

A survey of traditional medicinal plants grown in the home gardens in Palayamkottai region of Tirunelveli District, Tamil Nadu.

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ABSTRACT

Herbs form the abundant portion of plant diversity and contribute a major section of global biodiversity. Many herbs are known for their medicinal properties. People around the world especially in India are keeping these plants in their home garden for their immediate availability when in need. This study was carried out in several geographically isolated pockets of the Palayamkottai region of Tirunelveli district, Tamil Nadu, India. The present study revealed that a total number of 149 plant species belonging to 131 genera coming under 58 families have been available in the home gardens of the study area. These plants have been used in the treatment of various ailments such as fever, cold, cough, rheumatism, skin diseases, scabies, diabetes, cancer, jaundice, malaria, piles, sexual complaints and antidotes for poisonous bites. The traditional medicinal plants from the study area are helpful to get relief from several diseases which are cost effective and without side effects. Growing herbal plants in the home gardens is an alternative form of conservation of biodiversity too.

Keywords: Herbs, plant diversity, Palayamkottai, medicinal plants and home garden.

INTRODUCTION

India is one of the twelve mega biodiversity centres having over 45,000 plant species. Its multiplicity is without comparison due to the presence of 16 different agro climatic zones, 10 vegetative zones and 15 biotic provinces. The country has 15,000 to 18,000 flowering plants, 23,000 fungi, 2500 algae, 1600 lichens, 1800 bryophytes and 30 million micro-organisms. About 1500 plants with medicinal uses have been mentioned in ancient texts and around 800 plants have been used in traditional medicine [1]. In India, all systems of medicine including the Indian systems of medicine 'Ayurveda', 'Siddha', 'Unani' are entirely and 'homeopathy' is partially depending on plant materials or their derivatives for treatment of human ailments [2]. There is a large amount of information and literature available on different types of herbs. Around 80% of the people all over the world are utilizing the herbal medicines as their traditional methods for treatment of various disorders [3]. This particular knowledge has

helped human beings stay alive and proliferate since their origin on earth [4]. A considerate medicinal plant usage pattern at an individual/household level is very important for manipulative policies on biodiversity maintenance [5].

The preference for herbal medicines has increased over the years [6]. It is estimated that 80% of the world's population use plants for curing basic diseases [7, 8]. Using the herbal source of medicine is also on the rise in recent years as more people grow herbs for fresh use or drying or freezing them for future usage. Most herbs can be grown-up productively with a minimum effort. Growing of culinary herbs and spices gives the freshest ingredients. Encouraging herbal gardens in the homes is a good way to promote using of medicinal plants for primary health care at the household level. Cookery and medicinal herbs merge the beauty and fragrance of flowers with the help of nutrition, adding flavour to the cooking and provided that a variety of therapeutic uses. Herbal garden should

be maintained in order to protect the medicinal plants. Hence a survey was made to enumerate the list of plants grown in the home gardens by the people living in Palayamkottai.

MATERIALS AND METHODS

Study area

The present study was carried out in Palayamkottai (8.7166 ° N and 77.7333 ° E) region of Tirunelveli district of Tamil Nadu, India. The normal Temperature and humidity in the region ranges between 28±7°C and 78±5%. It is around 189.9 km² and the population of about 4,73,000. Four areas with mostly residential homes were considered for this survey viz., KTC Nagar, Perumalpuram, Santhi Nagar and NGO Colony.

Classification of species based on different criteria

The habit of the plant which gives the general

appearance of the plant was considered for the grouping of the plants into herbs, shrubs, trees, climbers and twines [9]. Following classification based on habit, plants were tabulated alphabetically and their binomial, family and vernacular names were also included in the table. Plants were also grouped based on the families they belong to. The part/s of the plant used as the medicine and the common diseases for which the plants or plant parts have been used also were considered for the grouping of the plants further.

RESULT AND DISCUSSION

The surveys showed that a total number of 149 species of commonly used medicinal plants have been available in the region. These plants are listed alphabetically using their botanical names (Table-1). Other information relating to their family, vernacular names and medicinal uses were also documented.

Table 1: List of plant species from Palayamkottai, Tirunelveli District

S. No	Botanical Name	Family	Vernacular Name	Medicinal Uses
1.	<i>Abelmoschus esculentus</i> (L.) Moench	Malvaceae	Vendai	Hair dandruff.
2.	<i>Abrus precatorius</i> L.	Fabaceae	Kundumani	Typhoid, dysentery and ulcers.
3.	<i>Achyranthes bidentata</i> Blume	Amaranthaceae	Sennaiyuruvi	Rheumatism, toothache, asthma, pyorrhoea, hypertension, back pains, urine in the blood, menstrual pain, bleeding, atherosclerosis and malignant mouth ulcers.
4.	<i>Acorus calamus</i> L.	Acoraceae	Vasambu	Ulcers, gas, stomach upset, arthritis, headache, memory problems, haemorrhoids, earache, strokes and skin disorders.
5.	<i>Aeglemarmelos</i> (L.) Correa	Rutaceae	Vilvamaram	Fever, abdominal pain, urinary troubles, dysentery, dyspepsia, stomach pain and seminal weakness, vomiting, fever and swellings.
6.	<i>Agave americana</i> L.	Asparagaceae	Anaikathalai	Diarrhoea, jaundice and toothache.
7.	<i>Albizia lebbek</i> (L.) Benth	Fabaceae	Vaagai maram	Cough, eye problems, lung problems, pectoral problems, abdominal tumours and inflammation.
8.	<i>Allium cepa</i> L.	Amaryllidaceae	Vengayam	Bruises, colic, ear-ache, bronchitis, colds, fevers, intestinal parasites, high blood pressure, jaundice, sores, impotence, cataracts, heart disease, burns, scabies, tuberculosis, insect stings, high cholesterol, varicose veins and diabetes.
9.	<i>Aloe vera</i> (L.) Burm. f.	Asphodelaceae	Sottru Kathalai	Weight loss, diabetes, hepatitis,

				osteoarthritis, stomach ulcers, asthma, skin infection, fever, itching and inflammation.
10.	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Amaranthaceae	Ponnankanni Keerai	Vomiting, headaches, bronchitis, asthma and hepatitis.
11.	<i>Amaranthus dubius</i> Mart. ex Thell	Amaranthaceae	Thandukeerai	Fever, anaemia, stomach ache constipation and kidney complaints.
12.	<i>Amaranthus viridis</i> L.	Amaranthaceae	Kuppaikeerai	Inflammations, haemorrhoids, dysentery and eye infections.
13.	<i>Anacardium occidentale</i> L.	Anacardiaceae	Kollampalam	Coughs, colds, kidney troubles, toothache and diarrhoea.
14.	<i>Ananas comosus</i> (L.) Merr	Bromeliaceae	Annachi	Digestive, gastric irritability, jaundice, inflammation, bone growth, sore throats and constipation.
15.	<i>Andrographis paniculata</i> (Burm.f.) Wall. ex Nees	Acanthaceae	Siriyangai	Common cold, flu, diarrhoea, bronchitis, sore throats, malaria, tuberculosis, chicken pox, coughs, ear, headaches, infection, dengue fever, inflammation, burns and mumps.
16.	<i>Annona squamosa</i> L.	Annonaceae	Seethapalam	Diarrhoea and dysentery.
17.	<i>Asparagus racemosus</i> Willd.	Asparagaceae	ThanneervittanKi zhagu	Diarrhoea, epilepsy, kidney disorders, chronic fevers, excessive heat, stomach ulcers and liver cancer.
18.	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Vembu	Leprosy, eye disorders, bloody nose, intestinal worms, stomach upset, diabetes, loss of appetite, skin ulcers, heart, cough, asthma, haemorrhoids, intestinal worms, low sperm levels, urinary disorders, diabetes fever, gum disease, skin diseases, pain, fever and liver problems.
19.	<i>Bambusa vulgaris</i> Schrad ex J.C. Wendl	Poaceae	Mungil	Rheumatism, heart problems, malaria and fever.
20.	<i>Barleria cristata</i> L.	Acanthaceae	December poo	Coughs, toothaches, anaemia and inflammation.
21.	<i>Barleria prionitis</i> L.	Acanthaceae	Kaattukanagaambaram	Fever, respiratory diseases, toothache and joint pains.
22.	<i>Basella alba</i> L.	Basellaceae	Pasalaikeerai	Haemorrhages, skin diseases, sexual weakness, local swellings, intestinal complaints, inflammation, ulcers and laxative in children.
23.	<i>Bauhinia tomentosa</i> L.	Fabaceae	Kattumandarai	Oral problems like sore throat and liver swelling.
24.	<i>Bougainvillea spectabilis</i> Willd.	Nyctaginaceae	Thaal poo	Non-insulin diabetes.
25.	<i>Brassica juncea</i> (L.) Czern.	Brassicaceae	Kadugu	Arthritis, foot ache, colds, rheumatism, and stomach disorders, headache, bladder, inflammation and haemorrhage.
26.	<i>Breynia retusa</i> (Dennst.) Alston	Phyllanthaceae	Mullu- vengai	Eye diseases, conjunctivitis, cough, skin inflammation, skin disease,

				swollen testicles and diarrhoea.
27.	<i>Calotropis gigantea</i> (L.) Dryand.	Apocynaceae	Erukku	Diarrhoea, dysentery, elephantiasis, leprosy, burns, headaches, rheumatic pains, coughs, colds, asthma and earache.
28.	<i>Capsicum annuum</i> L.	Solanaceae	Milagai	Intestinal gas, stomach pain, diarrhoea, and cramps.
29.	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Modakanthan Keerai	Arthritis, inflammations, constipation and abdominal discomfort.
30.	<i>Carica papaya</i> L.	Caricaceae	Pappaali	Cancers, tumours, asthma relief, rheumatism, nervous pains, dengue fever to increase the blood platelets and heal burns.
31.	<i>Calophyllum inophyllum</i> L.	Calophyllaceae	Punnai	Skin diseases
32.	<i>Caryota urens</i> L.	Arecaceae	KoonthalPanai	Tooth ailments, hair growth, ulcers, migraine headaches, snake-bite poisoning and rheumatic swellings
33.	<i>Cascabela thevetia</i> (L.) Lippold	Apocynaceae	Ponnarali	Malarial fever sores and snake bites.
34.	<i>Casuarina equisetifolia</i> L.	Casuarinaceae	Savukku	Diarrhoea and stomach-ache.
35.	<i>Catharanthus roseus</i> (L.) G. Don	Apocynaceae	Nithiyakalyani	Leukaemia, cancer therapy, hypertension, asthma, menstrual irregularities, chronic constipation, diarrhoea, indigestion, dyspepsia, malaria, dengue fever, diabetes and skin diseases.
36.	<i>Ceiba pentandra</i> (L.) Gaertn.	Malvaceae	Ilavampanchu	Dressing on sores, sprains, tumours, abscesses, stomach problems, diarrhoea, hernia, gonorrhoea, fever, asthma and rickets.
37.	<i>Celosia argentea</i> L.	Amaranthaceae	Kozhikondai	Bloody stool, haemorrhoid bleeding, uterine bleeding, leucorrhoea, diarrhoea, cataracts and hypertension.
38.	<i>Centella asiatica</i> (L.) Urban	Apiaceae	Vallaraikerai	Wounds, increase memory power, chronic skin conditions, venereal diseases, malaria, varicose veins and ulcers.
39.	<i>Chamaecostus cuspidatus</i> (Nees & Mart.) C. Specht & D.W. Stev.	Costaceae	Kostum	Diabetes.
40.	<i>Chrysanthemum indicum</i> L.	Asteraceae	Saamanthi	Gonorrhoea and itchiness of the skin.
41.	<i>Cissus quadrangularis</i> L.	Vitaceae	Pirandaikodi	Obesity, diabetic and cholesterol.
42.	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	Cucurbitaceae	Dharpoosani	Urinary tract infections, bed wetting, renal stones, alcohol poisoning, hypertension, diabetic, diarrhoea and gonorrhoea.
43.	<i>Citrus limon</i> (L) Burm. f.	Rutaceae	Elumicchai	Kidney stone, digestion, reduce pain and swelling.
44.	<i>Clitoria ternatea</i> L.	Fabaceae	Shangupushpam	Eye problems and snakebites.

45.	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Kovaikai	Leprosy, jaundice, asthma, bronchitis, skin eruptions, burns, tongue sores, ear ache, indigestion, eye infections, nausea, insect bites and fever.
46.	<i>Cocos nucifera</i> L.	Arecaceae	Thennai	Treat fish poisoning, kidney problems, stomach-ache and blood in the urine.
47.	<i>Codiaeum variegatum</i> (L.) Rumph. ex A. Juss	Euphorbiaceae	Crotans	Snake bite, fever, fungal infections, Gastric ulcers and toothache.
48.	<i>Colocasia esculenta</i> (L.) Schott	Araceae	SeppaKizhangu	Promote menstruation and cysts.
49.	<i>Coleus blumei</i> Benth	Lamiaceae	-----	Digestion, stomach, diarrhoea, congestion of the liver with swollen hands and feet.
50.	<i>Combretum indicum</i> (L.) DeFilipps	Combretaceae	Rangoon Malli	Rheumatism.
51.	<i>Cordia sebestena</i> L.	Boraginaceae	Kattaparuthi	Cough bronchial ailments, wounds, headache and sprain.
52.	<i>Coriandrum sativum</i> L.	Apiaceae	Malli	Stomachupset, loss of appetite, hernia, nausea, diarrhoea, bowel spasms, intestinal gas, measles, haemorrhoids, toothaches, worms, and joint pain.
53.	<i>Costus igneus</i> Nak	Costaceae	Insulin Keerai	Diabetic, asthma, bronchitis and urinary stones.
54.	<i>Crinum asiaticum</i> L.	Amaryllidaceae	Vishamungil	Contusions, sprains, fractures and luxations
55.	<i>Crossandra infundibuliformis</i> (L.) Nees	Acanthaceae	Kanakambaram	Toothache, skin diseases, syphilis, fever, stomach trouble, asthma, heart disease, paralysis and epilepsy.
56.	<i>Cucumis sativus</i> L.	Cucurbitaceae	Vellarikai	Constipation and skin health.
57.	<i>Cucurbita maxima</i> Duchesne	Cucurbitaceae	Poosanikai	Ulcers and inflammations.
58.	<i>Cupressus sempervirens</i> L.	Cupressaceae	-----	Ulcers, whooping cough the spitting up of blood, spasmodic coughs, colds, flu and sore throats.
59.	<i>Curcuma longa</i> L.	Zingiberaceae	Manjal	Diabetes, inflammation, diarrhoeal, hepatoprotective, asthma and cancer.
60.	<i>Cyamopsis tetragonoloba</i> L. Taub.	Fabaceae	Kottavarai	Lower blood cholesterol, diabetics and night blindness.
61.	<i>Cycas revoluta</i> Thunb.	Cycadaceae	-----	Cancer and hematoma.
62.	<i>Cycas circinalis</i> L.	Cycadaceae	Madanakama poo	sores, cuts, wounds, ulcers and swellings
63.	<i>Delonix regia</i> (Bojer.ExHook.)Raf.	Fabaceae	Vaagai	Diabetes, arthritis, diarrhoea, earache, constipation and helminthiasis.
64.	<i>Eclipta prostrata</i> L.	Asteraceae	Karisilanganni	Fevers, eye diseases, asthma, bronchitis, liver problems, diarrhoea, cancer, skin problems like sores, pimples, rashes and various diseases, including leprosy, anaemia and dysentery.

65.	<i>Eucalyptus globulus</i> L.	Myrtaceae	Thailamaram	Asthma, bronchitis, plaque and gingivitis.
66.	<i>Euphorbia cyathophora</i> Murray	Euphorbiaceae	Thiththili poo	Gonorrhoea, skin problems and body pain.
67.	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Amman pacharicy	Asthma, fever, coughs, cold, diarrhoea, peptic ulcers and vomit.
68.	<i>Euphorbia tithymaloides</i> L.	Euphorbiaceae	Kannadikalli	Ulcer, asthma and burns.
69.	<i>Gmelina arborea</i> Roxb.	Lamiaceae	Kumulmaram	Ulcer, diarrhoea, thirst, anaemia, leprosy, vaginal discharge, piles, fever and varieties of ailments.
70.	<i>Gomphrena globosa</i> L.	Amaranthaceae	Vaadamalli	Asthma, leucorrhoea chronic bronchitis, whooping cough, dysentery, pulmonary tuberculosis with haemoptysis and infantile fever.
71.	<i>Guazuma ulmifolia</i> Lam.	Malvaceae	Thenmaram	Gastrointestinal pain, liver problems, leprosy dysentery and skin problems.
72.	<i>Hamelia patens</i> Jacq.	Rubiaceae	Thepputhar	Wound healing, inflammation, rheumatism, diabetes, stomach ache and fever.
73.	<i>Helianthus annuus</i> L.	Asteraceae	Suriya Gandhi	Swellings, high fever, snakebites and spider bites.
74.	<i>Hemidesmus indicus</i> (L.) R.Br.	Apocynaceae	Nannaari	Dyspepsia, fever, skin diseases, syphilis, leucorrhoea, genitourinary diseases and chronic coughs.
75.	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Chemparuthy	Fever and sores, cold, cough, feverish illnesses, cold, cough and sore eyes.
76.	<i>Impatiens balsamina</i> L.	Balsaminaceae	Kacitumpai	Wounds, cancer, pains in the joints, inflammations of the skin and torn nails.
77.	<i>Ixora coccinea</i> L.	Rubiaceae	Idly poo	Stomach pain, fever, headache and colic.
78.	<i>Jasminum sambac</i> (L.) Sol.	Oleaceae	Kundumalli	Jaundice, venereal diseases, ulcers, skin diseases and eye disorders.
79.	<i>Justicia adhatoda</i> L.	Acanthaceae	Aadathoda	Asthma, bronchitis and tuberculosis.
80.	<i>Kleinia grandiflora</i> (Wall. ex DC.) N.Rani	Asteraceae	Thelkadi Patchillai	Inflammation
81.	<i>Lagenaria siceraria</i> (Molina) Standl.	Cucurbitaceae	Suraikai	Jaundice, diabetes, ulcer, piles, hypertension, skin diseases, cooling, sedative and Rheumatism.
82.	<i>Lantana camara</i> L.	Verbenaceae	Unnichi	Cancers, chicken pox, measles, asthma, ulcers, swellings, eczema, tumours, high blood pressure, skin itches, leprosy and scabies.
83.	<i>Lawsonia inermis</i> L.	Lythraceae	Marudhani	Dysentery, diarrhoea and to promote menstrual flow, sore throats, leprosy, wounds, ulcers, liver problems and toothache.
84.	<i>Luffa acutangula</i> Mill.	Cucurbitaceae	Peerkankai	Tumour and skin infection.
85.	<i>Mammillaria baumii</i> Boed	Cactaceae	-----	Reduces blood sugar levels and cholesterol levels.
86.	<i>Mangifera indica</i> L.	Anacardiaceae	Maamaram	Wounds, ulcers and vomiting.
87.	<i>Manilkara zapota</i> (L.) P.	Sapotaceae	Sappota	Constipation, pile, fevers and

	Royen			diarrhoea.
88.	<i>Melia azedarach</i> L.	Meliaceae	Malaivembu	Diarrhoea, tooth problems, nervous headache, vomiting and itch.
89.	<i>Mentha spicata</i> L.	Lamiaceae	Puthina	Stomach ache and chest pains.
90.	<i>Michelia champaca</i> (L.) Baill. ex Pierre	Magnoliaceae	Sambaga poo	Fever, Leprosy and pain.
91.	<i>Mimosa pudica</i> L.	Fabaceae	Thottachinungi	Healing wound, piles, Used for snake bite, leprosy, dysentery, vaginal and uterine complaints, asthma, inflammations, burning sensation, leucoderma and diarrhoea.
92.	<i>Mimusops elengi</i> L.	Sapotaceae	Magizhamboo	Disease of blood, liver complaints, and diseases of the nose, headache and their smoke is good in asthma.
93.	<i>Mirabilis jalapa</i> L.	Nyctaginaceae	Anthimantharai	Dropsy, diarrhoea, indigestion menstrual disorders, inflammation, wound healing, fevers, treat scabies and muscular swellings.
94.	<i>Momordica charantia</i> L.	Cucurbitaceae	Pavaikai	Leprosy and malignant ulcers, intestinal worms, jaundice and other fevers.
95.	<i>Moringa oleifera</i> Lam.	Moringaceae	Murungai	Headaches, skin complaints, fevers, bronchitis, eye and ear infections, inflammation of the mucus membrane, wounds or insect bites, gastric ulcers and diarrhoea.
96.	<i>Muntingia calabura</i> L.	Elaeocarpaceae	-----	Headache and cold.
97.	<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	Kariveppilai	Diabetes.
98.	<i>Musa paradisiaca</i> L.	Musaceae	Vazhai	Leprosy, hysteria, fever, digestive disorders, haemorrhage, epilepsy, haemorrhoids, and insect bites.
99.	<i>Nerium oleander</i> L.	Apocynaceae	Arali poo	Leprosy, cancer and skin diseases.
100.	<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Parijatham	Cough, joint pain, ringworm and other skin diseases.
101.	<i>Nymphaea alba</i> L.	Nymphaeaceae	Water lily	Kidney pain, congestion, sore throat, dysentery, pain and has sedative.
102.	<i>Ocimum sanctum</i> L.	Lamiaceae	Thulasi	Skin infections, Fever, headache reliever, cure mouth ulcers, dental cavities, plaque and protecting the teeth.
103.	<i>Opuntia dillenii</i> (Ker-Gawl.) Haw.	Cactaceae	Sappathikalli	Treatment of catarrhs, asthma, migraine, headaches in general, diabetes, peptic ulcer, healing agent, treat burns, edema (swelling of limbs), dyspepsia and indigestion.
104.	<i>Pandanus amarylifolius</i> Roxb.	Pandanaceae	-----	Anemia, arthritis and baldness.
105.	<i>Pedaliium murex</i> L.	Pedaliaceae	Aanainerunchi	Urethral stones, venereal diseases, inflammation, ulcers and fever.
106.	<i>Phyllanthus acidus</i> (L.) Skeels	Phyllanthaceae	Pulipunelli	Skin diseases, asthma, fevers and cathartic.
107.	<i>Phyllanthus amarus</i> L.	Phyllanthaceae	Keelanelli	Kidney stones, ulcers, diabetes, hepatitis, jaundice, and inflammation.

108.	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Periyanelli	Diarrhoea, jaundice, and inflammation.
109.	<i>Phyllanthus reticulatus</i> Poir.	Phyllanthaceae	Sivappupula	Ear infections, malaria, anaemia, sore throat, snakebites, mental problems and diarrhoea.
110.	<i>Piper betle</i> L.	Piperaceae	Vetrilaikodi	Eye injury/infection, night blindness, headache, throat irritation, cold, digestion, cough, difficult breathing, wounds, ulcers, boils and bruises.
111.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Fabaceae	Kodukkapuli	Diarrhoea, dysentery, constipation and tuberculosis and ulcer.
112.	<i>Plectranthus amboinicus</i> (Lour.) Spreng.	Lamiaceae	Karpooravallielai	Malarial fever, cough, chronic asthma, helminthiasis, diarrhoea, skin ulcerations, scorpion bite, skin allergy and wounds.
113.	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Chittiramoolam	Obesity, chronic menstrual disorders and skin diseases.
114.	<i>Plumeria alba</i> L.	Apocynaceae	NelaSampangi	Blennorrhagia and syphilis
115.	<i>Plumeria pudica</i> Jacq.	Apocynaceae	Perungalli	Ulcers and scabies.
116.	<i>Plumeria rubra</i> L.	Apocynaceae	-----	Muscular swellings and rheumatic pain.
117.	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	Pungaimaram	Ulcer, abdominal tumours, high blood pressure, anaemia, leprosy, diarrhoea, coughs, and colds.
118.	<i>Psidium guajava</i> L.	Myrtaceae	Koiya	Diarrhoea, type 2 diabetes, dysmenorrhoea, hyperlipidemia, and hypertension.
119.	<i>Punica granatum</i> L.	Lythraceae	Maadhulai	Diarrhoea, dysentery, intestinal parasites, tonic for the heart and throat, Diarrhoea and ulcer.
120.	<i>Rauvolfia tetraphylla</i> L.	Apocynaceae	Pampukaalaachchedi	Eyes troubles, skin diseases, stomach pain, snakebite and toothache.
121.	<i>Ricinus communis</i> L.	Euphorbiaceae	Amanakku	Headache, skin infection and antidandruff.
122.	<i>Sansevieria trifasciata</i> Prain	Asparagaceae	Paambukatralai	Fungal and scabies infections.
123.	<i>Saraca asoca</i> (Roxb.) Willd.	Caesalpiniaceae	Asogamaram	Uterine disorder, cure inflammation relax the plain muscles of the ileum, stomach-ache, dysentery, diabetes, dysentery, colic, piles, ulcers and pimples.
124.	<i>Senna alexandrina</i> Mill.	Caesalpiniaceae	Alakalam	Treat constipation.
125.	<i>Senna auriculata</i> (L.) Roxb.	Caesalpiniaceae	Aavaram poo	Diabetes, eye infections, constipation, liver disease, and urinary tract disorders.
126.	<i>Sesbania grandiflora</i> (L.) Pers.	Fabaceae	Agathikeerai	Throat problems, Improve memory power and Diarrhoea.
127.	<i>Sesbania sesban</i> (L.) Merr.	Fabaceae	Sitragathi	Scorpion stings, sore throat, gonorrhoea, syphilis and jaundice during pregnancy.
128.	<i>Sida cordifolia</i> Linn.	Malvaceae	Kurunthotti.	Diuretic, inflammatory and rheumatic.
129.	<i>Solanum torvum</i> Sw.	Solanaceae	Sundaikai	Dysentery, stomach complaints, fever, ulcers and skin diseases.

130.	<i>Solanum americanum</i> Mill.	Solanaceae	Manathakkali	Ulcer and skin diseases.
131.	<i>Solanum lycopersicum</i> L.	Solanaceae	Thakkaali	Scalds and sunburn, toothache, leprosy and rheumatism and severe headaches.
132.	<i>Solanum melongena</i> L.	Solanaceae	Katharikai	Cholesterol.
133.	<i>Solanum trilobatum</i> L.	Solanaceae	Thuthuvalai	Asthma, lungs disorder, stomach pain, tuberculosis, constipation, gastric problems, mental ability and rheumatism.
134.	<i>Solanum surattense</i> Brum. f.	Solanaceae	Kandankatrikai	Throat infections, inflammation, cough, asthma, fever, heart disease, rheumatism and piles.
135.	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Naval maram	Mild stringent digestive stimulant and liver stimulant anti-inflammatory.
136.	<i>Tabernaemontana divaricata</i> (L.) R. Br. Ex Roem. &Schult.	Apocynaceae	Nanthiyavattam	Hypertension, headache, Cough and scabies.
137.	<i>Tagetes erecta</i> L.	Asteraceae	Tulukaccevvanti	Digestive, diuretic, stomachic, indigestion, colic, severe constipation, ulcers, eczema, skin diseases, conjunctivitis, coughs and dysentery.
138.	<i>Tamarindus indica</i> L.	Caesalpinaceae	Puliamaram	Cardiovascular, anemia, eye sight, thyroid, diabetes and skin irritation.
139.	<i>Tecoma stans</i> (L.) Juss. ex Kunth	Bignoniaceae	Nakacengkapam	Stomach pain and diabetes.
140.	<i>Tectona grandis</i> L. f.	Lamiaceae	Tekku	Bronchitis, urinary discharges, headache and pain.
141.	<i>Thespesia populnea</i> (L.) Sol. Ex Correa	Malvaceae	Poovarasu	Headaches and itches, dysentery, typhoid and haemorrhoids.
142.	<i>Thunbergia grandiflora</i> (Roxb. ex Rottl.) Roxb	Acanthaceae	-----	Stomach complaints, eye disease, snake bites, ear infections and deafness.
143.	<i>Trigonelle foenum-graecum</i> L.	Fabaceae	Venthyakeerai	Diabetes.
144.	<i>Vigna unguiculata</i> (L.) Walp.	Fabaceae	Thataipayiru	Jaundice, menstrual disorders, epilepsy, anorexia and constipation.
145.	<i>Volkameria inermis</i> L.	Lamiaceae	Shangam Cooppy	Skin diseases, swellings, itches, Rheumatism and fever.
146.	<i>Withania somnifera</i> (L.) Dunal	Solanaceae	Ammukkura	Diabetes and inflammation.
147.	<i>Zea mays</i> L.	Poaceae	Cholam	Inflammation of the bladder, kidney stones, obesity, diabetes, pile, and circulatory problems.
148.	<i>Zingiber officinale</i> Roscoe	Zingiberaceae	Inji	Osteoarthritis, natural pain reliever, curing ulcer, heart attack and stroke, inflammatory, hyperglycaemic and gastrointestinal disorders
149.	<i>Ziziphus jujuba</i> Mill.	Rhamnaceae	Mala elandhai	Wound healing, inflammation and sedation.

Classification of species based on the family

A total of 149 species were distributed belonging to 131 genera coming under 58 families (Table 2). Taxonomically dicotyledonous plants

represent more number of species contributing 130 species belonging to 48 families, whereas monocotyledonous plants contribute 19 species belonging to 12 families.

Table 2: Distribution of plant families in the study area

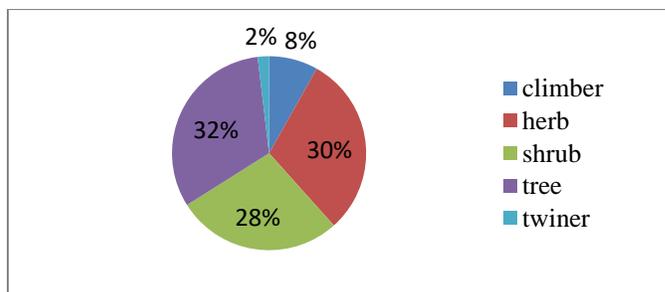
S.No	Family	Genus	Species	S.No	Family	Genus	Species
1.	Acanthaceae	5	6	30.	Elaeocarpaceae	1	1
2.	Acoraceae	1	1	31.	Euphorbiaceae	3	5
3.	Amaranthaceae	5	6	32.	Fabaceae	12	13
4.	Amaryllidaceae	2	2	33.	Lamiaceae	6	6
5.	Anacardiaceae	2	2	34.	Lythraceae	2	2
6.	Annonaceae	1	1	35.	Magnoliaceae	1	1
7.	Apiaceae	2	2	36.	Malvaceae	6	6
8.	Apocyanaceae	8	10	37.	Meliaceae	2	2
9.	Araceae	1	1	38.	Moringaceae	1	1
10.	Arecaceae	2	2	39.	Musaceae	1	1
11.	Asparagaceae	3	3	40.	Myrtaceae	3	3
12.	Asphodelaceae	1	1	41.	Nyctaginaceae	2	2
13.	Asteraceae	5	5	42.	Nymphaeaceae	1	1
14.	Balsaminaceae	1	1	43.	Oleaceae	2	2
15.	Basellaceae	1	1	44.	Pandanaceae	1	1
16.	Bignoniaceae	1	1	45.	Pedaliaceae	1	1
17.	Boraginaceae	1	1	46.	Phyllanthaceae	2	5
18.	Brassicaceae	1	1	47.	Piperaceae	1	1
19.	Bromeliaceae	1	1	48.	Plumbaginaceae	1	1
20.	Cactaceae	2	2	49.	Poaceae	2	2
21.	Caesalpinaceae	3	4	50.	Rhamnaceae	1	1
22.	Caricaceae	1	1	51.	Rubiaceae	2	2
23.	Calophyllaceae	1	1	52.	Rutaceae	3	3
24.	Casuarinaceae	1	1	53.	Sapindaceae	1	1
25.	Combretaceae	1	1	54.	Sapotaceae	2	2
26.	Costaceae	2	2	55.	Solanaceae	3	8
27.	Cucurbitaceae	7	7	56.	Verbenaceae	2	2
28.	Cupressaceae	1	1	57.	Vitaceae	1	1
29.	Cycadaceae	1	2	58.	Zingiberaceae	1	1

Classification of species based on habit

With reference to Habit, most of the home garden plants 32% (51 species) were trees, 28% (34

species) were shrubs, 30% (48 species) were herbs, 8% were (13 species) climbers and 2% (3 species) were twiners (Figure1).

Figure 1: Habit wise distribution of plant species in the study area

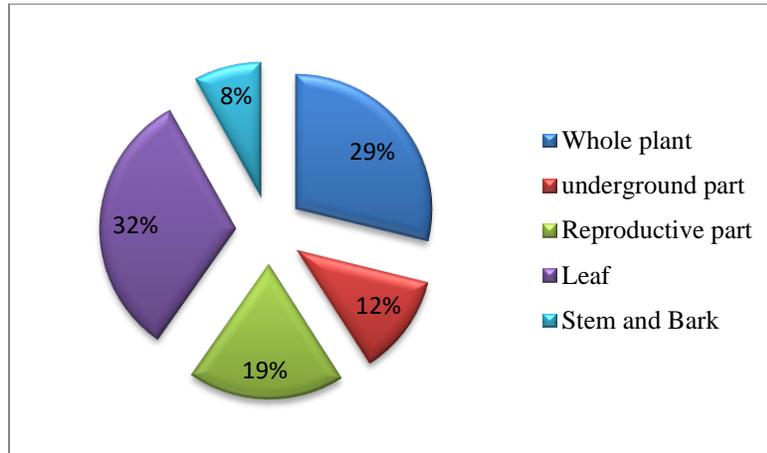


Classification of species based on the plant parts used

Parts of the plants collected were observed in the present study. Of the 149 species of commercially exploited medicinal plants, 48% of the plants are grown

for leaves, 18% for underground parts (root, rhizome and tubers); 28% for reproductive parts (buds, flowers, fruits and seeds); 43% for whole plant and 12% for aerial parts (stem and bark) (Figure 2).

Figure 2: Preference of different parts of medicinal plants in the study area

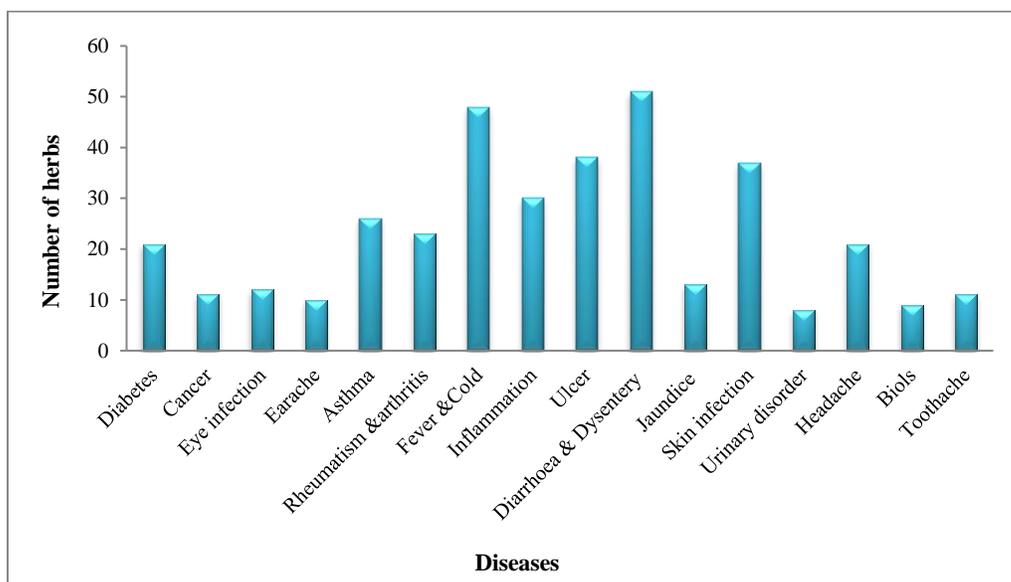


Classification of species based on their medicinal uses

People are collecting the medicinal plants and use them to treat their common ailments viz., diabetes,

cancer, eye infection, ear infection, asthma, rheumatism, arthritis, fever, common cold, inflammation, ulcer, diarrhoea and dysentery, jaundice, skin infection, urinary disorder, headache, boils and toothache (Figure 3).

Figure 3: Diseases wise usage of medicinal plant in the study area



By adding together some common ingredients such as sugar, salt, honey, milk, onion, pepper, turmeric, tamarind, jiggery, coconut oil and cow's urine, people prepare various formulations to treat the common ailments. They believe that these ingredients are very helpful to cure common diseases within few days without any side effects. Availability, low cost and high effectiveness make them to be worth enough for the common man. However, the vernacular names of certain medicinal plants which are sold in the local markets are confusing with original plant species. Moreover powdered and dried plant parts are mostly sold with the adulterants. Realizing this fear, people have started growing herbal plants in their own garden. This will also prevent the local people collecting medicinal plants in the wild which may lead to extinction of such species.

According to Mesa-Jiménez [10], when few plants are well thought-out therapeutic, communities attribute higher rates of corroboration to those plants. However, when the widely held of conventional plant treatments are for small ailments, the low Pharmacological Ethno botanical alphabetical listing indicate a low concentration of medicinal plant awareness. These suggest corrosion of medicinal plant information and warrant new life of the community's conventional medicinal system. Systematic revival would ensure constant use of more species which, in turn, would conserve local biodiversity [11]. Voek (2004) [12] believes people in disturbed areas tend to use more local medicinal plants due to knowledge or user-friendliness. This idea is contest by de Albuquerque (2006) [13] whose study in the north eastern region of Brazil showed those people abandoned medicinal plants growing near their homes or on local roadsides. Our study's results, however, have the same

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opinion more intimately with the findings of Voek (2004) [12]. However, modified forms of a local natural resource capacity also be traded. For example, *Zingiber officinale* Roscoe (Ginger) is widely sophisticated in humid regions of India, yet local medicinal herb dealer trade dried out ginger which is used broadly both in codified and non-codified systems of Indian medicine. Similarly, *Azadirachta indica* A. Juss. (Neem) is also found naturalized all the way through tropical regions of India, yet neem seed oil is commonly traded. Mostly, traded plants are collected from their usual habitats, even if cultivated species also might be received by the customer [14]. It is commonly understood that business-related plant trade has eroded medicinal plant biodiversity, outstanding to undefended harvest methods working when collecting plants from the undomesticated [15].

CONCLUSION

This study revealed that even though the accessibility of western medicine for simple and complicated diseases is available, many people in the study area are still continue to depend on medicinal plants, at least for the treatment of some common diseases such as, cold, cough, fever, headache, poison bites, skin diseases and tooth infections. Herbal gardens not only provide ingredients for simple formulations at domestic level; they remain a viable source of income also for many. Herbal gardens play a major role in the production of medicinal plant parts, medical formulations, job opportunities, crop improvement, and maintaining soil fertility. Conservation of such plants help to maintain the green nature, healthy atmosphere around the home and most importantly it provides an aesthetic value.

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