Review of Drugs of Natural Origin. A Treatise of Pharmacognosy. 7th Revised Edition


The seventh edition of Drugs of Natural Origin. A Treatise of Pharmacognosy preserves the same high standards as in the sixth edition. Altogether, there are 12 chapters in this newly revised edition, written by two internationally renowned authors. The chapters are well organized, and at the end of each chapter the authors provide a section for further reading with primary references that could be used by the reader to enhance the content found in the book on a particular topic. To name a few, some of the most relevant topics for the natural product scientific community that are found in this book include the history of natural products in medicine and their role in drug discovery, the processing, regulation, and product development of crude drugs and herbal remedies, biotechnology in drug production, and the biosynthetic pathways for pharmacologically active natural products. The authors have also included many beautifully illustrated figures of the natural product source of current natural product drugs, making the book more interactive and attractive for reading. Other important features in this book are the appendix and the index. Providing the different names of a natural source and its corresponding page in the book helps to simplify the search for information on individual sources by the interested reader. This textbook is a rich source of current information because it includes recent advances in the natural product area.

The major differences when compared to the sixth edition occur in Chapter 5 (“Carbohydrates”), in Chapter 9 (“Natural Products Derived Biosynthetically from Amino Acids”), and in Chapter 12 (“Phosphonates and Phosphinates”). In Chapter 5, two drugs approved for the treatment of diabetes (voglibose and miglitol) have been included for the first time. In Chapter 9, the subsections on cyanogenic glycosides and glucosinolates have been removed. Chapter 12 was not part of the sixth edition and covers phosphonates and phosphinates, which are referred to as C–P compounds. As part of this chapter, fosfomycin is described, an approved antibacterial agent with broad spectrum activity that belongs to this group of organic compounds. The authors discuss not only the production of this drug and the relationship of these compounds with other compounds in Nature but also the biosynthetic pathway.

Currently, this book may be regarded as the leading text in the area of pharmacognosy in the English language. The new generation of scientists in the area of natural products and their students will certainly benefit from this high-quality textbook. In this reviewer’s opinion, this textbook should be available in every university biomedical library and in the individual collection of natural product researchers, as it is covers multidisciplinary areas of applications, including biochemistry, ethnomedicine, medicinal chemistry, and phytochemistry. Kudos to the authors for this truly outstanding volume!

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Notes
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