

Students of genetics and evolution will find a number of papers of considerable interest, particularly one on "Competition, Co-existence, and Evolution" by F. J. Ayala; an account of "Heterozygosity and genetic polymorphism in parthenogenetic animals" by M. J. D. White; "Ecological Factors and the Variability of Gene-Pools in *Drosophila*" by J. Beardmore; and "Mating Propensity and its Genetic Basis in *Drosophila*" by E. B. Spiess. However, the paper which is of outstanding interest is that on "The Evolutionary Biology of the Hawaiian *Drosophilidae*" by H. L. Carson, D. E. Hardy, H. T. Spieth, and W. S. Stone. This is a general summary of the work on evolution and taxonomy in this fascinating group of *Drosophila*. It is written clearly with simple diagrams and for it alone the book is worth having.

There are a number of other useful papers, including one by G. L. Stebbins which comments on changes in his attitude to evolution and variation in plants over the last 20 years. However, it is almost impossible to read without his original book at one's side. He appears to have taken the opportunity to revise his book in note form but merely publish the notes! There is also an important paper bringing up to date Ford's investigations into *Maniola jurtina* in south-west England, but it chiefly records the changes and does not offer any new explanation for the remarkable phenomena reported.

There are two papers of a more philosophical nature, one by G. G. Simpson and the other by B. Rensch, which may interest the historian but I doubt very much whether they are of any value to the experimental geneticist. There is also a chapter, unfortunately the last in the volume, called "Human Genetic Adaptation", which would have been better left out. It is doubtful whether it would have passed the reviewers if submitted to a genetics journal, and is more appropriate to a first-year undergraduate textbook than a volume honouring such a distinguished scientist as Professor Dobzhansky.

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CLINICAL GENETICS. An International Journal of Genetics in Medicine. Edited by K. Berg (Oslo), J. Boök (Uppsala) and J. Mohr (Copenhagen).

In Volume 1, No. 1, of this new journal there are six papers.

Hsia reviews the use of white blood cells and of cultured somatic cells (both adult and foetal) in the study of clinical genetic disorders, but some reference to pitfalls in the techniques would have been helpful.

German writes the fifth of a series of papers on abnormalities of human sex chromosomes (all but one of the others being "in the press") and discusses the gonadal dysgeneses—Turner's syndrome and its variants—which he thinks are due to a single erroneous intrachromosomal rearrangement affecting one of the two sex chromosomes in a normal diploid zygote, or in an early post-zygotic cell. This is in sharp contrast to Klinefelter's syndrome, which he looks upon as being caused by non-disjunction in the parent.

Gertner and his colleagues add Pompe's disease and the Pelizaeus-Merzbacker syndrome to the list of those which show cellular metachromasia in fibroblasts, but the authors point out the limitations of the usefulness of this finding.

McCombs and co-workers describe a new fast-migrating ceruloplasmin variant in a healthy Negro woman (though why she came to be tested is not stated), which migrated identically to ascites fluid ceruloplasmin from one alcoholic cirrhotic and three ovarian carcinoma patients.

Ohno and his colleagues report a sex difference in alcohol metabolism. Their paper concerns experiments on female and castrated male mice given testosterone and the results are of great basic interest though a long way from the bedside. They postulate that the alcohol dehydrogenase (ADH) locus of kidney, but not of liver, is under the control of a secondary repressive genetic regulatory mechanism. If this block is completely removed by androgenic steroid, the ADH locus of kidney functions at about the same rate as that of the liver.

Finally there is a long paper by Vyas and Fudenberg on the immunobiology of human anti-IgA. It is principally concerned with the serological system which they have developed for the detection of this antibody, but the biological significance of it when found—whether it be due to previous transfusion of blood or injection of gammaglobulin or to iso-immunisation in pregnancy—is not yet known.

Some general comments (biased perhaps since the reviewer is the editor of the rival U.K. journal) are that this first number is slim, and it will be interesting to see if there is enough material to justify publication every two months; all the contributions are from the U.S.A. and one would have thought that the all-Scandinavian editorship would have produced something home-grown in their first number; and, if this is a representative issue, the journal would be too difficult for most practising physicians in this country. The papers nevertheless have value for geneticists, and research workers in allied fields.

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THE MOLECULES OF LIFE. Gisela Nass. World University Library. Wiedenfield and Nicolson, London, 1970. Pp. 256. 35s.

This is an unsatisfactory book. Published in "The World University Library" aimed at providing "authoritative introductory books for students which will be of interest also to the general reader", Gisela Nass's *The Molecules of Life* is an example of how not to popularise science.

Elementary introductions to science have a vital educational role. However, they should avoid the pitfalls of speaking down to their audience and of oversimplification to the point of misinformation. They should also attempt a balanced view of their subject. It is extraordinary that this book covers such a wide range of topics as the structure of the nucleic acids, mechanisms of protein synthesis, cell structure, vitamins, pheromones, the circulation of blood in vertebrates, the evolution of *Equus*, mutation, antibodies and the origin of life yet fails, for example, to give any account of basic genetics, or cell division or even to mention mitosis, meiosis and recombination.

Giving the reader the complete amino acid sequence of human haemoglobin, or a whole page table of the details of 29 different amino acid substitutions in human haemoglobins (from S to Shimonoseki), is no substitute for the basic general information, which even at an elementary level I would have considered essential to the purpose of this book.