

Microbial Toxins

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Preface

Ergot toxicity has been known to man for much of his recorded history; man, in addition, probably learned early to distinguish between the toxic and edible mushrooms. Yet, in spite of these clues and the fact that molds have been associated with illness as early as the nineteenth century, mycotoxicoses remained the "neglected" diseases until 1961 when the aflatoxins were discovered and found to be the cause of the "turkey X" syndrome. These findings resulted in a renaissance in mycotoxin research followed by a rapid accumulation of a massive body of literature. The mycotoxin problem was soon found to be worldwide, although it was most severe in the nonindustrialized areas of Africa and Asia. Epidemiological studies indicated that some of the mycotoxins played an etiological role in cancer, particularly in southern Africa. Yet the role as causative agents of disease of many of the mycotoxins discovered in the past decade remains to be determined.

In the three volumes devoted to the algal and fungal toxins (VI, VII, VIII) of this multivolume treatise on microbial toxins, the authors have attempted to comprehensively and critically review what has been accomplished as well as indicate future lines of research. These volumes are intended for scientists and graduate students in the various scientific disciplines for a multidisciplinary approach is required to resolve and find solutions to the many problems presented.

The extensiveness of the mycotoxin literature forced the editors to divide the originally planned single volume on algal and fungal toxins into three: VI, VII, and VIII. However, the divisions are arbitrary with no implication intended that the toxins in any given group are related with respect to structure, function, mode of action, or biosynthesis. Volume VI includes the toxins produced by the *Aspergilli* and *Penicillia*. Volume VII, the algal toxins and those mycotoxins produced by species in the genera *Fusarium*, *Rhizoctonia*, and *Pithomyces*, and this volume, the toxins produced by the fungal phytopathogens, the mushrooms, and those toxins synthesized in plants in response to fungal invasion or other injury.

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