THE MEDICAL PLANT USE IN FIGHTING PARASITOSIS AND INTESTINAL WORMS GOOD NEIGHBORHOOD IN THE GARDEN IN THE MUNICIPALITY BENJAMIN CONSTANT-AM, BRAZIL

O USO DE PLANTAS MEDICINAIS NO COMBATE A PARASITOSES E VERMINOSES INTESTINAIS NO BAIRRO BOM JARDIM NO MUNICÍPIO DE BENJAMIN CONSTANT-AM, BRASIL

Diana Lopes Coelho¹, Eliel Guimarães Brandão², Lisandra Vieira Rosas², Márcia Nascimento Pinto², Tatyanna Mariúcha de Araújo Pantoja²; Renato Abreu Lima^{2*}

1. Graduação em Ciências: Biologia e Química, Instituto de Natureza e Cultura da Universidade Federal do Amazonas – INC/UFAM, Benjamin Constant, AM, Brasil.

2. Docente do Instituto de Natureza e Cultura da Universidade Federal do Amazonas – INC/UFAM, Benjamin Constant, AM, Brasil.

* Autor correspondente: renatoal@ufam.edu.br

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ABSTRACT

The use of medicinal plants with different therapeutic purposes is part of the popular knowledge, and the worms or intestinal parasites treated by such plants. Therefore, this study aimed to carry out an ethnobotanical survey of medicinal plants to combat parasitic diseases and intestinal worm infections in the neighborhood Bom Jardim in the municipality of Benjamin Constant AM. Structured questionnaires were applied with open and closed questions to 38 residents to verify the determining factors for the emergence of parasites and worms and the end of the research, produced a list of plant species with their most common uses. As a result, the monthly income is found, basic sanitation and water quality as possible factors contributing to the emergence of parasites and intestinal worms. In addition, it identified 35 different species of medicinal plants used for the treatment of parasites and tapeworms belonging to plant families 22 with greater dominance of the Lamiaceae family. The plants most cited were ginger, mastruz and mint, followed by garlic, heals all, boldo, basil, cashew, paregoric and orange elixir, with prevalence of tea as a form of preparation and sheet as most used plant part. Regarding the identification of parasitic and intestinal worms, found to roundworm (Ascaris lumbricoides), tuxina (Enterobius vermicularis) and ameba (Entamoeba histolytica) with the highest number of citations. It is worth mentioning that the residents surveyed also cited the conditions such as stomach pain, diarrhea, intestinal cramps, among others, as the most frequently treated with medicinal plants. Therefore, the study of plants to combat worms or parasites can contribute information needed to phytochemical and pharmacological studies for the formulation of new compounds.

Keywords: Survey; Phytotherapy; Ethnobotanical.

RESUMO

O uso de plantas medicinais com diferentes finalidades terapêuticas faz parte do conhecimento popular, sendo as verminoses ou parasitoses intestinais tratadas por tais plantas. Diante disso, o presente estudo objetivou realizar um levantamento etnobotânico sobre as plantas medicinais no combate a parasitoses e verminoses intestinais no bairro Bom Jardim no município de Benjamin Constant-AM. Foram aplicados roteiros estruturados com perguntas abertas e fechadas para 38 moradores para verificar os fatores determinantes para o surgimento de parasitoses e verminoses e ao final da pesquisa, elaborou-se uma lista de espécies vegetais com seus respectivos usos mais frequentes. Como resultado constatou-se a renda mensal, saneamento básico e qualidade de água como possíveis fatores contribuintes para o surgimento de parasitoses e verminoses intestinais. Além disso, identificou-se 35 espécies diferentes de plantas medicinais utilizadas para o tratamento de parasitas e vermes pertencente a 22 famílias botânicas com maior predominância da família Lamiaceae. As plantas mais citadas foram gengibre, mastruz e hortelã, seguidos do alho, sara tudo, boldo, alfavaca, caju, elixir paregórico e laranja, com prevalência do chá como forma de preparo e a folha como parte vegetal mais

utilizada. Em relação à identificação de parasitoses e verminoses intestinais, constatou-se a lombriga (*Ascaris lumbricoides*), tuxina (*Enterobius vermicularis*) e ameba (*Entamoeba hystolytica*) com maior número de citações. Vale ressaltar que os moradores entrevistados, também citaram as afecções como dor de estômago, diarreia, cólicas intestinais, entre outros, como os mais frequentes tratados com plantas medicinais. Portanto, o estudo de plantas no combate a vermes ou parasitas pode contribuir com informações necessárias para estudos fitoquímicos e farmacológicos visando à formulação de novos compostos.

Palavras-chave: Levantamento; Fitoterapia; Etnobotânica.

1. INTRODUCTION

The use of medicinal plants in Brazil is an alternative of a large part of the population, mainly the low income ones, which are related to the high cost of allopathic medicines and the difficulties faced by restricted access to a quality health system, making Thus, carrying out more and more important plant studies. Currently, studies are carried out by professionals in the fields of biology, chemistry, pharmacy, among others who, together with the empirical knowledge, contribute with information about the components present in the plants and their therapeutic benefits for some diseases. Ethnobotanical studies aim to search for and rescue this knowledge and traditional botanical knowledge, especially when it comes to the use of flora resources.

Thus, the use of vegetables in the therapeutic treatment is common among the human species. In the Amazon region, the medicinal use of plants is rooted in the culture of the various cultural and ethnic groups that coexist with nature by taking what they need in a sustainable way. These peoples value their traditions and popular knowledge about the use of plants in the treatment of various diseases, including parasitic and intestinal worms. These parasites and intestinal worms are infections that affect the population in general, and can cause enormous health problems, directly influencing public health, which does not have the necessary financial resources to care for the entire population.

Benjamin Constant, a municipality that was surveyed, has a Human Development Index of 0.574 [1] and a poverty incidence of 63.92% according to the Brazilian Institute of Geography and Statistics (IBGE) in 2010. In this population are found several Ethnicities, foreigners (Peru and Colômbia) and Brazilians. This municipality has serious social and structural problems, especially those related to health. This study was carried out in the Bom Jardim neighborhood, which has a population of 3,406 inhabitants according to the 2010 Census (IBGE, 2010). It is noteworthy that in this neighborhood are residents who face daily problems related to the insufficient infrastructure in the water and sewage network, providing to this place, the increase in the incidence of people infected by parasites and worms.

Therefore, the development of projects with this theme contributes to the knowledge of diseases that affect the population, in addition to emphasizing the conservation of the environment, especially of medicinal plants. This concern is particularly related to the lack of medicines in hospitals or clinics, and even to the high cost of these medicines. These issues, which direct people to popular wisdom, that is, use their knowledge to make home remedies for the purpose of fighting parasites and intestinal worms. In addition, the theme of this project is related to few researches made, making it relevant to the execution of the same. Therefore, the present work had the objective of ethnobotanical surveying of medicinal plants used to combat intestinal parasites and worms in children, young adults and adults in the Bom Jardim neighborhood in the municipality of Benjamin Constant-AM.

2 MATERIALS AND METHODS

2.1 STUDY AREA

Benjamin Constant is a municipality in the interior of Amazonas, North of the country. It is located in the micro region of Alto Solimões, Amazonas mesoregion west, away from Manaus 1.118km straight, and the distance waterway transport is 1.638km, up the Rio Solimões and the river Javari. Its population is 39,484 inhabitants, according to IBGE data in 2015. The municipality has in vegetation with native plants that exist in all the land areas where there are conditions for their growth and development.

The types of plants are related to the predominant type of forest, which are classified as: igapó (*Mauritia flexuosa* L.), açaí (*Euterpe oleracea* Mart) e paxiúba (*Socratea exorrhiza* Mart.) [2].

According to the National Integration Plan, the city would be the end of the Trans But the passage that would link Lábrea to Benjamin Constant even been cleared. Due to environmental barriers and implementation of indigenous territories, probably this stretch of highway is never finished, leaving the inhabitants only air and river transport and connection to the rest of the country [3].

Bom Jardim is one of the districts of the municipality that was selected for this research because little research is done on site, part of the neighborhood does not have running water, and present residences with gardens that are cultivated medicinal plants. The first resident of the neighborhood was Francisco Jean, Peru named Pancho. Later, he came to this place José Ferreira Rocha Primo and wife. This couple was the first called the neighborhood in 1908. As the land was fertile, the couple planted several saplings of roses, appearing thus a beautiful garden, which influenced the denomination Bom Jardim [2].

2.2 METHOD

This consisted work of a stamp ethnobotanical study, in which they were raised from the use of medicinal plants data used to combat parasites and intestinal worms in the neighborhood Bom Jardim in the municipality of Benjamin Constant-AM. Visits were carried out in the city with neighborhood residents who possessed the knowledge of medicinal plants. For this, was held the presentation of the project and the Term of Informed Consent Form (ICF) in accordance with Resolution No. 466 of December 12, 2012 of the National Health Council [4] and the residents who were according to the survey They signed and then the interviewer employed dialogues to direct the

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conversation, trying to respond to a structured script with open and closed questions. The time spent in each interview varied, depending on the greater knowledge of the people about the medicinal or availability of each resident plants, because the participants had committed to house activities related to children, cleaning, among others.

The information about the medicinal use of plants was obtained by means of qualitative and quantitative approaches. essential information were recorded for the recognition of species (popular name, parts used, preparation methods, use of indicators and ways to acquire the plants) with a view to drawing up a list of plant species (popular, scientific name and properties therapeutic) directed to the various parasites and intestinal worms. In addition, questions were asked in which it obtained information on the epidemiology and identification of parasites and worms that affect or to rushing residents of the neighborhood.

2.3 DATA ANALYSIS

The indications were grouped based on the classification of diseases proposed by the World Health Organization (WHO). The applied script contained open and closed questions about socioeconomic information (age, ethnic origin, place of birth, education and profession) and ethnobotanical (free listing of used plants, purpose, method of use). At the end of the survey, means were obtained by dividing the number of citations (sum of the number of all plant uses quotes with any therapeutic purpose mentioned by respondents), the number of respondents. In addition, also were analyzed: concept of medicinal plants, use plants, form of acquisition of knowledge (generation to generation, books, church, talk with friends), the acquisition of plants, (purchase, own cultivation, neighbors / relatives , etc.), list of medicinal plants (used part, utility, form of preparation) medical use of parasites or intestinal worms (concept of parasites or worms, plants used to combat these diseases, frequency of use of plants), epidemiological survey (hygiene folks).

The use of this procedure aimed at identifying how it is distributed knowledge about medicinal plants, in relation to the factors mentioned. Similarly, simple averages were obtained for the other population groups, and subsequently compared to one another within each factor, using Word program version 2003. For analysis was popular names used by the proposed classification Vendruscolo et al. (2005). According to the author, classification, ethno-synonyms or synonyms folk occur when for a botanical species are referred to different popular names. This category can be divided into true ethno-synonyms, when the popular names are structurally different, or false ethno-synonyms, if the popular names are structurally similar. For this work, were not considered subdivisions of false ethno-synonyms, mentioned by Vendruscolo et al. (2005). Occur ethno-folk homonyms or homonyms when a popular name is mentioned for different plant species [5].

2.4 MATERIAL COLLECTION BOTANICAL

Plant samples were prepared collected as dried specimens of standard procedures and the identification took place in Botany Laboratory INC / UFAM through existing material comparison with literature aid specialist [6] and by experts in the field of botany. Conducting further visits to obtain additional information and new samples of plant material is required.

2.5 DISSEMINATION OF DATA OBTAINED

After application of research to residents of Bom Jardim, was held to return the results in the form of folders [7] and [8].

3. RESULTS AND DISCUSSION

In the district of Bom Jardim, were interviewed 38 residents who responded to a script, the same being categorized into: list of plant species used for the treatment of parasitic and intestinal worms, identifying determining factors for the emergence parasites and of worms and dissemination of results. Regarding the use of 97.37% of respondents reported that plants. residents use especially when they are sick or initial symptoms that they believe to be caused by worms or parasites, therefore believe in the efficiency of home remedies, since the most reported lack of side effects with the use of these vegetables. In addition, also include the reasons for uses of these plants, the lack of funds to buy medicine indicated for health professionals.

According to [9] the use of medicinal plants in the treatment of diseases has evolved over time, from the simplest forms of local treatment to the most sophisticated forms of manufacturing. This being an alternative due to poor conditions of sanitation, housing, among others. Recalling that the knowledge of medicinal plants is present since the beginning, for the Indians, Africans, Europeans, are groups that used enough medicinal plants. As medicinal plants well known by people "more experienced" who share information with children, grandchildren, and others. Related to this, survey results find that traditional knowledge prevails with 92.50%, in which information is passed on from generation to generation, traditional knowledge is still present, followed by knowledge coming from the media.

Similar results were obtained in studies conducted by [10], wherein 72% of the cases, the traditional knowledge is the most common form of learning. The transfer of this popular knowledge, over time, between different generations, through the experience and orality is a practice called by some of the conversations culture scholars [11], a practice, highlighted by the author, as a feature of communication Amazonian man. This practice still exists among the peoples of the world; it has even received incentives from the very World Health Organization (WHO) [12]. According to obtained data, most (54%) of respondents have a place for cultivation of medicinal plants, 30% acquire plants when necessary, with neighbors, 12% buy at fairs, as reported do not have proper place for planting and 4% are in the forest plants they need.

Studies by [13] and [10] are similar, since the majority of study participants plants obtained through proper cultivation in the area outside of their homes. [14] Emphasizes that one of the factors that influence the knowledge and use of medicinal plants is the availability of species in a given region. In order that the cultivated plant products may provide significant benefits for household economy, may be achieved donation, exchange or market. 156 citations were registered, identified among them 37 species, distributed in 23 botanical families, which have been reported various plant parts, various forms of preparation and different therapeutic purposes (Chart 1).

The most representative botanical families on the number of named species were Lamiaceae (43) Amarantaceae (12), Zingiberaceae (11), Anarcadiaceae and Acanthaceae (10 each). Malvaceae and Piperaceae (nine each), Rutaceae, Asteraceae and Arecaceae (seven each), while other families received five citations or even a quote. Similar results were obtained in a survey conducted by [15] in the city of Vilhena, Rondônia in the Lamiaceae family was mentioned more predominance. In studies conducted by [16] in lowland communities Solimões-Amazonas River, also reports that the most cited botanical family Lamiaceae was followed by Asteraceae, Fabaceae and Rutaceae. Thus, there is the representation of botanical families in the practices of residents in health benefits.

	Popular name	Scientific name	Family	Source ¹	Indication ¹	Part used ¹	Method of preparation	
	Abacaxi (ananá) verde	Ananas ananassoides (Baker) L. B. Smiyh	Bromeliaceae	Native	a- worms	a- fruits	a- in natura	
	Alecrim	Rosmarinus officialis L.	Lamiaceae	Exotic	a- stomach	a- leaves	a- tea	
	Alfavaca	Ocimum selloi Benth.	Lamiaceae	Native	a- intestinal cramps b- worms	a- leaves b- leaves	a- tea b- juice	
	Algodão	Gossypium hirsutum L.	Malvaceae	Native	a- intestinal cramps b- worms	a- leaves b- seeds	a- tea b- maceration	
	Amor - crescido	Portulaca pilosa L.	Portulacaceae	Native	a- diarrhea, intestinal cramps	a- leaves	a- tea	
	Alho	Allium sativum L.	Liliaceae	Exotic	a- worms	a- bulb	a- tea, inalacion, maceration	
	Ampicilina	Alternanthera brasiliana L. O. Kunt.	Amaranthaceae	Native	a- stomach	a- leaves	a- tea	
	Azeitona	Olea europaea L.	Oleaceae	Exotic	a- stomach	a- shells	a- tea	
	Bacabinha	<i>Oenocarpus vacaba</i> Mart.	Arecaceae	Native	a- diarrhea	a- tuber	a- tea	

Boldo	Plectranthus barbatus Andrews	Lamiaceae	Exotic	a- stomach, bellyache	a- leaves	a- tea
Cajú	Anacardium occidentale L.	Anacardiaceae	Native	a- diarrhea	a- leaves, shells	a- tea
Capim Santo	<i>Cymbopogon citratus</i> D. C.	Graminiaceae	Exotic	a- worms	a- leaves	a- tea
Capeba	Piper umbellatum L.	Piperaceae	Exotic	a- bellyache	a- leaves	a- in natura
Castanha- do- Pará	<i>Bertholletia excelsa</i> H. B. K.	Lecythidaceae	Native	a- worms	a- fruits	a- tea
Catinga de mulata	Tanacetum vulgare L.	Asteraceae	Exotic	a- stomach	a- leaves	a- tea
Caxinguba	Ficus carica L.	Moraceae	Exotic	a- worms	a- shells	a- in natura
Coco	Cocus nucifera L.	Arecaceae	Exotic	a- diarrhea	a- fruits	a- in natura
Chicória	Cichorium endivia L.	Asteraceae	Exotic	a- worms	a- root	a- tea
Cominho	Cuminum cyminum L.	Apiaceae	Exotic	a- stomach	a- leaves, fruits	a- tea
Cravinho	Tagetes patula L.	Asteraceae	Exotic	a- stomach	a- leaves	a- tea
Elixir Parigórico	Piper marginatum L.	Piperaceae	Native	a- diarrhea, stomach, bellyache	a- leaves	a- tea
Erva Cidreira	Melissa officinalis L.	Lamiaceae	Exotic	a- stomach	a- leaves	a- tea

Gameleira	Ficus glabra Vell.	Moraceae	Exotic	a- worms	a- shells	a- tea
Gengibre	Zingiber officinale L.	Zingiberaceae	Exotic	a- intestinal cramps	a- root	a- tea
Gergelim	Sesamum indicum L.	Pedaliaceae	Exotic	a- worms	a- seeds	a- maceration, juice
Goiaba	Psidium guayaba L.	Myrtaceae	Native	a- diarrhea	a- leaves ou shells	a- tea
Hortelã	Mentha villosa L.	Lamiaceae	Exotic	a- intestinal cramps, stomach, bellyache	a- leaves	a- tea
Ingá	Inga edulis Mart.	Fabaceae	Native	a- diarrhea	a- shells	a- tea
Laranja	Citrus sinensis L.	Rutaceae	Exotic	a- stomach	a- leaves	a- tea
Lurunju				b- bellyache	b- shells	b- tea
Mamão	Carica papaya L.	Caricaceae	Exotic	a- worms	a- seeds	a- juice
Malva	Malva sylvestris L.	Malvaceae	Exotic	a- amoeba	a- leaves	a- juice, tea
Manga	Mangifera indica L.	Anarcadiaceae	Exotic	a- stomach	a- leaves, shells	a- tea
Mastruz	Chenopodium ambrosioides L.	Amaranthaceae	Native	a- worms b- tuxina	a- leaves b- leaves	a- juice b- juice, tea
Mata pasto	Senna obtusifolia (L.) Irwing & Barneby	Fabaceae	Native	a- worms	a- leaves, flowers	a- tea
Munguba	Pachira aquatica Aubl.	Malvaceae	Native	a- tuxina	a- shells	a- in natura
Pau d'arco	<i>Tabebuia aurea</i> (Mart.) Bur.	Bignoniaceae	Native	a- amoeba	a- shells	a- tea
Sara tudo	Justicia calycina (Nees)	Acanthaceae	Native	a- stomach	a- leaves	a- tea

The reference letters indicate connection between the Indication, Used Part and Preparation Mode items.

The most cited medicinal plants for the treatment of worms or parasites were ginger, and mint mastruz (11 citations each) followed by garlic, heals all (10 citations each), boldo (nine citations), basil (eight citations); cashew (eight citations), paregoric (seven quotes) and orange (seven quotes). [15] Mention the importance of correct identification of medicinal plants, which allow the rescue of historical and cultural population, since these plants can provide benefits to the body by the properties that have the active ingredient. The authors point out that the recognition plan should be done by the taxonomic identification of the species (scientific name) and not just the popular name. Regarding the therapeutic treatment, roundworm (Ascaris lumbricoides) was the most cited hookworm and tuxina (Oxiurose) infection caused by the worm Enterobius vermicularis, less frequent; followed by symptoms / diseases such as stomach pain (most common), diarrhea, abdominal pain, intestinal cramps and amoeba. As the amoeba caused by an intestinal parasite.

[17] Reports that *A. lumbricoides* is among the most common intestinal parasites that affect the Brazilian population. The plant part used in the preparation of home remedy, there was the sheet as predominant (170 citations), followed by the shell (35 citations), root (15 citations), fruit and oil (six quotes), seeds (four citations), tuber and bulb (three quotations), flower and sap (a quote each). Similar results were found by [18], in studies conducted in the riverine communities of Manacapuru, in which the leaves had higher rates compared to other parts of the plants, since the availability of flowers, fruits and seeds are not available in all times of the year.

[19] Corroborate highlighting the likely explanation for the increased use of sheets may be in fact being easier to harvest and available most of the year. Furthermore, the use of leaves, especially native species, is a favorable point for the preservation of these species. Given the results, it was found the predominance of the use of medicinal plants such as tea (160 citations), and juice *in natura* (33 citations), maceration (10 citations), juice (six quotes) and inhalation with less quote resembling with results of [15] and [10], wherein the tea was the predominant form of preparation most commonly used because it is a simple and effective manner.

Considering the results in relation to the concept of parasites or worms, most respondents could not answer (44.74%), followed by residents who conceptualized worms or parasites (39.47%) and worms are in the intestines of humans and they can cause many consequences and can be considered correct. Others mentioned in the case of diseases caused by poor hygiene, bathing in polluted sites. To [20] worms and parasitic infections are infections caused by popularity parasites like worms. However, according to [21], there is no single character possible to identify an animal as a parasite, which hampers identification of only one disease.

Regarding the frequency of use of plants to combat worms or parasites, the data showed that 70% of residents use when they feel some diseases / disorders related to worms, 13.2% always use, especially for the children and grandchildren, 10.5% have used enough and 5.3% did not respond to the script. Some residents (44.74%) stressed the importance of the use of medicinal plants for worms, especially because it refers to diseases that affect particularly children, being a relevant concern because, they become more sensitive and more targets frequently.

Medicinal plants are used mainly for conditions such as diarrhea, stomach pain, stomach pain and intestinal cramps. As for parasites and worms were identified through questions, only three lumbricoides species Α. (roundworm). *E*. vermicularis (oxiurose) and E. histolytica (causative protozoan amoeba). Similar results were found in the survey conducted by [22] where the highest rates of A. lumbricoides causing intestinal infections were recorded. [23] highlights the roundworm as causing a parasitic disease that, according to the UN National (UN), affects about one billion people in the world of which twenty thousand die annually.

The most affected age group is children, with 70-90% of these being children under ten years and belonging to disadvantaged socioeconomic classes, especially subtropical and tropical countries like Brazil. As the epidemiological profile, 97.37% reported washing hands and using shoes and only 2.63% reported performing this practice sometimes. Results are in disagreement with [17], for which no or insufficient minimum condition of sanitation and inadequate personal and domestic hygiene practices are the main mechanisms of transmission of intestinal parasites. The incidence of affected residents by intestinal diseases and diseases caused by the identified parasites or worms (roundworm, roundworm, amoeba), may be related to washing inadequate hands, so that many respondents mentioned washing hands with water only, with the need to use other component such as the gel soap and / or alcohol to wash their hands.

Data showed that 68.42% do not take bath in rivers, 21.05% often bathe in rivers, and often by locals who do not benefit from running water and others because they like; 10.53% answered sometimes in walking occasions or visits the riverside communities. You can assign probably the presence of diseases by species *A. lumbricoides*, *E. histolytica* and *E. vermicularis* mentioned by respondents, factors such as waste and septic tanks, which are close to the bathroom. So that, the place to bathe is in the backyard.

According to the results, the majority (94.74%) have the habit of washing food before consuming and 5.26% did not wash their food. [24] discusses the importance of washing food, since the transmission of intestinal parasites in most cases occurs by passive oral route, with drinking or food contaminated with parasitic structures released by these agents. [25] Points out that the transmission of intestinal parasites can occur through contaminated food, feces or cysts served by flies and cockroaches; from person to person through contaminated hands and food handling by asymptomatic individuals. As for the treated water consumption, 92.11% of residents consume treated water, which is, water COSAMA, according to them, still put a few drops of Hypochlorite because,

despite being piped water is not fully treated; 7.89% did not consume tap water, since the places where they live do not have running water. Disclosure of ethnobotanical results [26] is related to an important factor because, contributed to enhancement of ethnobotanical knowledge of respondents, as well as information on aspects that may be related to a few quotes from parasites and intestinal worms.

4. CONCLUSION

The use of medicinal plants is part of the popular culture of the neighborhood, which are used for the benefit of health, both to assist in relief and for the healing of disease or infirmity, among which are inserted into the parasites and worms intestinal that were the focus of this research. Surveys of ethnobotanical knowledge promote the rescue of knowledge that is often unknown to much of the population, which is involved with the technological world of today. So that information on medicinal plants are more frequent among residents who had contact with people from different cultures or have lived in places with difficult access to the hospital.

The recognition of determinants and identification of parasitic and intestinal worms are important to be treated or prevented the spread of species transmission of disease. In addition to being relevant investment in campaigns, lectures, distribution of leaflets to residents, including the poorest, unfortunately, have little information about the enteroparasitárias diseases. The information must be related to sanitary and domestic habits correct statements, in order to prevent diseases that can be affected by the species *A. lumbricoides*, *E. vermicularis* and *E. histolytica*, pathogens that were cited more frequently in the searched neighborhood. Therefore, this study contributed to the knowledge of different plants used in the treatment of intestinal parasites and worms, so that research related to this theme were found, also emphasizing to the socio-cultural revival. In addition to providing benefits to assist in the selection of plants for phytochemical and pharmacological research since they are required to contribute scientific knowledge of certain plants and their therapeutic purposes.

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