

Atractyloside Chemistry, Biochemistry and Toxicology

Edited by R. Santi and S. Luciani
Piccin Medical Books; Padova, 1978
127 pages. \$12.00

This book, although short, provides a valuable account of the large body of information which has accumulated on the chemistry and biochemistry of atractyloside and carboxyatractyloside. Over half of the book (70 pages) is devoted to two chapters by Klingenberg and Vignais which describe the mechanism of action of the atractylosides on the mitochondrial adenine nucleotide translocator protein. These chapters contain very thorough and readable summaries of the experimental results and ideas emanating from these two laboratories, both of which have contributed heavily to the elucidation of the chemistry of the translocator protein. However, the experiments and the concepts represented are directed toward the specialist, and are probably beyond the scope of interest of the natural products chemist or the toxicologist, for whom the remainder of the book would be of interest. Three of the remaining chapters should appeal specifically to the natural products chemist, one on the pharmacognosy of *Atractylis sumnifera*, and one each on the chemistry of atractyloside and carboxyatractyloside. The two latter chapters emphasize the historical and chrono-

logical developments which led to the establishment of the structures of carboxyatractyloside and atractyloside. Unfortunately, no attempts were made to relate the chemistry of these compounds to their biological and inhibitory activities, and the result is that these chapters contain little information which is relevant to the needs of the biochemist.

The remainder of the book is composed of two short chapters, one dealing with the effects of atractyloside on the whole animal, and a second which describes new plant species found to contain atractyloside. The former chapter contains useful toxicological data on atractyloside, which may be difficult to find elsewhere. The experimental results reported in this chapter are not, however, surprising, and are generally in keeping with the toxic site of action of these compounds on oxidative phosphorylation.

Although this book covers a rather narrow subject area, it will undoubtedly be of value to those working on carboxyatractyloside and atractyloside per se, as well as those interested in the mitochondrial adenine translocator protein.

B. Nelson

Advances in Enzymology, volume 47

Edited by A. Meister
John Wiley and Sons; Brisbane, Chichester, New York, Toronto, 1978
viii + 500 pages. £23.00

Whilst the rationale for the apparently arbitrary choice of articles that comprise this volume is unfortunately not made clear by the present editor, the success of the series can be gauged by the fact that

this is the forty-seventh volume. From all accounts a high proportion of the articles have proven valuable and have stood the test of time, both as sources of research information and teaching material at graduate