D. Matthes: Tiersymbiosen und ähnliche Formen der Vergesellschaftung.
Grundbegriffe der modernen Biologie Bd. 14, Gustav Fischer Verlag, Stuttgart—New York 1978, 241 pp., 87 Figs. Price 32 DM.

Symbiosis is one of the oldest and best known phenomena in biology. Despite this fact we cannot assert that everything is known about it. The author has compiled the present knowledge on symbiosis in a book which is popularly written, but of a high standard and provided with well selected illustrations. The author has been successful in his purpose. Following the introductory chapter he discusses both symbiosis and carposis as opposed to parasitism, which has nothing to do with the contents of the book, indeed. He continues to treat particular forms of carposis, the symbiosis in the narrower sense of the word, and to symphily. In subsequent chapters he deals with these three types of symbiosis in detail, describes their subdivisions and supports his conclusions by numerous examples from different parts of animal kingdom. The last chapter is devoted to animals whose bodies serve as environment for other organisms. At the end of the book there is a useful list of references (primarily German), covering 35 pages, and subject and author indexes.

On closer scrutiny it is apparent from the book that our information on some types of symbiosis is still inadequate. Many examples reveal that affiliation to this or that type of symbiosis may be disputable. However, this deficiency does not result from the author's ignorance, but from the large number of most different variants of main forms of symbiosis, which we try to compress into artificially created categories. We often do not distinguish a precise boundary between such well defined phenomena as phoresia and parasitism.

The attempt to stabilize the terminology is a considerable asset of the book. Deegener's terminology of 1918 has practically not gained ground and individual authors created their own concepts, often for identical phenomena. Matthes has made an attempt to unify the terminology as early as 1967. The specification of his system in this well written book is a great advantage and might become a basis for the unification of the terminology concerning symbiosis. However, the characterizations of some concepts are too succinct and permit a free interpretation of any phenomenon. In many cases no reference is made to the fact that the phenomenon in question is constant or temporary and this is of great importance for particular types of symbiosis and their determination.

The book should not be missing in the library of any biologist. It will surely receive a wide response and retain its usefulness for a long time.

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