

1. Record Nr.	UNINA9910557511603321
Autore	MATHIEU Florence
Titolo	Biocontrol Agents and Natural Compounds against Mycotoxinogenic Fungi
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 electronic resource (136 p.)
Soggetti	Research & information: general Biology, life sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Mycotoxins are toxic secondary metabolites produced by fungi. They cause deleterious effects on humans, animals, and plants. More than one hundred mycotoxins are known which contaminate food and feed raw materials. Fungal infection and mycotoxin contamination can occur directly in fields (pre-harvest stage), during storage, or during industrial processing (post-harvest stage). Given the proven toxicity of mycotoxins and their widespread distribution, it is necessary to prevent their occurrence in food and feed. To limit mycotoxin contamination, several techniques can be adopted at the pre-harvest or post-harvest stages. These techniques can reduce mycotoxin concentration through fungal growth reduction or mechanisms leading to mycotoxin degradation or mycotoxin detoxification (i.e., reduction of the toxicity). Until very recently, fungicides were favored to limit mycotoxin contamination by reducing fungal growth. Nonetheless, the sanitary and environmental impacts of these products and their effects on food quality encourage the development of alternative strategies based on biocontrol agents (BCAs) or natural compounds. Moreover, in some cases, fungal growth reduction can stimulate mycotoxin production. The focus of this Special Issue of Toxins is to gather the most recent advances related to reducing mycotoxin contamination in food and feed using BCAs and natural compounds. In this context, two main</p>

types of approaches can be proposed: Preventive methods that could be applied in the field, during storage, or during industrial processing and curative methods that detoxify contaminated matrices by eliminating the produced mycotoxin.
