

OCCURRENCE OF OCHRATOXIN A IN BLATINA WINE FROM THE MOSTAR VINEYARDS

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Abstract

Blatina is an autochthonous and most represented red wine variety in Herzegovina. Wine is the second source of daily mycotoxins intake for humans with domination of ochratoxin A (OTA) contamination of grapes. The aim of this paper was to determine occurrence of OTA in Blatina.

Representative sampling was achieved by selecting twenty quality and premium wines from Mostar vineyard produced in 2018 and 2019. Quantification of OTA was performed by high performance liquid chromatography with a fluorescent detector (HPLC-FLD).

The research determined that the wines contained OTA. The values ranged from 0.205 µg/L to 0.933 µg/L in wines produced in 2018, and from 0.211 µg/L to 0.628 µg/L in wines produced in 2019. All samples had an OTA concentration of less than 1 µg/L.

It can be concluded that the presence of ochratoxin A in Blatina wine is within acceptable limits of Regulation in the European Union (EU). The level of ochratoxin A in wine depends on the type of grape, wine region, agricultural practice, weather conditions and the process of wine production. In order to protect consumer health, it is necessary to monitor its values in wines on the market.

Key words: Red wine, Ochratoxin A, HPLC-FLD.