

Cytochalasins: Incidence and Biological Activities

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PREFACE

Cytochalasins, emerging mycotoxins, are diverse in their structure and biological activities and being elaborated by equally diverse moulds both in taxonomy and ecologically. They live on diverse substrates and in different mode of association. These mycotoxins are unique category by their characteristic of toxicity causing specific inhibition of cytokinesis. They are also reported to cause diverse biological activities related to cell. Because of inhibition of cytokinesis, a multinucleate cells of giant size are formed. Probably due to inhibition of cytokinesis, they act as anticarcinogenic and inhibit tumor formation which is likely to be highly useful as anticancer therapeutic agent. In that cure they are likely to be benguine mycotoxins.

The mycotoxins which are non-antigenic and adversely affect health of animals including man and induce variety of health hazards of chronic to serious nature. Further, under modern living conditions contamination of foods with mycotoxigenic moulds and mycotoxins are investable contaminants of foods and feeds are common rather than exceptions. Inspite of scientific and technological developments, contamination of mycotoxins are unavoidable, inadvertent and cannot be avoided. Therefore, one has to minimize the mycotoxin problem.

Thus management of mycotoxins problem in not only problematic but also intricate in view of its multiple dimensions. Therefore, deeper understanding of conditions of foods and feeds and moulds behaviour is of paramount importance. In view of the emerging nature of cytochalasins their incidence, biological activities are little known. No doubt future studies will reveal more interesting facts which may help us to tackle this problem more effectively.

The present book is an outcome our studies during last fifteen years. We tried to cover different aspects of these toxins based on our observations, analysis of problem and existing literature. However, much more in depth studies are needed to unravel many of their biological activities.

We take this opportunity to thank all those who helped us directly or indirectly. We have liberally borrowed the literature from different sources; we gratefully acknowledge their generous gesture. The encouragement provided by the University authorities are gratefully acknowledged. One of the authors (Dr. S.

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