Book Reviews

Behrens, H.: Lehrbuch der Schafkrankheiten. 2. ed.

Berlin, Hamburg: Parey 1979. 300 pp., 84 figs., 3 color plates. Hard bound DM 98.—

This textbook is concerned with diseases of sheep and is designed for use by students and veterinarians. Written in language everyone can understand, this text presents both the results of scientific research and practical experience gained in disease control. The description of symptoms and prophylactic measures is of interest to sheep owners and breeders, the various diseases being discussed in detail. The discussion of diseases of sheep divides into several portions, with the subjects covered in Sections I to VIII ranging from etiology through prophylaxis to regulations governing epizootic diseases. This makes it easy to look up special information and to establish the diagnosis when an animal is presenting symptoms which are typical of two or more diseases. A list of the literature bearing on the subject enables the interested reader to go more thoroughly into the various diseases of sheep.

Another concern of this textbook is to highlight the great importance of veterinarians to efficient sheep production. This reviewer considers that it would be advisable to change the order of the sections concerned with infertility and poisoning, since there is a close relationship between poisoning and metabolic and deficiency diseases and infertility can be regarded as offering a better transition to diseases transmitted by genetic mechanisms from parents to offspring, An all-important asset to this text is the discussion of these two subjects and the inclusion of sections dealing with surgical operations and various subjects not usually discussed in text books on deseases of animals. Good knowledge of the pathogenetics of sheep is necessary to keep sheep in good health. Veterinarians and stock breeders will certainly find that the chapter on the pathogenetics of sheep has not been brought up to date.

It would appear appropriate to choose as a suitable basis the international list of lethal anomalies (possibly supplemented by data presented in Wiesner/Willer, 1974) and also list nonlethal anomalies. In addition to information on manifestations and their delimitation from phenocopies, and on hereditariness, it is important for the veterinarian to know the breeding effort required to eliminate undesirable factors and the negative effects upon breeding of surgical interventions made by veterinary surgeons.

H. Brandsch, Leipzig

Parker, R.E.: Introductory Statistics for Biology. 2. ed.

London: E. Arnold 1979. 122 pp., 13 figs., 6 tabs. Soft bound £ 2.40

The second enlarged edition of this little book is again specifically addressed to the biologist. It contains the most important simple statistical methods which in most cases are sufficient for the verification of biological data. The difficulties, which students frequently have with the analysis of their data is, according the author, due more to the simple but unusual terminology and not to their mathematical approach of statistical methods. He therefore refrains from a presentating statistics as a branch of mathematics. He emphasizes the explanation of the terminology, which could be important for biologists. For all the explanations, examples and illustrations are used. At the end of each chapter problems and exercises are given, the solutions for which follow at the end of

the book. Anyone who works through this homework, will reap greater benefit from the analysis of his numerical data. This second edition will hopefully be widely distributed within the world of biologists! It's use could improve many genetical publications. For yet another new edition I would like to propose the inclusion in chapter 2 of terms such as error probability, acceptance and refusal trajection.

E. Weber, Berlin-Karlshorst

R. Perez-Bercoff (ed.): The Molecular Biology of Picornavirusses. Nato advanced study institutes series; Series A: Life Sciences A 23 New York: Plenum Publ. 1979. 371 pp. Hard bound \$ 39.50

This volume presents the proceedings of a conference on the molecular biology of picornaviruses held by the NATO International Advanced Study Institute in September 1978. The intention of this conference was to provide for a fresh and original review of all relevant topics and issues in the field offered by internationally renowned researchers. The conference was concerned especially with a review of the structure of the picorna virion, early events during the infectious process, the synthesis and processing of viral proteins, decoding the viral mRNA, translation regulation, mechanism of interferon action, the replication of viral RNA and the virus-directed synthesis under non-permissive conditions. The 17 chapters contained here range from practically selfcontained monographs. The papers represent a high scientific level and mediate a very broad and detailed insight into the molecular biology of these viruses as well as the mechanisms and the regulation of viral macromolecule synthesis in eukaryotic systems. The book is the first comprehensive treatise on this topic and provides an excellent summary of current knowledge. It is a very convenient reference source of relevant and up-to-date information, methods and literature. It can be recommended for a number of reasons, for example as an introduction for collaborators in this virus group and as a volume which fills gaps in currently available literature.

H. Stäber, Berlin

National Institute of Agricultural Sciences, Division of Genetics: Annual Report.

Kannondai, Yatabe, Tsukuba, Ibaraki, 300-21, Japan 1979. 62 pp.

Generally speaking, the reading of annual reports is very boring: they are mostly badly written by, in many cases, reluctant authors who are a little dishonest, self-praising and public relationsminded. Not so this one, which aims to facilitate communication among researchers in the field of plant breeding and genetics. The 25 articles comprise progress reports giving condensed information on research outcome. The subjects of breeding research are mostly rice, soybeans and oil seeds, but grain gets increasing attention at the Tsukuba Science City. The new institute has new germplasm seed storage for about 50,000 entries of seeds of plant genetic resources. The institute is also engaged in the new large scale Green Energy Program, which tries to bring into effective use natural energy resources from agriculture, forestry and fisheries. Good luck to the new director Keishi Fujii!

H.F. Linskens, Nijmegen