A highly ambitious project in which 44 authors and many more who were involved in detailed data collection and analysis provided six main chapters: Introduction and Rationale: Objectives, Methodology and Organisation: Methods and Models Used; Country Analyses; Regional Analysis: Summary and Conclusions, and two annexes: Literature Review on Adaptation in Agriculture, and the Household Questionnaire.

Methodologies used included cross-sectional Ricardian analysis, a structural Ricardian analysis, CROPWAT and CROPWATCC, and a farm household survey which was conducted in 11 countries with a total of 9598 households. Weather data, crops, livestock, soils and hydrological data were also collected from each country.

Synthesizing so much data for the whole continent in one, relatively short, book is very difficult and has not been entirely successful. The graphs and diagrams are not always clear and the continent-wide maps are not very effective at such a scale.

The outcome should be of interest to many followers of modelling on this scale, but the most interesting information could be on the amount of adaptation that farmers have been undertaking. The concluding chapter is too brief and superficial to be of any general value and reflects a mindset embedded in the conventional economic order and does not acknowledge the need for alternative economies and ecologies that might be based on farmer knowledge and new partnerships for innovation and change.

David Gibbon

Integrated Watershed Management: Connecting people to their land and water. By H. M. Gregersen, P. F. Ffolliott and K. N. Brooks. Wallingford: CAB International (2007), pp. 288, £35.00. ISBN 978-1-84593-281-7. doi:10.1017/S001447970800728X

In a period of looming food crises, land disputes and water shortages a comprehensive overview on integrated water management (IWM) is timely and appropriate. The authors go to great length to cover just about every subject related to IWM in a holistic and exhaustive way, trying hard to explain such a complex issue. The subjects covered include challenges and opportunities; land use, water management and cumulative effects; institutional context; planning and policy making; hydrological processes and technical aspects; monitoring and evaluation to improve performance; research, training, information and technology transfer; and concluding thoughts on adaptive and integrated management of watersheds.

Every chapter provides detailed information, such as, the distinction between a conference, symposium, seminar and workshop, which is explained in the chapter on research, training, information and technology transfer.

I have little criticism of the book, except that the authors go astray when they step outside their own discipline. A statement that trees protect soils against erosion is simply not true. The management of trees and their spatial arrangement, like forests, can indeed prevent erosion. Individual trees, however, do not and can even aggravate erosion. Also, a list of acronyms would have been useful, certainly for those who are not conversant with watershed management in the USA. However, despite these small inconveniences the book can be considered as an asset for those who want to know more about IWM, because it touches upon about every subject related to it. It can be highly recommended as a textbook for undergraduate teaching and as a reference guide for people working in IWM or related areas.

Paul Kiepe

Soil Science Simplified (Fifth Edition). By N. S. Eash, C. J. Green, A. Ravi and W. F. Bennett. Ames, Iowa: Blackwell Publishing (2008), pp. 246, £29.99. ISBN-13: 978-0-8138-1823-8. doi:10.1017/S0014479708007291

This book follows the usual pattern for soil science textbooks with chapters on soil formation, soil physical, biological and chemical properties, soil water, temperature, fertility and plant nutrition, management, conservation, classification and uses. As an introductory text it is well written, adequately illustrated, pleasantly readable, and contains both a useful index and glossary. Only the American Soil Taxonomy system of classification is described, which may reduce its usefulness to Europeans and other users of the FAO system. The absence of colour plates is a particular drawback here.

The authors suggest the book as an introductory text for high school courses in agricultural science and for university students of natural and earth sciences, which is about right, although outdated units like microns and angstroms have been left in and the coverage is fairly basic. The coverage of soil water, for example, goes only so far as the concept of available water but with no mention of water or matric potential, of water release characteristics, or of the concept of hydraulic conductivity. This is a basic, user-friendly book that covers soil science from a predominantly agricultural and applied perspective with the minimum use of technical

terminology. However, for students of the biological and earth sciences who may need to develop further their knowledge of soil science I would choose an introductory book with a coverage in more depth.

Chris Mullins

Asian Crops and Human Dietetics. By U. R. Palaniswamy. Albany NY, USA: The Haworth Press/Taylor and Francis Group (2008), pp. 206, US$89.95. ISBN 978-1-56022–312-2. doi:10.1017/S0014479708007308

This book is an interesting publication with selected Asian crops grouped into seven chapters based on their usage: grains, vegetables, fruits, fats and oils, beans and nuts, spices, and herbal beverages and subsequents. Its purpose is to bring Asian crops and culture that have made a significant contribution to human dietetics to the attention of people in other parts of the world. In addition to nutrition, Asian cuisines were part of traditional systems of health and healing. In each chapter the treatise on each crop has an introduction, botanical description, nutritional composition, food and medicinal uses, anti-nutritional factors, if any, and research results related to nutraceutical compounds.

The botanical descriptions lack references. The traditional use of various plant parts from different crops mentioned in this book are 'household remedies', which are undocumented by research. Nevertheless, such claims descending from previous generations help students in dietetics and nutrition to undertake research to document such claims. Among oil crops, soybean, and among millets, *Pennisetum typhoides*, an important crop, are missing. The treatment of many crops (e.g. eggplant, French bean, winged bean, taro) is too brief. Instead of embedding the chemical composition for most of the crops in the text, it would have been better to have such data in tables.

This book will open the eyes of non-specialist readers in Asia and other parts of the world to choose foods for a healthy diet and lifestyle, and help scientists to conduct research and industry to develop health-related products from plants.

S. Shanmugasundaram

Crop Wild Relative Conservation and Use. Edited by N. Maxted, B. V. Ford-Lloyd, J. M. Iriondo, M. E. Dulloo and J. Turok. Wallingford, UK: CABI (2008), pp. 682, £120.00. ISBN 978-1-84593-099-8. doi:10.1017/S001447970800731X

In my view this is a useful book, given the increased global interest in plant biodiversity as a means of providing more stable and secure sources of food and non-food products (e.g. medicines, natural pesticides) to meet future threats, such as, climate change, population increases, rising food costs, withdrawal of many pesticides due to regulation, rapidly changing pest and disease threats.

However, the book suffers from heavy use of acronyms and abbreviations and from being a collection of proceedings papers with varying styles, depths of knowledge and diversity of topics. The various case studies are interesting but appear to be scattered in a semi-random way throughout the book, making it flow less well than it could have done. The short and longer chapters contain a great deal of interesting data and information, which should be of use to specialists in this field. I personally found the emphasis on databases and information management to be slightly excessive and would have preferred more emphasis on the value and potential uses of these genetic resources as, for example, food, ecological service providers and novel traits for plant breeding.

Parts VIII–X are of greatest value to generalist readers like myself, who are more interested in the 'bigger picture' and less interested in information systems. Overall this is an interesting book for specialists and generalists who want an overview of this important area.

Nick Birch

Indigenous Fruit Trees in the Tropics – Domestication, Utilization and Commercialization Edited by F. K. Akinnifesi, R. R. B. Leakey, O. C. Ajayi, G. Sileshi, Z. Tchoundjeu, P. Matakala and F. R. Kwesiga. Wallingford, UK: CAB International (2008), pp. 438, £75.00. ISBN 978-1-84593-110-0. doi:10.1017/S0014479708007321

Having lived for many years in tropical regions, discovered and appreciated indigenous fruits, and then worked on domestication trials, I was looking forward to reading this book. It is an academic *tour de force*, with contributions from many of the leading scientists in this subject. This does not make it an easy read for non-specialists.