

Botanical Medicines: The Desk References for Major Herbal Supplements, 2nd ed. Dennis J. McKenna, Kenneth Jones and Kerry Hughes. The Haworth Herbal Press. 2002. Paperback, pp. 1138. Paperback \$79, hardback \$169. ISBN 0 7890 1265 0

Recently there has been an increase in the publication of books covering different aspects of medicinal plants and it can be very difficult for someone new to this field of research to select both a readable and authoritative work. The authors of this desk-top reference volume (it is too heavy a volume to call a hand- or pocket-book) are to be congratulated on meeting both criteria. The 1st edition was published in 1998 and this 2nd edition covers advances in our knowledge about the chemistry and efficacy of thirty-four of the most widely consumed herbs and fungi, including *Ephedra*, a species not covered in the 1st edition. The information about each plant, fungus or yeast is presented in the same useful style under nine headings: botanical data, history and traditional uses, chemistry, therapeutic applications, pre-clinical studies, clinical studies dosage, safety profile and references. I have one concern about the headings and that is the use of the term 'botanical data' to cover information about fungi and yeasts. Fungi are not plants and thus it is not scientifically correct to use the term to cover both groups of organisms, although it is often done and it annoys mycologists.

The sections called 'botanical data' provide the reader with basic taxonomic information about the scientific name of the main species within each of the thirty-four genera that are used for their medicinal properties. The section also provides a selection of common names and a description of the plant or fungi. It is a shame that no reference was made to the conservation status of some of the plants, for example, ginseng. It is vital that the correct species gets into the trade and many herbalists are not fully aware of the conservation status of the herbs they use. In some cases herbs are still being wild-harvested without due attention to over-harvesting. As the demand for these medicinal plants increases then there is a need to look at the sustainable production of each species to ensure enough plants of the correct quality are being grown to meet the needs of the trade. Providing a supply of good quality plants could avoid the use of alternative species that might not have the efficacy of the original or may, in the worst case situation, be toxic.

Results that the authors have gathered on the clinical uses of the different species is very useful for a wide range of researchers and is often lacking from the many other books that cover the chemistry and medicinal properties of herbs. Another section of interest is the safety profiles of the species, especially the information about herb-drug interactions. This information is becoming very important as more people experiment with herbal remedies at the same time as taking other drugs. The authors have also included information about the issues associated with taking the herbs if pregnant or breast-feeding. In part, it is the inclusion of these results and the very useful breakdown of the pre-clinical data

into different disease states that separates this publication from many others.

Overall, the information the authors have collated about the different plants and fungi would be very suitable for those interested in different aspects of herbal medicines, especially those wanting to compare the uses of the different plants and fungi in the treatment of specific diseases as well as their use in cosmetics and the growing interest in 'functional foods'. Much of the information is up to date and the references will lead the interested researcher to the relevant literature. I am sure that I, along with others who need a reliable herbal reference book, will make good use of this book. It is hoped that the authors will soon collate similar results on another thirty species.

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Ruminant Physiology: Digestion, Metabolism, Growth and Reproduction. P. B. Cronje (editor). Oxford: CABI. pp. 474. £65.00. ISBN 0 85199 463 6

This book contains the keynote review papers presented at the IX International Symposium on Ruminant Physiology held in South Africa, 1999. It is suitably aimed towards advanced students and research workers in the areas of animal and veterinary sciences. The drive towards increased production in farmed animals has yielded a wealth of research in a variety of areas of ruminant animal physiology. The papers contained within this book concisely, yet thoroughly, review the background, recent advances and future directions of such research.

Papers of a common theme are grouped into chapters, which naturally progress from one to the next. As such, this compilation benefits from flowing as a book rather than a collection of papers. The first three chapters cover feed intake, rumen microbiology and nutrient absorption, and discuss potential interventions associated with each. Tissue maintenance and growth are then discussed, including an excellent review of the endocrine regulation of growth and metabolism. An interesting review of the physiological functions of adipose tissue, including the paracrine and endocrine factors it produces, sheds an unusually positive light on this 'much maligned tissue'. Nutrient partitioning is a strong theme throughout the section on reproduction, pregnancy and lactation, both between maternal and conceptus tissues and during lactation. The current status of research into the genetic manipulation of ruminant animal productivity is discussed in a manner refreshingly free of moral complications. Finally the influence of genetics, nutrition and stress on

host resistance to economically important parasites and pathogens is discussed.

The common theme of the reviews is the search for human interventions that have the potential to manipulate and modify the ruminant animal system to increase its efficiency. This fuels analysis of the regulation of nutrient intake, digestion, utilisation and partitioning. Throughout the book new technologies including genetic- and molecular-based approaches and mathematical modelling are discussed as research tools. Nutrient partitioning and nutrient–gene interactions are also strong topics. The reviews are very informative of the current level of knowledge in the varied topics and are thoroughly referenced. This book will therefore provide a good source of up-to-date information and literature to researchers

specific to each topic. However, its major strength lies in providing a thorough update on background knowledge to those working in the wider field of ruminant animal production.

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