## BOOK REVIEWS

reliable yields allowed both an increase in the area under rice cultivation and enterprise diversification. A 17fold increase in rice production from the region is a remarkable achievement: however, inspired local leadership and continuity of support played a key role.

The authors are optimistic that combinations of better technology, robust social and institutional capital and growing markets in nearby towns will result in sustained improvements. However, there could have been more on ecological sustainability given the high and unique endemism of the region, for example, it might have been better if the forestry activities had been built on indigenous rather than exotic species.

For the busy reader the preface and the epilogue capture the essence of the project.

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Trace Elements in Soils and Plants. 4th edition. By A. Kabata-Pendias. Boca Raton, FL, USA: CRC Press/Taylor & Francis Group (2010), pp. 548, US\$159.95. ISBN 9781420093681.

After a brief overview of trace element sources and biogeochemistry, this book is essentially an element-byelement survey, with very brief synopsis for each entry. While not rigorous in its approach, the book is interesting precisely because it tries to cover the entire periodic table. The limitation is that the more unusual elements receive a more limited coverage precisely because there is not much literature on them, which in turn indicates that they may be generically of less interest.

The text is succinct and appears accurate. As a teaching resource in biogeochemistry I found it had a lot of potential, giving good entry points into the literature for undergraduate students who might be given essay topics on how a particular element behaves in the plant and soil environment, particularly those elements of a more exotic bent. It also provides a lot of contextual information about environmental, soils and plant concentrations and their sources, providing a good overview as to drivers of element availability such as pH, organic matter, interactions with other elements and mineral content. It has the approach of Marschner's classic textbook on 'Mineral Nutrition of Higher Plants', which is no bad thing. It is a welcome addition to my library and I will certainly be pointing students in its direction. As such, while not essential, the text is a very useful resource. For the scientist wanting more detailed or up-to-date information the approach is somewhat limited and the examples given idiosyncratic with no filter as to why the examples are given.

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Biopesticides.Pest Management and Regulation. By A. Bailey, D. Chandler, W. P. Grant, J. Greaves, G. Prince and M. Tatchell. Wallingford, UK: CABI Press (2010), pp. 232, £75.00. ISBN 13: 978-1-84593 559-7.

Overall this book is well written. It gives an up-to-date view on factors affecting pesticide usage, restrictions, the need for IPM (integrated pest management) and the role of biopesticides within an IPM framework. Chapter 1 is a good introduction, covering complex regulatory barriers, innovations and inter-disciplinary challenges for biopesticides, including food security, global food demand and climate change. Chapter 2 covers the main types of pests, pathogens and weeds attacking global crops. It also introduces problems of pesticide over-usage, including pesticide resistance, pest resurgences, secondary pests, loss of biocontrol agents, environmental damage and consumer exposure via food residues. Chapter 3 covers biopesticides and product numbers, mainly in the EU and USA. It also gives useful information on the use of biopesticides and biocontrol agents for IPM. The regulation of biopesticides is discussed using a useful table. Chapter 4 covers the costs and benefits of switching crop protection technologies, alongside agri-environmental policies, using the UK as an example of the approaches already being used. Chapter 5 tackles complex international regulatory issues. It is quite technical and detailed, so is of most benefit to specialist readers. The loss of conventional products due to EU 91/414 highlights the need for new solutions but indicates that the route to substitutive solutions is slow and complex. Chapters 6 and 7 expand on the steps involved in biopesticide regulation and have an