

Book Reviews

contributions of this book will, no doubt, smooth and catalyse further understanding.

Hans Ågren
Department of Psychiatry
University Hospital, Uppsala

G. C. AINSWORTH, *Introduction to the history of plant pathology*, Cambridge University Press, 1981, 8vo, pp. xii, 315, illus., £27.50.

This well-produced and -illustrated book is, of course, primarily intended for those dealing specifically with botany or agriculture. Yet much of it will be of interest to doctors and medical historians, and the author himself notes the importance of interdisciplinary studies to all professions.

Plants, like man and other animals, suffer predominantly from diseases caused by fungi, bacteria, and viruses. Dr. Ainsworth shows that the plant pathologist is in fact a plant doctor – or, rather, an epidemiologist – whose task it is to diagnose, treat, and prevent diseases of plant populations, and he has organized his book on this basis.

The medical historian is reminded that some of the fundamental discoveries concerning human medicine have been the outcome of research into plant diseases. The first experimental evidence of the pathogenicity of any micro-organism was provided, at the beginning of the nineteenth century, by the demonstration that bunt of wheat is caused by a fungus; while the existence of viruses was revealed, at the very end of the century, by experiments on tobacco mosaic disease.

For the plant world, however, the fungi are by far the most important pathogenic agents, whereas in human and animal pathology the bacteria and viruses predominate. Since the fungi rarely proliferate within the human or animal body, their possible pathogenicity to man and animals has, until very recently, been largely ignored outside Russia and Eastern Europe. Yet, it has long been known that a toxic fungus was responsible for the outbreaks of ergotism which ravaged Europe from the Middle Ages up to the nineteenth century. Since the second World War, if not earlier, the Russians have incriminated exo-toxins of various fungi as the cause of other serious epidemic conditions in man and animals. More recently, it has been shown that some of these toxins may be carcinogenic in animals, and that such aflatoxins are widely present in groundnuts, wheat, and other crops used for human and animal food, and can even enter the milk of cattle. Thus, it should come as no surprise that the Russians have now been accused of initiating mycological warfare, with a “yellow rain” containing fungal exo-toxins.

It is, therefore, somewhat disappointing that Dr. Ainsworth, one of the world’s foremost mycologists, should confine this book almost entirely to the quantitative effects of plant diseases. Their qualitative aspects must surely be of interest to us all, and not least to plant pathologists and medical historians.

Elinor Lieber
Green College, Oxford

ROY PORTER (editor), “*The Earth generated and anatomized*” by William Hobbs. *An early eighteenth-century theory of the earth*. (*Bulletin of the British Museum (Natural History)*, Historical Series vol. 8, 26 March 1981), 4to, pp. 158, illus., [no price stated].

The publication of this manuscript is to be welcomed, though the casual reader may be forgiven for asking why. After all, it caused no significant reaction in its own day, and its author, who seems to have been remarkably ignorant of contemporary works on the same subject, was an undistinguished naturalist about whom we know very little. But, as Dr. Porter cogently argues, it provides us with a vivid example of what the average “under-labourer” in the field of natural history in the early eighteenth century was doing and has enough intellectual merit in its own right to arouse the interest of the specialist in this field.

Hobbs’s approach to the problem of “y^e manner how, and when, the Shells, and other Marine productions, came to be immassed and mingled in the Rocks and Mountains” (his “principal design”) was curiously anomalous. At a time when most theorists were mechanists, Hobbs held