# EXTRACTION OF ANTHOCYANINS FROM GRAPE POMACE GENERATED DURING THE PRODUCTION OF WHITE WINE

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Grape is one of the most cultivated fruit in the world being primarily destined for industrial processing. In 2010, the main wine region of Brazil processed about 530 tons of grapes. The high generated volume, around 20% of the total processed fruit, the short harvest period and some polluting characteristics make the grape pomace a serious environmental problem. However, this residue can be considered as an interesting source for the recovery of bioactive compounds, mainly phenolic ones, with qualitative and quantitative variation due to many different factors such as the grape cultivar, the fruit processing, among others. The objective of this research was to determine the best condition for the hydro alcoholic extraction of the grape pomace generated during the production of white wine regarding the anthocyanin recovery. For this purpose, it was planned a 23 factorial design with triplicate at the central point, having as independent variables the ethanol content (30-70%), pH (2-4) and the ratio substrate: solvent (1:3 to 1: 9). The contents of total and monomer anthocyanins were the dependent variables. The grape pomace was previously hydrated and the extraction was carried out for two hours at 50 °C. The ratio substrate: solvent has positively influenced the anthocyanin extraction. But it was observed that the increase in pH and the increase in pH associated with the decreased of the ethanol content resulted in a decrease of the anthocyanin extraction. By using pH 2.0, 30% ethanol and the ratio substrate: solvent equal to 9:1 an overall yield of 99% was verified. Under these conditions, it was estimated a recovery of 173 mg of anthocyanin for 100g of grape pomace.
Keywords: waste recovery, bioactive compounds, grape pomace.