Book reviews

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K. Roberts (Ed.), Handbook of Plant Science (2 Volume Set), Wiley, Chichester, England (2007). Price: €345.00, Hard Cover, 1648 pages, Website: www.wiley.com, ISBN: 978-0-470-05723-0

The *Handbook of Plant Science*, according to the Preface, was compiled to produce "a comprehensive and authoritative resource for teachers, students and researchers" and to "provide the key background information for their particular area of interest". It comprises 255 articles extracted from the *Encyclopedia of Life Sciences* (ELS), an Internet-based "Encylopedia" published by Wiley (www.els.net). Currently, the ELS has over 4300 articles covering all aspects of life sciences including Biochemistry, Cell biology, Developmental Biology, Ecology, Evolution and Diversity of Life, Genetics and Disease, Genetics and Molecular Biology, Immunology, Microbiology, Neuroscience, Plant Science, Science and Society, Structural Biology, and Virology.

The articles in the Handbook of Plant Science, written by about 350 contributing scientists, are arranged across two volumes as follows (number of articles in parentheses): Volume 1: Introduction (2), Functional Plant Anatomy (24), Plant Tissues and Cells (20), Plant Cell Biology (20), Plant Growth and Development (35), Molecular Genetics and Biotechnology (37); Volume 2: Evolution (7), Plant Primary Metabolism (20), Plant Secondary Metabolism (26), Photosynthesis (23), Plants and their Environment (25), Plants and Other Organisms (16). The articles contain numerous black-and-white photographs and figures, and in addition there are 48 full-colour pages found at the centres of each of the two volumes (colour renditions of 87 of the black-and-white figures from the articles). At the end of the second volume there is an extensive Subject Index of 57 pages (4 columns) containing over 1700 entries. Although it may not be as rapid or extensive as an electronic search, it does assist the reader to source relevant information in the two volumes.

In general, the articles vary from 2 to 10 pages, with some articles being more of an introductory nature, and others being more advanced and in-depth. Thus, some of the articles are more of a "text-book" style, with no specific reference citations and only a list for "further reading", whereas others are more detailed review articles with both a specific references section and suggestions for further reading. Thus, there is some overlap between individual chapters, but these have been crossreferenced to allow the reader to expand their understanding on certain topics.

A fairly noticeable criticism of the Handbook of Plant Science is the absence of an article on gibberellins, especially considering the fact that the other classical plant hormones are each represented in individual articles. This provides the reader with some doubt regarding the comprehensiveness of sections with which one may be less familiar. It may well be that some errors have crept into a publication of this enormity, but more serious scholars and researchers will be able to discern cases where this may have occurred and search for information to supplement that which is readily provided in this text. On a positive note, however, the Handbook of Plant Science does cover an extensive range of plant science topics in varying degrees of detail, and as such, it does have its benefits. Indeed, although other reviewers have criticised this publication for its cost and relative redundancy (some articles may already be outdated due to rapid scientific advances), it may nonetheless be a very useful "desktop" reference to lecturers and students in any field of plant science, particularly for those who do not have access to the online ELS. For many of the more specific topics in modern plant sciences, this "hefty text" does provide a vast amount of information, and may be a very useful starting point for more in-depth discovery of many topics.

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Herbal Drugs: Ethnomedicine to Modern Medicine, K.G. Ramawat (Ed.), 2009, Springer-Verlag, Heidelberg, Germany, Price: €199.95, Hard Cover, 402 pages, ISBN: 978-3-540-79115-7, Website: www.springer.com

The "modern" use of herbal drugs is certainly not on the decline, and there is increasing attention being paid to the development and "modernisation" of the use of plants and herbal drugs in medicine—something which has been around for a very long time. This book highlights some plants used in ethnomedicine that have been scientifically validated, and provides reviews of information on herbal drugs used for antioxidant, anticancer, memory enhancing, neuroprotective, immunomodulatory, and anti-inflammatory effects. In addition, herbal drugs used for stroke, cardiovascular disorders, and erectile dysfunction are also discussed, as well as issues related to toxicity and safety.

The book comprises 21 Chapters written by a variety of international contributors, several of whom are experts in their respective fields of ethnopharmacology. The first two Chapters provide an introduction to the book, and highlight the potential of herbal drugs as sources of novel bioactive molecules, including a short overview of ancient medicinal systems and some of the main classes of bioactive molecules (alkaloids, phenolics and