Evaluation of Anthocyanins and Flavonols from two Different Acerola (*Malpighia emarginata* DC.) varieties

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Acerola, known to have high vitamin C levels, is also rich in phenolics and carotenoids. Much attention has been focused on the activity of the natural antioxidants present in fruits, because these components have the potential to reduce the level of oxidative stress. The aim of this work was to evaluate the total content of anthocyanins and flavanols from two different acerola (Malpighia emarginata) varieties (BRS237 and II47/I) in non-liofilizated and liofilizated pulp as well as in juice fruit. The total anthocyanins and flavanols concentration were estimated as medium values according to the method of Fuleki and Francis (1968). The BRS237 variety presented a total anthocyanins concentration of 33.8mg/100g, 183.3mg/100g and 23.6mg/100g from non-liofilizated pulp, liofilizated pulp and fruit juice respectively. The total flavonols content was 21,9mg/100g, 93mg/100g and 20,9mg/100g for the respective samples. Indeed, II47/I variety revealed a total anthocyanins concentration of 38.7mg/100g, 249,5mg/100g and 27.9mg/100g for non-liofilizated and liofilizated pulp and fruit juice respectively. The total flavonols content was 30.8mg/100g, 122.0mg/100g and 29.1mg/100g respectively. The results indicate a major antioxidant potential for II47/I variety compared to BRS237 one. Apparently there is not a significant difference between anthocyanins and flavonols from non-liofilizated pulp and juice fruit for both varieties as weel as between each one. Furthermore, the results obtained with liofilizated pulp confirmed the higher content for anthocyanins and flavonols for II47/I variety.

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