

Obtaining and characterization of anthocyanins dry extract for nutraceutical and food preparations

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ABSTRACT

The main constituents of the *Euterpe oleracea* Mart. fruit are anthocyanins. The aim of this work was to standardize the extraction process and characterize an anthocyanins- rich dry extract obtaining from this fruit. A 2³ full factorial design was used. The volumes of ethanol 92% and acetic acid and the extraction time were used as factors. Total solids and anthocyanins content were used as responses. The dry extract was obtaining by freeze drying. The content of anthocyanins was determined by spectrophotometry. FTIR, DSC, TG, SEM and Atomic Absorption Spectrometry were used to characterize the obtained dry extract. The radical scavenging activity was evaluated by the DPPH methods. The extraction conditions were established. The most influential factor was the volume of acetic acid. The extract showed a good anthocyanin content and antioxidant properties. The better extraction conditions were: volume of ethanol 92%: 400mL; volume of acetic acid: 75mL; extraction time: 4h.

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