

Book review

G. C. Ainsworth: Introduction to the history of mycology. Cambridge University Press, Cambridge, London, New York, Melbourne, 1976. 359 pp., 106 figs., linen bound; price £ 11.80.

The history of mycology in the 18th century was exhaustively treated by Lütjeharms (1936); some brief chapters on the history of mycology have appeared in various text books and the longest treatise published so far is one by Ramsbottom (1941). Some important chapters of plant pathology were fascinatingly described by Large (1940), a short historical survey was given by Keitt in 1959 in Horsfall and Dimond's *Plant Pathology* and the most exhaustive text is the 'Geschichte der Phytomedizin' by Braun (1965). An up to date overall history of mycology including phytopathology was still lacking and this gap will be filled by Ainsworth's book.

This book does not describe, as one might expect, the development of all fields of mycology together in a chronological sequence, but can rather be regarded as a compendium of general mycology where each branch is followed individually from its beginning almost to the present day. Chapters thus include the origin and status – form and structure – culture and nutrition – sexuality, cytology and genetics – pathogenicity – poisonous, hallucinogenic and allergenic fungi – uses of fungi – distribution of fungi – classification – and organisation for mycology. A 30 page bibliography is arranged chronologically and includes titles up to 1974.

The chapter on pathogenicity (43 pp.) covers both plant and animal/human pathogenic fungi emphasizing the effect of their study on the growth of mycology. The strongly changing views on the classification of plant disorders until about 1850, when the reality of fungal pathogenicity became fully appreciated, is outlined and illustrated with the examples of bunt and black rust of wheat. The rapid development of plant pathology from about 1870 onwards is sketched under the headings: host-parasite relations, physiology of parasitism and fungicides; the last leading to the recent development of systemic fungicides. The discovery of phytotoxic fungal metabolites is reviewed in the chapter on poisonous fungi.

The book is attractively illustrated with reproductions from old books and contains relatively few portraits of the most important authorities; the largest portrait being that of Johanna Westerdijk who is mentioned in connection with culture collections in the last chapter.

If one compares Lütjeharms' text covering only the 18th century in 262 pp. with the present volume, it becomes clear that much information had to be suppressed for the sake of conciseness. The restriction to only the most important information, however, will make the book attractive to a large public. Primary and secondary sources are placed in the right light and the whole work gives a well balanced impression. It is pleasant to read in spite of the highly condensed information.

W. Gams