CAROTENOIDS, TOTAL PHENOLICS COMPOUNDS AND ASCORBIC ACID IN SWEETENED TROPICAL CASHEW APPLE JUICE PACKED IN GLASSES AND PET BOTTLES

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Few researchers have studied the effect of processing on the stability of functional components in tropical fruit juices, except for vitamin C. The maintenance of the original characteristic of foods for a long storage period is one of the greatest objectives of the food industry. Therefore the conditions of storage and the type of packaging used have a great importance on the quality of the final product during shelf life. Thus, this study aimed to evaluate the stability of total carotenoids, phenolic compounds and ascorbic acid present in sweetened tropical cashew apple juice, obtained by the hot fill process, packed in glass and polyethylene terephthalate (PET) bottles for 120 days at 28 °C. Sweetened cashew tropical juices were formulated standardizing pulp content to 25% and soluble solids to 11 °Brix. The analyses were of phenolic compounds (REYNERTSON et al., 2008), ascorbic acid (IAL, 2008) and total carotenoids (NAGATA and YAMASHITA, 1992). There was a reduction of carotenoids in both packaging - glass (31.35%) and PET (31.21%), showing that there was no significant difference between the two types of packaging and storage time. A reduction in ascorbic acid content of about 53.09% in the PET and about 24.49% in the glass was observed. A decrease in phenolic compounds in the sample stored in glass bottles (8.80%) and the sample stored in PET bottles (26.87%) was also observed. Thus, this work suggests that sweetened tropical juice cashew apple packed in glass bottles showed less loss of nutritional and functional components.