

utilize both temporal and spatial data from a wide variety of sources to provide practical tools that can be used to increase efficiency, quality and yield.

Mark Young

*Handbook of Plant Nutrition*. Edited by A. V. Barker and D. J. Pilbeam. Boca Raton, FL, USA: CRC Press, Taylor and Francis Group (2007), pp. 613, £79.99. ISBN 0-8247-5904-4. doi:10.1017/S001447970800625X

This internationally authored book is concerned with the principles of plant nutrition from a historical perspective to the current day and provides an excellent source of references to knowledge of the nutrient element requirements of major crop plants. The book has one chapter for each element and these are grouped together into sections: i) the macronutrients N, P, K, Ca, Mg and S; ii) the micronutrients B, Cl, Cu, Fe, Mn, Mo, Ni and Zn; and iii) the so-called beneficial elements Al, Co, Se, Si, Na and V, i.e. those elements which may stimulate growth or are required only by certain plants. Each chapter has its own style, tailored to the element in question, but the nutrient element chapters generally follow the pattern of a historical perspective, descriptions of metabolism and function, diagnostic testing of plants and soil, and fertilizer composition and use. Because of the controversy surrounding the classification of elements as 'beneficial' the section on these elements makes interesting reading and widens the appeal of the book. Described on its rear cover as having 'great value to growers, agricultural consultants, agronomists and plant scientists' the book has more relevance to theory than to practice and as noted in the preface will also be useful to soil scientists. The visible effects of nutrient stress on plants are illustrated by monochrome photographs, some of which fail to impress. However, a CD-ROM, with full colour photographs and pdf files of each printed chapter, is included with the book.

Charles Shand

*Introduction to Statistics for Biology. Third edition*. By R. H. McCleery, T. A. Watt and T. Hart. Boca Raton, FL, USA: Chapman and Hall/CRC (2007), pp.273, £27.99. ISBN 13: 978-1-58488-652-5. doi:10.1017/S0014479708006261

After a gap of 10 years the third edition of this textbook for first year undergraduate biology students puts greater emphasis on planning and designing experiments, provides a more consistent framework for hypothesis testing and replaces exercises by worked examples. The book comes with a free trial edition of Minitab on disc.

With relatively few examples the authors try to instill an understanding of the why and how of statistical science. The style is persuasive rather than didactic but 'you do need to read this book from start to finish, rather than dipping in for the bit you want'. There is a lot of reading, but I found the text generally very clear and easy to read. Part of the reason the authors have needed so many words, of course, is that they have not used any mathematics. Where necessary they have used mathematical notation but only after painstaking explanation.

The usual topics are covered: probability, distributions, estimation, confidence intervals, regression, analysis of variance, design of experiments, categorical data and non-parametric tests. While these are all covered at an introductory level an excellent chapter on 'Managing Your Project' would be equally valuable in a statistics guide for post-doctoral biology researchers.

Overall the authors balance well the need for an understanding of statistical ideas with the practical skills of using software to plot the data and implement the methodology.

Jim McNicol

*Plant Breeding and Biotechnology. Societal Context and the Future of Agriculture*. By D. J. Murphy. Cambridge: Cambridge University Press (2007), pp. 423, £29.99 (paperback). ISBN 970-521-53088-0. doi:10.1017/S0014479708006273

In this informative and thought-provoking book on international plant breeding and biotechnology the author blends history, science and socio-economics. In looking at the past and future of global agriculture, the roles and contributions of the public and private sectors are scrutinized and the so-called agbiotech revolution, especially the development and management of transgenic or GM crop varieties, is critically examined. In doing so the author exposes the exaggerations of all those involved in the GM debate. A strong case is made for a more