

Spectrophotometric characterizations of anthocyanins extracted from black grapes skin

Gabriela STANCIU^{a*}, Simona LUPȘOR^a and Constanta SAVA^b

^a*Department of Chemistry, Ovidius University of Constantza, 124, Blvd. Mamaia, 900527, Constantza, Romania*

^b*Department of Pharmacy, Ovidius University of Constantza, Constantza, Romania*

Abstract. The aims of this study consist on anthocyanins isolation from black grapes skin by different extraction methods in order to select the best choice, as well as the spectrophotometric characterization of anthocyanins extracts (quantitative analysis, indices for pigment degradation, color density, polymeric color and stability study during time at ambient temperature). The study is justified by two major reasons: first the proved antioxidant effect of anthocyanins and their importance for health and the second the worldwide trend for replacing synthetic foods colorants with natural pigments among them anthocyanins being situated in first place because of their intense and diverse colors as well as for their protective effect.

The results show that black grapes skin has rich anthocyanins content (325.216- 323.456 mg/100g fresh products), the index for pigment degradation are between 40.4% - 41.77% in fresh products, the color density values are from 1.59 to 2.68 and the anthocyanins extracts have a good stability during time (289.335 – 316.962 mg/100g fresh products).

Keywords: anthocyanins, index for pigment degradation, color density, polymeric color, black grapes
