

CAPÍTULO 13

USE OF MEDICINAL PLANTS IN BASIC HEALTH UNITS IN THE MUNICIPALITY OF MISSÃO VELHA, CEARÁ, BRAZIL

Data de submissão: 21/03/2023

Data de aceite: 02/05/2023

Luana Souza Santos

Universidade Regional do Cariri – URCA –
Missão Velha – Ceará
<https://lattes.cnpq.br/5778688687758453>

Maria Elizete Machado Generino

Universidade Regional do Cariri – URCA,
Crato – CE
<http://lattes.cnpq.br/0777413376782312>

Priscilla Augusta de Sousa Fernandes

Universidade Federal da Paraíba - UFPB,
João Pessoa – PB
<http://lattes.cnpq.br/7744491766743793>

Valdilia Ribeiro de Alencar Ulisses

Universidade Regional do Cariri – URCA,
Crato – CE
<http://lattes.cnpq.br/9730825758511373>

Cícero dos Santos Leandro

Universidade Regional do Cariri – URCA,
Crato – CE
<http://lattes.cnpq.br/7323619730656059>

Francisco Sydney Henrique da Silva

Universidade Estadual do Ceará – UECE,
Fortaleza – CE
<http://lattes.cnpq.br/3136887636477971>

Marcos Aurélio Figueiredo dos Santos

Universidade Regional do Cariri – URCA,
Campos Sales – CE
<http://lattes.cnpq.br/8643818710205791>

Maria Ivaneide Rocha

Universidade Regional do Cariri – URCA,
Crato – CE
<http://lattes.cnpq.br/9970719739461824>

Georgia Maria de Alencar Maia

Universidade Regional do Cariri – URCA,
Crato – CE
<http://lattes.cnpq.br/6998170734884455>

Ariston Oliveira Magalhães Filho

Faculdade de Juazeiro do Norte -FJN,
Juazeiro do Norte - CE
<http://lattes.cnpq.br/3059274117605497>

Mikael Amaro de Souza

Universidade Regional do Cariri – URCA,
Crato – CE
<http://lattes.cnpq.br/0407870742446195>

José Weverton Almeida-Bezerra

Universidade Regional do Cariri – URCA,
Crato – CE
<http://lattes.cnpq.br/5570296179611652>

ABSTRACT: Brazil is the country with the richest and most diverse biodiversity in the world. Given this diversity, there are plants with medicinal properties. Considering that phytotherapy is inserted as a complementary practice in the Unified Health System (SUS), the present research has the general objective of identifying the main medicinal plants used by users of the Unified Health System through the Basic Health Units (UBS) in the area urban and rural areas of the Municipality of Missão Velha-Ceará for the treatment of illnesses. This is a research with qualitative and quantitative methods of the descriptive and exploratory type, carried out in two stages: literature review and dialogic field research with popular people, developed in the aforementioned municipality. To carry out the study, 02 (two) UBS's were chosen, both located in the municipality in question, one located in the urban area and the other in the rural area. Data collection was through semi-structured interviews based on a standardized form in order to obtain information about the plants used and their different therapeutic uses. From this ethnobotanical survey, the results reveal a total of 56 species of medicinal plants shared between 31 botanical families and 53 genera. Regarding the number of citations per species, *Matricaria recutita* L., (39) *Peumus boldus* Molina (33), *Pimpinella anisum* L. (33) and *Anethum graveolens* L. (29) are the species most used by participants. With reference to the number of species by botanical families, Asteraceae stands out, followed by Lamiaceae, Fabaceae, Myrtaceae and Rutaceae with 8, 7, 4, 3 and 3 respectively. On the use of the main parts of the plants used, there is the leaf with 44%. Regarding the forms of preparation, infusions and decoctions were the most used. It is concluded that ethnobotanical works retrieve valuable information and are the basis for prospective and ethnopharmacological studies.

KEYWORDS: Caatinga; Popular Knowledge; Health; Integrative and Complementary Practices.

USO DE PLANTAS MEDICINAIS EM UNIDADES BÁSICAS DE SAÚDE DO MUNICÍPIO DE MISSÃO VELHA, CEARÁ, BRASIL

RESUMO: O Brasil é o país que detém a biodiversidade mais rica e diversificada do mundo. Diante dessa diversidade, encontram-se as plantas com propriedades medicinais. Considerando que a fitoterapia está inserida como prática complementar no Sistema Único de Saúde (SUS), a presente pesquisa tem por objetivo geral identificar as principais plantas medicinais utilizadas por usuários do Sistema Único de Saúde por meio das Unidades Básicas de Saúde (UBS) na zona urbana e rural do Município de Missão Velha-Ceará para o tratamento de enfermidades. Trata-se de uma pesquisa com métodos qualitativos e quantitativos do tipo descritiva e exploratória, realizada em duas etapas: revisão de literatura e pesquisa de campo dialógica com populares, desenvolvido no município supracitado. Para realização do estudo, foram escolhidas 02 (duas) UBS's, ambas localizadas no Município em referência, uma situada na zona urbana e a outra na zona rural. A coleta dos dados foi por meio de entrevista semiestruturada com base em formulário padronizado a fim de obter informações acerca das plantas utilizadas e seus diferentes usos terapêuticos. A partir desse levantamento etnobotânico, os resultados revelam um total de 56 espécies de plantas medicinais partilhadas entre 31 famílias botânicas e 53 gêneros. Com relação ao número de citações por espécies, tem-se a *Matricaria recutita* L., (39) *Peumus boldus* Molina (33), *Pimpinella anisum* L. (33) e *Anethum graveolens* L. (29) como as espécies mais utilizadas pelos participantes. Com referência ao número de espécies por famílias botânicas, Asteraceae

se sobressai, seguida de Lamiaceae, Fabaceae, Myrtaceae e Rutaceae com 8, 7, 4,3 e 3 respectivamente. Sobre a utilização das principais partes das plantas utilizadas, tem-se a folha com 44%. Com relação às formas de preparo, obtiveram-se infusos e decoctos como os mais utilizados. Conclui-se que trabalhos etnobotânicos resgatam informações valorosas e são a base para estudos de prospecção e etnofarmacológicos.

PALAVRAS-CHAVE: Caatinga; Conhecimento Popular; Saúde; Práticas Integrativas e Complementares.

1 | INTRODUCTION

In Brazil, the use of medicinal plants and herbal medicines is ancient when associated with the popular knowledge of our ancestors (GOULART et al., 2021). A fact that contributes to this wide use of plants is that Brazil has an unparalleled biological diversity, as pointed out by Ribeiro et al. (2014), it is the country with the richest and most diverse biodiversity in the world. Among the populations that most use such plants are those with lower purchasing power, since these medicinal species are culturally accepted, have low cost, high availability and, mainly, wide distribution.

It is worth emphasizing that in the midst of all this biological richness distributed among the different Brazilian phytogeographic domains, the Caatinga stands out, a type of Seasonally Dry Tropical Forest (FTSS) that stands out as being one of the most populous and richest in biodiversity (SANTOS et al., 2011). Given this diversity, there are plants with medicinal properties. However, there is still a lack and devaluation of ethnobotanical studies that unify popular and scientific knowledge, so that, in this way, the medicinal properties of all the floristic heterogeneity offered by the phytogeographic domain of the caatinga are explored, studied and corroborated (ARGENTA, 2011).

In this sense, ethnomedicinal studies provide information on the use and therapeutic potential of many plants used by traditional communities in the semi-arid region of Cariri. So that these plants can be used in Basic Health Units (UBS), since phytotherapy is included as a complementary practice in the Unified Health System (SUS) since 2006 through PICs.

In view of the above, the present research has the general objective of identifying the main medicinal plants used by users of the Unified Health System (SUS) through the Basic Health Units in the urban and rural areas of the Municipality of Missão Velha- Ceará for the treatment of diseases, as well as knowing the therapeutic potential of the medicinal species used by the population.

As specific objectives, this work sought to rescue popular knowledge about medicinal plants, identify the potential of medicinal species, compare knowledge about medicinal plants among residents of urban and rural areas, verify the different therapeutic indications of plants and raise awareness about the importance conservation and conscious use of these species.

2 | MATERIAL AND METHODS

This study was carried out in the Municipality of Missão Velha ($07^{\circ} 14' 59''$ S; $39^{\circ} 08' 35''$ W) located in the State of Ceará, microregion of Cariri, south of Northeast Brazil. Two (2) Basic Health Units were chosen for the development of this research, one located in the Urban Zone, named Ana Anilete Araruna de Macêdo (Unit XIII) (-7.248566, -39.148531) and the other in the Rural Zone called Maria Tavares de Close, psf attachment 16 (-7.260141, -39.090792). 55 (fifty-five) users of the UBS's were interviewed, chosen at random. Data collection was through semi-structured interviews based on a standardized form.

3 | RESULTS AND DISCUSSION

From this ethnobotanical survey, the results reveal a total of 56 species of medicinal plants shared in 31 botanical families and 53 genera (Table 1). The plants are presented by family/scientific name, popular names reproduced in the way they were informed by each interviewee, therapeutic purpose, parts used, way of use, way of preparation and route of administration (table 1).

Regarding the number of citations per species, *Matricaria recutita* L., with 39 citations, *Peumus boldus* Molina (33), *Pimpinella anisum* L. (33) and *Anethum graveolens* L. (29) are the species most used by the participants. With reference to the number of species by botanical families, Asteraceae stands out, followed by Lamiaceae, Fabaceae, Myrtaceae and Rutaceae with 8, 7, 4, 3 and 3 respectively. On the use of the main parts of the plants used, there is the leaf with 44%. Regarding the forms of preparation, infusions and decoctions were the most used.

Family/Scientific name	Popular name	Therapeutic indication	Used part	Preparation	Use
ACANTHACEAE					
<i>Justicia pectoralis</i> Jacq.	Anador	Fever, headache, body ache	Leaves	Infusion	Tea
AMARANTHACEAE					
<i>Dysphania ambrosioides</i> (L.) Mosyakin & Clements	Mastruz	Infections and inflammation in general	Leaves	Infusion	Tea
AMARYLLIDACEAE					
<i>Allium sativum</i> L.	Alho	Flu, cough, hypertension	Stem	Infusion	Tea
<i>Allium cepa</i> L.	Cebola-branca	Flu, cough, boost immunity	Barks	Decoction	Tea
ANACARDIACEAE					
<i>Anacardium occidentale</i> L.	Caju	Cough, cold, wound healing	Fruits, Leaves, Barks	Infusion, Decoction	Tea, Bath, Cataplasm
<i>Astronium urundeuva</i> (M. Allemão) Engl.	Aroeira	Ulcers, urinary infections, fever, cough, gastritis	Leaves, Barks	Infusion, Decoction, Powder	Bath, Tea

APIACEAE

<i>Anethum graveolens</i> L.	Endro	Indigestion, insomnia, flu, nausea	Leaves, Seeds	Infusion	Tea
<i>Pimpinella anisum</i> L.	Erva-doce	Cough, indigestion, constipation, headache, anxiety	Seeds	Infusion	Tea

APOCYNACEAE

<i>Himatanthus drasticus</i> (Mart.) Plumel.	Janaguba, Pau santo	Gastric ulcer, healing	Barks, Latex	Decoction	Compresses
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ASTERACEAE

<i>Acanthospermum hispidum</i> DC.	Espinho de cigano	Flu, cold, fever	Leaves	Infusion	Tea
<i>Achyrocline satureoides</i> (Lam.) DC.	Macela, marcela-do-campo	Stomach ache, Headache	Fruits	Infusion	Tea
<i>Baccharis trimera</i> (Less.) DC.	Carqueja	Regulate blood pressure and indigestion	Leaves, Branches	Infusion	Tea
<i>Matricaria recutita</i> L.	Camomila	Anxiety, insomnia	Flowers	Infusion	Tea
<i>Mikania glomerata</i> Spreng.	Guaco	Flu, cough, sore throat, bronchitis	Leaves	Infusion	Tea, Syrup
<i>Calendula officinalis</i> L.	Calêndula	Skin inflammations	Flowers Leaves	Infusion	Tea, Cataplasma
<i>Cynara scolymus</i> L.	Alcachofra	Hypertension, indigestion	Leaves	Infusion	Tea
<i>Ageratum conyzoides</i> L.	Mentrasto, erva-de-são-jôão	Menstrual cramps, pain in general	Leaves	Infusion	Tea

BORAGINACEAE

<i>Sympytum officinale</i> L	Confrei	Wound healing, mycoses	Leaves	Soaking	Compresses
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CACTACEAE

<i>Melocactus zehntneri</i> (Britton & Rose)	Coroa-de-frade	Kidney pain	Seeds	Decoction	Tea
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CARYOCARACEAE

<i>Caryocar coriaceum</i> Wittm.	Pequi, piqui	Respiratory diseases, (Flu, asthma), prevents cancer	Oil, Flowers, Fruits, Leaves	Soaking, Infusion	In natura, Tea
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CUCURBITACEAE

<i>Sechium edule</i> (Jacq.)	Chuchu	Hypertension	Fruits	Juice	In natura
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CAPRIFOLIACEAE

<i>Valeriana officinalis</i> L.	Valeriana	Insomnia, stress	Roots	Infusion	Tea
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CELESTRACEAE

<i>Maytenus ilicifolia</i> (Mart.)	Espinheira-santa	Diseases of the digestive tract: indigestion, gastritis, heartburn and skin inflammation (scarring)	Leaves	Infusion	Tea, Compresses
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FABACEAE

<i>Hymenaea courbaril</i> L.	Jatobá	Inflammation, breathing problems, cough	Barks	Decoction	Tea
<i>Amburana cearenses</i> (Allemao) A.C.	Umburana	Indigestion, fever, bronchitis	Barks	Decoction	Tea
<i>Anadenanthera colubrina</i> (Vell.) Brenan.	Angico, Angico-preto	Flu, cough, bronchitis	Barks	Decoction	Tea
<i>Copaifera langsdorffii</i> Desf.	Pau d'óleo	Flu, throat infections, general infections	Barks, Oil	Decoction	Tea
LAMIACEAE					
<i>Melissa officinalis</i> L.	Erva-cidreira	Indigestion, anxiety, flu, lack of appetite	Leaves	Infusion	Tea
<i>Origanum vulgare</i> L.	Orégano	Digestion, regulate the menstrual cycle	Leaves	Infusion	Tea
<i>Rosmarinus officinalis</i> L.	Alecrim	Indigestion, flu, high blood pressure, acne	Leaves	Infusion	Tea
<i>Ocimum basilicum</i> L.	Alfavaca	Cancer prevention, soothing	Leaves	Infusion	Tea
<i>Mentha spicata</i> L.	Hortelã	Poor digestion, fever, flu	Leaves	Infusion	Tea
<i>Thymus vulgaris</i> L.	Tomilho	Asthma, throat infections, cough	Leaves, Flowers, Aerial parts	Infusion	Tea, Syrup, Inhalation
<i>Ocimum basilicum</i> L.	Manjericão	Bad digestion, flu	Leaves	Infusion	Tea
LAURACEAE					
<i>Cinnamomum verum</i> J.Presl.	Canela	Poor digestion, flu, colds	Barks	Decoction, Powder	Tea
LILIACEAE					
<i>Aloe vera</i> (L.) Burm.f	Babosa	Heal skin wounds, hemorrhoids	Leaves	Gel	<i>In natura</i>
<i>Laurus nobilis</i> L.	Louro	Inflammation in general, insomnia, anxiety, poor digestion	Leaves	Infusion	Tea
MONIMIACEAE					
<i>Peumus boldus</i> Molina.	Boldo, boldo-do-chile	Malaise, indigestion, constipation, nausea, intestinal gas	Leaves	Infusion	Tea
MORACEAE					
<i>Dorstenia brasiliensis</i> Lam.	Contra-erva	Fever	Roots, Leaves	Infusion	Tea
MYRISTICACEAE					
<i>Myristica fragrans</i> Houtt.	Noz-moscada	Insomnia, anxiety, cramps, cough	Seeds	Infusion	Tea
MYRTACEAE					
<i>Psidium guajava</i> L.	Goiaba	Diarrhea, stomach pains, digestion, ear infections	Fruits, Leaves	Infusion	Juice, Tea
<i>Eucalyptus globulus</i> Labill.	Eucalipto	Breathing problems (cold and flu)cicatrizar feridas.	Leaves	Crushing, Cataplasma	Inhalation

<i>Syzygium aromaticum</i> (L.) Merr. & L.M.Perry	Cravo-da-índia	Headache, toothache	Floral buttons	Decoction	Tea
NYCTAGINACEAE					
<i>Boerhavia</i> L.	Pega-pinto, erva-de-tostão	Prevents cancer	Leaves	Infusion	Tea
OLACACEAE					
<i>Ximenia americana</i> Linn.	Ameixa-brava, ameixa-da-caatinga	Cold, cough	Barks	Infusion	Tea, Cataplasma
PASSIFLORACEAE					
<i>Passiflora cincinnata</i> Mast.	Maracujá	Insomnia, anxiety	Leaves, Fruits	Infusion	Tea, Juice
PHYLLANTHACEAE					
<i>Phyllanthus niruri</i> L.	Quebra-pedra	Kidney stone	Whole plant	Infusion	Tea
PHYTOLLACACEAE					
<i>Petiveria alliacea</i> L.	Tipí	Sore throat, toothache, body cleansing, cough, headache	Roots	Decoction	Bath, Inhalation
POACEAE					
<i>Cymbopogon citratus</i> (D.C.) Stapf.	Capim-santo, capim-limão cidreira	Anxiety, stress, insomnia, hypertension, abdominal pain	Leaves	Infusion	Tea
PUNICACEAE					
<i>Punica granatum</i> L.	Romã	Sore throat	Barks, Leaves, Stem, Seeds	Infusion, Decoction	Tea, <i>In natura</i>
RUTACEAE					
<i>Ruta graveolens</i> L.	Arruda	Regular menses, earache, headache	Leaves	Infusion	Tea
<i>Citrus limon</i> L.	Limão	Flu, cough, boost immunity	Fruits	Juice	<i>In natura</i>
<i>Citrus sinensis</i> (L.) Osbeck.	Laranja	Indigestion, flu, nausea	Fruits, Barks	Decoction, Juice	<i>In natura</i> , Tea
VIOLACEAE					
<i>Pombalia calceolaria</i> (L.) Paula-Souza	Papaconha- da-flor-branca	Cough, fever	Roots	Decoction	Tea
ZINGIBERACEAE					
<i>Zingiber officinale</i> Roscoe.	Gengibre	Indigestion, asthma, bronchitis, flu, cough	Roots	Decoction	Tea
<i>Curcuma longa</i> L	Cúrcuma	Flu, colds	Rhizome	Powder	Tea

Table 1: List of medicinal species mentioned and used by the population that attends the Basic Health Units (UBS's) in the urban and rural area of the Municipality of Missão Velha - Ceará, as well as their therapeutic indications, part used, state of use, form of preparation and use.

Source: Author, 2022.

4 | CONCLUSION

From the results obtained, it was verified that the use of medicinal plants is widespread in the Municipality as a reference for the prevention, cure and treatment of diseases. It is noticed that ethnobotanical works retrieve valuable information and are the basis for prospecting and ethnopharmacological studies. Surveys like this provide a dialogic interaction with the community and allow knowing the ancestral knowledge rooted in each family, whose knowledge can be promising for studies and construction of theories that can later be proven by the scientific community. It is necessary to see the use of the medicinal properties of plants as an alternative not only for promoting health, but as an economic model for the country, as well as demystifying the idea that it is only with technology and a lot of medicine that treatment for various diseases can be achieved.

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