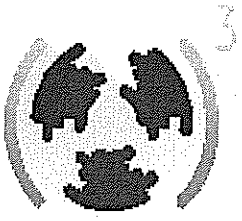

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ANTIOXIDANT ACTIVITY ULTRASONIC EXTRACT AND MACERATE COLORED VEGETABLES

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Beet (cv. Palanacka crvena) was cultivated under controlled plastic-covered greenhouse conditions using standard production methods. During harvest maturity, beethead sampling was performed for chemical analysis. The objective of this study was to investigate the correlation between total phenolic content and antioxidant activity of ethanol extracts of beet. Total phenols were evaluated by the Folin-Ciocalteu spectrophotometric method. Antioxidant activity, defined as the DPPH radical neutralizing ability, was also determined by spectrophotometry. Results show that the total phenolic content was higher in beet-ultrasonic extract E_1 (0.0811±0.0001 g GAE/100g sample) than in macerate E_2 (0.0577±0.0001 g GAE/100g sample). High values of antioxidant activity were identified (92.67 % for E1 and 91.69% for E2), suggesting a favourable correlation with the total phenolic content (r^2 = 0.832 and r^2 =0.998).

Key words: beet, correlation, phenolic compounds, antioxidant, macerate, ultrasonic extract.