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H. C. BELS-KONING & W. M. VAN KUIJK, *Mushroom terms, Polyglot on research and cultivation of edible fungi, English, German, Dutch, Danish, French, Italian, Spanish and Latin* (Pudoc, Centre for Agricultural Publishing and Documentaion, Wageningen, 1980). Pp. 312. Price: ± DM 100. — .

This glossary of technical and scientific terms used in the world of the growers of edible fungi is the considerably enlarged successor of 'Mushroom terms in five languages', a publication which was out of print for more than 10 years. To the original five languages English, German, Dutch, Danish and French, two more have been added, viz. Italian and Spanish.

The main table of the glossary consists of 1169 numbered English terms in alphabetical order, each followed by the corresponding terms in the other six languages. Additional alphabetical indices in these other languages refer to the numbers of the terms in the main table.

D. M. DRING, *Contribution toward a rational arrangement of the Clathraceae*, Edited by R. W. G. Dennis (Reprint from Kew Bull. 35(1), 1980; published by the Royal Botanic Gardens, Kew). Pp. 96. Price: £ 5 (£ 6 by surface post overseas).

By the untimely death of Dr. Dring, Kew, his far advanced manuscript on the Clathraceae of the world remained unfinished. Fortunately Dr. Dennis prepared it for publication and provided it with identification keys.

The great interest of the resulting paper lies in the author's efforts to arrange genera and species in several supposedly phylogenetic series. *Clathrus* (augmented by the inclusion of *Anthurus* and *Linderia*) is considered the most primitive genus. Two of the five series distinguished remain within the boundaries of the extended genus *Clathrus* (the Anthuroid and the Clathrelloid series), the Lateroid and the Blumenavioid series would find their origin in *Clathrus* and the Lysuroid series with *Colus*, *Pseudocolus*, *Lysurus* (including *Simblum* and *Kalchbrennera*) is thought to be related to the Clathrelloid series. Not more than eight genera are maintained and all together about 40 species are described.

This publication is not a complete monograph but presents a well-argued and well-illustrated endeavour to put systematics of the Clathraceae on the right track.

B. GEDEK, *Kompendium der medizinischen Mykologie* (Parys Studentexte 25, Paul Parey Verlag, Berlin/Hamburg, 1980). Pp. 395, 195 Text.-figs., 2 Col. Pls., and 34 Tables. Price: DM 48. — .

The main part of the compendium is preceded by a condensed introduction to the principles of mycology (136 pp.). In the successive chapters are treated morphology, reproduction, nutrition,

physiology and metabolites, occurrence (particularly in food of man and animal) and detection and isolation technics for fungi and mycotoxins. The important terms and concepts are printed in bold type.

In the special part the mycopathology of man and animal is treated in three chapters respectively on mycoses, mycological allergies and mycotoxicoses. All diseases caused by fungi are treated in the same comprehensive way, beginning with name and symptoms as well as the name(s) of the fungus and toxin(s), followed by data on geographical distribution, ecology, epidemiology, clinical aspects, characteristics and detectability of the fungal agent, therapy and prevention.

This well-indexed book is written in the first place for medical and veterinarian students, physicians, veterinaries and medical microbiologists.

W. JÜLICH & J. A. STALPERS, *The resupinate non-poroid Aphyllophorales of the temperate northern hemisphere* (Verh. Kon. Nederl. Akad. Wetensch. Afd. Natuurkunde, 2nd Ser., Vol. 74, North-Holland Publishing Company, Amsterdam/Oxford/New York, 1980). Pp. 338, 81 Text-figs., 1 Table. Price: Dfl. 120. —

A book consisting for the greater part of a comprehensive key to about 800 species in 131 genera of resupinate non-poroid Aphyllophorales of the northern temperate zone. To make identification as easy as possible, in the main entries easily recognizable characters are used instead of more fundamental characters that are difficult to observe. The use of the key to the genera (14 pp.) is facilitated by a preceding 'basic key' using the main characters which makes it possible to start identification immediately at the relevant part of the generic key.

The main body of the book (248 pp.) consists of descriptions of the genera (treated in alphabetical order) followed by keys to the species in which diagnostic descriptions of the species are incorporated. Distributional data are given only on the level of continents. Information on the substrate is always given in general terms in the generic descriptions and in the species description only if of special interest.

The authors have refrained from arranging the genera in families because such an arrangement 'is bound to be artificial, leaving too many intermediate taxa'. This point is well illustrated on a folded Table showing a rather dense net of supposed relationships. The bibliography is impressive (409 entries).

R. KÜHNER, *Les Hyménomycètes agaricoïdes (Agaricales, Tricholomatales, Pluteales, Russulales)—Etude général et classification* (Bull. Soc. linn. Lyon 49 (Num. spéc), 1980). Pp. 1045, with Text-figs. (drawings and black-and-white photographs) on 203 pp. Price: Frs. 580. — till June 30, 1981; Frs. 650. — after that date.

A well-bound volume of more than 1000 continuously numbered pages containing the reprints of a series of papers published in the Bulletin de la Société Linnéenne de Lyon from March 1978 to May 1980. The reprints are supplemented with an introduction, a synoptical table of the proposed classification, a French and an English summary of each about 30 pp., a very extensive bibliography, and indices.

This is undoubtedly the most important publication in the field of agaricology since many years. In it the whole system of the agaricoid Hyménomycètes is probed and reconsidered and, as a result of this, many major and minor alterations are introduced.

The system of the Agaricales as gradually modelled by Singer in the three editions of his book 'The Agaricales in modern taxonomy' is in broad outlines accepted by many agaricologists. Kühner has shown now that there are very serious reasons to partly revise this system. To a fuller extent than ever before Kühner has evaluated the information accumulated in recent years on the ultrastructure of spore walls, the cytology of basidia, spores and hyphal tips, the chemistry of pigments, the ontogeny of the fruit-body, etc. and hence drawn his conclusions.

A grouping of the families with emphasis on the characters of the spore wall and on cytological data has led to the recognition of five orders (Tricholomatales, Agaricales, Pluteales, Russulales and Boletales) instead of the single order in Singer's classification.

The number of families is in both systems about the same (Kühner, 19; Singer, 18). This does however not mean that these authors have the same point of view on the family level. Only seven families have more or less the same circumscription in both systems. Six of Kühner's families are lacking in Singer's classification and five of those accepted by Singer are lowered in rank or dispersed by Kühner.

Perhaps of still greater importance is a considerable amount of reshuffling done by Kühner in the rest of the families; e.g. the Resupinatae and the Panae (= Pannelae Sing.) are moved to the Pleurotaceae, the Cystodermateae to the Tricholomataceae and the Panaeoleae together with the Bolbitiaceae to the Strophariaceae. Moreover the last-named family is strongly enlarged by Kühner by inclusion of the Crepidotaceae and, at the cost of the Cortinariaceae, by transferring *Galerina*, *Naucoria* (without *Alnicola*), *Phaeocollybia*, and *Gymnopilus* to it. Thus the Strophariaceae have become a large family, rather difficult to define.

On the genus level there is a strong tendency in Kühner's book to reduction of the number of genera, this standing in strange contrast to the increase of taxa on higher levels in the same work. Kühner advocates the maintenance of large classical genera as *Lepiota* and *Cortinarius* in their widest sense. In addition several well-known genera are merged in others, such as *Stropharia* and *Hypholoma* in *Psilocybe*; *Tubaria*, *Phaeomarasmium*, *Phaeogalera*, and *Flammulaster* in one genus *Naucoria* (exclusive of *Alnicola*); *Dermoloma*, *Porpoloma* and *Armillaria* s. Singer (type: *A. luteovirens*) in *Tricholoma*, and perhaps more surprisingly *Alnicola* in *Hebeloma*, *Marasmiellus* in *Micromphale*, *Megacollybia* (type: *Collybia platyphylla*) in *Hydropus*, *Geopetalum* in *Lentinus*, etc.

This book is so crammed with information that it takes about a year to digest. But that is not surprising as it gives us a life-time of experience with agarics of one of the greatest mycologists of our time.

G. LAZZARI, *Glossario micologico in cinque lingue* (Suppl. Boll. Gruppo micol. Bresadola, Trento, 1980). Pp. 165. Price: ?

This well-edited and attractively printed and bound booklet is a mycological glossary with Italian as the leading language. Nearly 1000 terms, in alphabetical order, are defined and of each the equivalents in Latin, French, German and English are given. Indices in each of these 'foreign' languages refer back to the numbers of the terms in the main list.

W. J. SUNDBERG & J. R. RICHARDSON, *Mushrooms and other fungi of Land Between The Lakes* (Tennessee Valley Authority, 1980) Pp. 60, 93 col. photographs. Price: \$ 3.50 (only to be ordered, with simultaneous payment by check, from W. J. Sundberg, Dept. of Botany, Southern Illinois University, Carbondale, IL 62901 U.S.A.).

This is a modest field guide to the larger fungi of Land Between The Lakes, a peninsula in western Kentucky and Tennessee. About 90 species are illustrated on good to excellent coloured photographs and briefly described. Several of the species depicted are unknown in Europe.

V. WIRTH, *Flechtenflora — Ökologische Kennzeichnung und Bestimmung der Flechten Südwestdeutschlands und angrenzende Gebiete* (Uni-Taschenbücher 1062, Verlag Eugen Ulmer, Stuttgart, 1980). Pp. 552, 136 Photographs and a number of Text-figs. Price: DM 29.80.

A lichen-flora intended as the successor of K. Bertsch's 'Flechtenflora von Südwestdeutschland' (1955). However, the number of species included has been considerably increased, the keys are more elaborate and, above all, the ecological information has been considerably enlarged. Typical of this flora is that the length of the part with the ecological characteristics of the species of a genus usually exceeds the length of the key of that genus, in which the rather concise morphological information is included.

This work covers in the first place the lichens of South-western and Western Germany and adjacent regions of Switzerland and France, but it is claimed to be useful in the whole of Central Europe exclusive of coastal and strictly alpine habitats.