

BIOGRAPHICAL NOTICE

Ing. PAVEL BARTOŠ, DrSc. – eighty



This year on March 30, PAVEL BARTOŠ completed 80 years. For many years he was the head of a research team engaged in genetics of disease resistance of cereals in the Department of Applied Genetics of the Research Institute of Crop Production in Prague-Ruzyně. After his studies at the Faculty of Agricultural and Forestry Engineering (now Czech University of Agriculture) that he finished in 1953, he started his career at the Research Institute of Crop Production in the Department of Mycology.

In 1961 he defended his Candidate of Science thesis (similar to PhD degree) on oat variety resistance to loose smut. Cereal smuts were the most important topic in his research besides cereal rusts. He cooperated in the development of anaerobic seed treatment of barley against loose smut and in the study of the physiological mechanism of such treatment. In 1983 he defended his Doctor of Science thesis on genetics of wheat resistance to leaf and stem rust and genetic variability of these rusts.

Since the very beginning of his research career he tried to transfer results of his research to wheat breeding by means of cooperation with wheat breeders. He tested breeding materials, supplied the inoculum for tests and participated in cereal breeders' workshops. This fruitful cooperation led to his co-authorship of 14 wheat cultivars. During his post-doctor fellowship in Winnipeg he determined rust resistance genes in East European wheat cultivars unknown till then and studied the mechanism of variability in cereal rusts. His papers on the translocation 1Bl.1RS later widely used in wheat breeding belong to the first ones on this topic. Also his stay in Wageningen was devoted to the yellow rust resistance of wheat cultivars carrying the translocation 1BL.1RS.

His contacts with foreign specialists in wheat rusts research contributed to the location of the Cereal Rusts Conference in 1972 to Prague. As a member of the Committee of the European and Mediterranean Cereal Rusts and Powdery Mildew Foundation he helped to develop scientific contacts of East European rust specialists with their colleagues in the West. The laboratory led by him was declared an international cereal rust laboratory in the framework of the East European cooperation on cereal disease resistance. Later on he participated in the COST action 817 as a coordinator of the wheat leaf rust research. With his colleagues he organized the international conference of this action "Approaches to improving disease resistance to meet future needs: airborne pathogens of wheat and barley" in 1997 in Prague. He is author or co-author of more than 300 scientific papers published in domestic and foreign journals and 10 books or university textbooks. He was also active as external teacher in postgraduate university courses and supervisor of domestic and also foreign PhD students. In this activity he took advantage of his broad knowledge of foreign languages that he also applied in translations of technical literature. He was a member of several scientific committees and of the editorial boards of the journals Plant Protection Science, Cereal Research Communications and Journal of Applied Genetics. He is still active at the Research Institute of Crop Production, Prague-Ruzyně.

To his anniversary we wish him good health and further success in his research activities.

Ing. Ivo Bareš, DrSc. (Prague)

BOOK REVIEW

Catalogue of Rust Fungi of the Czech and Slovak Republics

URBAN, Z., MARKOVÁ, J.

Univerzita Karlova v Praze, Nakladatelství Karolinum, Praha, 2009, ISBN 978-80-246-1664-3

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 that possess 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 be cultivated *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 book "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 the Slovak Republic). This catalogue is based mainly on materials collected by deceased professor Zdeněk Urban, who dedicated all his professional life to study of the taxonomy and ecology of rust fungi. In the list there are only included those rust whose occurrence in the various areas is supported by records published since 1906 up to now. 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, when doubtful taxons lack the number, so really more than 376 species are described here.

Each of the species in the list contains authors, place and year of the valid publication, synonyms, and list of localities where its occurrence in the Czech and Slovak Republics 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 occurrence, persistence of spores, variability of spores, etc.). In some cases also other comments e.g. about taxonomical revisions are added.

Whole book is terminated with the list of host species (in alphabetical order) and rust species referred to them. The abbreviations of the life cycle type (e.g. spermogonia, aecia, uredia, etc.) are supplemented. Also references and index of rust names and synonyms, where accepted and unaccepted names are differentiated, are included.

The book is excellent publication and very useful for those, who want to look up some basic information about rusts in the Czech and Slovak Republics – place and date of occurrence of particular species, or synonyms of their names, and basic information about their hosts. Thus, this book will be of significant interest to students in master and doctor degree, however, also for professionals in mycology, phytopathology and plant protection.

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