# Baru

The by-product of the production chain of this fruit from the **Cerrado could become the baru** main commercial product.

With the support of The Good Food Institute Brasil, Dr. Renato Manzini Bonfim, from the Agricultural Research Center – EMBRAPA, developed new ingredients that add value to the residual pulp from baru processing.

The baru tree is an emblematic figure of the Brazilian Cerrado, representing an important source of biodiversity and a symbol of the region's cultural and food identity. Despite its recognized value, the baru production chain focuses on the almond, with the **pulp**, which represents 40% of the fruit, often being wasted. Recognizing this unexplored potential, the present study developed a **paste** and flour from baru pulp, which showed great potential for use in the plant-based food industry.

#### The new ingredients in practice:

- The paste and flour were incorporated into formulations of kibbehs, nuggets, and vegetarian burgers, achieving high acceptance in sensory tests, scoring 7 or higher;
- **Rich in fiber, carbohydrates, and minerals**, the paste and flour enriched the formulations, providing greater nutritional value to the final products;
- Contributed to the **consistency and homogeneity** of the preparations, preventing them from becoming brittle and improving the texture;
- The concentration of carbohydrates in the paste and flour also **increased the juiciness** of the products;
- Baru paste flour **is extrudable in 3D food printers**, a promising and innovative technology.

Economic, environmental, and social impacts:

- Both the pulp and its derivatives have the potential to become the baru main commercial products, generating a **higher income** than that obtained from the sale of almonds;
- Environmentally, processing encourages the maintenance of baru in the cerrado, contributing to the sustainability of the biome;
- Pulp processing does not generate environmental **pressure**, as it uses the residue after extracting the almond without picking more fruits;
- Socially, it strengthens meaningful relationships between local agents, such as rural producers, extractivists, and cooperatives;
- Gives visibility to adopted production systems and foods with **territorial identity**, promoting the appreciation of local culture.

## **Invest in the project**

To advance the technology until its adoption, the following steps include:

- Eveloping equipment that accelerates the processing of baru, from breaking to peeling and pulping the fruit more efficiently;
- It is also essential to validate the processes on a production scale and carry out analyses to ensure the safety of the ingredients;
- Furthermore, exploring new uses for ingredients is critical, aiming to expand the product portfolio and add value to the raw material.

### **Interested?**

Then, find out more details about the research:

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To support and invest in the continuity of the project, contact our team by e-mail:

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