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Novel Integrated Strategies for Worldwide Mycotoxin Reduction in Food and Feed Chains

10. CURRENT SITUATION ON THE OCCURRENCE OF MYCOTOXINS AND TOXIGENIC FUNGI IN PORTUGAL

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Mycotoxins are secondary metabolites produced by filamentous fungi that are toxic for humans and animals in small amounts and that are found worldwide in a large number of agricultural commodities. They are usually ingested involuntarily, when contaminated plant products are consumed, and represent a great risk for public health. Therefore, governments throughout the world have imposed strict legal limits for their levels in food and feed products in order to reduce potential health risks for consumers. Despite of its ubiquity, the mycotoxin problem is mainly dependent on regional factors, such as the mycotoxigenic characteristics of the local mycoflora, the local climate conditions, and the local agricultural practices. For this reason, a constant vigilance from local governmental food safety agencies and from the local researcher community is needed.

This communication will review the current situation on the occurrence of mycotoxigenic fungi in some Portuguese cultures, such as grapes, corn and dried fruits.

Particular attention will be given to the incidence of mycotoxigenic Aspergillus strains in those cultures and to the levels of ochratoxin A, aflatoxins, cyclopiazonic acid and fumonisin B2 produced. Data will be discussed taking into account the geographical origin of the isolates and the particular climate conditions of each sampling region. An updated review on the levels of the main mycotoxins found in local products and in imported commodities will also be presented.