## REVIEWS

EVOLUTION UND HOMINISATION. Edited by G. Kurth. Stuttgart: G. Fischer. 1962. Pp. 228, 47 figs. 48.50 DM.

Eighteen collected papers are here dedicated to Gerhard Heberer. They concern evolution, systematics and the fossil history of man. They are mostly specialised and disconnected and somewhat contradictory of one another. Some also concern the problem of whether the genera Australopithicus, Pithecanthropus, Pavanthropus, Sinanthropus, Javanthropus, Africanthropus, Cyphanthropus, Atlanthropus, Telanthropus, Palaeanthropus and Euranthropus might not all prove to be just Homo if we knew the whole truth. Examining the dating of early human remains, Kurtén suggests that man in Java may be as old as in South Africa but he agrees that the type of early man in South Africa is the earlier. We are therefore left with the view that man probably began in Africa and afterwards moved into Asia.

Genetic problems are not put in the foreground of these discussions except in the paper of Robinson with which those of Dart and Oakley are connected. Robinson argues in favour of the view that man's inventions have directed the course of his evolution by changing his selective situation. His interaction with his culture can thus be expressed in purely biological terms. This principle seems to be fundamental for human biology since it applies equally whether the invention is the use of bone implements, of the cultivation of crops or of the smelting of metals: each of these changed the selective forces at work to the advantage of the men who made the invention.

C. D. DARLINGTON.

BIOLOGICAL ALKYLATING AGENTS. By W. C. J. Ross. London: Butterworths. 1962. Pp. 232. £2, 15s.

Approximately half of this book deals with the fundamental chemistry of alkylating agents and their reactions with biologically occurring compounds. The remainder is concerned with the use of such reagents in the treatment of cancer, the problem being considered in general terms from the standpoint of selective toxicity. It is pleasing to see here the application of certain fundamental biochemical studies as exemplified by the modification of carcinostatic or carcinocidal substances to result in preferential uptake by cancer cells or hydrolysis to liberate the toxic compound in situ.

This is the first monograph dealing with these reagents and the book's greatest value will be for those concerned with the chemical development and testing of selectively toxic substances. For the geneticist the brief section discussing the effect of alkylation on nucleic acids will be most interesting.

K. W. Fuller.

INTRODUCTION TO THE MATHEMATICAL THEORY OF GENETIC LINKAGE. By N. T. J. Bailey. Oxford: At the Clarendon Press. 1961. Pp. 298. 55s.

Since the primary purpose of this book is "to be of assistance to those geneticists who require to use mathematical methods", and since it goes by the name of an introduction to the subject of linkage, one might be