

## REVIEWS

L. E. WEHMEYER, *A world monograph of the genus Pleospora and its segregates*. (The University of Michigan Press. Ann Arbor.) Pp. xi + 451, 1 chart, 25 text-plates. Price: U.S. \$ 15.00.

There are few groups, even among the notorious pyrenomycetes, that have been the source of new species to such an extent as the one covered by this monograph. Its author recognizes a big central and rather heterogeneous genus *Pleospora* (with 100 species) and some affiliated smaller genera, *Platyspora*, a new genus (3 species), *Clathrospora* (8 species), and *Pyrenophora* (7 species). 71 species are excluded from these genera. Dr. Wehmeyer had very profitable hunting, judging from the vast number of synonyms he admits and discusses under the accepted species. One would conclude that quite a number of the species as he defines them are broadly conceived or very variable. In the Chapter "Nomina dubia, confusa, nuda, etc." 62 specific names are treated; and in the Chapter "Species non vidi" no less than 223 specific names are listed or discussed. Thus, it would seem that there is still ample opportunity for further hunting and for redescription of as yet insufficiently known species.

Dr. Wehmeyer has striven to arrange the species of *Pleospora* known to him into subgenera, sections, and series: the probable phylogenetic relationships are presented in a chart. The 25 plates depict spores.

It is regrettable that the synonyms and the names discussed as nomina dubia, &c. are not printed in any special type (they are not even in italics). Not much consistency can be found in the abbreviations of the bibliographic citations of which quite a number are erroneous or incomplete. The method of citing types is often unsatisfactory. In nomenclatorial respects one will come across several deviations from the Code. For an example see Donk *in Taxon*, 11: 120-122. 1962.

M. A. DONK

E. MÜLLER & J. A. VON ARX, *Die Gattungen der didymosporen Pyrenomyceten*. (Beiträge zur Kryptogamenflora der Schweiz. Band 11, Heft 2. 1962.). (Büchler & Co. AG. Wabern-Bern.) Pp. 923, 323 text-figures.

This very important publication is a continuation of "Die Gattungen der amerosporen Pyrenomyceten" by the same authors (J. A. von Arx & E. Müller, 1954). It gives much more than the title of the serial of which it forms a part would suggest. The authors have not set any geographical limits and take stock of the pyrenomycetes of the whole world on the generic level. With this second step they now have covered a considerable portion of the field.

Mycologists needed a review of the genera of pyrenomycetes on a world wide scale for more than half a century. After the survey in Engler & Prantl's "Die natürlichen Pflanzenfamilien" by Lindau (1897) a real torrent of new species and new genera deluged the accepted foundations and turned our knowledge of the groups into an unsurveyable mess. Many of the authors who contributed most to the increase of genera and species did little to put order into the flood or to correlate their findings with preceding work; and those who tried often failed spectacularly (Theissen & Sydow). In fact, the pyrenomycetes (especially the tropical ones) had become such an impenetrable jungle that the interest in these fungi waned considerably. It is my impression that with the present contribution its authors have cut a road deep into this jungle and made a considerable stretch of it accessible again.

Of each genus a generic description and often also a brief discussion and synonyms are given, followed by detailed descriptions of one or more of its species. Nearly all genera are illustrated by one or sometimes more figures showing microscopical

sections through a fruit-body. The amount of work, time, and patience that must have gone into the book is staggering and one cannot but hope that the authors will be able to continue on this level and will round off this invaluable recasting of the classification of the pyrenomycetes.

That the adopted classification will pass completely unchallenged is of course not to be expected, but the importance of a work of this kind is that it sifts and classifies an enormous amount of facts into a solid basis for further discussion.

M. A. DONK

R. SINGER, *The Agaricales in modern taxonomy. Second, fully revised edition.* (J. Cramer. Weinheim. 1962.) Pp. vii + 915, frontispiece + 73 plates. Price: DM 120.—.

Since it is not well possible to review this important publication *in extenso* at this place, a few general remarks may suffice. The first edition appeared in 1951 and very soon established itself as the leading handbook to the taxonomy of the Agaricales. Its importance was not merely due to the fact that it filled a sorely felt gap, but also to its intrinsic value, as a survey of the group by a competent and highly original spirit with an astonishing knowledge of details gathered in four continents by ardent study in both the herbarium and the field. Since the years that elapsed the author has continued expanding his knowledge, especially as to the South American species and also has steadily worked on the improvement of this second edition. Many genera have been radically revised and several important alterations made and the work has become almost a new book rather than a mere second edition.

The General Part perhaps underwent the least changes although many additions were made here, too. In the Special Part the main subdivisions have been kept, except that the Polyporaceae is treated as a distinct family consisting of a small kernel of the family as it is currently defined to which a number of agaric genera formerly included in the Pleurotaceae have been added. The merits of this alteration are still to be proved. The keys to the species of the separate genera have been omitted and replaced by indications where such keys are to be found.

The work is well printed and edited. The illustrations on the plates form a very mixed lot without much apparent coherence and of unequal execution.

There can be no doubt that this second edition will take the place of the first and will hold itself as the standard work on the taxonomy of the Agaricales down to the specific level for many years to come—until the third edition will replace it. It is difficult to imagine who else would be able to replace it.

M. A. DONK

R. SINGER, *Keys for the determination of the Agaricales.* (J. Cramer. Weinheim. 1962.) Pp. 64. Price: DM. 10.—.

This is a reprint of the keys contained in the work reviewed above. The keys lead down to the genera and are supplemented by references to existing keys to the species. This booklet is not only a handy companion to the bigger work but will also be welcome to students who will have no daily access to the main work.

M. A. DONK

M. A. DONK, *The generic names proposed for Agaricaceae.* (Beihefte zur Nova Hedwigia 5.) (J. Cramer. Weinheim. 1962.) Pp. 320 + (i). Price DM. 80.—.

The author of this work has reviewed the generic names proposed for Hymenomycetes in a series of fourteen numbers, of which thirteen appeared and one is still in press.

These instalments were published in various journals. The present part is the eleventh, and like its companion volume on the Polyporaceae (published in "Persoonia") is issued as an independent unit without much reference to the other parts.

Of every one of the several hundreds of generic names published for agarics details are given on publication, etymology, typification, and where necessary on its history and applications; the nomenclatural status is indicated or discussed in each case. For some taxa validly published and correct names are introduced; a few new combinations are made.

T. W. JOHNSON, JR. & F. K. SPARROW, JR., *Fungi in oceans and estuaries*. (J. Cramer. Weinheim. 30 Augustus 1961.). Pp. xxii + 668, 17 plates. Price DM. 120.—.

The 'marine' fungi have attracted more and more attention during the last few decades and the wealth of information and the number of known species is rapidly increasing. Therefore, it gives considerable satisfaction that a manual appeared which reviews what is known about them. Nearly one half of the book consists of Part I which deals with general topics: it includes a historical résumé, chapters on the relation of fungi and various groups of other organisms and their surroundings, on physiology and an ecology, as well as other chapters. Part II, "Taxonomy", gives descriptions of the taxa and is elucidated by 17 plates of clear line drawings. The bibliography of 49 pages shows that much information is scattered throughout the world literature and that a manual of this kind giving an interpretative survey was long overdue. Moreover, unpublished data have been entered.

It is interesting to find that representatives of the Basidiomycetes are lacking except for one species of Tilletiaceae, the more so because it would appear that the maximum salinity tolerance limit of the various fungi normally considered 'terrestrial' forms are exceptionally high (p. 141). Many wood-loving ascomycetes are recorded in this book, but no Hymenomycetes among which a considerable number of species is known to be wood-loving too.

A work of this kind doubtless will stimulate research on these biologically interesting fungi. As a manual it will be a very welcome addition not only to the library of the mycologist but also to that of botany departments in view of its extensive general considerations.

M. A. DONK

*Scripta botanica—II*. (Institutum zoologicum et botanicum Academiae Scientiarum R.P.S.S. estonicae. Tartu. 1962.) Pp. 278, illustr. Price: Rbl. 1. 18.

This publication contains the text of 25 papers presented at a symposium of mycologists and lichenologists from the Soviet Baltic republics. The symposium was held in Tartu September 26–27, 1959, and attended by professionals and amateurs from Latvia, Lithuania, Byelorussia, Estonia, and Leningrad.

The subjects treated cover a wide field, including Peronosporales, Ustilaginales, Uredinales, Agaricales, Polypores, Geoglossaceae, and lichens.

A directory of specialists concludes the publication.

R. A. MAAS GEESTERANUS

R. CIFERRI, *Mycoflora domingensis integrata*. (Quaderno No. 19. 1961.) (Istituto Botanico della Università, Laboratorio Crittogamico. Pavia.) Pp. 539. Price: L. 3000.

This is the second and much enlarged edition of the same author's "Mycoflora domingensis" (1929). It is a check list of all fungi recorded for the region mentioned. Useful information and critical remarks added in some cases (e.g. the Phallales) would have been welcomed in other cases as well. A generic index and a host index conclude the work.

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