



Environmental Stress on the Production of Mycotoxins

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Message from the Guest Editors

The mycotoxin produced by the secondary metabolism of agricultural and foodborne important fungi is a low molecular weight but highly toxic compound and a significant hazard for human and animal health. These compounds occur naturally in the environment, but their production is increased due to various natural and synthetic environmental stressors that can modulate the oxidative status of the fungal cell. Oxidative stress is one of the main factors that triggers mycotoxin biosynthesis in fungal cells. Also, climate change is important in those metabolic pathways since it strongly negatively regulates environmental factors and thus shapes the fungal community in the environment and mycotoxin production. A constant evaluation of mycotoxin risk is needed as insurance for a minimization of the adverse effects caused by environmental stress factors of any kind. Such processes can be evaluated on a molecular and genetic level, but with the same aim of establishing mechanisms that are able to control and reduce contamination of the environment with mycotoxins.

The SI shall cover all the important topics related to mycotoxin production influenced by stressors from the environment.





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Message from the Editor-in-Chief

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