
Now, 2016, part 1/2 “Ascomycota” is published, the most diverse group of fungi, distributed from the arctic and subarctic vegetation formations to tropical rainforests and semi-deserts, to freshwater and marine ecosystems. This volume indicates that it is possible to bring the new edition soon to an end. Missing parts include Part 1/3 “Basidiomycota”, Part 2/2 “Rhodobionta” and Part 5 “Seed Plants, Spermatophytes, Angiosperms p.p., Rosidae”.


Most obvious on a first look for non-fungal specialists: the systematics of the Ascomycota has changed dramatically when compared to former textbook classification a decade ago. The phylum now contains three subphyla, the Taphrinomycotina, the Saccharomycotina, and the Pezizomycotina with a total of 18 formally recognized classes.

Responsible are phylogenetic revisions based on DNA sequence data which have become available recently and which have revolutionized the systematic classification at higher level dramatically, leading to a new understanding of fungal evolution and species delimitation.

The systematic arrangement followed, therefore reflects the current state of understanding of the Ascomycota and provides an updated synthesis of classical anatomical-morphological characters and modern molecular data.

The text consists of six chapters: 1 Introduction, 2 Ascomycota (including introduction, characterization and systematic arrangement), 3 Synopsis of classification of the Ascomycota, 4 Systematic arrangement of the Ascomycota, 5 Taxonomic novelties, 6 Appendix. It is com-