



ROLE OF THE BARU ALMOND IN ENVIRONMENTAL, ECONOMIC, AND SOCIAL SUSTAINABILITY: A REVIEW

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RESUMO

Thematic area: sustentabilidade social, ambiental e econômica

Introduction: *Dipteryx alata* Vogel is a Brazilian Cerrado fruit species known as “baruzeiro”. Their almond, “baru” shows several applications for the local communities such as food, commercialization, reforestation, and traditional medicine. **Objective:** to perform a systematic review of the role of the baru almond in environmental, economic, and social sustainability. **Materials and methods:** we follow the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses - PRISMA methodology. Studies were searched in PubMed, Scopus, Scielo, and ScienceDirect databases using the descriptors “*Dipteryx alata*” OR “baru nut” OR “baru almond”. No language or date restrictions were made. Duplicate articles were excluded. Then, the title and abstract were read to apply the exclusion criteria (reviews, short communication, conference of documents, and articles on other topics). After reading each article in its entirety, original studies, books, or chapters published online that covered one or more of the objectives of this review were eligible. **Results and discussion:** baruzeiro is a fast-growing tree and does not depend on fertilized soil. Various animals appreciate its fruits and almonds, which favors their propagation. Although both are edible, almond consumption is more common and their extraction has been a way of generating income for local communities. Almonds are sold both fresh and in co-products. The high nutritional value and aroma of baru almonds allow the elaboration of functional and vegan foods rich in protein, unsaturated fatty acids, antioxidants, fiber, and minerals. In addition, it has the versatility to be consumed in natura, in flour, and in culinary preparations such as cakes, cookies, fermented beverages, cereal bars, granola, sweets, and frozen yogurt. Another perspective that has been explored is the baru almond as a source of a new vegetable oil. Several studies have sought to improve extraction methods to ensure a quality oil, rich in unsaturated fatty acids, such as oleic and linoleic acid, and antioxidants, such as vitamin E. A few years ago, the Ministry of the Environment established the baru as one of the native species of socio-biodiversity of food value, for the purpose of marketing in natura or its derived products, which can strengthen production chains and increase the exchange of experiences between extractive communities. **Conclusion:** The use of baru almonds for

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environmental recovery, food, and source of income favors the development of local communities, strengthening production chains. Therefore, the baru almond plays an essential role in the tripod of environmental, economic, and social sustainability. Resumo - sem apresentação

PALAVRAS-CHAVE: Cerrado, extractivism, nut, reforestation, source of income