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**Research Article**

# Botswanan palm basketry among the Wounaan of western Colombia: lessons from an intercontinental technology transfer

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**Abstract**

Traditional palm basketry of the Ba Yei and HaMbukushu people of the Okavango delta region in Botswana was introduced in the 1970s by a missionary to the Wounaan aborigines of western Colombia, who had a related weaving technique. The African technique was quickly assimilated by the Wounaan and enriched with shapes and decoration based on their own cultural patterns. The Chocoan palm *Astrocaryum standleyanum*, which the Wounaan used in their traditional baskets, replaced the African *Hyphaene petersiana* used in Botswana. The high quality of the new basketry led to a rapid success and turned Wounaan *Astrocaryum* baskets into an icon among Colombian handicrafts. Market pressure led to a severe depletion of the fiber-producing palm near Indian villages in the late twentieth century, as palms were felled by the hundreds to harvest the spear leaves. Educational campaigns and the introduction of an appropriate harvest tool have subsequently reduced the impact of leaf harvest, and *A. standleyanum* is now protected by the Wounaan. This case pinpoints the importance of a careful resource management assessment before introducing new market pressures on a traditional plant product. It is also a good example of positive results from a sustained campaign for appropriate resource management.

**Key words**: Arecaceae, *Astrocaryum*, conservation, fibers, sustainable use

**Resumen**

La cestería tradicional con palmas producida por los pueblos Ba Yei y HaMbukushu de la región del delta del Okavango en Botsuana fue introducida por una misionera en los 1970s entre los indígenas Wounaan, del occidente de Colombia, quienes tenían una técnica de tejido relacionada. La técnica africana fue asimilada rápidamente por los Wounaan y enriquecida con formas y decoración basados en sus propios patrones culturales. La palma del Chocó *Astrocaryum standleyanum*, que los Wounaan usaban en sus canastos tradicionales, reemplazó a la especie africana *Hyphaene petersiana*, que se usa en Botsuana. La gran calidad de la nueva cestería generó un éxito rápido, convirtiendo los canastos Wounaan de *Astrocaryum* en un ícono entre las artesanías de Colombia, y la presión del mercado condujo a un severo agotamiento de la palma cerca de los pueblos indígenas a finales del siglo XX, pues las palmas eran derribadas por centenares para cosechar sus cogollos. Campañas educativas y la introducción de una herramienta de cosecha adecuada redujeron posteriormente el impacto de la cosecha de hojas, y *A. standleyanum* es protegida ahora por los Wounaan. Este caso resalta la importancia de una cuidadosa evaluación del manejo de un recurso antes de introducir nuevas presiones de mercado sobre un producto tradicional derivado de plantas. También es un buen ejemplo de los resultados positivos de una campaña sostenida sobre el manejo adecuado de un recurso.

**Palabras clave**: Arecaceae, *Astrocaryum*, conservación, fibras, uso sostenible

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## Introduction

Palm basketry woven by the Wounaan Amerindians of the Lower San Juan River, in the Pacific lowlands of Colombia, ranks among the most popular handicrafts produced in that country today [1, 2]. This basketry includes tightly woven baskets and trays, made with the single rod coiled technique and vividly decorated with geometric, anthropomorphic or zoomorphic designs. These items are produced with fibers obtained from the spear leaves of the güérregue palm, *Astrocaryum standleyanum*, a tall spiny palm growing in rain forests from Costa Rica to northwestern Ecuador. A boom of this basketry in domestic and international markets in the 1980s-1990s, combined with the destructive practice of cutting down the palms to obtain the leaves, led to a depletion of the resource near the Wounaan villages [1], prompting conservation campaigns to protect both the palm and the income-generating craft. In this paper we discuss the origin of current *A. standleyanum* basketry among the Wounaan, the threat it posed to the palm, and the recovery of the palm populations through educational campaigns and the introduction of appropriate harvest tools. The lessons learned from this process can be applied elsewhere to similar cultural exchanges or technology transfers involving the use of plant resources.

The Wounaan Indians, also known as Waunana, Noanamá, or Nonam, occupy the area of the lower San Juan River and the smaller nearby rivers Docampadó, Togoromá, and Pichimá, in the departments of Chocó and Valle del Cauca, in western Colombia; their territory comprises 1,895 $km^2$ [3], and their language, Wounmeu, belongs to the Chocó linguistic family [4]. The Wounaan inhabited their current territory on the lower San Juan River at the time of arrival of the first Spanish conquerors in the sixteenth century [5]. Today, only two Wounaan settlements are located outside this area: one in the northern Pacific coast of Colombia, near Juradó [6] and another in Panama, where they arrived in the 1940s [7]. The Wounaan rule their own territory through Indian Councils; land ownership is communal but individual families keep control of permanent or transient crop plots. At the lower San Juan River, the Wounaan live close to Afro-Colombian communities that spread into the area after the abolishment of slavery in Colombia in 1851.

## Methods

We reviewed ethnographic accounts on the material culture of the Wounaan, as well as current gray literature on their basketry, which we compared with a similar basketry found in Botswana. One of the authors (AP) directly witnessed the process of initial development of Botswanan basketry among the Wounaan during her visits to Pichimá on behalf of Artesanías de Colombia,

the national handicraft agency, in 1986, and two of us (AP and RB) took part in the process of *A. standleyanum* conservation campaigns in 1997-1998.

## Results

### *Origin and expansion of Astrocaryum standleyanum fiber weaving*

*Astrocaryum standleyanum* leaf fiber has long been used by the Wounaan as a raw material for producing strings used for tying objects and for holding in place the loincloth formerly worn by men [8-10]. This same fiber apparently has a long history of use in Wounaan basketry. Wassén 1935 [11] described and illustrated a small basket with a lid (Fig. 1), woven with the 'single rod foundation' variant of coiled basketry [12: 246]. Although Wassén did not indicate the kind of fiber used, Palacios 1993 [13] documents baskets woven out of *A. standleyanum* leaf fiber, similar to the one shown in figure 2. These baskets, either dark brown or in natural color, with little or no decoration, were woven with wooden or bone needles, and were used to store small goods or personal belongings. This kind of basket was uncommon among the Wounaan (and also among the neighboring Embera) before the 1970s, when they were manufactured as a byproduct of *A. standleyanum* after the palm was felled to use the hard stems as house stilts.

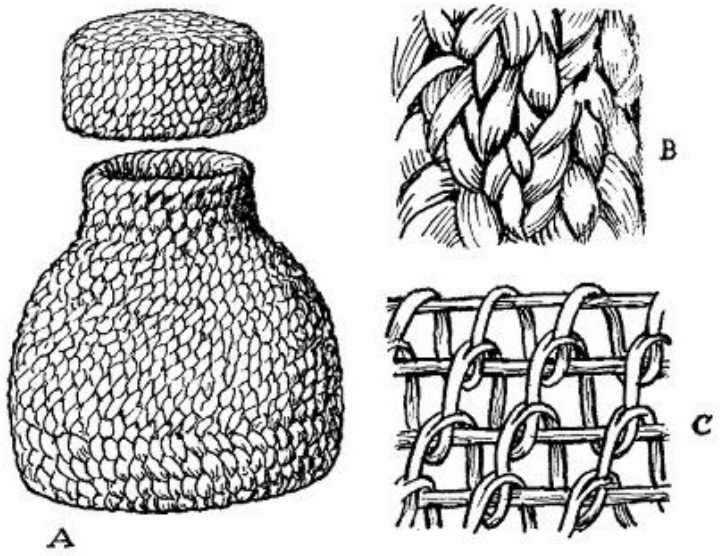


**Fig. 1.Traditional basket woven by the Wounaan with the single rod technique in the 1930's. A, basket; B, detail; C, technique. Reproduced from Wassén (1935), with permission from the National Museums of World Culture, Gothenburg.**

In the 1970s, a Spanish missionary named Rosa, working at the Wounaan village of Pichimá, brought a sample basket from Botswana, where she had served previously, and showed it to the Indians. This kind of African basket (Fig. 3) is woven by the Ba Yei and HaMbukushu women of northwestern Botswana out of unopened leaves of the palm *Hyphaene petersiana*, and they are an important cultural item for these groups as well as a major source of cash income [14, 15]. Although quite different in aspect from the traditional Wounaan baskets, the Botswanan ones are actually woven with a variant of the same single rod coiled technique. The major differences between the Botswanan baskets and traditional Wounaan baskets, which makes them look unlike each other (Figs. 1-3), are in the structure of the foundation and in the kind of stitch.

**Fig. 2. Traditional basket woven by the Embera at the Pacific coast of Colombia in the mid-1980's, with a detail of its stitches. Baskets similar to this one were woven also by the Wounaan, as recorded by one of the authors. Personal collection of Aida Palacios.**

In the traditional Wounaan baskets each stitch passed either through the fiber of the previous stitch (Figs. 1C), or through the foundation of the previous coil (Fig. 2); in the latter, the stitches were widely separated from one another, so that the foundation was visible. Furthermore, the foundation's fiber strand was naked. In the Botswanan technique the foundation is wrapped in fiber, resulting in a solid coil (Fig. 4C); each stitch completely surrounds the current coil and the previous one (Fig. 4B-C), and the stitches are so tight that the foundation is not visible. This technique is not exclusively Botswanan but is also found in such remote areas as Thailand and the Pacific coast of North America [12].

Being familiar with the single rod coiled technique, the Wounaan women rapidly incorporated the new type of stitch. The first baskets produced looked 'rather African' in design (Fig. 5), but within a few years the Wounaan started to incorporate into their basket design the patterns used in other items of their own culture, including the traditional shape of their clay pots, until the current richness of design was reached. Originally, the baskets were mostly in natural color or had a combination of orange and black, obtained by dyeing the fiber with plant pigments or mud. Today, the Wounaan have a rich color palette that includes red and green, and several variations in hue.

At first the Wounaan wove only a few baskets for the missionaries, who took them as presents whenever they travelled out of the area. There was no broad scale production nor did the baskets have any particular domestic use. In the late 1970s, Álvaro Chávez, an anthropologist at the Museo de Artes y Tradiciones Populares (Museum of Popular Arts and Traditions), discovered the baskets in Pichimá and took some of them to the country's capital, Bogotá, where they had a great impact. Subsequently, Artesanías de Colombia started a program of marketing and design improvement, and the baskets were exhibited at the First National Handicraft Fair in Bogotá in 1990. That was

the start of the *A. standleyanum* basket boom. Within a few years the Wounaan baskets had gained a reputation among Colombian handicrafts, and by the early 1990s they fetched high prices in handicraft shops in Bogotá [16] and had even reached shops in New York (R. Bernal, pers. obs.).

**Fig. 3. Basket woven by the Ba Yei and HaMbukushu of Botswana, 2012. Photo courtesy of Nicola Hart, Botswanacraft Marketing Ltd., Gaborone.**

From Pichimá, the new basket weaving technique spread to other Wounaan villages in the mid-1980s, and the subsequent improvement of decoration with natural dyes turned *A. standleyanum* baskets into one of the most important economic activities of the Wounaan in Colombia [1] as well as in Panama, where the new technique was introduced around 1985 [17]. Women of the Embera, another Chocoan group, also started to weave baskets with the same technique at the Gulf of Tribugá, on the Pacific coast in Colombia (R. Bernal and G. Galeano, pers. obs.), and also in Panama, but their weaving has been deemed less refined [17].

Accustomed to obtaining the unexpanded leaves as a byproduct of stem felling for construction, the Wounaan started to cut down the palms by the hundreds under the new large-scale basket production model, leading within one decade to an exhaustion of the palm near the Indian villages. In the early 1990s, Artesanías de Colombia and Fundación FES, a Colombian social development NGO, launched a campaign for sustainable harvest of *A. standleyanum* leaves. The campaign included a poster that was distributed throughout Wounaan villages, and over a period of several years they conducted field activities with local communities, in order to teach palm leaf harvesters how to use the *medialuna* (Fig. 6), a simple half-moon blade mounted on a pole, which makes it possible to cut the spear leaf without killing the palm. This tool has long been used in banana plantations for cutting off old leaves, and is commonly available in hardware stores. One

of us (RB) took part in field activities in May 1998 at Pichimá, where the easy use of the *medialuna* and its obvious advantage over the traditional harvest technique generated immediate acceptance.


**Fig. 4. Baskets currently woven by the Wounaan. A, baskets; B, detail, C, weaving process. Photo credit: N. García, B-C: G. Galeano**

Due to the isolation of the various Wounaan settlements over the lower San Juan River area and the difficulty of formulating community-based proposals, obtaining the required funds, and developing the projects, it took several years for the use of the *medialuna* to become widely known throughout the Wounaan territory, and for the tool to be widely available to harvesters. Even during our field work at the Wounaan village Puerto Pizario in 2011, we heard complaints of harvesters who claimed that there were not enough blades available. However, today leaf harvest seldom involves cutting down palms. Although population structure still reveals a scarcity of adult palms (N. García, unpublished data), it shows an obvious recovery in other size classes, and adult trees can now be found near villages.

## Discussion

The African origin of current Wounaan basketry is virtually unknown to most people, apparently even to the Wounaan themselves. In a recent dissemination booklet based on information gathered at the Wounaan village of Puerto Pizario [10] nothing is mentioned on this subject, and current baskets appear to be confused with those formerly woven by the Wounaan with the coiled rod technique, similar to the one illustrated in Fig. 2.

It is evident, however, that today's baskets did not exist among the Wounaan before Wassén's visit to the area in 1934 nor by the time of Reichel-Dolmatoff's visit 26 years later [18]. Both authors describe the single coil basket illustrated in Fig. 1A, but no mention is made of anything resembling those in Fig. 3. It is unlikely that such an appealing and unusual kind of basket had been overlooked by ethnographers studying the material culture of the Wounaan. By the time one of us (AP) started to work in Pichimá in 1986, both the traditional baskets and the new ones were to be found, whereas only traditional basketry was found in other Wounaan villages.

Therefore, it is remarkable how quickly the Wounaan appropriated the new variation of their traditional technique, and how deeply they enriched it with their own cultural patterns. So deeply, indeed, that the new baskets became a signature of their people and a major source of cash income for most Wounaan households.

**Fig. 5. Early Wounaan basket woven with the Botswanan technique ca. 1988. Personal collection of Aida Palacios.**

**Fig. 6. Detail of the *medialuna* used for harvesting spear leaves of *Astrocaryum standleyanum* in western Colombia. Photo credit: R. Bernal.**

## Implications for conservation

The unexpected success of the new baskets, and the resulting negative pressure on the populations of *A. standleyanum,* illustrate the danger of introducing new uses for local plants without a previous assessment of the species' potential for sustainable management, in terms of both its intrinsic properties and traditional management practices for it, as described for palms by Galeano et al. [19]. The impact of the new basketry on populations of *A. standleyanum* was predictable, as the African model had already had an impact on the populations of the palm *Hyphaene petersiana* in Botswana by the early 1980s [14]. Previous research among the Wounaan before introducing the new technique would have shown that *A. standleyanum* baskets were a byproduct of palm felling, and would have called for concurrent introduction of a non-destructive leaf harvest technique.

The rapid assimilation of the *medialuna* by palm harvesters at individual villages contrasts with the slow dissemination of the tool throughout the Wounaan territory. Looking retrospectively, we attribute this slow dissemination to the focus of the campaign, which gave priority to production and distribution of a poster illustrating how to use the *medialuna*, instead of to the introduction and dissemination of the *medialuna* itself. This lesson should be taken into account in many conservation projects, for which the production of a poster or similar visual material is often given a high priority, although its impact can be rather poor. As a matter of fact, in 1995 the campaign poster of *A. standleyanum* was nowhere visible at the Wounaan village of Pichimá, where it had been distributed several months before, as there were not many walls in Wounaan houses where a poster could be hung. Until that time, most villagers had never seen a *medialuna*.

On the other hand, the depletion suffered by *A. standleyanum* in the 1980s and 1990s shows that any campaign for the sustainable harvest of a plant involved in a new use should be started before the use is implemented or, at least simultaneously, before the malpractice spreads. An estimation of the pressure that the new use will generate on the resource, following criteria like those pointed by Galeano et al. [19], can provide the parameters for a strong and successful campaign. With appropriate planning, a new use can be developed while preserving sound plant populations. In this way, a technology transfer like the one discussed here can be a new source of income for a human group moving from subsistence to consumerism, and can even be a way of making their culture better known in today's inescapably global society.

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