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in Foodstuffs
TCP/IRA/2905**

**APPLICATION OF GOOD AGRICULTURAL
PRACTICES IN WHEAT, BARLEY AND CORN
FOR PREVENTION OF MYCOTOXINS IN IRAN**

Mohammad Taghi Mazloumi

and

Majid Dehghanshoar

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Mohammad Taghi Mazloumi and Majid Dehghanshoar

National Consultant of the FAO Project (TCP/IRA/2905), formerly Head of Food Technology Research Department of National Nutritional Science and Food Technology Research Institute, Shaheed Beheshti University of Medical Sciences and Health Services

Tehran-Iran

mt_mazloumi@yahoo.com

and:

Majid Dehghanshoar

National Project Director, Head of Seed and Plant Certification and Registration Institute

Karaj-Iran

Editors:

Art Schaafsma

International Consultant of the FAO Project (TCP/IRA/2905)

University of Guelph, Ridgetown

Ontario, Canada N0P 2C0

Gordon S. Shephard

International Consultant of the FAO Project (TCP/IRA/2905)

Programme on Mycotoxins and Experimental Carcinogenesis (PROMEC)

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**To the memory of my dear father, truly a
great man; to my dear mother; to my dear
wife; and my dear daughters.**

M.T.Mazloui

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M.T. Mazloumi
and
M. Dehghanshoar

In the name of God

PREFACE

As a result of being a substantial component in the Iranian food basket, and the main provider of calorie needed by animal and poultry in Iran, cereal has a very significant role in the food security of the country. Therefore, safety assurance of this crop to harmful factors, such as mycotoxins, the secondary metabolites that can be produced by toxigenic fungi is an important need for food safety and security of the country.

Field and laboratory research results indicating that, due to the high relative humidity, insect activities, improper methods of harvesting, storage, transportation and processing, mycotoxin contamination can occur.

Therefore, understanding the physiological behavior of fungus as well as the crop, and also good agricultural practices (GAPs) for monitoring and control of mycotoxins is necessary.

The Authors of this book, have been intended to increase the public understanding from the hazards resulted from the fungal contamination and mycotoxin production, which could cause serious diseases such as cancers and even death in human. The other objective was to introduce good agricultural practices for controlling mycotoxins to the respected farmers, policy makers in the Ministry of Jihad Agriculture, researchers, extension experts, professors of the universities, and students.

We hope that, this book could be of help to production safe food and food security of the country.

M.T. Mazlouni
and
M. Dehghanshoar

ABBREVIATIONS

AF	aflatoxin
a_w	water activity
DON	deoxynivalenole
ERH	equilibrium relative humidity
FAO	Food and Agriculture Organization of the United Nations
FB	fumonisin
GAP	good agricultural practice
GHP	good hygienic practice
GMP	good manufacturing practice
GTP	good transportation practice
GSP	good storage practice
HACCP	Hazard Analysis and Critical Control Point
ND	not detected
OTA	ochratoxin A
WHO	World Health Organization
ZEA	zearalenone

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