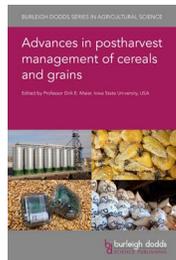
Improving the nutritional and nutraceutical properties of wheat and other cereals

Editor Prof. Trust Beta, University of Manitoba, Canada
 ISBN - print 978-1-78676-479-9
 ISBN - ePub 978-1-78676-481-2
 ISBN - ePDF 978-1-78676-482-9
 Pages 380
 Pub. Date May 2021
 Price £145/\$190/€175/C\$245
 Series No AS81

NEW

This collection reviews advances in the key areas required to achieve durable disease resistance in cereal crops, from advances in understanding pathogen biology/epidemiology and plant pathogen interactions to identifying sources of resistance and advance techniques for breeding new varieties.

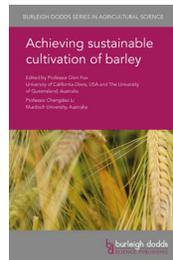
This volume reviews the key research on the nutritional components of cereals, their interactions with the gut, the way processing can inhibit or optimise their benefits and what it means for developing the next generation of nutritionally-enhanced cereal products.



Advances in postharvest management of cereals and grains

Editor Prof. Dirk E. Maier, Iowa State University, USA
 ISBN - print 978-1-78676-352-5
 ISBN - ePub 978-1-78676-354-9
 ISBN - ePDF 978-1-78676-355-6
 Pages 478
 Pub. Date August 2020
 Price £150/\$195/€180/C\$255
 Series No AS88

NEW

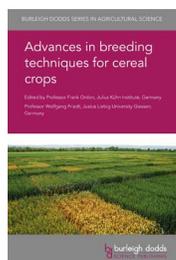


Achieving sustainable cultivation of barley

Editors Prof. Glen Fox, University of California-Davis, USA and Prof. Chengdao Li, Murdoch University, Australia
 ISBN - print 978-1-78676-308-2
 ISBN - ePub 978-1-78676-310-5
 ISBN - ePDF 978-1-78676-311-2
 Pages 528
 Pub. Date February 2020
 Price £170/\$220/€205/C\$290
 Series No AS74

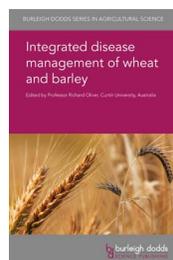
Part 1 of this collection assesses the causes of postharvest losses. Part 2 reviews advances in storage technologies, including management of insect pests using techniques such as fumigation, controlled atmospheres and biopesticides, as well as control of fungal contamination.

This collection reviews advances in understanding barley physiology and genetics, molecular breeding and cultivation techniques, as well as disease and weed management. It also discusses advances in improving barley for end uses such as malting and brewing.



Advances in breeding techniques for cereal crops

Editors Prof. Frank Ordon, Julius Kuhn Institute (JKI), Germany and Prof. Wolfgang Friedt, Justus-Liebig Univ. of Giessen, Germany
 ISBN - print 978-1-78676-244-3
 ISBN - ePub 978-1-78676-246-7
 ISBN - ePDF 978-1-78676-247-4
 Pages 612
 Pub. Date June 2019
 Price £190/\$245/€230/C\$325
 Series No AS60



Integrated disease management of wheat and barley

Editor Prof. Richard Oliver, Curtin University, Australia
 ISBN - print 978-1-78676-216-0
 ISBN - ePub 978-1-78676-218-4
 ISBN - ePDF 978-1-78676-219-1
 Pages 366
 Pub. Date October 2018
 Price £170/\$220/€205/C\$290
 Series No AS19

This collection reviews key advances in cereals breeding. It looks at advances in exploiting genetic diversity, the use of doubled haploids and hybrid breeding. The book also reviews developments in phenotyping, the use of genetic markers and techniques such as genomic selection.

Diseases remain a serious problem in cereal cultivation. The first parts of the book review current research on fungal diseases of cereals and the challenge of fungicide resistance. The book then discusses breeding resistant varieties and methods for integrated disease management of cereals.

CEREALS



Achieving sustainable cultivation of wheat - Vol 1

Breeding, quality traits, pests and diseases

Editor Prof. Peter Langridge,
The University of Adelaide, Australia

ISBN - print 978-1-78676-016-6
ISBN - ePub 978-1-78676-018-0
ISBN - ePDF 978-1-78676-019-7
Pages 686
Pub. Date July 2017
Price £190/\$245/€230/C\$325
Series No AS05

This book reviews advances in breeding techniques as well as their application to produce drought-resistant and other improved varieties. It also discusses wheat nutritional quality. Finally it reviews developments such as disease-resistant varieties and other techniques to combat pests and diseases.



Achieving sustainable cultivation of wheat - Vol 2

Cultivation techniques

Editor Prof. Peter Langridge,
The University of Adelaide, Australia

ISBN - print 978-1-78676-020-3
ISBN - ePub 978-1-78676-022-7
ISBN - ePDF 978-1-78676-023-4
Pages 350
Pub. Date July 2017
Price £130/\$170/€155/C\$220
Series No AS06

Volume 2 discusses ways of improving cultivation from variety selection to post-harvest storage. It reviews trends in integrated crop management, sustainable intensification and organic cultivation before concluding by looking at ways of supporting smallholders in the developing world.



Achieving sustainable cultivation of maize - Vol 1

From improved varieties to local applications

Editor Dr Dave Watson, formerly CGIAR
Maize Research Program
Manager, CIMMYT, Mexico

ISBN - print 978-1-78676-008-1
ISBN - ePub 978-1-78676-010-4
ISBN - ePDF 978-1-78676-011-1
Pages 348
Pub. Date June 2017
Price £150/\$195/€180/C\$255
Series No AS01

This volume focuses on breeding new varieties of maize with desirable traits such as drought tolerance and improved nutritional value as well as how such innovations can be successfully deployed in the developing world.



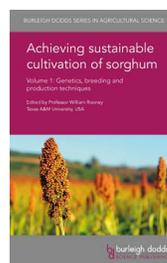
Achieving sustainable cultivation of maize - Vol 2

Cultivation techniques, pest and disease control

Editor Dr Dave Watson, formerly CGIAR
Maize Research Program
Manager, CIMMYT, Mexico

ISBN - print 978-1-78676-012-8
ISBN - ePub 978-1-78676-014-2
ISBN - ePDF 978-1-78676-015-9
Pages 470
Pub. Date July 2017
Price £170/\$220/€205/C\$290
Series No AS02

Volume 2 covers methods for improving maize cultivation, from seed selection to nutrition, irrigation and techniques such as intercropping. It also reviews research on key pests and diseases and methods for their control in making cultivation more efficient and sustainable.



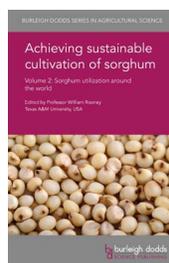
Achieving sustainable cultivation of sorghum - Vol 1

Genetics, breeding and production techniques

Editor Prof. William Rooney,
Texas A&M University, USA

ISBN - print 978-1-78676-120-0
ISBN - ePub 978-1-78676-122-4
ISBN - ePDF 978-1-78676-123-1
Pages 546
Pub. Date July 2018
Price £160/\$210/€190/C\$270
Series No AS31

Sorghum is the fifth most important cereal crop (after rice, maize, wheat and barley). The first volume in this two-volume collection reviews advances in understanding sorghum physiology and genetics as well as developments in breeding new varieties and their more efficient cultivation.



Achieving sustainable cultivation of sorghum - Vol 2

Sorghum utilization around the world

Editor Prof. William Rooney,
Texas A&M University, USA

ISBN - print 978-1-78676-124-8
ISBN - ePub 978-1-78676-126-2
ISBN - ePDF 978-1-78676-127-9
Pages 260
Pub. Date April 2018
Price £130/\$170/€155/C\$220
Series No AS32

Volume 2 in this sequence summarises key research on the wide range of uses of sorghum as food, animal feed and for biofuel. It also assesses the challenges of growing sorghum in different parts of the world and how these are being addressed.



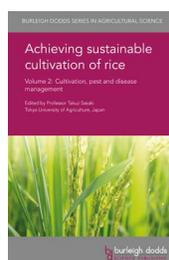
Achieving sustainable cultivation of rice - Vol 1

Breeding for higher yield and quality

Editor Prof. Takuji Sasaki, Tokyo University of
Agriculture, Japan

ISBN - print 978-1-78676-024-1
ISBN - ePub 978-1-78676-026-5
ISBN - ePDF 978-1-78676-027-2
Pages 298
Pub. Date May 2017
Price £140/\$180/€170/C\$240
Series No AS03

This collection reviews advances in breeding techniques as well as improving traits such as flood or drought resistance. It also discusses advances in understanding the nutritional role of rice and ways this can be enhanced to feed a growing population.



Achieving sustainable cultivation of rice - Vol 2

Cultivation, pest and disease management

Editor Prof. Takuji Sasaki, Tokyo University of
Agriculture, Japan

ISBN - print 978-1-78676-028-9
ISBN - ePub 978-1-78676-030-2
ISBN - ePDF 978-1-78676-031-9
Pages 438
Pub. Date May 2017
Price £150/\$195/€180/C\$255
Series No AS04

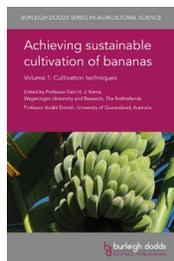
This volume reviews ways of improving the cultivation of rice, from planting to soil management, nutrition and irrigation as well as techniques such as integrated crop management. It also discusses key pests and diseases and methods for their control.

HORTICULTURE



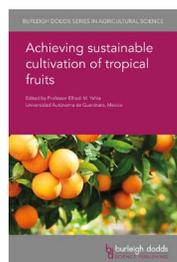
Achieving sustainable cultivation of bananas - Vol 2: Germplasm and genetic improvement **NEW**
 Editors Prof. Gert H. J. Kema, Wageningen University & Research, The Netherlands & Prof. André Drenth, University of Queensland, Australia
 ISBN - print 978-1-78676-344-0
 ISBN - ePub 978-1-78676-346-4
 ISBN - ePDF 978-1-78676-347-1
 Pages 426
 Pub. Date November 2020
 Price £170/\$220/€205/C\$290
 Series No AS86

Volume 2 discusses the progress of identifying and broadening the genetic base for *Musa* species. This volume also reviews the current conventional and molecular breeding techniques for breeding new varieties of banana.



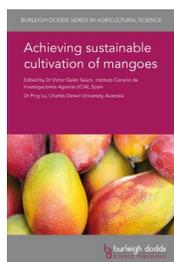
Achieving sustainable cultivation of bananas - Vol 1: Cultivation techniques
 Editors Prof. Gert H. J. Kema, Wageningen University & Research, The Netherlands & Prof. André Drenth, University of Queensland, Australia
 ISBN - print 978-1-78676-156-9
 ISBN - ePub 978-1-78676-158-3
 ISBN - ePDF 978-1-78676-159-0
 Pages 378
 Pub. Date October 2018
 Price £170/\$220/€205/C\$290
 Series No AS40

This volume reviews recent research on improving banana cultivation. It discusses the current challenges facing banana production, as well as the developments that can be used to improve banana yields sustainably.



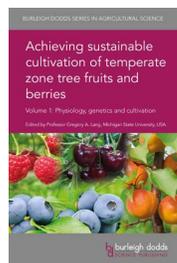
Achieving sustainable cultivation of tropical fruits
 Editor Prof. Elhadi M. Yahia, Universidad Autónoma de Querétaro, Mexico
 ISBN - print 978-1-78676-284-9
 ISBN - ePub 978-1-78676-286-3
 ISBN - ePDF 978-1-78676-287-0
 Pages 644
 Pub. Date December 2019
 Price £190/\$245/€230/C\$325
 Series No AS65

This collection reviews current advances in the breeding and cultivation of key tropical and subtropical fruits, such as avocado, banana, coconut, guava, jackfruit, lychee, mango, papaya and pomegranate. It highlights key innovations in citrus cultivation, from genetics to precision agriculture.



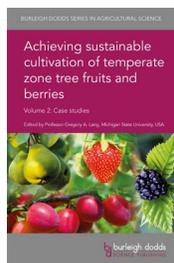
Achieving sustainable cultivation of mangoes
 Editors Dr Víctor Galán Saúco, Instituto Canario de Investigaciones Agrarias (ICIA), Spain and Dr Ping Lu, Charles Darwin University, Australia
 ISBN - print 978-1-78676-132-3
 ISBN - ePub 978-1-78676-134-7
 ISBN - ePDF 978-1-78676-135-4
 Pages 570
 Pub. Date February 2018
 Price £180/\$235/€215/C\$305
 Series No AS34

Mangoes are grown widely across Asia, Africa, the Americas and Southern Europe. This volume summarises the wealth of recent research on enhancing mango cultivation. Topics include developments in understanding mango genetics and breeding as well as cultivation, pest and disease management.



Achieving sustainable cultivation of temperate zone tree fruits and berries - Vol 1
Physiology, genetics and cultivation
 Editor Prof. Gregory A. Lang, Michigan State University, USA
 ISBN - print 978-1-78676-208-5
 ISBN - ePub 978-1-78676-210-8
 ISBN - ePDF 978-1-78676-211-5
 Pages 520
 Pub. Date June 2019
 Price £140/\$180/€170/C\$240
 Series No AS53

Volume 1 summarises the wealth of research addressing the challenges facing temperate fruit cultivation, from breeding improved varieties to better crop management and protection methods.



Achieving sustainable cultivation of temperate zone tree fruits and berries - Vol 2
Case studies
 Editor Prof. Gregory A. Lang, Michigan State University, USA
 ISBN - print 978-1-78676-212-2
 ISBN - ePub 978-1-78676-214-6
 ISBN - ePDF 978-1-78676-215-3
 Pages 470
 Pub. Date June 2019
 Price £140/\$180/€170/C\$240
 Series No AS54

Volume 2 in this collection reviews advances in breeding and cultivation of key stone fruits (peach, cherry, plum and apricot), pome fruits (pear and apple), and berry fruits (strawberry, raspberry, blackberry and blueberry).

See what others are saying about Bananas Volumes 1 & 2:

"This book provides an excellent and complete overview of banana production in the world. Considering the rapid evolution of banana production in the last couple of decades, it provides a timely update of current information. The contributing authors are among the best experts in banana research worldwide, making this book the future reference volume for this important crop."

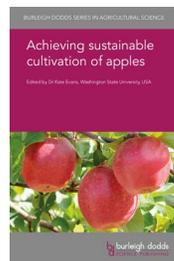
Dr Emile Frison, Former Director General of Bioversity International

"The editors have assembled a team of leading researchers in banana germplasm and genetic improvement with many years of expertise. This comprehensive compilation takes into account the important and diverse factors affecting long-term banana production sustainability. It will be an important resource for the research community but will be of value to producers and consumers as well."

Dr Brian Irish, USDA-ARS PGITRU, USA



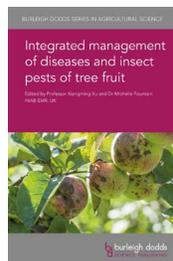
HORTICULTURE



Achieving sustainable cultivation of apples

Editor Prof. Kate Evans, Washington State University, USA
 ISBN - print 978-1-78676-032-6
 ISBN - ePub 978-1-78676-034-0
 ISBN - ePDF 978-1-78676-035-7
 Pages 616
 Pub. Date June 2017
 Price £190/\$245/€230/C\$325
 Series No AS18

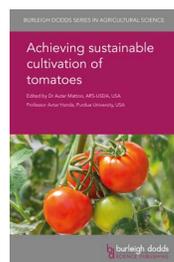
This book reviews our understanding of tree and fruit physiology and how it can be used in breeding better varieties. It also discusses pests and diseases and ways they can be prevented or controlled to make cultivation more productive.



Integrated management of diseases and insect pests of tree fruit

Editors Prof. Xiangming Xu and Dr Michelle Fountain, NIAB-EMR, UK
 ISBN - print 978-1-78676-256-6
 ISBN - ePub 978-1-78676-258-0
 ISBN - ePDF 978-1-78676-259-7
 Pages 748
 Pub. Date September 2019
 Price £190/\$245/€230/C\$325
 Series No AS68

In the light of increasing restrictions on pesticides, this collection reviews advances in understanding key diseases and insect pests of tree fruit. It shows how this understanding can be used to improve integrated disease and pest management techniques.



Achieving sustainable cultivation of tomatoes

Editors Dr. Autar Mattoo, ARS-USDA, USA and Prof. Avtar Handa, Purdue University, USA
 ISBN - print 978-1-78676-040-1
 ISBN - ePub 978-1-78676-042-5
 ISBN - ePDF 978-1-78676-043-2
 Pages 564
 Pub. Date March 2017
 Price £180/\$235/€215/C\$305
 Series No AS07

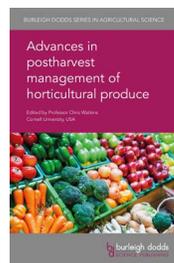
This book reviews key developments in tomato breeding, including developing improved varieties with desirable traits such as drought or pest resistance. It also discusses ways of improving cultivation techniques as well as pests, diseases and their control.



Achieving sustainable cultivation of vegetables

Editor Emeritus Prof. George Hochmuth, University of Florida, USA
 ISBN - print 978-1-78676-236-8
 ISBN - ePub 978-1-78676-238-2
 ISBN - ePDF 978-1-78676-239-9
 Pages 644
 Pub. Date September 2019
 Price £180/\$235/€215/C\$305
 Series No AS59

Vegetable cultivation faces several challenges, such as the need to improve yields in the face of rising consumer demand, whilst maintaining sustainability. This volume summarises the wealth of research on improving sustainability through advances in physiology, breeding, cultivation and pest management.



Advances in postharvest management of horticultural produce

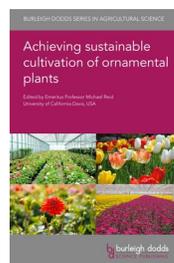
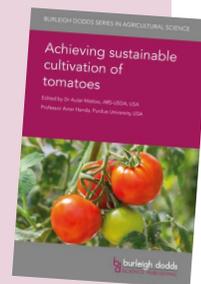
Editor Prof. Chris Watkins, Cornell University, USA
 ISBN - print 978-1-78676-288-7
 ISBN - ePub 978-1-78676-290-0
 ISBN - ePDF 978-1-78676-291-7
 Pages 464
 Pub. Date January 2020
 Price £150/\$195/€180/C\$255
 Series No AS66

Postharvest losses remain a serious problem in the fresh produce sector. This collection reviews advances in preservation and disinfection, monitoring and management techniques to optimise safety and quality of fresh fruit and vegetables. It also covers developments in smart supply chain and distribution monitoring and management.

See what others are saying about Tomatoes:

"[This book] provides a very effective background to genetic tools to control viral and other diseases, thus complementing the earlier parts of the book which draw attention to the strategic importance of exploiting genetic diversity to develop crops with greater resistance to biotic and abiotic stresses...[It] will certainly benefit plant breeders and those involved with genetic engineering technology to develop new crop varieties."

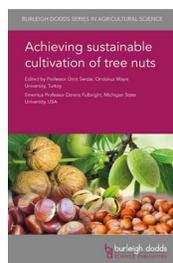
International Pest Control



Achieving sustainable cultivation of ornamental plants

Editor Emeritus Prof. Michael Reid, University of California-Davis, USA
 ISBN - print 978-1-78676-328-0
 ISBN - ePub 978-1-78676-330-3
 ISBN - ePDF 978-1-78676-331-0
 Pages 444
 Pub. Date April 2020
 Price £150/\$195/€180/C\$255
 Series No AS82

This book discusses advances in understanding plant physiology, genetic diversity and breeding techniques. It reviews cultivation techniques in areas such as nutrition, irrigation, protected cultivation and pest management.

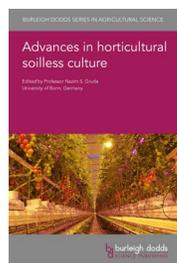


Achieving sustainable cultivation of tree nuts

Editors Prof. Ümit Serdar, Ondokuz Mayıs University, Turkey and Emeritus Prof. Dennis Fulbright, Michigan State University, USA
 ISBN - print 978-1-78676-224-5
 ISBN - ePub 978-1-78676-226-9
 ISBN - ePDF 978-1-78676-227-6
 Pages 552
 Pub. Date July 2019
 Price £170/\$220/€205/C\$290
 Series No AS56

This collection reviews the wealth of research addressing key issues facing the cultivation of tree nuts. It discusses the health benefits of tree nuts and reviews advances in breeding and cultivation of walnuts, almonds and more.

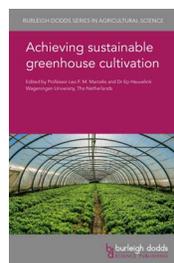
HORTICULTURE



Advances in horticultural soilless culture

Editor Prof. Nazim S. Gruda, University of Bonn, Germany
 ISBN - print 978-1-78676-435-5
 ISBN - ePub 978-1-78676-437-9
 ISBN - ePDF 978-1-78676-438-6
 Pages 442
 Pub. Date February 2021
 Price £160/\$210/€190/C\$270
 Series No AS94

NEW

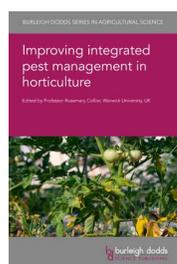


Achieving sustainable greenhouse cultivation

Editors Prof. Leo F. M. Marcelis and Dr Ep Heuvelink, Wageningen University, The Netherlands
 ISBN - print 978-1-78676-280-1
 ISBN - ePub 978-1-78676-282-5
 ISBN - ePDF 978-1-78676-283-2
 Pages 538
 Pub. Date September 2019
 Price £170/\$220/€205/C\$290
 Series No AS63

Part 1 of this collection reviews research on optimising substrates for soilless cultivation. Part 2 assesses advances in technologies such as fertigation systems and process control. The final part of the book includes case studies on a range of horticultural crops such as tomatoes, strawberries and lettuce.

Greenhouse and other forms of protected cultivation create controlled environments to offset climate change and optimise resource use. This book reviews current research in more efficient design, crop management and system control to optimise greenhouse use.



Improving integrated pest management in horticulture

Editor Prof. Rosemary Collier, Warwick University, UK
 ISBN - print 978-1-78676-753-0
 ISBN - ePub 978-1-78676-755-4
 ISBN - ePDF 978-1-78676-756-1
 Pages 400
 Pub. Date February 2022
 Price £150/\$195/€180/C\$255
 Series No AS110

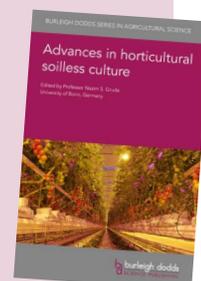
NEW

This collection reviews current advances in integrated pest management (IPM) for horticultural crops, including the use of biological control mechanisms, technological developments such as proximal sensors, agronomic practices and physical control.

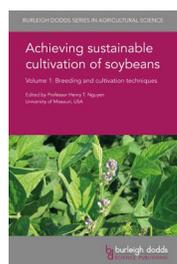
See what others are saying about Soilless culture:

"Soilless culture is rapidly rising around the world due to its ability to deliver reliable yield, quality and produce uniformity... However, we should also pay attention to best horticultural principles and this book promises to bring together the current best practice in technology and horticulture to create an important industry reference for all participants."

Graeme Smith CAg, Chair - International Society of Horticultural Science (ISHS) Working Group – Hydroponics & Aquaponics'



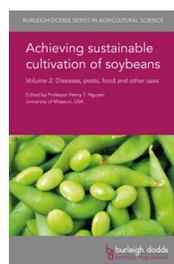
OIL BEARING CROPS



Achieving sustainable cultivation of soybeans - Vol 1 Breeding and cultivation techniques

Editor Prof. Henry T. Nguyen, University of Missouri, USA
 ISBN - print 978-1-78676-112-5
 ISBN - ePub 978-1-78676-114-9
 ISBN - ePDF 978-1-78676-115-6
 Pages 340
 Pub. Date May 2018
 Price £140/\$180/€170/C\$240
 Series No AS29

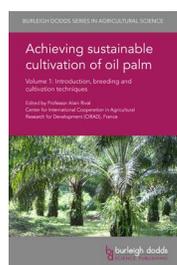
The first of this two-volume collection reviews advances in understanding of soybean physiology and genetics as well as breeding and more efficient methods of cultivation.



Achieving sustainable cultivation of soybeans - Vol 2 Diseases, pests, food and other uses

Editor Prof. Henry T. Nguyen, University of Missouri, USA
 ISBN - print 978-1-78676-116-3
 ISBN - ePub 978-1-78676-118-7
 ISBN - ePDF 978-1-78676-119-4
 Pages 286
 Pub. Date February 2018
 Price £140/\$180/€170/C\$240
 Series No AS30

Volume 2 focusses on ways of improving the management of pests and diseases of soybeans. It reviews research on improving the nutritional value and shelf-life of soybeans as well as its uses in animal feed and biodiesel.



Achieving sustainable cultivation of oil palm - Vol 1 Introduction, breeding and cultivation techniques

Editor Prof. Alain Rival, Center for International Cooperation in Agricultural Research for Development (CIRAD), France
 ISBN - print 978-1-78676-104-0
 ISBN - ePub 978-1-78676-106-4
 ISBN - ePDF 978-1-78676-107-1
 Pages 306
 Pub. Date February 2018
 Price £140/\$180/€170/C\$240
 Series No AS27

The cultivation of oil palm has raised concerns about sustainability. The first volume in this collection reviews research addressing these challenges in areas such as breeding and cultivation techniques.



Achieving sustainable cultivation of oil palm - Vol 2 Diseases, pests, quality and sustainability

Editor Prof. Alain Rival, Center for International Cooperation in Agricultural Research for Development (CIRAD), France
 ISBN - print 978-1-78676-108-8
 ISBN - ePub 978-1-78676-110-1
 ISBN - ePDF 978-1-78676-111-8
 Pages 462
 Pub. Date March 2018
 Price £160/\$210/€190/C\$270
 Series No AS28

The second volume discusses advances in understanding and managing pests and diseases. It also reviews ways of assessing its nutritional qualities as well as in measuring and minimising its environment impact.

Introducing our new series...

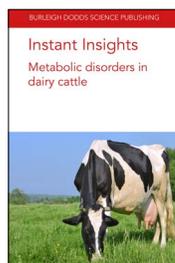
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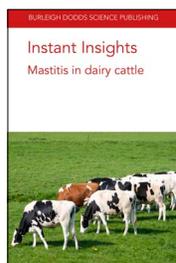
LIVESTOCK



Metabolic disorders in dairy cattle

ISBN - print 978-1-78676-931-2
 ISBN - ePub 978-1-78676-932-9
 Pages 132
 Pub. Date December 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
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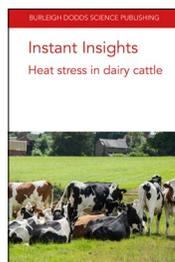
This specially curated collection features four reviews of current and key research on metabolic disorders in dairy cattle.



Mastitis in dairy cattle

ISBN - print 978-1-78676-929-9
 ISBN - ePub 978-1-78676-930-5
 Pages 96
 Pub. Date December 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 07

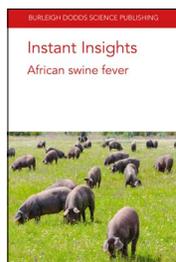
This specially curated collection features four reviews of current and key research on mastitis in dairy cattle.



Heat stress in dairy cattle

ISBN - print 978-1-78676-933-6
 ISBN - ePub 978-1-78676-934-3
 Pages 92
 Pub. Date December 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 08

This specially curated collection features four reviews of current and key research on heat stress in dairy cattle.

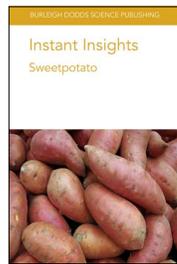


African swine fever

ISBN - print 978-1-78676-861-2
 ISBN - ePub 978-1-78676-862-9
 Pages 100
 Pub. Date May 2021
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 09

This specially curated collection features four reviews of current and key research on African swine fever in pigs.

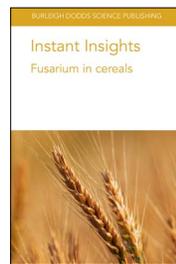
CROPS



Sweetpotato

ISBN - print 978-1-78676-854-4
 ISBN - ePub 978-1-78676-855-1
 Pages 124
 Pub. Date October 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 01

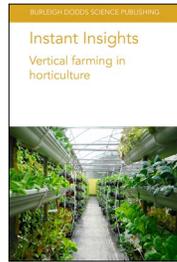
This specially formulated collection features three reviews of current topics and key research in sweetpotato.



Fusarium in cereals

ISBN - print 978-1-78676-892-6
 ISBN - ePub 978-1-78676-893-3
 Pages 120
 Pub. Date November 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 02

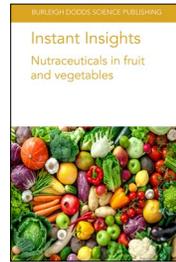
This specially curated collection features four reviews of current and key research on fusarium in cereal crops.



Vertical farming in horticulture

ISBN - print 978-1-78676-922-0
 ISBN - ePub 978-1-78676-923-7
 Pages 144
 Pub. Date December 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 03

This specially curated collection features five reviews of current and key research on vertical farming in horticulture.



Nutraceuticals in fruit and vegetables

ISBN - print 978-1-78676-924-4
 ISBN - ePub 978-1-78676-925-1
 Pages 106
 Pub. Date December 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 04

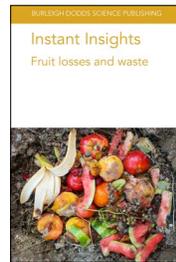
This specially curated collection features three reviews of current and key research on nutraceuticals in fruit and vegetables.



Climate change, insect pests and invasive species

ISBN - print 978-1-78676-927-5
 ISBN - ePub 978-1-78676-928-2
 Pages 90
 Pub. Date December 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 05

This specially curated collection features three reviews of current and key research on climate change, insect pests and invasive species.



Fruit losses and waste

ISBN - print 978-1-78676-973-2
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 Pages 138
 Pub. Date December 2020
 Price £37.99/\$49.99/€45.99/C\$64.99
 Series No 11

This specially curated collection features five reviews of current and key research on fruit losses and waste.

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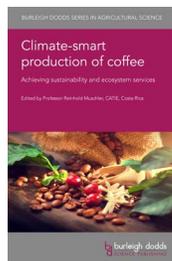
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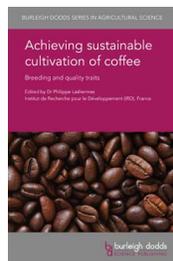
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BEVERAGE & SUGAR CROPS



Climate-smart production of coffee
Achieving sustainability and ecosystem services **NEW**
Editor Prof. Reinhold Muschler, CATIE, Costa Rica
ISBN - print 978-1-78676-483-6
ISBN - ePub 978-1-78676-485-0
ISBN - ePDF 978-1-78676-486-7
Pages 500
Pub. Date July 2022
Price £160/\$210/€190/C\$270
Series No AS111

The coffee sector needs more resilient and sustainable methods of cultivation. This volume reviews the range of recent research addressing these challenges, from climate-smart cultivation practices to integrated management of pests and diseases based on agroecological principles.



Achieving sustainable cultivation of coffee
Breeding and quality traits
Editor Dr Philippe Lashermes, Institut de Recherche pour le Développement (IRD), France
ISBN - print 978-1-78676-152-1
ISBN - ePub 978-1-78676-154-5
ISBN - ePDF 978-1-78676-155-2
Pages 410
Pub. Date January 2018
Price £170/\$220/€205/C\$290
Series No AS39

Coffee is one of the most widely-traded commodities in the world. This volume summarises research addressing key challenges in coffee cultivation, including genetic diversity and breeding improved varieties. Other chapters discuss how to measure and improve quality traits.



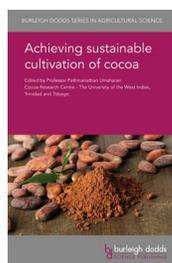
Global tea science
Current status and future needs
Editors Dr V. S. Sharma, formerly of the UPASI Tea Research Institute, India and Dr M. T. Kumudini Gunasekare, formerly Tea Research Institute, Sri Lanka
ISBN - print 978-1-78676-160-6
ISBN - ePub 978-1-78676-162-0
ISBN - ePDF 978-1-78676-163-7
Pages 558
Pub. Date February 2018
Price £180/\$235/€215/C\$305
Series No AS41

Tea cultivation faces a range of challenges in improving yields. The various parts of the book review ways of addressing these challenges, from breeding and cultivation to plant protection and improving sustainability.

See what others are saying about Coffee:

"This book on the recent advances in coffee research will help to meet the current challenges facing sustainable coffee production. This book is the most up-to-date synthesis on major advances in coffee science, written by a large panel of researchers involved in international coffee research projects, in collaboration with the coffee industry worldwide."

Emeritus Professor Andre Charrier, Montpellier SupAgro, France



Achieving sustainable cultivation of cocoa
Editor Prof. Pathmanathan Umaharan, Cocoa Research Centre – The University of the West Indies, Trinidad and Tobago
ISBN - print 978-1-78676-168-2
ISBN - ePub 978-1-78676-170-5
ISBN - ePDF 978-1-78676-171-2
Pages 588
Pub. Date August 2018
Price £190/\$245/€230/C\$325
Series No AS43

Cocoa cultivation faces a number of significant challenges. This volume reviews how research is addressing these challenges in areas such as breeding and agronomy, understanding and managing the range of diseases affecting cocoa, as well as ways of measuring and improving the sustainability of cocoa cultivation.



Achieving sustainable cultivation of sugarcane - Vol 1
Cultivation techniques, quality and sustainability
Editor Prof. Philippe Rott, University of Florida, USA
ISBN - print 978-1-78676-144-6
ISBN - ePub 978-1-78676-146-0
ISBN - ePDF 978-1-78676-147-7
Pages 360
Pub. Date November 2017
Price £160/\$210/€190/C\$270
Series No AS37

Sugarcane is the source of 80% of the world's sugar. This volume reviews key research on improving sugarcane production, focussing on enhancing cultivation techniques such as irrigation and nutrient management as well as measuring and improving sustainability.



Achieving sustainable cultivation of sugarcane - Vol 2
Breeding, pests and diseases
Editor Prof. Philippe Rott, University of Florida, USA
ISBN - print 978-1-78676-148-4
ISBN - ePub 978-1-78676-150-7
ISBN - ePDF 978-1-78676-151-4
Pages 468
Pub. Date March 2018
Price £170/\$220/€205/C\$290
Series No AS38

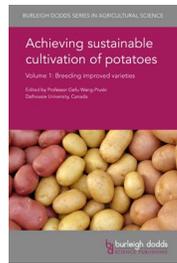
Sugarcane cultivation faces a range of challenges to improve yields sustainably. This volumes reviews how these challenges can be addressed through developments in breeding as well as better management of pests and diseases.

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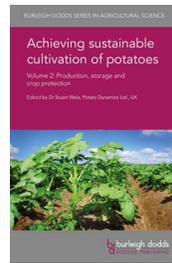
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ROOTS, TUBERS & PULSES



Achieving sustainable cultivation of potatoes - Vol 1
Breeding improved varieties
Editor Prof. Gefu Wang-Pruski, Dalhousie University, Canada
ISBN - print 978-1-78676-100-2
ISBN - ePub 978-1-78676-102-6
ISBN - ePDF 978-1-78676-103-3
Pages 320
Pub. Date August 2018
Price £150/\$195/€180/C\$255
Series No AS26

Potatoes have long been one of the world's most important crops. The first volume in this two-volume sequence reviews advances in understanding plant physiology, genetics and breeding. It also discusses ways of understanding the nutritional and sensory properties of potatoes.



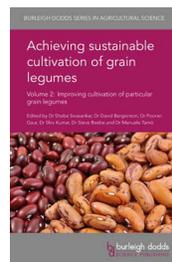
Achieving sustainable cultivation of potatoes - Vol 2
Production, storage and crop protection
Editor Dr Stuart Wale, Potato Dynamics Ltd., UK
ISBN - print 978-1-78676-128-6
ISBN - ePub 978-1-78676-130-9
ISBN - ePDF 978-1-78676-131-6
Pages 328
Pub. Date September 2018
Price £160/\$210/€190/C\$270
Series No AS33

The second of this two-volume collection discusses ways of improving cultivation across the supply chain from seed selection and planting to post-harvest storage. It also reviews research on the better understanding and management of key pests and diseases.



Achieving sustainable cultivation of grain legumes - Vol 1
Advances in breeding and cultivation techniques
Editors Dr Shoba Sivasankar et al., formerly CGIAR Research Program on Grain Legumes, ICRISAT, India
ISBN - print 978-1-78676-136-1
ISBN - ePub 978-1-78676-138-5
ISBN - ePDF 978-1-78676-139-2
Pages 432
Pub. Date March 2018
Price £160/\$210/€190/C\$270
Series No AS35

This major two-volume collection reviews the wealth of recent research on improving cultivation of this major crop. This first volume ranges from plant physiology and breeding through to better cultivation techniques.



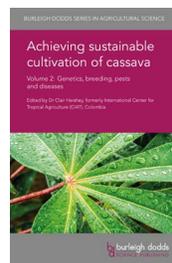
Achieving sustainable cultivation of grain legumes - Vol 2
Improving cultivation of particular grain legumes
Editors Dr Shoba Sivasankar et al., formerly CGIAR Research Program on Grain Legumes, ICRISAT, India
ISBN - print 978-1-78676-140-8
ISBN - ePub 978-1-78676-142-2
ISBN - ePDF 978-1-78676-143-9
Pages 398
Pub. Date January 2018
Price £160/\$210/€190/C\$270
Series No AS36

The second volume in this collection focusses on improving the cultivation of particular grain legumes, such as common beans, lentils, soybeans, groundnuts, cowpea, faba beans and pigeonpea.



Achieving sustainable cultivation of cassava - Vol 1
Cultivation techniques
Editor Dr Clair Hershey, formerly International Center for Tropical Agriculture (CIAT), Colombia
ISBN - print 978-1-78676-000-5
ISBN - ePub 978-1-78676-002-9
ISBN - ePDF 978-1-78676-003-6
Pages 424
Pub. Date July 2017
Price £160/\$210/€190/C\$270
Series No AS20

This collection begins by reviewing the current state of cassava cultivation, before going on to review the range of techniques enabling sustainable intensification, from seed systems management to intercropping and post-harvest management.



Achieving sustainable cultivation of cassava - Vol 2
Genetics, breeding, pests and diseases
Editor Dr Clair Hershey, formerly International Center for Tropical Agriculture (CIAT), Colombia
ISBN - print 978-1-78676-004-3
ISBN - ePub 978-1-78676-006-7
ISBN - ePDF 978-1-78676-007-4
Pages 322
Pub. Date August 2017
Price £140/\$180/€170/C\$240
Series No AS21

Volume 2 reviews genetic resources and breeding techniques as well as their use to produce varieties with traits such as enhanced resistance to biotic and abiotic stresses. It also discusses key pests and diseases and their management in making cultivation more efficient and sustainable.

See what others are saying about Potatoes Volumes 1 & 2:

"Sustainable potato cultivation means simultaneously addressing and resolving a complex set of varied and interlinked context-specific constraints. These books promise to rise to the occasion with a talented cast of authors who span the disciplinary spectrum from genetics, pests and diseases, cropping systems all the way through to nutrition and consumer perspectives."
Graham Thiele, Director - CGIAR Research Program on Roots Tubers and Bananas, led by the International Potato Center (CIP), Peru

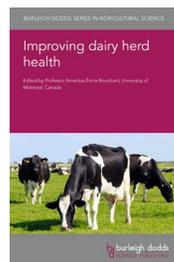
See what others are saying about Grain legumes Volumes 1 & 2:

"These references will greatly improve the visibility of, and access to knowledge about, crops that play such a critical role in sustainable cropping systems, nutrition and income, yet which often remain under the radar of governments and policy makers and which do not always receive the investment they deserve."

Jeff Ehlers, Program Officer in Agricultural Development, Bill & Melinda Gates Foundation

LIVESTOCK

DAIRY

**Improving dairy herd health**

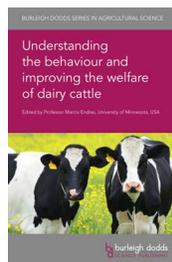
Editor Prof. Emile Bouchard, University of Montreal, Canada

ISBN - print 978-1-78676-467-6
 ISBN - ePub 978-1-78676-469-0
 ISBN - ePDF 978-1-78676-470-6

Pages 490
 Pub. Date July 2021
 Price £150/\$195/€180/C\$255
 Series No AS102

NEW

This volume reviews advances in on-farm herd health management to prevent and limit disease amongst dairy cattle. It surveys advances in disease epidemiology and monitoring, ways of optimising cattle immune function as well as enhancing health at different stages in the life cycle.

**Understanding the behaviour and improving the welfare of dairy cattle**

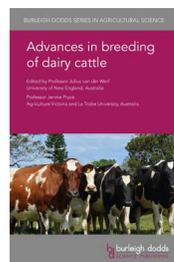
Editor Prof. Marcia Endres, University of Minnesota, USA

ISBN - print 978-1-78676-459-1
 ISBN - ePub 978-1-78676-461-4
 ISBN - ePDF 978-1-78676-462-1

Pages 274
 Pub. Date February 2021
 Price £150/\$195/€180/C\$255
 Series No AS98

NEW

The welfare of farmed animals is an increasing concern for consumers and regulatory agencies. This collection summarises and reviews the wealth of research relating specifically to dairy cattle, including understanding behaviour, monitoring welfare and improving current welfare practices.

**Advances in breeding of dairy cattle**

Editors Prof. Julius van der Werf, University of New England, Australia and Prof. Jennie Pryce, Agriculture Victoria and La Trobe University, Australia

ISBN - print 978-1-78676-296-2
 ISBN - ePub 978-1-78676-298-6
 ISBN - ePDF 978-1-78676-299-3

Pages 658
 Pub. Date December 2019
 Price £180/\$235/€215/C\$305
 Series No AS72

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

**Improving rumen function**

Editors Dr C. S. McSweeney, CSIRO, Australia and Prof. R. I. Mackie, University of Illinois, USA

ISBN - print 978-1-78676-332-7
 ISBN - ePub 978-1-78676-334-1
 ISBN - ePDF 978-1-78676-335-8

Pages 862
 Pub. Date June 2020
 Price £190/\$245/€230/C\$325
 Series No AS83

NEW

Part 1 summarises advances in analysing the rumen microbiome. Part 2 reviews recent research on different types of rumen microbiota. Part 3 discusses the way the rumen processes nutrients whilst Part 4 explores nutritional strategies to optimise rumen function.

**Achieving sustainable production of milk - Vol 1**

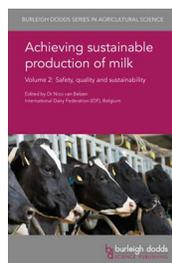
Milk composition, genetics and breeding

Editor Dr Nico van Belzen, formerly International Dairy Federation (IDF), Belgium

ISBN - print 978-1-78676-044-9
 ISBN - ePub 978-1-78676-046-3
 ISBN - ePDF 978-1-78676-047-0

Pages 360
 Pub. Date March 2017
 Price £150/\$195/€180/C\$255
 Series No AS08

This book provides a detailed review of current research on key components and quality traits of milk as well as ways of measuring milk quality. It then discusses genetic factors affecting these traits and how they can be used to improve breeding of dairy cows.

**Achieving sustainable production of milk - Vol 2**

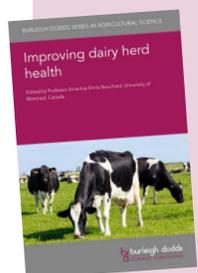
Safety, quality and sustainability

Editor Dr Nico van Belzen, formerly International Dairy Federation (IDF), Belgium

ISBN - print 978-1-78676-048-7
 ISBN - ePub 978-1-78676-050-0
 ISBN - ePDF 978-1-78676-051-7

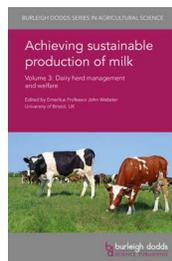
Pages 432
 Pub. Date June 2017
 Price £170/\$220/€205/C\$290
 Series No AS09

This volume reviews current research on understanding and managing pathogens in dairy farms. It also discusses more recent concerns about the environmental impact of dairy farming and ways it can be made more sustainable, including in developing countries.

**See what others are saying about Dairy herd health:**

"This collection will take readers from the basic principles through a broad range of specific topics, including the need to optimize animal welfare. Prof. Bouchard has assembled an exceptional cast of international leaders in the field and I am confident this collection will be an exceptional resource for practitioners, scientists working in the field and students of the discipline."

Emeritus Professor Ian Dohoo, Prince Edward Island University, Canada

**Achieving sustainable production of milk - Vol 3**

Dairy herd management and welfare

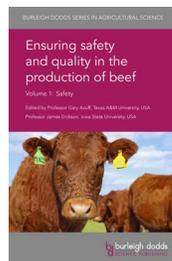
Editor Emeritus Prof. John Webster, University of Bristol, UK

ISBN - print 978-1-78676-052-4
 ISBN - ePub 978-1-78676-054-8
 ISBN - ePDF 978-1-78676-055-5

Pages 606
 Pub. Date August 2017
 Price £190/\$245/€230/C\$325
 Series No AS10

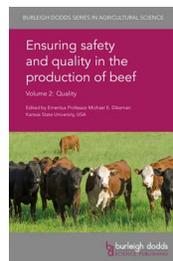
Animal health and welfare are of major importance in dairy farming. This collection looks at the key issues affecting dairy herd welfare as well as ways of optimising dairy cattle nutrition. It also reviews ways of detecting, preventing and managing diseases affecting dairy cattle.

BEEF



Ensuring safety and quality in the production of beef - Vol 1: Safety
 Editors Prof. Gary Acuff, Texas A&M University, USA, and Prof. James Dickson, Iowa State University, USA
 ISBN - print 978-1-78676-056-2
 ISBN - ePub 978-1-78676-058-6
 ISBN - ePDF 978-1-78676-059-3
 Pages 252
 Pub. Date June 2017
 Price £130/\$170/€155/C\$220
 Series No AS11

Volume 1 looks at key research trends in ensuring safe beef production from breeding to slaughter. These include current research on pathogens in beef, risk assessment and detection as well as food safety management.



Ensuring safety and quality in the production of beef - Vol 2: Quality
 Editor Emeritus Prof. Michael Dikeman, Kansas State University, USA
 ISBN - print 978-1-78676-060-9
 ISBN - ePub 978-1-78676-062-3
 ISBN - ePDF 978-1-78676-063-0
 Pages 442
 Pub. Date April 2017
 Price £170/\$220/€205/C\$290
 Series No AS12

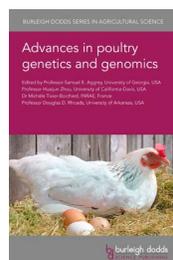
Volume 2 reviews developments related to quality, starting with the way breeding and growth affect meat quality. The book also discusses cattle nutrition and management, and the factors affecting flavor and meat colour.

POULTRY



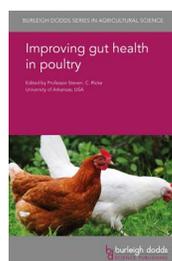
Understanding the behaviour and improving the welfare of chickens **NEW**
 Editor Prof. Christine Nicol, Royal Veterinary College - University of London, UK
 ISBN - print 978-1-78676-422-5
 ISBN - ePub 978-1-78676-424-9
 ISBN - ePDF 978-1-78676-425-6
 Pages 688
 Pub. Date September 2020
 Price £170/\$220/€205/C\$290
 Series No AS91

Part 1 of this volume reviews advances in research on key aspects of poultry behaviour and welfare monitoring. Part 2 discusses particular welfare issues affecting broilers and layers such as housing and environmental enrichment as well as problems such as injurious pecking and bone health.



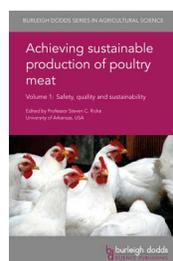
Advances in poultry genetics and genomics **NEW**
 Editors Prof. Samuel E. Aggrey et al., University of Georgia, USA
 ISBN - print 978-1-78676-324-2
 ISBN - ePub 978-1-78676-326-6
 ISBN - ePDF 978-1-78676-327-3
 Pages 580
 Pub. Date July 2020
 Price £190/\$245/€230/C\$325
 Series No AS79

This collection begins by reviewing current challenges facing poultry breeding. It goes on to review recent research on the genetics of key traits, from production traits such as egg production to functional traits such as bone strength, and their implications for breeding.



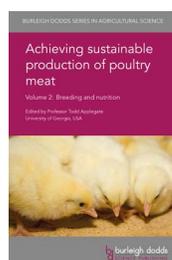
Improving gut health in poultry
 Editor Prof. Steven C. Ricke, University of Arkansas, USA
 ISBN - print 978-1-78676-304-4
 ISBN - ePub 978-1-78676-306-8
 ISBN - ePDF 978-1-78676-307-5
 Pages 546
 Pub. Date November 2019
 Price £180/\$235/€215/C\$305
 Series No AS73

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



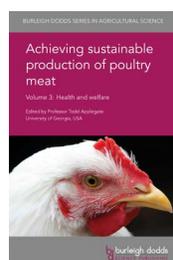
Achieving sustainable production of poultry meat - Vol 1: Safety, quality and sustainability
 Editor Prof. Steven C. Ricke, University of Arkansas, USA
 ISBN - print 978-1-78676-064-7
 ISBN - ePub 978-1-78676-066-1
 ISBN - ePDF 978-1-78676-067-8
 Pages 502
 Pub. Date January 2017
 Price £180/\$235/€215/C\$305
 Series No AS13

Poultry production faces many challenges. This collection starts by reviewing safety, including detection, prevention and control of zoonoses in poultry flocks. It also discusses key aspects of quality such as meat flavour as well as wider issues such as the environmental impact of poultry production.



Achieving sustainable production of poultry meat - Vol 2: Breeding and nutrition
 Editor Prof. Todd Applegate, University of Georgia, USA
 ISBN - print 978-1-78676-068-5
 ISBN - ePub 978-1-78676-070-8
 ISBN - ePDF 978-1-78676-071-5
 Pages 342
 Pub. Date July 2017
 Price £150/\$195/€180/C\$255
 Series No AS14

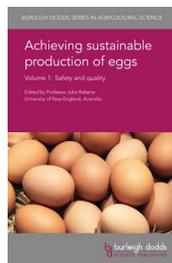
There have been significant advances in poultry breeding and nutrition. This book discusses key developments such as marker-assisted breeding and improvements in poultry feed such as the use of enzymes to optimise nutritional efficiency.



Achieving sustainable production of poultry meat - Vol 3: Health and welfare
 Editor Prof. Todd Applegate, University of Georgia, USA
 ISBN - print 978-1-78676-072-2
 ISBN - ePub 978-1-78676-074-6
 ISBN - ePDF 978-1-78676-075-3
 Pages 350
 Pub. Date August 2017
 Price £160/\$210/€190/C\$270
 Series No AS15

Health and welfare are major issues in poultry production. This collection reviews our understanding of bacterial, viral and other diseases affecting poultry and their effective management. It also discusses ways of managing poultry flocks to optimise their welfare from hatching to slaughter.

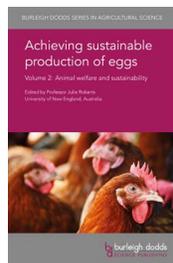
POULTRY



Achieving sustainable production of eggs - Vol 1 Safety and quality

Editor Prof. Julie Roberts, University of New England, Australia
 ISBN - print 978-1-78676-076-0
 ISBN - ePub 978-1-78676-078-4
 ISBN - ePDF 978-1-78676-079-1
 Pages 430
 Pub. Date March 2017
 Price £170/\$220/€205/C\$290
 Series No AS16

This collection begins by looking at egg composition and chemistry. This provides a foundation for discussing pathogenic contamination of eggs and methods for its prevention, detection and control. The book concludes by assessing factors affecting egg appearance, shelf-life, and nutritional value.



Achieving sustainable production of eggs - Vol 2 Animal welfare and sustainability

Editor Prof. Julie Roberts, University of New England, Australia
 ISBN - print 978-1-78676-080-7
 ISBN - ePub 978-1-78676-082-1
 ISBN - ePDF 978-1-78676-083-8
 Pages 234
 Pub. Date February 2017
 Price £130/\$170/€155/C\$220
 Series No AS17

Welfare and sustainability are now major issues in egg production. This book reviews nutrition and other aspects of husbandry affecting laying hens as well as the environmental impact of egg production and how it can be made more sustainable.

PIGS



Understanding gut microbiomes as targets for improving pig gut health

NEW

Editors Prof. Mick Bailey and Emeritus Prof. Chris Stokes, University of Bristol, UK
 ISBN - print 978-1-78676-487-4
 ISBN - ePub 978-1-78676-489-8
 ISBN - ePDF 978-1-78676-490-4
 Pages 400
 Pub. Date December 2021
 Price £150/\$195/€180/C\$255
 Series No AS103

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 optimise gut function.

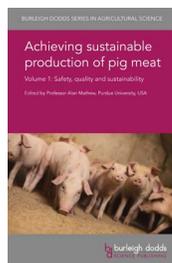


Understanding the behaviour and improving the welfare of pigs

NEW

Editor Emerita Prof. Sandra Edwards, University of Newcastle, UK
 ISBN - print 978-1-78676-443-0
 ISBN - ePub 978-1-78676-445-4
 ISBN - ePDF 978-1-78676-446-1
 Pages 594
 Pub. Date February 2021
 Price £150/\$195/€180/C\$255
 Series No AS96

The welfare of farmed animals such as pigs is an increasing concern for consumers and regulatory agencies. This collection summarises and reviews the wealth of recent research on understanding pig behaviour and improving their welfare.



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

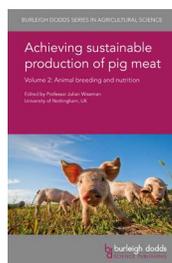
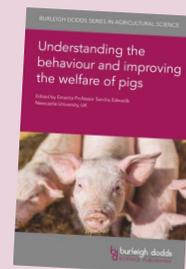
Editor Prof. Alan Mathew, Purdue University, USA
 ISBN - print 978-1-78676-088-3
 ISBN - ePub 978-1-78676-090-6
 ISBN - ePDF 978-1-78676-091-3
 Pages 290
 Pub. Date June 2018
 Price £130/\$170/€155/C\$220
 Series No AS23

Pig meat is the most widely-consumed meat in the world. This volume addresses some of the key challenges facing pig farming such as the continuing threat from zoonoses, ways of maintaining and improving meat quality as well as making pig production more sustainable.

See what others are saying about Pig welfare:

"Animal welfare is an essential aspect of modern livestock production...The proposed content of this book is excellent and covers all major themes in the field of pig behaviour and welfare. The list of authors includes most of the best scientists in the area. Therefore, I am fully convinced that this book will become a must for anyone interested not only in pig welfare, but also in pig production in general."

Dr Xavier Manteca, Universitat Autònoma de Barcelona, Spain



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

Editor Prof. Julian Wiseman, University of Nottingham, UK
 ISBN - print 978-1-78676-092-0
 ISBN - ePub 978-1-78676-094-4
 ISBN - ePDF 978-1-78676-095-1
 Pages 340
 Pub. Date October 2017
 Price £160/\$210/€190/C\$270
 Series No AS24

Pig production faces many hurdles in meeting increasing global demand sustainably. This volume discusses advances in breeding to improve both productivity and quality. It also reviews key developments in improving animal nutrition, health and welfare.

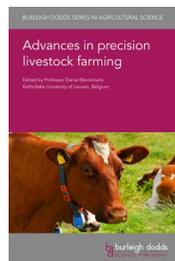


Achieving sustainable production of pig meat - Vol 3 Animal health and welfare

Editor Prof. Julian Wiseman, University of Nottingham, UK
 ISBN - print 978-1-78676-096-8
 ISBN - ePub 978-1-78676-098-2
 ISBN - ePDF 978-1-78676-099-9
 Pages 326
 Pub. Date March 2018
 Price £140/\$180/€170/C\$240
 Series No AS25

Maintaining animal health and high standards of animal welfare are seen as key to sustainable livestock production. This volume reviews the effective management of diseases affecting pigs as well as ways of defining and promoting animal welfare in pig production.

LIVESTOCK MANAGEMENT



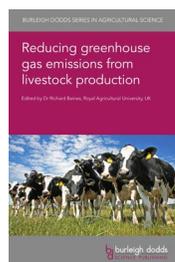
Advances in precision livestock farming **NEW**
 Editor Prof. Daniel Berckmans, Katholieke University of Leuven, Belgium
 ISBN - print 978-1-78676-471-3
 ISBN - ePub 978-1-78676-473-7
 ISBN - ePDF 978-1-78676-474-4
 Pages 300
 Pub. Date March 2022
 Price £150/\$195/€180/C\$255
 Series No AS105

This collection 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.



Developing animal feed products **NEW**
 Editor Dr Navaratnam Partheeban, Royal Agricultural University, UK
 ISBN - print 978-1-78676-463-8
 ISBN - ePub 978-1-78676-465-2
 ISBN - ePDF 978-1-78676-466-9
 Pages 256
 Pub. Date June 2021
 Price £150/\$195/€180/C\$255
 Series No AS101

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.



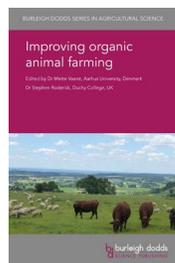
Reducing greenhouse gas emissions from livestock production **NEW**
 Editor Dr Richard Baines, Royal Agricultural University, UK
 ISBN - print 978-1-78676-439-3
 ISBN - ePub 978-1-78676-441-6
 ISBN - ePDF 978-1-78676-442-3
 Pages 358
 Pub. Date July 2021
 Price £150/\$195/€180/C\$255
 Series No AS95

Cattle are a major source of non-carbon dioxide greenhouse gas emissions. Part 1 reviews the genetics, measurement and modelling of methane emissions from cattle. Parts 2 and 3 look at mitigation strategies, from manure and grassland management to improved nutrition.



Improving rumen function **NEW**
 Editors Dr C. S. McSweeney, CSIRO, Australia and Prof. R. I. Mackie, University of Illinois, USA
 ISBN - print 978-1-78676-332-7
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 ISBN - ePDF 978-1-78676-335-8
 Pages 862
 Pub. Date June 2020
 Price £190/\$245/€230/C\$325
 Series No AS83

Part 1 summarises advances in analysing the rumen microbiome. Part 2 reviews recent research on different types of rumen microbiota. Part 3 discusses the way the rumen processes nutrients whilst Part 4 explores nutritional strategies to optimise rumen function.



Improving organic animal farming
 Editors Dr Mette Vaarst, Aarhus University, Denmark and Dr Stephen Roderick, Duchy College, UK
 ISBN - print 978-1-78676-180-4
 ISBN - ePub 978-1-78676-182-8
 ISBN - ePDF 978-1-78676-183-5
 Pages 406
 Pub. Date March 2019
 Price £170/\$220/€205/C\$290
 Series No AS46

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



Improving grassland and pasture management in temperate agriculture
 Editors Prof. Athole Marshall & Dr Rosemary Collins, IBERS, Aberystwyth University, UK
 ISBN - print 978-1-78676-200-9
 ISBN - ePub 978-1-78676-202-3
 ISBN - ePDF 978-1-78676-203-0
 Pages 486
 Pub. Date July 2018
 Price £190/\$245/€230/C\$325
 Series No AS51

In many countries there has been a shift to intensive grassland livestock systems with higher environmental impact. There is also greater understanding of the wider role of grasslands in delivering ecosystem services. This collection reviews current research into the more sustainable use of agricultural grassland.

SHEEP



Achieving sustainable production of sheep
 Editor Prof. Johan Greyling, University of the Free State, South Africa
 ISBN - print 978-1-78676-084-5
 ISBN - ePub 978-1-78676-086-9
 ISBN - ePDF 978-1-78676-087-6
 Pages 474
 Pub. Date September 2017
 Price £180/\$235/€215/C\$305
 Series No AS22

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.

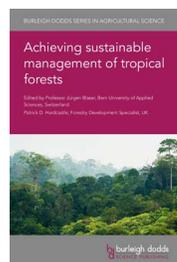
See what others are saying about Precision livestock farming:

"I'm very pleased to see the expertise of the individuals who have been brought together for this project. I fully expect that this publication will be highly sought and cited by farmers, advisors, researchers and students around the world. I look forward to seeing this important contribution to the precision farming body of knowledge. and students of the discipline."

Dr David Kelton, DFO Research Chair in Dairy Cattle Health/ Professor of Epidemiology, University of Guelph, Canada



FORESTRY & GRASSLANDS



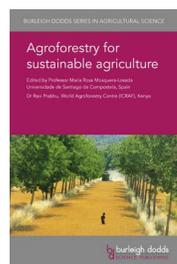
Achieving sustainable management of tropical forests **NEW**
 Editors Prof. Jürgen Blaser, Bern University of Applied Sciences, Switzerland and Mr Patrick D. Hardcastle, Forestry Development Specialist, UK
 ISBN - print 978-1-78676-248-1
 ISBN - ePub 978-1-78676-250-4
 ISBN - ePDF 978-1-78676-251-1
 Pages 746
 Pub. Date October 2020
 Price £190/\$245/€230/C\$325
 Series No AS80

This collection summarises and reviews the rich body of research on tropical forests and how this research can be utilised to make sustainable management of tropical forests a standard future implementable strategy.



Achieving sustainable management of boreal and temperate forests
 Editor Dr John A. Stanturf, Estonian University of Life Sciences, Estonia
 ISBN - print 978-1-78676-292-4
 ISBN - ePub 978-1-78676-294-8
 ISBN - ePDF 978-1-78676-295-5
 Pages 872
 Pub. Date November 2019
 Price £190/\$245/€230/C\$325
 Series No AS71

Forests deliver both economic benefits and a range of key ecosystem services. This collection reviews current research on optimising their use, from understanding tree physiology and planting, to product diversification.



Agroforestry for sustainable agriculture
 Editors Prof. María Rosa Mosquera-Losada, University of Santiago de Compostela, Spain and Dr Ravi Prabhu, World Agroforestry Centre, Kenya
 ISBN - print 978-1-78676-220-7
 ISBN - ePub 978-1-78676-222-1
 ISBN - ePDF 978-1-78676-223-8
 Pages 542
 Pub. Date May 2019
 Price £180/\$235/€215/C\$305
 Series No AS55

This volume reviews the latest research on the role and implementation of main types of agroforestry, the ecosystem services that agroforestry can deliver and techniques for optimising agroforestry practice.



Improving grassland and pasture management in temperate agriculture
 Editors Prof. Athole Marshall & Dr Rosemary Collins, IBERS, Aberystwyth University, UK
 ISBN - print 978-1-78676-200-9
 ISBN - ePub 978-1-78676-202-3
 ISBN - ePDF 978-1-78676-203-0
 Pages 486
 Pub. Date July 2018
 Price £190/\$245/€230/C\$325
 Series No AS51

In many countries there has been a shift to intensive grassland livestock systems with higher environmental impact. There is also greater understanding of the wider role of grasslands in delivering ecosystem services. This collection reviews current research into the more sustainable use of agricultural grassland.

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