

Bookreview

SIWERT NILSSON (Ed.)

(Authors: A. KÄÄRIK, J. KELLER, E. KIFFER, J. PERREAU, O. REISINGER.)

ATLAS OF AIRBORNE FUNGAL SPORES IN EUROPE

Springer-Verlag, Berlin, Heidelberg and New York 1983, 9 + 139 pp., incl. 87 plates and 10 Figs. Price DM 128,—.

This is a very attractive and interesting publication containing illustrations and descriptions of a limited number of fungal diaspores made up by several mycologists, specialists in ultrastructures and microphotography, J. KELLER, J. PERREAU, H. LUNDSTRÖM, T. NILSSON, E. GRAFSTRÖM, E. KIFFER and O. REISINGER. The illustrations consist of excellent micrographs made by light microscopy, scanning electron microscopy and, in certain cases, also by transmission electron microscopy. About 87 species of fungi were selected from *Myxomycetes*, *Zygomycetes*, *Ascomycetes*, *Basidiomycetes* and *Deuteromycetes* with regard to their possible presence in air. Their illustrations are arranged taxonomically according to current classifications. A short review includes a brief outline of life cycles and general ontogeny of spores in the different groups of fungi. An introduction describes methods of preparing fungal spores material for a certain kind of microphotography and contains a glossary of mycological descriptive terminology. A short survey of airborne fungi recorded in some forest, agricultural and industrial sites is compiled after selected literature.

The contents of the publication does not fully correspond to the title of the book. The collection of illustrations is not the result of a systematic study of airborne fungal spore, but only a selection of excellent microphotographs of the ultrastructure of spores from different taxonomic groups of fungi. This Atlas is instructive mostly for taxonomists, discovering details from the spore morphology and ultrastructure and from the mechanism of their formation and departure. Some of the spores and their ultrastructure are illustrated and described here for the first time. The book could be useful also for plant pathologists, aerobiologists, allergologists, but not as a basic handbook, because illustrations of many common airborne fungal spores are not included.

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