*Expl Agric.* (2012), volume 48 (4), © *Cambridge University Press 2012* doi:10.1017/S0014479712000634

Contested Agronomy. Agricultural Research in a Changing World. Edited by J. Sumberg and J. Thomson. London: Earthscan/Routledge (2012), pp. 232, £19.99. ISBN 978-0-415-507414-1.

This is a very interesting, thought-provoking and timely book that through 12 chapters on subjects as diverse as Conservation Agriculture, Bio-fortification, Bio-char, Water Management/Agronomy in Africa and the System of Rice Intensification (SRI) illustrates how *politics* may profoundly influence the way agronomic issues are presented at policy levels and to a general public. As such the book should be an obligatory reading for any (senior) agronomist.

A criticism is that the book does not present a clear view as to what the agronomic research discipline is about. *Agronomy* is a kind of an orphan discipline among the agricultural sciences that is being taught very superficially, if at all, at universities. It is crucial in two specific ways: (a) as an essential link between agricultural research and hands-on farming, and (b) as an integrating and holistic discipline that brings together research contributions from other specialised disciplines (be it plant breeders or socio-economists) into technical and policy options for the agricultural sector.

Indicative of the weakness in agronomic background is the lack of attention paid to the critical features of *interactions* and *confounding* that are involved in any comparison between agricultural systems. *Confounding* interferes with the objective interpretation of field data and observations, thereby often rendering scientific conclusions and explanations questionable. This is well illustrated by the debates surrounding SRI.

Unfortunately, some of the contributions, certainly the concluding chapter, are written in a rather academic style, which makes the subject less accessible to a desired readership of generalists.

Willem A. Stoop

*Expl Agric.* (2012), volume 48 (4), © *Cambridge University Press 2012* doi:10.1017/S0014479712000646

Plants, Biotechnology and Agriculture. By D. Murphy. Wallingford, UK: CABI (2011), pp. 320, £39.95. ISBN 978-1-84593-688-4.

The book is divided into four parts. The first is about the plants and their genomes with basic but comprehensive information describing how plants are exploited by humans, what makes a plant different from another organism and how the plant genome is structured and organized. The second part describes how plants function. The third part is about plant manipulation, including domestication, plant breeding and genetic modification (GM) with a well-balanced description of different techniques of biotechnology. The author quite rightly points out that transgenesis is only one of the many biotechnology techniques used to improve agricultural performances in plants. The last part deals with the current plant biotechnology developments, its social context and future challenges.

The book is very well written, easy to read and well structured. Each chapter starts with an overview and finishes with a summary. Although the book covers a wide range of subjects, from plant genomics to plant function and breeding, the focus is always on biotechnology. The author's views are well balanced between the importance of the new GM technology and the reasonable doubts with single gene approaches. I agree with the author that transgenesis is likely to become increasingly useful in crop breeding as more trait-regulating genes are identified, but this approach will complement rather than replace non-transgenic technologies.

This book is highly suitable for the intended readers: senior level undergraduates, postgraduates studying for a degree in biology, plant science, agriculture, biotechnology, crop science or breeding. I also recommend it for everybody interested in crop improvement as a future challenge.

Eva Vincze

*Expl Agric.* (2012), volume 48 (4), © *Cambridge University Press 2012* doi:10.1017/S0014479712000658

Plant Nutrition and Soil Fertility Manual. Second edition. By J. B. Jones Jr. Boca Raton, FL: CRC Press (2012), pp. 282, £49.99 (PB). ISBN 978-1-4398-1609-7.