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LEVANTAMENTO DE PLANTAS MEDICINAIS EM ÁREAS RURAIS DO IFPE CAMPUS VITÓRIA DE SANTO ANTÃO

MEDICINAL PLANTS SURVEY IN RURAL AREAS OF IFPE CAMPUS VITÓRIA DE SANTO ANTÃO

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RESUMO

Desde tempos remotos o homem busca na natureza recursos para melhoria da sua saúde, entre eles, o uso de plantas medicinais, que são utilizadas como uma alternativa na cura de enfermidades. A etnobotânica pode ser definida como o estudo de relações existentes entre o homem e as plantas e o modo como essas plantas são usadas como recursos a seu favor. Esses estudos envolvem desde levantamentos sobre a cultura local, cultivo, manejo, forma de utilização até investigações com o isolamento de substâncias com propriedades específicas no tratamento de doenças, levando sempre em consideração a relação do homem com as plantas. Este trabalho foi realizado em duas áreas do IFPE Campus Vitória de Santo Antão, a área da Produção Agroecológica Integrada e Sustentável – PAIS e a área da Unidade Demonstrativa de Práticas Agroecológicas - UDPA Com a finalidade de conhecer a diversidade de plantas medicinais presentes nestas áreas do Instituto. Essas plantas são cultivadas em canteiros com adubação com esterco do próprio Campus e irrigação diária e, durante uma visita as duas áreas, foi realizada uma análise visual em campo e contagem das plantas com a finalidade de identificar a diversidade de espécies medicinais presentes nos locais e, posteriormente foi consultada a literatura a fim de conhecer as principais indicações terapêuticas das respectivas plantas e suas respectivas famílias botânicas. Podemos destacar a importância do levantamento dessas espécies no local de estudo, pois as plantas medicinais são uma excelente alternativa no uso da medicina popular, onde essas plantas podem ser encontradas e cultivadas em diversos locais e, além disso, contribuem para o resgate do conhecimento popular de comunidades.

Palavras-Chave: conhecimento popular, etnobotânica, plantas medicinais.

ABSTRACT

From ancient times man has sought in nature resources to improve his health, among them the use of medicinal plants, which are used as an alternative in the cure of diseases. Ethnobotany can be defined as the study of the relationships between man and plants and how these plants are used as resources in their favor. These studies range from surveys on local culture, cultivation, management, methods of use to investigations with the isolation of substances with specific properties in the treatment of diseases, always taking into consideration the relationship between man and plants. This work was carried out in two areas of the IFPE Campus Vitória de Santo Antão, the area of Integrated and Sustainable Agroecological Production - PAIS and the area of the Demonstrative Unit of Agroecological Practices - UDPA In order to know the diversity of medicinal plants present in these areas Institute. These plants are cultivated in beds with fertilization with manure from the Campus itself and daily irrigation, and during a visit to both areas a visual field analysis and plant counting was carried out in order to identify the diversity of medicinal species present in the sites and, later the literature was consulted in order to know the main therapeutic indications of the respective plants and their respective botanical families. We can highlight the importance of surveying these species in the study site, since medicinal plants are an excellent alternative in the use of folk medicine, where these plants can be found and grown in several places and, in addition, contribute to the rescue of popular knowledge of communities.

Keywords: ethnobotany, medicinal plants popular knowledge.

INTRODUÇÃO

From ancient times, the man has sought out in nature divers resources to improve their living conditions, including the use of medicinal plants. These plants used in health recuperation have evolved a lot until they are present in the most varied forms of disease treatments, such as in teas, medicines, ointments and syrups (FARIAS, et al, 2016). Medicinal plants are used in the simple preparation of teas to treat everyday illnesses, are used to more complex compounds such as “Lambedores” (BRITO; MARÍN; CRUZ; 2017).

The use of medicinal plants is seen as a strong attribute in the cure of diseases by the use of rural communities and indigenous people, through their knowledge were able to transmit this practice for many centuries, from generation to generation, through the accumulation of theoretical and practical knowledge with the use of these plants (ALMEIDA et. al, 2014).

The origin of popular knowledge about these plants emerged thought basic care measure, thought observation and attempts in the use of medicinal plants, building empirical knowledge in the search for disease improvement (RIBEIRO et at, 2014). The ethnobotany can be defined as the study of existing relationships between the man and plants, and the way in which these plants are used as resources in their favor (ROCHA; BOSCOLO; FERNANDES;

2015). Ethnobotanical studies involve from surveys on local culture, cultivation, management, form to use, and other investigations, always taking into account the relationship between the man and plants (SILVA; OLIVEIRA; 2017).

The study of ethnobotany, search not only to record the use of plant resources present in a given area, but also the ways in which they are used and employed by traditional communities (SILVA et. al, 2015)

Medicinal plants are excellent options for popular use, their low cost and high efficiency, they can be found and cultivated on home farms, they contribute to the recovery of knowledge and popular medicine (FLOR; BARBOSA; 2015). It is important to have knowledge about the functions of each plant existing in certain locations, such as the indication, the part used, which quantities are needed to combat a given disease, beyond other important data, they can be used with a safety margin, without having a risk, such as toxicity (SOUZA, et al, 2017).

Recently, a growing interest about the use of medicinal plants and extracts with therapeutic actions can be observed, which constitutes the way of help primary health care, compatible with conventional medicine. It is important there is a guarantee of safety in relation

to toxic effects and knowledge about side effects, interactions, contraindications, among others, and also the existence of pharmacological tests and clinical experimentation that demonstrate efficacy for this type of medicament (FIRMO, et al, 2011).

The objective of this work was to identify the diversity of medicinal plants cultivated in two areas of the IFPE Campus Vitória de Santo Antão, explain the importance of growing these plants as a maintenance of popular knowledge and identify their therapeutic property in the literature.

FUNDAMENTAÇÃO TEÓRICA

The ethnobotany investigation is one of the most used resources currently in the selection of species for studies in folk medicine and in the treatment of diseases. Helping in this way, in a framework of knowledge that can be used for the benefit of people through the use of these plants. FLOR & BARBOSA (2015), the cultivation of medicinal plants in rural communities, constitutes an important local resource for the health and sustainability of the rural environment. However, it is important to have orientation on the correct cultivation and management of medicinal plants, as the complementation of popular and scientific knowledge on the production and use of medicinal plants is essential for their safety and effectiveness.

According BRASILEIRO et al (2008), most of the information about the use of medicinal plants comes from family tradition, followed by the option for a natural treatment. Where most of these are grown in backyards (SANTOS et al, 2016), (QUEIROZ; LAMANO-FERREIRA, 2014).

Ethnobotany is the science that analyses, studies and interprets the history and relationship of plants in ancient and current societies (LOPES et. al, 2010). SOUZA et. al (2015), ethnobotany is defined as a study of interrelationship that takes place directly between people and living cultures and plants in their environment, which is allied with various cultural and environmental factors, as well as the conception developed by these cultures on the plants and their possible uses.

Research with medicinal plants involves investigations of traditional and popular medicine such as characterization of active principles, pharmacological investigation of extracts, and formulations of herbal medicines, however, even with the intensification of studies in this area, it is clear that these studies are still scarce regarding the diversity of the Brazilian biome (FERREIRA, et al, 2015).

METODOLOGIA

The work was developed in two agricultural production areas of the Federal Institute Pernambuco/IFPE Campus Vitória de Santo Antão, the area of the Demonstration Unit of Agroecological Practices - UDPA, and an area of Integrated and Sustainable Agroecological Production - PAIS.

In these areas where the work was developed, in addition to the diversity of medicinal plants, we can also find other varieties of cultivated plants, such as vegetables in general. In addition, they are areas destined to practical activities of the institution's students, where they develop projects and activities with the help of professors.

During a visit to the two areas, a visual analysis in the field and counting of plants was realized in order to identify the diversity of medicinal species present in the places and, later, the literature was consulted through articles, in order to know the most therapeutic indications and the most used parts of the respective plants under study.

RESULTADOS E DISCUSSÃO

Data were obtained through field observation and the plants were classified by popular name, scientific name, botanical family, therapeutic indication and part of the plant used, as shown in table 1. In all, 10 medicinal species were found: rosemary, rue, aloe, grass, chambá, cologne, lemongrass, mint, thick leaf mint and mastruz, with the leaves being the most used part of these plants, with the presence of 8 botanical families: *Rutaceae*, *Liliaceae*, *Poaceae*, *Acanthaceae*, *Zingiberaceae*, *Labiatae*, *Lamiaceae*, *Amaranthaceae*.

All species are used for some medicinal purpose, these species are cultivated in agricultural bed with fertilization with cattle manure, horse manure or goat manure from the campus itself, with daily irrigation.

According to PEREIRA & PAULA (2018), capim santo also known as capim-limão stands out with very efficient therapeutic actions, widely used in the form of teas, with several actions, including the anti-hypertensive, diuretic, calming action, antimicrobial, against abdominal cramps and analgesic.

For OLIVEIRA et al, (2016), Chenopodium ambrosioides L., popularly known as “Mastruz”, is widely used in almost all Brazilian regions, including the Northeast, where this species is mainly cultivated in temperate and subtropical climates. The leaves are

used for various health problems, such as respiratory, vascular, gastrointestinal, neurological, endocrine, rheumatic and parasitic complications.

Figure 1: Medicinal species found in the PAIS and UDPA area at the IFPE Campus Vitória.

Medicinal species found in the PAIS and UDPA área at the IFPE Campus Vitória de Santo Antão				
Popular name	**Scientific name**	**Family**	**Therapeutic indication**	**Part of Plant used**
Rosemary	*Rosmarinus officinalis* L.	Labiatae	Soothing, circulation, flu, cold, headaches	Leaves
Rue	*Ruta graveolens* L	Rutaceae	Earache, infection, anti-inflammatory, menstrual cramps	Leaves
Aloe	*Aloe vera* L.	Liliaceae	Burn, anti-inflammatory,	Latex, sap
Capim Santo	*Cymbopogon citratus*	Poaceae	Headache, stomach pain, colic, insomnia, tranquilizer, problems with hypertension	Leaves
Chambá	*Justicia pectoralis* Jacq	Acanthaceae	Lung problems, cough, bronchitis, flu, fever and nausea	Leaves
Cologne plantation	*Alpinia speciosa* Schum	Zingiberaceae	Fever, cough, tranquilizer, cold	Folhas, inflorescence
Lemon balm	*Melissa officinalis* L	Labiatae	Flu, soothing, cold, insomnia	Leaves
Common mint	*Mentha sp*	Lamiaceae	Liver, stomach, flu, cold, worm, hemorrhage	Leaves
Thick leaf mint	*Coleus ambotnicus*Lour	Lamiaceae	Antifebrile, anti-inflammatory, digestive and cough calming when used as tea, combats insomnia, expectorant	Leaves
Mastruz	*Chenopodium ambrosioides* L	Amaranthaceae	Respiratory, gastrointestinal, neurological, endocrine, rheumatic complications and parasitic	Leaves

Source: Own, 2018.

Rosemary, on the other hand, is a perennial herb native to the Mediterranean region, but now cultivated around the world as an aromatic plant. Its leaves are commonly used as a condiment in cooking, but it has also been widely used for different medicinal purposes such as treating headaches, soothing, colds (SANTOS et al, 2017). In addition, studies that report its antioxidant action can be highlighted (TIUZZI; FURLAN, 2016).

Rue - Ruta graveolens L., also known as domestic rue, garden rue, ruta, strong-smelling rue, is a dense foliage sub-shrub with a characteristic odor that can reach up to 1.5 m in height. As a medicinal plant, it can be used as an anti-inflammatory, menstrual cramps, repellent action and also in the fight against lice (DIAS et al, 2012).

Lemon balm is in a prominent position among medicinal plants due to its

phytotherapeutic importance used as a tranquilizer and to help reduce anxiety problems, in addition to being considered a sleep inducer due to its major constituent of citral, which is responsible for the relaxing action. (MEIRA; SOUZA; MARTINS; 2010).

According to LIMA (2018), the chambá, also known as anador - Justicia pectoralis, is useful in the treatment of headache, expectorant, anti-asthmatic and analgesic, in addition to treating respiratory problems such as lung inflammation, cough and bronchitis.

Aloe vera is considered the most biologically active and commercialized species of the Aloe L. genus and has been used for a long time for therapeutic purposes, due to the anti-inflammatory and antibacterial properties of active substances that are concentrated in the gel and in the leaf bark (ALCÂNTARA; BEZERRA; CARVALHO; 2014). It is popularly known in Brazil as aloe vera and has been claimed to have several important therapeutic properties, including accelerating wound healing (RAMOS; PIMENTEL; 2011).

The colony plantation, widely used in folk medicine, has medicinal properties that are related to leaves and inflorescence, which have therapeutic uses with anti-hypertensive, fever, and calming action (SANTANA; 2009).

The thick leaf mint, or also known as fat mint, widely cultivated in backyards is widely used in cases of cough, bronchitis and inflammation of the mouth and throat, in addition to being widely used for treatments against catarrh, fever and bronchitis. It can be used in different ways such as teas and syrups (TAVARES, et al, 2015). Common mint, scientifically known as Mentha sp, is a medicinal and aromatic plant, with properties that help treat digestive problems, such as poor digestion, nausea or vomiting, and also has calming and expectorant effects (TAVARES, et al, 2015).

In this context, one can see the importance of these plants for medicinal use, with different purposes and efficiency. In addition to contributing to the use of popular medicine, being a great attribute for science and public health, contributing to the rescue of historical knowledge.

CONCLUSÃO

Nature provides us plants with therapeutic actions that can help in the treatment of diseases, mainly through popular knowledge that is passed down from generation to generation and often empirically, being a very viable alternative for rural communities and society in general.

The research allowed us to identify the medicinal species present on the Campus of the IFPE Vitória de Santo Antão, and their importance as an excellent alternative in the treatment of various diseases, being found 10 medicinal species from 8 botanical families, with properties of varied use. It is important to have knowledge of the therapeutic properties of each plant, and that surveys in communities are carried out in order to maintain the dissemination of this popular knowledge so that knowledge can be intensified.

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