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STORAGE STABILITY, ANTIOXIDANT AND ANTILIPID ACTIVITY OF SEED EXTRACT FROM PINOT NOIR GRAPE¹

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Abstract: The seed extract from Pinot Noir grape (GSE) was prepared. Extraction yield (12%) and total phenolic content (111.22 mg GAE/mg DW matter) of GSE was evaluated. The antioxidant capacity of GSE was determined by ABTS and DPPH methods. The effect of storage conditions of GSE on its TPC values has been investigated. It was found that when GSEs kept at 31%, 52% and 71% relative humidity for 60 days at 25 °C, the TPC values decreased from 111.22 to 86.83, to 83.00 and to 62.00 mg GAE/g DW, respectively. For that period TPC value of the sample stored at 4 °C decreased slightly to 109.50 mg GAE/g DW and TPC value of lyophilized sample retained. The lipid oxidation of extracted fats from ground pork without and with added GSE and a synthetic antioxidant (butylated hydroxyl toluene) was studied at 40 °C, 4 °C and -18 °C. It was found that at 4 °C for 48 hours there was no lipid oxidation of the fat samples with added antioxidants (AO), in contrast to the sample without AO. After 48 hours at -18 °C, no lipid oxidation was observed in all samples - without and with added AO.

Key words: grape seed extract, storage stability, fat, lipide oxidation

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