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BOOK REVIEW

HECHT, H., STEERE, W. C., WALLACE, B. (ed.): *EVOLUTIONARY BIOLOGY*. Vol. 12. — Plenum Press, New York—London 1980. 378 pp. US \$ 32.50.

This book is a continuation of a series with good tradition. The editor of the first eight volumes was Professor Theodosius Dobzhansky. The twelfth volume brings five articles. Each of them is a valuable survey of experimental results and theoretical considerations. The common feature of individual articles, however, is only the title of the series. Only a few biologists will be equally interested in all five topics of the collection, which covers geobotany, zoology, ecology and molecular genetics. Of course, it does not reduce the value of individual contributions.

The first of them deals with the apparent changes in the diversity of fossil plants. It is a theoretical article which covers many general aspects of plant phylogenesis, especially concerning different methods of investigation of fossil plants. The next article, the authors of which are the Soviet ecological genetists Yablokov, Baranov and Rozanov, deals with the population structure, geographic variation and microphylogenetic stems from interesting doctrines of Vavilov. The authors chose the object which was not genetically studied before, the sand lizard *Lacerta agilis*. The third article of the volume is a valuable contribution to the modern, molecular genetic problem of the origin of the mutator activity in *Drosophila melanogaster*. The mutator factor is a genetic determinant of episomal nature, which is spreading during last years in the natural populations of *Drosophila*. The authors present an interesting hypothesis on the activation of the mutator activity factor by hybridization and they present a large amount of experimental data in proof of this hypothesis. The fourth topic deals with the geographic distribution of the inversion polymorphism of *Drosophila pseudoobscura*. Different inversions of chromosomal segments and their distribution in geographically divergent populations provide a model in this study of the population genetics. The last part of the book is ecological study of the factors determining the patchy and insular distribution of High Andean birds.

The book lacks a general critical, unifying survey of the general conclusions, which come from the confrontation of individual articles.

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