



Effect of storage on anthocyanin and antioxidant activity of a tropical blend juice

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The search for healthier and more practice products have encouraged the development of the drinks ready for consumption, mainly mixed juice, obtained from fruits and vegetables. Anthocyanins are pigments present in several fruits and vegetables, responsible for their red and purple color. The antioxidant action of anthocyanin is due to the presence of hydroxyls group, in addition to aromatic rings. Several studies have pointed out its relationship on the prevention of chronic diseases. Therefore, the aim of this study was to evaluate the effect of storage of a mixed juice of banana, strawberry and juçara on its anthocyanin content and antioxidant activity.

Fruit pulps in a 60:20:20 ratios of banana, strawberry and juçara, respectively, were mixed in an industrial blender for obtaining the juice and it was storage in a BOD incubator at 6 °C for three months. Samples were taken each 30 days for anthocyanin content and antioxidant activity evaluation. The anthocyanins were determined using the pH differential method and antioxidant activity was quantified using the method based on the decoloration of the ABTS^{•+} radical.

Initially, the mixed juice presented an anthocyanin content of 16.0 mg of cyanidin-3-glucoside.100 g⁻¹ and an antioxidant activity of approximately 9.0 µmol Trolox.g⁻¹. In spite of the storage period had affected both total anthocyanin and antioxidant activity (p<0.05), there was retention of about 60 and 70%, respectively, of these parameters, after three months, showing that the tropical blend juice continues to be a good source of bioactive compounds, being a potential drink for a healthier life.