



Research Paper

MEDICINAL PLANTS USED IN ANTONIO MARTINS, RIO GRANDE DO NORTE, BRASIL

Ana Claudia da Silva¹, Sandra Sely Silveira Maia², Maria de Fatima Barbosa Coelho³,
Ricardo Carlos Pereira da Silva⁴ and Willame dos Santos Candido⁵

^{1,2,4} Universidade Federal Rural do Semi-Árido (UFERSA), Departamento de Ciências Vegetais, BR 110 Km 47, CEP 59625-900, Mossoró-Brasil

³ Universidade Federal de Mato Grosso (UFMT) Programa de Pós-Graduação em Agricultura Tropical (PPGAT) Av. Fernando C. da Costa, nº 2367 – Cidade Universitária - 78060-900 – Cuiabá – MT, Brasil

⁵ Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP/FCAV), Campus de Jaboticabal, Via de Acesso Prof. Paulo Donato Castellane s/n, CEP 14884-900 - Jaboticabal, SP..

Abstract

The use of plants to cure diseases has been practiced by most of the Brazilian population for several centuries. This provided a use that knowledge needs to be rescued, reclaimed and preserved. The aim of this study was to raise awareness of the use by residents of a rural community about medicinal plants. The study was conducted in Sitio Boa água Community in the municipality of Antonio Martins, Rio Grande do Norte, Brazil. The sample was non-probabilistic by convenience and purposive, consisting of 67 residents. The interviews were open and semi-structured, recorded in a field diary and recorded with prior approval of the residents. Was mentioned 50 plants distributed in 48 genera, 50 species and 35 families. The families most frequently cited were Asteraceae (six species), Lamiaceae (three species), Euphorbiaceae (three species) and cucurbits (three species). The most frequent indications were inflammatory, sedative, respiratory diseases, wound healing, headache and diarrhea. In the community there is great diversity of species used for major health disorders. Respondents have knowledge about medicinal plants socially constructed and transmitted orally through generations.

Key words: ethnobotany, folk medicine, northeastern Brazil.

INTRODUCTION

The use of plants in curing disease has been practiced by the majority of the world at different times in history, especially in poor and developing countries, as in Brazil. This use provided knowledge that needs to be rescued, valued and preserved.

Brazil has the greatest biodiversity of about 55 000 species of higher plants known [1]. Most of these species is used in any form, be it as a food source, as raw material for construction, as medicaments for curing diseases such as flavorings, among others [1].

The world organization for health (WHO) aimed at reducing the number of excluded from government health systems, recommends that the agencies responsible for public health in each

country: a) carry out regional surveys of plants used in traditional folk medicine and identify them botanically; b) encourage and recommend the use of those who have proven their efficacy and safety; c) argue against the use of folk medicine practices considered harmful; d) develop programs to grow and using the selected plants in the form of preparations endowed with effectiveness, safety and quality [2].

Medicinal plants are widely used by the Brazilian population and the use of these is increasingly deepening due to the knowledge of the therapeutic power and the many uses of species, many being the result of a series of cultural influences throughout the history of Brazil [3].

Use of medicinal plants by the population, especially the elderly, is by several factors such as: low cost, difficulty in acquiring medicines in health services, few adverse effects when compared to common medications, cultural tradition and preference for natural [4].

The term "herbal" refers to plant species that due to their potential therapies, have been incorporated by many people in their cultures and which were later carefully studied becoming thus inexhaustible source of approved drugs and commonly used from a rich source of new substances with biological activity [5].

In the semi-arid Northeast, the use of plants to cure diseases is common practice, especially in rural areas where there is a greater interaction of the same with these plants, thus acquiring comprehensive knowledge on the subject. Thus there is a perspective to recognize the importance of relations between man and nature which means a cognitive advance, where science is used to protect the cultural heritage and biodiversity [6].

The human activities have affected the Brazilian biomes among them can be mentioned the Caatinga in the Northeast that has been seriously altered by activities such as making bricks, charcoal, wood, and others that has led to a vast deforestation, fragmenting and modifying its unique flora and therefore also damaging the fauna.

Therefore, the aim of this study was to survey the knowledge of the use of medicinal plants among residents of a rural community.

MATERIAL AND METHODS

Data collection was carried out in the rural community Sitio Boa água, located in the municipality of Antonio Martins, in the state of Rio Grande do Norte. It is situated between the geographical coordinates 06°12'46,8" South latitude and 37°54'21,6" West longitude Greenwich with an average elevation of 312 m [7].

The study was conducted during the months of January and February 2010. The sample was non-probabilistic for convenience and intentional, consisting of 67 residents. The interviews were open and semi-structured, recorded in a field diary and recorded with prior permission of the residents. Interviews were conducted through questionnaires to randomly selected residents.

The photographic record was made of plants and the collection of herbarium specimens for identification in Herbario "MOSS". Essential information were recorded for the recognition of species (popular name, part (s) used (s), form of preparation, use of indicators and ways of acquiring the plant), and data from respondents such as gender, age, education and situation professional.

RESULTS AND DISCUSSION

All respondents know or use some plan to make "medicine", most have the knowledge and uses of these plants because they learned from their parents, grandparents or relatives and few are those who know the plants through the media, such as radio, television, books, etc. The age of respondents ranged from 18 to 80 years, and the predominant age group was 60-80 years (30%) and 85% were female.

Similar age found in Caruaru, PE [8], Mirassol do Oeste, MT [9] and São Miguel, RN, [10]. Elsewhere on homegardens, women also accounted the largest portion of respondents [8], [10] and [11]. Regarding the educational level and employment status 39% of respondents were farmers and 73% only had primary school.

They were cited 50 plants distributed in 48 genera, 50 species and 35 families (Table 1). The most cited families were Asteraceae (6 species), Lamiaceae (3 species), Euphorbiaceae (3 species) and cucurbit (3 species). The most frequent indications were inflammation, soothing, respiratory diseases, healing, headache and diarrhea.

Table 1. List of species medicated products exported by the residents of Sítio Agua Boa municipality of Antonio Martins, RN.

Family/Spécies	Common name	Uses/Diseases
CUCURBITACEAE <i>Momordica charantia</i> L.	melão-de-são-caetano	skin lesions
VERBENACEAE <i>Lippia alba</i> (Mill.) N. E. Brown	erva-cidreira	colic, soothing, headache, flu
LABIATAE <i>Plectranthus amboinicus</i> (Lour.) Spreng.	malvariço	influenza, inflammation, gastritis, ulcers
EUPHORBIACEAE <i>Jatropha gossypifolia</i> L.	pião-roxo	headache
LABIATAE <i>Mentha x piperita</i> L.	hortelã	headache, soothing, skin
POACEAE <i>Cymbopogon citratus</i> (DC) Stapf.	capim-santo	soothing, migraine, dizziness, diabetes
ASTERACEAE <i>Venonia condensata</i> Backer	boldo	headache, soothing, poor digestion
CHENOPODIACEAE <i>Chenopodium ambrosioides</i> L.	mastruz	healing, gastritis, flu, inflammation of the uterus, worm
EUPHORBIACEAE <i>Phyllanthus niruri</i> L.	quebra-pedra	kidney stone, anti-inflammatory
RUTACEAE <i>Ruta graveolens</i> L.	arruda	analgesic
SCROPHULARIACEAE <i>Scoparia dulcis</i> L.	vassourinha	diarrhea, urinary tract infection
MIMOSACEAE <i>Mimosa tenuiflora</i> (Willd) Poir.	jurema preta	inflammation of the uterus, cicatrizing
NYCTAGINACEAE <i>Boerhavia diffusa</i> L.	pega-pinto	inflammation, urinary infection, anemia, blood cleanser
MIMOSACEAE <i>Anadenanthera colubrina</i> (Vell.) Brenan	angico	flu
COMBRETACEAE <i>Combretum leprosum</i> Mart.	mofumbo	flu, fever
LABIATAE <i>Hyptis suaveolens</i> L.	bamburral	labyrinthitis digestive problems, headache, flu
ANACARDIACEAE <i>Schinus terebinthifolia</i> Raddi.	aroeira	inflammation
BURSERACEAE <i>Commiphora leptophloeos</i> (Mart.) J.B. Gillett	imburana	inflammation, gastritis, regulate menstruation, infection
ANACARDIACEAE <i>Anacardium occidentale</i> L.	cajueiro vermelho	healing, inflammation of the uterus

ANNONACEAE <i>Annona muricata</i> L.	graviola	inflammation, cancer
CARICACEAE <i>Carica papaya</i> L.	mamoeiro	cough, skin, spots, worm, gastritis, flu
LYTHARACEAE <i>Punica granatum</i> L.	romã	inflammation, flu, sore throat
MYRTACEAE <i>Psidium guajava</i> L.	goiabeira	diarrhea
LAURACEAE <i>Persea americana</i> P. Mill.	abacate	headache, kidney pain
RUTACEAE <i>Citrus sinensis</i> L.	laranja (fruit)	soothing, heartburn, stomach pain, high blood pressure
MUSACEAE <i>Musa spp.</i>	banana (fruit)	cough, bronchitis, infection, flu
ASPHODELACEAE <i>Aloe vera</i> L.	babosa	cancer nodules in general, infection, gastritis, wounds, burns
BIXACEAE <i>Bixa orellana</i> L.	urucum	bronchial asthma
BIGNONIACEAE <i>Handroanthus impetiginosus</i> (Mart. ex DC.) Mattos	pau-d' arco	inflammation of the uterus
ROSACEAE <i>Prunus domestica</i> L.	ameixa	inflammation, scarring, fever
ALLIACEAE <i>Allium sativum</i> L.	alho	flu, heart, prevent diseases (thrombosis)
CONVOLVULACEAE <i>Operculina macrocarpa</i> L.	batata- de- purga	appetite, worm, healing
CUCURBITACEAE <i>Luffa operculata</i> L.	cabacinha	sinusitis
CUCURBITACEAE <i>Sechium edule</i>	chuchu	high pressure
FABACEAE <i>Dipteryx odorata</i> (Aublet) Willd.	cumaru	healing, inflammation, sinusitis
LILLIACEA <i>Allium cepa</i> L.	cebola branca	cough
SOLANACEAE. <i>Solanum tuberosum</i> L.	batata inglesa	gastritis, cough headache
VIOLACEAE <i>Hybanthus calceolaria</i> (L.) Schulze-Menz	papaconha	flu, sore throat, cough, increase appetite, worm
SOLANACEAE. <i>Solanum capsicoides</i> All.	melancia da praia	urinary infection and uterus, flu, colic

The parts most commonly used for the preparation of the "remedies" were the leaves, followed by shells. Most authors that works with ethnobotany of medicinal plants also highlights the sheet as the most widely used vegetable part of these preparations [10], [12], [13], [14] and [15].

This significant use of leaves is due, probably, to the frequent use of herbal medicinal plants grown in domestic spaces for the people of the community, whose leaves are available all year round. Other studies claim that most plant species tend to concentrate the active ingredients in the leaves, providing important indicator in the herbivory-protection strategy [16], which confirms the importance of using these plant parts of medicinal plants.

The form of preparation that stood out was the tea, especially when wearing the sheet, both in infusion as in decoction. The decoction was also cited as a form of preparation most commonly used in other studies [13] and [17].

CONCLUSION

In the community there is great diversity of species used for major health disorders. The most used part are the leaves as tea. Respondents have knowledge about medicinal plants socially constructed and transmitted orally through generations.

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