

in chapter 1, whereas replication, which is very important for the understanding of division and segregation, is treated only in chapter 25.

The book is greatly recommended to all those teaching genetics in schools and particularly to those people in universities, undergraduates and graduate students, and anyone else who may want to test their understanding of all or some special areas of genetics. For teaching genetics the broad collection of various problems is very valuable. Because the book was published in 1973, there are no examples of the advanced results of the last five years. It is to be hoped that, considering those recent explorations, the author will soon write an appendix to 'Questions and Problems'.

E. Günther, Greifswald

Lubs, H.A., de la Cruz, F. (Eds.): Genetic Counseling. A Monograph of the National Institute of Child Health and Human Development.

New York: Raven Press 1977. 616 pp., 24 figs., 122 tabs. Hard bound \$ 36.00

In forty contributions the state of the art on genetic counselling is presented, illustrating the complexity of the subject even though not all the ramifications are dealt with. Specific diseases as well as general evaluations, sociological methods, prospective programmes, organization of services, special technics and future directions and supportive methods were discussed during this conference organized by the National Institute of Child Health and Human Development. Reading is strongly advised to those who believe that they have not yet mastered every detail of the art.

S.J. Geerts, Nijmegen

Hsu, T.C., Benirschke, K.: An Atlas of Mammalian Chromosomes Vol. 10.

Berlin-Heidelberg-New York: Springer 1977. 324 pp., 68 figs. Loose-leaf boxed DM 64,80

This is the last volume in this series, bringing the total number of folios to 518. 'This does not mean that in the future additional compilations of karyotypes will not be appended'. Though 'it is premature to compile banded karyotypes', this Atlas 'will remain useful as a general reference'. It has substantially contributed to mammalian cytogenetics, cytotaxonomy and cytoevolution. The cumulative index makes the series a classic in these fields.

S.J. Geerts, Nijmegen

Kelly, P.T.: Dealing with Dilemma. A manual for Genetic Counsellors.

Berlin-Heidelberg-New York: Springer 1977. 143 pp., 1 fig. Soft bound DM 17,10

Those who regularly or occasionally give genetic counselling

should read this book and contemplate its content. It is not about the modes of inheritance, diagnostic problems or the calculations of chances, but deals with the psychological and humanistic aspects instead. The reader is given clear, step by step guidance for his communications with persons under emotional stress for a genetic reason. Geneticists have not been trained as social or behavioral scientists and this manual really fills a gap. It is regrettable that the title does not clearly describe the contents of the book.

S.J. Geerts, Nijmegen

Segal, J., Kalaidjiew, A.: Vol. 2. Biophysikalische Aspekte der Struktur, Dynamik und Biosynthese der Eiweißmoleküle. Vol. 3. Biophysikalische Aspekte der multimolekularen Eiweißstrukturen (Koazervate, Membranen, Fasern).

Leipzig: VEB G. Thieme 1977. 160/132 pp., 78/57 figs., 9/10 tabs. Soft bound DM 34,-/30,-

These two books (in German) treat some of the biophysical aspects of the structure, dynamics and biosynthesis of protein molecules (vol. 2) and of the multi-molecular protein structure-like coacervates, membranes and fibers (vol. 3). The books, intended for scientists working in these fields, have been written by the authors in order to express a number of hypotheses which deviate strongly from generally accepted views.

The basis of most of these hypotheses is their 'Faltentrommel' model (Falten = fold, trommel = drum) of globular protein molecules. This model, published earlier by the authors (Segal, Dornberger-Schiff, Kalaidjiew: 'Globular Protein Molecules', Pergamon Press, 1960) has never gained acceptance. This is not surprising. Their model requires the amino acid sequence to have pairs of bifunctional amino acids at regular distances and to have pairs of dibasic-amino acids alternate with pairs of diacidic-amino acids. Such regularities are not found in the known sequences of numerous globular proteins. Moreover, the model is completely incompatible with the structure of globular protein molecules as found from X-ray analyses.

Inspired partly by this model, the authors propose their 'Faltenband' model for DNA which consists of left- and right handed double helical parts of equal length. The model would make, the authors state, the unwinding of DNA preceding replication and transcription much more understandable than other models do. It would, moreover, be able to code peptide chains which satisfy the requirements for their protein model.

In the treatment of the structure and properties of biological membranes, the protein component of the membrane is again seen as a 'Faltentrommel' and plays, therefore, an important role in the permeability and transport properties of the membranes.

Although we have read both books with interest and some curiosity, the arguments used by the authors to support their theories are scarcely convincing. We do not consider the contents a valuable contribution to our knowledge. G.A.J. v. Os, Nijmegen

Announcement

Assinsel Award for A.C. Gallais

The International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL), founded in 1938 at Amsterdam, has decided to create an Award for scientists whose basic research contributes noticeably to the improvement of plant breeding methods for the benefit of agriculture and horticulture.

During the 1978 Assinsel congress at Hamburg, the first Award was presented to Mr. André C. Gallais (France) for an outstanding thesis. Based on his observations of alfalfa, he conducted biometrical study on heterosis in an allogamic autotetraploid species.