BOOK OF ABSTRACTS

9TH MEETING OF YOUNG RESEARCHERS
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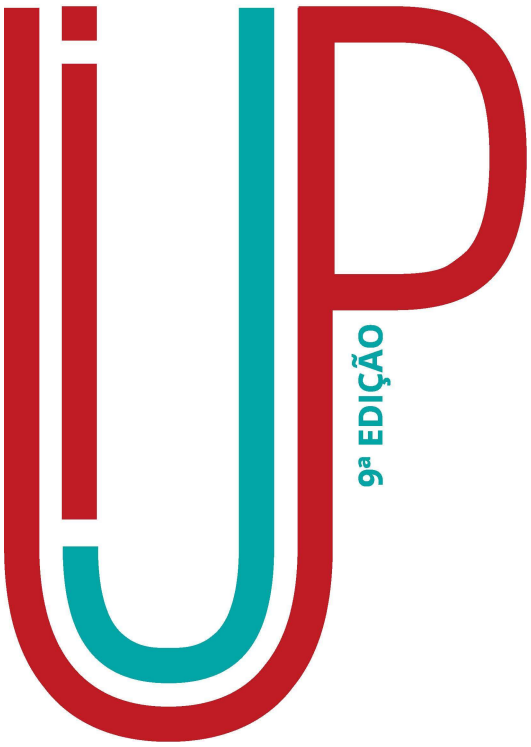

ENCONTRO INVESTIGAÇÃO JOVEM
DA UNIVERSIDADE DO PORTO

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- **11115 | Baobab fruit: Assessment of seed kernel lipid fraction**

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Fruit seeds are important sources of oils for nutritional, pharmaceutical and industrial purposes, despite their differences in fatty acids composition. To study the viability of baobab seed kernel valorization as a new alternative edible oil source, it is essential to characterize its lipid fraction.
Oil was obtained by Soxhlet extraction with petroleum ether (2.5 h). Fatty acid methyl esters (FAME) were then analyzed by GC, in a Shimadzu GC-2010 gas chromatograph with a flame ionization detector (Shimadzu, Columbia), according to Pimentel et al. (2014). Vitamin E profile (α, β, γ and δ-tocopherols and α, β, γ and δ-tocotrienols) was determined by NP-HPLC/DAD/FLD, in an HPLC integrated system (Jasco, Japan), as described by Rodrigues et al. (2015).
The results showed that baobab seed kernel presents a healthy fatty acids profile, essentially rich in oleic (C18:1n9) and linoleic acids (C18:2n6). Regarding vitamin E profile, the major lipid-soluble antioxidant in the cell antioxidant defense system, γ-tocopherol was the prevailing vitamer. These preliminary results anticipate baobab fruit as an interesting source of oil. More studies are being conducted in order to contribute to a better knowledge of this fruit intending its valorisation, given the socio-cultural importance that it has in Africa.