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PHENOLIC CHARACTERIZATION OF AGING WINE LEES: CORRELATION WITH ANTIOXIDANT ACTIVITIES

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Abstract

Aging wine lees are water-wastes produced during the wine aging inside wood barrels that can be considered as alternative sources of bioactive compounds. Phenolic characterization and antioxidant activity (AA) measurements of wines lees solid-liquid extracts have been undertaken on a dry extract (DE) basis. Solvents with different polarities (water, methanol, ethanol, two hydroalcoholic mixtures and acetone) were used. Total phenolic (TPC) and total flavonoid contents (TFC) were determined. The mixture of 75:25(v/v) EtOH:H₂O showed the highest values with 254mg_{GAE}/g_{DE} and 146mg_{CATE}/g_{DE} respectively. HORAC, HOSC and FRAP were used to determine the AA of the extracts being also highest for the mixture of 75:25(v/v) EtOH:H₂O (4,690 μmol_{CAE}/g_{DE}, 4,527

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