

BOOK OF ABSTRACTS
SECTION: PRESENTATIONS OF COMPANIES

**PHENOLIC PROFILE OF MACEDONIAN RED WINES Violeta Ivanova-Petropulos^{1*},
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Abstract

Wine possesses a variety of recognized beneficial effects on human health, such as anti-inflammatory, antimicrobial, and anti-aging effects, as well as prevention of cardiovascular diseases. All these effects are due to the high content of phenolic compounds, such as stilbenes, anthocyanins, flavonols, flavan-3-ols and phenolic acids. In this study, red wines from Vranec, Cabernet Sauvignon and Merlot varieties (*V. Vinifera* L.) have been analysed using high-performance liquid chromatography coupled with diode array detector and online mass spectrometry (HPLC-DAD-ESI-MS and MS/MS) in order to determine their phenolic profile. All wines presented a complex phenolic profile represented by anthocyanins, pyranoanthocyanins, flavonols, hydroxycinnamic acids and their derivatives, stilbenes, gallic acid and flavan-3-ols. Vranec wine, which is characterized with deep red colour, showed highest concentration of all phenolic families compared to Cabernet Sauvignon and Merlot wines, indicating the important role of variety in differentiation of phenolic composition.

Key words: *phenolic compounds, red wine, HPLC-DAD-ESI-MS.*