

## REVIEWS

**QUANTITATIVE INHERITANCE.** Papers read at a colloquium held at the Institute of Animal Genetics, Edinburgh University, under the auspices of the Agricultural Research Council, 4th to 6th April 1950. Her Majesty's Stationery Office, London, 1952. Price 20s. net.

It was enterprising of the Agricultural Research Council to organise and to publish the contributions to this symposium on *Quantitative Inheritance*. Nearly all the contributors stress the importance of quantitative characters in evolution and in animal and plant improvement, and this represents a real advance from the attitude of the first generation of geneticists, about 1910, though it is no novelty for the present generation.

Like most such occasions, this discussion suffered to some extent from the reiteration by the older hands of opinions of which they have ceased to be critical, and by the naive misapprehensions of the newcomers. Nevertheless, some material of interest has been gathered.

Attention may be drawn to the short paper by L. L. Cavalli, "An analysis of linkage in quantitative inheritance" using the methods and material of K. Mather. Instructive also is Mather's gentle but effective reproof of the extravagances of a purely negative contribution by B. Woolf.

The paper, however, from which most can be learnt, and which is the chief justification for the publication, is that of Mather and Vines on "The inheritance of height and flowering time in a cross of *Nicotiana rustica*." This sets out fully and usefully the analysis up to the fourth generation, with a valuable discussion of those factors, such as scaling, which help to make the analysis more accurate.

R. A. F.

**HEREDITY IN UTERINE CANCER.** By Douglas P. Murphy. Harvard University Press (London : Geoffrey Cumberlege). 1952. Pp. xi+128. 16s.

Although geneticists on the whole incline to the view that a predisposition to cancer is inherited, the opinions held by many authorities who have studied the subject are somewhat diverse. With the possible exception of the work of Brøbeck, the existing literature seems to lack any really satisfactorily comprehensive data on the familial occurrence of cancer, involving in particular an adequate series of controls. The present book describes the methods and results of an enquiry whose purpose was to make good this deficiency. It is concerned with the occurrence of cancer among the female relatives of 201 women suffering from cancer of the uterine cervix and of 215 controls. In the first section of the book the literature is reviewed and discussed, and emphasis is laid on the need for a new survey. The second section deals with the materials and methods employed, and is a model of clarity and precision. Full details are given of the purpose of the investigation, the use made of a pilot study, the selection of both the cancer and control probands, the methods of obtaining and handling the clinical and social information required, personnel employed, and so on. The results achieved are elaborated in the third section and discussed in the fourth. Certain details of the administrative background and the questionnaires used are presented in appendices.

The general conclusions of the survey are that hereditary factors do influence the frequency of occurrence of uterine cancer, though the effect is small. Thus the ratio of cases of uterine cancer to all cases of cancer was 26 per cent. in the female relatives of cancer probands, compared