BOOKS RECEIVED

Continuous culture in microbial physiology and ecology

Over the past few years Meadowfield Press has undertaken a programme of publishing short, authoritative reviews of topics in microbiology, the selection of which, so far, has been interesting and thoughtful. Thus, students and professional microbiologists are steadily being provided with a series of extended essays on topics often neglected in the textbook literature or provided in a much less digestible form in the review periodicals. One of the most recent additions to this "Patterns of Progress" series deals with continuous culture and in Professor Hans Veldkamp a lucid and stimulating author has been recruited. The intention has not been to make a comprehensive discussion of continuous culture theory and application, but to introduce the reader to the basic elements—including some helpful practical hints—and highlight the value of the technique in studying the interaction of micro-organisms with their environment.

The book is organised into five chapters, the first of which introduces the reader to continuous culture and prepares him for what is to follow: population kinetics, transformation of energy, responses to a changing environment, and morphology and cell composition. Professor Veldkamp leads the reader into these subjects by succinctly discussing a careful selection of key experiments in microbial physiology and relating the findings to ecology. This approach has worked well. The appropriateness of continuous culture methods for analysing ecological problems is made abundantly clear, and equally important is Professor Veldkamp's caution that continuous culture must only be viewed as an investigative tool in this context; it does not mimic the natural environment.

The 68 pages of this book can be perused very quickly but they are worth, however, much more careful reading, reflecting as they do the author's considerable experience of and contribution to the subject. The text is well referenced so that the reader can gain ready access to the primary literature. One can envisage the book being particularly useful for undergraduate teaching and for all those who require a sound introduction to continuous culture.

A. T. Bull

Continuous culture 6: applications and new fields

"Continuous culture 6" picks up the story where the "Patterns of Progress" primer on continuous culture by H. Veldkamp leaves off and considers in detail the application of continuous culture philosophy and practice to industrial processes and developing areas of microbiological research. This volume records the plenary lectures presented at the 6th International Continuous Culture Symposium convened in Oxford in July 1975. Since 1958, when a symposium devoted to continuous culture was held in Prague under the aegis of the Czechoslovak Academy of Science, this series of specialist international meetings has played an invaluable role in nurturing the development and proselytising the advantages and acceptance of the technique in microbiology. It is interesting to thumb through the pages of the previous symposia and note the changes that have occurred during the intervening 17 years. One of the most striking features is the widespread adoption of continuous culture methods for research into the whole spectrum of microbiological problems be they physiological, metabolic, genetic, ecological or technological in essence. No longer, it seems, is continuous culture considered a plaything of an enthusiastic few; rather it is an experimental