

Book Review

ZDENĚK URBAN and JAROSLAVA MARKOVÁ

Catalogue of rust fungi of the Czech and Slovak Republics

Charles University in Prague, Karolinum Press, Prague, 2009. – ISBN 978-80-246-1664-3. Price 1200 Kč.

Rusts (*Uredinales*, Basidiomycota) are a group of obligate biotrophic fungi pathogenic on a broad range of seed plants and ferns. Rust fungi consist of more than 7000 species possessing some of the most complex life cycles in the Eumycota. Traditionally, a limited number of synapomorphic characters and incomplete life-cycle and host-specificity data have hampered phylogenetic inference within the *Uredinales*. As they are almost impossible to cultivate *in vitro*, they have been the subjects of far fewer molecular studies than other fungal groups of similar size, thus current contradictions, especially in the deeper nodes, have not yet been resolved.

The Catalogue of rust fungi of the Czech and Slovak Republics represents a summary of the distribution of rust fungi in the territory of the former Czechoslovakia (the Czech Republic and Slovakia). This catalogue is based mainly on material collected by the late professor Zdeněk Urban, who dedicated all his professional life to the study of the taxonomy and ecology of rust fungi. The list only includes rusts whose occurrence in the various areas is supported by records published since 1906 up to date. The older records follow the rust flora of the Czech Republic (Bubák 1906).

In this catalogue, 376 species are enlisted and the current taxonomy and nomenclature of individual rust species is provided. The list is arranged alphabetically, while doubtful taxa are not numbered, so in fact more than 376 species are described.

Each of the species in the list contains authors, place and year of valid publication, synonyms, and a list of localities in the Czech Republic and Slovakia where the species was recorded. Data are chronologically ordered from earlier to recent acquisitions. The list of localities is completed with descriptions of some special morphological and ecological aspects (occurrence of various types of spores, months of their recording, persistence of spores, variability of spores, etc.). In some cases also other comments, e.g. on taxonomic revisions, are added.

The book is completed with a list of host species (in alphabetical order) and rust species relating to them. Abbreviations of life cycle types (e.g. spermogonia, aecia, uredia) are explained as well. Also references and an index of rust names and synonyms, in which accepted and unaccepted names are differentiated, are included.

The book is an excellent publication, very useful for those who want to find basic information on rusts in the Czech and Slovak Republics: place and date of occurrence of particular species, synonyms of their names, and basic information on their hosts. Thus, this book will be of significant interest to students of master's and doctor's, but also to professionals in mycology, phytopathology and plant protection.

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