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Knowledge about Medicinal Plants in Two Communities in Western Bahia

Conhecimentos sobre Plantas Medicinais em Duas Comunidades do Oeste da Bahia

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Abstract

The traditional use of medicinal plants is an ancient practice widespread around the world and has been widely studied by researchers dedicated to documenting these plants and their respective therapeutic uses. This study aimed to identify the medicinal plants used by residents of the communities of Nova Colônia and Descoberto, located in the municipality of Coribe – Bahia, Brazil. Data were collected between January and March 2024 through semi-structured interviews with 30 individuals selected using the "snowball" sampling technique. Diseases were classified based on the chapters of the ICD-11. The agreement on the main uses of the species (CUPc) was analyzed. The results indicated 157 plant species belonging to 55 botanical families. Among them, 55 species had more than three citations, distributed across 32 families. Lamiaceae, Fabaceae, and Asteraceae were the most frequently mentioned families in the study. The most cited species were *Commiphora leptophloeos, Lippia alba,* and *Rosmarinus officinalis*. Leaves were the most commonly used plant part, oral administration was the most common route, and preparation as tea was the most frequent method of use. The conditions most commonly treated with plants were Infectious and Parasitic Diseases and Digestive System Diseases. The plants with the highest agreement among participants (CUPc) were *Commiphora leptophloeos*, *Mentha pulegium*, and *Bidens pilosa*. The results show that the residents of Nova Colônia and Descoberto possess considerable knowledge regarding the use of medicinal plants.

Keywords: Traditional Knowledge. Traditional Medicine. Therapeutic Use.

Resumo

O uso tradicional de plantas medicinais é uma prática milenar difundida em todo o mundo, sendo amplamente estudado por pesquisadores que se dedicam a registrar essas plantas e seus respectivos usos terapêuticos. O presente trabalho teve como objetivo conhecer as plantas usadas com finalidade medicinal pelos moradores das comunidades de Nova Colônia e Descoberto, no município de Coribe - Bahia, Brasil. Os dados foram coletados entre janeiro e março de 2024, mediante entrevistas semi-

estruturadas com 30 pessoas selecionadas pela técnica “bola de neve”. As doenças foram organizadas com base nos capítulos do CID-11. Foi analisada a concordância quanto aos usos principais das espécies (CUPc). Os resultados indicaram 157 espécies de plantas pertencentes a 55 famílias botânicas. Dentre elas, 55 espécies com mais de três citações, distribuídas em 32 famílias. Lamiaceae, Fabaceae e Asteraceae foram as famílias mais mencionadas no estudo. As espécies mais citadas foram *Commiphora leptophloeos, Lippia alba* e *Rosmarinus officinalis.* A folha foi a parte da planta mais utilizada, a via oral foi a mais aplicada e a forma de preparo em chá o mais frequente método de uso. As enfermidades que mais se usaram as plantas para tratamento foram as Doenças Infecciosas e Parasitárias e Doenças do Sistema Digestivo. As plantas com maior concordância de uso entre participantes (CUPc) foram *Commiphora leptophloeos, Mentha pulegium* e *Bidens pilosa.* Os resultados evidenciam que os moradores de Nova Colônia e Descoberto apresentam considerável conhecimento sobre o uso de plantas medicinais.

Palavras-chave: Conhecimento Popular. Medicina Tradicional. Uso Terapêutico.

1 Introduction

The traditional use of medicinal plants is an ancient practice widespread across the globe, and it has been extensively studied by researchers dedicated to documenting these plants and their respective medicinal applications (Albuquerque; Júnior; Medeiros, 2022).

The study of the plants’ healing properties, when integrated with other scientific fields such as phytochemistry and pharmacology, contributes to the investigation of species with potential for supplying industries seeking raw materials derived from natural resources (Albuquerque; Júnior; Medeiros, 2022). The plants’ medicinal potential is validated through biological testing, isolation, and analysis of compounds - referred to as metabolites - found in different parts of the plant, which may exhibit various therapeutic activities (Nascimento *et al*., 2022).

Bioactive metabolites have emerged as potential drivers of growth in various industrial sectors, including the food, pharmaceutical, and cosmetics industries, especially considering Brazil’s biodiversity (Pimentel *et al*., 2015). This highlights the importance of regionally focused research that investigates traditional knowledge of medicinal plants, thereby generating data for the scientific community in applied studies (Vargem *et al*., 2022).

Geographically isolated communities and elderly individuals are often the focus of ethnobotanical surveys, as such knowledge is typically linked to folk wisdom and the oral transmission of knowledge across generations (Carvalho *et al*., 2015). Consequently, most of the data reported in the literature indicate that knowledge concerning the use of medicinal plants is predominantly held by older individuals (Kiill *et al*., 2016).

Studies on traditional knowledge of medicinal plants contribute to the appreciation of ancestral wisdom and are essential for gathering materials that support diverse areas of research. In light of these considerations, it becomes necessary to conduct surveys on plants with therapeutic properties.

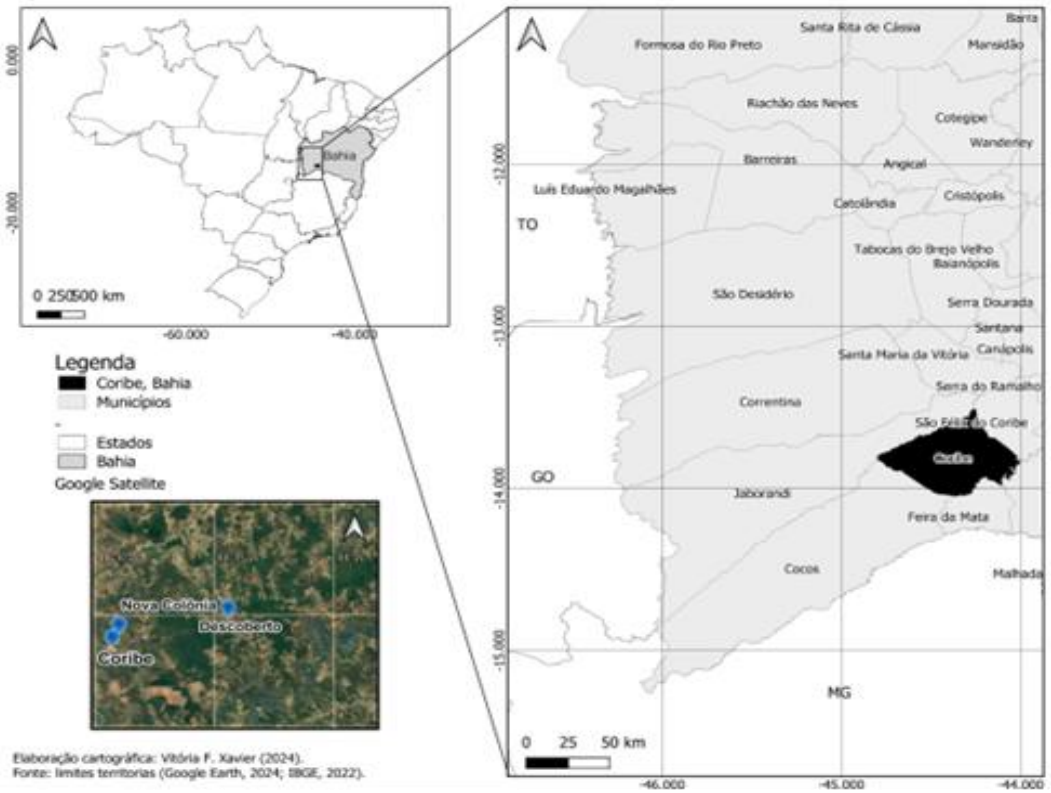
Accordingly, given the scarcity of ethnobotanical surveys on medicinal plants used in the western region of Bahia and the relevance of this traditional knowledge, the present study aimed to document the medicinal plants used by residents of the Nova Colônia and Descoberto communities, located in the municipality of Coribe, Bahia, Brazil.

2 Materials and Methods

2.1 Study area

The study was conducted in the communities of Descoberto and Nova Colônia, located in the rural area of the municipality of Coribe, in the western region of the state of Bahia, Brazil (Figure 1).

Figure 1 - Geographical location of the communities of Descoberto and Nova Colônia in the municipality of Coribe, Bahia, Brazil



Source: the authors.

The agricultural frontier of western Bahia has been increasingly expanding, particularly with regard to soybean cultivation and pasture (Poaceae), including irrigated plantations (Ferreira *et al.*, 2021). The municipality of Coribe has an estimated population of 13,990 inhabitants (IBGE, 2022), is situated at an altitude of 637 meters, and is located at the geographical coordinates Latitude: 13º 49’ 45” S and Longitude: 44º 27’ 16” W (Coutrim; Souza, 2018). The vegetation in the municipality belongs to the Cerrado biome, consisting of wooded savanna and grassy-woody savanna areas. The

climate exhibits two well-defined seasons: a rainy period and a dry season, with 37.5% of the municipality's area covered by pastures (IBGE, 2023).

The primary source of income in the communities is subsistence agriculture. Specifically in the community of Nova Colônia, fishing and irrigated farming are also practiced, given that the area is bordered by the Formoso River. Nova Colônia is located 36.5 km from the municipality of Coribe, while the community of Descoberto is 30.7 km away from Coribe. Both communities maintain a generational culture of using medicinal plants, with respected community leaders who are recognized in the region for their extensive knowledge in treating illnesses through the use of medicinal plants.

These leaders explore the Cerrado and, upon encountering an unknown plant, will often test it and report the effects - frequently discovering therapeutic properties previously undocumented. These individuals are also sought out by neighbors for recommendations regarding the plants' medicinal use.

2.2 Data collection

Data were collected through household visits to residents of the two rural communities, conducted between January 17th and March 4th, 2024. Semi-structured interviews were carried out, based on a personal data form and another form containing information about the medicinal plant name, method of use, plant part used, and mode of preparation, following the model proposed by Rodrigues and Otsuka (2011). Participants signed the Free and Informed Consent Form (FICF) after reading, understanding, and agreeing to the methodology.

Interviewees were selected using the "snowball" sampling technique (Bailey, 1994), through informal conversations in which one community member would recommend another potential participant, who would then suggest the next, continuing the process until no further recommendations were made. In addition to these referrals, the selection criteria included having knowledge of and actively using medicinal plants for the treatment of illnesses.

This research was approved by the Research Ethics Committee of the State University of Southwest Bahia, through the Plataforma Brasil system, under approval number 76273923.5.0000.0055.

2.3 Data organization

After the local (vernacular) names of the species were mentioned by the informants, the researcher was granted access to home gardens and conducted guided walks in native areas to identify the named plants, recording specimens through notes and photographs. Species identification was based on literature consultations (Lopes; Teixeira; Silva, 2023), expert assistance, and comparisons made using the *Flora and Fauna do Brasil* (REFLORA) website. For plant species that could not be

directly observed, identification was confirmed by community members through image verification from virtual herbaria.

The therapeutic indications for each plant species were grouped into acronyms (Table 1) based on the disease categories and chapters of the International Classification of Diseases, 11th Revision (ICD-11), as proposed by the World Health Organization in 2022.

Table 1 - Acronyms organized based on the chapters of the International Classification of Diseases, 11th Revision

Chapter Nº	ICD-11 Chapter	Acronym
I	Certain infectious or parasitic diseases	CIPD
II	Neoplasms	NPL
III	Diseases of the blood or blood-forming organs	DBBFO
IV	Diseases of the immune system	DIS
V	Endocrine, nutritional or metabolic diseases	ENMD
VI	Mental, behavioral or neurodevelopmental disorders	MBND
VII	Sleep-wake disorders	SWD
VIII	Diseases of the nervous system	DNS
IX	Diseases of the visual system	DVS
X	Diseases of the ear or mastoid process	DEMP
XI	Diseases of the circulatory system	DCS
XII	Diseases of the respiratory system	DRS
XIII	Diseases of the digestive system	DDS
XIV	Diseases of the skin	DS
XV	Diseases of the musculoskeletal system or connective tissue	DMCT
XVI	Diseases of the genitourinary system	DGU
XVII	Conditions related to sexual health	CRSH
XVIII	Pregnancy, childbirth or the puerperium	PCP
XIX	Certain conditions originating in the perinatal period	CCPP
XX	Developmental anomalies	DA
XXI	Symptoms, signs or clinical findings not elsewhere classified	SSCFNEC
XXII	Injury, poisoning or certain other consequences of external causes	IPCOEC

Source: Adapted from the Pan American Health Organization (PAHO).

The data collected were tabulated in data spreadsheets using Microsoft Excel software, containing the information extracted from the semi-structured interview forms.

Quantitative analyses were carried out by calculating the Percentage of Agreement on the Main Uses of medicinal species (CUP), with values ranging from 0 to 100. The higher the value, the greater the number of citations referring to the species' main use (Manosso *et al.*, 2021). The calculation was performed using the following formula (Gois *et al.*, 2016):

CUP = (Number of informants citing main uses × 100) /Number of informants citing the species

Additionally, the CUP value was multiplied by a correction factor (number of informants who mentioned the species divided by the number of informants who mentioned the most frequently cited species) to obtain CUPc, the Corrected Percentage of Agreement on Main Use (Gois *et al.*, 2016).

Due to the large number of plants mentioned, only those species cited by at least three informants were selected for more detailed description.

3 Results and Discussion

3.1 Participant's characterization

Through the snowball sampling technique, 30 individuals (18 women and 12 men) were identified and interviewed. Of these, 20 were residents of the Descoberto community and 10 of the Nova Colônia community. Regarding participant profiles, 60% were female, highlighting that women are the main holders of knowledge about medicinal plants in these communities. Studies conducted in Bahia, such as those by Souza, Andrade, and Andrade (2024), Marthins *et al.* (2025), and Costa *et al*. (2024), also had a majority of female respondents.

The age of the participants ranged from 43 to 80 years, with 46% over the age of 60, similar to the study by Marthins *et al*. (2025). The remaining 54% were between 43 and 57 years old, representing the majority. Similarly, Brito and Evangelista (2020) found that the elderly did not form the majority, as most respondents in their study were between 39 and 49 years old.

3.2 Cited therapeutic species

A total of 157 plant species belonging to 55 botanical families were cited. Of these, 55 species were cited more than three times and were distributed among 32 families (Table 2). In other studies carried out in Western Bahia, such as the research by Barbosa *et al*. (2023) conducted in the municipality of Barreiras with 400 elderly participants, a total of 41 native species from 28 botanical families were identified.

Coutrim and Souza (2018) recorded 14 native medicinal tree species from 9 families, based on 996 questionnaires distributed across 7 municipalities in the Caatinga and Cerrado biomes of Bahia. These results emphasize the depth of knowledge held by residents of western Bahia, especially when comparing the number of citations in the present study to the number of respondents.

3.3 Most frequently cited botanical families

The families with the highest number of cited species were Lamiaceae, Fabaceae, and Asteraceae, which together accounted for 33.9% of all the cited species. Studies such as those by Gois *et al.* (2016), Ferreira, Pasa, and Nunez (2020), and Manosso *et al*. (2021) also identified these families as the most frequent. According to Oliveira and Menini-Neto (2012), Lamiaceae and Asteraceae are often the most commonly cited in ethnobotanical surveys due to their adaptability to diverse environments.

The *Lamiaceae* family includes a large number of species with potential therapeutic use for treating various illnesses. These plants are traditionally cultivated and include aromatic species with potential for essential oil production (Maurício; Camacho; Souza, 2023; Porte; Godoy, 2001). Their species are known for antioxidant, bactericidal, fungicidal, and insecticidal activities (Lima; Cardoso, 2007).

In Brazil, *Asteraceae* is the third largest family of Angiosperms (Roque *et al*., 2020). It occupies a wide range of vegetation types and is widely distributed throughout the Cerrado biome (Zappi *et al*., 2015). These plants are rich in flavonoids and tannins, with significant antioxidant and antimicrobial activity (Fabri *et al*., 2011).

The *Fabaceae* family includes species widely used as therapeutic resources in the northeastern Cerrado, with promising potential for the discovery of bioactive compounds (Souza *et al*., 2014; Macêdo *et al*., 2018; Lopes; Teixeira; Silva, 2023).

Table 2 - Medicinal plants used by the population of the communities of Descoberto and Nova Colônia, Coribe, Bahia

Family / Scientific Name	Name	Origin	Citat.	Abbreviation	CUPc (%)
Adoxaceae / *Sambucus nigra* L.	Elderberry	Exotic	5	DAG; DIP; SNCOP	28.5
Amaranthaceae / *Dysphania ambrosioides* (L.) Mosyakin & Clemants	Mexican tea	Exotic	6	DIP; SNCOP; DSD	38.3
Amaryllidaceae / *Allium sativum* L.	Garlic	Exotic	6	DIP; DENM; SNCOP; DAC; DSR; DSI	23
Allium cepa L.	Onion	Exotic	3	DAG; DSD; SNCOP; DIP	0
Anacardiaceae / *Astronium urundeuva* (M.Allemão) Engl.	Aroeira	Native	7	DSD; DIP; SNCOP; DAG	22.6
Mangifera indica L.	Mango	Exotic	3	DENM; SNCOP; DSR; DSD	0
Annonaceae / *Annona muricata* L.	Soursop	Exotic	5	DENM; DSD; NPS; DAC; LECE; DIP	0
Apiaceae / *Coriandrum sativum* L.	Coriander	Exotic	3	DIP; SNCOP; DSR	15.3
Asphodelaceae / *Aloe vera* (L.) Burm.f.	Aloe	Exotic	8	DSMTC; NPS; DSD; DIP; SNCOP	38.1
Asteraceae / *Artemisia absinthium* L.	Wormwood	Exotic	3	DSD	23
Bidens pilosa L.	Spanish needle	Exotic	7	DSD; DSOFS	53
Vernonanthura ferruginea (Less.) H.Rob.	Ironweed	Native	3	DSR; DSD; DIP	17.2
Vernonia condensata Baker	Lumã	Exotic	4	DSD	30
Brassicaceae / *Brassica oleracea* L.	Kale	Exotic	5	DSD; DSR; DSMTC; DAC	38
Burseraceae / *Commiphora leptophloeos* (Mart.) J.B.Gillett	Umburana	Native	13	DSD; DIP; SNCOP; DAG	100
Cactaceae / *Pereskia aculeata* Mill.	Barbados gooseberry	Native	6	DAC; DSMTC; SNCOP; DSOFS; DENM; DSI; DSD; DIP	21.5
Caricaceae / *Carica papaya* L.	Papaya	Exotic	4	DIP; DENM; DSD	15
Caryocaraceae / *Caryocar brasiliense* Cambess.	Pequi	Native	3	DIP; DSR	15.3
Costaceae / *Costus spicatus* (Jacq.) Sw.	Marsh caninha	Native	7	DIP; DAG; DSD; NPS; DSMTC; DP	45.4
Cucurbitaceae / *Citrullus lanatus* (Thunb.) Matsum. & Nakai	Watermelon	Exotic	3	DSD	23
Cucurbita pepo L.	Pumpkin	Exotic	5	DIP; DSD; DAG	38
Euphorbiaceae / *Croton*	Little camphor	Native	3	DSD	23

***goyazensis* Müll.Arg.**					
Fabaceae / *Pterodon emarginatus* Vogel	Sucupira	Native	3	DIP; DSMTC; DSOFS; SNCOP; DSD	23
Senna occidentalis (L.) Link	Coffee senna	Native	6	DIP; DSR	23
Stryphnodendron coriaceum Benth.	Barbatimão	Native	5	SNCOP; DSD; DAG; DIP	15.2
Tamarindus indica L.	Tamarind	Exotic	6	DSD; DENM	38.3
Hymenaea stigonocarpa Mart. ex Hayne	Jatobá	Native	4	DIP; SNCOP	19.98
Lamiaceae / *Mentha arvensis* L.	Field mint / Vick	Exotic	4	DIP	30
Mentha pulegium L.	Pennyroyal	Exotic	8	DIP; DSR; SNCOP	53.3
Mentha suaveolens Ehrh.	Apple mint	Exotic	5	DSD; DENM; DIP; DP	15.2
Ocimum basilicum L.	Basil	Exotic	4	DIP; SNCOP; DS-V; TMCN; DSD	15
Ocimum gratissimum L.	African basil	Exotic	4	DIP; SNCOP; DSN	22.5
Plectranthus sp.	Sete dores	Exotic	5	DSD; SNCOP; DIP	28.5
Plectranthus amboinicus (Lour.) Spreng.	Cuban oregano / Broadleaf thyme	Exotic	7	DAG; DSD; DENM; DIP; DAG	45.05
Plectranthus barbatus Andr.	Indian coleus / Boldo	Exotic	6	DSD; SNCOP	38.3
Rosmarinus officinalis L.	Rosemary	Exotic	9	DP; DSMTC; TMCN; DS-V; DAC; DIP; DSD; SNCOP; GPP	38.29
Lauraceae / *Persea americana* Mill.	Avocado	Exotic	5	DAG; DSMTC	30.4
Malvaceae / *Gossypium hirsutum* L.	Cotton	Exotic	6	DIP; DAG; DSOFS; DSR	23
Moraceae / *Morus nigra* L.	Mulberry	Exotic	5	DENM; TMCN	38
Moringaceae / *Moringa oleifera* Lam.	Moringa	Exotic	3	NPS; DENM; DAC; DAG; DSD	0
Myrtaceae / *Eugenia uniflora* L.	Surinam cherry / Pitanga	Native	3	DSD; DAC; SNCOP	0
Passifloraceae / *Passiflora* sp.	Passionfruit	Native	3	DAC; TMCN	23
Plantaginaceae / *Plantago major* L.	Broadleaf plantain	Exotic	3	DAG; DSD; DSMTC; DIP; DSR	15.3
Poaceae / *Cymbopogon citratus* (DC.) Stapf.	Lemongrass	Exotic	8	TMCN; DS-V; DIP; SNCOP; DAC	22.8
Zea mays L.	Corn	Exotic	3	DAG	23
Punicaceae / *Punica granatum* L.	Pomegranate	Exotic	6	SNCOP; DSD; DIP; DAC; DSR; DSMTC; DAG	15.3
Phytolaccaceae / *Phyllanthus acutifolius* Poir. ex Spreng.	Stonebreaker	Native	4	DAG	30
Rubiaceae / *Morinda citrifolia* L.	Noni	Exotic	5	NPS; DAG; DSD; DENM; DIP	28.5
Rutaceae / *Citrus limon* (L.) Osbeck	Lemon	Exotic	8	DAC; DENM; DSD; DIP	30.5
Citrus sinensis (L.) Osbeck	Orange	Exotic	8	DIP; DS-V; SNCOP; TMCN; DSD	45.75
Ruta graveolens L.	Rue	Exotic	6	SNCOP; CSS; DIP; DSD; DAG; DAC	18.4
Verbenaceae / *Aloysia gratissima* (Gillies & Hook.) Tronc.	Whitebrush / Lavender	Exotic	4	TMCN; DAC; DIP; SNCOP	15
Lippia alba (Mill.) N.E.Br. ex Britton & P.Wilson	Lemon balm	Native	12	TMCN; DAC; DIP; SNCOP; DSI; DSD	38.2
Zingiberaceae / *Curcuma longa* L.	Turmeric	Exotic	5	DIP; DSR; SNCOP; DSMTC; DENM	30.4
Zingiber officinale Roscoe	Ginger	Exotic	4	DIP; DSR; DIP; SNCOP	30

*CUPc: percentage of agreement regarding the main uses, corrected.*International Classification of Diseases (ICD-11): DIP = Certain infectious or parasitic diseases; NPS = Neoplasms; DSOFS = Diseases of the blood or blood-forming organs; DSI = Diseases of the immune system; DENM = Endocrine, nutritional, or metabolic diseases; TMCN = Mental, behavioral, or neurodevelopmental disorders; DS-V = Sleep-wake disorders; DSN = Diseases of the nervous system; DSV = Diseases of the visual system; DAC = Diseases of the circulatory system; DSR = Diseases of the respiratory system; DSD = Diseases of the digestive system; DP = Skin diseases; DSMTC = Diseases of the musculoskeletal system or connective tissue; DAG = Diseases of the genitourinary system; CSS = Conditions related to sexual health; GPP = Pregnancy, childbirth, or puerperium; SNCOP = Symptoms, signs, or clinical findings, not elsewhere classified. Origin: E - exotic, N – native.

Source: research data.

3.4 Most Cited Species and Their Characteristics

Commiphora leptophloeos, with the highest number of citations (n=13), was mainly associated with diseases of the digestive system. The interviewees mentioned the exclusive use of its seed, either in teas to be ingested or by chewing its seed. Research has confirmed its antimicrobial, anti-inflammatory, antioxidant, antidiarrheal, antispasmodic, and antibiofilm activity (Cordeiro *et al.*, 2021; Dantas-Medeiros *et al*., 2021a; Dantas-Medeiros *et al*., 2021b; Pessoa *et al.*, 2021). Maurício, Camacho, and Souza (2023) in their survey in Mossoró/RN also mentioned *Commiphora leptophloeos*, although with a reduced number of citations compared to other species addressed in the study. Additionally, its use is restricted to the bark, being employed in the treatment of conditions such as sinusitis, wounds, and stomach pain.

Lippia alba was cited by 12 interviewees, primarily to treat headaches, fever, and dizziness, with the main use being tea made from its leaves. It is already proven in the literature that Lippia alba has sedative-anesthetic, anxiolytic, anticonvulsant, and analgesic activities (Silva *et al*., 2025).

Rosmarinus officinalis (n=9) was widely cited to treat mental, behavioral, or neurodevelopmental disorders, particularly depression and anxiety, with the main use being tea made from the aerial parts. Its anxiolytic and antidepressant activity has been confirmed by subsequent research (Achour *et al*., 2022; Saeed *et al*., 2022). This species is widely used in the essential oils industry, as a condiment, and for ornamental flowers, containing various antioxidants, diterpenes, triterpenes, and flavonoids, with significant antimicrobial activity in its oil (Porte; Godoy, 2001).

Mentha pulegium L. (n=8) was cited mainly to treat infectious and parasitic diseases, with 87.5% of the interviewees mentioning its use for treating the flu (Influenza) through tea made from its leaves. The tea is also used in milk to treat the flu in babies and children in their early years, a practice that can result in health risks for users, thus highlighting the importance of returning scientific knowledge to the community.

Citrus sinensis L. was cited by 8 interviewees to treat fever and headaches, with tea made from the leaf, fruit, and stem bark being used. In this case, the stem bark is cited for the treatment of the flu, as in Manosso *et al.* (2021), where the syrup made from the fruit's bark is used by residents of northern Mato Grosso.

Cymbopogon citratus (n=8) was cited mainly to treat mental, behavioral, or neurodevelopmental disorders, used as a calming agent, as well as for fever and headaches, with the tea made from its leaves being widely used. Some people also reported consuming the tea for its pleasant taste and aroma, without a specific intention to treat diseases. The use of teas as part of the diet is a common practice in many cultures around the world (Costa; Marinho, 2016).

Aloe vera (n=8) was cited by 62.5% of the interviewees for its healing activity, with the topical use of its leaf gel on wounds. Its healing activity has already been confirmed in the literature (Orue *et al*., 2023).

3.5 Applications and Uses

The most commonly used part of the plant was the leaf (48%), followed by the stem bark (9%), as seen in Costa and Marinho (2016). The predominance of leaf use was also observed in the work of Cunha and Bortolotto (2011), which can be explained by its accessibility and the fact that the leaves contain bioactive compounds important for therapeutic use (Ghorbani, 2005). The use of bark as one of the most cited parts may be influenced by the fact that, in certain seasons, the leaves are not available in some species, which affects the use of a part of the plant that is present in all seasons while the plant is alive: the bark (Maurício; Camacho; Souza, 2023). Additionally, residents associate the use of stem bark with the presence of therapeutic properties in this specific part of the plant necessary for treating the specific diseases mentioned.

Certain infectious or parasitic diseases (DIP) and diseases of the digestive system (DSD) were the disease categories with the most citations from the interviewees, together summing 38% of the total use, a result similar to that of Maurício, Camacho, and Souza (2023), who also had digestive system-related categories among the most cited uses. The high frequency of citations of digestive system problems may be associated with the quality of water consumed in the communities. In Descoberto, residents frequently reported the high salt and mineral content in the water used over the years. Although the consumption of brackish water has decreased with the distribution of Amazonian tanks for rainwater storage, the water still undergoes no treatment, a factor that may have influenced the functioning of the digestive system.

Regarding the mode of administration, the most frequent was oral (83.6%), specifically through the preparation of teas (56%). The study by Cunha and Bortolotto (2011) also showed teas as the main preparation method, which, in addition to being used for medicinal activities, is characterized by its use as food due to the pleasant taste and aroma of some plants (Costa; Marinho, 2016).

3.6 Agreement on the Use of Medicinal Plants

To verify the percentage of agreement regarding the main uses of plants corrected (CUPc), plants with more than three citations were listed, totaling 56 species evaluated. Therefore, the species with the highest CUPc (>38%) were *Commiphora leptophloeos* (100%), *Mentha pulegium* (53.3%), *Bidens pilosa* (53%), *Citrus sinensis* (45.75%), *Costus spicatus* (45.4%), *Plectranthus amboinicus* (45.05%), *Plectranthus barbatus* (38.3%), *Dysphania ambrosioides* (38.3%), *Tamarindus indica*

(38.3%), *Rosmarinus officinalis* (38.29%), *Lippia alba* (38.2%), *Aloe vera* (38.1%), *Morus nigra* (38%), *Cucurbita pepo* (38%), and *Brassica oleracea* (38%).

Among the 15 most cited species, only *Commiphora leptophloeos, Lippia alba*, and *Costus spicatus* are native to Brazil (Reflora, 2025; Silva; Bernardo; Parente, 1999). Among the plants with the highest concordance index (Table 3), the most commonly used part was the leaf, cited 63.1% of the time. Of the species with the highest CUPc (Table 3), 46.7% have their main use associated with treating diseases of the digestive system (*Commiphora leptophloeos, Tamarindus indica, Plectranthus amboinicus, Brassica olaracea, Bidens pilosa, Plectranthus barbatus*, and *Costus spicatus*).

Table 3 - Species of plants with a corrected percentage of Concordance regarding the Main Uses (CUPc) greater than 38%, cited by interviewees from the municipality of Coribe - Bahia, Brazil, with the respective parts used according to the main use

Scientific Name	Common Name	CUPc (%)	Part Used	Main Use
Commiphora leptophloeos (Mart.) J.B.Gillett	Umburana	100	Seed	Digestive system diseases
Mentha pulegium L.	Puejo	53.3	Leaf	Certain infectious or parasitic diseases
Bidens pilosa L.	Picão	53.0	Leaf, root, whole plant	Digestive system diseases
Citrus sinensis (L.) Osbeck	Orange	45.7	Leaf, fruit	Symptoms, signs, or clinical findings not classified elsewhere
Costus spicatus	Marsh caninha	45.4	Leaf	Digestive system diseases
Plectranthus amboinicus (Lour.) Spreng.	Broad mint	45.0	Leaf	Digestive system diseases
Plectranthus barbatus Andr.	Boldo	38.3	Leaf	Digestive system diseases
Dysphania ambrosioides (L.) Mosyakin & Clemants	Mastruz	38.3	Leaf, root	Certain infectious or parasitic diseases
Tamarindus indica L.	Tamarind	38.3	Fruit	Digestive system diseases
Rosmarinus officinalis L.	Rosemary	38.3	Leaf	Mental, behavioral, or neurodevelopmental disorders
Lippia alba (Mill.) N.E.Br. ex Britton & P.Wilson	Lemon balm	38.2	Leaf	Symptoms, signs, or clinical findings not classified elsewhere
Aloe vera (L.) Burm.f.	Aloe	38.1	Leaf	Symptoms, signs, or clinical findings not classified elsewhere
Morus nigra L.	Mulberry	38.0	Leaf	Endocrine, nutritional, or metabolic diseases
Cucurbita pepo L.	Pumpkin	38.0	Seed	Certain infectious or parasitic diseases
Brassica oleracea L.	Kale	38.0	Leaf	Digestive system diseases

Source: research data.

The high level of consensus among informants about the medicinal application of a species also indicates its potential for drug bioprospecting (Santos *et al*., 2019). It is as if all these interviewees who mentioned the plant agree that a particular use is indeed recommended by them due to its effectiveness, acting as a community seal of approval. Vendruscolo and Mentz (2006) also refer to the CUP as an indicator of greater security regarding the effectiveness of the suggested application

for certain species by a population, indicating that a particular species has been used for some time in the community to treat specific diseases.

Allium cepa, *Mangifera indica*, *Annona muricata*, *Moringa oleifera*, and *Eugenia pitanga* did not achieve consensus among informants on their main use (CUPc = 0), as all interviewees mentioned different uses for the same species, indicating the diversity of uses for one species. On the other hand, *Commiphora leptophloeos* had the highest number of citations and total consensus on its main use among participants (CUPc = 100), which suggests that all interviewees agree that the species is effective in treating digestive system diseases, specifically those related to the stomach. This characteristic is considered an indicator of plants with potential for research in the pharmaceutical field (Vendruscolo; Mentz, 2006).

4 Conclusion

The rural communities of the municipality of Coribe-BA, studied in this research, demonstrate a relatively broad knowledge of medicinal plants used to treat diseases. The results also corroborate studies that show this knowledge is predominant among women and individuals aged 43 to 57 years.

In this study, the species with the highest consensus on their main use were: *Commiphora leptophloeos*, *Mentha pulegium*, *Bidens pilosa*, *Citrus sinensis*, *Costus spicatus*, *Plectranthus amboinicus*, *Plectranthus barbatus*, *Dysphania ambrosioides*, *Tamarindus indica*, *Rosmarinus officinalis*, *Lippia alba*, *Aloe vera*, *Morus nigra*, *Cucurbita pepo*, and *Brassica oleracea*.

The species cited by the informants present a potential for exploring plant metabolites in industries, mainly pharmaceuticals. Thus, the data obtained will serve as a guide for future bioprospecting studies to be conducted by the authors and/or other researchers.

It is also noteworthy the relevance of works of this nature to document popular knowledge and contribute to the appreciation and perpetuation of this traditional knowledge.

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