

Can Postage Stamps Reveal Brazil's Forest Bioresources?

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Postage stamps can reveal the communication between different fields of knowledge, transforming elements of nature into emblems for the representation of biodiversity, economic resources, national identity, and the cultural identity of countries. Brazilian philatelic issues that represent timber species express the dialogue between forest resources and the bioeconomy. The historical relationship between man, his territory, and the use of forest resources is established through visual records of the management, use, and valorization of Brazilian timbers over time. This editorial seeks to demonstrate how postage stamps become instruments for publicizing the country's timber potential and how they disseminate knowledge about the diversity of species of economic interest.

DOI: 10.15376/biores.21.2.2787-2791

Keywords: Philately; Bioeconomy; Forest resources; Timber species; Palm species

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Postage stamps are historical documents that disseminate science in a manner comprehensible to the lay public (Salcedo 2010). Created in England in 1840, the postage stamp aimed to democratize access to the postal service and optimize the entire mail system. Brazil was the second country in the world and the first in the Americas to adopt the postage stamp (Meyer and Meyer 2019). The study of postal themes allows for the interpretation not only of the iconographic preferences of a period, but also of the processes of cultural legitimization, identity valuation, and symbolic representation that permeate the construction of nations in the collective imagination (Martínez and Peregrín 2007). Issues that depict timber tree species and palm trees evidence the country's botanical richness and can reveal the bioeconomic potential of its forests.

Brazil stands out globally as one of the largest producers of tropical timber and plays a strategic role in the global forest products market (Timber Trade Portal 2019). Among the 60,000 species of timber cataloged worldwide, Brazil is the most biodiverse country, holding approximately 9,000 species (Beech *et al.* 2017). The representation of timber species and palm trees through stamps reveals the central role of these trees in shaping the country's ecological and economic identities. Noble woods, recognized for their quality and commercial value, have historically been associated with urban development, exports, and popular art, symbolizing Brazil's natural and cultural wealth (Alves 2024).

Postal issues can also evidence the tension between economic use and environmental conservation. While tropical timbers are intensively extracted, the discourse of the bioeconomy emphasizes the need for sustainable use and value addition through technological innovation and traditional knowledge (Almeida 2010). Thus, stamps depicting trees can simultaneously express historical memory and ecological

perspective, constituting a link between the past and the future of the society-forest relationship.

Brazilian Trees and Palms Represented on Postage Stamps

Trees and palm trees of economic importance are represented on Brazilian postage stamps (Fig. 1). These species are recognized for their added value as forest resources for diverse uses (Table 1).



Approximately 36% of these species are threatened, including the Vulnerable (VU) and Endangered (EN) categories, with emphasis on *Araucaria angustifolia* (Bertol.) Kuntze (Araucariaceae, pine) and *Paubrasilia echinata* (Lam.) E. Gagnon, H. C. Lima and G.P. Lewis (Fabaceae, Brazilwood). Two species of high bioeconomic relevance, *Bertholletia excelsa* Bonpl. (Lecythidaceae, Brazil nut tree) and *Swietenia macrophylla* King (Meliaceae, mahogany), are classified as VU. This reinforces the idea that part of the Brazilian timber resources present in philately belongs to biological groups under increasing conservation risk. *Handroanthus albus* (Cham.) Mattos (Bignoniaceae, ipê), classified as Least Concern (LC), despite supplying timber of extended historical use (Melo Júnior *et al.* 2025), is an icon of the national flora, having been designated as the “national symbolic flower.” Its presence on postage stamps reflects its cultural and ecological importance.

The species portrayed on the stamps exhibit a strong concentration of natural distribution in two biomes: Amazonia and the Atlantic Forest. The Amazon is the most represented biome, housing timber species of high economic and socio-environmental value, such as *B. excelsa*, *Hevea brasiliensis* Willd. ex A.Juss. Müll.Arg. (Euphorbiaceae,

rubber tree), and *S. macrophylla*. The palm trees *Euterpe oleracea* Mart. (Arecaceae, açaí palm), *Attalea speciosa* Mart. ex Spreng. (Arecaceae, babassu palm), and *Mauritia flexuosa* L.f. (Arecaceae, buriti palm), which are important for the extractivism of fruits and seeds, occur predominantly in the Amazon and the Cerrado. The Atlantic Forest, the second most featured biome, gathers emblematic species at high risk of extinction, such as *A. angustifolia* and *P. echinata*. Brazilian postage stamps evidence a diversity of forest bioresources of high economic and sociocultural value, ranging from timber products to non-timber extractive resources. Approximately 64% of the bioresources represented on the stamps are derived from timber extraction; the remaining 36% correspond to non-timber bioresources, including rubber, Brazil nut, açaí pulp, and vegetable oils extracted from babassu and buriti.

Conclusion

Philately is an interdisciplinary field of study capable of providing information about forest species of heightened economic, ecological, and cultural value, integrating the ecological, economic, and historical dimensions of a given country. Postal stamps depicting Brazilian tree species and palm trees help us understand the intertwining of forest bio-resources and economic value as elements that were, or still are, determining factors in the country's socioeconomic development. Recognizing stamps as practical documents for knowledge dissemination is also recognizing the role of philately as a mediator between nature and society, for the valorization of forests and their bioeconomic potential.

Acknowledgments

The authors are grateful for National Council for Scientific and Technological Development (CNPQ 308777/2025-5), and Santa Catarina State Research and Innovation Support Foundation (FAPESC 2024TR001918).

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Table 1. Wood and Palm Species on Brazilian Stamps

Postal Issue	Family	Species	Popular Name	Biome*	Forest Type*	Bioresource*	Status*	Fig.1
Tree								
1975	Araucariaceae	<i>Araucaria angustifolia</i>	pinho	Atlantic Forest, Pampas, Pantanal	High-altitude grassland, Semi-deciduous Seasonal Forest, Mixed Ombrophilous Forest	Woody	EN	A,B
1978	Bignoniaceae	<i>Handroanthus albus</i>	ipê-amarelo	Atlantic Forest	Rocky Field, Ombrophilous Forest	Woody	LC	C
1983	Lecythidaceae	<i>Bertholletia excelsa</i>	Castanheira	Amazon	Upland Forest	Woody; Chestnut Extraction	VU	D
1984	Euphorbiaceae	<i>Hevea brasiliensis</i>	seringueira	Amazon	Riparian Forest, Floodplain Forest	Rubber Extraction	NE	E
1985	Caryocaraceae	<i>Caryocar brasiliense</i>	pequi	Amazon, Caatinga, Cerrado, Atlantic Forest, Pantanal	Cerrado (lato sensu)	Woody, Culinary Oil from the Fruit	LC	F,G
1987	Meliaceae	<i>Swietenia macrophylla</i>	mogno	Amazon, Cerrado, Atlantic Forest	Riparian Forest, Upland Forest, Floodplain Forest, Semi-deciduous Seasonal Forest, Ombrophilous Forest	Woody	VU	H
1990	Fabaceae	<i>Mimosa caesalpiniifolia</i>	sabiá da caatinga	Caatinga	Caatinga (stricto sensu), Riparian Forest	Woody	LC	I
1990	Fabaceae	<i>Paubrasilia echinata</i>	pau-brasil	Atlantic Forest	Semi-deciduous Seasonal Forest, Ombrophilous Forest, Restinga	Woody; Wood Dye	EN	J
Palm								
1983	Arecaceae	<i>Euterpe oleracea</i>	açaí	Amazon, Cerrado	Upland Forest, Floodplain Forest	Culinary Fruit Pulp	NE	K
1984	Arecaceae	<i>Attalea speciosa</i>	babaçu	Amazon, Cerrado	Cerrado (lato sensu), Riparian Forest, Rainforest, Palm Land	Seed Oil Extraction	NE	L
2013	Arecaceae	<i>Mauritia flexuosa</i>	buriti	Amazon, Caatinga, Cerrado	Riparian Forest, Igapó Forest, Palm Land	Seed Oil Extraction	NE	M

* Data obtained from literature (BGF 2021; Brazilian Forest Service 2025). Legend: EN – Endangered; LC – Least Concern; NE – Not Evaluated; VU – Vulnerable.