

## Book Reviews

*Biochemistry of Plants*, by Dr. Geza Doby. Akademiai Kiado.  
Budapest, 1959. 655 pp.

Professor Doby's book can be divided into four major parts. The first discusses in detail inorganic and organic compounds which are of importance in plant metabolism, with special emphasis on the mechanism of action of enzyme systems in the metabolic sequences. The second part deals with the uptake of nutrients and with assimilation processes. The assimilation of carbon and photosynthesis are described in great detail. This is followed by a discussion of carbohydrates, lipids and nitrogenous materials and their anabolic reactions. The third part is concerned with catabolic processes brought about by such enzymes as dehydrogenases, flavin and metallo-enzymes, carboxylases etc. The fourth section of the book briefly elaborates on some of the correlations of the processes discussed.

The literature of each problem is reviewed and each subject is appraised critically. The historical developments of the problems are stressed, and the complexities and interrelations of the biochemical processes are pointed out. The presentation is up-to-date, the author often giving well documented opinions as to what further investigations in a given area might deal with and uncover.

For plant biochemists versed in Hungarian, the book will be a good source of reference. However, general biochemists, plant physiologists, agricultural and pharmaceutical chemists will also find it useful. If the book were to be translated into a more widely read language, it would be of value for the food industries, and for those which extract, dry, condense and conserve plant products.

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*Progress in Drug Research*, edited by Ernst Jucker. Birkhäuser Verlag Basel/Stuttgart, 1959. Vol. 1, 607 pp.

As emphasized by Dr. Jucker in a preface in German, French and English, the rapid development of pharmaceutical research makes it difficult for the active investigator to keep abreast of progress in any but his own field. It is the aim of *Progress in Drug Research* to provide annually a

volume on current aspects of pharmaceutical research. By means of survey articles it is hoped to provide complete summaries by workers in special fields of chemical, pharmacological and clinical aspects of the chosen topics. In addition, studies are envisaged on the relationship between the structure and pharmacological activity of certain groups of medical compounds. Such objects, if fulfilled, cannot fail to arouse the interest and enthusiasm of all who are concerned with research on medicinal substances. It must therefore be said at once that the first volume of this new series augurs well. Here we have seven substantial contributions. Dr. Büchi of Zurich writes in German on ion-exchange resins and their use in medicine and pharmacy. He discusses their nature, techniques of usage and applications, with full regard to the relevant world literature. But his own extensive study and knowledge of ion-exchange resins enable him to write with an authority that not only informs the reader but stimulates thought about specific further applications whether analytical, biochemical or clinical. The widespread interest in sustained action preparations alone must attract many readers to these hundred pages. Dr. Tsung-Min Lin and Dr. K. K. Chen of Indianapolis write in English on cholesterol and its relation to atherosclerosis—a timely review of a rapidly growing literature in a field which some of us, like the authors, think has been exploited commercially ahead of an adequate understanding of the aetiology of atherosclerosis in man. Here is a refreshingly critical review of what is known and what is being done in this challenging field to which so much effort is now being devoted, particularly in U.S.A. Dr. von H. -A. Oelkers of Hamburg writes in German on the chemotherapy of worm infestations. He considers the incidence of the many helminth infections, their source, the life cycles of the parasites, and the chemotherapeutic agents that have been studied in combating infestations by, and infections due to, trematodes, cestodes and nematodes, noting their limitations. This section provides an excellent background to stimulate interest in Dr. von Bally's review in German of chemical investigations of anthelmintics both naturally derived and synthetic. Against a historical background there is an appraisal of more recent work on phloroglucinol derivatives from male fern, kamala and kousso, on ascaridol, on santonin and other lactones and brief notes on the alkaloids harmaline, pelletierine and arecoline. The range of synthetic anthelmintics is also concisely discussed.

It is salutary for all to study the extensive article in German by Drs. Haas, Fink and Hartfelder of Ludwigshafen on placebo reactions and reactors and in 174 pages they cover the design of clinical studies and their interpretation, first in general terms, then more specifically in relation to a wide range of properties which are difficult to evaluate objectively. There is a wealth of data gathered into this chapter drawn from the world literature that will repay repeated reference and the critical discussions will serve to discourage the more optimistic interpretations that are all too easily reached from limited clinical studies.

Dr. A. H. Beckett of London, writing in English, discusses stereo-

chemical factors in biological activity. After concise yet fully documented accounts of spatial arrangements in stereoisomers, biological activity in stereoisomers and metabolism and enzymes, several systems are discussed to demonstrate the importance of stereoisomerism in biologically active molecules culminating in the work of the author's team on analgesics. Herein is much to stimulate thought and reduce empiricism in the design of new drugs.

Finally, Dr. Kunz of Düsseldorf surveys in German new medicinal agents introduced in the past five years.

The standard of this first volume in content and production is such that all who read it will impatiently await the second volume promised in 1960.

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