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Abstract

The aim of present study was to investigate the influences of pH and several salts on the antioxidant activity and color of an ethanolic grape marc extract. Furthermore, the phenolic content of the extract was analyzed using HPLC and spectrophotometric methods while the total antioxidant activity was assessed by the reaction with ABTS radical. Gallic acid, procyanidins B1, B2, polydatin, catechin, epicatechin, hyperoside, ferulic, chlorogenic, and salicylic acids were among the main identified polyphenols. Different pH values had slight influence on the antioxidant activity, the highest value being determined for pH 3.7. The redness, chroma, and hue were significantly enhanced at pH 3.7 and 2.6. The chromaticity decreased at pH = 5.5 and pH = 7.4, so the extract should be used with care in products with such media. The presence of salts did not noticeably affect the antioxidant activity, except the higher concentrations of CaCl₂, which decreased the antioxidant activity but enhanced the color intensity.