

Testing certain methods of extracting polyphenolic extracts from Vitis vinifera seeds

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The efficiency of the methods of extraction of the vegetal principles is enssured by the relation extraction agent/vegetal mass, temperature, the number of extraction phases, pH, the size of the vegetal materil particles, performance rating. In the present study, two extractive methods were tested, the discontinuous shaking extracting method and Soxhlet continuous extractive method. In the first case the extractive process was followed durind its dynamic course for 24 hours. In order for the mentioned extractive methods to be assessed, the obtained vegetal extracts were analyzed to determine the total polyphenol content (g GAE/L) and the index of tannoid matters (ITM). As a vegetal material, Vitis vinifera seeds were used, from the varieties Cabernet Sauvignon, Merlot, Băbească neagră and Fetească neagră.

The purposes were to select the most efficient metho for the extraction of total polyphenolic compounds, and to select the vegetal material with the highest content of tatal polyphenolic compounds.

The importance of the studies regarding the grape polyphenols is the evaluation of the enological potential of the different varietiess of vines, as well as the evaluation of their properties benefic for healthcare, due to their anti-oxidant, anti-neoplastic and anti-inflammatory actions. The richest vegetal extracts as to the total polyphenols, tanoid matter and anthocyns content were obtained from Băbească neagră and Merlot grape seed by using both extractive methods.