Animals in Traditional Folk Medicine

Implications for Conservation

Contents

Life Sciences

K. B. Clancy, University of Illinois, Urbana-Champaign, IL, USA; K. Hinde, Harvard University, Cambridge, MA, USA; J. N. Rutherford, University of Illinois at Chicago, IL, USA (Eds)

Building Babies: Primate Development in Proximate and Ultimate Perspective

Contents

Fields of interests
Developmental Biology; Evolutionary Biology; Animal Ecology

Target groups
Graduate

Discount group
Professional Non-Medical

Farming Systems Research into the 21st Century: The New Dynamic

Contents

Fields of interests
Agriculture; Sustainable Development; Environmental Management

Target groups
Professional/practitioner

Discount group
Professional Non-Medical

Due August 2012

2012. XXV, 550 p. 48 illus., 8 in color. (Developments in Primatology: Progress and Prospects, Volume 37) Hardcover

S. Eisenman, Temple University, Ambler, PA, USA; L. Struwe, D. Zaurov, Rutgers University, New Brunswick, NJ, USA (Eds)

Medicinal Plants of Central Asia: Uzbekistan and Kyrgyzstan

This unique book is a collaborative effort between researchers at Rutgers University and colleagues from numerous institutions in Uzbekistan and Kyrgyzstan. It will be the first book to document more than 200 of the most important medicinal plants of Central Asia, many whose medicinal uses and activities are being described in English for the first time.

Features
- Valuable resource to students and researchers studying botany, ethnobotany, natural products, pharmacognosy and medicinal chemistry
- Available for the first time in English
- Co-Authorered with local scientists from the region

Contents

Fields of interests
Plant Biochemistry; Plant Sciences; Plant Systematics/Taxonomy/ Biogeography

Target groups
Research

Discount group
Professional Non-Medical

Due August 2012

2012. Approx. 300 p. 194 illus., 189 in color. Hardcover

Approx. $189.00

**Phytochemicals, Plant Growth, and the Environment**

This is the second volume since the reintroduction of the Recent Advances in Phytochemistry (RAP) series, an annual journal supported by the Phytochemical Society of North America.

**Features**

- This 42nd volume of RAP includes a total of seven articles, many, but not all, based on talks presented at the 50th annual meeting of the PSNA
- Describes the integration of several different approaches to ask and then answer interesting questions regarding the function of interesting plant metabolites
- Serves as an authoritative, up-to-date resource that helps to set the gold standard for thought and research in fields related to plant biochemistry

**Contents**

Preface to Recent Advances in Phytochemistry Volume 42.
- 1. Trichothecene Triangle – Toxins, Genes and Plant Disease.
- 2. An analytical method to quantify three plant hormone-families in grape berry using liquid chromatography and multiple reaction monitoring mass spectrometry.
- 4. Production of Traditional and Novel Biopolymers in Transgenic Woody Plants.
- 7. A Dynamic Model for Phytohormone Control of Rhizome Growth and Development

**Fields of interest**

Plant Ecology

**Target groups**

Graduate

**Discount group**

Professional Non-Medical

**Bioinformatics and Drug Discovery**

**Features**

- Contains fully updated protocols on the cutting-edge of the field's progress
- Provides step-by-step detail essential for reproducible results
- Contains key notes and implementation advice from experts

**Contents**

Cell Perturbation Screens for Target Identification by RNAi: Using Functional Genomics to Identify Drug Targets: a Dupuytren's Disease Example.
- Functional Characterization of Human Genes from Exon Expression and RNA Interference Results.
- Barcode Sequencing for Understanding Drug-gene Interactions.
- High-Throughput Sequencing of the Methylome Using Two-Base Encoding.
- Applications and Limitations of In Silico Models In Drug Discovery.
- Compound Collection Preparation for Virtual Screening.
- Mapping Between Databases of Compounds and Protein Target.
- Predictive Cheminformatics in Drug Discovery: Statistical Modeling for Analysis of Micro-Array and Gene Expression Data.
- Advances in Nuclear Magnetic Resonance for Drug Discovery.
- Human ABC Transporter ABCG2 in Cancer Chemotherapy: Drug Molecular Design to Circumvent Multidrug Resistance.
- Protein Interactions: Mapping Interactome Networks to Support Drug Target Discovery and Selection.
- Linking Variants from Genome-Wide Association Analysis to Function via Transcriptional Network Analysis.
- Models of Excitation-Contraction Coupling in Cardiac Ventricular Myocytes.
- Integration of Multiple Ubiquitin Signals in Proteasome Regulation.

**Fields of interests**

Bioinformatics; Pharmacy

**Target groups**

Professional/practitioner

**Discount group**

Professional Non-Medical

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**Due August 2012**

2012. 200 p. 41 illus., 14 in color. (Recent Advances in Phytochemistry, Volume 42) Hardcover

- approx. $189.00

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**Due July 2012**

2nd ed. 2012. XV, 355 p. 104 illus., 56 in color. (Methods in Molecular Biology, Volume 910) Hardcover

- approx. $209.00
- ISBN 978-1-61779-964-8

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**Humana Press**
Farming for Food and Water Security

Sustainable agriculture is a rapidly growing field aiming at producing food and energy in a sustainable way for our children. This discipline addresses current issues such as climate change, increasing food and fuel prices, starvation, obesity, water pollution, soil erosion, fertility loss, pest control and biodiversity depletion. Novel solutions are proposed based on integrated knowledge from agronomy, soil science, molecular biology, chemistry, toxicology, ecology, economy, philosophy and social sciences. As actual society issues are now intertwined, sustainable agriculture will bring solutions to build a safer world.

Features
► Reports a novel tool to assess public goods of organic farming using a radar diagram ► Reports a list of advanced methods to remove water pesticides ► Participatory research shows that farmers perform better than extension officers Reports a list of criteria to select agroindicators

Contents
Public goods and farming.- Pesticides and sustainable agriculture.- Nitrogen use efficiency by annual and perennial crops.- Microalgae for bioremediation of distillery effluent.- No-till direct seeding for energy-saving rice production in China.- Agricultural water poverty index for a sustainable world.- Vermicompost and plant nutrition.-Animal manure for smallholder agriculture in South Africa.- Vermicompost and soil quality:

Fields of interest
Agriculture

Target groups
Graduate

Discount group
Professional Non-Medical

Progenitor Cells
Methods and Protocols

Contents
New Series
Global Change Ecology and Wetlands

The Society of Wetland Scientists' book series, Global Change Ecology and Wetlands, emerged from the Society’s Global Change Ecology Section. There is a growing need among wetlands managers and scientists to address problems of climate change in wetlands, and this series will fill an important literature gap in the field of global change as it relates to wetlands around the world. The goal is to highlight the latest research from the world leaders researching climate change in wetlands, to disseminate research findings on global change ecology, and to provide sound science to the public for decision-making on wetland policy and stewardship. Each volume will address a topic addressed by the annual symposium of the Society's Global Change Ecology Section.

B. A. Middleton, U.S. Geological Survey, National Wetlands Research Center, Lafayette, LA, USA (Ed)

Global Change and the Function and Distribution of Wetlands

The Global Change Ecology and Wetlands book series will highlight the latest research from the world leaders in the field of climate change in wetlands.

Features
- The first book to contribute to a world view of the potential effects of climate change on wetlands
- The chapters synthesize information to create a worldwide analysis of climate change and wetlands
- The book series will encompass many different themes over time, so will eventually become a compendium of definitive literature based on the latest research on the topic
- All researchers and managers working in global change ecology and wetland ecology will want to have the entire series of books

Contents
Section 1. Paleoecology and Climate Change.
1. Insights from Paleohistory Illuminate Future Climate Change Effects on Wetlands; Ben A. LePage et al.- Section 2: Sea Level Rise and Coastal Wetlands. 2. Response of salt marsh and mangrove wetlands to changes in atmospheric CO2, climate, and sea level; Karen McKee et al.- Section 3: Atmospheric Emissions and Wetlands. 3. CH4 Dynamics in Wetlands and Possible responses to Global Climate Change; Hojeong Kang et al.- Section 4. Drought and Climate Change. 4. The effects of climate-change-induced drought and freshwater wetlands; Beth A. Middleton, Till Kleinebecker.

Fields of interests
Freshwater & Marine Ecology; Climate Change; Earth Sciences, general

Target groups
Upper undergraduate

Discount group
Professional Non-Medical

Available
2012. VI, 244 p. 45 illus., 7 in color. (Global Change Ecology and Wetlands, Volume 1) Hardcover
► $189.00
ISBN 978-94-007-4493-6

Comparative Physiology of Fasting, Starvation, and Food Limitation

Contents

Fields of interests
Animal Physiology; Nutrition

Target groups
Research

Discount group
Professional Non-Medical

Available
2012. X, 537 p. 84 illus., 24 in color. Hardcover
► $209.00
ISBN 978-3-642-29055-8
**Life Sciences**

**Capybara**

**Biology, Use and Conservation of an Exceptional Neotropical Species**

**Contents**


**Fields of interests**

Conservation Biology/Ecology; Animal Ecology; Fish & Wildlife Biology & Management

**Target groups**

Research

**Discount group**

Professional Non-Medical

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**ECTO-NOX Proteins**

**Growth, Cancer, and Aging**

This volume documents this unique family of cell surface proteins. Despite masquerading as intractable and difficult to clone and characterize, ENOX proteins have and continue to offer remarkable opportunities for research, commercial development and outside confirmation of therapeutic, diagnostic and new paradigms to help explain complex biological processes.

**Contents**


**Fields of interests**

Protein Science; Proteomics; Cell Biology

**Target groups**

Research

**Discount group**

Professional Non-Medical

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**Humana Press**

Due July 2012

2012. X, 406 p. 121 illus., 17 in color. Hardcover

**ECTO-NOX Proteins**

**Growth, Cancer, and Aging**

**Due June 2012**

2012. 635 p. 281 illus., 2 in color. Hardcover

**High Throughput Phenotyping in Plants**

**Methods and Protocols**

**Contents**


**Fields of interests**

Plant Sciences; Plant Genetics & Genomics

**Target groups**

Professional/practitioner

**Discount group**

Professional Non-Medical
**Genomics of the Saccharinae**

**Features**
- Covers all aspects of the Saccharinae
- All chapters are written by experts in their fields
- Includes unique illustrations and photographs

**Contents**

**Fields of interests**
- Plant Genetics & Genomics
- Plant Sciences
- Plant Breeding/Biotechnology

**Target groups**
Graduate

**Discount group**
Professional Non-Medical

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**Dynamic Models of Infectious Diseases**

**Volume 1: Vector-Borne Diseases**

Despite great advances in public health worldwide, insect vector-borne infectious diseases remain a leading cause of morbidity and mortality. Diseases that are transmitted by arthropods such as mosquitoes, sand flies, fleas, and ticks affect hundreds of millions of people and account for nearly three million deaths all over the world.

**Features**
- This book addresses several of the major insect vector-borne diseases
- All of the chapters address critical elements of disease control
- The reader is provided with a current understanding of research methods directed at control of vector-borne diseases

**Contents**

**Fields of interests**
- Systems Biology
- Infectious Diseases
- Bioinformatics

**Target groups**
Research

**Discount group**
Professional Non-Medical

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**Due August 2012**

- approx. $209.00
- ISBN 978-1-4419-5946-1

**Due September 2012**

2013. Approx. 300 p. 29 illus., 9 in color. (Developments in Primatology: Progress and Prospects, Volume 43) Hardcover
- approx. $189.00
- ISBN 978-1-4614-3966-0

**Due July 2012**

- approx. $189.00
Life Sciences

Professional Non-Medical

T. Ruf, C. Bieber, W. Arnold, E. Millesi, University of Vienna, Austria (Eds)

Living in a Seasonal World

Thermoregulatory and Metabolic Adaptations

Contents

Fields of interests
Animal Physiology; Animal Ecology; Animal Biochemistry

Target groups
Research

Discount group
Professional Non-Medical

R. Schnell, USDA-ARS, Miami, FL, USA; P. Priyadarshan, Rubber Research Institute of India, Ranni, Kerala, India (Eds)

Genomics of Tree Crops

Trees that are indispensibly supportive to human life pose a formidable challenge to breed them to suit to human needs. From soft drinks to beverages to oil to tires, the value added products from trees give a spectrum of products to human kind. While attempts to tap these resources through conventional breeding are underway, the quick and elegant way of manipulating the genetic systems at the genome level is an essential chapter of modern science. Books featuring genomics of tree crops are few, and genomics is such a science that changes rapidly. Genomics of Tree Crops is an earnest attempt towards compiling genomics of tree crops.

Features
- Cover a wide area of concepts and methods
- Written by a panel of renowned experts in the field
- An indispensable guide for scientists, advanced students, and teachers studying tree genomics

Contents

Fields of interests
Plant Sciences; Plant Biochemistry; Plant Anatomy/Development

Target groups
Professional/practitioner

Discount group
Professional Non-Medical

V. Sejian, S. Naqvi, Central Sheep and Wool Research Institute, Avikanagar, India; T. Ezeji, The Ohio State University, Wooster, OH, USA; J. Lakritz, R. Lal, The Ohio State University, Columbus, OH, USA (Eds)

Environmental Stress and Amelioration in Livestock Production

Features
- This book is the first of its kind to address in detail all aspects of environmental physiology and livestock adaptation
- The contributors are world class professionals with vast experience in the chosen field
- A valuable reference material for researchers, university teachers, and professionals involved in livestock production

Contents
Introduction. - Factors influencing livestock productivity. - Heat stress impact on livestock production. - Walking stress influence on livestock productivity. - Environmental stresses and livestock reproduction. - Concept of multiple stresses and its significance on livestock productivity. - Ameliorative measures to counteract environmental stresses. - Nutritional manipulations to optimize productivity during environmental stresses. - Role of pineal gland in relieving environmental stress. - Basic principles involved in adaptation of livestock to climate change. - Neuroendocrine regulations of adaptive mechanisms in livestock. - Molecular mechanisms of livestock adaptation. - Genetic adaptability of livestock to environmental stresses. - Genes involved in the thermal tolerance of livestock. - Impact of climate change on livestock production. - Global climate changes: Enteric methane reduction strategies in livestock. - Conclusions and Researchable Priorities.

Fields of interests
Animal Ecology; Animal Physiology

Target groups
Research

Discount group
Professional Non-Medical

Available
2012. XIV, 563 p. 135 illus., 17 in color. Hardcover
$239.00
ISBN 978-3-642-28677-3

Due July 2012
2012. XII, 356 p. 24 illus., 20 in color. Hardcover
$209.00

Available
2012. XXXIII, 849 p. 50 illus., 16 in color. Hardcover
$293.00
ISBN 978-3-642-29204-1
Plant Salt Tolerance
Methods and Protocols

Contents

Fields of interests
Plant Sciences; Plant Genetics & Genomics

Target groups
Professional/practitioner

Discount group
Professional Non-Medical

Embryo Culture
Methods and Protocols

Features
▶ Sets the stage for future research and laboratory application involving embryo culture ▶ Provides step-by-step detail essential for reproducible results ▶ Contains key notes and implementation advice from the experts

Contents

Fields of interests
Cell Biology; Embryology

Target groups
Professional/practitioner

Discount group
Professional Non-Medical

Intellectual Property Issues
Therapeutics, Vaccines and Molecular Diagnostics

Due July 2012
2012. XVIII, 640 p. 59 illus., 32 in color. (Methods in Molecular Biology, Volume 913) Hardcover
▶ $139.00

Available
▶ $49.95
ISBN 978-3-642-29525-6

Due July 2012
2012. XV, 405 p. 40 illus., 18 in color. (Methods in Molecular Biology, Volume 912) Hardcover
▶ $139.00

Due July 2012
2012. XV, 405 p. 40 illus., 18 in color. (Methods in Molecular Biology, Volume 912) Hardcover
▶ $139.00

U. Storz, Michalski Huettermann & Partner Patent Attorneys, Duesseldorf, Germany; W. Flasche, immatics biotechnologies, Martinsried, Germany; J. Driehaus, Viering, Jentschura & Partner, Duesseldorf, Germany
L. Yee-Ki, S. Chung-Wah, University of Hong Kong, Pokfulam, Hong Kong

**Calcium Handling in hiPSC-Derived Cardiomyocytes**

Calcium is crucial in governing contractile activities of myofilaments in cardiomyocytes, any defects in calcium homeostasis of the cells would adversely affect heart pumping action. The characterization of calcium handling properties in human induced pluripotent stem cell-derived cardiomyocytes (iPSC-CMCs) is of significant interest and pertinent to the stem cell and cardiac regenerative field because of their potential patient-specific therapeutic use.

**Feature**
- With numerous color figures

**Contents**
- Myocardial Infarction and Heart Failure.
- Embryonic Stem Cells/Pluripotent Stem Cells.
- Human Induced Pluripotent Stem Cell (hiPSC)-derived Cardiomyocytes as a Source for Cardiac Regeneration.
- Calcium Homeostasis in Cardiomyocytes.
- Sarcoplasmic Reticulum (SR) Governs Maturity of Cardiomyocytes.
- SR Junctional Proteins Play a Role in Calcium Flux Between Cytosol and SR.
- Spatial and Temporal Ca2+ Wavefront Dictated by T-tubule Structure.
- IP3-Mediated Calcium Release Contributes to Whole-Cell Calcium Transients.
- Calcium Handling Properties of hES-derived Cardiomyocytes.
- iPSC-derived Cardiomyocyte as A Potential Platform for Disease Modelling of Impaired Calcium-Handling Related Syndrome.
- Excitation-Contraction (EC) Coupling Assessment.
- Limitation and Future Studies.

**Fields of interests**
- Stem Cells; Cardiology; Cell Biology

**Target groups**
- Research

**Discount group**
- Professional Non-Medical

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Y. Zhang, Huazhong Agricultural University, Wuhan, China

**Ascorbic Acid in Plants**

**Biosynthesis, Regulation and Enhancement**

Ascorbate acid (AsA) is an important antioxidant in plants, playing important roles in various physiological processes. Humans have lost the ability to synthesize AsA because of the lack of L-gulono-1,4-lactone oxidoreductase, and thus have to absorb ascorbate from diet including fresh fruits and vegetables, as they are the major sources of ascorbate. Several pathways for AsA biosynthesis and metabolism have been identified in plants since 1998. More attention has been paid to improving ascorbate content in plants especially in fruits and vegetables. Significant progresses have been made on key enzymes and genes involved in the AsA biosynthesis and metabolism.

**Feature**
- New addition to the SpringerBrief in Plant Sciences series Covers the newest advances in this important protein Comprehensive and up-to-the-minute information

**Contents**
- Preface.
- Chapter 1. Chemical feature.
- Chapter 2. The biological role of ascorbate in plants.
- Chapter 3. Ascorbate biosynthesis in plants.
- Chapter 4. The oxidation and metabolism of ascorbate.
- Chapter 5. Recycling of ascorbate.
- Chapter 6. Transport of ascorbate.
- Chapter 7. Key enzymes involved in ascorbate biosynthesis and metabolism.
- Chapter 8. Regulation of ascorbate biosynthesis.
- Chapter 9. Ascorbate in tomato, a model fruit.
- Chapter 10. Metabolic modification of ascorbate in plants.
- Chapter 11. Regulating ascorbate biosynthesis and metabolism for abiotic stress tolerance in plants.

**Fields of interests**
- Plant Sciences; Plant Anatomy/Development; Plant Biochemistry

**Target groups**
- Research

**Discount group**
- Professional Non-Medical