Honey wine, new wine style from Temjanika, Smederevka and Stanušina varieties

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Abstract

The aim of this study was to apply a modern vinification technique and develop a new wine style of local grape varieties, Temjanika and Smederevka, as well as autochthonous Stanušina variety, all grown in the Tikveš wine region. Wines were produced with addition of two doses (20 and 40 g/L) of honey before fermentation in order to study its influence on the overall quality. The following chemical parameters were determined: alcohol, density, pH, total acidity, total sugars, glycerol, glucose, fructose, sucrose, acetic acid, tartaric acid, lactic acid and malic acid, applying FTIR analyses. Spectrophotometric determination included analysis of polyphenols and antioxidant activity. It was noticed that addition of honey influenced the content of alcohol, total sugars, as well as individual glucose and fructose, observing increasing of their content. Moreover, slightly increased total phenolics content was noticed in wines fermented with honey and almost no influence of honey was observed on the antioxidant activity, glycerol, organic acids and acetic acid content. In general, addition of honey in grape mash before fermentation could be considered as a possible technique for increasing the wine quality and stability, especially of varieties with lower quality potential.

Keywords: honey wine, Temjanika, Smederevska, Stanušina, FTIR, spectrophotometry.