Plants that Heal: Experiences of those who use them in the Amazon Region of Pará

Plantas que curan: experiencias de quienes las usan en la región amazónica de Pará

Plantas que curam: experiências de quem as usa na região amazônica do Pará

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Abstract

The study assessed the interaction between people and therapeutic plants in the traditional pharmacopoeia in different contexts of healing and religiosity. Homegardens in the towns of Abaetetuba and Vigia, and stands at the market, Feira da 25 de Setembro, in the city of Belém, PA, were investigated. The methodology included conducting semi-structured interviews and photographic records to analyze the cultural and religious value aggregated to plants and their use in the tradition of these populations. The use of 50 species of therapeutic plants was identified, 29 at Feira da 25, 11 in Abaetetuba and 19 in Vigia. There is a greater diversity of species at

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Feira da 25 and the demand is related to mystical rituals. The species mucuracaá, catinga de mulata, rosemary and basil are frequently used in ritual works for spiritual protection. In the homegardens, residents expressed spiritual and affective connections, wherein the plants have sacred meanings in addition to transmitting well-being. Both at markets and in homegardens, diversity in the use of species associated with the domain of knowledge and traditions passed down through family generations means the use of plants is effective at curing diseases of the body and soul.

Keywords: bioculturality; homegardens; open markets; healing; medicinal plants; Amazon.

Resumen

El estudio evaluó la interacción entre personas y plantas terapéuticas en la farmacopea tradicional en diferentes contextos de curación y religiosidad. Se investigaron huertos familiares en las localidades de Abaetetuba y Vigia, y puestos en el mercado, Feira da 25 de Setembro, en la ciudad de Belém, PA. La metodología incluyó la realización de entrevistas semiestructuradas y registros fotográficos para analizar el valor cultural y religioso agregado a las plantas y su uso en la tradición de estas poblaciones. Se identificó el uso de 50 especies de plantas terapéuticas, 29 en Feira da 25, 11 en Abaetetuba y 19 en Vigia. Hay una mayor diversidad de especies en Feira da 25 y la demanda está relacionada con los rituales místicos. Las especies mucuracaá, catinga de mulata, romero y albahaca se utilizan con frecuencia en trabajos rituales de protección espiritual. En los huertos familiares, los vecinos expresaron conexiones espirituales y afectivas, donde las plantas tienen significados sagrados además de transmitir bienestar. Tanto en los mercados como en los huertos familiares, la diversidad en el uso de especies asociadas con el dominio del conocimiento y las tradiciones transmitidas de generación en generación significa que el uso de plantas es eficaz para curar enfermedades del cuerpo y el alma.

Palabras clave: bioculturalidad, huertas, mercados abiertos, curación, plantas medicinales; Amazonía.

Resumo

O estudo avaliou a interação entre pessoas e plantas terapêuticas na farmacopéia tradicional em diferentes contextos de cura e religiosidade. Foram investigados quintais domiciliares nos municípios de Abaetetuba e Vigia e barracas do mercado Feira da 25 de Setembro, na cidade de Belém / PA. A metodologia incluiu a realização de entrevistas semiestruturadas e registros fotográficos para analisar o valor cultural e religioso agregado às plantas e sua utilização na tradição dessas populações. Foi identificada a utilização de 50 espécies de plantas terapêuticas, sendo 29 na Feira da 25, 11 na Abaetetuba e 19 na Vigia. A diversidade de espécies da Feira da 25 é maior e a procura está relacionada com rituais místicos. As espécies mucuracaá, catinga de mulata, alecrim e manjericão são frequentemente utilizadas em trabalhos rituais de proteção espiritual. Nos quintais, os moradores expressaram vínculos espirituais e afetivos, sendo que as plantas possuem significados sagrados além de transmitirem bem-estar. Tanto nos mercados quanto nos quintais, a diversidade no uso de espécies associada ao domínio do conhecimento e das tradições passadas de geração em geração faz com que o uso de plantas seja eficaz na cura de doenças do corpo e da alma.

Palavras- chave: bioculturalidade; quintais domésticos; feiras; cura; plantas medicinais; Amazônia.

Introduction

Plants have incorporated the role of special emissaries that aim to meet human needs and establish a link with the supernatural, having been ritualized in countless magical and religious celebrations, in addition to acting as fundamental mechanisms of survival in virtually all cultures (Camargo, 2014; Leite *et al*., 2015).The use of plants in popular treatments is linked to the analysis of three main axes: the pharmacological action of the substance in the body; to the set, characterized by the personality, psychic and emotional conditions in which the individual finds themselves; and, to the setting, which

considers the sociocultural environment and associated symbolic meanings (Camargo, 2014; Lévi-Strauss, 1975; Peláez, 1994; Soares *et al.*, 2017).

In addition to the ethnopharmacobotanical characteristics, the relationship with healing plants is associated with the faith and trust of the people involved in the medical process, with the existence of a universe of plants that acquires religious powers that harmonize body and spirit (Lucas *et al.*, 2017). This plants have the ability to expand human perception, cure diseases and serve as sacraments in many religions (Labate and Goulart, 2005). According to Quintas (2007), the *pajelança*[1] practiced by individuals in the Amazon traces its origins back to the practices for coping with illnesses established by the Tupi-Guarani peoples who sought help through interconnection with the spirits of the forest. Belief and magic systems are modulated by different cultural traditions that influenced the ways of life of Amazonian peoples (Galvão, 1955; Santos, 2000).

Thus, Maués (1995) identified the Amazon region of Pará as a conspicuous locus for the realization of religious practices that synthesizes Indigenous and African elements and embody nature in their ritualities. Analyzing the town of Vigia de Nazaré, for example, Rêgo Jr. (1973) observed hybridity of *pajelança* practices that are definitely mixed with Umbanda roots, tambor de mina, Catholicism, Spiritism and other religions, characterizing the place with a form of genuine faith. In addition, plants used in contexts of rituals and health care are circulating in open air markets, grocery stores, homegardens, swiddens, vegetable gardens, forests, rivers, among other places, which encompass aspects of sociability, religiosity, commerce and the circulation of plants, people, beliefs and knowledges (Bitencourt *et al.*, 2014).

Oliveira (2017) highlights that the documentation of the representations that societies develop with the natural environment also enables the identification and preservation, material or immaterial, of elements of biodiversity that are configured in the associated genetic, biological, and cultural heritages. In the Amazonian way of life, religions and religiosities merge biocultural components and incubate functional and liturgical roles to plants, whether in urban, contemporary environments or in traditional communities. Based on this statement, this work sought to identify the therapeutic plants used at the intersection of beliefs in the botanical-religious universe from the perspective of those who know and use them in different spaces.

Material and Methods

Study locations

The areas of investigation and information collection contemplated three environments: the market called Feira 25 de Setembro, or more commonly Feira da 25, in the city of Belém, and homegardens in the municipalities of

Vigia and Abaetetuba, in the state of Pará. The three environments were selected based on data previously cataloged by the research group, which for some time has been mapping and constructing inventories of plants and the societies that use them, from different biocultural perspectives.

The biocultural perspective highlighted in this study invites us to understand healing based on the category of cultural diseases (Gruca *et al.*, 2014), which considers different conceptions of diseases from the perspective of different cultures in the world, and that are often associated with heavenly bodies, and with the social and spiritual environment. Contrary to modern mainstream medicine, which understands disease based on causes and scientific facts, traditional medicine understands illnesses as originating from natural forces and mystical powers.

The selection of participating interviewees in Vigia and Abaetetuba consisted of requesting information from local residents concerning individuals who had the expertise or a gift for healing and ritualizing through plants and religiosity. In order to reach this understanding of the social group, exploratory visits were made and living experiences with people from churches, local primary health units, and others. At Feira da 25, two of the stands were run by individuals only working with herbs and preparing medicines, and they are owners of more than one stand.

The Feira da 25 de Setembro complex, located in the metropolitan region of Belém, was opened 44 years ago and has an area of 315 m^2 (Carmo *et al.*, 2015). The municipality of Abaetetuba occupies an area of 1,610.408 km^2 and belongs to the microregion of Cametá and mesoregion of northeastern Pará. Situated 120 km from Belém, the state capital (Gonçalves and Lucas, 2017), it has a population of approximately 141,100 inhabitants (IBGE, 2010). The municipality of Vigia, founded in 1616, is located in the mesoregion of northeastern Pará and in the microregion of Salgado, 77 km from the capital, has an area of 539,079 km2 and a population of 47,889 inhabitants (IBGE, 2010).

Data collection

Following the prior consent of the research participants, qualitative and quantitative information on the use of therapeutic plants was acquired through the use of a semi-structured interview form containing closed and open-ended questions, together with photographic records, field notebooks, and audio recorders (Albuquerque *et al.,* 2010). The group that constitutes the present sample was chosen by rational selection (non-probabilistic sampling), since individuals who held locally recognized knowledge concerning therapeutic plants were prioritized, here denominated “specialists” (Thiollent, 1986), which includes the vendors at the market and specialists in healing from Abaetetuba and Vigia.

To collect botanical specimens (leaves, flowers and/or fruits) in the homegardens of Abaetetuba and Vigia, the guided tour technique was used (Albuquerque *et al.*, 2010), following the preparation steps (pressing, drying, and freezing) and herborization (registration and inclusion) of the material according to the manual by Martins-da-Silva *et al.* (2014). The scientific names were identified by parataxonomist and updated in the Reflora (n.d.) (http://floradobrasil.jbrj.gov.br) and Tropicos.org (2018), Missouri Botanical Garden, (https://www.tropicos.org) databases. Subsequently, the botanical samples were included in the Prof. Dr. Marlene Freitas da Silva Herbarium at the State University of Pará. Samples that did not meet the standards of collection, identification and inclusion in an indexed collection were only named using the vernacular nomenclature in this work and were not included in the collection.

Information analysis

To compile the results, the data obtained in the interview forms, discourses, and expressions of the participants and in notes in the field book were analyzed. During the visits to Abaetetuba and Vigia, five specialists were selected in each municipality, while at the Feira da 25 only two participants were selected, since they were the only ones working with therapeutic plants.

Results and Discussion

The people and biocultural uses of therapeutic plants

The cultural value of plants in the places visited is, among other reasons, associated with their availability in nature, the belief and reaffirmation of the identity of the healer and their patients; furthermore, it expresses behavior strongly rooted in family inheritances. Of the 12 interviewees, 10 are women, aged between 40 and 70 years old, and two are men aged between 31 and 74 years old. In the homegardens of Abaetetuba and Vigia, there are a larger proportion of female specialists (80%) aged between 35 and 65 years old, data that corroborates women as expert practitioners in plants and recipes, and perpetuators of biocultural knowledges.

One of the things these healing specialists have in common are daily routines focused on caring for the people who seek them out for the most diverse disorders. They are recognized in their places of residence and work as authorities on plants and medicines, or as healers, faith healers, *pai* or *mãe de santo*[2]. They tend to be in high demand and see their patients in their own homes. Dona Costa M.N., for example, is 65 years old and can receive up to 40 people in a week. In these works, dedicated to *others*, they help to ward off negative energies and evil spirits; they bless and assist in solving financial problems and interpersonal relationships.

These masters have similar profiles and common features. They are people with low levels of education, who commonly have not completed primary education. Their source of income is the partner's salary, retirement benefits or donations from their patients, because work that seeks to perform healing is not remunerated since it is seen as a mission or a gift in this life. The vocation and awakening to heal people occurred mainly in childhood or adolescence and was revealed by the presence of spirits in apparitions or dreams, but the fact is that not everyone was prepared for this mission. Their learning with plants and the elaboration of medicines came from their mothers or grandmothers, or even from their own experiences, including in dreams, assisted by spirits or guides that protect and direct the treatment. In this mission, some became *filhos de santo*, or *pais/mães de santo*.

Regarding the specialists at the market, both have been working for more than 20 years at the Feira da 25 de Setembro, and the sale of plants/products at the market is the main source of income for the family. Contributions to family work occur the market and at home, where they cultivate and process some of the herbs sold. Growing herbs in homegardens is a common practice for all those interviewed and occurs a lot more often in Vigia and Abaetetuba, where healers also propagate and select the plants to be used in rituals.

The role of women in the healing systems in both municipalities is a relevant aspect of this study. Even though they have different ages and lives, they follow a routine of patient care and still participate in other domestic and work tasks. It is worth highlighting that in the homegardens sampled, the knowledge possessed by younger women is not necessarily inferior to that of older women; the domain of greater knowledge among them is determined more by local reality, which implies, for example, minimal access to health centers, factors that encourage the maintenance and enhancement of traditional knowledge.

Women and men identify with caring for *others* and are known as healers or faith healers, those who use their beliefs and religious influences to cure many types of illnesses, energy imbalances and cultural diseases. Some stated that they have gifts connected with regaining health and communicating with their spirit guides, and this teaches them to prepare syrups, bottled extracts, and teas.

In addition, they cited practices in which they "enchant" or "cure" plants, to transform themselves into animals and/or people on certain nights to protect the house and the homegardens, granting a power from the plant, obtained through transmutations of its matter into its ancestral primitive spirit. **Tajá** (*Agave* sp., Asparagaceae) is usually found inside and outside homes and on Wednesdays and Fridays it receives treatment with cachaça, coarse salt, ammonia, and water in its roots. This procedure works to maximize the strength of the plants in order to prepare medicines, such as a bath for discharge.

Plants like **espada de São Jorge** [Saint George's sword], **espada (chicote) de Ogum** [*lit.* Ogum's sword/whip], **espada de Joana D'arc, comigo ninguém pode** [dumb cane], **tajá** and **tamaquarés** are widely used and are always present in homes; they are seen as a symbol of protection for the home and are associated with spiritual entities of African-based religions. Therefore, for a remedy or treatment to become effective it is necessary to amalgamate spells aiming at healing forces.

The majority of the interviewees attend Catholic churches, but also participate in African-based religions, such as Umbanda, and feel that they belong to it, placing their faith and hope in guides, caboclos and orixas, who intercede in the healing processes and other accomplishments, with the help of therapeutic plants. This profile that converges multicultural expressions are components of rites, myths and narratives in the Amazon biome and are part of the cultural identity discourses. Such discourses concerning *caboclo* life are described by Paes Loureiro (2001) as a narrative fabric that can exist in multiethnic environments based on cultural memory and sociocultural dynamics. For these people, the dimension of the woods, the plants, the forest, of nature goes beyond the aspect of a religious path; indeed, the different cultures shape these molded lives.

At open markets or in homegardens (Figure 1), one thing all the participants have in common is their concern to maintain their plant collections alive because they are repositories of biodiversity that are fed by healing needs linked to religiosities. They are people who see plants as symbols of defense, protection, celebrations, and the realization of dreams (employment, love, the acquisition of material goods and health).

In homegardens, plants are grown in a variety of places, outside or indoors, in pots, basins, or on the land surrounding the house. Studies developed by Siviero *et al.* (2014) indicated that cultivation close to the residence enables the management of plant species and better use of them, since they are distributed in strategic points in the homegardens, in flowerbeds, vegetable patches and *jiraus*[3] thus ensuring the needs of the family group. In these cultures, there is a strong demonstration of respect for the species, mainly because they are linked to well-being and spirituality.

The plants identified in this study can be used in more than one therapeutic modality, depending on the type of malaise or disorder specific to each person. There are plants that are included in bath preparations and act in more generic rites, such as discharging baths, calming baths, baths for attracting good things like love or money. Others consist of more elaborate and specific preparations for a given body system, including a set of plants (compound recipes) and other forms of preparation. Therefore, teas, compresses, bottled extracts, macerates, syrups, etc., can act according to the patient's condition, who reveal themselves and open up to the specialist, so they can make a diagnosis, prepare the recipe and wait for the patient's status to improve. In

some situations, during the waiting period, the specialist takes a piece of the person's clean clothing and prays at a distance, returning the item when the patient is cured. Certain conflicting uses of bottled extracts were observed between the participants. We verified that the bottled extracts sold at the market have a less specific action, with variations in the patients' well-being. For specialists from Vigia and Abaetetuba, however, bottled extracts are unique preparations made only for a person who opens up in a particular situation, they cannot be produced in quantity.

Figure 1. Forms of commerce and cultivation of therapeutic plants investigated in the research and used by the population of Pará. A. Dehydrated medicinal plants sold at the Feira da 25 de Setembro, located in Belém, PA. B. Plants sold in natura, in addition to other products based on plant species also sold. C and D. Homegardens located in the municipalities of Vigia and Abaetetuba, respectively. Note in C plants grown in pots, recycled plastic and metal containers on the jiraus. *Source*: authors, 2021.

In any situation, healing works in a systemic manner and the body and soul must be healed. These products can make use of the whole plant, or of certain parts (leaves, bark), or they can be used as amulets placed near the entrance of houses, or even forming a ring around them. Camargo (1980) showed that the popular use of the plant as an amulet is linked to the belief in a shield that blocks obsessive entities and promotes spiritual cleansing of people and places. Lobato *et al.* (2017) also reinforced that plants related to the mysticism of a given culture embrace the whole environment, as they protect the yard, the house, the health of family members, the group's income, and emanate prosperity and luck.

In conversations with vendors, it is evident that several of the sick people who seek herbs, discontinue seeking help in hospitals and primary health care units posts due to difficult access and low financial status; or use plants in parallel with other forms of treatment, due to the lack of security in the health services offered to their communities. This profile of those who buy and attend open markets demonstrates a framework of continuous demand for medicinal plants that are now understood as priority resources and not merely alternatives.

When natural resources become scarce in homegardens, due to space limitations, therapeutic plants are acquired in open markets and grocery stores, and to some extent furnish the acquisition of such resources. The people holders of knowledge travel to commercial centers in search of plant materials to prepare home remedies, because domain and cultural identity with the plants they consume, and they are responsible for maintaining the commercial flow active, as they buy and stimulate sales: "I always buy the magic herbs... I even owe Cabocla Jurema some work... and I also use the ready-made products... today I'm going buy the *amansa* [softener for the soul] ...] we wash our husband's clothes... it's the last of the water that washes the clothes... then he remains really meek, really gentle... every week I wash his clothes like this" (SM, 37 yrs old). Thus, the open markets also function as spaces providing and maintaining the dynamics and healing culture based on popular knowledge, since plants no longer found in homegardens can be purchased, continuing the transmission of knowledge and conservation of essential plant species in these practices.

The plant ethnospecies found at Feira da 25 and in the homegardens

The diversity of species used in healing rituals is vast. In the survey conducted in this work, 50 species of therapeutic plants were registered, 29 of which were found at Feira da 25, 11 in Abaetetuba, and 19 in Vigia (Table 1). At the Feira da 25, there is a greater diversity of species and the demand is related to mystical rituals, which large use **mucuracaá** [guinea hen weed], **catinga de mulata, alecrim** [rosemary] and **manjericão** [basil], for example, sought after by consumers to obtain healing and spiritual protection.

This is an indication of the reliability and expectation of those who seek out these plants. In these connections, the transmission of information occurs through those who have already tried and tested them, who begin to recommend them and even orient others on how to obtain and use them, a type of effectiveness validation. In the space of Feira da 25, although profit is prioritized, knowledge obtained in the past, by relatives and friends, or guidance given by market vendors (a very common practice), are preserved.

Table 1. Therapeutic plants indicated by the interviewees at the open market, Feira da 25 de Setembro, and in the municipalities of Abaetetuba and Vigia, Pará, Brazil.

Ethnospecies (common name)	**Family/ Scientific name**	**Purpose**	**Form of use**	**Part of the plant**	Location
Agarradinho	Not identified	Love attraction and sexual appetite stimulant. Seduction attractant	Bath, Infusion	Whole plant	Feira da 25
Água selvagem	Not identified	Attraction of good things	Essence	Whole plant	Feira da 25
Alecrim da angola	LAMIACEAE *Vitex agnus Castus* L.	Attracting good energy	Bath, Infusion	Whole plant	Feira da 25
Alho macho	AMARYLLIDACEAE *Allium sativum* L.	Protection against the evil eye, envy and greedy eye	Amulet	"Seed" (i.e., garlic clove)	Feira da 25
Arruda	RUTACEAE *Ruta graveolens* L	Blessing	Topical	Whole plant	Vigia
Arruda	RUTACEAE *Ruta graveolens* L.	Protection against the evil eye, envy and ill will. To bring money	Bath, Infusion	Whole plant	Feira da 25
Atrativo do amor	Not identified	Attraction	Essence	Whole plant	Feira da 25
Baunilha	Not identified	Attraction	Essence	Flower	Feira da 25
Busca longe	Not identified	Bring your loved one back	Bath, Infusion	Whole plant	Feira da 25
Cabí	MALPIGHIACEAE *Cabi paraensis* Duck.	Discharge, itching	Bath, Tea, Infusion	Leaf	Feira da 25
Cabí	MALPIGHIACEAE *Cabi* sp.	Protection of body Body cleansing, dispelling negative energy, discharge	Amulet, Bath	Whole plant, Leaf (small, new)	Vigia

Casca de laranja	Not identified	Smudging	Tea, Infusion	Bark	Feira da 25
Catinga de mulata	LAMIACEAE *Aeollanthus suaveolens* Mart. ex Spreng	Blessing	Topical, Bath	Whole plant	Vigia
Catinga de mulata	LAMIACEAE *Aeollanthus suaveolens* Mart. ex Spreng	Cleansing body and soul	Bath, Tea, Decoction	Whole plant	Feira da 25
Catinga de mulata	LAMIACEAE *Aeollanthus suaveolens* Mart. ex Spreng.	Evil eye	Amulet	Whole plant	Abaetetuba
Catuaba	Not identified	Aphrodisiac	Tea, Decoction	Bark	Feira da 25
Chega-te a mim	AMARANTHACEAE *Alternanthera bettzickiana* (Regel) Voss	Attraction	Tea, Infusion, Bath	Whole plant	Feira da 25
Cheiro do Pará	Not identified	Attraction	Essence	Mixture	Feira da 25
Cipó alho	BIGNONIACEAE *Mansoa alliacea* (Lam.) A.H. Gentry	Discharge	Tea, Bath, Decoction	Vine	Feira da 25
Cipó d'alho	BIGNONIACEAE *Mansoa alliacea* (Lam.) A.H. Gentry	Keeping away bad things	Bath, Amulet	Leaf, Whole plant	Abaetetuba
Cipó d'alho	BIGNONIACEAE *Mansoa alliacea* (Lam.) A. H. Gentry	Body cleansing, pushing away negative energy	Bath	Leaf	Vigia
Comigo ninguém pode	ARACEAE *Dieffenbachia seguine* (Jacq.) Schott	Dispelling negative energy	Bath, Amulet	Leaf, Whole plant	Abaetetuba

Comigo ninguém pode	ARACEAE *Dieffenbachia seguine* (Jacq.) Schott	Protection, *quebranto*,[4] evil eye, witchcraft	Amulet	Whole plant	Vigia
Dama da noite	Not identified	Attraction	Essence	Flower	Feira da 25
Erva cidreira	VERBENACEAE *Lippia alba* (Mill.) N. E. Br.	Opening up the path, *quebranto*	Bath	Leaf	Vigia
Erva pena verde	ARACEAE *Caladium* sp.	Protection, *quebranto*, evil eye, witchcraft	Amulet	Whole plant	Vigia
Espada (Chicote) de Ogum	ASPARAGACEAE *Sansevieria* sp.	Protection, *quebranto*, evil eye, witchcraft	Amulet	Whole plant	Vigia
Espada de Joana D'arc	ASPARAGACEAE *Sansevieria* sp.	Protection, *quebranto*, evil eye, witchcraft	Amulet	Whole plant	Vigia
Espada de São Jorge	ASPARAGACEAE *Sansevieria trifasciata* Prain	Protection, *quebranto*, evil eye, witchcraft	Amulet	Whole plant	Vigia
Espada de São Jorge, espada de Jarina	ASPARAGACEAE *Sansevieria trifasciata* Prain	Bad luck, *panemeira*[5]	Amulet	Whole plant	Abaetetuba
Eucalipto	MYRTACEAE *Eucalyptus* L'Hér.	Scared child	Cologne	Leaf	Abaetetuba
Guaraná	Not identified	Energetic, aphrodisiac	Mixture	Semente	Feira da 25
Hortelã grande	LAMIACEAE *Mentha* sp.	Blessing, pull in the tummy, tearing	Topical	Leaf	Vigia
Hortelanzinho	LAMIACEAE *Mentha* sp.	Blessing, pull in the tummy, tearing	Topical	Whole plant	Vigia
Japana	ASTERACEAE *Ayapana triplinervis* (M.Vahl) R.M.King&H.Rob.	Body cleansing	Bath	Leaf	Vigia

Jasmin	Not identified	Attraction	Essence	Flower	Feira da 25
Jiboinha	ARACEAE *Epipremnum pinnatum* (L.) Engl.	Protection	Amulet	Whole plant	Abaetetuba
Manjericão	LAMIACEAE *Ocimum* sp.	Attraction	Bath, Infusion	Whole plant	Feira da 25
Manjericão	LAMIACEAE *Ocimum* sp.	Blessing	Topical	Leaf	Vigia
Marapuama	Not identified	Aphrodisiac	Tea, Decoction	Bark	Feira da 25
Mucuracaá	PHYTOLACCACEAE *Petiveria alliacea* L.	Discharge, cleansing the body and/or soul	Bath, Infusion	Whole plant	Feira da 25
Mucuracaá	PHYTOLACCACEAE *Petiveria alliacea* L.	*Panemeira*, dispelling bad things	Bath	Leaf	Abaetetuba
Mucuracaá (tipi)	PHYTOLACCACEAE *Petiveria alliacea* L.	Body cleansing, dispelling negative energy	Bath	Leaf	Vigia
Patichouli	Not identified	Attraction	Tea, Decoction	Essence, Root	Feira da 25
Pau de angola	Not identified	Attraction	Essence	Whole plant	Feira da 25
Pau de angola	PIPERACEAE *Piper* sp.	Opening up the path, *quebranto*	Bath	Leaf	Vigia
Pião branco	*Jatropha gossypiifolia* L.	Discharge	Bath, Tea, Infusion	Whole plant	Feira da 25
Pião roxo	EUPHORBIACEAE *Jatropha gossypiifolia* L.	Opening up the path, *quebranto*	Bath	Leaf	Vigia
Pião roxo	EUPHORBIACEAE *Jatropha gossypiifolia* L.	Protection	Amulet	Whole plant	Abaetetuba

Pimenta malagueta	BIGNONIACEAE *Mansoa alliacea* (Lam.) A. H. Gentry	*Panemeira*, bad luck, greedy eye	Blessing	Twigs, Leaf, Whole plant	Abaetetuba
Priprioca	Cyperaceae *Cyperus articulatus* L.	Attraction	Essence	Root	Feira da 25
Quebra barreira	Not identified	Cleansing the body and/or soul	Bath, Tea, Infusion	Whole plant	Feira da 25
Quebra Feitiço	CUCURBITACEAE	Discharge, cleansing the body and/or soul	Bath, Infusion	Whole plant	Feira da 25
Rio Branco	ARACEAE *Calladium* R. Br.	Protecting the house	Amulet	Whole plant	Abaetetuba
Rio Negro	ARACEAE *Colocasia* Schott	Protecting the house	Amulet	Whole plant	Abaetetuba
Tajá	ASPARAGACEAE *Agave* sp.	Against *panemeira*, dispelling the boto[6]	Amulet	Whole plant	Vigia
Tajá fêmea	ARACEAE *Philodendron* sp.	Protecting the house and family	Amulet	Whole plant	Vigia
Talismã do amor	Not identified	Love attraction. Bring your loved one back	Essence	Whole plant	Feira da 25
Vindicá	Not identified	Attraction	Bath, Infusion	Whole plant	Feira da 25

Source: Authors, 2021.

Table 1 presents the repertoire of the forms of use and prescription of traditional remedies that reflect the memory and repertoires of vendors and people in their homegardens. The data shows that not only is the leaf the part most used, but the whole plant has a strong appeal, a strong individuality that needs to be used with all of its vital organs to be successful. The entire plant is important. Croatto (2002) interpreted that in these situations, botanical resources become trans-signified organisms to the extent they express something beyond their natural sense, that of a plant, and are configured in cultural creations of the human mind, in this case representations of protective deities.

Most of the plants in Table 1 are present at the Feira da 25, which becomes a place of convergence, of arrivals and departures plants for traditional treatment systems to occur, whether in the municipalities or in the city of Belém. The acquisition of ritualistic medicinal plants in open markets was analyzed by Moreira (2007) as a way of maintaining culture in urban fabrics and possessing social functions based on cultural, religious and spiritual values that are maintained over many family generations.

The traditional medical systems of those people who work at markets, and those who work in their homes and gardens, expressed the memory of family use, an affective relationship with family know-how and which, even in contemporary times and assuming new connotations, remains active. In addition, contemporary rites may represent medical practices and beliefs arising from encounters with African, Indigenous and European peoples, who incorporated new or resignified traits, elements, and techniques into existing rites.

Therapeutic indications based on the use of the 50 plant species mentioned by the interviewees were grouped into categories frequently used in ritual works for spiritual protection, with the most prevalent being used for protecting and curing disorders (Table 2). Such disorders can be understood as a malaise, a feeling that something is not right, a dysfunction that can be physical, mental and sometimes spiritual. Disorder is something subjective and depends on the vision of each individual (Ricciardi, 2009).

Table 2. Therapeutic plants indicated for specific disorders, as cited by the interviewees, together with their indications.

Ethnospecies (common name)	**Scientific name**	**Disorder treated**
Alho macho	*Allium sativum* L.	Protection against the evil eye, envy and greedy eye
Arruda	*Ruta graveolens* L	Blessing
Arruda	*Ruta graveolens* L.	Protection against the evil eye, envy and ill will. To bring money

Cabí	*Cabi* sp.	Body cleansing, dispelling negative energy, discharge, protection of body
Catinga de mulata	*Aeollanthus suaveolens* Mart. ex Spreng.	Evil eye
Cipó d'alho	*Mansoa alliacea* (Lam.) A. H. Gentry	Body cleansing, pushing away negative energy, keeping away bad things
Comigo ninguém pode	*Dieffenbachia seguine* (Jacq.) Schott	Protection, *quebranto*, evil eye, witchcraft, dispelling negative energy
Erva pena verde	*Caladium* sp.	Protection, *quebranto*, evil eye, witchcraft
Espada (Chicote) de Ogum	*Sansevieria* sp.	Protection, *quebranto*, evil eye, witchcraft
Espada de Joana D'arc	*Sansevieria* sp.	Protection, *quebranto*, evil eye, witchcraft
Espada de São Jorge	*Sansevieria trifasciata* Prain	Protection, *quebranto*, evil eye, witchcraft
Japana	*Ayapana triplinervis* (M.Vahl) R.M.King&H.Rob.	Body cleansing
Mucuracaá	*Petiveria alliacea* L.	*Panemeira*, dispelling bad things
Mucuracaá (tipi)	*Petiveria alliacea* L.	Body cleansing, dispelling negative energy
Quebra barreira	Not identified	Cleansing the body and/or soul

Source: Authors, 2021.

Table 2 reveals a clinical picture of disorders cared for by specialists and confirms that despite the influences of the urban environment, which weaken the biocultural memory with traditional medicine, most of the interviewees continue to practice health and well-being linked to the past, in new cycles of knowledge, thus generating a transit of knowledges, which according to Dantas and Silva (2013) and Gandolfo and Hanazaki (2011), even if they remain inert, are always resignified, and never effectively lost.

Due to the diversity of species registered in the inventory from the three locations, varied forms of use were confirmed, identified with each particular need. Thus, a plant like **cipo d'alho** [garlicvine] can be used as an amulet, in the preparation of a bath or tea in order to ward off negative energies or as a spiritual discharge. Each participant presented their own knowledge concerning its cultivation, prescriptive use, and where to buy it. This profile represented the concern of these people in maintaining plant collections and even donating seedlings so that the species are not forgotten and that they are always present in homegardens. This confirms the importance of these environments as a means to potentialize a cultural behavior whose main

purpose is the quality of life of individuals, who are always resignifying, developing and re-elaborating techniques for the therapeutic propagation of ethnic knowledge (Gandolfo and Hanazaki, 2011).

The plant species that occur in common between the areas were **comigo ninguém pode** and **catinga de mulata**, appearing both at Feira da 25 and in the homegardens of Abaetetuba and Vigia, followed by the **Arruda** [rue], **cabí** and basil, which were found at Feira da 25 and Vigia, **mucuracaá** at Feira da 25 and in Abaetetuba; and the **cipó d'alho** and **pião roxo** in the homegardens of Vigia and Abaetetuba (Figure 2). The mains indications for these species are the rituals of prayers and blessings for the protection and cleansing of the body, and they are common in or near the house to prevent evil. It is evident that a cultural relationship was constructed on a daily basis, by resorting more frequently to the use of these sacred plants based on the great strength they exert.

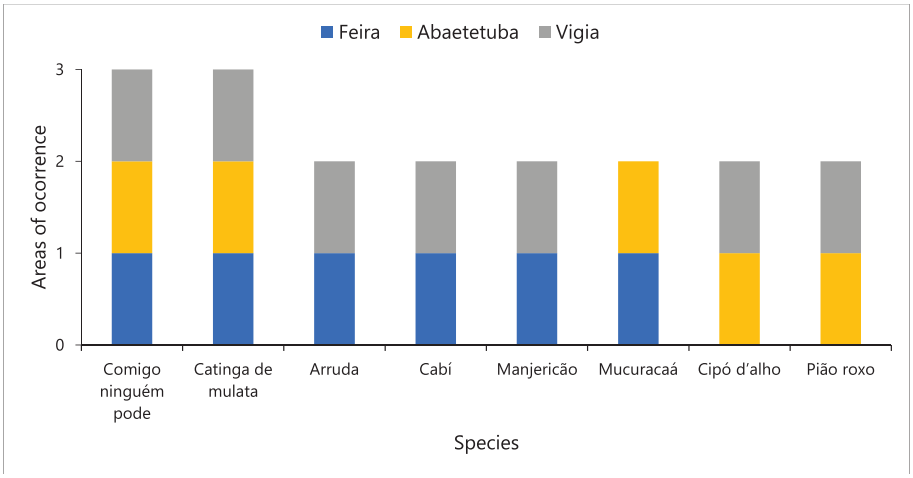

*Figure 2***.** Commonly occurring species at the market, Feira da 25 de Setembro, and in the municipalities of Abaetetuba and Vigia, Pará, Brazil. *Source***:** Authors, 2021.

Although many species are common to the two municipalities visited, reports from participants in Vigia indicate greater concern with maintaining cultivations of the plants because this is essential in their lives. In contrast, Abaetetuba shows many homegardens are being paved over, or rented, or people no longer feel healthy or young enough to maintain their cultivation. In addition, crime in this town has increased on a large scale, which has made many people migrate to other cities in the interior of Pará.

Interferences from different origins have modified the occupation of environments that are better preserved, more natural and less urbanized (ecological tourism, new housing opportunities, migrations, large mining companies, hydroelectric plants etc.), causing intense changes in the

landscape and generating serious negative interferences in local biodiversity, including habitat loss and food shortages (Rios and Huber, 2017). Thus, urban, peri-urban and forest homegardens symbolize crucial mechanisms for maintaining the representative biota of a given location, acting as strategies to achieve the goals proposed by the Convention on Biological Diversity (CBD) and by the Global Plant Conservation Strategy (GSPC).

Homegardens, in addition to functioning as a means of ensuring livelihoods, through the planting of food species and the commercialization of medicinal, ornamental and mystical plants, also ensure the conservation of individual plants through the exchange of ethnospecies and ethnovarieties with neighbors and/or family and friends, confirming the maintenance of local agrobiodiversity (Gonçalves & Lucas, 2017). With this exchange network, a lot of data is produced concerning the manipulation of plants for spiritual and organic healing benefits, such as the making of baths, home remedies, and the creation of protection symbols, which are passed on and ensure the perpetuation of this web of knowledges that characterizes the identity of many communities (Ferreira, 2017).

The residents expressed spiritual and affective connections constructed in their homegardens, which came to be seen as sacral points of the house that transmit well-being and strength to those who live there. It is a type of emotional affinity with a compartment of the house, from which you can prepare medicines, perform spiritual or organic cures, organize celebrations and converse (Albuquerque and Chiappeta, 1996). Another behavior evidenced is the special care when a visitor, someone not so familiar with the house, enters this space. As a preventive measure, no one is not allowed to enter with a “charged” body, as this causes the plants to wither (dry) and die through their actions as energy deposits absorbing bad vibrations. According to Cascudo (1967, p. 56), plants like the **tajás** are among the herbs that act as protective amulets: “In the Amazon, the **tajás** (Caladios, Araceae) perform countless occupations in the service of society. They guard the house, defend it from thieves, from the envious, from false friends, guaranteeing the sleep of the faithful. They bring fortune, love, success.”

The **erva pena verde** [Heart of Jesus, Elephant’s ear] (Figure 3) symbolizes the figure of an Indigenous person; the plants in the form of swords and spears generally designate **caboclas** (guides), such as the sisters Mariana, Herondina and Jarina, and Saint George (corresponding to the orixa Ogum), that protect the houses from negative energies. In addition, during the Umbanda ritual, plants such as **cipó d’alho, arruda, pião roxo** and rosemary cure the body and spirit or as offerings to the *caboclas* who come down onto the patio during the *pajelança* as: Caboclas Jurema, Yansan, Erundina and Cabocla Healer Marian, who uses **mururé, paricá** and **unha de gato** to cure malice. Each *cabocla* has its symbol plant, for example, the symbol plant for Cabocla

Jurema is the herb **comigo ninguém pode**, while for Caboclo Pena verde, the symbol plant is the herb of the same name, **erva pena verde.**

Figure 3. Power plants grown in homegardens in the municipalities of Abaetetuba and Vigia, PA. A. **Erva pena verde** (*Caladium* sp., Araceae); B. **Comigo ninguém pode** (*Dieffenbachia secine* (Jacq.) Schott, Arecaceae); C. **Tajá** (*Agave* L., Asparagaceae). *Source***:** Authors, 2021.

Some healers admit to having the gift of healing since childhood and that this improved during their growth, when they went through moments of intense difficulties and suffering, as a form of trial. Although many report the prejudice and persecution that they are frequently targeted with, pejoratively called "*macumbeiros*"[7] and "*feiticeiros*" [*lit.* sorcerers], at the same time, these individuals are recognized as people of respect and authority by most of the community (Buchillet, 1991).

In the reports on plants used in ritual therapies, there is a strong influence of beliefs from the popular imagination, such as "sightings" and "apparitions," in which the presence of the plant signifies a barrier against supernatural beings. Some residents vehemently describe stories concerning the *boto*, and how it has already appeared in the streams that run at the bottom of their

yards; a feared entity that can bring malice and bad omens, but that was driven from their homes by the use of plants, like **tajá**.

In the scenarios studied, the healing framework identified variations in interpretations among the specialists and, therefore, the act of healing is rooted in strong subjectivity that can, in this study, be configured in sensations of physical well-being or of a spiritual-mystical order. The scents or herbal baths, for example, found at open markets were popularized as purifiers for promoting a feeling of cleanliness and freshness. By undergoing such a procedure, consumers believe they are free from the misfortunes that plagued them, free from perturbations that biomedical medicine does not resolve.

In homegardens, however, bathing does not always restore health, and works only as a pretreatment, requiring the intervention of other procedures that include the use of other plants applied in the treatment and, thus, the individual is monitored until they achieve full health and are able to return to normal life. Buchillet (1991) showed that the traditional ways of interpreting and resolving diseases can only be understood when apprehended and analyzed from their sociocultural frame of reference, as they present internal coherence and rationality that contributes to the difference in the conceptions of individuals.

Moreover, the plants used in the scenarios proved to be cultural reaffirmation tools. **Cabí**, a plant native to the Amazon and a central link in the preparation of the centuries-old ayahuasca beverage, served in that past as a symbol of protection in popular medicine to ward off bad energy (Ducke, 1943). This function of **cabí** is still in force in homegardens, such that this climbing plant (vine) grows vertically leaning on fences or trees, allowing a greater number of its parts (the leaves) to prepare baths for protection and cleansing the body. **Arruda**, an exotic plant that was acclimated to Brazilian land, was widely used by African priests in blessings and baths (Almeida, 2011). The purpose of use that still persists at the present time demonstrates that even in the face of religious syncretism and the ephemeral nature of modern life, traditional methods that combine cultural matrices have not been lost over time.

Conclusions

The specialists' experiences of spirituality, intimately associated with the healing mission, together with the plant component, lend credibility to their actions and have become the forces for patients to cope with physical (bodily) and spiritual illnesses. It is notable that the plants indicated in the results constructed their life stories in this hybrid medicine, including being used by past generations. This framework of therapies is still present in Vigia and Abaetetuba, and extends to the Feira da 25 de Setembro, intersecting and

resignified, while still preserving traditional customs in this sacred nature. In this intersection, there are dependencies, because plants that are not grown in homegardens can be purchased at markets.

Another essential aspect is the existence of the homegarden as a sacred magical space, which in cosmovisions of the world, is a space for conserving biodiversity, for propagating knowledge, and where the plants are not mere components of recipes or constituents of a natural or constructed area, rather they are transfigured into healing entities that aid those who seek them.

Notas

[1] A series of healing and magic rituals performed by an Indigenous pajé or shaman.

[2] In Afro-Brazilian religions, a *pai* or *mãe de santo* is a man or woman responsible for the cult of the orixas, a person who addresses the deity and receives instructions that they transmit to believers. They are considered spiritual leaders and their work can also include healing personal disorders and other conditions.

[3] In certain plant growing spaces, some species can be kept in pans, cans or buckets, which are placed on a structure usually made of wood, called a *jirau*, due to the difficulty of cultivating them directly in the soil (Moura et al. 2016).

[4] An alleged morbid state – in children, animals, plants and even food – that is said to be produced by the evil eye of certain people.

[5] *Panemeira* or *panema* is usually caused by witchcraft and is characterized as any condition and situation that leads to failure and misfortune in a person's activities (Pereira et al. 2017).

[6] *lit.* the pink Amazon River dolphin (*Inia geoffrensis*). This refers to stories about the *boto*, which is known for malicious acts that harm river communities. In one legend, it transforms into a very handsome, flirtatious man, who seduces women to make them pregnant and then abandons them, returning to the river.

[7] A *macumbeiro* is a practioner of *macumba*, which itself is a generic term for Afro-Brazilian religion.

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