

Abstract No: 745

CHARACTERIZATION OF JUSSAÍ (*EUTERPE EDULIS*) CULTIVATED AT RIO DE JANEIRO

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Background & Objectives: Assaí jussara (Euterpe edulis) or jussaí is a palm from Rio de Janeiro Atlantic Forest. Many studies have been report that its antioxidant activity is five times hihgest fro assaí (*Euterpe oleracea*). The objective of this study was to characterized three samples of liophylized jussaí.

Methods & Results: The centesimal composition, iron and zinc (by ICP), antioxidant activity, phenolic compounds, anthocyanins (HPLC) and total antocyanins (Scpectrophtomy) in freeze-dried in natura pulp samples were evaluated. The contents of centesimal composition were: moisture 4.91 ± 0.021 ; ash 3.86 ± 0.13 ; proteins 1.17 ± 0.05 ; lipids 38.64 ± 0.90 ; fiber 40.73; carbohydrates 5.13 (g. 100^{g-1}) and caloric value 395.20 Kcal.100 g⁻¹. The antioxidant activity was 31.67 mgcyanidin-3-o-glycoside; 100g -1 μ mol; ORAC - 2690.93 \pm 206.8 μ mol Trolox. g⁻¹; total anthocyanins 1833.55 mg-cyanidin-3-o-glycoside.100g $^{-1}$ ± 91.93; 386.63 mg-cyanidin-3-o-glycoside.100g $^{-1}$ ± 6.43 and, 1263.49 \pm 29.85 mg-cyanidin-3-o-runenoside.100g $^{-1}$. The contents of chrome, aluminum, iron and zinc were, respectively: 22.26 ± 1.95 ; 3.536 ± 0.29 ; 171.00 ± 13.13 +- and 37.36 ± 0.65 . Some carotenoids were still identified lyophylized jussaí as lutein, beta-carotene, 13 and 9-Z-betacarotene and total carotenoids: $19.12 \mu.g^{-1} \pm 27.57$; 22.73 ± 148.99 ; $0.35 \pm$ 22.62 and $0.34 \pm$ 28.99, respectively.

Conclusions: The results were very significant since the lyophilized jussaí pulp can be applied as a functional supplement for people to minimize the effects of the oxidative stress.

Significance and Impact of the Study: the present work is very significant since with this results, our working group will make nanoemulsions among other products that can benefit the people health.

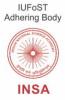
Conflict of interest disclosure: There is no conflict of interest

540



Keywords: jussaí, *Euterpe edulis*, characterization, freeze-drying, phenolic compounds, antioxidant activity.











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TO WHOMSOEVER IT MAY CONCERN

This is to certify that the following two posters (**#745 and #746**) were presented during IUFoST 2018 India World Congress during October 23-27, 2018 at Navi Mumbai, India. The presenting author for both the poster presentations was *Lucia Maria Jaeger de Carvalho*; Rio de Janeiro Federal University, Brazil.

The details of two posters were as follows:

#745 in Session 06 on Oct. 27, 2018

Characterization of jussaí (Euterpe edulis) cultivated at Rio de Janeiro

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#746 in Session 05 on Oct. 26, 2018

Carotenoids contents in pumpkins (*Cucurbita moschata*) cooked in different cooking styles <u>Lucia Maria Jaeger de Carvalho</u>¹; Ramon M. Silva¹, Beatriz Cunha¹, Filipe M. Ferreira¹, Elisa C. Leal¹, Lucas Malvezzi de Macedo¹, Sidney Pacheco², Luzimar Da Silva², Manuela Santiago², José Luiz Viana de Carvalho² and Semíramis R.R. Ramos²

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<u>Please Note</u>: The names of presenting author along with co-authors were those uploaded in IUFoST 2018 Webpage Poster Abstracts Submission Portal, with no additions or deletions in the list can happen once uploaded first time.

Further, the poster presentation #746 entitled "Carotenoids contents in pumpkins (*Cucurbita moschata*) cooked in different cooking styles" was one of the poster awardees in IUFoST 2018. This was presented by *Lucia Maria Jaeger de Carvalho*, Rio de Janeiro Federal University, Brazil, for which the Certificate was presented only to the presenting author.

M. C. Varadaraj

Chair, Poster Committee of Congress and Former Chief Scientist of CSIR-CFTRI P. G. Rao

Chair, Scientific Committee of Congress and Distinguished Scientist of CSIR