

**BOOKS RECEIVED BY THE RIJKSHERBARIUM LIBRARY**

R. Agerer (Ed.). *Colour atlas of ectomycorrhizae, Issue 7.* (Einhorn Verlag, Eduard Dietenberger GmbH, Schwäbisch Gmünd. 1993.) Pp. 33, 8 col. pls. Price: DM 73.- incl. 1 binder.

The seventh issue of this loose-leaf colour atlas of ectomycorrhizae gives 8 coloured plates, of *Boletopsis leucomelaena*, *Gyrodon lividus*, *Hydnellum peckii*, *Phellodon niger*, *Piceirhiza oleiferans*, *Scleroderma citrinum*, *Suillus laricinus* and *Tricholoma acerbum*, together with half-tone photographs of anatomical features, and legends. Also in this issue, extensive additions are given to the glossary, check-lists on morphology, chemical tests, anatomy of the mantels, emanating elements, and cross sections. Keys are given for ectomycorrhizae on *Abies*, *Alnus*, *Betula*, *Cyclobalanopsis*, *Elaeocarpus*, *Fagus*, *Picea*, *Pinus*, and *Salix*. In an appendix a list is given of the plates that have been issued hitherto, and how to arrange them. A synoptic table makes identification of ectomycorrhizae easier. As the series progresses a new binder is necessary, and is supplied at cost with the present issue.

R. M. Dähncke. *1200 Pilze in Farbfotos.* (AT Verlag, Aarau-Stuttgart. 1993.) Pp. 1179, 1200 col. pls. Price: DM 148.-.

This is a new edition of R. M. Dähncke & S. Dähncke, 700 Pilze in Farbfotos, published in 1979. As the title suggests, the new edition is substantially enlarged with several hundreds of new photographs. Although the pictures mostly have been taken in a studio, they are generally of good quality and show very well the diagnostic features of the species involved. In comparison with the first edition of the book, many more species have been identified by specialists, which considerably increased the value of this book. Also some errors in the first edition have been corrected. The book will certainly be welcomed by professionals and amateurs, especially those that do not have the first edition.

D. Frese. *Die molekularbiologische Analyse der physiologischen Phänomene des Seneszenzsyndroms bei dem Ascomyceten Podospora anserina.* (Bibliotheca Mycologica 149, J. Cramer in der Gebrüder Borntraeger Verlagsbuchhandlung, Berlin, Stuttgart. 1993.) Pp. 117, 40 text-figs., 6 tables. Price: DM 60.-.

As an aerobic organism *Podospora anserina* produces energy by respiration with the help of cytochrome C oxidase. But if this system is inactivated an alternative respiratory system takes over. It was found during this study that, when both respiratory systems become simultaneously active, the mycelium ages quickly. If only one of the respiratory systems is blocked a long-living mycelium results. It has been suggested that as long as

the cytochrome respiration is active and the alternative respiration plays only a minor role, a choice of mitochondrial DNA is available. But when the alternative respiration becomes more active simultaneously, this choice is no longer available and incompetent mitochondria are accumulated, which finally kills the mycelium.

G.J. Krieglsteiner (Ed.). *20 Jahre Arbeitsgemeinschaft Mykologie Ostwürttemberg (AMO). Beiträge zur Kenntnis der Pilze Mitteleuropas IX.* (Einhorn Verlag, Eduard Dietenberger GmbH, Schwäbisch Gmünd. 1993.) Pp. 204, 10 col. pls. Price: DM 38.-.

The present volume of this series, that is published with irregular intervals, contains 17 papers written by Central European specialists in various fields of mycology (Babos, Benkert, Bohus, Clemençon, Enderle, Frommberger, Forstinger, Gminder, Haas, Krieglsteiner, Moser, Rastetter, and Tortic). Most of the contributions are floristic or taxonomic, dealing with macromycetes. The colour plates are of good quality, and depict 48 rare and interesting species.

G.J. Krieglsteiner. *Verbreitungsatlas der Großpilze Deutschlands (West). Band 2: Schlauchpilze.* (Verlag Eugen Ulmer GmbH & Co., 1993.) Pp. 596, 7 text-figs., 1987 distribution maps. Price: DM 88.-.

This is the second volume of an atlas with distribution maps of macro-fungi for West Germany. It contains the Euascomycetes with the exception of Taphrinales, Erysiphales, and marine or submersive taxa. It is a large (A4-format) volume with well-printed illustrations and 1987 maps in colour. Initially meant to cover only the distribution of Ascomycetes in Baden-Württemberg (Germany), the region was extended to the whole territory of the former Federal Republic of Germany ('Bundes Republik'). The list of Ascomycetes is based on Baral & Krieglsteiner (1985), 'Bausteine zu einer Ascomyceten-Flora der BR. Deutschland' (Z. Mykol. Beih. 6); while the nomenclature is followed after Cannon, Hawksworth & Sherwood-Pike (1985), 'The British Ascomycotina. An annotated checklist'. The observations of 500 cooperators are included. In the numbered distribution maps records after 1 May 1945 are presented; earlier records, records from literature, or records from uncertain localities are presented without number in an overall list of the species.

In the introductory part a survey is presented of the projects of mycological mapping in Europe. Despite the great care that is taken to present in a uniform way the identifications and records of so many cooperators, still a few irregularities could be observed: *Aleuria hortensis* (No. 15) is a species of *Peziza* and not of *Aleuria* Fuckel; *Coprotus aurora* (No. 0360) and *C. glaucellus* (No. 0361) are also presented as *Ascophanus aurora* (No. 106) and *A. glaucellus* (No. 108); *Rhyarobius depauperatus* (No. 1710) and *Ascophanus holmskjoldii* are undoubtedly the same as *Saccobolus depauperatus* (No. 1715) and *Thecotheus holmskjoldii* (No. 1833), respectively.

M. Moser & W. Jülich. *Farbatlas der Basidiomyceten. Colour Atlas of Basidiomycetes. Lief. 10.* (Gustav Fischer Verlag, Stuttgart & New York. 1993.) Pp. 184, 60 pls. Price: DM 92.-.

The tenth issue of this loose-leaf colour atlas contains figures in colour of *Hygrophorus*, *Lacrymaria*, *Marasmius*, *Mniopetalum*, *Mycena*, *Nyctalis*, *Panellus*, *Phaeocollybia*, *Pholiotina*, *Phyllotus*, *Pluteus*, *Porpoloma*, *Psathyrella*, *Resupinatus*, *Rickenella*, *Rozi-tes*, *Russula*, *Strobilurus*, *Tricholomopsis*, and *Tulostoma*. The photographs are of variable quality, ranging from rather poor to fairly good.

H. Neubert, W. Nowotny & K. Baumann. *Die Myxomyceten Deutschlands und des angrenzenden Alpenraumes unter besonderer Berücksichtigung Österreichs, Band 1. Ceratiomyxales, Echinosteliales, Liceales, Trichiales*. (Karlheinz Baumann Verlag, Lindenstrasse 40, D-72810 Gomaringen, Germany. 1993.) Pp. 344, numerous col. pls., line drawings and SEM pictures. Price: DM 190.-.

The present volume is the first of a three-part Monograph of Myxomycetes in Germany and the Alps, in particular the Austrian Alps, and covers the Ceratiomyxales, Echinosteliales, Liceales and Trichiales. In the general part information is given on the life-cycle of myxomycetes, and the characters for identification, followed by chapters in ecology and distribution, methods for sampling and conservation, and an extensive glossary. The taxonomic part gives keys and descriptions of all species known from the area. The descriptions are very elaborate and extensive. The line-drawings give good, clear information on the diagnostic features, but what makes this book unique are the colour plates. These are of superb quality, highly professional, and depict all species strongly enlarged, as you may see them under a stereomicroscope. Therefore this publication is warmly recommended, not only to taxonomists, but also to teachers, who will find it most useful as an introduction in the world of myxomycetes for their students.

D.N. Pegler, L. Boddy, B. Ing & P.M. Kirk (Eds.). *Fungi of Europe: investigation, recording and mapping*. (Publications Sales, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, England. 1993.) Pp. 322, numerous line illustrations. Price: £ 18.-.

This book gives the proceedings of the eleventh Congress of European Mycologists, held at the Royal Botanic Gardens, Kew, 1992. It contains twenty-three papers, written by international experts and arranged under the headings Fungal Recording & Mapping, Fungi in European Ecosystems, and Conservation of European Fungi. As such it gives the latest state of research in these fields in Europe.

D.N. Pegler, B.M. Spooner & T.W.K. Young. *British Truffles. A revision of British hypogeous fungi*. (Royal Botanic Gardens, Kew. 1993.) Pp. 216, 30 text-figs., 26 plates (of which 12 in colour). Price: £ 19.50.

This book is a full treatment of the British hypogeous fungi by three different authors. After a short introduction, T.W.K. Young treats the 'Pea Truffles' (*Zygomycotina*, Endogonales), B.M. Spooner the 'True Truffles' (*Ascomycotina*, Elaphomycetales and Pezizales), and D.N. Pegler the 'False Truffles' (*Basidiomycotina*, in six orders). The small group of the 'Anamorphic Truffles' (*Deuteromycotina*) is anonymously included. After earlier treatments by Rev. M.J. Berkeley & C.E. Broome (1846-1875), and Prof. L.E. Hawker (1954 and 1974), the study of hypogeous fungi in Britain was stimulated

by the British Mycological Society by an annual 'truffle hunt'. In the present account all relevant material deposited in the herbaria of the Royal Botanic Gardens, Kew and the Royal Botanic Garden, Edinburgh is revised and included. The considerable taxonomic developments during the last decennia are also taken into account. Keys are provided for the identification of all orders, families, genera, and species included. Each species is fully described and illustrated in black-and-white line-drawings, habitus sketches in colour, and scanning electron micrographs of details and spores. An indispensable work for those who are interested in hypogeous fungi.