

ORIGINAL ARTICLE

Popular Knowledge and Tradition: Use of Medicinal Plants in a Quilombo in Northeastern Brazil

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Highlights

1. Use of medicinal plants was a practice and represented a therapeutic preference.
2. The transmission of traditional knowledge was fundamental in the community.
3. Inconsistencies were found in the use and preparation of medicinal plants.

ABSTRACT

The aim was to know the sociodemographic profile and to evaluate the use of medicinal plants in the Tijuaçu community, Bahia semi-arid. This is a quantitative, observational, exploratory research, conducted between April and June 2022. The project was approved by the Ethics Committee and registered with Sisgen. The data were collected in a semi-structured questionnaire, containing 17 questions. Volunteers were approached in homes and after signing the consent form, the information was collected. The data was analyzed by mean, frequencies, and association measures between the variables, by Pearson's chi-square test. 104 informants participated in the study, of which 70.2% were women, 56.7% were married and 50% were farmers. 101 participants reported that they used medicinal plants. Medicinal plants with the highest occurrence were: cider, holy grass and fennel. The most cited form of preparation was tea and the prevalently used plant, the leaf. Despite the visible importance in the maintenance of identity culture in this quilombo, as to the ancestral use of nature, inconsistencies were found, such as the risk of herbs-drug interactions, inadequate preparations and inconsistent indications, endangering the health of these people. In this sense, a training for rational and safe use of flora in the community would be fundamental.

Keywords: ethnopharmacology; ethnobotany; complementary and integrative practices; quilombolas.

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INTRODUCTION

An important historical landmark for the consolidation of Integrative and Complementary Practices in Health (Pics) was the creation of the National Policy on Integrative and Complementary Practices (PNPIC) in 2006¹. Among PICS, the use of medicinal plants is very common in traditional communities, since the maintenance of this practice is performed from generation to generation, via oral transmission. In addition, the cultivation of medicinal plants in these places is an alternative for primary health care, and in the therapy of some diseases².

In the PNPIC's text there is the definition of a traditional community as a human group including remnants of quilombos communities, distinct by their cultural conditions, which is traditionally organized by successive generations and its own customs and that retains their social and economic institutions³.

In this context, the study on the use of medicinal plants by quilombola peoples is an important strategy for promoting the valorization of traditional knowledge, so inserted in this population, besides providing subsidies for ethnobotanic and ethnopharmacological research⁴. Thus, the rescue of this knowledge and its therapeutic techniques represents a form of recording this informal learning, to produce scientific information about the health of these communities⁵.

Research with medicinal plants has been conducted in various regions of Brazil. The Brazilian Northeast is a region of frequent use of medicinal plants, especially in rural areas, where the number of drugstores is lower, the presence of herbs vendors is common in these historically needy locations⁶⁻⁷.

The wide therapeutic use of Brazilian flora is due to the great plant diversity with bioactivity, thus ratifying the need to know local pharmacotherapy, in order to identify what these peoples know about the use of medicinal plants, regarding indications and preparation⁷⁻⁸.

Considering the influence that the quilombola community carries with it about popular medicine and still practices the custom of its ancestors, it is essential to record this knowledge about medicinal plants⁶. Therefore, the contribution of popular observations on the use and effectiveness of medicinal plants is justified, even if the phytochemical of these plant compounds is not known to them, the present phytocomplex can be investigated and certified by pharmacobotany. In this sense, the objective of this article was to know the sociodemographic profile and to evaluate the use of medicinal plants in a quilombola community in the semi-arid of Bahia.

METHODOLOGICAL ROUTE

Research Design

This is an analytical-exploratory cross-sectional study, with the participation of 104 families, each with a higher informant of all genders, born in the Rural Black Community of Tijuáçu, Municipality of Senhor do Bonfim, in northern Bahia, northeastern Brazil, held from April to June 2022.

Research location

The Rural Black Community of Tijuáçu was recognized as a remnant of Quilombo, in February 2000. However, the legalization of its land demarcation rights was formalized by the National Institute of Colonization and Agrarian Reform (Incra), years later. Confirming it as a quilombola territory, through Ordinance N^o. 399 of the Federal Official Gazette (DOU), on July 25, 2014, which decides to recognize and declare as lands of the remaining communities of Quilombos de Tijuáçu and surroundings, the area of 8,529,2487 ha, located in the municipalities of Senhor do Bonfim, Filadélfia and Antonio Gonçalves, in the state of Bahia.

The district headquarters has easy access, being on the banks of the Lomanto Júnior Highway (BR 407), 23 km from the city of Bahia of Senhor do Bonfim and distant 374 km from the capital, Salvador (Figure 1). It has the following geographical coordinates: South Latitude 10 ° 27 ', West Longitude 40 ° 11'. It has a semi-arid climate, with temperature ranging from 19.2°C to 28.3°C and its predominant vegetation is caatinga. The economy of the region is based on subsistence agriculture, especially castor plant, corn, watermelon, and beans. Livestock is poorly developed, cut and dairy to meet local food demand and family farming. This traditional community keeps the customs, religiosity and peculiar lifestyles, which are passed on inherited. Utting and milk livestock are poorly developed, only to meet local food demand and family farming.

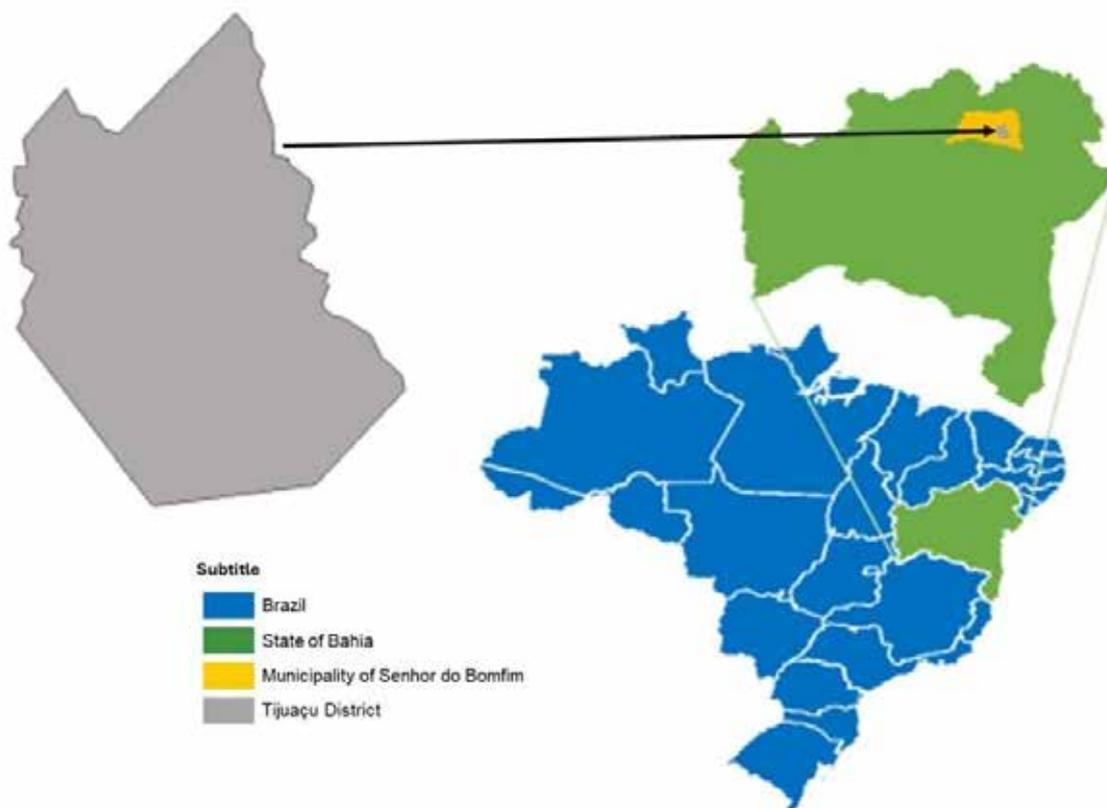


Figure 1 – Location map of the Quilombola Community of Tijuacu – BA.

Source: Adapted by the authors.

Ethical aspects and data analysis

Initially, a community leadership was contacted, which provided information about the locality and authorized the research, signing the science and authorization documents, as an example, the letter of consent. In addition, the resolution of the National Health Council (CEP-CONEP), N°. 466, of December 12, 2012 and the Declaration of Helsinki was followed.

Thus, the research started after approval by the Research Ethics Committee (CEP), with CAAE: 57079222.9.0000.0053, Opinion: 5.359.681 and registration in the National System of Genetic and Traditional Associated Heritage Management (Sisgen): AA0B12E . After the release of the ethical opinion, people were approached directly in the quilombo, after the appropriate explanations of the study, they signed the term of free and enlightened consent (TCLE), the questionnaire was read by the researcher and the answers of each researcher were noted.

The results of the questionnaires were compiled in database. Then the data were analyzed through the descriptive statistics tools, through tables and summary measures. Then, by the inferential statistics, through the evaluation of (in) existence of association. Among the variables, analysis was performed through the chi-square test and the measurement of the correlation, by the correlation of Pearson, with a level of significance of $p < 0.05$.

Development of field research

In the visits to the community, the semi -structured questionnaires with the 17 questions were answered. It contained the variables on sociodemographic data (age, marital status, education, income) and others specific to the use of medicinal plants (species used, part of the plant, indication, preparation, form of use). This instrument was created and validated internally by the authors before being applied to participants.

The participants were selected by non-probabilistic sampling, of the sampling type for convenience, ie, they were approached and invited to participate in the research and received a numbering, without drawing⁹. Participants received sequential numbers at the time of application of the questionnaire, so that they could not be identified at any other stage of the research. As follows: Participant N^o. 1, Participant N^o. 2 ... Participant N^o. 104. The interviews were conducted in random selected homes, based on the willingness of residents to collaborate with the research.

The medical plants mentioned were identified by the researchers. When the informants mentioned them, they were asked to show the species, then a photograph was made and a sample was stored in individualized plastic bag and labeled for later botanical identification.

RESULTS AND DISCUSSION

Sociodemographic data

The questionnaire was filled by 104 informants (one per family), with age groups between 21 and 89 years and average 49.94 years. Of these, 28 (26.9%) was in the age group between 31 and 40 years (26.9%) and 28 (26.9%) was over 60 years old (Table 1). It is very common for the studies conducted in quilombola communities to have a similar result, with an age group of very varied participants, as it ensures a balance and an analysis directed to the influence of the cultural burden of research¹⁰.

Table 1 – Sociodemographic data of research in the Rural Black Community of Tijuaçu, Senhor do Bonfim, in northern Bahia, northeastern Brazil, held from April to July 2022

Variável	Número	%
Amostra	104	100
Faixa etária		
Between 21 and 30 years	13	12,5
Between 31 e 40 years	28	26,9
Between 41 e 50 years	17	16,4
Between 51 e 60 years	18	17,3
More than 60 years	28	26,9
Gender		
Male	31	29,8
Feminine	73	70,2

Marital status		
Married	59	56,7
Single	29	27,9
Widower	8	7,7
Divorced	7	6,7
Stable union	1	0,9
Profession - Occupation		
Farmer	52	50
Housekeeper	18	17,3
Self-employed	9	8,7
Any	6	5,8
Retiree	4	3,8
Hairdresser	3	2,9
Others (student, teacher, bricklayer, guard, deliveryman)	10	9,6
Household income		
Until a minimum wage (\$ 275,83)	89	85,6
From 1 to 3 minimum wages	14	13,4
More than 3 minimum wages	1	0,9
Schooling		
Incomplete elementary school	30	28,8
Complete elementary school	17	16,4
High school	45	43,3
Illiterate	10	9,6
University education	2	1,9
Religion		
Catholic	55	52,9
Protestant	40	38,5
Without religion	9	8,6
Do you have supply water?		
Yes	103	99,1
No	1	0,9
Do you have electricity in the home?		
Yes	103	99,1
No	1	0,9
Do you have a landline or mobile phone?		
Yes	101	97,1
No	3	2,9
Do you use internet?		
Yes	91	87,5
No	13	12,5

Source: Adapted by the authors

There was a predominance of women among participants, who represented 73 (70.2%) of the total (Table 1). For Silva et al.¹¹, this is due to the fact that there is greater acceptance of the female group to participate in the research. Gomes and Bandeira¹² argue that women show greater knowledge about the use of medicinal plants in relation to men.

Most, ie 89 (85.6%) participants reported that they had a minimum salary income or less. The most common profession was a farmer, with 52 (50%) occurrences (Table 1). Agriculture is a very

frequent occupation in these communities, reaching even higher percentages, as in the research of Sales et al.¹³ who observed that 70.8% of people in the quilombolas community Senhor do Bonfim, in the municipality of Areias, Paraíba were farmers low-income.

Regarding education, 45 (43.3%) had high school, 10 (9.6%) participants were not literate and only two (1.9%) participants reported having higher education (Table 1). Oliveira⁴ points out that the lower the degree of education, the greater the use of medicinal plants, because the lack of knowledge can make it difficult to use other types of therapies in the treatment of diseases.

Regarding marital status, 59 (56.7%) were married. The Catholic religion was predominant, with 55 (52.9%) occurrences (Table 1). These results are in accordance with the study, which found 69% of married participants¹⁴. In another survey, the Catholic religion was professed by 93% of participants, higher than in the current survey⁶.

Regarding housing infrastructure conditions, 103 (99.1%) had supply water, 103 (99.1%) had electricity in the home, 101 (97.1%) had a fixed or mobile phone and 91 (87.5%) used internet (Table 1). It can be observed that the community has essential services, but the food conditions of families or basic sanitation have not been investigated. Other quilombola communities only won good housing conditions recently. However, many of these communities still suffer from lack of sanitation, mud and stud house, lack of supply water¹⁵.

Use of medicinal plants in the community

Only three (2.88%) participants reported not using medicinal plants. This result was similar to that found by Silva et al.¹⁶, aligned with miscegenation and the ancestral relationship of these populations with nature, the use of plants for the treatment of diseases is common. The high prevalence in the use and high satisfaction of the population with medicinal plants show that in this community the flora is a therapeutic collection of great value.

Regarding the form of plant acquisition, 81 (64.8%) people said they cultivate plants at home and 20 (19.2%) said they gathered in nature and bought at fairs and supermarkets. Other studies have identified similar observations in which the authors report that those communities acquire plants by cultivating them at home in the area of work plantations in agriculture or community gardens. That is, there is great ease in acquiring them, influencing the use^{17,18,19,20}.

Informants, 55 (52.9%) stated that they made continuous use of synthetic medicines, while 49 (47.1%) reported that they used it sporadically. In this case, since these people make concomitant use of medicinal plants, they may be exposed to herbs-drug interactions, and this synergism may exacerbate, nullify or inhibit the effects of some drugs. Thus, popular culture in the use of medicinal plants, contributes to the indiscriminate use of this therapy within the context of self-medication, without prescription, guidance and/or monitoring of the qualified health professional, easy access to medicinal plants, encouraged by the most affordable cost to large portion of the population, it opens the doors for interaction with continuous medicines, which can lead to worsening the health condition of patients with noncommunicable chronic diseases (NCD)²¹.

Among the main diseases cited by the community, there was a predominance of systemic arterial hypertension (SAH), with 36 (34.6%) mentions, followed by diabetes mellitus (DM), with 16 (15.3%) occurrences; Nephropathies, with 4 (3.8%) carriers and acute myocardial infarction, with 2 (1.9%) reports. Regarding the Pearson (chi-square) correlation test, there was statistical significance when compared to the age group ($p = 0.00065$) and DM ($p = 0.00024$). The age group over 60 years was one where most had SAH, ie 18 of the 28 participants. As for DM, there were 16 of the 28 participants who had the disease. Type 2 DM and has are more frequently found in older people. In a study on the prevalence of SAH and associated factors in a quilombo in Bahia, the authors found a prevalence

of 38.5% for SAH and 6.5% for DM. They stated that the implementation and guarantee of access to intersectoral public policies, including organs of education, health, culture and social development, could contribute to the improvement of life and health conditions in rural and socially vulnerable communities, such as quilombos remnants²².

A number of 101 (97.1%) people said they used medicinal plants in the community and 97 (93.3%) participants learned from parents and grandparents. These plants were used as a palliative agent in light diseases such as headache, inflammation, cramps, diarrhea, as well as to treat more complex diseases such as DM, has, gastritis, pneumonia, liver and intestinal problems. This preference can be noted in other studies, which stated that the reason for choice is associated with the generally lower cost²³. Other authors found that this predilection occurs for various reasons, including: the effectiveness of traditional medicine compared to conventional medicine, the delay of medical consultations, the ease of resorting to the plants available in their homes and respect for culture and teachings passed by parents²⁴. This result corroborates studies conducted in both quilombola communities^{11,13}, and in indigenous community, where credibility is higher in treatments performed with medicinal plants than using synthetic medications²⁵.

Regarding the degree of satisfaction with the use of medicinal plants, 92 (88.5%) were very satisfied; Nine (8.6%) expressed indifference and only three (2.9%) reported dissatisfaction. Regarding Pearson's (chi-square) correlation test, there was statistical significance, when compared to gender with the degree of satisfaction with the use of medicinal plants ($p = 0.0192$). In this case, 63 (86.3%) of women reported very satisfied, while men, 24 (77.4%) stated a lot of satisfaction. Indeed, the use of medicinal plants has been more common among older people and women¹².

38 different plants were cited by the research participants (Table 2). 26 families were identified, with Lamiaceae the predominant, with six plants, which encompasses species such as the rosemary (*Rosmarinus officinalis* L.), the alfavaca (*Ocimum gratissimum* L.), the mint (*Mentha x Piperita* L), the boldo (*Plectranthus barbatus* A.), the basil (*Ocimum basilicum* L.) and the pennyroyal (*Cunilla fasciculata* Benth.). Other researchers checked this same botanical family highlighted in our research, as most used in quilombola communities. The predominance of species of the same family in a specific region contributes to wide use and demonstrates the medicinal potential, in view of recurrence in the use^{18,26,27}

Table 2 – Medicinal plants with more than one quote in the Rural Black Community of Tijuaçu, Senhor do Bonfim, in northern Bahia, northeastern Brazil, a survey conducted from April to June 2022

Plant species	Part of the plant	Preparation	Popular indication	No. of citations
Cidreira <i>Lippia alba</i> (Mill.) N.E.Br. Ex Britton & P. Wilson (Verbenaceae)	Leaf	Infusion tea	Calming, hypertension	71
Holy grass <i>Cymbopogon citratus</i> (D.C.) Stapf (Poaceae)	Leaf	Infusion tea	Calming, hypertension	58
Anise <i>Pimpinella anisam</i> L. (Apiaceae)	Seed	Infusion tea	Calming, hypertension, combat gases and difficult digestion	29
Boldo <i>Plectranthus barbatus</i> A. (Lamiaceae)	Leaf	Infusion tea	Colic, difficult digestion	27
Pau de Rato <i>Caesalpinia pyramidalis</i> Tul. (Caesalpinoideae)	Leaf	Infusion tea	Pain, inflammation and (*for everything)	26

Mint <i>Mentha x piperita</i> L. (Lamiaceae)	Leaf	Infusion tea	Calming, flu and headache	18
Rosemary <i>Rosmarinus officinalis</i> L. Labiatae (Lamiaceae)	Leaf	Infusion tea	Flu, headache and poor digestion	15
Mastruz <i>Chenopodium ambrosioides</i> L. (Chenopodiaceae)	Leaf	Infusion tea	Flu, inflammation and worms	14
Calêndula <i>Calendula officinalis</i> L. (Asteraceae)	Leaf	Infusion tea	Flu, inflammation and infection in general	13
Chamomile <i>Matricaria recutita</i> L. (Arastaceae)	Leaf	Infusion tea	Calming, gingivitis	12
Guava <i>Psidium guajava</i> L. (Myrtaceae)	Leaf	Infusion tea	Abdominal pain and diarrhea	8
Malvão Bastardiopsis densiflora (Hooker & Arnott) (Malvaceae)	Leaf	Infusion tea	Flu and colic	8
Basil <i>Ocimum basilicum</i> L. (Lamiaceae)	Leaf	Infusion tea	Urinary infection, flu and headache	8
Surinam cherry <i>Eugenia uniflora</i> L. (Myrtaceae)	Leaf	Infusion tea	Flu, fever and hypertension	8
Garlic <i>Allium sativum</i> L. (Liliaceae)	Dente	Decoction tea	Flu, antibiotic	7
Orange <i>Citrus sinensis</i> L. (Rutaceae)	Leaf	Infusion tea	Flu and insomnia	6
Tanchagem <i>Plantago majus</i> L. (Plantaginaceae)	Leaf	Infusion tea	Pneumonia, toothache and urinary tract infection	6
Umburana de Cheiro <i>Amburana cearenses</i> A.C. Smith (Fabaceae)	Seed	Decoction tea	Abdominal pain	6
Alfavaca <i>Ocimum gratissimum</i> L. (Lamiaceae)	Leaf	Infusion tea	Flu, insomnia and diabetes	4
Aloe <i>Aloe vera</i> L. Burm. f. (Aloaceae)	Sap	Water -mixture	Stomach problems, straightening hair	4
Eucalyptus <i>Eucalyptus globulus</i> Labill (Myrtaceae)	Leaf	Infusion tea	Calming and flu	4
Beach watermelon <i>Solanum capsicoides</i> All. (Solanaceae)	Leaf	Infusion tea	Breathing problems	4
Fedegoso <i>Senna macranthera</i> (Colladon) (Caesalpiniaceae)	Leaf	Infusion tea	Flu and inflammation	3
Pinha <i>Annona squamosa</i> L. (Annonaceae)	Leaf	Infusion tea	Flu and inflammation	3
Água de levante <i>Mentha citrata</i> Ehrart (Labiatae)	Leaf	Infusion tea	Insomnia and hypertension	2
Aroeira do Sertão <i>Myracrodruon urundeuva</i> Freire All. (Anacardiaceae)	Bark	Bath of Seat in Intimate Hygiene	Vaginal discharge, inflammation	2

Rue plant <i>Ruta graveolens</i> L. (Rutaceae)	Leaf	Maceration	Varicose veins	2
Clove <i>Caryophyllus aromaticus</i> L. (Myrtaceae)	Seed	Decoction tea	Pain in general and flu	2
Soursop <i>Annona muricata</i> L. (Annonaceae)	Leaf	Infusion tea	Flu	2
Black Jurema <i>Mimosa tenuiflora</i> (Willd.) (Fabaceae)	Bark	Decoction tea	Inflammation	2
Passion fruit <i>Passiflora edulis</i> S. (Passifloraceae)	Leaf	Infusion tea	Calming	2
Melon of São Caetano <i>Momordica charantia</i> L. (Cucurbitaceae)	Leaf	Infusion tea	Stomach problems	2
Moringa <i>Moringa oleifera</i> Lam (Moringacea)	Leaf	Infusion tea	Diabetes	2
Pata de vaca <i>Bauhinia farficata</i> Link (Caesalpiniaceae)	Leaf	Infusion tea	Kidney problems and diabetes	2
Pennyroyal <i>Cunila fasciculata</i> Benth. (Lamiaceae)	Leaf	Infusion tea	Flu	2
Quebra facão <i>Croton conduplicatus</i> L. (Euphorbiaceae)	Bark	Maceration	Infection and diabetes	2
Rabo de tatu <i>Eurhizococcus brasiliensis</i> Hempel (Margarodidae)	Leaf	Infusion tea	Colic	2
Pomegranate <i>Punica granatum</i> L. (Lythraceae)	Fruit e Bark	Decoction tea and gargle	Pharyngitis and gingivitis	2

Caption: *The community makes abusive and inappropriate use of this plant, as there is no plant that serves for everything.

Source: Research data

The vernacular name of this plant is cidreira (*Lippia Alba* (Mill.) N.E.br. Ex Britton & P. Wilson), which was the most cited, with 71 occurrences. The species is used in Brazil due to the soothing, smooth, analgesic, sedative, anxiolytic and slightly expectant antispasmodic properties²⁸. The quilombola population of Tijuacu uses it mainly as a natural sedative, soothing and for the treatment of SAH, and cited use to relieve gastrointestinal pain and headache through leaf tea, prepared by infusion or decoction.

The second, with 58 citations was the Holy Grass (*Cymbopogon citratus* (DC.)). This plant was used in the community in the treatment of systemic arterial hypertension, insomnia and flu symptoms, as well as use as food. The predominant mode of preparation was the infusion or decoction of the leaves. In different countries, popular use of species of this genus indicates applicability as a tranquilizer, antiseptic, antipyretic, anti-inflammatory, analgesic compound²⁹. There are also studies that indicate antidiabetic and antihypertensive activity³⁰.

The use of cidreira and the holy grass is frequent in other quilombola communities, repeatedly appearing as the most used^{6,13,31}. In this sense, Araújo et al.³² state that, among the diseases and diseases of greater prevalence in the quilombola communities of the Bahian semiarid, are anxiety and has.

A high number of use of plants was noted with the purpose of treatment for anxiety and insomnia. Valeriano et al.¹⁹ obtained, in a recent study, the same prominence in a quilombola community in Minas Gerais, where the main use of plants was such as soothing and in the treatment of insomnia.

The third most cited plant was the fennel (*Pimpinella Anisum L.*), with 29 quotes. Different extracts and essential oil of fennel showed antibacterial and antifungal activity. This plant acts on gastrointestinal complications, presents hepatoprotective activity, and demonstrates antidiabetic and hypolipemiating activity³³. In the community of Tijuçu, participants claimed to use it as soothing, in the treatment of gases and poor digestion, abdominal pain and hypertension. For this they use flowers, leafs and seeds for the preparation of infusion teas.

The plant known as pau-de-rato ou catingueira-verdadeira (*Caesalpinia pyramidalis Tul.*) It is also, very popular among the members of this community, was quoted 26 times and, many of them, claimed to use it “to treat everything” and to Specific problems such as abdominal cramps, pain in general, lack of appetite, infections and intestine problems. There is an abusive use of this species in the community and with inadequate indications, since in the literature it has antidiarrheic properties (Leaves, Flowers and Barks) and for treatment of hepatitis and anemia (Bark)³⁴.

Garlic (*Allium sativum L.*) had 7 occurrences among the informants, with indication for flu and antibiotics. However, the main indications in the literature are in the treatment of hyperlipidemia, mild arterial hypertension and prevention of atherosclerosis. This species is known for causing interactions with continuous drugs such as anticoagulants, hypoglycemic and hypotensive, increasing bleeding time, marked hypoglycemia and increased medicine hypotensive action²¹.

Although SAH was the most common disease in 36 (34.6%) surveyed, there was a low nomination, in which only 5.8% of medicinal plant citations directed to this treatment. It Oliveira⁴ obtained a similar result in his study in a quilombola community in Bahia, where 20% of participants had has and only 3.5% of therapeutic indications were directed to this disease.

For the preparation process, several parts of the vegetables were cited, highlighting, considerably, the Leaves, with 80.0% of the occurrences (Figure 2). Several studies have shown similar results, always bringing leaves as the main part used^{25,35,36,37,38}. For Battisti et al.³⁹, the likely explanation for this is because the leaves are easy to collect and always available throughout the year. In addition, other authors¹⁹ justify this visibility of Leaves, in the argument that the concentration of active ingredients is greater in this part of the plant. Bark appears in other northeastern semiarid studies as the most used plant, after Leaves^{26,27}.

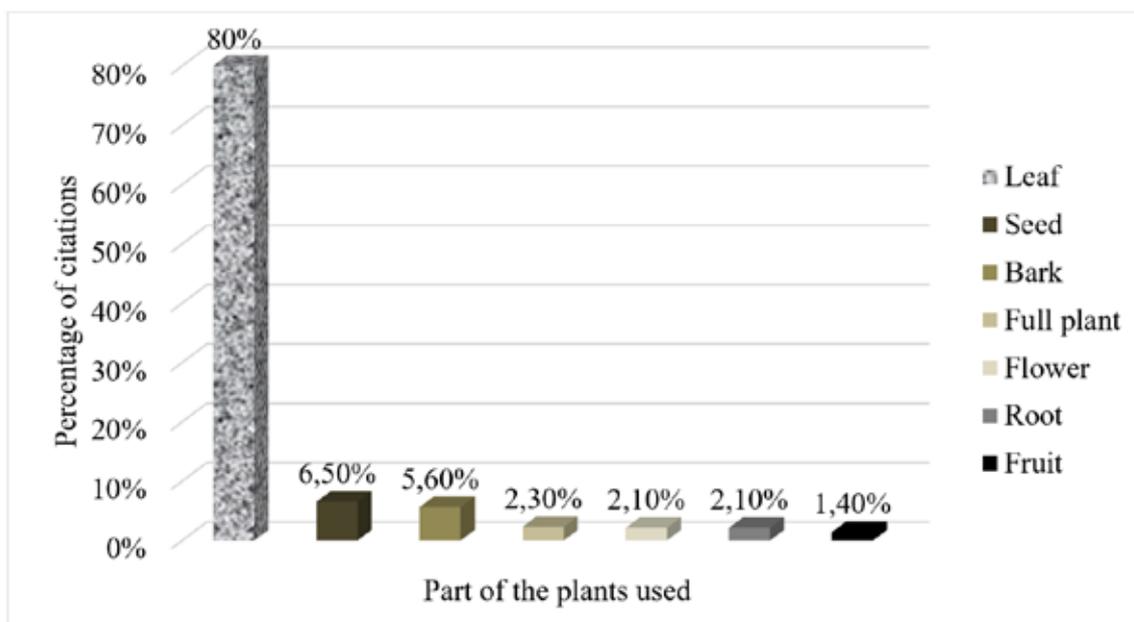


Figure 2 – Part of the plants used by informants in the Rural Black Community of Tijuçu, Senhor do Bonfim, in northern Bahia, northeastern Brazil, a survey conducted from April to June 2022.

The mode of preparation that showed the highest prominence was tea, either by the decoction method (87.3%) or infusion (8.7%), followed by maceration (2.1%). In this case, it was observed that the preparation by decoction was not the most suitable in many cases, since the most commonly used plant was Leaf. Thus, infusion preparation should be prevalent. Decoction should not be used in species that have volatile active ingredients and soft parts such as leaves and flowers. This excessive time of boil can lead to the destruction of the active ingredient and thus loss of medicinal activity of the plant.

Also reported were the juice (1.2%) and plant sap (0.7%). Not only this, but other studies show that the form of tea is the preference of most people who use natural resources as everyday therapy^{16,19,38}.

FINAL CONSIDERATIONS

The results of research with the Rural Black Community of Tijuaçu indicated that the use of medicinal plants was a constant practice and represented a therapeutic relevance in the locality, in view of the preference for plants to synthetic medications and the high level of satisfaction with use by use Effectiveness, ease and abundance⁴⁰. The maintenance and transmission of this knowledge is fundamental in the preservation of the identity culture of this traditional community.

The large number of species cited and some of these with consonant indications in the literature show the importance of this type of knowledge in the studied population. However, some inconsistencies were observed as inappropriate amounts in preparation, incorrect indications, lack of criteria regarding the preparation of hard parts (decoction) and soft parts (infusion) of plants, herbs-drug interactions, and may generate toxic effects or ineffectiveness in Action of chronic drugs, endangering the health of these people.

Finally, this research was important to provide data for later phytochemical studies, as well as assist in the registration and preservation of the community's knowledge in this tradition.

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