

must be taken into account. There is no indication of any diminution in the amount of taxonomic work, for the present volume records a total of 2,413 new generic and subgeneric names during 1954, a 50 per cent increase on the previous year.

The compilation of the "Zoological Record" is a heavy task, and requires considerable financial assistance to produce it at any reasonable cost. The list of donors includes institutions and individual subscribers in many parts of the world, the two leading contributors being the Royal Society and Unesco, but further donations will be required if the price of this invaluable publication is to be kept within reach of private individuals. EDWARD HINDLE

USEFUL FUNGI

The Friendly Fungi

A New Approach to the Eelworm Problem. By C. L. Duddington. Pp. 188+24 plates. (London : Faber and Faber, Ltd., 1957.) 21s. net.

ALTHOUGH, as the author states, this is not a technical book, it nevertheless embodies a wealth of authoritative information on predacious fungi which has hitherto been available only as fragmentary data dispersed among various British and foreign scientific journals. It deals with an absorbing subject which is made all the more interesting by the engaging and informal style of the text. Indeed, much of the merit of the volume is derived from the author's vivid and sometimes dramatic narrative surrounding the warring factions in Nature and their harnessing for useful purposes.

As the sub-title indicates, the book deals with the part played by aggressive soil-inhabiting fungi in checking the ravages of plant-parasitic eelworms which are to-day acknowledged to be among the farmer's worst enemies. It examines the possibility of further stimulating this biological control by inoculating the soil with potent strains of selected fungus cultures and by treating the soil to foster increased prolificacy and activity of the predators. To achieve such a disturbance of the state of dynamic equilibrium in favour of the fungi is by no means simple, and it is to the author's credit that it is his own work in this field which has provided the most useful pointers to surmounting some of the inherent difficulties.

The most fascinating section of the book is that devoted to the remarkable eelworm-trapping mechanisms of predacious fungi—the sticky hyphal networks, the sticky knobs, the constricting rings and the passive ring traps. Equally exciting is the account of the laboratory techniques which have been devised for studying these mechanisms—the employment of a pneumatic micromanipulator for handling the microscopic organisms and the use of cinematograph film for recording their movements. All is presented in a manner which is readily understandable to readers with no special scientific knowledge.

A notable feature of the book is the excellent and impartial way in which the author has summarized and evaluated research work conducted on predacious fungi in other countries; for example, the investigations into the control of root knot eelworm on pineapples in Hawaii and the attempted control of

both plant and animal nematode parasites in France. Unfortunately, the results from field experiments carried out in England on the control of potato root eelworm and cereal root eelworm are less convincing since they are expressed mainly in terms of crop yield. The logical criterion for measuring the nematicidal effects of the different treatments would be the comparative figures for larval or cyst populations of the eelworms in the soil recorded prior to treatment and after cropping. The reviewer has the impression that certain suppositions have been developed which merely reflect the effects of cultural or manurial treatments in enhancing the growth of the crop rather than in suppressing the eelworms.

The book is well illustrated with excellent photographs and carefully executed line-drawings, is provided with a useful bibliography and is free from major errors. On p. 17, Northern Ireland is mistakenly cited in a context appropriate to the Republic of Ireland, and some half-dozen misspellings of scientific names are evidently attributable to typographical errors.

R. CHAMBERLAIN

A RECONSIDERATION OF AFFECT

Pain and Pleasure

A Study of Bodily Feelings. By Thomas S. Szasz. Pp. xvi+301. (London : Tavistock Publications, Ltd., 1957.) 30s. net.

IT is, perhaps, a wise thing for scientists as well as artists to stand back occasionally and see what their work looks like at a distance. In this book the author is doing this with basic psychological terms and their application to psychoanalysis. Dr. Szasz is professor in the Department of Psychiatry at the State University of New York College of Medicine and, since he is an honours graduate in physics as well as medically qualified and trained in psychoanalysis, he has written the scholarly book one would expect.

The first part is a consideration of the philosophical aspects of the subject, and the second, third and fourth are devoted to various theories of pain, bodily feelings and pleasure. He accepts Russell's views regarding the separation of the material of physics into 'public data' and that of psychology into 'private data', and wisely refuses to accept explanations which try to combine the two. He presses for pain and pleasure to be classed as affects, as Fenichel suggested. Pain, he considers, is associated with the idea of something being taken away, or the threat of such loss or injury. Pleasure, on the contrary, is evoked by something being given to us even if it is only sensory stimulation or its discharge. He applies these views to such conditions as hypochondriasis, pseudocyesis, hysterical anaesthesia, and particularly to the phantom limbs which are so commonly felt after amputation and the curious pains felt in them.

This is not a book to read when one is half-asleep over a fire; it needs the reader's close attention. Nevertheless, everyone who writes on pain and pleasure will have to take the writer's ideas into consideration, and their application may be of considerable value.

There are an excellent bibliography, covering four pages, and a good index. The paper is good and the printing clear.

CLIFFORD ALLEN