

Abstract

The volatile aromas that are lost during the must's fermentation into wine represent a department that is not very much analysed. The capturing and analysing of the volatile compounds that are trapped in the CO₂ flow during gas exhaustion of the fermentation stage are the main objectives of the present study. The Tamaioasa romaneasca grapes, harvest of 2011, were processed according to the aromatic wine technology. During fermentation, the volatile aromatic compounds were captured using SPE cartridges attached to the airlocks of the fermentation vessels. After the fermentation ended, the extracts were obtained by washing the bed of the SPE cartridges with 2 mL dichloromethane. Gas-chromatography coupled with mass-spectrometry was used to identify the captured compounds. The processing technologies influenced the number and quantity of the captured compounds. Esters (isobutyl acetate) and alcohols, as well as aldehydes and terpenes are found in the exhaust air of the fermentation process. The identified compounds are found in trace quantities.

Key words: (min. 3 – max. 5): Tamaioasa romaneasca, aroma compounds, exhaust CO₂