
 Book review

Webster, J.: Pilze: Eine Einführung. Berlin, Heidelberg, New York: Springer 1983. 641 + xvii pp., 332 figs. Soft bound DM 118,—.

The author John Webster is closely connected with handbooks of mycology. His handbook has provided a valuable general introduction to mycology. Now, a second edition of "Introduction to Fungi" has appeared which is translated into German by Dieter Epp.

This revised edition gives the reader a clear and understandable introduction to the morphology and reproduction of the different fungal classes.

The incompatibility question of the *Myxomycetes*, the infection mechanism of the *Plasmodiophoromycetes*, the organisational gradation of hyphal tips of the *Oomycetes*, *Zygomycetes*, and the classes with septated hyphae are clearly discussed and elucidated with photo's and drawings. In the chapter on the *Fungi imperfecti* the development of the different vegetative reproductive forms is described and grouped according to three actual topics: the aquatic imperfect fungi, the animal-trapping fungi and the imperfect fungi living on plant seeds.

In addition, the methods of cultivating different fungi, selected examples for specific taxa, are described and the monographies referred and consulted to are indicated by the author.

It is my opinion that by placing the lichens under the inoperculate *Discomycetes*, as *Lecanorales*, one minimizes the significance of the lichens as a whole. The question is not solved by the sentence: "Most lichens belong to this group, though, other fungi are also correlated with lichens, e.g. the *Pleosporales*, *Hysteriales*, *Sphaeriales*, *Basidiomycetes* and some *Fungi imperfecti*."

Personally, I have some difficulties with the use of the suffix "-ota" for categories other than "Regna". Here it is used for phyla and the suffix "-otina" for subphyla. It is acceptable when they are used consequently, however: on page 232 the term "*Ascomycotina*" is used, which is meant as class, on page 249 it is used as a sub-phylum.

On page 394 a key is given for the determination of *Basidiomycetes*. In this key the *Holo-* and *Phragmobasidiomycetidae* are not mentioned, while these subclasses are mentioned in the text. Both terms are used here in a different sense i.e., as subclasses of the *Hymenomycetes*. This means that the fungi with a undivided basidium and those with a divided one are placed in three different groups. The fungi with a basidium divided by transverse septae are placed in the class of the *Teliomycetes*, and by longitudinal septae in the *Hymenomycetes*. The fungi with a whole basidium (undivided) are placed partly under the *Hymenomycetes* and the remainder under the *Gasteromycetes*.

The following points I regard as slips of the pen: In Fig. 89, page 184, right-sided spiralisation is not indicated, i.e. left-sided only.

In Table 8, page 477, the following definition for teleospores is given: "on basidia formed spores" instead of "on dikaryotic hyphae in sori formed restspores, in which the karyogamy takes place". The head of the chapter on page 529 is not printed in capitals as are both other heads on page 501 and 516.

On the whole, however, this book is a good reference book for teachers and scientists, and a valuable introduction text for students.

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