Profile of phenolic acids in cashew apple (*Anacardium occidentale, L.*) after thermal injury.

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Evidences suggest that a diet rich in fruits and vegetables may decrease the risk of chronic diseases, due to low fat content and high levels of fiber and antioxidant substances, such as ascorbic acid and polyphenols. Content of phenolics in fruits is affected by the degree of maturity at harvest, cultivar, pre and post harvest conditions, storage and processing. Cashew tree (Anacardium occidentale, L.) is native from Brazil and its culture has a large socioeconomic importance to the Northeast Region of the country. The pseudofruit (or cashew apple) is rich in ascorbic acid and phenolic compounds. The main of this work was to identify the phenolic acids present in cashew apple and to evaluate the effects of cutting and storage in different temperatures (2, 27 and 40 °C) by 24 hours on phenolic acids profile. Four phenolic acids were identified in cashew apple juice after hydrolysis and GC/MS analysis: gallic acid, protocatechuic acid and free and conjugate cinnamic acid. No modifications were observed at 2 and 27°C, but at 40°C it was observed an increase in protocatechuic and cinnamic acid and a decrease in cinnamic acid conjugate. These results indicate that high temperature is an important factor to phenolic composition by promoting hydrolysis of these compounds.

Keywords: cashew apple, phenolic acids, injury.

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