

*Trace Elements in the Environment : Biogeochemistry, Biotechnology and Bioremediation*. Edited by M. N. V. Prasad, K. S. Sajwan and R. Naidu. Boca Raton, FL, USA: CRC/Taylor and Francis (2006), pp. 726, £92.00. ISBN 1-566-70-685-8. doi:10.1017/S0014479706414903

The subject matter of this edited book has a wide appeal, tackling the serious problems encountered in many ecosystems from trace element pollution. While the book's contents live up to the title, individual chapters vary greatly in depth and style. Some chapters are very site-specific studies, while others are generic reviews. I looked through the preface to find clues to the origin or rationale for this construction, expecting the book to be a compendium of conference papers, but it left me none the wiser.

While I found many of the individual chapters dealing with site-specific problems interesting and well written, I would not want to purchase the book for them, but rather request chapters through the library. Subjects covered include arsenic in Florida soils, fluoride contamination of groundwater, chemicals in biosolids, lead accumulation in plants, trace elements in Portuguese mine plants, trace elements in Russian weeds, etc. This list illustrates the idiosyncratic nature of the subject matter.

I had more difficulties with the review-type chapters as the subject matter they cover has been reviewed many times previously in the literature, leaving a feeling of *deja vu*. Chapters also overlap strongly as in Chapters 12 and 13 – 'Arbuscular mycorrhizal fungi and heavy metals: tolerance and potential use in bioremediation' and 'Role of arbuscular mycorrhiza and associated microorganisms in phytoremediation of heavy metal polluted sites', respectively. The editor M. N. V. Prasad has written 10 out of the 33 chapters in the book, seven of which are either solo authored or first authored. This adds a further unusual balance to this book.

Andy A. Meharg

*Environmental Risk Assessment of Genetically Modified Organisms Volume 2. Methodologies for Assessing Bt cotton in Brazil*. Edited by A. Hilbeck, D. A. Andow and E. M. G. Fontes. Wallingford, UK: CABI Publishing (2006), pp. 373. £75.00. ISBN 1-84593-000-2. doi:10.1017/S001447970642490X

This volume is the second in the series arising out of the IOBC's *GMO Guidelines Project – Development of International Biosafety Testing Methodologies for Transgenic Plants*, using the proposed introduction of Bt cotton as a case study. The very knowledgeable author group has written 13 chapters comprehensively covering these methods. In addition to an excellent summary of the cotton situation in Brazil and of the details of the GM cotton proposed for introduction (the now widely used Cry1Ac and Cry1Ac/2Ab cottons), this volume covers assessment of gene flow risks, risks of evolved resistance by insect pests, impacts on non-target pests, pollinators, predators and soil organisms using a Problem Formulation and Options Assessment methodology. The tables are particularly valuable, walking the reader through all the steps which would be necessary for a complete pre-release assessment of the biological risks (not human or animal health or economic risks), adopting a tiered approach to the determination of which impacts to look at and in what level of detail, as earlier proposed by Romeis *et al.* Three-quarters of Brazil's cotton grows in the mid-west where Bt cotton will reduce insecticide use by about two sprays annually (or around 10%) but will not affect the key pests, boll weevils and aphids which spread blue disease. However, as happened in India in 2002, in 2005 Brazil bowed to pressure from farmers who have been growing unapproved Bt cotton over large areas for years, and commercialized Bt cotton without satisfactorily addressing almost all the questions posed in this book. New and robust catches have been laboriously designed for stable doors, but this particular horse has bolted!

Derek Russell

*Environment and Livelihoods in Tropical Coastal Zones. Managing Agriculture-Fishery-Aquaculture Conflicts*. Edited by C. T. Hoanh, T. P. Tuong, J. W. Gowing and B. Hardy. Wallingford, UK: CAB International (2006), pp. 309, £65.00. ISBN 978-1-84593-107-0. doi:10.1017/S0014479706434906

This edited volume of 22 chapters is the second in a series on the Comprehensive Assessment of Water Management in Agriculture Series, an output of a cross-disciplinary initiative to bring together existing knowledge and stimulating new approaches to water use. The resulting outputs are a diverse collection of often disciplinary perspectives aimed at helping planners, resource managers and donors to improve their investment in coastal zone development.

There are clear signs of individual contributors attempting to improve accessibility between disciplines – the explanation of the sampling methods used by a social scientist for example. The abstracts have also been edited to convey the main message of each article even if the chapter itself focuses on a more specialist audience.

An important limitation in the book as a whole is the focus on the 'local' and relative lack of consideration of other major drivers of change in coastal zones. The corporate actors that were critical to the intensification of shrimp farming in Asia are not featured, the story being largely presented as one of smallholders and Government. Agri-industry has underpinned the rapid development of shrimp farming from the supply of inputs to connections with global markets and hastened its spread between countries. This focus on producer communities has also led to a neglect of broader issues such as the growth in processing industries and associated impacts on employment.

On balance, however, the editors have done a creditable job in assembling this collection of quality multi-disciplinary perspectives on such an important issue.

David Little

*China's Agricultural Development-Challenges and Prospects*. Edited by Xiao-Yuan Dong, Shunfeng Song and Xiaobo Zhang. Aldershot, UK: Ashgate Publishing Ltd, (2006), pp. 311, £65.00. ISBN -10: 0-7546-4696-3. doi:10.1017/S0014479706444902

This book is part of an Ashgate series on The Chinese Economy. Most chapters are selections from an international symposium on China's rural economy held in China in June 2004. The book is in three parts: Part 1 is an Overview of Challenges and Options. It opens with insights on the High Performing Asian Economies by the Nobel Laureate R. W. Fogel. Two chapters define three key problems of Chinese agricultural development: low farmer incomes, with wide inequalities between both urban and rural incomes and the wealthy east – and poor rural west; with World Trade Organization entry, the issue of long-term grain supplies and high domestic costs of production; and, finally, weak rural organization underlying poor protection of farmers' rights and increasing land conflicts. Three further chapters examine suggested solutions, the final one draws lessons for China from Taiwan's experience in rural organization. Parts Two and Three of the book are econometric examinations of some of these issues. Part Two has five chapters on The Performance and Potentials of China's Agriculture. Part Three has four chapters on Agricultural Risk Management. The potential of domestic agriculture to meet future Chinese food requirements is of global interest. Part One of this book can inform a wide audience, Parts Two and Three will be of most interest to professional economists focussed either on China or on world food markets.

Mike Collinson

*Grains in China: Foodgrains, Feedgrain and World Trade*. By Zhang-Yue Zhou and Wei-Ming Tian. Aldershot: Ashgate Publishing (2005), pp. 255, £55.50. ISBN 0-7546-4289-1. doi:10.1017/S0014479706454909

This book provides a systematic overview of recent trends in China's grain production, consumption and trade. It examines these trends in the light of the changing policy environment within which the Chinese agriculture operates and the significant demographic changes driving changes in consumption patterns in China. A notable feature is the focus on the demand and supply of feedgrains, which is timely because the feed use of cereals is expected to be the most dynamic element driving the world cereal economy in future years. Another key feature is the attempt to provide regional grain balance sheets that highlight significant inter-regional variations in performance of the grains sector in China.

As is well recognized, the performance of China's grain sector has significant implications not only for China but also for the world grain economy. Future trends are projected by constructing a range of alternative scenarios in which the accession of China to the World Trade Organization, the resultant changes in agricultural policy and the policy responses of the Chinese government to emerging trends are the key elements. These scenarios constitute the most important contribution as they provide a substantial empirical foundation for policy discussions on China's grain sector strategies. They also reinforce the key message that complacency about China's 'grain problem' is not warranted in spite of surpluses in some recent years.

It would have been useful if the book had also provided insights into factors driving changes in productivity in Chinese agriculture and its competitiveness – in particular how policy changes have affected the incentives to invest in productivity enhancement and increase production.

C. S. Srinivasan