

**STUDY OF SOME POLYPHENOLIC EXTRACTS
OBTAINED FROM PRESSED GRAPE SKINS**
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Abstract

Due to their biologically active properties, polyphenols convert waste into attractive sources for the medical and pharmaceutical products, their traditional management being varied towards other technological processes. The identification of active principles derived from the polyphenolic extracts obtained from pressed grape marc can help create an alternative use and recovery of by-products of wine, fact which increases their economic value. It also helps assess the oenological potential of vine varieties and thus to assess their beneficial properties in maintaining metabolic balance and health of the human body. In this context, the research in this paper aim to characterise the extracts obtained from pressed grape marc by identifying and quantifying the major polyphenolic compounds in their composition. To study the influence of the maceration technology on the content of polyphenolic compounds from byproducts of the winemaking process, grape samples of Fetească neagră, Băbească neagră, Cabernet Sauvignon, Merlot and Arcaș grape varieties were processed using classical maceration, thermo-maceration, microwave maceration and rotary tanks maceration (ROTO-tanks). The obtained polyphenolic extracts were analyzed by high performance liquid chromatography (HPLC), several phenolic acids, stilbenes (trans-resveratrol) non-hydrolysable tannins (catechin and epicatechin), some flavones (rutin and quercetin), and a number of anthocyan compounds being identified and quantified. The results of the preliminary characterization showed quite similar values in the content of total polyphenols and tannoid matters index. The maceration variants did not affect the amount of hydroxybenzoic and hydroxycinnamic acids. The other polyphenolic compounds that were identified varied depending on the grape variety and maceration technology used. The obtained data justifies the use of pressed grape marc as raw material to obtain polyphenolic extracts, recommending further research on its biologically active properties (antiradical, antioxidant, cytotoxic and cytostatic).

Key words: grapes, macerationa, pressed grape marc, extracts, polyphenols