

Ethnobotany of *Quilombola* Homegardens: Resistance and Cultural Preservation in Two Communities in Bahia State, Brazil

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Abstract: Ethnobotany of quilombola homegardens: resistance and cultural preservation in the Matinha dos Pretos and Paus Altos communities in Bahia State, Brazil. Quilombola backyard homegardens are spaces of resistance to the oppression of previously enslaved people who, even though “free,” are unable to expand their territorial boundaries. We examined the backyards of two quilombola communities in the Caatinga region of Bahia State in order to identify the food and medicinal plants they cultivated or preserved as well as their uses. We used qualitative and quantitative approaches, with guided tours, semi-structured interviews, and conversations with participants caring for five backyards in each community. We conducted discursive and descriptive analyses of the data. These spaces are managed mainly by women. Of the 148 plant species cited, 115 are medicinal and 66 are food species, of which 30 are PANC, with most being native. The communities were similar in terms of the nomenclature of ethnospecies, biodiversity, plant uses, and plant sharing. Backyard homegardens constitute a biocultural heritage, with exchanges of intergenerational knowledge and inter-family relationships, and moments of leisure. They contribute to family income, food and health security and the conservation of biodiversity.

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Introduction

Homegardens are areas surrounding houses where plants that can contribute to the conservation of species with nutritional, medicinal, ornamental, and other values are cultivated. These spaces, referred to as agroforestry systems (KABIR & WEBB, 2008; PEREIRA *et al.*, 2010), can serve multiple purposes and host diverse crops, being imbued with meanings that may be unique to a family or reflect the cultural practices of the entire community (GAZEL FILHO, 2008). Perennial plants often grow associated with herbaceous species within a single management unit, and both can be integrated with animals—resulting in spatial and temporal arrangements having high species diversity and complex ecological interactions (ABDO *et al.*, 2008).

Homegardens function as natural pantries that supplement household incomes, improve food quality (as cultivation typically avoids the use of pesticides), preserve local customs and ethnobiodiversity, and can ensure food security by providing fresh and natural produce through family farming (OAKLAY, 2004; GOMES, 2017; CARMO, 2018). These gardens also hold rich repertoires of biocultural memories and serve as connections between human experiences and plant phenology that foster positive interactions among living beings (TOLEDO & BARREIRA-BASSOLS, 2015; MEYER, 2017; ALMADA & SOUZA, 2017; MOURA & OLIVEIRA, 2022). Additionally, they contribute to the aesthetic beauty of households.

The lands of Quilombola Remnant Communities (QRCs) were acquired by residents through service exchanges, purchases, or passive occupation (DOS SANTOS, 2016), and in many cases, homegardens represent the only property owned by a family group. Their sizes can vary widely, depending on factors such as their proximity to urban areas (ALMADA & SOUZA, 2017).

In northeastern Brazil, where open-air food markets are common, one can find medicinal plants and non-conventional food plants (PANCs) for sale that were cultivated in homegardens, as well as herbs for cooking, teas, and medicinal baths. This cultivation of diverse plant species with food and medicinal uses contributes to primary healthcare, food security, and the local economy.

The rational use of the natural resources in the *Caatinga* biome (a highly seasonal, deciduous, thorny dryland vegetation type) is essential for human survival (CALÁBRIA *et al.*, 2008). Long periods of drought, resource scarcity, and insufficient public policies are part of everyday life of the people of that region, and QRCs there must also deal with various forms of prejudice and discrimination, with ongoing struggles for land rights, as well as the full recognition of their legal and human rights (VITÓRIO, 2015).

Given the numerous limitations and forms of exclusion facing Afro-descendants on a daily basis, studying their domains and the spaces they use can reveal critical insights into their way of life and contribute to the appreciation and preservation of the culture of these important Brazilian populations. This research was designed to describe quilombola homegardens as spaces where knowledge circulates, and to elucidate, from an ethnobotanical perspective, the relationships between sociocultural factors and the biodiversity of plant resources. We therefore sought to answer the following questions:

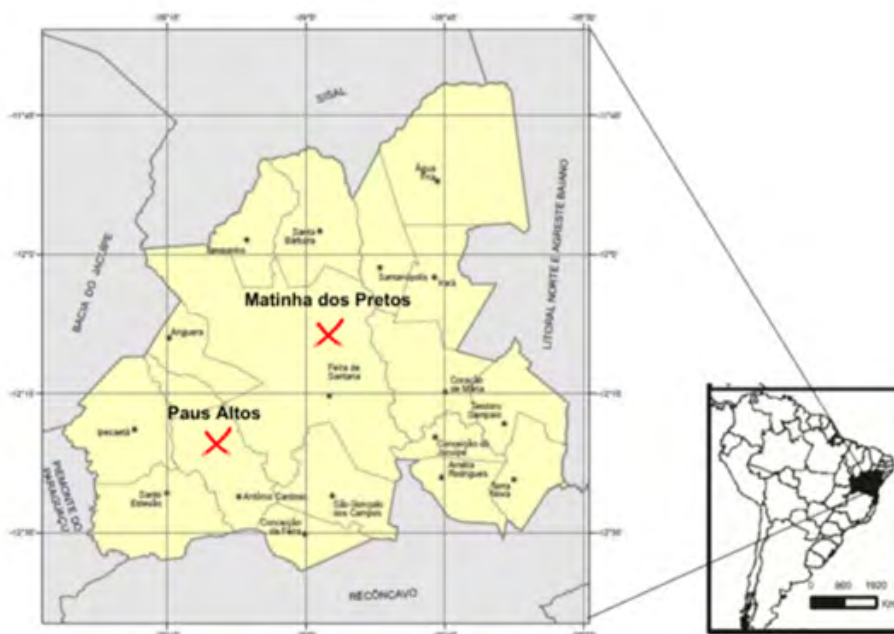
(a) Which food and medicinal plants found in homegardens are most frequently used by the residents of the communities studied? (b) Are there significant similarities between these communities regarding the plants cultivated and their uses?

Methodology

Study Area and Participants

This research was conducted in two Quilombola Remnant Communities (QRCs) in Bahia State, Brazil (Figure 1), located within the Portal do Sertão territory, in the Caatinga biome.

Figure 1 – Map of the municipalities within the Portal do Sertão Identity Territory, highlighting the Quilombola Remnant Communities of Matinha dos Pretos (municipality of Feira de Santana) and Paus Altos (municipality of Antônio Cardoso) in Bahia State, Brazil.



Source: <http://patrimonio.ipac.ba.gov.br/territorio/portal-do-sertao/> Adapted by the authors, 2023.

The Quilombola Remnant Community (QRC) of **Matinha dos Pretos** is located within the district of Matinha in the municipality of Feira de Santana, approximately 135 km from the state capital of Salvador; the **Paus Altos** community is located in the municipality of Antônio Cardoso, 161 km from Salvador.

The community of Paus Altos was officially recognized as a QRC by the Palmares

Cultural Foundation in 2010 (Ordinance No. 82/2010, published in the Federal Official Gazette). The community was organized as an association in 2003 (*Associação Rural Quilombola de Paus Altos, Santa Cruz e Adjacências - ASCORTAPA*). The association currently enrolls approximately 62 families and directly and indirectly benefits more than three hundred people. The community of Matinha dos Pretos was certified as a QRC by the Palmares Cultural Foundation in 2014 (Ordinance No. 61/2014, published in the Federal Official Gazette) (FUNDAÇÃO PALMARES, 2014). Neither community has yet received an official land title certificate from INCRA.

The selection of the two QRCs involved in this research was based on convenience sampling, with personal contacts between the author and the residents of those communities. Initial contacts were made by phone with community leaders and field visits began in April 2021. Five homegardens in each community were selected for this stage of the research. The identification of non-conventional food plants' (PANCS) adopted the definition proposed by Kinupp and Lorenzi (2014).

The thesis project underlying this study is registered in SISGEN (Registration No. A1FAF5F), with the Ethics Committee of the State University of Feira de Santana (CAE: 37655120.0.0000.0053); it was reviewed and approved by community leaders as well as in meetings with community association members.

Data Collection and Analysis

This phase of the research employed qualitative methods, including participant observation and participatory research approaches (ALBUQUERQUE *et al.*, 2010). A total of 10 homegardens were visited (five in each community), with 13 participants ranging in age from 40 to 90 years. Data collection was conducted through semi-structured interviews, informal dialogues, and homegarden visits between April and December/2022. In some cases, follow-up visits were made to supplement or confirm information. Field notes and photographs were taken, and participant observations were recorded. Interviews were audio-recorded, transcribed, analyzed, and interpreted with attention to maintaining the integrity of each participant's individual narrative, in accordance with the specialized literature.

The selection of the interviewee homegardens began with recommendation by the first participant and by homegarden by community leaders. From there, additional participants were selected using the "snowball" sampling method. Guided tours were conducted, and botanical material was collected for subsequent cataloging and incorporation into the State University of Feira de Santana Herbarium (HUEFS). Photographic records of some species were also made to compose a community plant catalog.

The ethno-species most frequently cited by the interviewees were considered the most commonly used in the communities and served as the basis for comparing the homegardens. Botanical species cultivated in the homegardens (both perennial and annual) that are widely recognized were part of the participants' diets (such as mango, papaya, corn, beans, watermelon, acerola, avocado, and squash) were not collected. The term *ethnospecies* is used in this study synonymously with *popular name* (MEDEIROS *et al.*, 2016).

To organize the reported uses of the species, they were categorized according to their relationships with human body systems: nervous, digestive, respiratory, genitourinary, cardiovascular, integumentary (skin), and skeletal. Some species did not fit easily into these categories and their uses were reported as anti-inflammatory, cancer treatments, pain relief, eye problems, treating physical exhaustion, and spiritual healing.

The collected data were classified into food and therapeutic use-categories, then tallied and organized into tables and charts. Quilombola identities, land ownership, and the uses and customs related to plant resources were examined based on Foucault's theoretical framework of discourse analysis in order to better understand the meanings attributed to homegardens (FOUCAULT, 2013).

Results and Discussion

The homegardens studied were located within the Caatinga biome, although the residents of Matinha dos Pretos reported the absence of intact areas of that native vegetation near the community. Although patches of Caatinga vegetation still exist near Paus Altos, access to them is limited. The residents of both communities mostly rely on the plants available within their homegardens. When possible, they also cultivate small plots of land farther from their homes, in areas leased or borrowed from relatives and friends. The plants grown in homegardens are selected to meet the families' basic needs, similar to findings reported for homegardens in Caruaru, Pernambuco State, Brazil (FLORENTINO *et al.*, 2007).

We interviewed individuals having varying levels of education. Most of the participants' incomes are derived from retirement benefits, although they sell small-scale agricultural productions or animals whenever possible. Some receive support from the *Bolsa Família* social program, and the communities take part in initiatives designed to encourage rural permanence, such as beekeeping, productive homegardens, and small-scale fruit pulp and preserve production.

Territoriality and Traditions

The territories occupied by Quilombola Remnant Communities may be urban or rural, which can be a decisive factor for the maintenance of traditional customs that are naturally influenced by the surrounding environment. In this context, differences in habits and traditions were observed between the Matinha dos Pretos and Paus Altos communities that were related to the level of development in each and with interactions with nearby urban centers.

Due to the number of houses and their proximity to each other, as well as the use of homegarden spaces for constructing homes for relatives, these spaces can be described as family homegardens (Figure 2C). The scarcity of space in these communities has led to the removal of trees over time to make way for more houses to be built. Those trees would otherwise traditionally have been seen as refuges in the semi-arid region with socioeconomic, cultural, and environmental importance for survival of community (such

as the *umbuzeiro* tree – *Spondias tuberosa* Arruda) (MATOS *et al.*, 2020).

When discussing the QRCs and the difficulties involved in gaining official recognition, all of the participants expressed pride in the efforts and sacrifices made throughout their lives to purchase the plots of land where they live – the land that now also accommodates the homes of their children who chose to stay or were financially unable to leave their parents.

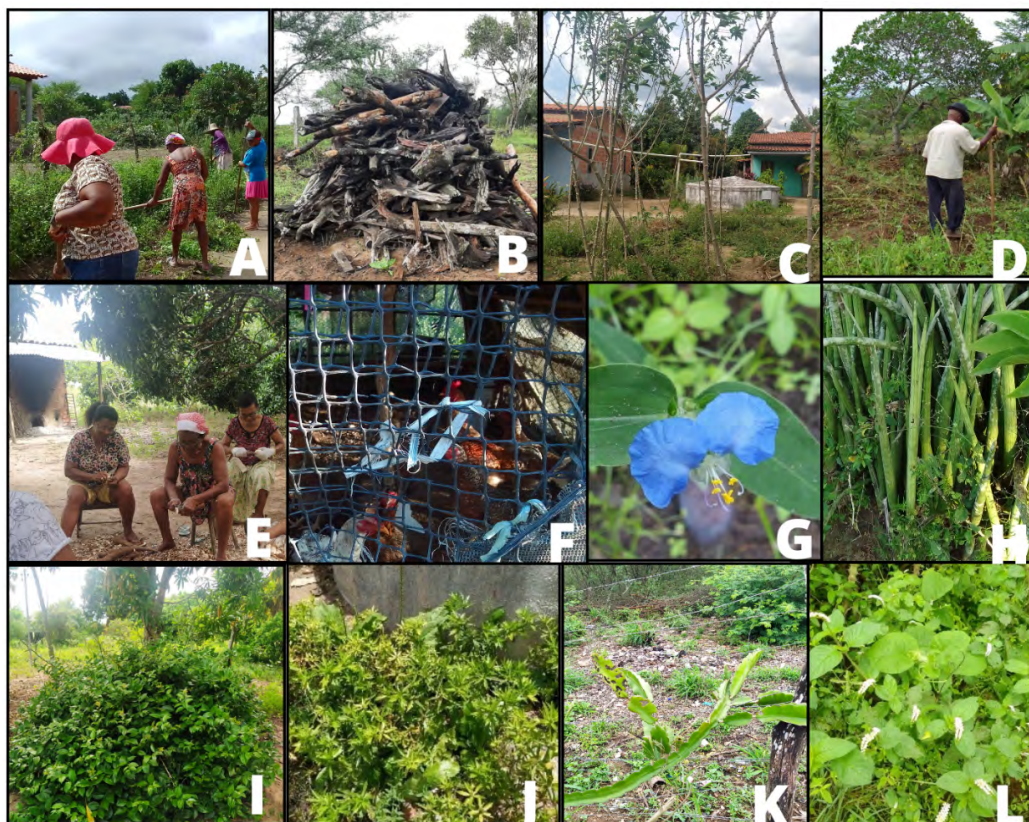
Memories of difficult times are part of the collective memory of Quilombola descendants:

“My mother worked hard to raise her children on the farms of the landowners. Selling her labor day by day just to feed us [...]. My foster son and I bought two plots of land.”
— Ms. P., Paus Altos, 79 years old

“We worked for wages. One day a week belonged to the landlord, to pay for the right to live there. So we saved up, we set aside the money we earned, the money from selling pigs, chickens, crops, and we bought our own little piece of land.”
— Mrs. C., Paus Altos, 76 years old.

These testimonies reflect the hardships endured to survive, and emphasize the efforts of older residents to own their own land. Grandparents and parents either purchased or inherited the plots of land that now serve as their homegardens. These gardens vary in size and are usually enclosed by fences, and are often divided into smaller areas used for raising animals or growing crops. Despite their fierce efforts to obtain the land, and the joy of owning it, the committee members live with the anxiety of not having their Quilombola territory officially recognized by the government.

Figure 2 – Photographs of daily life, homegardens, and some plant species found in the Quilombola Remnant Communities of *Matinha dos Pretos* in the municipality of Feira de Santana and *Paus Altos* in the municipality of Antônio Cardoso, Bahia State, Brazil.



Legend: A (helper for weeding); B (firewood for the stove and campfire); C (family backyards); D (preparing the land for planting); E (helper for scraping cassava); F (perch for raising birds); G (Marianinha); H (sword of Ogun); I (ora-pro-nobis); J (Indian coriander); K (dragon fruit); L (cockscomb).

Source: Prepared by the authors, 2023.

In terms of cultural practices, many rural traditions are still preserved in Paus Altos, such as “*aboiar*” (traditional cattle calling), watering animals at natural springs, and raising dogs, poultry, small livestock, and even larger animals such as cattle. In Matinha dos Pretos, on the other hand, urban influences are more evident, and landholdings are generally smaller.

“We raise a couple of head of cattle, which help us out when things get tight, and some sheep and chickens for eggs and, now and then, for a fresh meal.” — Mr. O., Paus Altos, 94 years old

Here, “fresh” refers to freshly slaughtered meat. People living in areas with limited access to markets and butcher shops often slaughter animals at home to enjoy fresh meat when hosting guests on Sundays or when household protein supplies run low. Backyard spaces in these communities are thus also used for raising animals such as poultry and pigs. The meat protein produced is also used by the family to “get by” – selling part of the production to earn some money. These practices were observed in both communities, although local commerce is more developed in Matinha dos Pretos and animal husbandry is less intensive.

The plants used by the Quilombola communities of Matinha dos Pretos and Antônio Cardoso are largely grown in homegardens, which reflects the level of degradation of the native Caatinga vegetation. Based on the data analyzed, the communities exhibit similar plant diversities consistent with the Caatinga biome (Table 1 and Supplementary Material 1¹). However, there is a greater consumption of wild edible plants in Paus Altos.

Table 1 – General data from field research conducted in the Quilombola Remnant Communities (QRC) of Matinha dos Pretos and Paus Altos, Bahia State, Brazil.

CRQ	Habit					Origin			Category of use			Total
	H	Ab	Av	T	R	N	C	Nd	M	A	PANC	
Matinha	41	20	30	6	2	44	29	15	82	58	26	103
Paus Altos	50	23	27	3	3	39	37	21	86	55	23	117
Total	69	30	38	6	3	63	41	23	115	66	30	148

Growth Habit: H (herb), Ab (shrub), Av (tree), T (climber), R (creeping);

Origin: N (native), C (cultivated); Nd (naturalized); E (endemic);

Use: M (medicinal), A (food), PANC (unconventional food plant);

T: (total per quilombola remnant community).

Source: Prepared by the authors, 2023.

Biodiversity

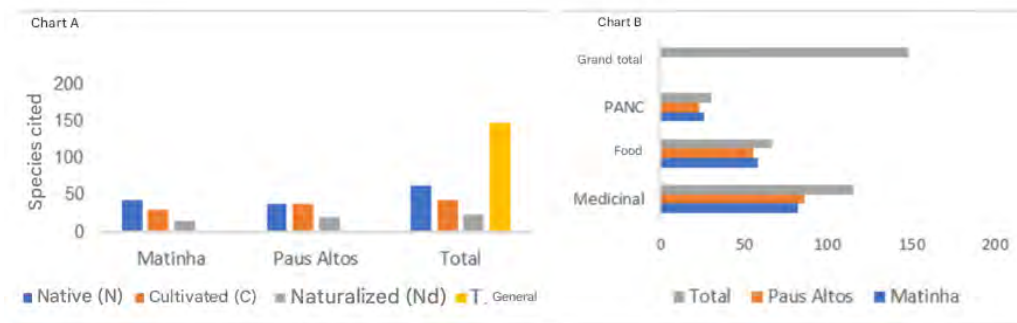
A total of 148 species (159 ethnospecies) were cited in the ten studied homegardens, including 115 medicinal and 66 food species – forming a mosaic of native, cultivated and naturalized species (Table 1). The plants found in homegardens are members of 50 botanical families, with the most frequent being Asteraceae, Lamiaceae (11 spp. each), and Fabaceae (10 spp.). The presence of species such as *Musa* sp., *Cocos nucifera*, *Psidium guajava*, *Mangifera indica*, *Carica papaya*, and *Citrus* sp. corroborates other reports of tropical homegardens (Wezel & Bender 2003; Kehlenbeck & Maass 2004; Albuquerque *et al.* 2005) (Supplementary Material 1).

Of the 148 plant species identified in the homegardens, 36 have both food and medicinal uses; 17 species remained unidentified (some were not collected during the fieldwork period due to the lack of rain, weeding, or the fact that they had not yet ger-

1 - <https://doi.org/10.5281/zenodo.17410628>

minated).

Figura 3 – Graphs showing the origins (A) and uses (B) of the species identified in the homegardens in the of Paus Altos and Matinha dos Pretos communities in Bahia State, Brazil.



Source: Prepared by the authors, 2023.

A predominance of native plants as opposed to cultivated and naturalized species can be observed in Figure 3A. Authors such as Vandebroek & Voeks (2018) discussed the flow of botanical material during the colonial period in Brazil and the gradual loss of customs related to plant use among the different peoples who later populated the country, including Africans brought under slavery. They mention various species that have disappeared, as well as others brought from Africa (such as okra) or that were acquired in exchanges with Indigenous peoples (such as cassava and manioc) and began to be intensively cultivated in Brazil. These plants were cited by both communities in the present study.

In terms of “conventional” food plants, out of the 30 species recorded, the most frequently cited were *Mangifera indica* (mango), *Mentha piperita*, and *Plectranthus amboinicus* (peppermint and Cuban oregano). The most cited non-conventional food plants were *Amaranthus viridis* (bledo) and *Spondias tuberosa* (umbu). Although the latter is considered an important species in the Caatinga biome, it was only encountered in two homegardens in Paus Altos and in one garden one in Matinha dos Pretos. Among medicinal plants, the most cited cultivated species were *Lippia alba* (lemon balm), *Cymbopogon citratus* (lemongrass), and *Cenostigma pyramidale* (caatinga tree). (Supplementary Material 1).

The exchange of seeds, cuttings, seedlings, and other plant material is a common practice throughout the world (Ban; Coomes, 2004) and contributes to the homegarden flora – alongside native or wild food and medicinal plants, which are often considered weeds (Voeks; Leony, 2004). These additions significantly enrich the floristic diversity of homegardens.

Plowing the soil is not regularly undertaken when planting conventional crops such as beans and corn, depending on the timing of the rainy season. Seeds may be purchased locally or stored in containers (often reused plastic PET bottles) between planting cycles. Communal gatherings, called an “*adjutório*” or “*digitório*”, can be organized for

planting and harvesting. These gatherings are moments of socialization among friends and neighbors, and present opportunities to sing traditional songs and recall ancestors (Figures 2A and 2E).

Amaral & Guarim-Neto (2008) noted that homegardens represent some of the oldest and most sustainable forms of land management. Considerable similarity was observed between the communities studied here in terms of botanical diversity and the uses of species for food and medicinal purposes. The data revealed that Paus Altos accounted for 79.05% of all of the species cited, while Matinha dos Pretos accounted for only 69.59%. Food plants are cultivated according to rainfall patterns, and non-conventional food plants (PANCs) represent over 40% of the species in this category (Figure 3B).

A predominance of herbaceous and shrubby species as opposed to tree species was observed. This trend is related to dietary customs, the size of the homegardens, and the need to optimize available space for building houses and seasonal planting. Perennial herbaceous species with food or medicinal potential are preserved during weeding. The most commonly encountered trees were mango (*Mangifera indica*), jackfruit (*Artocarpus heterophyllus*), and cashew (*Anacardium occidentale*) – all cultivated species. In contrast, native species, such as *Cereus jamacaru* (mandacaru), *Ziziphus joazeiro* (juazeiro), and *Bauhinia cheilantha* (caatinga-de-porco) are underutilized to the point of being removed from homegardens, despite being representative of the Caatinga biome (Supplementary Material 1).

Figure 2 shows photographs taken in the communities of Matinha dos Pretos and Paus Altos. They document some of the species that were not collected, as well as everyday scenes in the homegardens included in this study.

Medicinal and Spiritual Plants

Medicinal plants, as considered in this study, as those used by the communities to treat all types of ailments - whether physical or spiritual. Although conventional medicines are used in both communities, everyone complements treatments with plants found in their homegardens.

Our data revealed a predominance of medicinal plant usages in both communities. The most frequently cited species in this category were *Cenostigma pyramidale* and *Cymbopogon citratus* (with 7 and 6 citations, respectively). It was also observed that access to the knowledge and use of these plants is related to the age of the resident. Older individuals, in addition to having more knowledge, also show greater trust in the healing power of plants, as illustrated in the quote below:

“My granddaughter got sick [...] vomiting [...] and my daughter ran to the yard to call a car and take her to the emergency room. Then I said, wait a minute, I made tea with pau-de-rato, added a few drops of dipyrone to the tea, and gave it to her. She soon fell asleep, and the sickness went away.” — Mrs. Q, Matinha dos Pretos, 59 years old

It is evident that the younger person's immediate reaction was to seek support from public health services, which suggests a certain devaluation of the community's own knowledge regarding the therapeutic power of plants, and is an example of the ongoing erosion of associated traditional knowledge.

Of the 117 plants cited as medicinal, thirteen were used to treat spiritual illnesses or to ward off evil spirits. These include: *arruda* (rue), *vassourinha*, *margarida* (daisy), *tapete-de-oxalá*, *espada-de-santa-bárbara*, *espada-de-são-jorge*, *espada-de-ogum* (Figure 2H), *cabeça-de-frade*, *guiné*, *dandá*, *tira-teima*, *quarana*, and *jasmim-de-são-cosme*. Except for the first three, all were exclusively mentioned for spiritual treatments within Afro-Brazilian religious rituals (Supplementary Material 1).

The significant number of medicinal plants cited demonstrates the dependence of QRCs on natural resources, as well as their challenges in terms of accessing conventional medical treatments. Table 2 indicates that there were higher numbers of citations for diseases of the digestive and respiratory systems, which aligns with findings from the literature review of Dos Reis *et al.* (2023) considering medicinal plants of the Caatinga biome; citations for genitourinary, cardiovascular, and nervous system conditions followed.

Illnesses such as flu, colds, constipation, and stomachaches are common, especially among children and the elderly, and are considered easy to manage with natural treatments. However, more difficult-to-treat illnesses, such as cancer, were also reported.

Leaves (Ribeiro *et al.*, 2014) and fruits stand out in terms of the most used plant organs (Table 2), with roots being used less frequently (which is an indication that efforts are made to preserve useful plants). These harvesting practices are part of the management and environmental conservation traditions practiced by traditional peoples and communities.

Despite the existence of a public healthcare system (SUS) in Brazil, access to medical treatments remains difficult, particularly for those with few resources or who live far from urban centers. Until the 2000s, in addition to financial constraints, many QRCs lacked infrastructure and convenient means of transportation to urban areas. In this context, the natural course for those who were ill was to seek treatment within the community itself, relying on herbs and other resources for relief.

Table 02 – Average number of plant use-citations as ordered by Human Body Systems, with average numbers of citations for plant parts, and their uses.

Human System	Average	Human System	Average	Plant art	Average
Nervous	4.57	Anti-inflammatory	2.14	leaf	9.76
Digestive	12.71	Cancer	1.0	flower	0.53
Genitourinary	6.85	Pain	0.42	Fruit	2.53
Respiratory	10.28	Eyes	0.71	Exudate	0.46
Cardiovascular	6.42	Physical fatigue	1.57	Root	0.76
Integumentary	2.71	Spiritual	2.85	Plant	0.84
Esqueletal	1.57				

Source: Prepared by the authors, 2023.

We identified ethnospecies with distinct popular names that differed between the two communities studied, or even more than one name within the same community. *Bidens pilosa* (known as *picão* and *carrapicho-de-agulha*) and *Acanthospermum hispidum* (known as *buticudo* and *juiz-de-paz*) are examples of plants known by more than one popular name in the same community. Interestingly, *Sansevieria trifasciata* (called *espada-de-são-jorge* and *espada-de-santa-bárbara*) and *Borreria verticillata* (known as *carqueja-branca* and *carqueja-preta*) are considered different ethnospecies by residents, but represent the same botanical species (Supplementary Material 1).

Beekeeping is practiced in Paus Altos, and the ethnospecies *carqueja-branca*, *carqueja-preta*, and *carqueja-cabeça-de-novelo* are very important for honey production (in addition to their medicinal use). *Carqueja* flowering is synonymous with increased honey yields.

The Role of Women in Caring for Homegardens and Preserving Traditional Knowledge in Matinha dos Pretos and Paus Altos

Among the homegardens included within this study, eight were cared for by women, widows, or single mothers; in only two gardens, one in each community, were homegardens care shared by a couple. When a man is present in the household, his responsibilities are largely focused on income-generating activities, known locally as “vender o dia” (selling one’s labor for the day). When men do tend to gardens in their free time, their care is predominately focused on cultivating conventional crops such as sweet potatoes, cassava, beans, and corn. This aligns with the findings of Camou Guerrero *et al.* (2008), who discussed gender influence on the management of garden spaces.

In terms of traditional knowledge related to plants, women demonstrated greater familiarity with the preparation and indications of the species in the homegardens, as they are generally responsible for food preparation, health care, and household hygiene. This supports observations made by Voeks & Leony (2004) in other communities in

northeastern Brazil.

Regarding the transmission of homegarden-related knowledge, all of the participants reported that they had learned from their ancestors, frequently mentioning mothers, grandmothers, and aunts as their main sources of information. In terms of passing on this knowledge to younger generations, they expressed the desire to teach them; however, most reports indicate a decline in knowledge transmission, influenced by the rise of technology, improvements in quality of life, and changes in faith-related practices.

“Today, kids only care about television and cell phones. Many don’t even want to go to school. In my time, as a girl, we stayed close to our mothers, and that’s how we learned.” — Ms. P, Paus Altos, 79 years old.

Jafelice (2012) pointed out that the construction of traditional knowledge involves subsistence needs and requires time to be consolidated. That same author highlighted the existence of prejudice toward this kind of knowledge and its traditional holders – often due to their limited formal education. He emphasized, however, the epistemological significance and historical-cultural importance of this knowledge. Traditional knowledge passed down orally from generation to generation constitutes an intangible cultural heritage, capable of fostering sustainable development, enriching science, and contributing to the conservation of agrobiodiversity (BERTOLDI, 2014; DUARTE *et al.*, 2016).

The introduction of electronic devices, such as television and cell phones, was cited by various respondents as a sign of cultural erosion, as that technology has reduced conversations and storytelling during visits with family and neighbors. In these moments of reunion, people used to talk about everything - family news, illnesses and healing stories, culinary recipes, and folk remedies.

Regarding medicinal plants, reports of plant-based health treatments were more frequent in the Paus Altos community than in Matinha dos Pretos. The relatively large distance between the municipality of Antônio Cardoso and the large city of Feira de Santana was one factor that, for example, encouraged the work of midwives. This practice is now nearly extinct, having been replaced by the use of conventional medical care when women begin labor.

“My daughter, with these hands that God gave me, I helped many children come into the world. I rarely lost one [...]” — M.D., Paus Altos, 86 years old

The role of midwives was very important in rural communities, especially those located far from urban centers. Midwives played crucial roles at times when access to basic healthcare services was quite precarious (SANTIAGO, 2019). The replacement of this age-old practice of midwifery by a biomedical-hospital-centered model represents yet another move toward the devaluation of popular healthcare, promoting the subjugation of communities to the hegemony of scientific knowledge (BONFIM *et al.*, 2018).

Leisure and Family Life in Quilombola Backyards

The increased monetary value of space due to urbanization has led to reductions in backyard areas in urban settings, although this phenomenon is not yet pronounced rural areas. Nonetheless, in both urban and rural QRCs, land represents a space of struggle that has never been fully accessible. Quilombola backyards are therefore intensely used by families in terms of spaces for belonging and affirmation of ownership, and extended family members gather there to celebrate family life.

“Relatives come here and don’t want to leave, you should see. It’s just a party. Some stay the whole week.” — Mrs. L., Matinha dos Pretos, 74 years old.

These gatherings are common during vacation periods or local festivities. Family members who live far away and value their family ties, places of origin, and cultural traditions take these opportunities to return to visit the community. However, daily gatherings also occur, typically in the late afternoon, for casual conversations.

“See that pile of firewood? It’s for making a bonfire. Every night, my children and grandchildren come around, and sometimes some friends too. In the late afternoon, we light the fire and put the tea kettle on. We sit around talking until late at night.” — Mr. O., Paus Altos, 94 years old.

The firewood is gathered from the remaining pastures and woodlands in the region, and is either collected or purchased. This tradition of open fires continues in both communities.

Cultivated, Wild, and Exotic Food Plants

Our data revealed a predominance of conventional, cultivated food plants in backyard gardens. However, non-conventional edible plants (PANCs) and wild species are also recognized as available resources (although they are under-utilized), confirming what has been observed about spontaneous food plants in general (SILVA *et al.*, 2021). The reasons cited for their low consumption include a lack of time for preparation and difficulty in accessing them, as the region experiences low rainfall and wild plants are not always available.

Among the most frequently cited PANCs in the community were *Amaranthus viridis* (known locally as *brede*) and *Talinum fruticosum* (*língua-de-vaca*). Among plants with non-conventional edible organs is the banana (*Musa* spp.), whose edible parts include, in addition to the fruit (the conventional part), the peel and the banana flower or heart (*mangará*). Some people know these parts are edible, but still discard them, even in households where scarcity exists. The lack of knowledge about PANCs significantly contributes to their underuse.

Quilombola Ethnobotany Beyond Backyards

The data collected allowed for comparisons of biocultural aspects between the two studied communities. While Matinha dos Pretos exhibits urban characteristics, Paus Altos preserves features more typical of a rural area. Regarding education, it was observed that there were significantly greater numbers of individuals in Matinha dos Pretos pursuing undergraduate or graduate degrees than in Paus Altos. This can be explained by the proximity of Matinha dos Pretos to the State University at Feira de Santana and the Recôncavo Federal University.

The expression of beliefs related to the use of medicinal plants is notable in both communities, with the predominance of Christianity (mainly Catholic and Evangelical), although there are also followers of Afro-Brazilian religions. Despite their harmonious coexistence, there is some reluctance to openly practice these religious rites. Even with educational efforts carried out over recent decades—including debates and discussions on equality, respect, and combating religious intolerance—there is still, subtly or covertly, distrust and fear of openly declaring oneself a practitioner of “rituals and prayers.”

Those who identify as Evangelicals have abandoned older prayer practices associated with the use of plants in disease treatments, but they still use teas, poultices, and syrups for medicinal purposes.

“After I accepted Jesus, I gave up many things I used before.” — Mrs. C., Paus Altos, 76 years old.

“Dandá is used to ward off the evil eye, and vassourinha is used to pray away discouragement.” — Miss P, Paus Altos, 74 years old.

Regardless of being Evangelical, as expressed in the first statement, or being practitioners of Afro-Brazilian religions (second statement) with their festivals for saints, healing prayers, and the use of plants such as vassourinha and dandá, the community in general uses medicinal plants as health treatments, thereby preserving local culture.

Besides using plants from backyard gardens and small farms for family consumption, both communities sell their surplus at local markets, thus corroborating studies highlighting the importance of backyards for household economies (LEAL *et al.*, 2020). Thus, these spaces provide many of the resources needed to meet additional nutritional and health demands.

When droughts make local production unfeasible, families can stock their pantries at community grocery stores or in the municipal centers (where larger markets offer a wide variety of products, affordable prices, and payment options).

Ornamental Plants

Although not a primary focus of this study, the category of ornamental plants was recognized. These plants were present in all ten backyards as well as inside homes, contributing to indoor and outdoor decoration. Like other plant groups, ornamental

plants are shared within the community and may come from different regions (having been brought back from trips or visits by family and friends). Siviero *et al.* (2014) studied ornamental plants in urban backyards in Rio Branco-Acre and discussed social networks reinforced by exchanges of traditional knowledge.

Moura & Oliveira (2022), in their study of backyards in Mossoró, noted that ornamental plants were consistently positioned in front of the houses. In Matinha dos Pretos and Paus Altos, however, ornamental plants could be found both in front of and around the houses, showing that their placement within backyards is less important than their simple presence.

Final Considerations

Backyards hold great importance in Quilombola Remnant Communities and represent spaces of resistance against the processes of socioeconomic and cultural homogenization so common in the societies around them. Soil management and cultivation techniques reveal care in conserving both the soil and plant species. Backyards represent spaces for the exchange of knowledge and the preservation and conservation of culture and biodiversity, as well as for gatherings, leisure, and the cultivation of useful plants. They are spaces for ethnobiodiversity, with a predominance of medicinal plants in both communities.

Land ownership remains an issue that will require the intervention of public agencies so that this right can be fully enjoyed by quilombola remnant communities as well as indigenous peoples.

Although they can still harbor rich biodiversities, these small cultivation plots are frequently tilled, leading to gradual declines in spontaneous vegetation cover. Tilling processes represent one more factor contributing to cultural erosion, as it interrupts species' life cycles and compromises their preservation, hinders plant use and their consumption by younger generations, reduces the exchange of knowledge as well as the ability to recognize species.

Women are mainly responsible for cultivating backyard plants, including weeding and the preservation of useful plants. Women often also take on the task of passing their knowledge to future generations, although gradual cultural erosion processes associated with modernity were observed, especially related to the use of electronic devices.

The predominance of medicinal plants over food plants in backyard gardens reflects the ease of obtaining processed foods, which often appear more attractive and appetizing.

Non-conventional food plants (PANC), either cultivated or wild, are present but represent underutilized resources. The reasons for their low consumption are varied, but include the lack of knowledge of their existence, the time required for their preparation, prejudice, and difficulty of access – as they grow spontaneously in low-rainfall regions and are not always available.

The high number of cultivated plants used by humans confirms the exchange of botanical material through human migration. In the case of plants used in the quilom-

bola communities, this diversity of cultivated and naturalized species is also related to the history of enslavement of Black peoples. Uprooted from their lands, they transported important plant resources when they could, or learned to use other resources found on new continents in order to survive (CAMARGO, 2014).

Some of the plants cited here are related to the needs of midwives, who still practice (especially in the Paus Altos community). The “Rede Cegonha” Project represents an effort by the Ministry of Health to rejuvenate the practice of natural childbirth and reduce cesarean sections in Brazil. Thus, the ancient practice of midwifery may be revived in spaces that ensure the safety of both the mother and the baby, with the inclusion of traditional herbs that can reduce the use of pharmaceuticals.

One way to enhance the use of backyard plants would be to promote training courses, seminars, and/or roundtables in community associations and schools. This effort would contribute to improving basic health, promote conscious consumption and reduce malnutrition and hunger, as proposed by the United Nations Sustainable Development Goal 2.

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References

- ABDO, M. T. V. N.; VALERI, S. V.; MARTINS, A. L. M. Sistemas agroflorestais e agricultura familiar: uma parceria interessante. **Revista Tecnologia & Inovação Agropecuária**, v. 1, n. 2, p. 50-59, 2008.
- ALBUQUERQUE, U. P.; ANDRADE, L. H. C.; CABALLERO, J. Estrutura e florística de quintais no Nordeste do Brasil. **Jornal de Ambientes Áridos**, v. 62, n. 3, p. 491-506, 2005.
- ALBUQUERQUE, U. P.; LUCENA, R. F. P.; ALENCAR, N. L. Métodos e técnicas para coleta de dados etnobiológicos. In: ALBUQUERQUE *et al.* (eds.). **Métodos e técnicas na pesquisa etnobiológica e etnoecológica**. Recife: Nupeea 2010.
- ALMADA, E. D.; SOUZA, M. O. E. Quintais como patrimônio biocultural. In: ALMADA, E. D.; SOUZA, M. O. E. (Orgs.). **Quintais: Memória, resistência e patrimônio biocultural**. 1. ed. Belo Horizonte: Editora da Universidade do Estado de Minas Gerais, v. 1, p. 15-29, 2017.
- AMARAL, C. N.; GUARIM-NETO, G. Os quintais como espaços de conservação e cultivo de

alimentos: um estudo na cidade de Rosário Oeste (Mato Grosso, Brasil). **Boletim do Museu Paraense Emílio Goeldi**, v. 3, n. 3, p. 329-341, 2008.

BAN, N.; COOMES, O. T. Hortas caseiras na Amazônia peruana: diversidade e intercâmbio de material de plantio. **Revista Geográfica**, v. 94, n. 3, p. 348-367, 2004.

BERTOLDI, M. R. Saberes tradicionais como patrimônio cultural imaterial dinamizador do desenvolvimento sustentável. **Revista Novos Estudos Jurídicos**, v. 19, n. 2, p. 559-584, 2014.

BONFIM, J. O.; PRADO, I. F.; BOA SORTE, E. T.; COUTO, P. L. S.; FRANÇA, N. M.; GOMES, A. M. T. Práticas de cuidado de parteiras e mulheres quilombolas à luz da antropologia interpretativa. **Revista Brasileira em Promoção da Saúde**, v. 31, n. 3, p. 1-11, 2018.

CALÁBRIA, L. *et al.* Levantamento etnobotânico e etnofarmacológico de plantas medicinais em Indianópolis, Minas Gerais, Brasil. **Revista Brasileira de Plantas Medicinais**, v. 10, n. 1, p. 49-63, 2008.

CAMOU-GUERRERO, A.; REYES GARCÍA, V.; MARTÍNES-RAMOS, M.; CASAS, A. Knowledge and use value of plant species in a Rarámuri community: A gender perspective for conservation. **Human Ecology**, v. 36, n. 2, p. 259-272, 2008.

CAMARGO, M. T. L. A. **As plantas medicinais e o sagrado: a etnofarmacobotânica em uma revisão historiográfica da medicina popular no Brasil**. São Paulo: Ícone Editora, 2014.

CARMO, M. S. **O potencial dos quintais produtivos numa comunidade quilombola no Território do Recôncavo da Bahia**. 2018. Disponível em: <http://ri.ufrb.edu.br/jspui/handle/123456789/1847>. Acesso em 08/10/2023.

DUARTE, G. S. D.; HOOGERHEIDE, E. S. S.; REIS, J. C.; SOUZA, G. F.; SILVA, J. F. V. Produção de farinha de mandioca: subsistência e tradição cultural na comunidade São Benedito, Poconé, MT, Brasil. **Cadernos de Agroecologia**, v. 11, n. 2, 2016.

FLORENTINO, A. T. N.; ARAÚJO, E. L.; ALBUQUERQUE, U. P. Contribuição de quintais agroflorestais na conservação de plantas da Caatinga, Município de Caruaru, PE, Brasil. **Acta Botanica Brasilica**, v. 21, p. 37-47, 2007.

FOUCAULT, M. **A arqueologia do saber**. 8. ed. Rio de Janeiro: Forense Universitária, 2013.

GAZEL FILHO, A. B. G. **Composição, estrutura e função de quintais agroflorestais no município de Mazagão, Amapá**. Belém: Embrapa - Amazônia Oriental, 2008.

GOMES, F. L. Quintais produtivos e resiliência alimentar nos espaços da reforma agrária. **Revista Craibeiras de Agroecologia**, v. 1, n. 1, 2017.

JAFELICE, L. C. Etnoconhecimentos: por que incluir crianças e jovens? Educação intercultural, memória e integração intergeracional em Carnaúba dos Dantas. **Revista Inter-Legere**, n. 10, 2012.

KABIR, M. E.; WEBB, E. L. Can homegardens conserve biodiversity in Bangladesh? **Biotropica**, v. 40, n. 1, p. 95-103, 2008.

KEHLENBECK, K.; MASS, B. L. Crop diversity and classification of homegardens in Central Sulawesi Indonésia. **Agroforestry Systems**, v. 63, p. 53-62, 2004.

KINUPP, V. F.; LORENZI, H. **Plantas Alimentícias Não Convencionais (PANC) no Brasil: guia de identificação, aspectos nutricionais e receitas ilustradas**. São Paulo: Instituto Plantarum de Estudos da Flora, 2014.

LEAL, L. S. G.; FILIPAK, A.; DUVAL, H. C.; FERRAZ, J. M. G. B.; FERRANTE, V. L. S. B. Quintais produtivos como espaços da agroecologia desenvolvidos por mulheres rurais. **Perspectivas em Diálogo: revista de educação e sociedade**, v. 7, n. 14, p. 31-54, 2020.

MATOS, F. S.; FREITAS, I. A. S.; PEREIRA, V. L. G.; PIRES, W. K. L. Efeito da giberelina no crescimento e desenvolvimento de mudas de *Spondias tuberosa*. **Revista Caatinga**, v. 33, p. 1124-1130, 2020.

MEYER, M. Quintal Espaço ecológico e cultural. In: ALMADA, E. D.; SOUZA, M. O. (Orgs.). **Quintais: Memória, resistência e patrimônio biocultural**. 1. ed. Belo Horizonte: Editora da Universidade do Estado de Minas Gerais, 2017, v. 1, p. 15-29.

MEDEIROS, M. F. T. *et al.* **Dictionary of ethnobiology and related areas**. Suíça: Springer International Publishing, 2016. p. 273-310.

MOURA, A. P.; OLIVEIRA, A. M. Etnobotânica nos quintais urbanos em Mossoró-RN. **Ambiente & Sociedade**, v. 25, 2022.

OAKLAY, E. Quintais Domésticos: uma responsabilidade cultural. **Agriculturas**, v. 1, n.1, p. 37-39, 2004.

PEREIRA, C. N.; MANESCHY, R. Q.; OLIVEIRA, P. D.; SOUZA OLIVEIRA, I. K. Caracterização de quintais agroflorestais no projeto de assentamento Belo Horizonte I, São Domingos do Araguaia, Pará. **Revista Agroecossistemas**, v. 2, n. 1, p. 73-81, 2010.

PERIN, M. G. **Educação ambiental: análise e crítica da erosão cultural e da biodiversidade no biocolonialismo**. 2018. <http://repositorio.ufsm.br/handle/1/12856> . Acesso em 08/10/2023.

REIS, H. S.; PAZ, C. D.; COCOZZA, F. D. M.; OLIVEIRA, J. G. A.; SILVA, M. A. V. Plantas medicinais da caatinga: uma revisão integrativa dos saberes etnobotânicos no semiárido nordestino. **Arquivos de Ciências da Saúde da UNIPAR**, v. 27, n. 2, p. 874-900, 2023.

RIBEIRO, D. A.; MACÊDO D. G.; OLIVEIRA L. G. S.; SARAIVA, M. E.; OLIVEIRA, S. F.; SOUZA, M. M. A.; MENEZES, I. R. A. Potencial terapêutico e uso de plantas medicinais em uma área de Caatinga no estado do Ceará, nordeste do Brasil. **Revista Brasileira de Plantas Medicinais**, v. 16, p. 912-930, 2014.

SANTIAGO, J. C. Arte de partear: aprendizados e ensinamentos de mulheres parteiras de co-

munidades remanescentes de quilombos do Vale do Guaporé–RO. **Revista Presença Geográfica**, v. 6, n. 1, p. 194-200, 2019.

SANTOS, J. B. Comunidades Quilombolas do Portal do Sertão da Bahia: a luta entre o reconhecimento e a redistribuição. **ILUMINURAS**, v. 17, n. 41, 2016.

SILVA, L. H. P.; COSTA, F. N.; MURTA, N. M. G. “Não é mato à toa”: cultura alimentar e plantas espontâneas no Vale do Jequitinhonha, MG/Brasil. **Ambiente & Sociedade**, v. 24, 2021.

SIVIERO, A.; DELUNARDO, T. A.; HAVERROTH, M.; OLIVEIRA, L. C.; ROMAN, A. L. C.; MENDONÇA, A. M. S. Plantas ornamentais em quintais urbanos de Rio Branco, Brasil. **Boletim do Museu Paraense Emílio Goeldi**, v. 9, p. 797-813, 2014.

TOLEDO, V. M.; BARRERA-BASSOLS, N. **A memória biocultural: a importância ecológica das sabedorias tradicionais**. 1. ed. São Paulo: Editora Expressão Popular, 2015.

WEZEL, A.; BENDER, S. Plant species diversity of homegardens of Cuba and its significance for household food supply. **Agroforestry Systems** 57: 39-49, 2003.

VANDEBROEK, I.; VOEKS, R. A perda gradual de vegetais indígenas africanos na América tropical: uma revisão. **Botânica Econômica**, v. 72, p. 543-571, 2018.

VITÓRIO, M. A. P. **História ambiental de quilombos: o caso das Terras de Preto da Matinha**. 2015. Disponível em: https://s3.amazonaws.com/ppgm.uefs.br/DISS_DEF_CIDA_ok.pdf. Acesso em 08/10/2023.

VOEKS, R. A.; LEONY, A. Forgetting the forest: assessing medicinal plant erosion in eastern Brazil. **Economic botany**, v. 58, n. 1, p. S294-S306, 2004.

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Etnobotânica de Quintais Quilombolas: Resistência e Preservação Cultural em Duas Comunidades Quilombolas da Bahia, Brasil

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Resumo: Quintais quilombolas são espaços de resistência contra a opressão de um povo escravizado que, mesmo “livre”, não consegue “alargar” seus limites territoriais. Observamos quintais de duas comunidades remanescentes de quilombolas do domínio Caatinga, na Bahia, a fim de identificar as plantas alimentícias e medicinais cultivadas ou conservadas e seus usos. Utilizou-se abordagens quali-quantitativas, com turnê guiada, entrevistas semiestruturadas e conversas com os participantes de cinco quintais em cada comunidade. Fizemos análise discursiva e descritiva dos dados. Estes espaços são geridos principalmente por mulheres. Das 148 espécies citadas, 115 são medicinais e 66 alimentícias, destas 30 PANC e a maior parte nativas. As comunidades assemelham-se na nomenclatura das etnoespécies, biodiversidade, usos e compartilhamento de plantas. Os quintais constituem-se como patrimônio biocultural, troca de saberes intergeracionais e relações inter-familiares, momentos de lazer, contribuem para a renda familiar, segurança alimentar e de saúde e conservação da biodiversidade.

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Artigo Original

Palavras-chave: Etnobotânica; Quintais quilombolas; Patrimônio biocultural; Plantas comestíveis; Plantas medicinais.

Etnobotánica de los Patios *Quilombolas*: Resistencia y Preservación Cultural en Matinha dos Pretos y Paus Altos, Estado de Bahía

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Resumen: Los patios quilombolas son espacios de resistencia contra la opresión de un pueblo esclavizado que, incluso siendo “libre”, no puede “expandir” sus límites territoriales. Observamos los patios de dos comunidades quilombolas remanentes en el bioma de la Caatinga, en Bahía, para identificar las plantas alimenticias y medicinales cultivadas o preservadas, así como sus usos. Utilizamos enfoques cualitativos y cuantitativos, con visitas guiadas, entrevistas semiestructuradas y conversaciones con participantes de cinco patios de cada comunidad. Realizamos un análisis discursivo y descriptivo de los datos. Estos espacios son gestionados principalmente por mujeres. De las 148 especies mencionadas, 115 son medicinales y 66 son plantas alimenticias, de las cuales 30 son PANC (plantas alimenticias no convencionales) y la mayoría son nativas. Las comunidades son similares en la nomenclatura de etnoespecies, biodiversidad, usos y compartición de plantas. Los huertos familiares constituyen patrimonio biocultural, un medio para intercambiar conocimientos intergeneracionales y fomentar las relaciones interfamiliares, ofreciendo oportunidades de ocio y contribuyendo a los ingresos familiares, la seguridad alimentaria y sanitaria, y la conservación de la biodiversidad.

Palabras-clave: Etnobotánica; Huertos familiares quilombolas; Patrimonio biocultural; Plantas comestibles; Plantas medicinales.

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