Mycotoxins: Detection and Control

Aflatoxins

These toxins are produced by the fungus Aspergillus flavus and A. parasiticus. They are known to be the most toxic of all mycotoxins and are present in a wide range of foodstuffs, including cereals, grains, and nuts. Aflatoxins are formed during the growth of the fungus on food and can persist in the food even after the fungus has been destroyed. They are known to cause liver damage, immune suppression, and cancer in humans and animals. The World Health Organization has classified aflatoxins as Group 1 carcinogens, meaning that they are known to cause cancer in humans. The International Agency for Research on Cancer (IARC) has also classified aflatoxins as Group 1 carcinogens.

Ochratoxin A

Ochratoxin A is produced by the fungi Aspergillus and Penicillium. It is known to cause liver and kidney damage in humans and animals. Ochratoxin A is also known to be a nephrotoxin, meaning that it can damage the kidneys. The International Agency for Research on Cancer (IARC) has classified ochratoxin A as Group 1 carcinogens, meaning that it is known to cause cancer in humans.

Fumonisins

Fumonisins are produced by the fungus Fusarium moniliforme. They are known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. Fumonisins are also known to cause liver damage in livestock.

Zearalenone

Zearalenone is produced by the fungus Fusarium graminearum. It is known to be toxic to humans and animals, and can cause endocrine disruption, meaning that it can affect the functioning of the endocrine system. Zearalenone is also known to be a carcinogen, meaning that it can cause cancer in humans.

Clavicipitins

Clavicipitins are produced by the fungus Claviceps purpurea. They are known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. Clavicipitins are also known to cause liver damage in livestock.

Tobacco-2-Methylcholanthrene

Tobacco-2-Methylcholanthrene is produced by the tobacco plant. It is known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. Tobacco-2-Methylcholanthrene is also known to cause liver damage in livestock.

Polycyclic Aromatic Hydrocarbons

Polycyclic aromatic hydrocarbons (PAHs) are produced by the burning of organic materials. They are known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. PAHs are also known to cause liver damage in livestock.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are produced by industrial processes. They are known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. PCBs are also known to cause liver damage in livestock.

Cadmium

Cadmium is produced by industrial processes. It is known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. Cadmium is also known to cause liver damage in livestock.

Lead

Lead is produced by industrial processes. It is known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. Lead is also known to cause liver damage in livestock.

Mercury

Mercury is produced by industrial processes. It is known to be toxic to humans and animals, and can cause problems with the nervous system, including neurological disorders and cancer. Mercury is also known to cause liver damage in livestock.
fungi in food and feed including the identification of genes and gene clusters. Mycotoxins are made by different fungal species and can affect the human and animal health. Mycotoxin research, including topics such as: new analytical methods for detection; the adoption of an ancient Mexican practice for detoxification of aflatoxins; mycotoxin management in Ireland, Lithuania and South America; mycotoxin reduction through plant breeding and integrated management practices. Further contributions from Richard Alabouvette, Anthony Rehncrona, trichothecenes, zearalenone, and aflatoxin-like gene clusters, as well as sclerotial development in Aspergillus flavus and A. parasiticus. Of particular interest are the chapters that elaborate on the potential use of mycotoxins as bioweapons. This book will stimulate new thinking on the need to develop tools as well as policies that can control and prevent the development of mycotoxin production in food and feed. The book also describes the epidemiology, occurrence, detection, management, awareness and policy. This book serves as a source of information on the occurrence and impact of mycotoxins on everything from trade and health to agricultural production in addition to suggesting opportunities for their control. The book also describes the epidemiology, occurrence, detection, management, awareness and policy. This book serves as a source of information on the occurrence and impact of mycotoxins on everything from trade and health to agricultural production in addition to suggesting opportunities for their control.
management in Africa and elsewhere by researchers, policy makers and development investors. This book is broadly divided into five sections and addresses recent advances in mycotoxicology and control of mycotoxin contamination and control measures. It gives an overview of mycotoxicology, discusses foodborne mycotoxins and their impact, reviews the development of mycotoxicology, and provides an overview of the control of mycotoxins. The book will update readers on several cutting-edge aspects of mycotoxin research with useful up-to-date information for mycologists, toxicologists, microbiologists, food scientists, and veterinarians. The book is intended for researchers, policymakers, and practitioners involved in mycotoxicology, mycology, mycologists, mycotoxicologists, pathologists, epidemiologists, pharmacologists, and veterinarians. The book is divided into five sections, each covering a different topic. The sections are:

1. Mycotoxicology
2. Mycotoxin Contamination and Control
3. Mycotoxin Detection
4. Mycotoxin Management
5. Mycotoxin Legislation

The book provides an overview of the development of mycotoxin research, discusses the impact of mycotoxin contamination on human and animal health, and reviews the methods for the detection and control of mycotoxins in food and animal feed. It also discusses the potential use of mycotoxins in food and animal feed, and provides an overview of the control of mycotoxicosis. The book is intended for researchers, policymakers, and practitioners involved in mycotoxicology, mycology, mycologists, mycotoxicologists, pathologists, epidemiologists, pharmacologists, and veterinarians.