BOTANY STUDY PROJECT

ETHNO BOTANICAL STUDY OF PLANT

A project report submitted in partial fulfilment of the requirement of

botany course of Palamuru University

during the year 2021-2022

Submitted By

P. RAJU	HTNO.19033006445048
C. LAXMI NARASIMHA	HT.NO.19033006445012
K. SHILPA	HT.NO.19033006445542
B. LAXMI	HT.NO.19033006445006
T. PUSHPA LATHA	HT.NO.19033006445055
C. ANITHA	HTNO.19033006445519

Under the guidance of

Mr. P. SRINIVASULU

DR.BRR GOVERNMENT DEGREE COLLAGE

JADCHERLA-509301, MAHABUBNAGAR DIST

TELANGANA

DECLARATION

We hereby declare that the investigation results incorporated in the present project titled_"Ethno Botanical Study Of Plant" were originally carried out by us under the supervisor of **Dr. P.Srinivasulu** ,Department of botany, **"Dr. BRR Government Collage Jadcharla, Mahabubnagar Dist, Telangana".** No part of this work has been submitted to any other university for the award of Degree.

Date : 27.06.2022

S.NO	NAME OF THE STUDENT	HALL TICKET NO	SIGNATURE
1	P. Raju	19033006445048	P. Raju
2	C. Laxmi narasimha	19033006445012	C. Laxmi Narsimha
3	K. Shilpa	19033006445542	K. Shilpa
4	B. Laxmi	19033006445006	B. Laxmi
5	T. Pushpa latha	19033006445055	T. Pushpalatha

P. SRINIVASULU, M.Sc., B.Ed., NET
Head
Dr. BRR Government College
jadcherla-509301
Mahbubnagar District
Telangana State, Indian.

Mobile: +91 9441084606
Email: sadasivaiahbyalla@gmail.com

CERTIFICATE

This is to certify that the present work titled "Ethno Botanical Study Of Plant" is the bonafide work of P. Raju, C. Laxmi Narasimha, K. Shilpa, B. Laxmi, T. Pushpa latha, C. Anitha under my supervisor. No part of this work has been submitted to any other University for the award of any Degree.

Date: 27.06.2022

Mr. P. SRINIVASULU
Assistant Professor of Botany

1. Introduction

The Rich And Diversified Flora Of India Provides Valuable Storehouse Of Medicinal Plants. The Curative Properties Of Herbs Have Long Been Known And Are Documented In Ancient Manuscripts Such As In Rig Veda, Garuda Purana And Agni Purana. These Treatises Focus On The Potential Of Plants And Herbs To Cure Human Ailments And Diseases. Scientists Are Now Documenting Various Ethnoveterinary Practices Based On Plant Drugs. The Plant Wealth Of India Also Offers The People Who Tend Livestock A Rich Reservoir In Treating The Diseases And Ailments Of The Animals. Seventy Six Percent Population Of India Is Predominantly Ruralin Indian Agriculture, Livestock Plays A Key Role In The Farmers Life, They Provide Farm Power, Rural Transport, Manure, Fuel, Milk And Meat, But Also A Major Role In Rural Economy By Providing Income And Employment To The Small Hold Farmers And Other Weaker Sections Of The Society. The Indigenous Knowledge Of The Veterinary Health Care System Acquired By Traditional Herbal Healers And Elderly Learned Farmers And Is Orally Transformed From One Generation To Other. It Is Less Systematic And Less Formalized And Is Usually Transferred By Word Of Mouth Rather Than In Writing[. Ethnoveterinary Medicine, Deal With Traditional Animal Health Care Which Encompasses The Knowledge, Skills, Methods, Practices And Beliefs About Animal Health Care. Ethnoveterinary Medicine Is Developed By Farmers In Fields And Barns, Rather Than By Scientists In Laboratories And Clinics. Ethnoveterinary Medicine Often Provides Cheaper Options Than Comparable Western Drugs And The Products Are Locally Available And More Easily Accessible. In The Face Of These And Other Factors, There Is Increasing Interest In The Field Of Ethnoveterinary Research And Development

The Possible Benefit Of Plant Derived Medications Constitutes A Rewarding Area Of Research, Particularly In Countries Such As India Which Have A Rich Biodiversity Of Natural Plant Resources Coupled With A High Prevalence And Variety Of Infectious Diseases. The Characteristics, Sophistication, And Intensity Of The Ethnoveterinary Systems Differ Greatly Among Individuals, Societies, And Regions. Hence, Documentation Of Ethnoveterinary Medicine From Regions Having A Rich Ethnographic And Biodiversity Setting Would Be Of Great Significance. Traditional Knowledge Of Ethnoveterinary Medicinal Plants And Their Use By Indigenous Cultures Are Not Only Useful For Conservation Of Cultural Traditions And Biodiversity But Also For Community Healthcare And Drug Development In The Present And Futuredocumentation Of Indigenous Knowledge And Evaluation Of The Use Of Plants For A Variety Of Purposes Assume Greater Significance, Not Just To Retain It, But Also To Keep It Alive And Make It Available For Future Use Because Of Rapid Socio-Economic And Cultural Changes That Are Taking Place Across The Traditional Community Of The Region. Keeping This In View, The Present Studies Was Initiated, With An Aim To Identify Knowledgeable Resource Person *I.E.* Elderly Learned Farmers And Experienced Traditional Healers And Document Their Knowledge Of On The Utilization Of Ethnoveterinary Medicinal Plants In Tikamgarh District Of Bundelkhand Region, India.

The Mediterranean Area, Which Possesses A Unique Ecology With Various Natural Features, Has Been Inhabited For Millennia And Is Strongly Influenced By Human–Nature Relationships. The Tradition Of Using Wild Plants For Medicinal Reasons Continues In Today's Small Rural Communities, Especially Among Societies That Maintain The Cultural Bridge Between Past And Present. While The Recently Developed Fast Communication Technologies Connect People In Seconds And Spread Data Across Vast Distances, Traditional Knowledge Still Holds Importance in daily life. Over the past few decades, efforts to preserve traditional knowledge have escalated around the world, especially in Europe and Mediterranean countries.

Besides being home to many plants in floristic terms, Turkey is rich in traditional herbal medicine, in addition to its cultural, historical and geographical heritage Ethnobotanical studies show that traditional knowledge of medicinal plants still exists in the Mediterranean Region, especially among elderly). Many scientists have focused on such studies and governmental foundations have increased financial support of this kind of research. The has organized studies across the country in the scope of the "Recording of Traditional Knowledge Based on Biological Diversity Project."

The Taurus Mountains are one of the highlights of the Mediterranean Region with a rich plant diversity Mersin has previously been the subject of this kind of scientific research, such as a study on herbal drugs on herbal markets in Mersin, which was conducted throughout the entire province. Thorough documentation of the traditional use of medicinal plants across the entirety of Mersin province is not presently available. Three districts and some specific areas of the province have been investigated from an ethnobotanical perspective. Another study investigates a small section of the region however, as one of the largest cities in Turkey, Mersin needs further investigation from an ethnobotanical perspective.

We aim to record the traditional usage of medicinal plants by conducting an ethnobiological study in Mersin that covers various different altitudes and areas representing all ten of its districts.

To this end, we compare the gathered ethnomedicinal data with previous findings from the Balkan and Mediterranean regions. We highlight new plants and usages from the region for future phytochemical and phytopharmacological studies. With further cultivation studies, these findings may demonstrate the potential for economic development for the benefit of local communities.

Plant resources have remained an integral part of human society throughout history. After fulfilling the primary needs like food and shelter, man has sought for a suitable remedy among plants for curing various diseases Traditional medicine is defined as indigenous medicine that is used to maintain health and to prevent, diagnose, and treat physical and mental illnesses differently from allopathic medicine based on theories, beliefs, and experiences. Traditional medicine has been used for thousands of years with great contributions made by practitioners to human health, particularly as primary health care providers at the community level and has maintained its popularity worldwide According to Sofowora about 60-85% of the population in every country of the developing world has to rely on traditional medicine. The practice of traditional medicine is widespread in China, India, Japan, Pakistan, Sri Lanka, Thailand, and Korea In China, traditional medicine accounts for around 40% of all health care delivered and is used to treat roughly 200 million patients annually

In Ethiopia, plants have been used as a source of medicine from time immemorial to treat different ailments due to its long history, and traditional medicine has in fact become an integral part of culture These traditional medical practices and remedies are recorded in oral tradition and in early medico-religious manuscripts and traditional pharmacopoeias, which, according to the estimates of some historians, date back to the 15th century AD

Ethiopia possesses about 6,000 species of vascular plants which could be due to its different topography and climatic conditions About 80% of human population and 90% of livestock rely on traditional medicine in this country Traditional medicine of Ethiopia is commonly used to treat various human and livestock ailments. Traditional healers known by different

names in different parts of the country are the primary players in the curative aspect of traditional medicine practice Thus, this study was initiated to document the traditional medicinal plants knowledge accumulated by local communities of Berbere district.

Plant resources have remained an integral part of human society throughout history. After fulfilling the primary needs like food and shelter, man has sought for a suitable remedy among plants for curing various diseases

Traditional medicine is defined as indigenous medicine that is used to maintain health and to prevent, diagnose, and treat physical and mental illnesses differently from allopathic medicine based on theories, beliefs, and experiences Traditional medicine has been used for thousands of years with great contributions made by practitioners to human health, particularly as primary health care providers at the community level and has maintained its popularity worldwide. According to Sofowora about 60-85% of the population in every country of the developing world has to rely on traditional medicine. The practice of traditional medicine is widespread in China, India, Japan, Pakistan, Sri Lanka, Thailand, and Korea]. In China, traditional medicine accounts for around 40% of all health care delivered and is used to treat roughly 200 million patients annually

In Ethiopia, plants have been used as a source of medicine from time immemorial to treat different ailments due to its long history, and traditional medicine has in fact become an integral part of culture These traditional medical practices and remedies are recorded in oral tradition and in early medico-religious manuscripts and traditional pharmacopoeias, which, according to the estimates of some historians, date back to the 15th century AD

Ethiopia possesses about 6,000 species of vascular plants which could be due to its different topography and climatic conditions About 80% of human population and 90% of livestock rely on traditional medicine in this countryTraditional medicine of Ethiopia is commonly used to treat various human and livestock ailments. Traditional healers known by different names in different parts of the country are the primary players in the curative aspect of traditional medicine practice Thus, this study was initiated to document the traditional medicinal plants knowledge accumulated by local communities of Berbere district.

People of all cultures have always depended on plants for their primary needs (food, shelter, warmth, medicines, etc.), and have naturally learned diverse applications of plants. In the course of nomadic roaming, this knowledge was exchanged with neighbouring tribes, friends and foe, and was gradually expanded upon. Thus, plant knowledge has been passed around the world since the beginning of time, and frequently, the actual plants themselves have spread along as well. The investigation of plants and their uses is one of the most primary human concerns and has been practiced by all cultures since generations, though it wasn't called 'Ethnobotany'. The term "Ethnobotany" was coined by US botanist John William Harshberger in. Ethnobotany is coined with two terms i.e., "ethno" - study of people and "botany" - study of plants; per se it is the study of the relationship between plants and people. It is considered as a branch of ethnobiology and is a multidisciplinary science defined as the interaction between plants and people. The relationship between plants and human cultures is not limited to the use of plants for food, clothing and shelter but also includes their use for religious ceremonies, ornamentation and health care (Schulteshe focus of ethnobotany is on how plants have been or are used, managed and perceived in human societies and includes plants used for food, medicine, divination, cosmetics, dyeing, textiles, for building, tools, currency, clothing, rituals, social life and music. The relationship between people and plants has always been profoundly important. Plants play an important role in every aspect of our lives and without them life is not possible. Plants not only regulate the concentration of gases in the air,

Plant resources have remained an integral part of human society throughout history. After fulfilling the primary needs like food and shelter, man has sought for a suitable remedy among plants for curing various diseases Traditional medicine is defined as indigenous medicine that is used to maintain health and to prevent, diagnose, and treat physical and mental illnesses differently from allopathic medicine based on theories, beliefs, and experiences Traditional medicine has been used for thousands of years with great contributions made by practitioners to human health, particularly as primary health care providers at the community level and has maintained its popularity worldwide According to Sofowora about 60-85% of the population in every country of the developing world has to rely on traditional medicine. The practice of traditional medicine is widespread in China, India, Japan, Pakistan, Sri Lanka, Thailand, and Korea In China, traditional medicine accounts for around 40% of all health care delivered and is used to treat roughly 200 million patients annually

In Ethiopia, plants have been used as a source of medicine from time immemorial to treat different ailments due to its long history, and traditional medicine has in fact become an integral part of culture These traditional medical practices and remedies are recorded in oral tradition and in early medico-religious manuscripts and traditional pharmacopoeias, which, according to the estimates of some historians, date back to the AD Ethiopia possesses about 6,000 species of vascular plants which could be due to its different topography and climatic conditions About 80% of human population and 90% of livestock rely on traditional medicine in this countryitionine of Ethiopia is commonly used to treat various human and livestock ailments. Traditional healers known by different names in different parts of the country are the primary players in the curative aspect of traditional medicine practice Thus, this study was initiated to document the traditional medicinal plants knowledge accumulated by local communities of Berbere district.

2.Abstract

Aim of the study

This paper aimed to present a quantitative review of information on Mapuche ethnobotany published for Argentina and Chile in the period.

Materials and methods

Sixteen ethnobotanical articles were studied quantitatively by utilizing ethnobotanical indices, non-parametric and multivariate tests.

This paper reports an ethnobotanical study that focused on the traditional medicinal plants used by local communities to treat human diseases. Ethnobotanical study of medicinal plants was carried out from June to September in Berbere district of Oromia region, Ethiopia. The study focused on documentation of medicinal plants used to treat various human diseases in the study area. Ethnobotanical data were collected using semistructured interviews, group discussion, guided field walks, and observations with participants. Preference ranking, paired comparison, direct matrix ranking, and informant consensus factors were used to analyze the importance of some plant species. A total of 70 medicinal plants, distributed in 56 genera and 46 families, were collected and identified. Plant family with the highest medicinal plants in the study area used for various diseases treatment was Euphorbiaceae (11.4%). The result of growth form analysis showed that shrubs constituted the highest proportion of medicinal plants (48.6%). Roots, 43 (44.8%), were the most frequently utilized plant parts for preparation of traditional herbal medicines. Crushing was a widely used mode of preparation of traditional remedies where oral administration (37.5%) was the dominant route. The highest informants consensus factor values were linked to gonorrhea and syphilis disease (0.95); the lowest was linked with external parasites and wound Local people in the study area possess traditional knowledge of medicinal plants to treat various human ailments; however, agricultural expansion and disinterest of young generation became the major threat to medicinal plants. It is, therefore, necessary to preserve this indigenous knowledge on traditional medicines by proper documentation, identification of plant species used, and herbal preparation. To save medicinal plants from further loss, involving local communities in cultivation of the most utilized medicinal plants is recommended.

This work provides the ethnobotanical data concerning the traditional use of medicinal plants in Macedonia region which has, up to now, been poorly investigated. The aim of the present study was to collect, analyze, and evaluate information on the use of medicinal plants among different population groups living in Central Macedonia. The study was carried out in the area of two small cities, Edessa and Naoussa, and nearby villages. The ethnobotanical data were gathered through extensive and semistructured interviews. The informants belonged to different population groups living in the study areas and were involved, at least partially, in agriculture. Together with detailed reports on each species, data were also summarized by some indices, such as Fidelity Level and Informant Consensus Factor (). A group of 96 informants was interviewed and 87 plant taxa with medicinal uses were cited. Medicinal plants are used to treat a wide range of diseases, in particular ailments of the respiratory tract and skin disorders. The importance of the traditional use of plants to cure and prevent common and some uncommon diseases had been highlighted. About 55% of medicinal plants mentioned by the informants had been previously reported to be sold in Thessaloniki herbal market as traditional remedies. Medicinal uses of some endemic taxa had been reported, e.g., *Satureja montana* subsp. *macedonica*, a member of the *S. montana* group restricted to Northern Central Greece, *Origanum dictamnus*, an endemic species of Crete, and six Balkan endemics, i.e., *Achillea holosericea, Digitalis lanata, Helleborus odorus* subsp. *cyclophyllus, Sideritis scardica, Thymus sibthorpii*, and *Verbascum longifolium*. Several differences in Traditional Ethnobotanical Knowledge were observed in relation to social and cultural components of the population. Only 7 species were commonly reported by all population groups, whereas 30 out of 87 taxa

(34%) were exclusively mentioned by a single group. All groups are incorporated in the local society and do not identify themselves as members of different ethnic groups, although they try to preserve their distinctiveness by keeping their traditions and dialects. Nevertheless, our data show that the knowledge regarding the medicinal plant use was rarely accompanied by preservation of linguistic diversity concerning the plant names. This work contributes to improve the knowledge on the traditional use of plants in the folk medicine of a region like Central Macedonia where different population groups live together, partially maintaining their traditions. A part of data of this paper has been presented as posted at 112° Congress of Italian Botanical Society Parma

Ethnopharmacological relevance

The indigenous knowledge of medicinal plants is important part of primary health care system in almost every society, especially the far–flung areas. These areas, one of the last storehouses of traditional knowledge are under the constant threat of losing this valuable information as it moves from one generation to another through word of mouth. Modernization, migration, education, and changing socio–economic status of people also affect the perpetuality of traditional knowledge. Therefore, time-to-time updation of information regarding the ethnomedicinal plants must be carried out so that any addition to the traditional knowledge is recorded and further phytochemical and pharmacological studies may be conducted for developing new drugs.

Background

The Mulam are an ethnic group native to Guangxi, and nearly 80% of the Mulam population lives in Luocheng Mulam Autonomous County, northern Guangxi, southern China. They have accumulated rich medicinal folk knowledge through practice and experience in their long-term struggles with disease and the harsh natural environment. However, their traditional medicinal knowledge is threatened due to a lack of written records, conservative inheritance patterns, and rapid economic development. Therefore, the investigation and documentation of medicinal plants and their associated indigenous wisdom are necessary.

People with intellectual disabilities experience substantial health inequities compared, with the general population. Many secondary conditions and lifestyle related health problems could be, prevented with adequate health promotion. The aim of this structured review is to provide insight into, the main characteristics of published health promotion intervention studies for people with and, in, doing so, to identify best practice and knowledge gaps. Relevant studies were identified through a, structured literature search of multiple electronic databases, the search strategy covered health promotion and intellectual disabilities for available papers, published between February 2 and In totalstudies were included and analyzed. Overall, studies were diverse and explored a variety of health issues. Papers included a variety of participants and intervention approaches. With regard to quality, many studies, failed to report how they recruited their participants, and there were substantial challenges identified, by authors in relation to recruitment, implementation of interventions, and the selection of outcome, measures used as well as the usability of measures themselves. Our findings suggest that this field, experiences methodological weaknesses and inconsistencies that make it difficult to compare and, contrast results. Theoretically driven studies that take into account the views and expectations of, participants themselves are needed, as is research that investigates the reliability and validity of, outcome measures for the ID population. Collaboration with mainstream health promotion research is, critical.

This study explores the research paradigms and topics of MOOCs to gain a deeper understanding of the MOOC phenomenon by reviewing 146 empirical studies of MOOCs published from October to November. The results show thatmost studies used quantitative research methods followed by mixed research methods and qualitative research methodsthe most frequently adopted data collection method was survey, followed by platform database, interviews, and discussion forum, more than half of the collected studies used at least two

data collection methods such as survey and interview the majority of researchers used descriptive statistics to analyze data, followed by inferential statistics and content analysis, and the research focus was mainly on students, followed by design-focused, context and impact-focused, and instructor-focused. Among the foci of that research, learner retention and motivation were the most mentioned, followed by learner experience and satisfaction, assessment, and instructional design.

METHODOLOGY:

The study was conducted in a village known as *Sítio Carão*, located in the municipality of Altinho, in the state of Pernambuco, Brazil . The village selected for the study is situated 16 km from downtown Altinho, which is located 163.1 km from the state's capital. At the time of this study, the population of the village was 189 inhabitants (112 were over 18 years of age, consisting of 67 women and 45 men); the local language is Portuguese. The village has an elementary school to complete their studies, the children travel to downtown Altinho; there is also a Catholic church and a Protestant church

The central point of the village is located at coordinates 08°35'13.5"S and 36°05'34.6"W.

The economy is sustained by subsistence farming, mainly corn and beans. Livestock farming is restricted to cattle, goats, poultry and a small number of pigs; this type of farming is also responsible for supplementing the food supply and generating family income

The vegetation consists of *Caatinga*, which is composed of trees that have a maximum height of just over 10 m, with branchy saplings and shrubs that are more abundant. In general, the density of

the trees with a trunk diameter more than 3 cm is between 1000 and 3000 per hectare, with basal areas between 10 m^2 ha^{-1} and 30 m^2 ha^{-1} and biomass between 20 $Mg.ha^{-1}$ and 80 $Mg.ha^{-1}$ The climate is dry and the soil is mainly shallow. The area includes the *Sertão* and *Agreste* subzones, the latter occurring in Altinho. As is typical of *Caatinga* vegetation, deciduous, thorny species, and Cactaceae and Bromeliaceae are found in large numbers in the area

The main resources for the village of *Sítio Carão* is the adjacent *Serra do Letreiro* landform, which provides space for agriculture, cattle rearing and the gathering of plants and animals

Data collection

For the purpose of this study, three methods were selected: a semi-structured interview with the entire adult population, which requires more time to collect ethnobotanical information; an inventory interview, which requires less time to collect ethnobotanical data but is associated with a previously compiled inventory of vegetation; and a participatory workshop using visual stimuli, which requires the least amount of time to collect

the trees with a trunk diameter more than 3 cm is between 1000 and 3000 per hectare, with basal areas between 10 m^2 ha^{-1} and 30 m^2 ha^{-1} and biomass between 20 $Mg.ha^{-1}$ and 80 $Mg.ha^{-1}$
The climate is dry and the soil is mainly shallow. The area includes the *Sertão* and *Agreste* subzones, the latter occurring in Altinho. As is typical of *Caatinga* vegetation, deciduous, thorny species, and Cactaceae and Bromeliaceae are found in large numbers in the area

The main resources for the village of *Sítio Carão* is the adjacent *Serra do Letreiro* landform, which provides space for agriculture, cattle rearing and the gathering of plants and animals

Data collection

For the purpose of this study, three methods were selected: a semi-structured interview with the entire adult population, which requires more time to collect ethnobotanical information; an inventory interview, which requires less time to collect ethnobotanical data but is associated with a previously compiled inventory of vegetation; and a participatory workshop using visual stimuli, which requires the least amount of time to collect

ethnobotanical data and which is also associated with a pre-existing inventory of vegetation from which to select the species to be used as visual stimuli.

To assess whether plant recognition is related to ecological apparency, i.e., the structure of the vegetation, or some characteristic related to the population structure of the species, specimens were correlated with the phytosociological parameters obtained from two forms of vegetation sampling carried out in two areas with distinct histories of disturbance, as described below.

To select the plant species presented as visual stimuli (Figure 1), one sample of each of the 62 plant species recorded during a phytosociological inventory was chosen. This field research and inventory were carried out between May 2008 and May 2010 [_]. A criterion for the selected specimens was healthy adult plants, thus the specimens would have the largest possible number of characteristics inherent to the plant structure. A floristic list was prepared using the APG II system, and the names were confirmed from the list of

species of the Brazilian flora compiled by the Botanical Garden of Rio de Janeiro [34].

RESULT:

R

S No	Name of the Plant	Name of the elements	Part Used	Mehod of Usage	Name of the Ethano Botanical Name
1	Alovera	Fever, Diabetics, Cancer, Hminity, Modulations Aide and vires skin diseases	Leaves and Jel	Prepare the Alovera to used fresh alovera leaf from a plant first cut of one of the outer leafs from the Bass of Plant make the Jel	NIRMALAMMA
2	Thulasi	Diarea, Fever	Leafes and Seeds	You have to do is toss equal protions of neem and thulasi leafs a long with to close and grand them after adding litle water to make a thick paste after user	NILIMA
3	Ashwagandha	Cacers, Alzheimer's, anziety	Roots	Tonic, Aphrodisia, Withanoloids and withanins	Venkataiah
4	Neem Seed	Fever, Diabetes, liver Problems, Gum Disease	Seed, Leaf of plup	Insecticid, Azadirachtin Fatty oil	Srinivasulu
5	Uthareni	Asthma	Root, Leaves	Ayurveda Dental Health, Dental Care	Sudakar
6	Gannery	Diabetes, Cancer, Sorethroat, Cought	Seed, leaf	oleander if you have an electrolyte imblances	Laxmamma
7	Brahmi	Skin Cream Whight	Leaf, Plant	Paste	Balya
8	Black Plum, Java plum	Diarrahea, Jaundice, Strok, Plies	Seed	Fruit, Frute	Ushaya
9	Alstonia Scholaris	Fever, Malaria, pain and Diabetes	Flower, Plants	Flower with Paste	Shantaiah
10	Jamun	Diabetes	Fruit, Seed, bark	Fruit is Juse	Mallaya
11	Solanum Aculeastum	Diarrhea and Femal in Fertility	Leaves and Fruits	Paste	Anathamma

S No	Name of the Plant	Name of the elements	Part Used	Mehod of Usage	Name of the Ethano Botanical Name
12	Gooouropeh	Emolient, sore throat antibucteriat	Leaves, flowers	Paste	Balaswamy
13	Mort	Skin Discords, Good Hair	Leaves	Paste	Keshav
14	Sorya	Burn wound anti-eczema, antimicrobial	Root	Oil	Seethamma
15	Thippa Teega	Timma Teega is mostly helpful to control blood sugar level in Diabetes it also helps to check in fever like Malaria	Leaves and stem	Leaves take in 10 and mixed in the water and	Ramulu
16	Vasaka	Cough and cold	Leaf	Leaves of vasaka are bolled with salt and small a mant of sugar and half cup of the juice is consumed thrice a day for relief in asthmotic problems	Guru Goud
17	Java Plum	Jumun keeps the Heart Healthy Jamun Helps with weight loss diabetes Manage ment	Fruit	Fruit Jamun can be consumed in fruit from, mode as a juice or even used in powder form it can be used in many healthy	Govindhu
18	Rose	Face cream and flower eat	flower	Flower with paste and cream leaves in paste by used	Jangaiah
19	Ginger	Cold, Cough, Skin Diseases, High BP	Ginger	Ginger Paste is a fast, easy and storege	Veeraiah
20	Hibiscus Rosa	This flower along with its leaves is used in so many ways to fitht hair fall and hair growth	Leaves and flowers	Leaves Pste in fine paste and apply in hair and flower 5 take and heat about a cup coconut oil and in the apply to hair in this week	Anjalamma
21	Nala Umintha	Hair Fall, Hair Groowth	Leaves Useaged	Paste	Bheemamma

Methods used in ethnobotanical studies for accessing local knowledge about native plants

The participatory workshop resulted in a greater number of errors in the identification of plants, which is related to the biological material being presented outside of the original plant environment. By using exsiccates and photographs as visual stimuli, plant naming and identification become more problematic because the botanical and ecological details are absent Photographs in particular are difficult because the informant does not have access to the tactile and olfactory information necessary for the accurate identification of plants]. The recognition of plants through pictures can be improved if an object of known size or dimension is placed beside the biological material before photographing. Another feature that can be useful in the recognition of species is making a cut on the plant's bark, a procedure used by many people in the field to aid in the recognition of plants.

Therefore, in situations in which one wishes to know the identity of a plant, the recommendation is to pay attention to the photographs and exsiccates used as visual stimuli. However, if the plant identity has already been established, these tools can be effective for obtaining more information about the plant, especially in cases in which the community member is elderly or would have some difficulty in being relocated to the field Unlike the use of photographs and exsiccates in participatory workshops, the inventory interview has the same advantage as the guided tour reported by Medeiros et althey both provide for the observation of the plant in its unique biological and ecological context. The inventory interview included more citations of species recorded in the vegetation because ecological characteristics are of great importance in the recognition of plant species by parataxonomists The only limitation would be the difficulty of relocating elderly informants or those with limited mobility to the field.

Consequently, the involvement of parataxonomists is of great importance in the diagnostic process of local flora. Janzen and Hallwachs argue that despite their lack of formal higher education, parataxonomists have shown themselves to be a group of great interest because they are able to absorb and work around the complex factors related to biodiversity, providing accurate inventory at levels similar or superior to those provided by undergraduate and postgraduate students. Jinxiu et al. compared the recognition of plant species by taxonomists and parataxonomists on a given field over a year and found that the parataxonomists were able to recognize more plant species than the taxonomists. Cunha and Albuquerque found that local informants recognized more than 95% of the plant species presented to them.

Among the limitations of involving parataxonomists would be the fact that they recognize only those species within their cultural field or those that they have encountered through their personal experiences Thus, the involvement of parataxonomists in rapid assessments is recommended, especially on occasions in which there is a pre-existing inventory of species found in the field.

The identification of the plants recognized by informants is vital to avoiding the distortion of future references. This would be an advantage of presenting the biological material in its original context, as the researcher is able to ensure the identity of the plant cited. It is important for the researchers to pay close attention when conducting in-home interviews, especially when no pre-interview research has been performed because one botanical species can be associated with several names and because several species may have the same popular name

By comparing the plants recorded at *Sitio Carão* with those from other regions, it has been found, for example, that *Rhamnidium molle* Reissek is known as *sassafras*; in contrast, the Fulniô Indians in the Águas Belas municipality in Pernambuco recognize the species *Ditaxis malpighiacea* (Ule) Pax e K. Hoffm as *sassafras Allophylus quercifolius* (Mart.) Rasdlk. is recognized as *estralador* in the community of *Riachão de Malhada de Pedra*, Caruaru municipality in Pernambuco though *estralador* is a species of Myrtaceae for the residents of *Sitio Carão*. Thus, the validity or consistency of popular names will be limited to each location.

In this study, the high richness of species exclusively recorded in semi-structured interviews cannot be interpreted as an advantage of this technique because the other methods used in this comparison (inventory interview and participatory workshop) were dependent on the diversity recorded in vegetation sampling. Thus, the sample size of the vegetation inventoried in this study (0.8 ha) may have been insufficient to register a greater richness of native species. By consequence, the informants who participated in the participatory workshop and inventory interview may have been introduced to a lower species richness that is not representative of what they actually know. Added to this, the time effort devoted to semi-structured interviews was higher than in other methods.

Although the inventory interview requires more time for execution, it is the most recommended method because it not only enables a more complete record of the species occurring in the region but also ensures more accurate identifications. For researchers to reduce the amount of time it takes to conduct a vegetation inventory, they may choose to use the point-centered quarter method because it requires less time in its application and fewer workers in the field

Another useful recommendation for selecting the locations of units to be used for vegetation inventory is the deployment and distribution of the units in landscapes with different histories of disturbance to accommodate the largest possible number of environments and plant species

Many of the species identified using these methods are among the least abundant or have a smaller IV and an elevated UV. This is due to the cultural prominence of the species or to the recognition of these species in the active memories of the participants, and they are therefore more frequently cited or remembered. This prominence can be related to the well-known presence of these plants, which is not necessarily related to their abundance, their stature or size their inner properties (e.g., medicinal properties due to chemical composition), or cultural preferences, such as fashion or tastes. Thus,

species with low abundance or IV may have a higher UV due to being cited more often. For example, *L. ferrea* (Pau-ferro), *C. speciosa* (Barriguda) and *E. velutina* (Mulungu) have low values of RD and IV (Table 2); however because these are large species, they are better known in the community, which facilitates their recognition, recall and utility and consequently raises their UV.

The relationship between the vegetation structure and the use value of plant species still lacks a clear-cut pattern in the scientific literature. Although the purpose of this study was to show the influence of methodological choice in studies about ecological apparency for more clarification about the ecological apparency hypothesis see [48], it was realized that this relationship was not significant in the community of Sítio Carão and that insignificant relationship is independent of the ecological tool used or the level of disturbance of the sample surveyed area. However, some studies have identified significant and positive relationships between use and availability of plant resources A recent example can be seen in Gueze et al. where in a random vegetation sample by plots the authors found significant relationships between the use value and the ecological importance of tree species in the Bolivian Amazon, providing further support to the hypothesis that people attach more uses to the species that are more apparent in the forest.

The use of semi-structured interviews allows the recognition of the most prominent species of a particular cultural field and these species are cited because they are present in a person's active memory. Incorporating the semi-structured interview as a tool for the rapid assessment of diversity is an excellent method for species inventories if there is no pre-existing inventory of vegetation, which also allows UV calculation. The use of a pre-existing vegetation inventory may allow for easier recognition of the species, as it would provide availability to previously recognized vegetation.

For some researchers, the structural importance of certain taxa was correlated with their UV [13], whereas other groups have concluded that not all species are used in accordance with high values of phytosociological parameters According to the results observed in this study, these differences may be related to the location and methods chosen for sampling vegetation. Galeano used transects extended over 10 km, and Tacher et al. [24] used secondary data of species recorded in Mexico. To select areas with the largest number of species, the researcher should select sites that are well preserved. The point-centered quarter method is a sampling tool that is useful in this regard, in addition to being faster than the sample plot method

Discussion

Methods used in ethnobotanical studies for accessing local knowledge about native plants

The participatory workshop resulted in a greater number of errors in the identification of plants, which is related to the biological material being presented outside of the original plant environment. By using exsiccates and photographs as visual stimuli, plant naming and identification become more problematic because the botanical and ecological details are absent Photographs in particular are difficult because the informant does not have access to the tactile and olfactory information necessary for the accurate identification of plants. The recognition of plants through pictures can be improved if an object of known size or dimension is placed beside the biological material before photographing. Another feature that can be useful in the recognition of species is making a cut on the plant's bark, a procedure used by many people in the field to aid in the recognition of plants.

Therefore, in situations in which one wishes to know the identity of a plant, the recommendation is to pay attention to the photographs and exsiccates used as visual stimuli. However, if the plant identity has already been established, these tools can be effective for obtaining more information about the plant, especially in cases in which the community member is elderly or would have some difficulty in being relocated to the field Unlike the use of photographs and exsiccates in participatory workshops, the inventory interview has the same advantage as the guided tour reported by Medeiros et al. they both provide for the observation of the plant in its unique biological and ecological context. The inventory interview included more citations of species recorded in the vegetation because ecological characteristics are of great importance in the recognition of plant species by parataxonomists The only limitation would be the difficulty of relocating elderly informants or those with limited mobility to the field.

Consequently, the involvement of parataxonomists is of great importance in the diagnostic process of local flora. Janzen and Hallwachs argue that despite their lack of formal higher education, parataxonomists have shown themselves to be a group of great interest because they are able to absorb and work around the complex factors related to biodiversity, providing accurate inventory at levels similar or superior to those provided by undergraduate and postgraduate students. Jinxiu et al.] compared the recognition of plant species by taxonomists and parataxonomists on a given field over a year and found that the parataxonomists were able to recognize more plant species than the taxonomists. Cunha and Albuquerque] found that local informants recognized more than 95% of the plant species presented to them.

Among the limitations of involving parataxonomists would be the fact that they recognize only those species within their cultural field or those that they have encountered through their personal experiences]. Thus, the involvement of

parataxonomists in rapid assessments is recommended, especially on occasions in which there is a pre-existing inventory of species found in the field.

The identification of the plants recognized by informants is vital to avoiding the distortion of future references. This would be an advantage of presenting the biological material in its original context, as the researcher is able to ensure the identity of the plant cited. It is important for the researchers to pay close attention when conducting in-home interviews, especially when no pre-interview research has been performed because one botanical species can be associated with several names and because several species may have the same popular name By comparing the plants recorded at *Sitio Carão* with those from other regions, it has been found, for example, that *Rhamnidium molle* Reissek is known as *sassafras*; in contrast, the Fulniô Indians in the Águas Belas municipality in Pernambuco recognize the species *Ditaxis malpighiacea* (Ule) Pax e K. Hoffm as *sassafras* . *Allophylus quercifolius* (Mart.) Rasdlk. is recognized as *estralador* in the community of *Riachão de Malhada de Pedra*, Caruaru municipality in Pernambuco though *estralador* is a species of Myrtaceae for the residents of *Sitio Carão*. Thus, the validity or consistency of popular names will be limited to each location.

In this study, the high richness of species exclusively recorded in semi-structured interviews cannot be interpreted as an advantage of this technique because the other methods used in this comparison (inventory interview and participatory workshop) were dependent on the diversity recorded in vegetation sampling. Thus, the sample size of the vegetation inventoried in this study (0.8 ha) may have been insufficient to register a greater richness of native species. By consequence, the informants who participated in the participatory workshop and inventory interview may have been introduced to a lower species richness that is not representative of what they actually know. Added to this, the time effort devoted to semi-structured interviews was higher than in other methods.

Although the inventory interview requires more time for execution, it is the most recommended method because it not only enables a more complete record of the species occurring in the region but also ensures more accurate identifications. For researchers to reduce the amount of time it takes to conduct a vegetation inventory, they may choose to use the point-centered quarter method because it requires less time in its application and fewer workers in the field Another useful recommendation for selecting the locations of units to be used for vegetation inventory is the deployment and distribution of the units in landscapes with different histories of disturbance to accommodate the largest possible number of environments and plant species

Many of the species identified using these methods are among the least abundant or have a smaller IV and an elevated UV. This is due to the cultural prominence of the species or to the recognition of these species in the active memories of the participants, and they are therefore more frequently cited or remembered. This prominence can be related to the well-known presence of these plants, which is not necessarily related to their abundance, their stature or size], their inner properties (e.g., medicinal properties due to chemical composition), or cultural preferences, such as fashion or tastes. Thus,

species with low abundance or IV may have a higher UV due to being cited more often. For example, *L. ferrea* (Pau-ferro), *C. speciosa* (Barriguda) and *E. velutina* (Mulungu) have low values of RD and IV however because these are large species, they are better known in the community, which facilitates their recognition, recall and utility and consequently raises their UV.

The relationship between the vegetation structure and the use value of plant species still lacks a clear-cut pattern in the scientific literature. Although the purpose of this study was to show the influence of methodological choice in studies about ecological apparency for more clarification about the ecological apparency hypothesis see it was realized that this relationship was not significant in the community of Sítio Carão and that insignificant relationship is independent of the ecological tool used or the level of disturbance of the sample surveyed area. However, some studies have identified significant and positive relationships between use and availability of plant resources A recent example can be seen in Gueze et alwhere in a random vegetation sample by plots the authors found significant relationships between the use value and the ecological importance of tree species in the Bolivian Amazon, providing further support to the hypothesis that people attach more uses to the species that are more apparent in the forest.

The use of semi-structured interviews allows the recognition of the most prominent species of a particular cultural field and these species are cited because they are present in a person's active memory. Incorporating the semi-structured interview as a tool for the rapid assessment of diversity is an excellent method for species inventories if there is no pre-existing inventory of vegetation, which also allows UV calculation. The use of a pre-existing vegetation inventory may allow for easier recognition of the species, as it would provide availability to previously recognized vegetation.

For some researchers, the structural importance of certain taxa was correlated with their UV], whereas other groups have concluded that not all species are used in accordance with high values of phytosociological parameters According to the results observed in this study, these differences may be related to the location and methods chosen for sampling vegetation. Galeano] used transects extended over 10 km, and Tacher et al. used secondary data of species recorded in Mexico. To select areas with the largest number of species, the researcher should select sites that are well preserved. The point-centered quarter method is a sampling tool that is useful in this regard, in addition to being faster than the sample plot method

Conclusion:

Ethno botany is not the only avenue for new drug discovery ,nor the only source of models for conservation, but the body of knowledge it represents is founded on long term experience with both subjects.

The divisions created by expanding economies and advancing technologies have served to separate the demand for natural products or traditional knowledge from the protection of their sources. There is still so little known about biological diversity and the chemical activity it contains, hence random or rational screening will continue to uncover new species and new compounds. For the same reason, the magnitude of what remains unknown.

The debate over intellectual property rights and the assignment of royalties have all helped focus global attention on the conservation of biological diversity and economic development as started previously, it is not a coincidence that the areas of greatest biological diversity are most often home to endangered indigenous cultures.

These traditions links between people, habitats and the species they contain have served to transmit information and protect species for thousands of years.

A glance at the strategies used in both commercial and academic drug discovery programs indicate that in the past decade the etho-directed approach is occupying in an expanding niche in the field of new drug development and can contribute significantly to the creation of effective conservation initiatives in both indigenous and industrial cultures.