

of genes is replaced in the book by Thoday's views on disruptive selection. Save in a few passing references to electrophoresis and to theoretical work of Jacob and Monod, the discovery of the material nature of the gene in 1953 and the subsequent two decades of molecular biology have scarcely affected K. Mather's view of population genetics.

For those who believe genetics began in 1953, this book provides an antidote rich in facts. Those who believe population genetics has not changed radically since 1953 will find this book a comfort.

JOEL E. COHEN, *The Rockefeller University*

#### GENETICAL STRUCTURE OF POPULATIONS.

By *Kenneth Mather*. *Chapman and Hall, London*; distributed in the United States by *Halsted Press (a division of John Wiley and Sons), New York*. \$12.95. viii + 197 p. ill.; index. 1973.

Intended by its author for advanced undergraduate and graduate students with a basic knowledge of genetics and chromosome behavior, this clearly written book reviews the sources of variation within populations; some factors affecting genetic equilibria (with a minimum of mathematics); a theory of free and potential, utilized and fixed variability; stabilizing, directional, and disruptive selection; life-cycles, genetic systems, and genetic architecture; and the effects of disruptive selection. The final chapter on individuals and populations observes that in outbreeding species, the selective merits of an individual's offspring depend on the other individuals available for mating in the population. The works of C. D. Darlington, K. Mather, and J. Thoday dominate the book.

K. Mather's 1953 paper with the same title (in *Evolution: Symp. Soc. Exper. Biol.*, 7: 66-95) outlines the book, with two exceptions. The first is that the paper motivates the study of microevolution in populations as a model of macroevolution of species. The book drops this motivation. The second is that the paper's speculative section on the evolutionary origin