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ANTIOXIDANT AND PHOTOPROCTETOR EVALUATION OF GRAPE EXTRACTS

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Abstract

The agroindustry residue contains a large variety of biologically active species that are wasted. The objective of the present study was to evaluate the antioxidant and photoprotective activity of the hydroalcoholic extracts of the Sauvignon Blanc grape (SB) and a mixture of Tannat and Malbec varieties (BTM). The total phenols content was evaluated by the Folin-Ciocalteu methods; total flavonols by AlCl3; antioxidant activity by radical DPPH sequestration, inhibition of the autoxidation of acid β-carotene linoleic system and iron chelation capacity. The photoprotector effect (SPF) was evaluated by scanning spectrophotometer among the wavelengths of 290nm to 320nm with readings every 5nm. The grape extracts BTM and SB presented an index of total phenols of 33.02 and 16.69 mg equivalents of Gallic acid/gram of extract respectively, while the content of flavonoids was 7.16 and 0.46 mg quercetin equivalents/gram of extract. BTM extract was able 98% DPPH sequestration and SB 88.9% in extract concentration of 3200 µg/mL. Iron chelation capacity was greater for the extract from the BTM (95.58%). The results show an SPF 157.22 to BTM extract and 0.413 to SB. In view of the results,

it can be stated that MTM bagasse extract has a better biotechnological potential.

Keywords: Antioxidant. Photoprotection. Grape.

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