

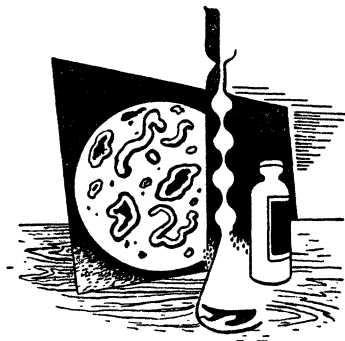
this property. All the important data accumulated prior to 1947 are presented, with emphasis on the interpretation of the facts when discovered, and the gradual evolution from them of the later formulas. The accepted strychnine structure was published by Woodward, Brehm, and Nelson in September 1947, and it is regrettable that this could not have been included to give the first complete story of this remarkable alkaloid. The tables to the chapter list the properties of hundreds of derivatives and represent a vast amount of labor.

Although the editors state in their preface that the pharmacology of the alkaloids will be included, this phase of the project had to be abandoned because of difficulty in assembling contributors.

When completed, this projected series will constitute the most exhaustive and authoritative reference work on alkaloids, and the plan to issue periodic supplements enhances its value.

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Chemical Activities of Fungi. Jackson W. Foster. New York: Academic Press, 1949. 648 pp. \$9.50.

Every scientist interested in mold metabolism will find it extremely convenient to have available *The Chemical Activities of Fungi*. Nowhere else are as many facts concerning the chemistry of fungi as conveniently arranged. The author, experienced in both the academic and commercial aspects of his subject, has been able to use tools other than the scissors and paste pot.

A list of the 19 chapter titles would constitute a sound synopsis of the book. There are chapters dealing with the chemical nature of mold mycelium, with mutations, with trace element nutrition, and with methodology. Chapters are devoted to each of many of the most important mold products, such as penicillin, citric acid, gluconic acid, and others. Little of importance is omitted.

A writer, freshly liberated from the strait jacket of conciseness prescribed by modern scientific journals, is likely to make full use of his freedom. The present work is probably an example. Reactions become "incriminated" (p. 401), or "motivated" (p. 156); enzymatic effects are "aggravated" (p. 463), and difficulties are "circumnavigated" (p. 599). Much space is occupied by games of intellectual solitaire played by the author. A few examples of these may be given. In the chapter

on citric acid, 12 pages are consumed in the erection and demolition of theories concerning citric acid formation before the mechanism finally approved is introduced. On pages 181 to 183 one finds a scholarly examination of definitions of reserve storage material. On page 245 begins an interesting three-page discussion of the familiar concept that seemingly new characters acquired by mutants are in reality due to loss of other characters. Such passages—and they are many—may require space, but will certainly prevent the book from being characterized as a dull compendium. Implicit in the criticism that inordinate space is given to the author's speculations is the appreciation of his ability to produce something more than a catalogue.

Throughout the book are numerous expositions of older concepts. These are first supported in an erect posture, then either knocked down or left to collapse. Although an occasional visit to the graveyard of forgotten theories is both useful and diverting, the mass exhumation often believed essential by authors of scientific books seems more likely to confuse than to instruct. The volume is, of course, not free from mistakes. In a comprehensive treatment of a large subject, occasional errors and inconsistencies serve to identify the work as that of a man rather than of a punch card machine. There are many ideas and conclusions with which this reviewer finds himself in disagreement. This is characteristic, for most readers, of all books in which ideas are to be found. The percentage of the author's ideas to which the reader will take exception will probably be small.

The reader of *Chemical Activities of Fungi* will find it an excellent guidebook to the original literature, and a serviceable textbook. He will find oracular pronouncements, wordy morasses, valuable data, and stimulating ideas. He will probably conclude, with the author, that the work is "an authoritative, critical book integrating and evaluating the field" (p. vii).

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Advances in Enzymology and Related Subjects of Biochemistry, Vol. IX. F. F. Nord, Ed. New York-London: Interscience, 1949. 760 pp. \$9.00.

The ninth volume of this stimulating series of books, like its predecessors, offers a thorough review of a few selected topics. The choice of subjects is not made with the purpose of complete coverage in the field of enzyme chemistry. Instead, each topic considered is given a critical and relatively leisurely examination that embodies much of the reviewer's own opinions. This personal approach, in conjunction with the thoroughness of the treatment, forms the major strength of these volumes. It enables the reviewer to develop his subject not only from the standpoint of present developments but with the important inclusion of past history and its influence on the development of the concepts with which he, but not necessarily the reader, is so familiar.

The 12 reviews presented range in subject matter from the industrial biosynthesis of fats through histo- and cytochemistry, to the metabolism of semen. It is clear that not all of these will be of universal interest. Neverthe-