

economics have in general omitted the second. This is partly because the later and weightier editions of Malthus' essay, like the later and weightier editions of Darwin's *Origin of Species*, change the emphasis of his argument. It is partly also no doubt because the principles of economics become unmanageable if an additional genetic variable is introduced into the theory. The omission however is a serious one because it conceals the contradiction which economists and sociologists are unwilling to admit, the contradiction between the economic and the biological aspects of Malthusian theory, the one demanding a standardisation of individuals, the other rejecting any standardisation of individuals.

The present book brings this contradiction home to us very well. For it is an attempt to recall the work of Malthus to our memory to-day. It consists of three accounts of thought on the subject in the eighteenth, nineteenth and twentieth centuries, a bibliography of Malthus and Malthusianism from 1793 to 1880 and reprints of Malthus' Summary of 1830 and his letter to Samuel Whitbread of 1807. The book as a whole is bound to be of great value. It has only one grave flaw: the failure to recognise the other side of the Malthusian system. The book as it stands is interesting. If this flaw were repaired it would be more than interesting. It would be gravely disturbing.

C. D. DARLINGTON.

IDEOLOGIE UND FORSCHUNG IN DER SOWJETISCHEN NATURWISSENSCHAFT.
By A. Buchholz. Stuttgart: Deutsche Verlags-Anstalt. 1953. Pp. 126. DM 2.90.

A review of Russian scientific literature from the end of the war to the death of Stalin. It deals with all branches of science, with the theories of Butlerov, Oparin, Lepeschinkaya and Lysenko and with the myths now attached to the names of Timiriazev, Michurin and Pavlov. There is an historical introduction and a bibliography of 376 papers, mostly Russian.

BIBLIOGRAPHY ON THE GENETICS OF DROSOPHILA. Part 2. By I. H. Herskowitz.
Commonwealth Bureau of Animal Breeding and Genetics. 1953. Pp. 212+xi. 21s.

Part 1 of *Bibliography on the Genetics of Drosophila* was prepared by Professor H. J. Muller and included papers up to 1938. Dr Herskowitz has now brought the tally up to 1950 in Part 2, which, like its predecessor, is published by the Commonwealth Bureau of Animal Breeding and Genetics.

The new volume includes 2841 books and papers and an index in two parts. The publications are arranged alphabetically by the name of the senior author, with full cross-references against the names of junior authors, so that a title can be readily traced once the name of any one of its authors is established. At the same time the General Index, occupying 40 pages and including some 1700 headings, should make it easy to trace papers by the subjects with which they deal. A shorter Systematic Index classifies the papers primarily by the species of *Drosophila* to which they refer. The index covers Part 1 as well as Part 2 of the Bibliography and so makes good a deficiency of the earlier publication. As in Part 1, titles originally given in a language other than those of Western Europe have been translated, and authors' names have been transliterated using anglicised orthography.

Publications have not been chosen for inclusion in any restrictive way. The systematics, morphology, physiology and natural history of *Drosophila* are included as well as the genetics. Publications not primarily concerned

with *Drosophila* have also been brought in where they would seem to be appropriate, so that many genetical books and reviews of a general kind are to be found in the list. By including articles from *Drosophila* Information Service, Dr Herskowitz has ensured the availability of a great deal of technical information not published in the normal way. He has taken the opportunity of catching a few publications which had eluded Professor Muller when he was preparing the earlier part.

Although a bibliography is not designed primarily to record the progress of a science, a great deal of information can in fact be gained from it. A striking feature brought out by Dr Herskowitz' publication, and one to which Professor Muller draws attention in his preface, is that the average annual output of papers relevant to *Drosophila* genetics has increased from 173 per year in the period 1925-38 to 237 in the years 1939-50; and this despite the facts that *Drosophila* has lost something of its dominating position in genetics and that the period in question includes the war years. Such figures bring home to us the accelerating progress of genetics itself as reflected in its ever-increasing literature; and at the same time we can see by the general references, which it is found desirable to include in a *Drosophila* list, how genetics is maintaining and even strengthening its unity as a scientific discipline, despite the growing spread of the living material from which it draws its experimental evidence. We can see, too, a different and more melancholy kind of history recorded in the pages of this bibliography when we observe the dates at which the publications of geneticists such as Dubinin and Timoféeff-Ressovsky suddenly cease.

But it is primarily as a guide to an extensive and essential genetical literature that *Bibliography on the Genetics of Drosophila* must be judged. It will fulfil this purpose admirably, and indeed it will be a necessity to every laboratory where genetics is practised.

K. MATHER.

THE PLACE OF BOTANY IN THE LIFE OF A UNIVERSITY. Inaugural Lecture. By C. D. Darlington. Oxford: Clarendon Press. 1954. Pp. 24. 2s. 6d.

An attempt to show that the development of analytical methods in the study of plants, chemical, genetical and microscopical, which was frustrated in the seventeenth and eighteenth centuries, has brought botany into relation with the other sciences and with the humanities, and thus requires the breaking down of the antique barriers between departments.