PREFACE

The idea of a series of congresses on "*Fusarium* -- Mycotoxins, Taxonomy, Pathogenicity" comes from Professor Jerzy Chelkowski. The first Seminar was held at the Warsaw Agricultural University in 1987 and since then it became a significant international forum to exchange ideas and thoughts. During the first years it concentrated in Europe, by now it has become an event of interest for all the continents. This success justifies the original idea and speaks for a continuation.

The *Fusarium* problem in cereals and other crops had and has a worldwide importance and recent epidemics on wheat in the US, Canada and elsewhere focused again on this problem.

The pace of development in research is astonishing. Ten years ago we discussed only a possible role of biotechnology and molecular techniques and now it is a routine method investigating many problems in the genetics of the pathogens and hosts.

Topics have also become wider during these congresses. At the first meetings resistance problems were treated only by several authors. In this book nearly half of the 200 contributions deal with this topic. It seems to me that breeding efforts in the small grain cereals took their appropriate place to control disease and toxin contamination. Many laboratories work in this field with great success and our knowledge on resistance problems and related fields is incomparably deeper than it was several years ago. We have much less activity on the *Fusarium* cob resistance in corn, even though hundreds of literature sources deal with the toxicological problems originated from susceptible hybrids. The conclusion seems, however, that a higher *Fusarium* resistance could be the solution has apparently not been drawn yet by the except some breeders. I am convinced that a positive development will follow also in this field.

Toxicology provides also new insights. We know now much more dangerous mycotoxins than we did several years ago; in this very meeting we will obtain information on newly described mycotoxins. We know from many sources about the worldwide occurrence of *Fusarium* toxins what helps us estimate more precisely their real danger. Other new results, however, throw some light on the genetic background of the toxin formation. The genes being responsible for the synthesis of the trichothecene skeleton have been mainly described. We know much more about the relations between toxin production, resistance and pathogenicity. Increasingly exact data help to estimate their physiological influence on human beings and animals.

The newly developed molecular genetic methods helped to obtain new insights in taxonomy. This congress might be a milestone in the shaping of new taxonomic ideas. This development inspired us to devote a satellite meeting for the molecular genetic and physiological aspects of toxin formation not only for *Fusarium*, but also for *Aspergillus* and other taxa.

During the planning of the Proceedings our aim was to give comprehensive information about the presented topics. Therefore we do not publish abstracts, but full articles. The other problem we faced whether was how to publish it: as a separate congress publication or as part of a journal. As the Cereal Research Institute has been publishing the Cereal Research Communication for 25 years, we decided to present the Proceedings in the framework of this periodical. This way it will be abstracted and referred by all international indexing and abstracting journals. As a part of this publication

policy, a decision was decided to present every participant 50 reprints of his or her contribution.

The articles were not divided into individual sections. The Table of contents, however, contains the proper sections and the respective form of the presentation (introductory, oral or poster). We have many articles that could have been classified in different sections. They were placed according to their most characteristic feature, as well as the author's wishes were also considered. As the Proceedings are published in the CRC, a Subject index will be presented for the whole volume in the first number of 1998. A list of contributors will also be added with their addresses, telephone, fax numbers and e-mail codes. Due to recent changes of telecommunication data, like recently in France, Czech Republic and others that might yet come, we suggest to update these data.

We hope that the Proceedings, covering many aspects of *Fusarium* genus and fusarial diseases of cereals and other crops will be helpful to persons in education, research and extension work dealing with various disciplines in which *Fusaria* and their metabolites play an important role.

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Editor