

Ethnoknowledge: Use of medicinal plants in communities

ABSTRACT

Aim: To evaluate the traditional knowledge as for the use of medicinal plants in the municipal districts that integrate into 14th Administrative Area of the Company of Technical support and Rural Extension of the State of Paraíba.

Place and Duration of Study: The study was accomplished in nine municipal districts that compose to 14th Administrative Area of EMATER-PB, constituted by the municipal districts of Cajazeirinhas, Condado, Coremas, Lagoa, Paulista, Pombal, São Bentinho, São Domingos and Vista Serrana, tends as thirst the city of Pombal, in the period of March to June of 2014.

Methodology: Referred him study was promoted by a field research, of descriptive character with qualitative approach. As instrument for collection of data a questionnaire was used structured previously, containing objective and subjective subjects. Where, it was interviewed 30 people in the rural area and in the headquarters of each municipal district, in other words, in the nine municipal districts above related, totaling, like this, 315 interviewees. The data were analyzed as for the relative frequency of the medicinal plants being calculated in the Microsoft Excel Program.

Results: 82 species were mentioned with medicinal potential, distributed in 52 families, with 52 therapeutic indications, among them, anti-inflammatory activity with 32 species, anti-pains (analgesic) with 21 and antiseptic with 19 species, for hepatic upset and in the symptomatic treatment of the influenza nineteen species were referred, and some species possessed more than a therapeutic indication.

Conclusion: The species more mentioned were: Herb cidreira, Mallow, Marcela, Mint, angry Lavender, Grass saint, Mastruz and Cumarú. The families of plants used for the treatment of diseases with larger representativeness were: Lamiaceae, Asteraceae, Verbenaceae, Malvaceae, Anacardiaceae and Euphorbiaceae.

Keywords: *Ethnobotany; Phytotherapy; semi-arid; cultural meaning.*

1. INTRODUCTION

The properties of the plants were recognized by the man in coexistence with the environment, being technical and empiric knowledge, transmitted along the times of generation the generation and influencing in the improvement and development of the same ones. The therapeutic value of vegetable species, for instance, they are forming together with other practices, a medical system, known as traditional [9].

The plants with medicinal potential come as a form of alternative resource against the symptoms of several diseases, with great use in distant communities of urban centers and without attendance to the health. Ethnobotany is the branch of the science that is devoted to the study of the job of plants for several purposes, registering the use of the present vegetable resources in certain areas and the handling forms used by traditional communities, as form of to rescue and to preserve the popular knowledge [12, 24].

Brazil is holder of the largest genetic diversity of the world and bill with wide tradition of the use of the medicinal plants linked to the popular knowledge. However, in spite of the wealth of the Brazilian flora, the number of information on medicinal plants is still considerably low. Although a lot of investment is not had for researches with medicinal plants, it is made calculations that at least half of the plants contained at the country contain active beginnings, capable to cure and to prevent a lot of diseases [5].

31 In agreement with [25] among the medicinal plants traditionally known and used are had the
32 Rosemary (*Rosmarinus officinales*), the boldo (*Peumus boldus*), to aloe (*Aloe vera*), the marcela
33 (*Achyrocline satureioides*), the mallow (*Malva sylvestris*), cidreira (*Lippia alba*) and chamomile
34 (*Matricaria chamomilla*), working as sedative, anti-inflammatory, against influenzas and digestive
35 problems. It is relevant to stand out also that the incorrect job of plants with therapeutic properties as
36 well as in the case of the medicines they can cause serious problems in the organism, because, many
37 possess poisonous beginnings, should be known which leaves of the plant can be used and the
38 effects that can bring for the organism, so that there is not the compromising of the wanted effect [20].

39 Before the exposed, it is configured indispensable the rising of information the about of the acquired
40 knowledge in certain local communities, in the intention of discovering the potentialities of the
41 vegetable resources with medicinal ends and their different use forms, as well as, to collaborate with
42 the diffusion of this, that comes as form of natural treatment and of low cost or even with the progress
43 in the herbal medicines use. Therefore, the present study had for objective to evaluate the traditional
44 knowledge as for the use of medicinal plants in the municipal districts that integrate into 14th
45 Administrative Area of the Company of Technical support and Rural Extension of the State of
46 Paraíba, headquartered in the city of Pombal, in the interior paraibano.

47

48 2. MATERIAL AND METHODS

49

50 The study was accomplished in nine municipal districts that compose to 14th Administrative Area of
51 EMATER-PB, constituted by the municipal districts of Cajazeirinhas, Condado, Coremas, Lagoa,
52 Paulista, Pombal, São Bentinho, São Domingos and Vista Serrana, tends as thirst the city of Pombal,
53 that stands out in the interior paraibano as being one of the regional poles, to example of Patos,
54 Sousa and Cajazeiras.

55 The research was accomplished with the home bosses, being considered as much the man as the
56 woman. Initially, it was interviewed 30 people in the rural area and in the headquarters of each
57 municipal district, in other words, in the nine municipal districts above related, totaling, like this, 315
58 interviewees.

59 As instrument for collection of data a questionnaire was used structured previously, containing
60 objective and subjective subjects, being composed by two parts. The first, destined to draw the
61 interviewees' socioeconomic profile and Monday seeking to reach the objectives plans for to present
62 researches, in what concerns the use of medicinal plants destined to the treatment of diseases.

63 Being accomplished during the months of March to June of 2014. During the interviews, it was looked
64 for to avoid the other people's direct influence. For this, individual interviews were accomplished and
65 in schedules different, same when there was occurrence of two or more people to live at the same
66 place.

67 After collection, the data were analyzed as for the relative frequency of the medicinal plants made
68 calculations in the Microsoft Excel Program, according to methodology [18] and presented in form of
69 tables. Seeking to subsidize the discussion of the results, it was promoted with backrest in the
70 pertinent literature to the theme in subject.

71

72 3. RESULTS AND DISCUSSION

73

74 The socioeconomic profile of the sample (sex, age group and occupation) is shown in Table 1. it was
75 Verified that the public presented an average of age from 51 to 70 years, being the 31 year-old
76 observed minimum age, and 87 year-old maxim. Among the interviewees 40% they were composed
77 by women and 60% by men. As for the profession most was farming representing a percentile of
78 79,92% of the interviewees. Those that don't possess the agriculture as main activity exercise the
activity in a secondary way.

79 Usually, due these to possess degree of inferior study (illiterates or 1st incomplete degree) they didn't
80 have opportunities in other fields besides the agriculture. [9] to the they evaluate the ethnobotany of
81 medicinal plants in the municipal district of São José of Espinharas - PB, they verified that most of the

interviewees possessed age group above 40 years and education 1st incomplete degree, being fruit of the need of entering in the arduous work of the field, carting education lack.

84

Table 1. Profile of the sample interviewed in the 14th Administrative Area of EMATER-PB, headquartered in Pombal-PB.

87

	Absolute value	Relative value (%)
Sex		
Male	189	60%
Female	126	40%
Total	315	100%
Age group		
31-40 years	21	6,66%
41-50 years	56	17,76%
51-60 years	77	24,42%
61-70 years	98	31,08%
71-80 years	49	15,54%
81-90 years	14	4,54%
Total	315	100%
Profession		
Farmer	252	79,92%
Merchant	7	2,22%
Teacher	21	6,66%
Domestic	35	11,2%
Total	315	100%

88

In the present study 82 species were mentioned with medicinal potential, which are distributed in 52 families (Table 2). Striped in 52 therapeutic indications, standing out the anti-inflammatory activity with 32 species, anti-pains (analgesic) with 21 and antiseptic with 19 species. However, species exist with several therapeutic functions, which for hepatic upset and in the symptomatic treatment of the influenza it was referred nineteen species.

Among the species, the more mentioned was herb cidreira (*Melissa officinalis*) with 102 citations, following for the mallow (*Malva sylvestris*) with 79 citations and the third species more mentioned was the marcela (*Achyrocline satureioides*) with 76 citations. Later, they were mentioned mint (*Mentha spicata*), angry lavender (*Lavandula angustifolia*), Grass saint (*Cymbopogon citratus*), mastruz

(*Dysphania ambrosioides*) and cumarú (*Dipteryx odorata*) equivalent to 74, 73, 71, 66 and 64 citations, respectively.

Table 2. it Lists of the botanical families, scientific and popular names, therapeutic indications, frequency of citations and relative frequency in the nine municipal districts of the interior paraibano led for Pombal-PB.

Botanical Family	Scientific name	Popular name	Therapeutic treatment	Nº Cit.	F.R. (%)
Verbenaceae	<i>Lippia alba</i> (Mill) N. E. Brown	erva cidreira	Bad digestion, sedative, bellyache, cold, diarrhea, upset of the nervous system, complications of the pre and postpartum, indigestion, late period, menstrual colics, anemia, hypertension, headache, intoxication.	102	32,38
Malvaceae	<i>Malva sylvestris</i> L	mallow	Gastritis, ulcer, infection in the mouth and in the throat, healing.	79	25,07
Asteraceae	<i>Achyrocline satureioides</i> (Lam.) DC.	marcela	Intestine, diarrhea, heartburn, intestinal problems.	76	24,12
Lamiaceae	<i>Mentha arvensis</i> L.	mint	Intestinal problems, catch flu, cold, bronchitis, asthma.	74	23,49
Lamiaceae	<i>Hyptis suaveolens</i> (L.) Poit	angry lavender	Intestinal constipation.	73	23,17
Poaceae	<i>Cymbopogon citratus</i> (D.C.) Stapf	grass Saint	Sedative, bellyache, diarrhea, fever, coughs, digestive problems.	71	22,53
Amaranthaceae	<i>Chenopodium ambrosioides</i> L.	mastruz	Inflammation, influenza, coughs, cold, gastritis, pain in the bones.	66	20,95
Fabaceae	<i>Amburana cearensis</i> (Allemão) A.C.Sm	cumarú ou imburana-de-cheiro	Inflammations, influenza, coughs, breathing problems.	64	20,31
Rutceae	<i>Citrus limonium</i> L.	lemon tree	Fever, influenza, cold, cough.	57	18,09
Anacardiaceae	<i>Myracrodruon urundeuva</i> Allemão	aroeira	Inflammation, coughs, influenza, inflammations in general, healing.	47	14,92
Liliaceae	<i>Aloe vera</i> (L.) Burm. F	aloe	Hemorrhoids, cuts, wounds, inflammations, baldness, ulcers, gastritis.	42	13,33

Phyllanthaceae	<i>Phyllanthus niruri</i> L.	quebra pedra	Renal affections, urinary infection, inflammations of the column, late period, menstrual colics.	36	11,42
Bignoniaceae	<i>Bignonia exoleta</i> Vell	purge potato	alIntestine, constipation, sinusitis, hemorrhage.	34	10,79
Olacaceae	<i>Ximenia americana</i> L.	bush plum	Inflammation, cicatrization, wash of wounds, column pain, diarrhea, problems in the stomach, intestinal constipation.	29	9,20
Mimosoideae	<i>Anadenanthera colubrina</i> (Vell.) Brenan	angico	Intestinal constipation.	25	7,93
Sapotaceae	<i>Sideroxylon obtusifolium</i> (Humb. ex Roem. & Schult.) T.D.Penn.	quixabeira	Inflammations of the column, bruises.	24	7,61
Euphorbiaceae	<i>Ricinus communis</i> L.	carrapateira or castor	Constipation, headaches, chicken pox. Constipation, headaches, chicken pox.	23	7,30
Cucurbitaceae	<i>Momordica charantia</i> L.	melão of São Caetano	He/she regularizes the menstrual flow, it relieves menstrual colic, hemorrhoids, fever, furuncles, abscesses, scabies.	23	7,30
Punicaceae	<i>Punica granatum</i> L.	pomegranate	Infections of the throat, hangover, hoarseness, problems in the stomach.	23	7,30
Apiaceae	<i>Anethum graveolens</i> L.	dill	Intestinal constipation.	22	6,98
Anacardiaceae	<i>Anacardium occidentale</i> L.	cashew tree	Inflammation, diarrhea, influenza, weakness, urinary problems, cough.	21	6,66
Lamiaceae	<i>Plectranthus ornatus</i> Codd	boldo	Diarrhea, indigestion, pains or abdominal colics, affections of the liver, insomnia.	20	6,34
Brassicaceae	<i>Nasturtium officinale</i> R. B.	cress	Pains, rheumatism, drop, arthritis, coughs, influenza, bronchitis, asthma, amenorrhoea, anemia, appetite lack, dandruff, colitis, toothache, diabetes, digestive disturbances,	19	6,03

			dyspepsia, fever, acne, jaundice, tuberculosis, uremia, syphilis, stones of the kidneys, worms, cystitis, swelling of the glands, weaknesses of the heart and of the nerves.		
Myrtaceae	<i>Psidium guajava</i> L.	guava	Loss of calcium, indigestion, abdominal pains, diarrhea.	17	5,39
Euphorbiaceae	<i>Croton blanchetianus</i> B.	quince	Dysentery, bellyache, badly to be.	16	5,07
Lamiaceae	<i>Vitex gardneriana</i> S.	jaramataia	Pains in the bones, problems in the kidneys, problems in the column, sedative, inflammations, pain in the stomach.	16	5,07
Rubiaceae	<i>Cascarilla undata</i> (Klotzsch) Wedd	corner corner	Amenorrhoea, invigoration of the blood, sinusitis, abortion, intestinal constipation.	16	5,07
Cercideae	<i>Bauhinia pentandra</i> (Bong.) Vogel ex Steud.	mororó	Cholesterol.	16	5,07
Caprifoliaceae	<i>Sambucus nigra</i> L.	sabugueiro flower	Sinusitis	15	4,76
Papaveraceae	<i>Argemone mexicana</i> L.	holy thistle	Upset of the nervous system, anemia, parasitic diseases, hypertension, diarrhea, indigestion, pains or abdominal colics.	14	4,44
Rhamnaceae	<i>Ziziphus joazeiro</i> M.	Juazeiro	Catarrh in the chest, influenza, decays; dandruff, sinusitis, inflammation in the teeth and in the mouth.	14	4,44
Anacardiaceae	<i>Astronium graveolens</i> J.	field gonçalo	Inflammation, diarrhea, anti-inflammatory.	14	4,44
Mimosoideae	<i>Mimosa tenuiflora</i> W.	black jurema	Healing (use external topic).	14	4,44
Fabaceae	<i>Caesalpinia pyramidalis</i> T.	catingueira	Spill, sinusitis, masculine sexual impotence.	14	4,44
Chrysobalanaceae	<i>Licania rigida</i> B.	oiticica	Inflammations, diabetes.	14	4,44

Caricaceae	<i>Carica papaya</i> L.	papaya	coughs, bronchitis, hoarseness.	13	4,12
Alliaceae	<i>Allium sativum</i> L.	garlic	Inflammation in the throat, hypertension, influenza, hemorrhoids, parasitic diseases, high cholesterol, affections of the feminine reproductive apparel.	12	3,80
Malpighiaceae	<i>Malpighia glabra</i> L.	barley	He/she coughs, catarrh in the chest, influenza, asthma.	12	3,80
Euphorbiaceae	<i>Cnidoscolus phyllacanthus</i> M.	faveleira	Healing.	12	3,80
Musaceae	<i>Musa sapientum</i> L.	banana tree	Coughs, bronchitis, hemorrhoids, parasitic conditions, renal affections, hypertension, hemorrhage of wounds, tuberculosis, whooping cough.	12	3,80
Meliaceae	<i>Azadirachta indica</i> A.	Nim	Vermicide.	12	3,80
Rutaceae	<i>Ruta graveolens</i> L.	rue	Ear pains, parasitic infections, menstrual colics, corporal pains.	12	3,80
Lamiaceae	<i>Lamium album</i> L.	tiredness or nettle-white	Inflammations in general, toothache, high cholesterol.	12	3,80
Fabaceae	<i>Caesalpinia ferrea</i> M.	wood-iron or jucá	Diabetes, reducing the volume of the urine and thirst, as anti-inflammatory, catarrhal disease, tonsils, intestinal colic, dysentery, throat, drop, hemorrhage, rheumatism, syphilis, coughs, hemorrhoids, heart problems, as expectorant, febrile, general weakness, lung diseases.	12	3,80
Apiaceae	<i>Foeniculum vulgare</i> M.	sweet herb or fennel	Heart problems, nauseas, flatulence, headache, hypertension, diarrhea, vomits.	12	3,80
Violaceae	<i>Hybanthus calceolaria</i> L.	pepaconha	For diseases in the teeth.	12	3,80
Asteraceae	<i>Matricaria chamomilla</i> L.	chamomile	Headache, fever, influenza, soothing.	11	3,49

Asteraceae	<i>Rosmarinus officinalis</i> L.	rosemary	Bronchitis, sinusitis, insomnia, depression, labyrinthitis, memory headache, cellulite, asthma.	11	3,49
Lamiaceae	<i>Ocimum basilicum</i> L.	basil	Fever, headache, diarrhea, bellyache, coughs, bad digestion.	11	3,49
Acanthaceae	<i>Justicia pectoralis</i> L.	noun	Pains, fever, influenza, menstrual colics, abdominal pains.	11	3,49
Euphorbiaceae	<i>Jatropha gossypifolia</i> L.	purple pinhão	Asthma, coughs, catarrh in the chest.	11	3,49
Combretaceae	<i>Combretum laxum</i> J.	mufumbo	Hemorrhages, breathing problems, for cicatrization and sedative.	11	3,49
Urticaceae	<i>Parietaria officinalis</i> L.	alfavaca	Catarrh in the chest, fever, sinusitis, ear pains, eye conditions, diarrhea, menstrual colics, upset of the nervous system, genitourinary disorders.	10	3,17
Solanáceas	<i>Solanum melongena</i> L.	eggplant	Arthritis, diabetes and inflammations of the skin in general.	10	3,17
Asteraceae	<i>Acanthospermum hispidum</i> DC.	gypsy thorn or sheepskin	Headache, toothache, dysentery, healing, bad digestion.	10	3,17
Burseraceae	<i>Commiphora leptophloeos</i> M.	imburana	Inflammation, healing, influenza, coughs, sinusitis.	10	3,17
Boraginaceae	<i>Heliotropium elongatum</i> W.	fedegoso	Pains, anemia, bronchitis, menstrual complications, headache, gastrointestinal pain, fever, hepatic diseases, neuralgias, burns, measles, scabies and amenorrhoea.	10	3,17
Cactaceae	<i>Melocactus zehntneri</i> (Britton & Rose)	crown monks of	Parasitic infections.	10	3,17
Crassulaceae	<i>Sedum dendroideum</i> M.	balm	Itch.	10	3,17

Malvaceae	<i>Pseudobombax marginatum</i> A.	Embiratã	Renal calculation, infection urinary, colic.	10	3,17
Brassicaceae	<i>Cleome spinosa</i> J.	mussambê	Inflammation, influenza, cough.	9	2,85
Rubiaceae	<i>Genipa americana</i> L.	jenipapeiro	Healing.	9	2,85
Apocynaceae	<i>Aspidosperma pyrifolium</i> M..	pereiro	Intestine, fevers, dizziness, bad digestion.	8	2,53
Euphorbiaceae	<i>Euphorbia tirucalli</i> L.	aveloz	Warts.	8	2,53
Malvaceae	<i>Gossypium hirsutum</i> L.	cotton	Furuncle.	8	2,53
Fabaceae	<i>Stryphnodendron adstringens</i> M.	barbatimão	Open wounds, inflammations in general, cutaneous affections.	8	2,53
Moraceae	<i>Morus nigra</i> L.	blackberry	Hypertension.	8	2,53
Turneraceae	<i>Turnera subulata</i> S.	chanana	Digestive problems, pains in general, elimination of tumors.	7	2,22
Zingiberaceae	<i>Renealmia aromatica</i> A.	cuité	Pains in the column, renal problems.	7	2,22
Smilacaceae	<i>Smilax brasiliensis</i> S.	japacanga	Diuretic, skin diseases.	7	2,22
Arecaceae	<i>Attalea humilis</i> M.	coconut catolé	Inflammation of the kidneys.	7	2,22
Bignoniaceae	<i>Jacaranda caroba</i> V.	carobá	Inflammations in general.	7	2,22
Rubiaceae	<i>Uncaria tomentosa</i> W.	cat nail	Afecções of the prostate, urinary infection.	7	2,22
Combretaceae	<i>Terminalia catappa</i> L.	castanet	Diuretic.	7	2,22
Cucurbitaceae	<i>Luffa operculata</i> L.	cabacinho	Sinusitis, abortive.	7	2,22
Euphorbiaceae	<i>Croton heliotropifolius</i> K.	velame	Badly to be, bad digestion, depurative, furuncle, pain in the column.	6	1,90
Fabaceae	<i>Senna alexandrina</i>	senna	Intestinal constipation.	6	1,90

M.					
Faboideae	<i>Erythrina velutina</i> W.	mulungu	Sinusitis, abortive.	6	1,90
Faboideae	<i>Geoffroea spinosa</i> J.	marizeiro	Antidiarrheal	6	1,90
Solanaceae	<i>Solanum agrarium</i> S.	watermelon of the beach	Spill, fever, constipation, sexual impotence.	6	1,90
Poaceae	<i>Zea mays</i> L.	corn	Pains, drop, edemas, cystitis, urethritis, urinary lithiasis.	6	1,90
Myrtaceae	<i>Syzygium cumini</i> L.	jambolão	Cholesterol.	6	1,90

103

104 The herb cidreira possesses essential oil with wide spectrum of antimicrobial activity, being this
 105 prepared herb under infusion form using leaves for therapeutic ends [14]. Corroborating [30] to the
 106 they study use of medicinal plants as home remedies in Blumenau, Santa Catarina, they observed as
 107 species more mentioned: the herb - cidreira, the chamomile, the mint and the lemon.

108 As [28], studying the use of medicinal plants for hypertensive and diabetics the mallow was indicated
 109 by the interviewees for infections, with therapeutic allegations as expectorant for the respiratory
 110 diseases (orally) and in the bruises and lawsuits of the mouth and throat (for topical road).

111 Considering the frequency of citation of the marcela, it can be justified for the use of their
 112 inflorescences is related mainly to problems of the digestive treatment and inflammatory states, being
 113 also one of the more mentioned among the interviewees [3].

114 The mint is one of the most versatile species in the therapeutic treatment, besides the indications
 115 mentioned in the Table 2, this species also brings benefits in the treatment of arterial hypertension
 116 and acts in the decrease of the cholesterol levels, being the leaf of the plant used in the preparation of
 117 the lambedor, so much for the treatment of breathing illnesses, as in the decoction for to the other
 118 indications [17].

119 The angry lavender (*Hyptis suaveolens*) it is indicated for pains, breathing infections and it possesses
 120 antimicrobial activity, the one which the leaves the stem or the complete plant can be used for the
 121 preparation of the tea [22]. besides the medicinal importance it was also verified that the essential oils
 122 of *Hyptis suaveolens* present efficiency in the control of larvae of *Aedes aegypti* tends potential for
 123 they be used as biolarvicides [26], in other words, in the prevention of the contamination of the
 124 primness.

125 The grass saithn is used through the infusion of the leaves. [4] to the they evaluate medicinal plants
 126 used by the population of the municipal district of Lagarto-SE in cancer patients, the species more
 127 mentioned were: Balm-mint (*Lippia dawn* (Mill) N. E. Brown - 30,8%), Boldo (*Plectranthus barbatus*
 128 Andr. - 15,7%), and Grass-Saint (*Cymbopogon citratus* (A.D.) Stapf - 14,6%), all used in common for
 129 some purposes (bad digestion, bellyache and indisposition). the Balm-mint and the Grass-saint were
 130 also mentioned as sedative. Still, in agreement with these authors the acquisition of these herbs in
 131 his/her majority is in the own back yard, indicating the easy access. These species are still used by
 132 patients with cancer, which told to use these concomitant one with chemotherapy about 40%.

133 The mastruz is used for therapeutic ends through the maceration of the leaves, which mentioned in
 134 the table 2 besides the indications are also adapted in the treatment of bone fractures, anthelmintic
 135 and antifungal [15, 6]. [21] studying the anatomical and histochemical analysis of *Dysphania*

136 *ambrosioides* (Mastruz) the presence of lipophilic substances was evidenced, essential oils,
137 oleoresins, phenolic compounds, starch, lignin and oxalate crystals of calcium, being those present
138 compositions in the metabolism of the plants used in the defense and adaptation of the same ones to
139 the environment and also presenting medicinal effect.

140 The cumarú also denominated of Imburana-of-smell it is very used in the Northeast area, for being a
141 species in that the peel of the tree possesses medicinal properties for treatment of breathing illnesses
142 [9].

143 In the other mentioned species they were referred as having used in the treatment of breathing
144 illnesses: lemon tree, juazeiro, garlic, acerola, flower-of-sabugueiro, catingueira, rosemary, basil,
145 mulungu, banana tree, chamomile, pinhão-purple, anador, papaya tree, watercress, gourd and
146 mussambê. [11] evaluating the medicinal plants that are used in the city of Vilhena, Rondônia, they
147 observed that through the leaf of the lemon (*Citrus limonium*) it is possible to obtain the tea or the
148 syrup for the herbal treatment of the influenza and of the sore throat.

149 To considered them anti-inflammatory and cicatrizant was aroeira, aloe, break-stone, plum of the
150 bush, quixabeira, cashew tree, coconut catolé, caroba, oiticica, nettle-white, black jurema, mufumbo,
151 romãzeira, imburana and faveleira. [16] to the they study use of the *Myracrodun urundeuva* Allemão
152 (aroeira of the interior) for the farmers in the treatment of diseases, they observed that enters the
153 main forms of use of the aroeira done by the farmers are the soaps as healing and the cooking for
154 seat bath and vaginal cream against vaginal itches. Already the teas or infusions were mentioned
155 against throat inflammations and gastritis; in what refers to the extract and dye, they are used as
156 healing. In agreement with [27] the romãzeira is indicated for inflammation in the throat being used
157 the fruit softened orally, and the break pointed stone for inflammations in the urinary apparel, in the
158 form of infusion of the leaves.

159 With analgesic acting they were mentioned the melon-of-be-caetano, cuité, fedegoso, gypsy's thorn,
160 jaramataia, pepaonha, cat nail and the corn. The melon-of-be-caetano it is used broadly for pains, to
161 combat viral illnesses and infections of the cardiocirculatory and gastrointestinal system and the
162 fedegoso used leaves or roots in the form of tea for pains and gastric problems [7].

163 For the cure of intestinal diseases as the intestinal constipation: Senna, angico, dill, corner-corner,
164 carrapateira, velame, watermelon of the beach, pereiro and potato-of-purgative, while antidiarréico:
165 boldo, guava tree, marmeleiro, gonçalo-pity-field, basil and marizeiro. In similar study [11], they
166 observed that species as boldo, corner-corner, guava tree and melon-of-be-caetano they were
167 mentioned for the treatment of bellyaches.

168 With antiparasitic action had stands out the nim, sacred thistle, arruda and friar's crown. [8] evaluating
169 the capacity etnobotânica of medicinal plants used in the district of Vista Alegre, Claro dos Poções,
170 MG, detached the use of the species friar crown for the treatment of the white cloth that is a disease
171 caused by a mushroom, soon the species presents antiparasitic action similar to the observed in this
172 work.

173 For the treatment of the itch balm was mentioned, for the wart they indicated the plant aveloz and the
174 furuncle the use of the cotton. In agreement with [13] the species aveloz can be used externally to
175 cauterize abscess and warts, could still be used to remove melanomas (skin cancer).

176 At the time that for control of chronic diseases as hypertension, cholesterol and diabetes were
177 pointed, jucá, anise, eggplant, mororó, amoreira and jambolão. [1] to the they evaluate the use of the
178 herbal treatment for the control of diabetes mellitus verified effectiveness twice a week with use of the
179 tea of the jambolão leaves.

180 Already with diuretic activity it was mentioned the japecanga and the castanet. [29] when evaluating
181 extract of the castanet fruit, it observed that the present natural pigmentation in the fruit indicates the
182 presence of anthocyanins, components of phenolic nature belonging to the group of the flavonoids,
183 with anti-inflammatory action, being to the peels of the castanet used as diuretic and to the leaves
184 they act as diaphoretic and against headaches.

[10] to the they accomplish analysis of the scientific production on medicinal plants verified that the vegetable species more researched were boldo, aroeira, mint, eucalyptus, chamomile, sacred espinheira, garlic, break-stone, mallow, arruda, cashew tree, guava tree, basil, pomegranate, anise and senna, being these mentioned in this work, demonstrating like this, that the empiric knowledge corroborates with scientific literature.

The families with larger representativeness were Lamiaceae (12%) with 206 citations, Asteraceae (6%) with 108, Verbenaceae (6%) with 102, Malvaceae (6%) with 97, Anacardiaceae (5%) with 82 and Euphorbiaceae (5%) with 82 citations (Table 3).

Table 3. They are striped the botanical families and the amounts of mentioned species and the number of citations for interviewee, in the nine municipal districts that compose to 14th administrative Area of EMATER-PB.

Botanical families	Cited species	Citations
Anacardiaceae, Faboideae, Malvaceae e Rubiaceae (4)	12	287
Lamiaceae (1)	6	206
Asteraceae e Fabaceae (2)	6	148
Euphorbiaceae (1)	7	82
Other (35)	51	949
Total	82	1672

It is also observed similarity under the presence of most of the families in this work in [19] where they stand out for the number of species Fabaceae (14), Lamiaceae (11), Asteraceae (9), Euphorbiaceae (7) and Solanaceae (7). Apiaceae and Arecaceae had four mentioned species, while three species were told for the families Anacardiaceae, Lauraceae, Moraceae, Poaceae, Rutaceae and Zingiberaceae.

For [23] the families Asteraceae (12), Lamiaceae (11), Fabaceae (11), Euphorbiaceae and Myrtaceae, with six species each. As well as, [2] the family of plants with larger note was Fabaceae, with 19 species perfazendo 22,35% of the total. Where can verify the importance especially of the family Fabaceae that had representativeness in the two studies.

Being like this, the use of species for phytotherapeutic purposes is shown as an alternative for rural communities' families, due to easy acquisition and the knowledge perpetuated by the generations, in spite of empiric, it possesses scientific proofs that corroborate with the mentioned purposes, rescuing cultural aspects and preserving these species when demonstrating the wealth of the flora in the semi-arid region of Paraíba.

4. CONCLUSION

82 species were mentioned with medicinal potential, distributed in 52 families, being to the species more mentioned: herb cidreira, mallow, marcela, mint, angry lavender, grass saint, mastruz and cumarú.

The plant families used for the treatment of diseases with larger representativeness were: Lamiaceae, Asteraceae, Verbenaceae, Malvaceae, Anacardiaceae and Euphorbiaceae.

REFERENCES

- 221 1. Alvarenga CF, KMN Lima, Mollica LR, Azeredo LO, Carvalho C. Use of medicinal plants for the
222 treatment of diabetes mellitus in the Paraíba Valley - SP. Rev. Ciênc. E Saúde Online. 2017; 2 (2):
223 36-44. Portuguese.
- 224
- 225 2. Batista AAM, Oliveira CRM. Medicinal plants as a community of the semi-arid Bahia: knowledge
226 and environmental conservation. Encyclop. Biosf. 2014; 10 (18): 74-88.
- 227
- 228 3. Brião D, Arctic LL, Líma LFP, Menezes APS. Use of medicinal plants in a municipality inserted in
229 the Brazilian Pampa Biome. Rev. da Univ. Valley of the Green River. 2016; 14 (2): 206-219.
230 Portuguese.
- 231
- 232 4. Caetano, NLB, Ferreira TF, MRO Reis, Neo GGA, Carvalho AA. Medicinal plants used in the
233 population of the municipality of Lagarto - SE, Brazil - emphasis on cancer patients. Rev. Bras. de
234 Pla. Med 2015; 17 (4): 748-756. http://dx.doi.org/10.1590/1983-084X/14_056. Português.
- 235
- 236 5. Carneiro FM, Silva MJP, LES Borges, Albernaz LC, Costa JDP. Trends in studies with medicinal
237 plants in Brazil. Rev. Sap. Soc. Sab. and prat. Educ. 2014; 3 (2): 44-75. Portuguese.
- 238
- 239 6. Garcia D, Domingues MV, Rodrigues E. Ethnopharmacological survey among migrants living in the
240 southeastern Atlantic Forest of Diadema, São Paulo, Brazil. J. of Ethnob. and Ethnom. 2010; (6): 1-
241 19.
- 242
- 243 7. Fiebig GA, Pasa MC. As medicinal plants in the community of Conceição, Mato Grosso, Brazil.
244 Adv. In para. Sc. 2018; 5 (1): 237-248. Portuguese.
- 245
- 246 8. Fagundes ANC, Oliveira GL, Souza BG. Ethnobotany of medicinal plants used in the district of
247 Vista Alegre, Claro dos Poções - Minas Gerais. Rev. Fit. 2017; 11: 62-80. Portuguese.
- 248
- 249 8. Fagundes ANC, Oliveira GL, Souza BG. Ethnobotany of medicinal plants used in the district of
250 Vista Alegre, Claro dos Poções - Minas Gerais. Rev. Fit. 2017; 11: 62-80. English.
- 251
- 252 10. Lisboa RS, Rodrigues FM. Análise da Casa Científica sobre Plantas Medicinais. Rev. Est. V. e
253 Saúde. 2017; 14: 8-14. Português.
- 254
- 255 11. Lima RA, Magalhães AS, Santos MRA. Levantamento etnobotânico de plantas medicinais
256 utilizadas na cidade de Vilhena, Rondônia. Rev. Pesq. & Criação. 2011; 10 (2): 165-179. Português.
- 257

- 258 12. Lima RBS, LFR Silva, Melo MRS, Costa JS, NS Picanço, Lima ES, et al. Atividade anti-malária in
259 vitro e in vivo de plantas da Amazônia brasileira. *Malária J.* 2015; 14 (508): 1-14. Doi:
260 <https://doi.org/10.1186/s12936-015-0999-2>.
- 261
- 262 13. Lorenzi H, Matos FJA. Plantas medicinais no Brasil: nativas e exóticas. 2 ed. Nova Odessa, SP:
263 Instituto Plantarum; 2008.
- 264
- 265 14. Machado TF, Pereira RCA, Batista VCV. Variabilidade sazonal da atividade antimicrobiana do
266 óleo essencial de *Lippia alba*. *Rev. Ciênc. Agron.* 2014; 45 (3): 515-519.
267 <http://dx.doi.org/10.1590/S1806-66902014000300011>.
- 268
- 269 15. Neiva VA, Ribeiro MNS, Cartágenes MSS, DF Moraes-Coutinho, Nascimento FRF, Reis AS, et
270 al. Estudos pré-clínicos de atividade glicênica de *Chenopodium ambrosioides* L. e a padronização
271 dos extratos na pesquisa e desenvolvimento de fitoterápicos. *Rev. Ciênc. e Saúde.* 2011; 13: 155-
272 165. Português.
- 273
- 274 16. Pereira PS, Barros LM, Brito AM, Duarte AE, Maia AJ. Uso da *Myracrodruon urundeuva* Allemão
275 (aroeira do sertão) pelos agricultores sem tratamento de doenças. *Rev. Cub. de Plantas Med.* 2014;
276 19 (1): 1-10. Português.
- 277
- 278 17. Ribeiro DA, Macêdo DG, Oliveira LGS, Saraiva ME, Oliveira SF, Souza MMA, et al. Potencial
279 terapêutico e uso de plantas medicinais em uma área de Caatinga no estado do Ceará, nordeste do
280 Brasil. *Rev. Bras. de Pla. Med.* 2014; 16 (4): 912-930. http://dx.doi.org/10.1590/1983-084X/13_059.
281 Português.
- 282
- 283 18. Rodal MJN, Sampaio EVSB, Figueiredo MA. Manual sobre métodos de estudo florístico e
284 fitossociológico - Ecossistema Caatinga. Brasília: Sociedade Botânica do Brasil / Seção Regional de
285 Pernambuco; 1992.
- 286
- 287 19. Rodrigues AP, Andrade LHC. Levantamento etnobotânico das plantas medicinais da comunidade
288 de Inhamã, Pernambuco, Nordeste do Brasil. *Rev. Bras. de Pla. Med.* 2014; 16 (3): 721-730.
289 Português.
- 290
- 291 20. Rodrigues KA, Oliveira LS, Raimundo Neto F, Araújo MP, Gomes DCV. O uso de plantas
292 medicinais para a comunidade da zona norte de Teresina - PI e seus fins terapêuticos. *Rev. Interd.*
293 2017; 10 (4): 77-81. Português.
- 294
- 295 21. Sá RD, Santana ASCO, FCL Silva, Soares LAL, Randaua KP. Análise anatômica e histoquímica
296 de *Dysphania ambrosioides* suportada por microscopia de luz e eletrônica. *Rev. Bras. de Farmac.*
297 2016; 26: 533-543. <http://dx.doi.org/10.1016/j.bjp.2016.05.010>.

298

299 22. Santos ACB, Nunes TS, Coutinho TS, MAP Silva. Uso popular de espécies medicinais da família
300 Verbenaceae no Brasil. Rev. Bras. de Pla. Med. 2015; 17 (4): 980-991. Doi:
301 http://dx.doi.org/10.1590/1983-084X/14_083. Português.

302

303 23. Santos SLDX, Alves RRN, Santos SLDX, Barbosa JAA, Brasileiro TF. Plantas utilizadas como
304 medicinais em uma comunidade rural do semiárido da Paraíba, Nordeste do Brasil. Rev. Bras. de
305 Farm. 2012; 93 (1): 68-79. Português.

306

307 24. Silva CG, Marinho MGV, Lucena MFA, Costa JGM. Levantamento etnobotânico de plantas
308 medicinais em área de Caatinga na comunidade do Sítio Nazaré, município de Milagres, Ceará,
309 Brasil. Rev. Bras. de Pla. Med. 2015; 17 (1): 133-142. http://dx.doi.org/10.1590/1983-084X/12_055.
310 Português.

311

312 25. Silva do Ó, KD, Silva GH, Leite IA. Estudo etnobotânico de plantas medicinais em duas
313 comunidades no estado da Paraíba, Brasil. Biod. 2016; 15 (2): 53-61. Português.

314

315 26. Silva, Alves ACL, Azevedo FR, Marco CA, Santos HR, Alves WS. Efeito larvicida de óleos
316 essenciais de plantas medicinais sobre larvas de Aedes aegypti L. (Diptera: Culicidae). Rev. Verde
317 de Agroec. e Desenv. Sust. 2017; 12 (2): 256-260. <http://dx.doi.org/10.18378/rvads.v12i2.4672>.
318 Português.

319

320 27. Silva, TR. Oliveira FC. Levantamento de plantas medicinais em domicílios do bairro Maracanã,
321 Prudente de Moraes / MG. Rev. Bras. de Ciênc. da Vida. 2017; 5 (5): 1-22. Português.

322

323 28. Siqueira JBV, Ceolin T, Ceolin S, Minuto JC, Oliveira SG, Oliveira ADL. Rating: 0.0 O uso de
324 plantas medicinais por hipertensos e diabéticos de uma estratégia de saúde da família rural. Rev.
325 Cont. & Saúde. 2017; 17 (32): 33-45. <https://doi.org/10.21527/2176-7114.2017.32.33-45>. Português.

326

327 29. Uchida VH. Extração do corante do fruto da castanha (*Terminalia catappa* Linn) e estudos dos
328 seus compostos fenólicos, antocianinas e atividade antioxidante. 2014. 77f. Dissertação (Mestrado
329 em Engenharia Química) - Centro de Tecnologia, Universidade Federal do Rio Grande do Norte,
330 Natal. Português.

331

332 30. Zeni ALB, Parisotto AV, Mattos G, Helena ETS. Utilização de plantas medicinais como remédio
333 caseiro na atenção Primária em Blumenau, Santa Catarina, Brasil. Ciênc. e sanit. 2017; 22 (8): 2703-
334 2712. <https://doi.org/10.1590/1413-81232017228.18892015>. Português.