- Book Reviews

Hutt, F.B.: Genetics for Dog Breeders.

San Francisco: Freeman and Company 1979. 245 pp., 53 figs. – Hard bound £ 7.80.

This is a nice introduction for kennel-holders and lay breeders to the field of dog genetics. One sympathizes with the author (A letter to veterinarians, appendix II) in his desire that breeding advisers be as well-informed in dog genetics as the reader of this book could be. Fourteen chapters in three parts (Principles of Genetics; Genetic variations in Dogs, Breeds and Breeding) cover a wealth of information, omitting however the origin and classification of breeds. The book is written in a lucid style though the content will not always be easily grasped. Some redundancy (e.g. paragraphs on linkage on pages 28, 36 and 42) will help the reader. Too much emphasis is perhaps placed upon genetic defects (appendix I: lethals) which the breeder will only rarely see; on the other hand the author is reticent in giving information on coat color, a topic interesting to most breeders. Nevertheless, this handbook is recommended to all those people who really want to understand dog breeding. S.J. Geerts, Nijmegen

Schöneich, J.: Ergebnisse der experimentellen Medizin.

Zellhybridisierung und Mutagenese bei somatischen tierischen und pflanzlichen Zellen in vitro. Bd. 34.

Berlin: Verlag Volk und Gesundheit 1979. 144 pp., 54 figs., 18 tabs. Soft bound DM 15,60.

This book contains 16 papers, 5 of which are devoted to animal somatic cell genetics, the other 11 deal with the genetics and physiology of cultured plant cells and protoplasts. The topics cover a range from somatic hybridization experiments designed to study malignancy (V. Spurna & M. Nebola), to quantative mutagenesis and phytohormoneautotrophy of plant cells (S.L. Karanova et al.) and include papers on gene mapping in man (K.-H. Grzeschik), use of segregation of specific HPRT gene from chinese hamster - chick reed blood cell hybrids for determination of the temporal order of gene replication (I. Raskó et al.), spontaneous Mamma-tumor-cell fusion (R. Widmaier & G. Rapsdorf), Simian-virus-40 - induced mutagenesis (M. Theile et al.), somatic compatibility after fusion of plant protoplasts (D. Dudits et al.), high frequency of nuclear fusion in heterokaryons of Nicotiana (L. Menczel et al.), use of somatic hybridizations to study kanamycin resistance in tobacco (P. Maliga et al.), nitrate reductase-deficient cell mutants: isolation and use in hybridization experiments (R. Grafe) and biochemical characterization (R.-R. Mendel), cell, protoplast culture, and plant regeneration from in vitro cells of rye (H. Koblitz; G. Saalbach; E.-U. Scheunert) and potato (Z. Opatrny). The reviews of A. Müller on somatic hybridization of plants and of K.-H. Grzeschik on gene mapping in man provide good discussions of problems and ideas in these exciting areas of research. Unfortunately, the book took too long in being published so most of the experimental material it contains has already been published in detail in periodicals (e.g. works of Maliga et al., Menczel et al., Dudits et al., Grafe, Mendel). On a whole the book gives some good examples of the great variety of experiments on in vitro cell genetics that are carried out in East-European countries.

Y.Y. Gleba, Kiev

Epstein, M.A.; Achong, B.G.: The Epstein-Barr Virus.

Berlin-Heidelberg-New York: Springer 1979. 459 pp., 72 figs., 29 tabs. Cloth bound DM 120,—.

This monograph, edited by the discoverers of the Epstein-Barr virus (EBV), consists of 19 chapters written by 20 leading specialists in the field of the EBV. The topics discussed deal with all aspects and problems of current EBV research. This virus has been at the focal-point of virology research for years, and not only because of its identification as the causative agent of infectious mononucleosis, since 1920 a major research problem. Virologists and cancer research workers are highly interested in the EBV because it has been quite convincingly demonstrated in the past few years by biochemical, immunological, sero-epidemiological and other techniques that the EBV could be a human tumor virus: Several chapters of this book indicate that it is reasonable to accept EBV as the causative agent of not only infectious mononucleosis but also of Burkitt lymphoma and nasopharynx carcinoma. In this connection a lot of problems still have to be solved. The analysis of the mechanism of action, which seems to be a multistep process including chromosomal aberrations, is one; and why does one and the same virus cause so many extremely different syndromes, is a second. This monograph is very well done; it is highly stimulating and provides a lot of information and ideas. Therefore it is most important, not only for those who are interested in the herpes viruses but for all people interested in modern virology and basic cancer research, to read this book. One should find it therefore in every library covering one of these fields. Both the editors and the publisher should be congratulated on this ex-E. Geissler, Berlin-Buch cellent book!