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RESEARCH ARTICLE

DOCUMENTATION AND ETHNOBOTANICAL SURVEY OF MEDICINAL PLANTS IN VALASAMALAI HILLS, THIRUVANNAMALAI DISTRICT EASTERN GHATS, TAMILNADU, INDIA

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ABSTRACT

An ethno botanical survey was conducted to collect information about medicinal plants used by traditional healers in villages located in the forest area of Valasamalai hills, Thiruvannamalai district, Tamilnadu, India. Information presented in this work was gathered from tribal informants including practitioners using an integrated approach of botanical collections and interview schedules. Many tribal people depending on naturally growing or wild plants for their food and medicine in this region. A total information was gathered from 24 to 76 age groups of people. The exploration revealed that some of unknown medical uses from the medicinal plants. Totally of 95 medicinal plants belonging to 50 families were identified in the region. These medicinal plants are used to various diseases such as skin diseases, dysentery, cough and cold. The botanical name, local name, family name, parts used and traditional practice were documented. The plant parts were invariably preferred in the form of juice, extract, powder, paste and treating ailments. The indigenous knowledge available with these people plays an important role in quick and proper identification of natural resources.

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INTRODUCTION

Ethnobotany is the study of the relationship between plants and people: From "ethno" - study of people and "botany" - study of plants. Ethnobotany is considered a branch of ethnobiology. Ethnobotany studies the complex relationships between (uses of) plants and cultures. The 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. Ethnobotany 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 (Schultes, 1992). Ethnomedicinal Plant contribute a significant role in the primary health care needs of the population in developing countries (Rai *et al*., 2000), particularly as alternative and complementary material medica. According to World Health Organisation (WHO), 80% of world's population in developing countries rely on herbal medicines, traditional treatments, and traditional practitioners for the main source of health care, and sometimes the only source of care as because it is close to home, accessible and affordable (Akerele, 1984; Shil *et al*., 2014). Ethnopharmacology involves the investigation of plants use in traditional communities to further enhance our understanding of the pharmacological basis of these culturally important medicinal plants (Bhatia *et al*., 2014), India, the mega biodiversity nation is not only endowed with a variety of flora and fauna but also has several ethnic communities. By practicing and using the plants for thousands of years, the ethnic and aboriginal people have gained immense practical knowledge about the medicinal plants (Pullaiah *et al*., 2003). Ethno-medicinal studies are a suitable source of information regarding useful medicinal plants that can be targeted for domestication and management (Kunwar *et al*., 2003) Herbal remedies form an integral part of healing and are considered to be the oldest forms of health care known to mankind on earth (Dangwal and Sharma, 2011). Indigenous knowledge of using medicinal plants for healing human ailments is, however, in danger of gradually becoming extinct, because this knowledge is passed on orally from generation to generation without the aid of a writing system and because many traditional healers do not keep written records (Kaido *et al*., 1997). Ethnobotanical studies are very important to reveal the past and present culture about plants in the world and preserving indigenous knowledge on medicinal plants. The quantitative ethnobotanical studies were utilized to detect the plant uses as food (Pieroni, 2001), About 200 years ago our pharmacopoeia was dominated by herbal medicines (Ernst, 2005), Traditional medicine in Tamil Nadu was previously called as Thamzhil maruthuvam (¼ Tamil

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medicine) and term siddha medicine was coined after 1923 by the British (Sebastia, 2011). Herbal medicines are comparatively safer than synthetic drugs. Plant-based traditional knowledge has become a recognized tool in search for new sources of drugs and neutraceuticals (Sharma and Mujundar, 2003). This is the first study of ethnobotanical survey of medicinal plants in Valasamalai hills. The main objective of the study is to documenting the medicinal plants in Valasamalai hills, recorded their local names and conserve the traditional knowledge of village peoples on usage of indigenous medicinal plants to treat various health problems.

MATERIALS AND METHODS

The study area and ethnobotanical survey

The Easter Ghats, a broken chain of mountains in the Indian peninsular extend from Coromandal in West Begal to Kanyakumari in Tamilnadu, is about 1600 km long north south direction. The study was conducted in 4 villages of Valasamalai hills (Mothakkal, Melvalasi, Keelvalasi, Akkarpatti, Tiruvannamalai district, Tamil Nadu), approximately lies between 88˚C to 91˚C longitude and 26˚C to 39˚C latitude. The vegetation is floristically rich compared to other regions of Easter Ghats and represents several unique habitats. Hamlets are found in different elevation (1800m). Temperature in the study area ranges from 14˚C to 26˚C during Dec-Apr and averages between 13˚Cduring Dec and 36˚C during Apr.

Data collection

The filed study was investigated to get information from local traditional healers having practical knowledge of medicinal plants were interviewed in 4 villages during December 2015 to April – 2016. During the course of the study, four filled trips were carried out in the study area totally 45 days were spent with their local traditional healers. Methods of selecting informants depended upon the distribution of local people having sound knowledge. They were requested to collect specimens of the plants they know or show the plant species on site. Those informants were tradition healers themselves or had traditional of healing in their families and had knowledge on the medicinal use on the plants, The wealth of medicinal plant knowledge among the people of this district is based on hundreds of year of beliefs and observation. This knowledge has been transmitted orally from generation to generation, however it seems that it is vanishing form the modern society since youth people are not interested to carry on this tradition.

Plant Collection

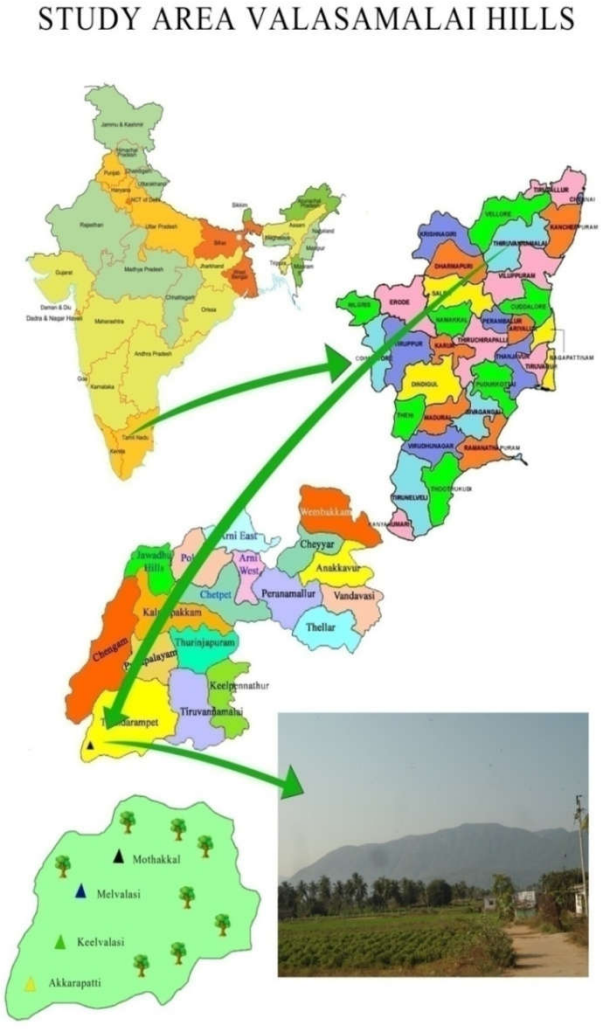
The medicinal plants used by the tribal people were collected following standard protocols and preserved using herbarium Techniques. Specimen collected from the field were tagged and taken to Lab. Plants were identified using with the help of Flora of presidency of madras and flora of Tamil Nadu. Herbarium collections have been voucher numbered and deposited in the Herbarium at Periyar University, Department of Botany Taxonomy Lab. Salem.

Interview with traditional healers

The ethno-medicinal information through direct interviews or oral conservations. They were selected based on their knowledge of medicinal plants within their families and neighbors. The questionnaires were used to obtain information on medicinal plants with their local names, parts used any other plants/agents used as ingredients mode of preparation and administration etc., were recorded for each collected ethno medicinal plants. A field data sheet has been prepared to record the plant details with ethno-medicinal information gathered from the traditional healers.

Preservation of plant specimens

Stand methods was followed with record to collection of plant materials, drying mounting, preparation and preservation of plant spcimens (Jain, 1964). Vocher spcimens of medicinal plants in triplicate were collected prepared and identified; plants with their correct nomenclature were arranged alphabetically by family name, vernacular name ethnomedicinal uses. The identification and nomenclature of the listed plants were based on the flora of presidency of madras (Gamble, 1935).



Picture I. Location map of Valasamalai hills, Thiruvannamalai District in TamilNadu, India

RESULTS AND DISCUSSION

The present study investigation revealed that the valasamalai hills were using 95 species of plants belonging to 50 families for medicinal use. Among them 23% of herb, 29% of shrub, 39% of tree, and were 9% of climbers (Picture: VI).

Picture II. Valasamalai Adivaram

Picture III. Medicinal Information Collected From The Tribal Herbal Healers

Picture: VI Tribal Community Habitate

Area visited

Table 1. Ethnomedicinal perspectives of plants used by Tribes in Valasamalai hills

S.No.	Botanical Name	Family	Vernacular Name	Habit	Parts	Ehnomedicinal Uses
1.	*Acalipha indica L.*	Euphorbiaceae	Kuppaimeni	Shrub	Leaf	Leaves grind with salt applied externally to cure snakebites.
2.	*Azadirachta indica L.*	Meliaceae	Vembu	Tree	Whole plant	Decoction of the bark is taken as liver tonic. Leaf paste is applied on affected part in skin disorders. seed oil is used for leprosy and wound healing.
3	*Abutilon indicum L.*	Malvaceae	Thuthi	Shrub	Seeds	Cough and Fever.
4.	*Acorus calamus L.*	Acoraceae	Vasambu	Herb	Root	Rhizome used for cough & fever. Leaf juice used Diuretic
5.	*Aegle marmelos (L.) Correa*	Rutaceae	Vilvam	Tree	Leaf	Shade dried powdered leaves used for decoction and consumed for cooling effect and diabetes.
6.	*Aloe verb Burm. f.*	Lalliaceae	Katraazhai	Shrub	Whole plant	Plant used for skin diseases and promotes coolness the smooth gel is applied externally in pimples.
7.	*Ageratum conyzoides* L.	Asteraceae	Vadaichedi	Herb	Whole plant	Leaf juice put in nostrils for headache in migrane. Plant crushed and applied to fresh cuts.
8.	*Artocarpus heterophyllous L.*	Moraceae	Palamaram	Tree	Fruit	Leaves juice taken internally for ulcer
9.	*Argemone Mexicana L*	Payoaveraceae	Kudiyottippondu	Shrub	Leaf	Leaf juice 50ml mixed with cow's milk used to malarial fever. Seed powder is taken with water orally twice a day in jaundice, leprosy and alterative latex is used to curd scorpion bite.
10.	*Asparagus racemosusWilld.*	Asparagaceae	Neervitankilangu	Climber	Tubers	Tubers are eaten raw to increase erection in males. Eating the tubers is also believed to increase the body strength.
11.	*Albiziaamara(Roxb.) Boivin.*	Mimosaceae	Thurinji	Tree	Leaf	The leaf is ground into paste and applied over the head to control hair fall.
12.	*Angiopteris evecta (G.Forst.) Hoffm.*	Marattiaceae	Yanai vanagi		Leaf	Decoction obtained from the leaf is taken orally along with lemon juice to treat intestinal ulcer and stomach ache.
13.	*Abrus precatorius*	Fabaceae	Kundumani	Shrub	Root	Root used for poisonous bite
14.	*Artabotrys odoratissimus R.*	Annonaceae	Manoranjitham	Climber	Leaves, roots	The leaves are found to contain antiferlity principle. A decoction of the leaves is given in cholera. The root of A. odoratissimus is a Chinese folk remedy for malaria.
15.	*Anacardim occidentale L.*	Anacardiaceae	Munthiri	Tree	Fruit	The fruit husk oil is applied externally to heal the cracks on heal.

Continue.....……..

16.	*Annona squamosa L.*	Annonaceae	Ramanseetha	Tree	Root	Root, paste for external application, root bark decoction orally for scorpion bite
17.	*Adhatoda vas Nees.*	Acanthaceae	Adhatoda	Tree	Leaf	Cold & Cough
18.	*Acacia nilotica*	Mimosaceae	Karuvelam	Tree	Leaf	Leaves used as a demulcent (or) for conditions such as gonorrhoea leucorrhoea, diarrhea, dysentery (or) diabetes
19.	*Andrographis paniculata Burmf.*	Acanthaceae	Nilavembu	Shrub	Leaf	Skin disorders, snake bite
20.	*Artocarphus heterophyllus L.*	Moraceae	Pala	Tree	Root, Leaves	Skin diseases, Ulcer, Asthma
21.	*Abrus precatorius L.*	Fabaceae	Kundumani	Shrub	Root	Root used for poisonous bite
22.	*Achyranthus aspera L.*	Amaranthaceae	Nayuruvi	Shrub	While plant& Leaf	Reduces body weight& skin disorders
23.	*Basella alba L.*	Basellaceae	Kodipasalai	Climber	Stem, Leaf	Leaves boiled in water and taken internally to cure piles
24.	*Bambussa arundinacea(Retz.)*	Poaceae	Moongkil	Tree	Seed	Energy produces
25.	*Borassus flabellifer Roxb.*	Araceae	Pannai	Tree	flowers, root	The flowers, root, toddy juice and fruit of tree used in the form of paste, juice and decoction to treat visusuchika, insanity, retention of urine and splenomegaly.
26.	Capparis sepiaria L.	Violaceae	Thotti chedi	Shrub	Fruit, bark , leaves	Root & Leaves are pasted with lemon juice and are applied topically to treat swellings.
27.	*Caesalpinia bonduc (Linn.) Rox*	Caesalpiniaceae	Kalichchikkai	Shrub	Leaves, fruits & seeds	Leaves: Leaves and bark is used for treatment of febrifuge and antiperiodic. Fruits: Fruits are used as tonic and antipyretic. Seeds: Fatty oil extracted from the seeds is used as a cosmetic and for discharges from the ear.
28.	*Cissampelos pariera L.*	Menispermaceae	Veeli	Climber	Seed	Plant oil mixed with rice flour is applied externally for body pain relief.
29.	*Cardiospermum luridum (Bl.) Adelb.*	Sapindaceae	Kattu mutakathan	Climber	Whole plant	Various parts of the plant can be extracted to provide laxative, emetic and diuretic, joint pain effects etc. Leaves can be made into medic pulmonary complications
30.	*Cassia tora L.*	Ceasalpinaceae	Usithagarai	Herb	Seed	Seed is mixed with water and ground into paste and applied topically to cure skin diseases.
31.	*Chrysopogon zizanioides (L.) Roberty*	Poaceae	Vettiver	Herb	Roots	Dried roots are mixed with coconut oil to reduce the dandruff, and hair falling. Dried roots are used for cosmetics, perfumes and aromatherapy, soaps, lotions, creams to cure for wounds acne and irritating skins. The roots internally used to cure nervous and circulatory problems, externally used to cure all around tonic bath, to ease muscle pains, as well as treatment for lice
32.	*Calotropis gigantean(L.) R.Br*	Asclepiddaceae	Erukku	Shrub	Latex	Latex is applied externally for dog bite and scorpion bite. The flowers powder mixed with black pepper and pinch of common salt is given orally in snake bite.
33.	*Cassia auriculata L.*	Caesalpiniaceae	Aaavaarai	Herb	Leaf, flower& Bark	Root paste mixed with coconut oil is applied on skin diseases. Fresh leaves are pounded in water and filtered. The decoction is given internally twice a day for one week to cure an the l mintic.
34.	*Cayratiapedata(Lam.) Juss.ex.Gagnep.*	Vitaceae	Anjukakodi	Climber	Leaf,	Young leaves are ground into paste and applied topically to treat snake bite.
35.	*Cynodon dactylon (L.)pers*	Poaceae	Arugampullu	Herb	Whole plant	Plant decoction 50ml is taken orally to cure diuretic, Rhizome juice mixed with water to drink which cure urinary disorders.
36.	*Chitoria tearnaatea L.*	Papilionaceae	Sankupu	Climber	Root	The root are bitter, refrigerant, opnthalim9c, laxtiove, intellect promoting, alexeterric, diuretic, anthelminitic, depuratiove, aphrodisiac.
37.	*Casis quadrangularis Wall ex. Wt&Arn*	Vitaceae	Piandair	Climber	Leaf	the used for obesity ,diabetes a cluster of heart disease hing cholesterol, asthma ,malaria cancer.
38.	*Coccinia grandis (L.) Voigt*	Cucurbitaceae	Kovai	Climber	Whole plant	Leaves juice taken for internally for ulcer
39.	*Citrus lemon L.*	Rutaceae	Elumichai	Tree	Fruit	Fruit juice used for stomach ache and reduce body heat.
40.	Cocculus hirsutus L.	Menispemaceae	Kattukodi	Climber	Root	The roots and leaves have great medicinal value and are used internally as well as externally for medicinal purpose. The external application of its paste alleviates the toxins. The leaves are coling, mucilaginous and are useful in eczema.
41.	*Curcuma longa Linn.*	Zingiberaceae	Manjal	Herb	Rhizome	Antiviral, haptic tonic .Therhizome are bitter, and acrid, thermogenic, emollient, anodyne, anti-inflamatory, vulnerary, depurative,anti-septic, appetizer,carminative, stomachin, anthemintic, laxative, diuretic, expectorant, haematinic stypic, anti periodic, alterative and skin diseases.

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42.	*Cocos nicifera L.*	Araceae	Thenni	Tree	Root	The root is astringens ,diuretic and anthelminitic, and areuseful in pharyngodynion uterine disorders, blennorrhagia.
43.	*Dodonaea viscose Li.*	Sapindaceae	Virali	Shrub	Leaf	Blood clot
44.	*Euphorbia hirta L.*	Euphorbiaceae	Amman patcharisi	Herb	Leaves, flower	Asthma, respiratory infections
45.	*Evolvulus Alsinoides L.*	Convolvulaceae	Vishnkaranthi	Shrub	Root	Fever, Take equal quantity of root morning glory and. Grind them together .Taken it one tablespoon milk once a day. Cholera, Powder the whole plant of dwarf morning glory and 7 black pepper to gether. Have ¼ teaspoon with lukewarm water for 3 days.
46.	*Euphorbia antiquorum L.*	Euphorbiaceae	Sadurakalli	Tree	Stem &root Root ,bark	The poisonous milky latex or other plant parts are taken as adrastic purgative and vomiting .The latex is applied extemelly to swellings, boils warts and other skin affections
47.	*Ficus glomerata L.*	Moraceae	Athi	Tree	Whole plant	Leaf juice is given in bilious problems. Roots are used diarrhea and diabetes. The decotion of bark is used to cure renderpest disease and vulnerary in cattle.
48.	*Glycosmis pentaphylla (Retz.) Dc.*	Rutaceae	Melaekulukki	Shrub	Leaf & root	The plant used for cough, rheumatism, anemia and jaundice
49.	*Gymnema sylvestre R. Br*	Asclepiadaceae	Sirukurinchan	Herb	Leaf &root	Leaf powder is mixed with cow's milk and taken orally to treat diabetes. A powder of the dried leaves is used to reduce the sugar level of the blood. The root powder is taken orally and also applied on the bitter spot to treat snakebite.
50.	*Justicia adhatoda L.*	Acanthaceae	Aadhatodai	Herb	Leaf	Leaf juice from this plant used for cough and fever. Leaf juice used for diarrhea
51.	*Helicteres isora L.*	Sterculiaceae	Valampuri	Herb	Fruit	Fruit powder boiled with Piper nigrum seeds, Allium sativum rhizome and gingelly oil is applied to treat earache.
52.	*Hibiscus rosa sinensis (L).*	Malvaceae	Semparuththai	Herb	Leaf&flower	It is used in hair lass.
53.	*Hygrophila auriculata (Schum) Heina Kerr.*	Acanthaceae	Neer mulli	Herb	Root & Leaf	Ash of the whole plant mixed with cow's urine is applied on joints to treat swelling of joints.
54,	*Heliotropium indicum L.*	Boraginaceae	Thel kodukku chedi	Shrub	Whole plant	Leaf juice boiled with coconut oil is applied on head to kill dandruff.
55.	*Hemidesmus indicus (L.) R.Br*	Asclepiadaceae	Nannari	Herb	Root	Decoction of root is taken to cool the body
56.	*Ipomoea staphylinaRoem. &Schult.*	Convolvulaceae	Onankodi	Climber	Leaves	Tender leaves are mixed with betel leaves and made into paste. The paste obtained is given orally to women during delivery time to ease the falling of placenta.
57.	*Jatrophagossypifolia L.*	Euphorbiaceae	Sivappuchedi	Shrub	Latex	Latex is applied over wounds to heal soon. The Latex is used for curing wounds in cattle.
58.	*Mimosa pudica L.*	Mimosaceeae	Thottal sinugi	Herb	Whole plant	Cattle disorders .The herb is used to stop bleeding from intestines and piles 3gram of the powder is taken with milk to stop bleeding.
59.	*Murraya koenigii* Spreng.	Rutaceae	Kariveppilai	Tree,	Leaf	The leaf paste is taken orally for diarrhoea and dysentery.
60.	*Musa paradisiacal L.*	Musaceae	Banana tree	Tree,	Fruit &stem	It is used to be arrest haemoptysis and posses strongly astringent and an the l mantic properties other uses are asthma, burns diabetes dysentery excessive menstrual flow fever, gout, headache, hemorrhage tuberculosis and ulcer and remove kidney stones.
61.	*Mimosa pudica L.*	Mimosaceeae	Thottal sinugi	Herb	Whole plant	Cattle disorders .The herb is used to stop bleeding from intestines and piles 3gram of the powder is taken with milk to stop bleeding.
62.	*Mangifera indica* L.	Anacardiaceae	Maamaram	Tree,	Fruit	The bark is boiled in water and the vapours are inhaled by mouth to avoid toothache.
63.	*Moringaoleifer L.Nimmo*	Moringaceae	Murungai	Tree	Leaf& flower	The tree produces pods which are made into s
64.	*Millettia pinnata L.*	Fabaceae	Pungai	Tree	Flower	Antidiabetes
65.	*Manihot esculenta Crantz.*	Euphorbiaceae	Guchi	Shrub	Rhizome	Cassava is grown primarily for the tubers which are used as a foodstuff. Tubers may be eaten raw, boiled or fried, or in baked goods. Since there is HCN in the skin of sweet varieties, they must be peeled first before eating. In bitter varieties the HCN is throughout the root, which must be cooked before using. From the manioc tuber are obtained starch, farina, a whole flour, grated manioc and tapioca.
66.	*Nerium indicum L.*	Apocynaceae	Arrali	Tree	Root	The root powder is an haemorrhoids and ulcer around genital.
67.	*Opuntia dillenii (Haw)*	Cactaceae	Sappatikalli	Shrub	Fruit	Decoction of the fruit is used as whooping cough, opthalmia, spasmodic cough and expectoration.
68.	*Pachygone ovata (Poir.) Diels*	Menispermaceae	Perungkaattukodi	Shrub ------	Seed	Seeds powder used for Snake bites

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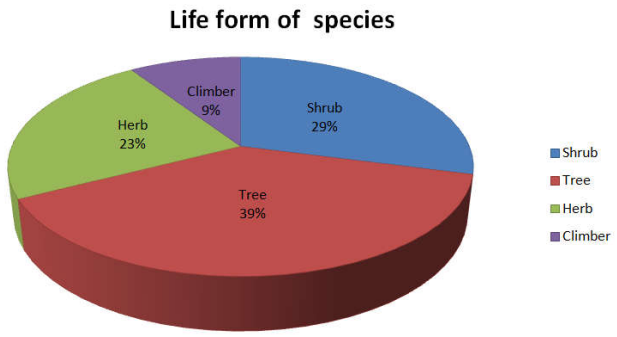
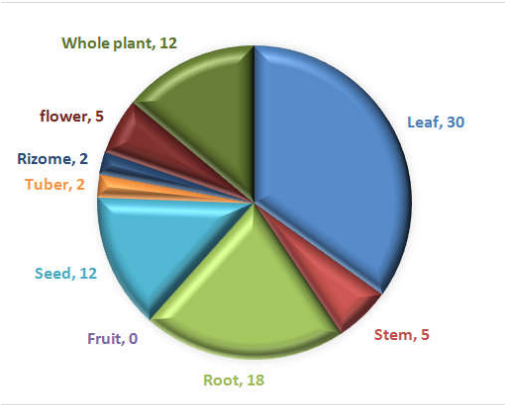
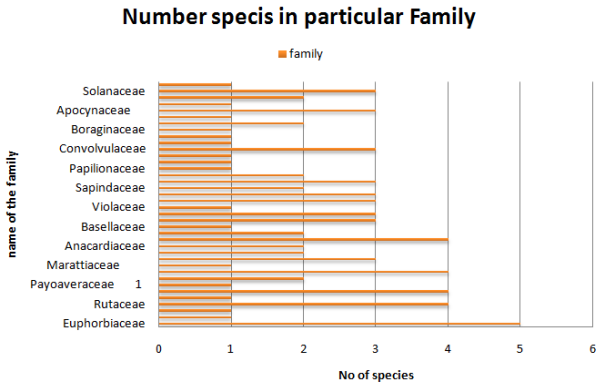
69.	*Psidium guajava L.*	Myrtaceae	Koyya	Shrub	Fruit	Used to treat diarrhea, sore throats, vomiting stomach upset, vertigo.
70.	*Phusalis minima L. Var*	Solanaceae	Tottakkai	Herb	Leaf & fruits	It is used as a bitter, appetizing, tonic, diuretic, laxative, useful in inflammation, enlargement of the spleen and abdominal troubles. The fruit is considered to be a tonic, diuretic and purgative.
71.	*Phoenix sylvestris Roxb.*	Arecaceae	Eacham	Tree	Seed	The consumption of fruits is act as laxative and Strengthened.
72.	*Phyllanthus amarus Schurn&Thomn*	Amaranthaceae	Keelanelli	Shrub	Leaf	Leave juice is used to cure jaundice disease.
73.	*Passiflora foeidat L.*	Passifloraceae	Siruppunakkai	Climber	Fruit	The fruits contain a bluish white pulp that is mildly sweet and delicately flavoured, young leaves ans plant tips are edible . dry leaves are used in tea in Vietnamese folk medicinal to relieve sleeping problems.
74.	*Phyllanthus acidus L.*	Phyllanthaceae	Aranelli	Tree	Fruit	Various parts of the plant are used for food. In India and Indonesia, the cooked leaves are eaten. While the fruit is eaten fresh, and is sometimes used as flavouring for other dishes in Indonesia, it is generally regarded as too tart to eat by itself in its natural form and is processed further. It is candied in sugar or pickled in salt, used in chutney, relish or preserves.
75.	*Rivea hypocrateriformis Choisy*	Convolulaceae	Mustae	Climber	Leaf	Leaves paste used for diarrhea
76.	*Ricinus communis L.*	Euphorbiaceae	Aamanakku	Herb	Leafs& Seed	The leaves resolve swelling and allay pain kernel of the castor seed is a purgative and much more officaceous than castor oil. Ingestion of 4-5 kernals purges and cures diseases lke paralysis, rheumatism, facial paralysis, long and asthma.
77.	*Ficus religiosa L.*	Moraceae	Arasamaram	Tree	Leaf & Root	It is used to cure diarrhea, astring dysentery, piles, leucorrhoea, rheumatism, wound and eliminatic worms.
78.	*Sesamum indicum L.*	Pedaliaceae	Ellu	Herb	Leaf	Demulcent, emollient
79.	*Solanum nigrum* L.	Solanaceae	Manathakkali	Shrub	Leaf	The juice taken from fresh leaves are used to treat for stomach ulcer.
80.	*Strychnos potatorum L.f.*	Loganiaceae	Sillakottai	Herb	Root	The whole plants used for Urinary & Kidney
81.	*Santalum album* L.	Santalaceae	Santhanam	Tree	Stem & root	Pimples, Urinary Infections
82.	*Solanum trilobatum L.*	Solanaceae	Thuthuvalai	Climber	Leaf	Leaves are used to cure throat infection, cold, cough, with the mixing of Tulasi and other spices also.
83.	*Syzygium cuminii L.*	Myrtaceae	Nava	Tree	Bark, Seed, Leaves	Dysentry, diabetics, antihelmintic fever
84.	*Sesamum indicum L.*	Pedaliaceae	Ellu	Shrub	Seed	The flour that remains after oil extraction from sesame seeds is 35-50% protein and contains carbohydrates. The oil has wide medical and pharmaceutical applications. It is mildly laxative, emollient and demulcent. The seeds and fresh leaves may be used as a poultice.
85.	*Vitex negundo L.*	Verbenaceae	Notchi	Tree	Leaves	Leaves boiled in water taken as inhalation, juice taken internally to cure Asthmatic complaints, Rhaumatic pains and epilepsy
86	*Musa paradisiacal L.*	Musaceae	Vaazha	Tree	Stem &fruit	The banana family is of more interest for its nutrient than for its medicinal properties. Banana root has some employment as an anthe lmintic and has been reported useful in reducing bronchocele.
87.	*Limoniaacidissima L.*	Rutaceae	Vilamaram	Tree	Fruit	Fruit pulp is eaten to strengthen the body
88.	*Lawsonia inermis* L.	Lythraceae	Maruthani	Shrub	Leaf& Root	Extract of root is given twice a day as health tonic, Paronoicsia, liver and general weakness Gynaecological Disorders
89.	*Tridax procumbens C.*	Asteraceae	Vettukkaaythalai	Shrub	Leaves	Antiulcer
90.	*Tectongrandis L.F*	Laminaceae	Tekku	Tree	Whole plant and leaves	Cough,fever,conorrhoea,diarrhea,di Arrhea,dysentery, sores ulcer,and Skin disease
91.	*Tamarindus indica* L.	Leguminosae	Puliya maram	Tree	Seed	The seed paste with pepper powder is applied on bitten part to reduce snake poison.
92.	*Piper nigrum* L.	Piperaceae	Milagu	Climber	Seeds	
93.	*Hemidesmus indicus (L.) R.Br.*	Apocynaceae	Nannari	Climber	Shrub	The plant enjoys a status as tonic, alterative, demulcent, diaphoretic, diuretic and blood purifier. It is employed i nutritional disorders and skin affection. It is administered in the form of powder, infusion.
94.	*Zizphus oenoplia(L) mill*	Rhamnaceae	Elanthimaram	Tree	Fruit	Ulcer, cuts, liver trouble, asthma and fever
95.	Wrightia tinctoria R.Br.	Apocynaceae	Veppalai	Tree	Leaf	The leaf paste is applied externally for skin diseases.



Picture VI. Life Form of Species



Picture VII. Plant Parts Used for the Preparation of Medicine



Picture VII. Family Used for the Various Ailments

The most commonly represented families were Euphorbiaceae (05) and Meliaceae (01), Acoraceae (01), Rutaceae (04), Lalliaceae (01), Moraceae (04), Payoaveraceae (01), Asteraceae (02), Mimosaceae (04), Marattiaceae (01), Fabaceae (03), Annonaceae (02), Anacardiaceae (02), Acanthaceae (04), Amaranthaceae (02), Basellaceae (01), Poaceae (03), Araceae (03), Violaceae (01), Caesalpiniaceae (03), Menispermaceae (03), Sapindaceae (02), Asclepidaceae (03), Vitaceae (02), Papilionaceae (01), Cucurbitaceae (01), Zingberaceae (01), Convolvulaceae (03), Sterculiaceae (01), Malvaceae (01), Boraginaceae (01), Musaceae (02), Moringaceae (01), Apocynaceae (03), Cactaceae (01), Myrtaceae (02), Solanaceae (03), Possifloraceae (01), Phyllanthaceae (01), Pedaliaceae (02), Loganiaceae (01), Stantalaceae (01), Verbenaceae (01), Rutaceae (01), Lythraceae (01), Laminaceae (01), Leguminosae (01), Piperaceae (01), Rhamnaceae (01), Malvaceae (01). (Picture:VII). Among different plants parts used by tribes in valasamalai hills the whole plant parts leaf (30%), root (18%), seed (12%), whole plant (12%), fruit (13%), stem (05%), flower (05%) rizom (02%), tuber (02%). (Picture: VIII). These are various methods of preparation and application to curing different types of diseases and they have various preparation forms like decoction, gel, juice, oil, paste, powder and raw. Local people are choosing to use herbal remedies mainly various treatment such as cancer (breast, colon) diabetes heart diseases kidney diseases (nephritis, nephrolith) respiratory tract diseases (cold, cough, asthma) skin diseases stomach diseases (ulcer, diarrhea, dysentery) and urinary tract diseases.

Conclusion

95 medicinal plants species belonging to 50 families were found in the research area. These plants are used in treatment of many diseases. By pasting and decoction these plants local people are them during the whole year. The most frequently used plants were tree (39%), herb (23%), Shrub (29%), climbers (09%). Many plants are used for the treatment of wound healing, cold, cough, diabetes, cancer, skin diseases etc.

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