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Book review

Fusarium: ***Mycotoxins, Taxonomy and Pathogenicity.*** J. Chekowski, editor. 1989. Topics in Secondary Metabolism, Volume 2. Amsterdam: Elsevier. 492 pp. Dfl. 325.00, US$ 171.00.

This book contains 26 chapters by 30 different authors that are all related to problems associated with fungi belonging to the genus *Fusarium*. The book is an outgrowth of a meeting held in Warsaw, Poland in September, 1987, and although some of the chapters have been updated since that time, many have not. Thus, information in portions of the book is somewhat, but not too seriously, dated. The book is biased towards European contributors (25/30) with the remaining authors from North America, probably reflecting attendance at the meeting, but the gaps that would be filled by Asian and Australian scientists are noticeable. Balancing these holes are numerous contributions from Eastern European workers which are not readily available in English scientific literature.

The presentation of the volume is not attractive. The text has been directly reproduced onto glossy paper from typescripts which have not been carefully edited. Many pages have corrections that were inserted by hand and the English in many of the chapters is quite poor. To understand some of the chapters I had to literally read them aloud. References are not in a standard format either. The volume has an index and a small glossary.

The material presented reflects the book's origin in a meeting, since there is some background material that is presented more than once. The contents of the chapters range from reviews to presentation of new data. The level of documentation within the review chapters varies widely, with some little more than a non-referenced listing of common 'rules of thumb'. With respect to crops, there is a heavy emphasis on wheat and maize, with mention of barley, rye and potatoes. Noticeable by their absence are tropical crops, *e.g.* rice, dryland crops, *e.g.* sorghum, and most fruits and vegetables.

The book presents a great deal of observational data, e.g. surveys and reports of diseases or conditions induced by particular compounds or associated with contaminated feedstuffs. Experimental data is not as common, and is confined primarily to the chapters on metabolism of various toxins by farm animals. Both genetics and molecular biology are conspicuous by their absence.

The legendary problems associated with *Fusarium* taxonomy are in full view in this book. Although there are only two chapters devoted specifically to taxonomy, the problems underlie virtually every presentation. Nirenberg's chapter compares her system with those of Booth and of Nelson, Toussoun & Marasas, but differences tend to outweigh the similarities. Many of the present problems with identification of toxigenic cultures can be traced to taxonomy, since if the experts cannot agree on many relatively major points, it should come as no surprise that the rest of us have problems. The basic principles of identification are clearly stated in Nirenberg's paper, but it would be unwise to approach the genus in a serious manner without at least one of the monographs by the major workers in the area.

In summary, this book is one whose distribution will be limited primarily to libraries and specialists. At a purchase price of nearly 35 cents per page, most others will copy the chapter or two that they are interested in and ignore the rest of the book.

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