

Book review

R. C. Cooke, 1980. *Fungi, man and his environment*. First published 1977, reprinted in paperback. 144 pp. Longman, London and New York. ISBN 0-582-44262-1. Price £ 2.95.

This attractive booklet should serve to arouse interest in fungi by a wide public rather than as a textbook for deeper study. It tells us 'what fungi do, why they are important to us and how they are being studied'. The chapters deal with general classification and structure, physiological activities and ecology, crop diseases and natural catastrophes, symbioses and dual organisms, ailments of man and his livestock, the use of fungi as biological control agents, fungus-growing insects, fungal toxins, industrial protein and modified foods, hallucinogenic fungi and other magic use, and fungi and the future. The appended bibliography gives just a small selection of papers to further wet the appetite.

Chapter 3 contains some impressive examples illustrating necrotrophic and biotrophic parasitism and emphasizes their economic consequences. The famine caused by *Phytophthora infestans* in Ireland is described in addition to pandemics of *Peronospora tabacina* in tobacco, *Hemileia vastatrix* in coffee and *Helminthosporium maydis* in new cultivars of maize. Mention is also made of the catastrophic outbreak of jarrah dieback in Australia due to *Phytophthora cinnamomi* and the role of Dutch elm disease in the UK due to an aggressive strain of *Ceratocystis ulmi*. More might have been said here about buffer capacities of the natural microflora against plant pathogens; some information on integrated control is given in Chapter 6, which also deals with the treatment of freshly cut stumps with *Peniophora gigantea* against *Heterobasidion annosum* and weed control with fungal pathogens.

Hopefully this booklet will spread the author's enthusiasm for mycology amongst the younger generation.

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