

BOOK REVIEWS

A. Bidaud, X. Carteret, G. Eyssartier, P. Moëgne-Loccoz & P. Reumaux. *Atlas des Cortinaires, pars XIII*. (Editions Fédération Mycologique Dauphiné Savoie, E. Bidaud, 70 rue Edison, F-69330 Meyzieu, France; esperance.bidaud@wanadoo.fr, 2003.) Pp. 711–861, numerous line-drawings, 58 fiches, 55 coloured plates. Price: EUR 120.

The 13th edition of this standard iconography of the genus *Cortinarius* treats two different subgenera. Pars XIII (1) deals with subgenus *Phlegmacium*, section *Fulvi*, a group of small to large species with brown pileus, a bulbous stipe base, and amygdaliform or limoniform spores. 40 Taxa are treated, of which 13 are new to science. Pars XIII (2) deals with subgenus *Hydrocybe* sect. *Obtusi*. About 70 taxa are treated, of which also 13 newly described. All taxa are well-described, with elaborate line-drawings of microscopical features, and colour plates in pencil of high quality. Identification keys are provided.

M. Enderle. *Die Pilzflora des Ulmer Raumes*. (Verein für Naturwissenschaft und Mathematik in Ulm, order: Manfred Enderle, Am Wasser 22, D-89340 Leipheim-Riedheim, Germany; manfred.enderle@gmx.de, 2004.) ISBN 3-88294-336-X. Pp. 520, about 300 coloured photographs. In German. Price: EUR 24.50.

Manfred Enderle is a well-known German mycologist, specialized in the taxonomy of Agarics. His numerous publications deal with various genera, with an emphasis on *Psathyrella* and *Conocybe*. Floristics have his warm interest as well. The present book may be considered his magnum opus, and gives an overview of long-term observation of the macrofungi in the region of Ulm in southern Baden-Württemberg and Bavaria, southern Germany. The introduction gives a short overview of the life cycle of fungi, and the methods to study and collect them, as well as an introduction into the Ulmer region with its vegetation and climate. The main part of the book, however, is devoted to an extensive overview of all of the about 2,800 taxa known from the area, arranged according to the families, with correct name and list of localities. Rare and critical species are often fully described and illustrated in line-drawing and often excellent coloured photographs. Especially these form a nice source of information, which makes the book interesting also for those who do not live in the Ulmer region. At the back of this book the reader will find about 30 pages with black-and-white photographs of mycological acquaintances of the author, including several famous mycologists.

S.P. Wasser. *Family Agaricaceae (Fr.) Cohn of Israel mycobiota. I. Tribe Agariceae Pat.* In: E. Nevo & P.A. Volz (eds.). *Biodiversity of Cyanoprocaryotes, Algae and fungi of Israel.* (A.R.G. Gantner Verlag Kommandit Gesellschaft, Fl 9491 Ruggell; distributed by Koeltz Scientific Books, Germany; e-mailkoeltz@t-online.de, 2002.) ISBN 3-9041444-87-1. Pp. 212, 74 line-drawings. Price: EUR 98.

This book is the third of this series, and deals with the tribe *Agariceae* of the family Agaricaceae. The first one dealt with Cyanoprocaryotes and algae, the second with soil microfungi, all of Israel. Although the higher basidiomycetes of Israel have been investigated and a number of publications has appeared, the knowledge of the mycota of Israel is far from complete. This work contributes to the knowledge of at least part of the higher basidiomycetes. The book starts with an introduction of 6 pages in which the outline of the book is given and the backgrounds of the family Agaricaceae. The chapter "Main natural features of Israel" gives details on the geology, climate and vegetation. The main part of the book is the systematic part, which begins with an outline of the family, and an overview of the used characters, including an essay on morphometric characters of the basidia and characters of pigments and proteins, together with elaborate comments on their use in unravelling the taxonomy of the family. The chapter also gives an overview of the work done by others using molecular data. The last c. 120 pages are filled with a treatment of the tribe *Agariceae*, with a key to the 4 genera, and of each genus the species are listed. Of each species a comprehensive synonymy with literature references, iconography, an extensive description, distribution, specimens examined and ecology is given. Of many species line drawings are depicted, and sometimes a SEM photograph is given, as well as a world-distribution map. Unfortunately no keys to the species are provided.

Although this book is a welcome contribution to the knowledge of macrofungi in Israel, some critical remarks need to be made. Numerous are the orthographical errors in the book, unfortunately, and the use of English could use some clarification. Also the family delimitation is rather curious: genera like *Cystoderma*, *Squamanita* and *Pseudobaeospora* are included, really a very classic approach which is contradicted by morphological characters as well as molecular research. The reasons for this dissenting view are not very strong. The author disagrees in this book with the new genus *Allopsalliota* to accommodate *A. geesterani*, apparently without having read all the arguments. However, molecular research underlines the considered decision to create a new genus. Also, considering the description and drawings of *A. geesterani* in this book, the find in Israel may well belong to another (perhaps new) species of sect. *Duploannulatae*. Considering the drawings, the presence of clamps in many of the pileal cuticle drawings in the genus *Agaricus* is surprising, since the genus is known for its absence of clamps.

Nevertheless, this book serves the purpose it was written for, to add to the knowledge of basidiomycetes in Israel, and as such it serves this purpose well.

Alterra. *Tree Doctor. Diagnosis of diseases of forest and ornamental trees*. CD-Rom (Alterra, Wageningen, info.alterra@wur.nl, 2001.) Price: EUR 75.

This CD-Rom is meant for people who manage trees and are confronted with diseases and plagues. It comprises data of 196 tree species on all kinds of attacks which kill or devalue a tree or scrub. It contains data on harm by insects (242 species), infective diseases (112 species, among which macro- and microfungi), mammals (3) and abiotic factors like drought or damage by herbicides (7). All diseases and plagues are provided with illustrations of the symptoms, elaborate descriptions of the species which causes it, including lifecycle, degree of harm, and, if relevant, what can be done against it. Also included are data about useful value of trees, a glossary, a bibliography and a search engine. It does not pretend to be a complete encyclopedia of tree species and their diseases, but gives information about the most common trees and harmful factors (450) that occur in the four countries that participated in this project: the Netherlands, France, Italy and Great Britain. The CD-Rom has therefore appeared in four languages.

The Dutch version is strangely enough the most comprehensive one, also, the English version could use some improvement by a native speaker. Of each organism the scientific name is given, the vernacular name, taxonomical details, host plants, symptoms, possible confusion with other symptoms, harm, distribution and frequency. The symptoms and their cause are illustrated with 1–3 colour photographs.

There are in principle two ways of reaching a result: the first is by choosing the species of tree, successively the part of the plant which is infected, and the symptoms, the second entrance is to choose directly for the organism or symptom. The pictures of the infected parts are a bit simple and could easily be improved.

Although this CD-Rom is developed for use by nature managers and not for professional mycologists, it is always interesting to see what fungi are treated in a programme like this. Most of the 112 infective diseases concern fungi, and in that part we are the most interested. In general their pictures are not of good quality, and that is a pity, since they are easy-to-obtain pictures of rather commonly occurring species. Some pictures are even wrong: one of the photographs of *Heterobasidion annosum* refers to *Ganoderma adspersum*! Also the choice of species is rather limited. While a medium like a CD is suitable for storing an enormous lot of information without too much costs, some important species are lacking, like *Heterobasidion annosum* and *Fomitopsis pinicola*. Although the CD-Rom is not meant as an encyclopedia, a lot more information could have been given on different species. And the way to find what species has caused the symptom one is looking at seems a bit complicated, by clicking on pictures. It is likely that at least the bracketfungi will sometimes be wrongly identified, but since the main protection of trees against those fungi is keeping the tree in good condition and prevent mechanical damage, that should not be a problem. A missed opportunity is the lack of microscopical characters. In this way often no certain identification can be made. The orthographic errors are a bit annoying.

In summary this CD-Rom is interesting, but mostly as a reference book, and it remains to be seen whether this programme is really helpful for managers of trees. It needs to be expanded and updated, and nicer photographs are needed, but a good start is made with it.

Th. Laessoe & J.H. Petersen. *MycKey. version 1.0*. CD-Rom. Keys to 528 genera of Basidiomycota from Northern Europe. (Svampetryk, Denmark, svampetryk@webspeed.dk, 2003.) Price: EUR 40.

MycKey 1.0 is a CD-Rom with a synoptical key to 604 genera of Basidiomycota, which are, according to the authors (almost) all genera of the Basidiomycota from northern Europe. Searches are performed through more than 120 fully illustrated search layouts with check boxes and pop up menus. It includes more than 2000 colour photographs of representative species, more than 5000 references, descriptions, informations on generic type, authors, synonyms and the number of species in the area. It can run in a Mac as well as a Windows environment, and has a version in English and Danish.

An exciting-to-use CD-Rom it seems, but unfortunately the first try did not succeed at all. QuickTime needs to be installed on your PC if one wants to run MycoKey version 1.0. Fortunately there is a new version of MycoKey, version 1.1, downloadable from the website (www.mycKey.com). The programme starts with an introduction screen where one can find background information about Mycokey. And, even more important, how the programme works. First one has to decide to use the easy or the full version. The easy version, as the authors state, “gives the unexperienced mushroom collector a soft start with the most common genera and rather easy characters, and is suitable for children from 10 years and up”. The full version serves the advanced student and the professional mycologist with the full character set of more than one thousand characters, lots of illustrations and lots of references to revisions, fungus, keys, etc. A hurried user could have some difficulties finding which button is what, but pressing the keybutton for starting the key is more or less logic. After doing this one gets all sorts of questions to answer, and to the left an indication is given of how many genera are left to decide from. The authors advise to fill in only those questions one is certain of, which is in general a good advice. One can check which genera still agree with the character states by pressing one of the buttons on top, and going back to the exercise of filling in is the lower right half of the same button. The buttons could do with some more explanatory labels, now one has to press the question mark button to find out which is which.

All sorts of species were tried to be identified up to generic level with the full version, to find out if the programme really works. Unfortunately, the character states are sometimes not correct: *Macrolepiota* is classified as having thin-walled spores instead of thick-walled, an *Agaricus* with an umbonate cap is impossible according to the programme, even though in the description caps can be umbonate, omphaloid genera like *Rickenella* and *Omphalina*, often with a convex, umbilicate cap can not be identified with that shape of cap, a *Pleurotus* with a smooth cap can not be identified. Colour seems to be especially difficult to code: one can choose from a range of colours, but colours are sometimes wrongly coded for species: *Allopsalliota* and *Agaricus* have the wrong colour of sporedeposit, *Myriostoma* has the wrong colour of fruitbody, *Leccinum holopus*, with its pale colour of the cap can not be identified, the colour of the cap of a fresh *Laccaria amethystea* is not available. These failures point us maybe once again to the fact that genera are often difficult to characterize within macrofungi. Also, the choice of character states is sometimes a bit limited: the flesh (context of an agaric) can only be cottony, brittle, tough, hard, waxy or gelatinous, there is no option to choose for soft without being waxy or gelatinous. Of course, the examples of species which could

be correctly identified to genus level were numerous and are not enumerated here. And the photographs of the several species per genus are without exception of very high quality! Also pictures are included of genera which are not exactly commonly depicted, like *Episphaeria*, *Pellidiscus* or *Campanella*.

The programme needs in general more evaluation and updating before it will become a bestseller as an identification programme. But the ingredients are already there: the nice pictures, and an enormous lot of information on a lot of species and genera. Enough reason to buy it. But we are eagerly awaiting the next updates and MycoKey 2, which will contain the discomycetes.