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Biodiversity of Brazilian Biomes as a Source of Alternative Proteins

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The increase in consumption of plant-based foods has become a global trend, driven primarily by the decrease in animal protein consumption. This shift can be motivated by various factors, such as health concerns, environmental awareness, or personal taste. Consequently, there has been a growth in the plant-based protein industry, aiming to meet the protein needs of individuals who choose to replace animal protein in their diets. Proteins are essential in nutrition as they serve as a source of energy and contribute to the development and maintenance of the body. Additionally, they are responsible for various physicochemical and sensory properties of food, acting as functional ingredients that are beneficial to health. The pursuit of consuming plant-based proteins or plant-based products has become a solidifying and growing trend. Soy is the main domestic raw material for plant-based protein production; however, the vast Brazilian biodiversity includes several native plants that are good protein sources but remain largely unexplored due to a lack of research and investment. Some products from the Brazilian flora have already demonstrated their potential as good protein sources and are being studied for implementation in food. Examples include the pequi almond, guarana seeds, and the Brazil nut, also known as the Pará nut, which is the main source of selenium. The Brazil nut is an oilseed with high nutritional value, consisting of 60-70% lipids and 15-20% proteins. These products often come from byproducts of other technological processes that are not properly utilized. Therefore, it is important to study these alternative proteins to animal protein since research explains their importance for human health and, consequently, for the food industry. We can see that the full potential of the Brazilian flora is not reflected in the daily lives of citizens, and in addition to various well-known products not being utilized, there are many others with unexplored nutritional value. With the increasing market for alternative proteins, plant-based products will receive more investment and become more common in the Brazilian diet. In addition to promoting healthier eating habits, the increased consumption of these products will help the environment and contribute to a better food production system.

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