

Book review

Herbicides and their mechanisms of action. Sheffield Biological Sciences, Volume 6. Edited by Andrew Cobb and Ralph Kirkwood. 2000. Sheffield Academic Press, Sheffield, United Kingdom. £85.00. ISBN 1-84127-109-8.

This book comprises 10 chapters each written by authors who are acknowledged authorities in their respective fields. All chapters are comprehensive, well presented with numerous references. Perhaps inevitably the subject areas range from the more general reviews e.g., Challenges for herbicide development, by Cobb and Kirkwood, and Actions of herbicides in mixtures by Streibig and Jensen, to the much more specific, e.g., The mode of action of quinclorac by Grossmann, and The mode of action of isoflutole by Pallett. Some chapters, e.g., The molecular basis of herbicide resistance, by Devine, and Actions of herbicides in mixtures by Streibig and Jensen do include a lot of information published elsewhere; although, having this condensed into authoritative reviews does have its merits. Other chapters on The role of cytochrome P450 enzymes, by Barrett, and Glutathione transferases by Edwards

and Dixon also provide up-to-date reviews of an extensive literature. Novel aspects are also included, such as the discovery of herbicides through natural products (Duke, Dayan and Rimando), the use of bioherbicides (Boyette) and how molecular biology can be used to define for herbicide targets (Cole and Rodgers). With such a book it is, perhaps, difficult to know who is the target audience. It is too specialized to be an ideal introductory text on herbicide modes of action. In this regard, the first editor's excellent book 'Herbicides and Plant Physiology' is a more appropriate, and certainly a cheaper choice. However, for specialists, this new book provides very useful reviews on a wide range of topics and provides an excellent source of references for those who want additional information.

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