Notes R.B.G. Edinb. 38(2):366 (1980)

BOOK REVIEW

A Life's Work. Over the last two years or so, a new approach to the classification of the agaricoid fungi has been offered by Professor Robert Kühner in a serial paper which has appeared in the Bulletin Mensuel de la Société Linnéenne de Lyon. The reviewer and many others have eagerly awaited the appearance of each new part as they represent a condensation of Kühner's thoughts, and are based on his long experience in agaricology and on the research work of the Lyon school. These parts have now been brought together in a single volume.*

The book is most welcome, particularly as at last one now possesses an alternative to Rolf Singer's monumental work, *Agaricales in Modern Taxonomy*. Kühner's synthesis is based upon morphological, biochemical, cytological, genetical, physiological and ecological information, as well as optical and electron microscope studies. The book illustrates the wide spectrum of Kühner's interests and those of the students he has directed during his years at Lyon. The work expands enormously the critical survey of the characters of the Agaricales offered by Singer as his basis of taxonomy, but omits Singer's species lists and much of the infrageneric breakdown found therein. In this way the two works are in part compatible. However, even if infrageneric data are not extensive, the most important changes are at ordinal level where the agaricoid fungi, once dispersed in the single order Agaricales, are now to be found in the Pluteales, Tricholomatales and Russulales, with the Agaricales reduced to contain, in the main, dark-spored taxa. The splitting off of the Russulales has long been a feature of French thought and is now being widely used, but the introduction of the Pluteales and Tricholomatales will be much harder to stomach, although the arguments put forward are stimulating.

Kühner's book is in French, although a 33-page English summary, covering the main conclusions, is provided; it is hoped this summary will make the book more attractive to those whose first language is not French. The first part of the book (pp. 1–233) covers a discussion on characters used in the taxonomy of the agarics and the second part (pp. 234–890) outlines the established genera from Coprinaceae and Cortinariaceae through to the Tricholomataceae, Hygrophoraceae and Pleurotaceae, with reference at all stages to the traditional conservative classification of the immediate post-Friesian era.

The main text is followed by a synoptic table covering the classification of the European hymenomycetoid agarics which is particularly useful as the page numbers, where the genera are located in the main text, are provided. The Boletales is added to the table for completeness, based on a parallel article with N. Arpin in the same journal (46(4):83 (1977)); it is a pity this paper has not been incorporated into the book. The major failing with the table is that the classification used for European species is based solely on European species, with little reference to extra-limital taxa.

The synoptic table is followed both by major comments relating to the classification proposed by Kühner and by a list of references which in the main is composed of French titles. This presumably is because the book is a personal account built over a long distinguished teaching career, but it emphasises the areas which have been omitted. A synopsis and indices of terms, species and higher taxa are provided and eight pages of additions, modifications or corrections follow the indices.

The work is dedicated to the memory of Elias Fries, father of mycology. I think he would have many questions to ask if only he were with us today . . . !

R. WATLING

* Les Hyménomycètes agaricoides (Agaricales, Tricholomatales, Pluteales, Russulales). Etude générale et classification by R. Kühner. xi + 1027 pp. 1980. Numéro spéciale du Bulletin de la Société Linnéene de Lyon 49. Lyon.