

Antioxidant activity of red wines

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Abstract

Polyphenols are important compounds which are responsible for the colour, taste, stability and overall quality of grapes and wine. These compounds present antioxidant, antimicrobial and anticancer effects. The aim of this study was determination of antioxidant activity of red wines from Vranec, Merlot and Cabernet Sauvignon varieties produced in different vintages. Antioxidant activity was determined by DPPH method, applying spectrophotometric measurement at wavelength of 515 nm. Trolox was used as a standard for calibration curve construction and expression of the results in wine samples. It was noticed that all wines presented relatively high antioxidant activity, regardless the variety and vintage, ranged from 10 to 18 mmol/L Trolox equivalents. It was confirmed that Macedonian red wines possess high antioxidant potential, with positive benefits for the human health.

Keywords: antioxidant activity, polyphenols, DPPH method, red wines.