

Mycoflora and mycotoxins control in drinking water and wine

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Filamentous fungi (ff) are notorious for the biodeterioration of numerous food and drink commodities. Often the problem is of an organoleptic nature such as appearance, taste and aroma. However, ff produce a range of toxic metabolites referred to as mycotoxins which contaminate such consumables. They are also responsible increasingly for a range of serious diseases especially of immunocompromised patients. Drinking water and wine are two commodities which are affected by fungi. The contamination of wine with mycotoxins has become increasingly recognised especially from the presence of the mycotoxin, ochratoxin A (OTA). On the other hand, the contribution of ff to drinking water has received less attention, although it is beginning to grow. Traditionally, it has been bacteria which have received most of the attention in the case of water. The base line levels of ff in these commodities requires to be established before it can be assessed if there are particular problems, and this involves the use of various technologies. There are few data on mycotoxin production in drinking water: Recently the oestrogenic compound zearalenone was shown to be capable of being so produced. The concentrations of mycotoxins and especially OTA, in wine are receiving much more attention than was the case previously. This presentation provides data on the work that has been produced in these fields at the Biol Eng Centre.

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