Volume 25, Number 1, pp.47-52, 2014

Study of phenolic compounds in red grapes and wines from Murfatlar wine center

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Abstract The latest research revealed that phenolic compounds play an important role in the quality of red wine, particularly on colour and astringency and also are responsible for the sanogenic or multiple benefic effects on human health after a moderate consumption of wine. This paper presents the ripening evolution of routine quality control parameters (sugars, acids, weight of 100 berries) and phenolic compounds (anthocyanins and polyphenolic index) during 2013 year for the most representative red grape varieties (Cabernet Sauvignon, Merlot, Feteasca Neagra, Pinot Noir and Mamaia) authorized to obtain wines with denomination of origin controlled in Murfatlar wine center. Also, the phenolic profile of obtained red wines was evaluated by reversed-phase high performance liquid chromatography. The reported results were useful to find the optimum moment for grape harvest ensuring the production of high quality wines.

Keywords: phenolic compounds, grape, wine, ripening, HPLC