

REVIEW

BEHAVIOURAL AND ECOLOGICAL GENETICS: A STUDY IN *DROSOPHILA*. P. A. Parsons. Oxford. Pp. 223. £6.50.

After an introduction which recapitulates the genetical utility of *Drosophila* Professor Parsons considers the behaviour genetics of the genus. He relates the behavioural effects associated with major genes, inversion sequences and polygenic systems, and reviews the evidence for non-random mating. In a general review of the ecological genetics of *Drosophila* the author considers factors which are relevant to the evolution of the species. The concluding chapters try to synthesise behaviour and ecology by a discussion of studies which have components of both.

The book is presented as an attempt to integrate behaviour, genetics and ecology using *Drosophila* as a paradigm. The author has, indeed, accumulated a large body of fact, but the dearth of critical comment and the absence of a defined theoretical framework contribute to a lack of purpose which detracts from the heuristic value of the work.

In places the book is misleading. For example, it is mistakenly supposed that an estimate of "broad heritability" can be obtained from inbred lines. Occasionally a lack of thoroughness is apparent. Instances range from the poorly drawn normal curves to the incomplete discussion of a reproduced figure related to linkage disequilibrium. The discussion of chromosome assays makes no use of the tabulated crosses between substitution lines. Instead, the analysis is restricted to the lines themselves. Methods proposed for the analysis of mating choice take no account of restraints in the experimental design.

The encyclopaedic quality of the work, whilst making it difficult to digest, will no doubt commend it to students as a source of references although its usefulness to the newcomer will be diminished by the lack of criticism.

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BOOKS RECEIVED

- OUTLINE STUDIES IN BIOLOGY—CELLULAR DEVELOPMENT. D. R. Garrod. Chapman and Hall Ltd., London, 1973. Pp. 64. £0.90.
- OUTLINE STUDIES IN BIOLOGY—BIOCHEMICAL GENETICS. R. A. Woods. Chapman and Hall Ltd., London, 1973. Pp. 64. £0.90.
- OUTLINE STUDIES IN BIOLOGY—FUNCTIONS OF BIOLOGICAL MEMBRANES. M. Davies. Chapman and Hall Ltd., London, 1973. Pp. 62. £0.90.
- OUTLINE STUDIES IN BIOLOGY—CELL DIFFERENTIATION. J. M. Ashworth. Chapman and Hall Ltd., London, 1973. Pp. 64. £0.90.
- YOUR HEREDITY AND ENVIRONMENT. Amram Scheinfeld. Chatto and Windus Ltd., London, 1973. Pp. 830. £6.00.
- EURO ABSTRACTS SECTION 1. Nuclear Energy—Scientific and Technical Publications and Patents. Vol II, No. 6, June 1973.