



Physical-chemical characterization in the *Babaçu* fruits (*Speciosa Orbignya*) with the use purpose as biocumbustivel in low income communities in the Amazonian Forest *

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The search of alternatives for energy sources in the world is a subject that has much time comes being studied. In a country of continental dimensions as Brazil, that shelters a great diversity of species not yet studied, either of its botanical rational use or point of view, it can be searched in its native species interesting alternatives for this problem. In this context, the production of biodiesel is presented as an alternative in potential for the rational use of forest species, moreover, is an interesting option for projects of carbon kidnapping, it offers many social and economic advantages and can be produced with the job of a simple and easy technology of being transferred to the productive process. The *Babaçu* (*Speciosa Orbignya*) is a species of the Palmae family, of common occurrence in the region north of the Brazil and presents some interesting characteristics, as eatable fruits and of great appreciation in the local and animal communities, the almonds possess a good potential of oil production, the wood can be used for rustic constructions, the leves can be used for coverings of houses and the palms can be used in the garden. Thus *Babaçu* is a very important species for the situated local populations mainly in the region north of Brazil. In this context, the present work had for objective to make a physicist-chemistry characterization of the fruit of *Babaçu*. The collections of seeds had been carried through in the city of Itapuã d'Oeste in Rondônia Stat. One is about an area previously worked in Thematic Project of recovery of degraded areas. The extraction and the characterization

of the oil had been carried through in the laboratory of Biochemist of the Department of Technology of the UNESP/Jaboticabal/São Paulo-Brazil. The dynamic assays had been carried through with the objective to study the fractionizing of the rind and the income how much to the release of almonds and to get impact loads, the data had been gotten with the dry fruits in complete way. The assays had been carried through of this form aiming at to get some characteristic of interest for future assays. Analyzing the results one notices that the gotten maximum force was of 40018 N. This value can be considered high when compared with the necessary force for rupture in the diametrical assay. However, it was observed that the injuries in almonds had been well lesser. The assays of chemical characterization had been carried through with fruits in different points of maturation and of a general form, 9.2% of staple fibres can be verified that they had presented them 32.1% of total fats, 5.2% of proteins. The presented results are part of a bigger project where if its rational use for the one of the to extract and the commercial plantation in degraded areas waits to determine the potential of oil use of native species of the forest being guided already, preserving the integrity of the forest beyond providing to the local communities a possible source of income.

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