



## 7<sup>TH</sup> PORTUGUESE YOUNG CHEMISTS MEETING

# BOOK OF ABSTRACTS

19<sup>th</sup> - 21<sup>st</sup> May 2021

Bragança - Portugal

**Title** Livro de Resumos do 7<sup>th</sup> Portuguese Young Chemists Meeting

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**Support** Electronics

**Support detail** PDF

**Edition** 1<sup>st</sup> Edition

**Bar Code** ISBN 978-989-8124-31-9



**Editor** Sociedade Portuguesa de Química

**Country** Portugal

**E-mail** [secretariado@spq.pt](mailto:secretariado@spq.pt)

**Editor prefix** 978-989-97667

## **VIABILITY OF *ATTALEA SPECIOSA* MART. EX SPRENG MESOCARP FLOUR FOR APPLICATION IN BAKERY PRODUCTS: CASE STUDY**

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*Attalea speciosa* (Mart. ex Spreng – Babassu) is a palm tree of the botanical family Arecaceae found in Brazil. It is considered the largest native oil resource in the world and its production chain is one of the most representative in south America. The potentialities of babassu ranges from the use of the coconut, as its unfolding in all the primary fractions of the epicarp, mesocarp, endocarp, and almonds [1]. The babassu mesocarp represents about 20.4% of the fruit, being a by-product of the babassu oil extraction industry, with most of its application being for human nutrition. [2]. The flour produced from the mesocarp of babassu coconut presents a high content in carbohydrate (mostly fibers), which can modify the lipid profile and significantly decrease the blood glucose. Also, the high content in phytochemicals with biological activity increases the quality of babassu flour for food applications, meeting the increasing demand for healthier food products [3]. However, the studies of babassu mesocarp flour are very scarce or even non-existing, making this plant very appealing for the development of new foodstuffs that could be on the vanguard of the next generation of bakery products. Therefore, the present study aims to develop bakery products (bread and waffles) based on babassu mesocarp flour, further investigated for their physical parameters of color, texture, mass, and volume, as also their proximate composition (AOAC methods). Furthermore, the free sugars (HPLC-RI), fatty acids (GC-FID), organic acids (UPLC-DAD), tocopherols (HPLC - fluorescence) and phenolic compounds (HPLC-DAD/ESI (MS)) composition will also be assessed, followed by the antioxidant, hepatotoxic and antimicrobial potential of the hydroethanolic extracts.

The valorization of this non-conventional food vegetable represents an important contribution from a cultural, economic, social and nutritional point of view for future consumers and producers. The introduction of babassu on a regular diet basis could lead to a diversification and improvement of nutritional quality considering the current agricultural system, where a small number of plants are produced for commercialization and consumption.

### **References**

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### **Acknowledgments**

To the Foundation for Science and Technology (FCT, Portugal) and FEDER under Programme PT2020 for financial support to CIMO (UID/AGR/00690/2019); the national funding by FCT, P.I., through the institutional and individual scientific employment program-contract for L. Barros/M.I. Dias; to FEDER-Interreg España-Portugal programme (TRANSCoLAB 0612\_TRANS\_CO\_LAB\_2\_P). To the European Regional Development Fund (ERDF) through the Regional Operational Program North 2020, within the scope of Project GreenHealth - Digital strategies in biological assets to improve well-being and promote green health, Norte-01-0145-FEDER-000042;