

Mycotoxins in brewing and malting



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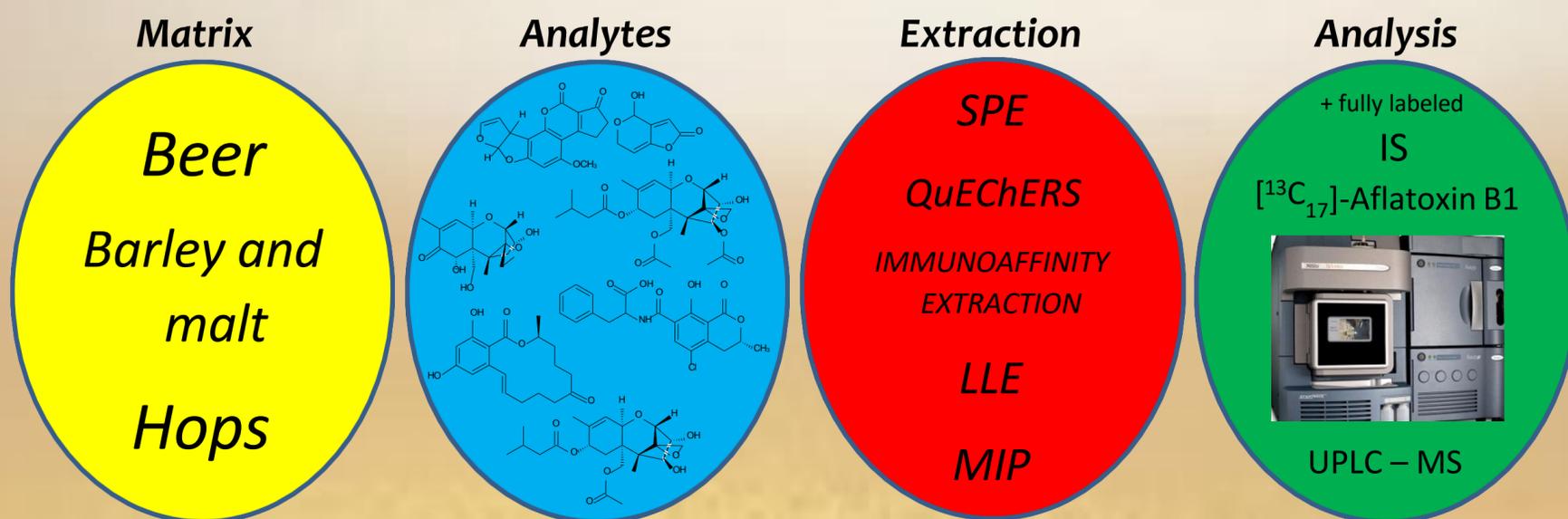
ABSTRACT

Mycotoxins are secondary metabolites of fungi and represent a serious problem for human health, due to the growing interest they are widely studied by scientific groups in various aspects. One of these aspects is the food industry and the associated beer production. Mycotoxins can be present in beer, but also in the basic raw materials for beer production. The Research Institute of Brewing and Malting has been dealing with the issue of mycotoxins since 2008 to the present. During this time, more than 10,000 samples were analyzed for mycotoxin content in various brewing and malting matrices. The Fianovis, a French start-up biotechnology company, provides a state-of-the-art offer of standards for accurate and reliable mycotoxin detection, including isotopically labeled standards. The issue of mycotoxins is a residual matter and the accurate quantitative determination of mycotoxins, correct interpretation of the results in connection with the toxicological values and the maximum permissible value of mycotoxin has a key role for the world food safety and consumer protection.

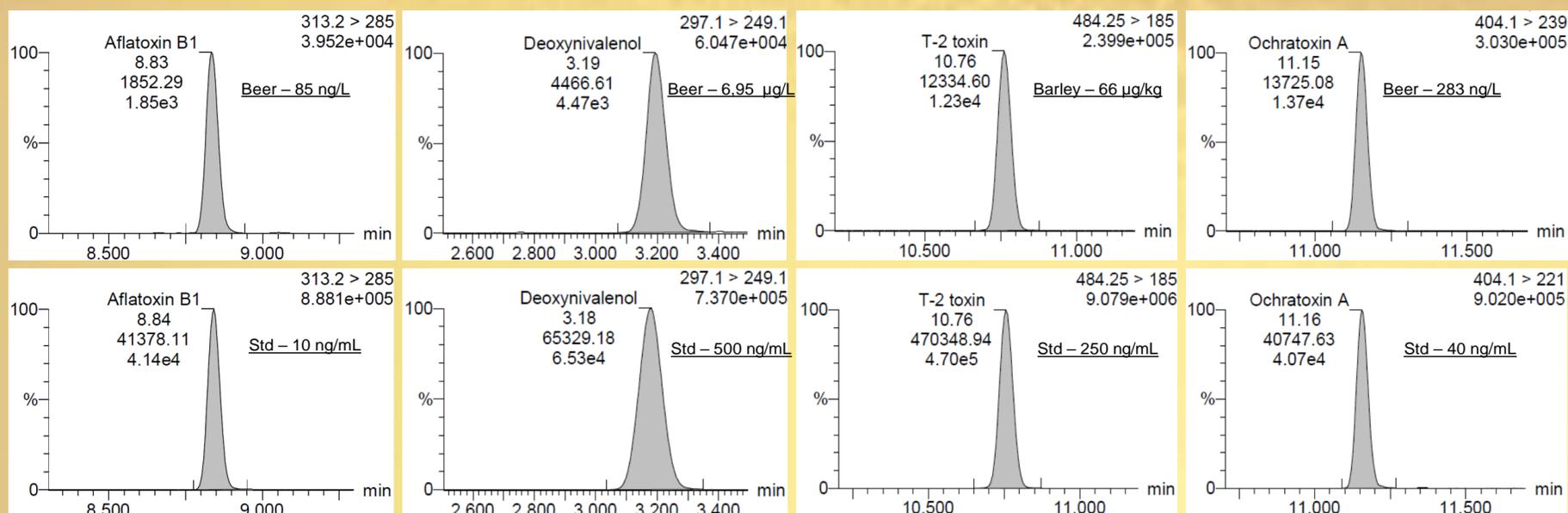
MYCOTOXINS IN BREWING AND MALTING



WORKFLOW



DETERMINATION OF MYCOTOXINS BY LC-MS/MS



CONCLUSION

The Research Institute of Brewing and Malting and the Fianovis cooperate in field of mycotoxins area with focus on brewing and malting. It is necessary to remember that the quality of the input raw materials has a significant influence on the final product, beer. From the results it is evident that the quality control has a key role for food safety and protection of consumer not only in brewing and malting. The future research will be connected with „Emerging“ mycotoxins.

ACKNOWLEDGEMENT

The authors would like to thank the Ministry of Agriculture of the Czech Republic (MZE- RO1923) and the Fianovis for the financial support.

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