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**Marketing Territorial y Comercialización Sostenible de las Hojas de  
Bijao en Mercados Gastronómicos y Culturales**

**Territorial Marketing And Sustainable Commercialization Of Bijao  
Leaves In Gastronomic And Cultural Markets**

**Autor**

**Martin Luther Jones Grinard<sup>1</sup>**

Facultad de Administración de Empresas y Contabilidad

<https://orcid.org/0000-0001-8722-8742>

[martin.jones0963@gmail.com](mailto:martin.jones0963@gmail.com)

**Universidad de Panamá**

Panamá

## Resumen

Las hojas de bijao (*Calathea lutea*) han sido utilizadas históricamente en Panamá y otras regiones de América Latina como insumo natural en la gastronomía tradicional, la conservación de alimentos y prácticas culturales comunitarias. Sin embargo, su potencial como activo económico sostenible continúa siendo subexplotado y escasamente abordado desde una perspectiva de marketing. El objetivo de este estudio es analizar las oportunidades de comercialización de las hojas de bijao desde un enfoque de marketing sostenible y marketing territorial, identificando los atributos que permiten su inserción en mercados gastronómicos, turísticos y culturales.

La investigación adopta un enfoque metodológico mixto de carácter exploratorio, combinando entrevistas semiestructuradas a productores y actores vinculados a la cadena de valor con encuestas aplicadas a consumidores interesados en productos tradicionales y sostenibles. Los resultados evidencian que la intención de compra se encuentra asociada principalmente a atributos como autenticidad cultural, origen territorial, sostenibilidad ambiental y uso gastronómico tradicional. Asimismo, se identifican limitaciones estructurales relacionadas con la informalidad productiva, la baja estandarización, la escasa visibilidad comercial y la débil articulación con mercados especializados.

A partir de los hallazgos, se propone un modelo estratégico de comercialización que integra narrativa cultural, certificación de origen, diferenciación por uso culinario y una arquitectura multicanal orientada a nichos gastronómicos y turísticos. Se concluye que las hojas de bijao pueden posicionarse como un producto cultural sostenible cuando las estrategias de marketing equilibran preservación cultural, sostenibilidad ambiental y viabilidad económica, contribuyendo al desarrollo territorial y al fortalecimiento de economías locales.

**Palabras clave:** Marketing Sostenible; Patrimonio Cultural Inmaterial; Productos Tradicionales; Desarrollo Territorial; Identidad Cultural.

## Abstract

Bijao leaves (*Calathea lutea*) have historically been used in Panama and other Latin American regions as a natural input in traditional gastronomy, food preservation, and community cultural practices. Nevertheless, their potential as a sustainable economic asset remains underexplored and rarely analyzed from a marketing perspective. This study aims to examine the commercialization opportunities of bijao leaves through a sustainable and territorial marketing approach, identifying key attributes that enable their integration into gastronomic, tourism, and cultural markets.

A mixed-methods exploratory design was adopted, combining semi-structured interviews with producers and value-chain stakeholders, along with surveys administered to consumers interested in traditional and sustainable products. Findings reveal that purchase intention is primarily associated with attributes such as cultural authenticity, territorial origin, environmental sustainability, and traditional culinary use. Significant structural limitations were also identified, including production informality, limited standardization, low commercial visibility, and weak integration into specialized markets.

Based on the results, a strategic commercialization model is proposed, integrating cultural storytelling, origin certification, differentiation by culinary use, and a multichannel distribution structure focused on gastronomic and tourism niches. The study concludes that bijao leaves can be positioned as a sustainable cultural product when marketing strategies balance cultural preservation, environmental sustainability, and economic viability, thereby contributing to territorial development and strengthening local economies.

**Keywords:** Sustainable Marketing; Intangible Cultural Heritage; Traditional Products; Territorial Development; Cultural Identity.

## **Introducción**

Bijao leaves (*Calathea lutea*), widely used in Panama and other Latin American countries for cooking, wrapping and presentation of traditional foods, are a vegetable input with deep cultural roots, symbolic value and practical functionality. Their historical use in gastronomic preparations - such as tamales, buns, hallacas and ceremonial dishes - transcends the culinary to become part of traditional knowledge systems linked to the territory, biodiversity and sustainable practices for the use of natural resources. In this sense, bijao leaves can be understood not only as an agroforestry input, but also as a biocultural good with potential for economic valorization in contemporary markets sensitive to sustainability and cultural identity (FAO, 2021; UNESCO, 2023).

In the current context, marked by the growth of responsible consumption, the reduction in the use of plastic packaging and the search for biodegradable alternatives, traditional vegetable inputs have acquired renewed economic relevance. Several studies indicate that consumers increasingly value products that integrate low environmental impact, traceability and cultural coherence, especially in gastronomic, tourism and creative markets (OECD, 2020; UNCTAD, 2023). Under this logic, bijao leaves have clear comparative advantages over synthetic or industrialized materials, as they are biodegradable, renewable and culturally significant.

However, despite its widespread use and cultural recognition, the commercialization of bijao leaves continues to take place mostly in informal circuits, with low levels of differentiation, little standardization and limited linkage with formal value chains. This situation restricts its capacity to generate sustained income for collectors, producers and rural communities, and reduces its visibility as a value-added product in specialized markets (FAO, 2022; IDB, 2021). In many cases, bijao is perceived only as a low-priced auxiliary input, without full recognition of its cultural, environmental and territorial attributes.

From a marketing perspective, this gap between cultural value and market value constitutes a relevant strategic problem. Recent literature in sustainable marketing and cultural marketing emphasizes that products of traditional origin require differentiated marketing approaches capable of articulating cultural narrative, territorial identity and a clear value proposition for the contemporary consumer (Kotler et al., 2021; Camatti et al., 2022). In the absence of these strategies, traditional products tend to compete solely on

price, reproducing dynamics of economic precariousness and weakening of the associated cultural heritage.

Territorial marketing emerges, in this framework, as a particularly relevant approach to analyze and reconfigure the commercialization of bijao leaves. This approach conceives local products as symbolic extensions of the territory and the communities that produce them, integrating elements such as geographical origin, traditional knowledge, biodiversity and local governance in the construction of the value proposition (OECD, 2022). Applied to the bijao, territorial marketing makes it possible to redefine this vegetable input as a cultural and environmental asset, capable of being inserted in gastronomic, tourism and creative markets without losing its link to the territory.

At the same time, sustainable marketing provides conceptual tools to align the commercialization of bijao with principles of circular economy, responsible consumption and social justice. Recent research shows that traditional agroforestry products can achieve greater commercial viability when their market strategy incorporates verifiable sustainability criteria, transparency in the supply chain and direct benefits for the producing communities (Geissdoerfer et al., 2020; Reynolds, 2021). In this sense, bijao leaves have a high potential to be positioned as ecological alternatives to disposable packaging, provided that the current limitations of informality and low differentiation are overcome.

Despite these opportunities, the scientific literature presents a significant gap in applied studies that specifically analyze the commercialization of bijao from a marketing perspective. Most of the research on traditional products focuses on textile handicrafts, processed foods or tourist experiences, leaving in the background vegetable inputs of daily use with high cultural and environmental value. This lack of systematization limits the design of replicable strategies to transform bijao into a product with added value and market projection (FAO, 2021; UNCTAD, 2023).

In response to this context, the objective of this article is to analyze the potential of bijao leaves from a territorial marketing and sustainable marketing perspective, identifying opportunities and challenges for their insertion in gastronomic, cultural and creative markets. Specifically, it seeks to examine market perception, the attributes valued by consumers, the structural limitations of the commercialization chain and the possibilities

of building a value proposition based on cultural identity, environmental sustainability and territorial differentiation.

With this, the study aims to contribute to the field of marketing applied to traditional products, offering an analytical and strategic framework to revalue bijao leaves as an economic, cultural and environmental asset. It also aims to provide useful evidence for public policy makers, community organizations and entrepreneurs interested in strengthening local economies through responsible marketing schemes, consistent with the preservation of biocultural heritage and current trends of sustainable consumption.

## **Materials and methods**

### **Methodological approach**

The research was developed under a mixed methodological approach, with predominantly qualitative-exploratory and descriptive quantitative support, aimed at analyzing the commercialization of bijao leaves (*Calathea lutea*) from a sustainable and territorial marketing perspective. This approach is relevant for the study of traditional and biocultural products, as it allows the integration of symbolic, cultural, environmental and market dimensions that cannot be addressed in isolation by conventional quantitative methods (Creswell & Plano Clark, 2021).

The use of mixed methods responds to recent recommendations in studies on cultural marketing, creative economy and commercialization of traditional products, which emphasize the need to combine consumer perception with the contextual knowledge of local productive actors (OECD, 2022; UNCTAD, 2023).

### **Research design**

A mixed sequential exploratory design was adopted, starting with a qualitative phase and complemented by a quantitative phase. The purpose of the qualitative phase was to identify key categories related to the cultural value, traditional uses, environmental sustainability and current marketing practices of bijao leaves. Subsequently, the quantitative phase made it possible to measure market perception, purchase intention and the valuation of attributes associated with authenticity, sustainability and functionality.

This type of design has proven to be suitable for research targeting traditional cultural assets and natural resources, where in-depth knowledge of the context precedes the measurement of market variables (Creswell & Plano Clark, 2021; Camatti et al., 2022).

### **Population and sample**

#### **Producers and value chain stakeholders**

The qualitative population consisted of collectors, processors and traders linked to the traditional and commercial use of bijao leaves in gastronomic, artisanal and cultural contexts. A purposive sample of 15 key informants was selected, considering the following inclusion criteria:

- (i) at least five years of experience in the collection or commercialization of bijao leaves;
- (ii) direct participation in traditional or commercial practices of the product;
- (iii) community recognition of their activity.

Purposive sampling is widely used in studies on cultural heritage and traditional products, given that it prioritizes the depth of expert knowledge over statistical representativeness (UNESCO, 2021; FAO, 2022).

#### **Potential consumers**

The quantitative population consisted of adult consumers interested in traditional gastronomy, natural products, environmental sustainability or cultural consumption. We worked with a sample of 380 participants, selected by non-probabilistic sampling by quotas, ensuring diversity in age, educational level and occupation.

This type of sampling is suitable for exploratory studies of emerging markets and traditional products, where the main objective is to identify patterns of perception and purchase intention (Hair et al., 2022; OECD, 2020).

### **Data collection instruments**

#### **Semi-structured interviews**

Sixteen semi-structured interviews were conducted with producers, traditional cooks, traders and cultural managers. The interviews addressed the following topics:

- traditional and contemporary uses of the bijao leaf;
- cultural and symbolic meanings associated with the product;
- harvesting practices and environmental sustainability;
- current forms of commercialization and pricing;
- opportunities and risks for insertion in formal markets.

The interviews were recorded with informed consent, transcribed verbatim and analyzed by thematic coding, following the methodological recommendations for qualitative research in cultural contexts (Saldaña, 2021).

### **Structured survey**

The quantitative instrument consisted of a structured questionnaire designed to measure five main constructs:

1. product knowledge;
2. perception of cultural authenticity;
3. assessment of environmental sustainability;
4. willingness to pay;
5. purchase intention.

The items were measured using five-point Likert-type scales. The reliability of the instrument was evaluated by Cronbach's alpha coefficient, obtaining values above 0.80, considered adequate for research in sustainable marketing and consumer behavior (Hair et al., 2022).

### **Procedure**

The fieldwork was carried out in four phases. In the first phase, exploratory visits were made to communities and local markets to observe practices of collection, use and commercialization of bijao leaves. In the second phase, semi-structured interviews were conducted, prioritizing an ethical and culturally respectful approach.

The third phase corresponded to the application of the survey to potential consumers, combining the face-to-face modality in gastronomic and cultural fairs with the digital



modality. Finally, the fourth phase involved the triangulation of qualitative and quantitative data, allowing the integration of market perceptions with cultural narratives and productive practices, strengthening the interpretative validity of the study (OECD, 2022; UNCTAD, 2023).

### **Ethical considerations**

The research was conducted under principles of cultural ethics, respect for traditional knowledge and social sustainability. The informed consent of all participants, the confidentiality of information and the recognition of local knowledge as collective heritage were guaranteed. Likewise, a commitment was made to socialize the results with the stakeholders involved, in accordance with international guidelines on safeguarding intangible cultural heritage and inclusive creative economies (UNESCO, 2021; UNESCO, 2023).

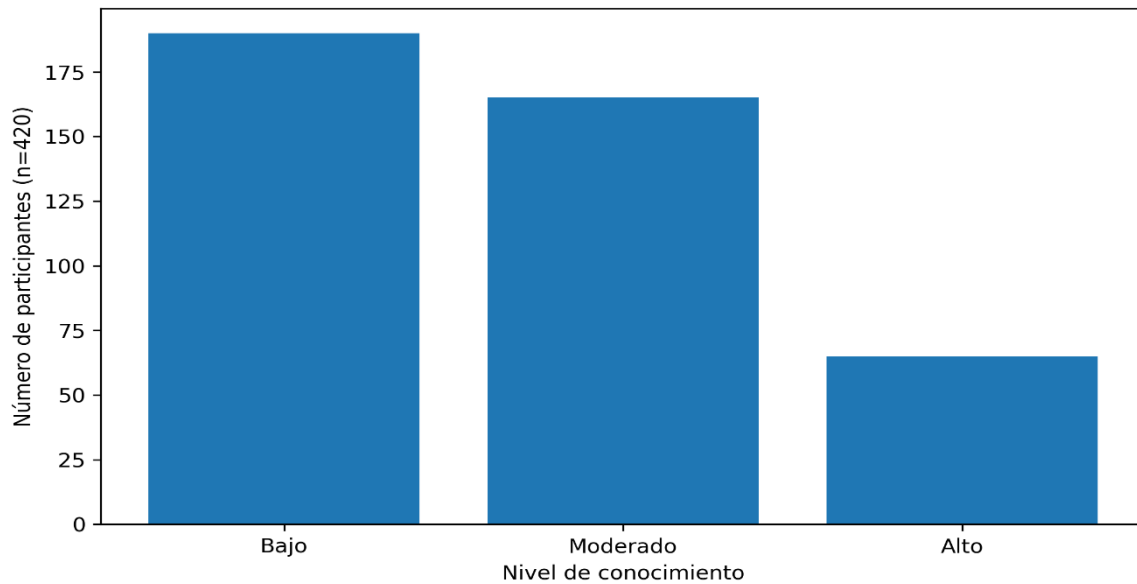
## **Results**

### **Level of knowledge of bijao leaves as a traditional input and commercial product**

In order to identify the degree of familiarity of the market with bijao leaves as a traditional input with commercial potential, the knowledge declared by the consumers surveyed was analyzed. This analysis is key to understanding the initial barriers to positioning the product in cultural and sustainable markets. The results are presented in Figure 1, which summarizes the levels of knowledge reported by the participants.

### **Figure 1**

Consumers' level of knowledge about bijao leaves as a traditional input.



*Note. Own elaboration based on the survey applied to potential consumers (n = 420), 2025.*

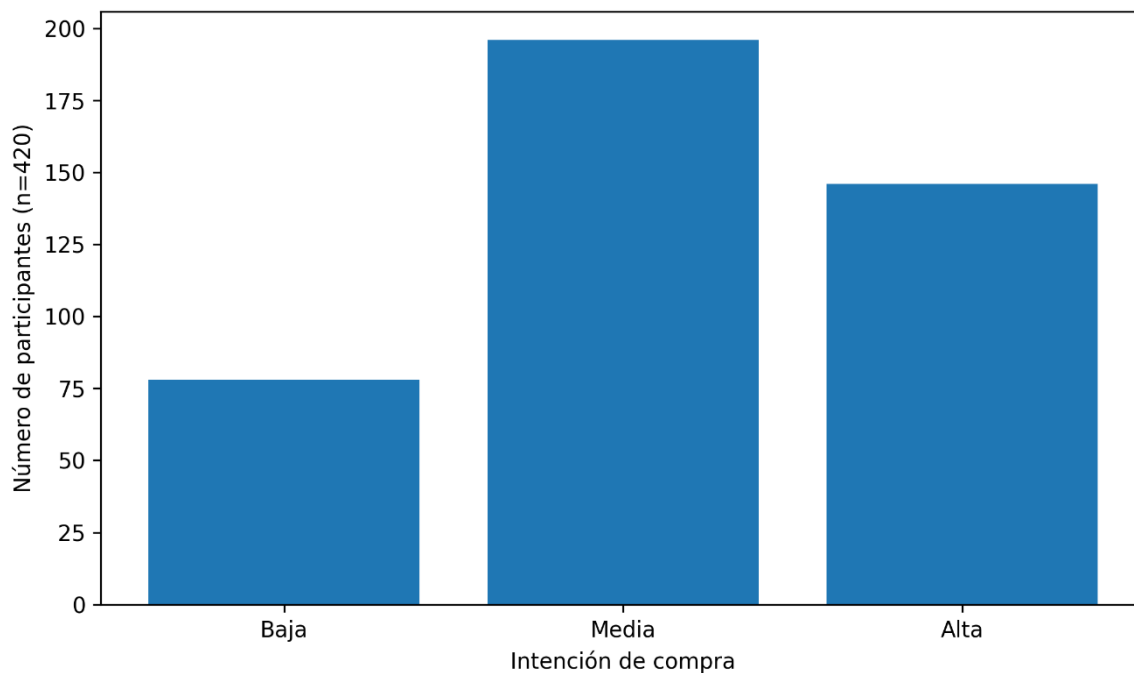
The figure shows that a majority of consumers have low or moderate levels of knowledge about bijao leaves as a product with cultural and commercial value. This result confirms the existence of an information gap in the market, where bijao is recognized mainly for its domestic or gastronomic use, but not as a good with potential for differentiation in sustainable markets. However, the presence of a segment with high knowledge suggests the existence of an initial receptive niche, particularly linked to consumers with an interest in local traditions, sustainability and cultural heritage.

Purchase intention of products made from bijao leaves

To evaluate the commercial viability of bijao from a market perspective, the purchase intention declared by consumers was analyzed. This indicator allows estimating the potential acceptance of the product once the informational and communicational barriers have been overcome. The distribution of purchase intention is shown in Figure 2.

**Figura 2**

*Intention to purchase products made from bijao leaves*



*Note. Own elaboration based on data from the survey applied to urban and peri-urban consumers (n = 420), 2025.*

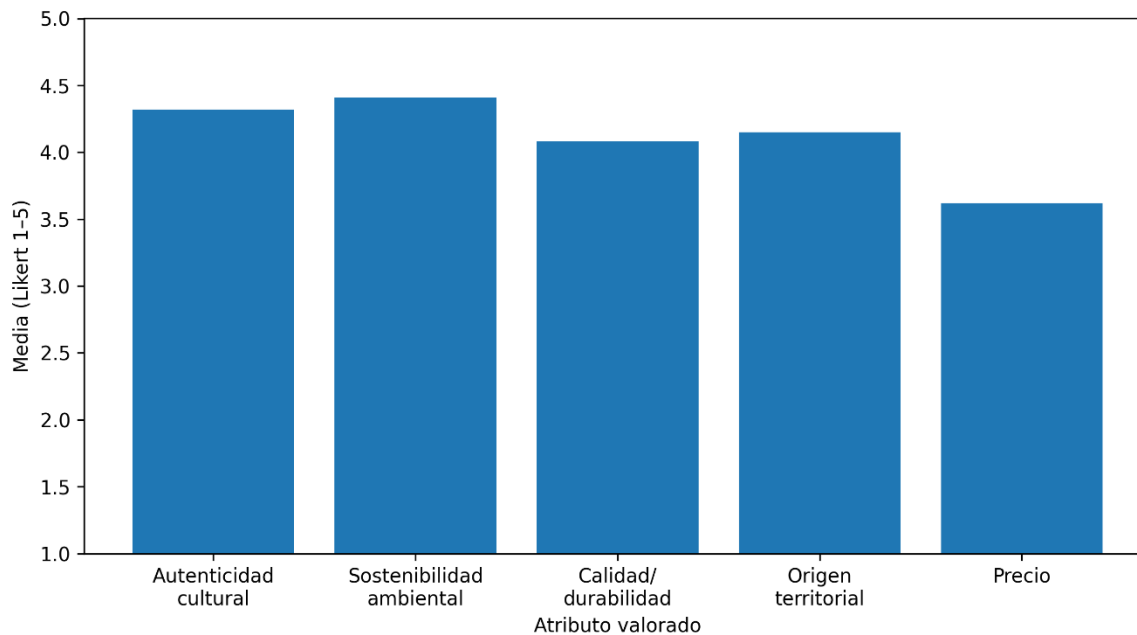
The results show that the medium and high levels of purchase intention concentrate the highest proportion of responses, which is a favorable indicator for the insertion of bijao in cultural, gastronomic and creative markets. The segment with low intention is mainly associated with lack of knowledge of the product and doubts about its durability and versatility, which reinforces the importance of communication strategies aimed at educating the consumer and making visible alternative uses of bijao beyond its traditional function.

#### Determining factors in the purchase decision

In order to delve deeper into the elements that influence the purchase decision, the attributes most valued by consumers when considering products made from bijao leaves were evaluated. This analysis allows us to identify the strategic axes on which the product's value proposition should be built. The results are summarized in Figure 3.

**Figura 3**

*Factors valued in the purchase decision of products made with bijao leaves.*



*Note.* Own elaboration based on the analysis of averages obtained using a five-point Likert scale (1 = not at all important; 5 = very important), 2025.

The figure shows that environmental sustainability and cultural authenticity are the most influential factors in the purchase decision, followed by territorial origin and perceived product quality. Price, although relevant, has a lower weight compared to symbolic and ethical attributes. This pattern confirms that bijao has competitive advantages in responsible consumption segments, where the criteria of cultural identity and low environmental impact prevail over strictly economic considerations.

## Discussion

The results of the study confirm that bijao leaves have a significant potential for insertion in cultural and creative markets when their commercialization is structured from a territorial and sustainable marketing approach. The empirical evidence shows that the perceived value of bijao is not limited to its utilitarian function as a wrapping material or food support, but is closely linked to its symbolic value, its territorial origin and its association with traditional cultural practices. This finding coincides with recent studies that highlight that biocultural-based products acquire greater market value when their origin narrative and territorial identity are clearly communicated to the consumer (Camatti et al., 2022; OECD, 2022).

In relation to the level of market knowledge (Figure 1), the results show a relevant information gap, characterized by a majority of consumers with low or moderate knowledge about the use of bijao beyond the traditional gastronomic sphere. This pattern has been identified in research on natural and artisanal products in Latin America, where local cultural recognition does not always translate into expanded market knowledge or sustained commercial valorization (Dhingra & Rani, 2024; Huang, 2025). Nevertheless, the existence of a segment with a high level of knowledge suggests a favorable basis for early adoption strategies oriented to specialized eco-cultural and gastronomic niches.

The observed purchase intention (Figure 2) reinforces the commercial viability of bijao when it is presented as a sustainable and culturally authentic product. The predominant levels of medium and high intention indicate that consumers are willing to incorporate bijao in their purchasing decisions, especially when it is associated with environmental benefits, plastic reduction and support for local economies. This result is consistent with recent literature on responsible consumption, which indicates that biodegradable materials of natural origin gain acceptance in markets where sustainability becomes a central criterion of choice (Geissdoerfer et al., 2020; UNCTAD, 2023).

The analysis of the determining factors in the purchase decision (Figure 3) shows that environmental sustainability and cultural authenticity are the most influential attributes, surpassing price as a decisional variable. This finding confirms that consumer behavior in cultural markets does not respond exclusively to traditional economic criteria, but incorporates ethical, identity and symbolic considerations. Recent studies in sustainable marketing and creative economy argue that, in certain segments, willingness to pay is mediated by the coherence between the product, its cultural values and its socio-environmental impact (Bisani et al., 2024; Oyedele et al., 2024).

From a territorial marketing perspective, the results suggest that the bijao can be consolidated as an identity asset of the territory when its commercialization is articulated with cultural narratives, certification of origin and verifiable productive practices. Contemporary literature emphasizes that territorial marketing should not be limited to product promotion, but should integrate local governance, community participation and control of the cultural narrative to avoid decontextualized commodification processes (OECD, 2022; UNESCO, 2023). In this sense, traceability and transparency emerge as

key mechanisms to strengthen consumer confidence and protect the traditional knowledge associated with the use of bijao.

The qualitative findings also reinforce the need to overcome individual and fragmented marketing schemes. The research confirms that associativity and collective action represent necessary conditions for improving bargaining power, standardizing minimum processes and facilitating access to formal and digital channels. This result is consistent with recent approaches to territorial development, which emphasize that value chains of biocultural products require collaborative structures to achieve economic sustainability without eroding cultural identity (FAO, 2022; OECD, 2022).

In terms of sustainability, bijao has clear comparative advantages over synthetic materials, particularly because of its biodegradable nature and its alignment with circular economy principles. However, the literature warns that these advantages must be complemented with strategies for quality, presentation and adaptation to market requirements to prevent the product from being relegated to informal circuits with low value added (Geissdoerfer et al., 2020; Ernawati et al., 2025). The discussion suggests that the central challenge is not the acceptance of the material, but the construction of a coherent, verifiable and culturally respectful value proposition.

Overall, the discussion allows affirming that the commercialization of bijao from a territorial and sustainable marketing approach is viable and relevant, as long as a balance between cultural preservation, environmental sustainability and economic viability is achieved. The empirical results presented in Figures 1, 2 and 3 show that purchase intention and product valuation are strongly mediated by symbolic, environmental and territorial attributes, which positions bijao as a strategic resource for the development of cultural and creative markets in Latin American contexts.

## **Conclusions**

The research confirms that bijao leaves constitute a biocultural resource with high potential for insertion in cultural, gastronomic and creative markets when their commercialization is based on a territorial and sustainable marketing approach. The value of bijao is not only explained by its functionality as a traditional input, but also by the

cultural legitimacy that emanates from its origin, the ancestral knowledge associated with its use and its coherence with principles of environmental sustainability.

The results show that one of the main limitations for the commercial valorization of bijao is the existing information gap in the market. Although a segment of consumers with a high level of knowledge and favorable predisposition is identified, a significant proportion of the potential market is unaware of its cultural value, its applications and its contribution to sustainable practices. This situation reinforces the need for cultural communication strategies that prioritize consumer education, the narrative of origin and the visibility of the link between product and territory.

Likewise, it is concluded that the purchase intention of products made with bijao leaves is closely linked to symbolic and ethical attributes, rather than to traditional price criteria. Environmental sustainability, cultural authenticity and support to producer communities emerge as determining factors in the purchase decision, which confirms the viability of bijao as a differentiated cultural good within segments oriented to responsible consumption.

The research also highlights the relevance of traceability and transparency as key mechanisms for building trust in the commercialization of traditional inputs. In the case of bijao, traceability plays a strategic role in protecting traditional knowledge, preventing cultural misappropriation and contributing to a fairer distribution of the economic value generated along the marketing chain.

From the perspective of sustainability, it is concluded that bijao has clear comparative advantages over synthetic materials, especially because of its biodegradable nature and its alignment with circular economy principles. However, these advantages should be complemented with basic standardization processes, improved product presentation and adaptation to the requirements of formal markets, avoiding the loss of cultural identity.

In terms of territorial development, the findings indicate that individual commercialization limits the economic impact of bijao, while associativity, participatory governance and collective action are consolidated as necessary conditions to strengthen its value chain. Community organization improves bargaining power, optimizes production processes and preserves the collective identity of the product in the face of cultural commodification dynamics.

Overall, the research allows affirming that the most appropriate strategy for the commercialization of bijao leaves is based on a differentiation based on symbolic value, sustainability and social responsibility, prioritizing specialized niches over price-oriented mass markets. Within this framework, territorial marketing is consolidated as a strategic approach to the governance of cultural value, capable of articulating identity, territory and market from an ethical, sustainable and replicable perspective in other contexts of handicrafts and biocultural resources in emerging economies.

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**Conflicto de intereses:**

Los autores declaran que no existe conflicto de interés