

DARWINIAN THEORY ENCOUNTERS GENETICS

Summary

In this article the relations between heredity and the evolution by natural selection are discussed. The Darwin's attempts to solve the problems of heredity were based on pre-Mendelian intuitions, and the discovery of the Mendelian rules inclined some outstanding geneticists to reject the Darwinian theory of natural selection. The difficulties of combining genetics with the theory of natural selection were overcome by population geneticists, but some

problems, such as the evolution of altruism or the maintenance of sexuality remained open. They were investigated at the second half of 20th Century and they are now either solved or close to the solution. Meantime, the developments in the study of hereditary variation in the field and the progress in molecular biology have clarified some unsolved questions and opened new perspectives for the evolutionary theory.