

Ethnobotanical Survey of Medicinal Plants in Korampallam Village, Thoothukudi District, Tamil Nadu, India

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ABSTRACT

People have been traditionally using medicinal plants from time immemorial for the treatment of various types of disease. An ethnobotanical survey was made in the Korampallam village in Thoothukudi district, Tamil Nadu, during the month of January 2020. Regular visits were conducted to collect and record the plants of that region. The following findings were made clear. A total of 129 plant species belonging to 62 families were recorded for Korampallam village of Thoothukudi district in Tamilnadu, India. Among the species, 1 species belongs to Pteridophyta, while the other 128 species belongs to Angiosperms. Analysis of habit forms indicated 73 species of herbs, 30 species of shrubs, 32 species of trees, 9 climbers, creepers and aquatic plants were recorded. The survey indicates that leaves are predominantly used for treating any ailment which was followed by stem with 34%, roots with 13% followed by whole plant and seeds with 9% and 3% respectively. Among 14 major disease categories, dermatological disorders were dominated followed by kidney disease with 451 use-reports, followed by skin disease and hair problem (302 and 242 use-reports, respectively).

Keywords: Demography, disorders, ethnobotany, Korampallam, survey.

INTRODUCTION

The progress of pharmacology, the therapeutic use of plants is very present in some countries, especially developing ones¹. Ethnobotany surveys include interviewing local people, use of the available data in the literature, and the folklore of each region². The goal of ethnobotany is to protect and to pass the valuable and useful traditional knowledge to future generations. Ancient methods of treatment by ethno medicinal value of various types of trees, shrubs, herbs and underground modification such as root, stem, bark, leaves, flowers, fruits and seed³. Now a days, indigenous knowledge about the use of medicinal plants in being lost from one generation to another generation due to modernization and the habitat destruction of the medicinal plants⁴. The present investigation elaborated the plant diversity of Kormapallam village, Thoothukudi district, Tamil Nadu, India. The district shows rich diversity of plants having medicinal value and other important economic aspects which are generally used for various aspects by inhabitants of the area. The objective of the present study includes collection of plants from Korampallam village, identification of collected plants and recording the plant available in the selected area.

MATERIALS AND METHODS

Description of the study area

Korampallam village was the area selected for the present analysis. Korampallam is a panchayat village located in Tamil-Nadu state, India, in the Thoothukudi district. The

Korampallam geographical coordinates are latitude 8.77 and longitude 78.1.

Plant collection and identification

During the month of January 2020, Korampallam village was regularly visited and every plant was photographed and collected in plastic bags for identification. With the aid of Flora of the Presidency of Madras, the plants were identified. In addition to data on taxonomic place (family), vernacular name, common name, life form, and folk medicinal uses, the species entries were supplemented. The life type was graded according to the system suggested by Raunkiaer into herbs, shrubs, grasses and trees (annual, biennial or perennial).

Ethnobotanical Survey:

The ethnobotanical study of the village includes the testing of knowledge about the usage of common medicinal plants. Based on the literature review, about 14 categories of common ailments like kidney disease (KD), Skin disease (SD), Hair problem (HP), Stomach problem (SP), Respiratory disease (RD), Cold (C), Cough (CO), Diuretic (D), Tooth ache (TA), Head ache (HA), Fever (F), Body heat (BH), Insect Bite (IB) and Menstrual issues (MI) were selected for the present survey. A questionnaire was prepared using Google forms to collect the ethnobotanical applications of the plants in the village. The link is <https://forms.gle/r4LYYRsiznLJ2qpN6>. The link was then circulated among the residents of the chosen village. Choices were given to each respondent to select

the medicinal plants and their uses. There were up to 124 members participated in the survey.

RESULT AND DISCUSSION

Plant Diversity

In the present study the attention is focused on diversity of plants in Korampallam village, Thoothukudi district, Tamil Nadu, India. A total number of 129 plant genus and 149 species were recorded from the study area. In which 1 genus belongs to Pteridophyta, while the other 128 genera belong to Angiosperms. (Table 1) The plants in Atoor village of Kanyakumari district and recorded 89 plant species belonging to 47 families were recorded⁵. 16 plant species belonging to 14 families were used for treating diabetes by the tribal peoples of Kolli hills of Namakkal district, Tamil Nadu were also reported and recorded⁶.

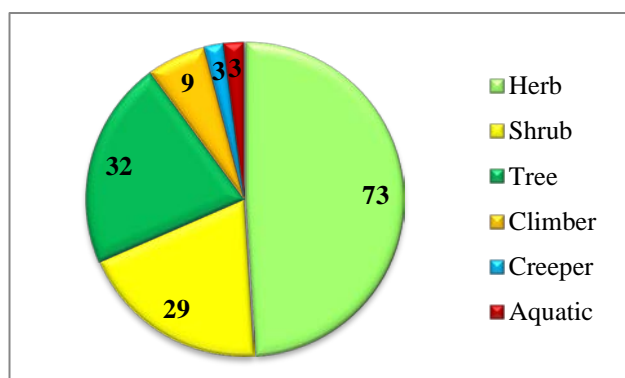


Figure 1: Habit Wise Distribution of Plant Species in Korampallam Village

Among the documented species belonging to 62 families, the family Fabaceae is most frequented represented with 9 species, followed by Asteraceae with 8 species, Amaranthaceae, Malvaceae and Verbenaceae with 6 species each. Previous studies reported that Fabaceae and Solanaceae are the dominant families with more no. of ethnomedicinal plants in Tirunelveli hills of southern India⁷.

Analysis of habit forms indicate 73 species of herbs, 30 species of shrubs, 32 species of trees, 9 climbers, creepers and aquatic plants are recorded and shown in Figure 1. The

common use of herbaceous medicinal plants was also reported in other parts like Kanyakumari and Red Hills of Tamilnadu⁸.

In the present study, the survey indicates that leaves are predominantly used for treating any ailment which is followed by stem with 34%, roots with 13% followed by whole plant and seeds with 9% and 3% respectively as shown in Figure 2. Findings of our study is in line with many ethnobotanical surveys showing that leaves are the most commonly used in areas like China, India, Thailand,

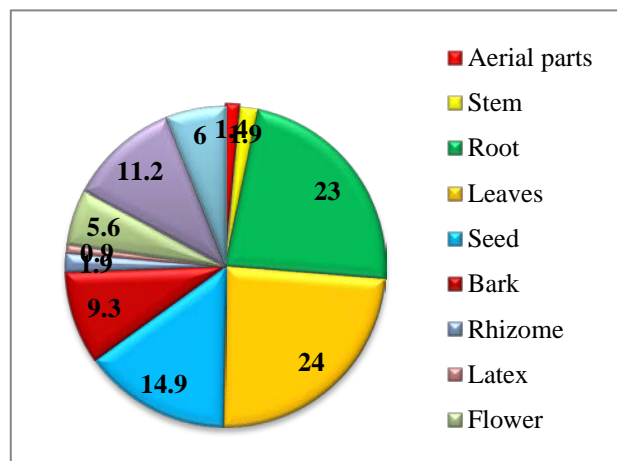


Figure 2: Percentage of Plant Parts Used for Drugs Preparation

Use report and use categories

The ethnobotanical study of the village includes the testing of knowledge about the usage of common medicinal plants. Based on the literature review, about 14 categories of common ailments like Kidney Disease (KD), Skin disease (SD), Hair problem (HP), Stomach problem (SP), Respiratory disease (RD), Cold (C), Cough (CO), Diuretic (D), Tooth ache (TA), Head ache (HA), Fever (F), Body heat (BH), Insect Bite (IB) and Menstrual issues (MI) are selected for the present survey and about 48 plant species are given in the survey to note down their usage as shown in plate 2 - 5. Among which about 24 species are noted to cure kidney disease followed by 19 species to cure stomach problem and 16 species to treat skin disease as shown in table 2.

Table 1. List of Plant Species Collected from Korampallam Village, Thoothukudi

S. No	Botanical Name	Family	Habit	Common Name
1.	<i>Abutilon indicum</i> Linn. Sweet.	Malvaceae	Herb	Country Mallow
2.	<i>Acacia nilotica</i> L. Willd. ex Delile	Fabaceae	Tree	Gum arabic
3.	<i>Acalypha indica</i> (Linn.)	Amaranthaceae	Herb	Indian Acalypha
4.	<i>Acanthospermum hispidum</i> DC.	Asteraceae	Herb	Goat's head
5.	<i>Achyranthes aspera</i> (L.)	Amaranthaceae	Herb	Nayurivi
6.	<i>Aerva lanata</i> (L.) Juss. ex Schult	Amaranthaceae	Herb	Poolai Poo
7.	<i>Aerva tomentosa</i> Forsk	Amaranthaceae	Herb	Desert cotton
8.	<i>Agave cantala</i> Roxb. ex Salm-Dyck	Agavaceae	Herb	Aanai katalalai
9.	<i>Albizia Labbek</i> (L.) Benth.	Fabaceae	Tree	Vaagai
10.	<i>Aloe vera</i> (L.) Burm.f.	Liliaceae	Herb	Chotthu Kathalaw
11.	<i>Alternanthera ficoidea</i> (L.) P.Beauv.	Amaranthaceae	Herb	Brazilian Snow Flower

12.	<i>Amaranthus viridis</i> L.	Amaranthaceae	Herb	Kuppai keerai
13.	<i>Andrographis Paniculata</i> (Burm.f.)	Acanthaceae	Herb	Nelavembu
14.	<i>Anisomeles malabarica</i> (L.) R. Br.	Lamiaceae	Shrub	Peyamerathi
15.	<i>Annona Squamosa</i> (Linn.)	Annonaceae	Tree	Sita
16.	<i>Antigonon leptous</i> Hook. & Arn.	Polygalaceae	Climber	coral vine, bee bush
17.	<i>Areca Catechu</i> Linn.	Arecaceae	Tree	Pakku
18.	<i>Argemone mexicana</i> Linn.	Papaveraceae	Herb	Bramadand
19.	<i>Asparagus racemosus</i> Willd.	Liliaceae	Shrub	Thanneer Vittankizhangu
20.	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Tree	Veambu
21.	<i>Bacopa monnieri</i> (L.) Penn.	Scrophulariaceae	Creeping herb	Neer brahmi
22.	<i>Biophytum sensitivum</i> (L.) DC.	Oxalidaceae	Herb	Jala pushpam
23.	<i>Boerhaavia diffusa</i> (Linn.)	Nyctaginaceae	Herb	Mookkirattai
24.	<i>Boerhaavia rependa</i> L.	Nyctaginaceae	Herb	Punarnava
25.	<i>Borassus flabellifer</i> (Linn.)	Arecaceae	Tree	Panai
26.	<i>Brassica Juncea</i> (L.) Czern.	Brassicaceae	Herb	Kadugu
27.	<i>Bryophyllum calycinium</i> Salisb.	Crassulaceae	Herb	Ranakalli
28.	<i>Calotropis gigantean</i> (L.) R. Br	Asclepiadaceae	Shrub	Erukku
29.	<i>Cardiospermum halicacabum</i> (Linn.)	Sapindaceae	Climbing herb	Mudakkathan
30.	<i>Carica papaya</i> (Linn.)	Caricaceae	Tree	Pappali
31.	<i>Cassia fistula</i> Linn.	Caesalpiniaceae	Tree	Sarakkondrai
32.	<i>Cassia senna</i> Linn.	Caesalpiniaceae	Under shrub	Avuri
33.	<i>Catheranthus roseus</i> (L.) G. Don	Apocynaceae	Herb	Nithya kalyani
34.	<i>Ceiba Pentandra</i> (L.) Gaertn.	Malvaceae	Tree	Illavam
35.	<i>Centella asiatica</i> (L.) Urban.	Apiaceae	Herb	Vallarai
36.	<i>Chloris barbata</i> (L.) Swartz	Poaceae	Herb	Mayil kondai pul,
37.	<i>Cissus quadrangularis</i> (L.)	Vitaceae	Shrub	Perandai
38.	<i>Citrullus colocynthis</i> (L) Schrad.	Cucurbitaceae	Creeping herb	Kumatti
39.	<i>Citrus limon</i> (L.) Osbeck	Rutaceae	Tree	Elumichai
40.	<i>Citrus reticulata</i> Blanco	Rutaceae	Tree	Narathangai
41.	<i>Cleome viscosa</i> L.	Cleomaceae	Herb	Naikaduku
42.	<i>Clerodendrum inerme</i> (L.) Gaertn	Verbenaceae	Shrub	Pinchil
43.	<i>Clitoria ternatea</i> (Linn.)	Fabaceae	Twiner	Sankupoo
44.	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Shrub	Kovai
45.	<i>Cocos nucifera</i> L.	Arecaceae	Tree	Coconut
46.	<i>Commelina benghalensis</i> Linn.	Commelinaceae	Procumbent Herb	Kanavaazhai
47.	<i>Corchorus aestuans</i> Linn.	Tiliaceae	Herb	Punaku
48.	<i>Crotalaria retusa</i> Linn.	Papilionaceae	Under Shrub	Gilugiluppai,
49.	<i>Crotalovia verrucosa</i> (Linn)	Papilionaceae	Herb	Kilukillappai
50.	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Herb	Arugampullu
51.	<i>Cyperus rotundus</i> Linn.	Cyperaceae	Herb	Korai pul
52.	<i>Cyperus triceps</i> (Rottb.) Endl.	Cyperaceae	Herb	Mustaka
53.	<i>Datura innoxia</i> Mill.	Solanaceae	Herb	Vellum mattai,
54.	<i>Datura metal</i> (Linn.)	Solanaceae	Herb	Umattai
55.	<i>Delonix regia</i> (Bojer ex Hook.) Raf.	Caesalpinaceae	Tree	Semmairkondrai
56.	<i>Duranta erect</i> L.	Verbenaceae	Shrub	Aagaaya poo
57.	<i>Eclipta alba</i> L.	Asteraceae	Prostrate herb	Karisalai
58.	<i>Enicostemma axillare</i> (Lam.) Raynal	Gentianaceae	Herb	Vellarugu
59.	<i>Epipremnum aureum</i> (Linden & André) G.S.Bunting	Araceae	Climber	Golden pothos
60.	<i>Erythrina indica</i> Lam.	Fabaceae	Tree	Kalyana murungai
61.	<i>Euphorbia hirta</i> (Linn.)	Euphorbiaceae	Herb	Ammam patcharisi
62.	<i>Evolvulus alsinoides</i> (L.)	Convolvulaceae	Prostrate Herb	Vishnu kirandi
63.	<i>Ficus benghalensis</i> (Linn.)	Moraceae	Tree	Aalamaram
64.	<i>Gomphrena globosa</i> (Linn.)	Amaranthaceae	Herb	Vadamalli
65.	<i>Gomphrena serrata</i> L.	Amaranthaceae	Herb	Coastal globe amaranth.

66.	<i>Heliotropium indicum</i> (Linn.)	Boraginaceae	Herb	Thael Kodukkupooundu
67.	<i>Heliotropium curassvicum</i> L.	Boraginaceae	Herb	Salt heliotrope
68.	<i>Hibiscus rosa-sinen</i> (L.)	Malvaceae	Shrub	Semparuthai
69.	<i>Hyptis ovate</i> Pohl ex Benth.	Lamiaceae	Herb	Pignut
70.	<i>Indigofera tinctoria</i> Linn.	Fabaceae	Herb	Avuri
71.	<i>Ipomea aquatica</i> Forsk.	Convolvulaceae	Floating Herb	Nalikam
72.	<i>Ipomea carnea</i> Jacq.	Convolvulaceae	Shrub	Neiveli katamanakku
73.	<i>Jasminum sambac</i> (L.)	Oleaceae	Shrub	Malligai
74.	<i>Jatropha curcus</i> Linn.	Euphorbiaceae	Shrub	Kaatuamanku
75.	<i>Jatropha gossypifolia</i> Linn.	Euphorbiaceae	Shrub	Siria amanakku
76.	<i>Jatropha multifida</i> (Linn)	Euphorbiaceae	Shurb	Malai amanakku
77.	<i>Justica adhatoda</i> L.	Acanthaceae	Shrub	Aadaathoda
78.	<i>Lantana Camara</i> (Linn.)	Verbenaceae	Shrub	Unnichi
79.	<i>Lawsonia inermis</i> (Linn.)	Lythraceae	Shrub	Maruthani
80.	<i>Leucas aspera</i> Willd.	Lamiaceae	Herb	Thumbai
81.	<i>Luffa cylindrica</i> (L.) M. Roem.	Cucurbitaceae	Climber	Mozhukupirkankai
82.	<i>Lycopersicon Lycopersicum</i> (L.) H. Karst.	Solanaceae	Herb	Thakkali
83.	<i>Mangifera indica</i> (Linn.)	Anacardiaceae	Tree	Maa
84.	<i>Manilkara zapota</i> (L.)	Sapotaceae	Tree	Sapota
85.	<i>Martynia annua</i> (Linn.)	Martyniaceae	Herb	Puli nakam
86.	<i>Melia azadarach</i> (L.)	Meliaceae	Tree	Malai vembu
87.	<i>Mimosa pudica</i> (Linn.)	Fabaceae	Herb	Thottal surungi
88.	<i>Mirabilis jalapa</i> (Linn.)	Nyctaginaceae	Herb	Anthimantharai
89.	<i>Mollugo nudicaulis</i> (Linn.)	Aizoaceae	Herb	Parpaadagam
90.	<i>Mollugo oppositifolia</i> L.	Aizoaceae	Herb	Carpetweed
91.	<i>Momordica cymbalaria</i> Hook F.	Cucurbitaceae	Climber	Athalakkai
92.	<i>Moringa oleifera</i> Lam.	Moringaceae	Tree	Murungai
93.	<i>Muntingia calabura</i> L.	Muntingiaceae	Tree	Thean pazham
94.	<i>Murraya koenigii</i> (L.) Sprengel	Rutaceae	Shrub	Kariveppilai
95.	<i>Musa paradisiaca</i> (Linn.)	Musaceae	Tree like herb	Vazhai
96.	<i>Nelumbo nucifera</i> Gaertn.	Nelumbonaceae	Floating Herb	Thamarai
97.	<i>Nerium oleander</i> (Linn.)	Apocynaceae	Shrub	Arali
98.	<i>Nymphaea stellata</i> Willd.	Nymphaeaceae	Aquatic Herb	Neelambal
99.	<i>Ocimum americanun</i> (Linn.)	Lamiaceae	Herb	Naai thulasi
100.	<i>Ocimum basilicum</i> (Linn.)	Lamiaceae	Herb	Tirunutpatchi
101.	<i>Ocimum tenuiflorcum</i> (Linn.)	Lamiaceae	Herb	Tulsi
102.	<i>Oldenlandia umbellate</i> L.	Rubiaceae	Herb	Chayaver
103.	<i>Oryza sativa</i> (Linn.)	Poaceae	Herb	Nellu
104.	<i>Parthenium hysterophorus</i> (Linn.)	Asteraceae	Herb	Vishapooundu
105.	<i>Passiflora foetida</i> (Linn.)	Passifloraceae	Climber	Sirupoonaikkaali
106.	<i>Pavonia odorata</i> Willd.	Malvaceae	Herb	Kanapooundu
107.	<i>Pedaliium murex</i> (Linn.)	Pedaliaceae	Herb	Perunerunjil
108.	<i>Pergularia extensa</i> (Forsk.)	Asclepiadaceae	Climber	Vellipparuthi
109.	<i>Phoenix dactylifera</i> L.	Arecaceae	Tree	Peritchapanai
110.	<i>Phyla nodiflora</i> (L.) Greene	Verbinaceae	Herb	Poduthalai
111.	<i>Phyllanthus acidus</i> (Linn.)	Euphorbiaceae	Tree	Aranelli
112.	<i>Phyllanthus amarus</i> Schum. & Thonn.	Euphorbiaceae	Herb	Keelanelli
113.	<i>Physalia minima</i> (Linn.)	Solanaceae	Herb	Sodakkuthakkali
114.	<i>Physalia peruviana</i> (Linn.)	Solanaceae	Hairy Herb	Pottipallam
115.	<i>Pisonia alba</i> L.	Nyctaginaceae	Shrub	Lachaikottai
116.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Fabaceae	Tree	Kodukapuli
117.	<i>Plectranthus amboinicus</i> (Lour.)	Lamiaceae	Herb	Karpuravalli
118.	<i>Polyalthia longifolia</i> (Sonn.)	Annonaceae	Tree	Nettilingam
119.	<i>Prosopis julfilora</i> (Sw.) DC.	Fabaceae	Tree	Velikathan
120.	<i>Psidium guajava</i> (Linn.)	Myrtaceae	Shrub	Koiyya
121.	<i>Punica granatum</i> (Linn.)	Punicaceae	Tree	Madulai
122.	<i>Ricinus communis</i> (Linn.)	Euphorbiaceae	Tree	Amanakku
123.	<i>Ruellia tuberosa</i> (Linn.)	Acanthaceae	Herb	Vedikai

124.	<i>Russelia equisetiformis</i> Schlecht. & Cham.	Plantaginaceae	Shrub	Coral fountain
125.	<i>Senna alata</i> (Linn.)	Caesalpiniaceae	Shrub	Seemai agathi
126.	<i>Senna auriculata</i> (Linn)	Caesalpiniaceae	Shrub	Avarai
127.	<i>Senna italica</i> Mill.	Caesalpiniaceae	Herb	Italian senna
128.	<i>Sida acuta</i> (Burm. f.)	Malvaceae	Herb	Vathathiruppi
129.	<i>Solanum nigrum</i> (Linn.)	Solanaceae	Herb	Manatakkali
130.	<i>Solanum torvum</i> (Sw.)	Solanaceae	Shrub	Sundaikai
131.	<i>Solanum trilobatum</i> (L.)	Solanaceae	Shrub	Thuthuvalai,
132.	<i>Solanum xanthocarpum</i> Schrad. & H. Wendl.	Solanaceae	Herb	Kandangattiri
133.	<i>Stahytarpheta jamaicensis</i> (L.)	Verbenaceae	Shrub	Seemai Nayuruvi
134.	<i>Stemodia viscosa</i> (Roxb.)	Scrophulariaceae	Herb	Sticky blue rod
135.	<i>Striga asiatica</i> (L.) Kuntze	Orobanchaceae	Herb	Pallipoondu
136.	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Tree	Naval
137.	<i>Tamarindus indica</i> (Linn.)	Fabaceae	Tree	Puli
138.	<i>Tectona grandis</i> (Linn. f.)	Verbenaceae	Tree	Thekku
139.	<i>Tephrosia purpurea</i> (Linn)	Papilionaceae	Under shrub	Kolingi
140.	<i>Terminalia catappa</i> Linn.	Combretaceae	Tree	Vadham
141.	<i>Thespesia populnea</i> (Linn)	Malvaceae	Tree	Poovarasu
142.	<i>Tragia involucrate</i> (Linn.)	Euphorbiaceae	Climbing herb	Senthatti
143.	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Herb	Nerunji
144.	<i>Tridax procumbens</i> (Linn.)	Asteraceae	Herb	Vettukayapoondu
145.	<i>Typha angustata</i> Bory & Chaub.	Typhaceae	Herb	Sambu
146.	<i>Vernonia cinerea</i> (L.) Less	Asteraceae	Herb	Neichitti keerai
147.	<i>Vicoa indica</i> (L.) DC.	Asteraceae	Herb	Jimikipoo
148.	<i>Wedelia chinensis</i> (Osbeck.) Merr.	Asteraceae	Herb	Manjal karisalai
149.	<i>Xanthium indicum</i> Koen.	Asteraceae	Herb	Marulumattai

Table 2. Medicinal Flora of the Study Area

S. No	Botanical Name	Useful Part	Uses
1	<i>Abutilon indicum</i>	Aerial Parts Leaves, bark, Root	Febrifuge, anathematic and anti-inflammatory; also employed in urinary troubles and lumbago Extracts is diuretic and demulcent Astringent and diuretic Nerving tonic and anti-pyretic; also used in piles
2	<i>Acalypha indica</i>	Aerial Parts Leaf	Cough associated with bleeding from the lungs and insipient phthisis Juice employed for coetaneous troubles, Juice of fresh leaves is a reliable emetic, found useful in cases of croup.
3	<i>Acanthospermum hispidum</i>	Whole Plant	Dermatological medicaments
4	<i>Achyranthes aspera</i>	Whole Plant	Decoction of Herb diuretic, used in renal dropsy's
5	<i>Aerva lanata</i>	Aerial parts	Used in cough, sore throat, diabetes and lithiasis and diuretic
6	<i>Aerva tomentosa</i>	Whole plant Flower and Roots Seeds	It is used externally to remove swelling relive inflammation and promote healing of wounds and ulcers. Used to alleviate Kidney problems and rheumatism. Cure headaches. A gargle is made from the plants to treat toothache.
7	<i>Agave centala</i>	Leaves Core Plant	Used as laxative and emmenagogue, also given in scurvy. leaves used in syphilis, Scrofula and Caner Used in as cites, dropsy, venereal sores and dysentery
8	<i>Albizia Labbek</i>	Leaves and Seeds Bark	In eye troubles Boils

9	<i>Aloe vera</i>	Leaves	Fresh juice of leaves cathartic and refrigerant. Used in liver and spleen ailments and for eye troubles and also in chronic constipation
10	<i>Andrographis Paniculata</i>	Whole Plant Leaves and roots	Astringent anodyne, Tonic used in dysentery, cholera, diabetes, influenza, bronchitis, itches and pile Febrifuge, Cholagogue and Anthelmintic
11	<i>Anisomeles malabarica</i>	Leaves	Dyspepsia and fever Decoction of the plant used in rheumatism
12	<i>Annona Squamosa</i>	Root, Seed	Purgative Abortifacient
13	<i>Areca Catechu.</i>	Nuts	Used as a Masticators
14	<i>Argemone mexicana</i>	Whole Plant Seeds	Plant Juice used in scabies and ophthalmia Oil in coetaneous troubles. It is a cathartic
15	<i>Asparagus racemosus</i>	Whole Plant Root	Diuretic & galactogogue. Fresh Juice mixed with Honey and given in dyspepsia Root used in nervous and rheumatic complaints
16	<i>Azadirachta indica</i>	Leaves Flowers Berries seeds Fresh tender twigs	Skin troubles Antiseptic Decoction given for ulcers and eczema Stomachic and tonic, Purgative, emollient oil used for skin troubles Clean teeth particularly in pyorrhoea
17	<i>Bacopa monnieri</i>	Whole Plant	Improve intelligence used in epilepsy insanity and other nervous diseases.
18	<i>Biophytum sensitivum</i>	Herb Leaves & Roots Seeds	Tonic and stimulant used in chest complaints, convulsions, cramps and inflammatory tumours. Ash mixes with lime juice given in stomach ache. Styptic Decoction of leaves given in diabetes, asthma and phthisis Powered applied to abscesses to promote suppuration
19	<i>Boerhavia diffusa</i>	Root	Expectorant, diuretic, Laxative, used in asthma
20	<i>Borassus flabellifer</i>	Fresh Sap	Stimulant and ant phlegmatic properties, inflammatory and leprosy
21	<i>Brassica Juncea</i>	Seed	Urticaria, diarrhoea, arthritis, hiccup, emetic
22	<i>Calotropis gigantea</i>	Leaves	Rubbed in the skin elephants in the treatment of kesavayer disease
23	<i>Cardiospermum halicacabum</i>	Roots Leaves	Diuretic, diaphoretic, laxatives used in rheumatism, Lumbago and nervous diseases Used as poultice in rheumatism
24	<i>Carica papaya</i> (Linn)	Un ripe fruit Plant	Milky Juice used to remove freckles and other blemishes from the skin Anthelmintic particularly effective for limbic Yields a blood anticoagulant
25	<i>Cassia fistula</i> Linn	Root, bark Stem-bark Leaf	Constipation, skin diseases Diabetes, leucorrhoea Anaemia, Leprosy, Jaundice, Pain, indigestion
26	<i>Cassia senna</i>	Leaves & Fruits	Laxative and purgative
27	<i>Catheranthus roseus</i>	Leaves Root Plant	Used in diabetes, infusion of leaves. Used in menorrhagia, Juice applied for relief of pain due to wasp stings Hypertensive, Sedative and tranquillizing properties Extract from the plant has shown growth inhibitory effect in certain human tumours
28	<i>Ceiba pentandra</i>	Root	Diuretic Gum used in bowel complaints
29	<i>Cissus quadrangularis</i>	Whole Plant Root	Juice prescribed in scurvy Powdered root considered specific for fractures
30	<i>Citrullus colocynthis</i>	Fruit Root	Fruit pulp considered drastic hydragogue, cathartic Purgative used in as cites, Jaundice, rheumatism and urinary troubles.
31	<i>Citrus limon</i>	Fruits	Juice-Scurvy, pulp hypertrophy of spleen
32	<i>Citrus reticulata</i>	Trust	Distaste, Thirst, oedema cardiac disease.

33	<i>Cleome viscosa</i>	Leaves Seeds	Rubefacient, Vesicant and soporific. poultice of seeds Efficacious in chronic painful joints and also anthelmintic
34	<i>Clerodendrum inerme</i>	Root, Leaf	Glandular swellings eczema, Leucorrhoea scabies, pain, diseases of votary. Snake bit poisoning
35	<i>Clitoria ternatea</i>	Root	Cathartic and diuretic
36	<i>Coccinia grandis</i>	Leaf Stem Root Fruit	Skin diseases Ulcers, stomatitis Diabetes, asthma Arthralgia, retention of urine
37	<i>Commelina benghalensis</i>	Herb	Demulcent-emollient, laxative and refrigerant, leprosy
38	<i>Corchorus aestuans</i>	Seed	Stomachic
39	<i>Crotalaria retusa</i>	Plant	Used in scabies and impetigo
40	<i>Crotalovia verrucosa</i>	Leaves	Used in scabies and impetigo
41	<i>Cynodon dactylon</i>	Rhizome	Used in genitor-urinary troubles
42	<i>Cyperus rotundus</i>	Whole plant	Diuretic, diaphoretic, astringent. Used in stomach and bowel complaints
43	<i>Cyperus triceps</i>	Root	Oil used in stimulating liver & to relieve puritans
44	<i>Datura innoxia</i>	Plant	Cerebral depressant
45	<i>Datura metal</i>	Leaves	Narcotic & antispasmodic
46	<i>Eclipta alba</i>	Plant	Tonic and deobstruent used in hepatic and splenic enlargements and in skin troubles
47	<i>Enicostemna axillare</i>	Whole Plant	Bitter tonic stomachic and laxative used as substitute for chirayita as a blood purifier also in dropsy and malaria
48	<i>Euphorbia hirta</i>	Whole Plant	Used as an ingredient in preparations for cough and asthma; also used in colic dysentery and diseases of genitor-urinary tract. Latest applied to warts.
49	<i>Evolvulus alsinoides</i>	Plant	Act as tonic and febrifuge, also used as vermifuge, along with oil used in promoting hair growth
50	<i>Ficus benghalensis</i>	Latex	Used in rheumatism and lumbago. Infusion of bark considered tonic astringent used in diarrhoea, dysentery and diabetes. Leaves to used and cooling
51	<i>Gomphrena globosa</i>	Root	Used in cough
52	<i>Heliotropium indicum</i>	Plant Root Leaves Flowers Seeds	Emollient, Vulnerary and diuretic used in ulcers, sores, wounds boils and skin affections Decoction of roots in cough and fever Decoction of leaves in urticaria and fever Flowers acts as emmenagogue in small doses and abortifacient in large doses Seeds masticated and used as a stomachic
53	<i>Hibiscus rosa-sinen</i>	Leaves Flowers	Anodyne, aperients, emollient Decoction used in bronchial catarrh
54	<i>Indigofera tinctoria</i>	Plant Leaves Roots	Extract used in epilepsy and other nervous disorders. Ointment used in sores, old ulcers and piles. Decoction used in blenorrhagia. Used in urinary complaints and hepatitis.
55	<i>Ipomea aquatica</i>	Plant	Juice used as an emetic in opium and arsenic poisoning. Useful for women suffering from nervous and general debility
56	<i>Ipomea carnea jacq</i>	Plant	Act as mild purgative
57	<i>Jasminum sambac</i>	Root & Leaves	Eye lotions
58	<i>Jatropha curcus</i>	Seed Plant Leaves	Oil used in sciatica, dropsy, Paralysis and externally for skin troubles and rheumatism, also abortifacient Juice used in scabies, eczema & ringworm affections Rubefacient and Lactagogue
59	<i>Jatropha gossypifolia</i>	Roots Leaves	Used in leprosy Decoction used as purgative

		Latex	Ulcer
60	<i>Jatropha multifida</i>	Root Leaves Seed	Decoction used indigestion and colic's Purgative also used in scabies Roasted seeds used in fever and venereal diseases Cathartic, used in criminal poisoning
61	<i>Justica adhatoda</i>	Leaves	Used in curing bronchial troubles Juice used in diarrhoea dyes enteric and glandular tumours Powdered leaves used in skin affections
62	<i>Lantana Camara</i>	Plant	Diaphoretic, Carminative anti spasmodic used in fistulae pustule and tumours. Decoction given in tetanus, rheumatism, malaria and for ataxy of abdominal viscera
63	<i>Lawsonia inermis</i>	Leaves	Prophylactic against skin troubles
64	<i>Leucas aspera</i>	Leaves Flowers	Juice applied eternally in psoriasis, Chronic skin eruptions and painful swellings Given with Honey in cough and colds.
65	<i>Lipia noflora</i>	Herb	Used as an antipyretic
66	<i>Luffa cylindrica</i>	Fruit	Diuretic, Lactagogue, Carminative and anthelmintic Juice purgative
67	<i>Mangifera indica</i>	Fruit Bark Seeds	Laxative, diuretic Used in uterine haemorrhage Asthma
68	<i>Manilkara zapota</i>	Bark	Gum is used in dental surgery
69	<i>Martynia annua</i>	Leaves Fruits	Used in epilepsy and applied in tubercular glands of the neck Juice used as a gargle for throat disorders Alexeteric used in inflammation
70	<i>Marsilea quadrifolia</i>	Plant	Anti-inflammatory diuretic, febrifuge and refrigerant
71	<i>Melia azadirach</i>	Leaf Bark Fruit	Juice anthelmintic diuretic emmenagogue. Gum used in spleen enlargement Ascariasis Tonic
72	<i>Mimosa pudica</i>	Root Leaves	Decoction used in gravel and other urinary complaints Juice used is dressing for sinus and also for sores and piles
73	<i>Mirabilis jalapa</i>	Leaves Stem	Used as a tonic Bruised leaves applied to boils and abscesses Juice of leaves applied to wrangles and bruises and for allaying itching in urticaria
74	<i>Mollugo nudicaulis</i>	Leaves	Applied for boils for suppuration
75	<i>Mollugo oppositifolia</i>	Plant	Plant used as stomachic aperients and antiseptic
76	<i>Luffa tuberosa</i>	Root Leaves Fruits	Used in haemorrhoids Juice given in bilious affections Tonics, stomachic, earminative and cooling used in rheumatism gout and diseases of liver and spleen and also in diabetes
77	<i>Momordica cymbalaria</i>	Root	Abortifacient
78	<i>Moringa oleifera</i>	All Parts Roots Leaves Flower Seeds	Used in as cites, Venomous bites rheumatism and as a cardiac and circulatory stimulant Rubefacient and vesicant Scurvy and catarrhal affections Diuretic & Cholagogue Antipyretic oil applied in rheumatism
79	<i>Muntingia calabura</i>	Plant	Antiseptic
80	<i>Murraya koenigii</i>	Leaves Root and Bark	Tonic, Stomachic, Carminative Leaves used in diarrhoea and dysentery and for checking vomiting Root juice-renal pails
81	<i>Musa paradisiaca</i>	Fruit	Laxative, used in intestinal disorders. Uvaemia, nephritis, hypertension and of the vascular disorders
82	<i>Nelumbo nucifera</i>	Rhizomes Carpals	Used in diarrhoea and dysentery Demulcent and nutritive

83	<i>Nerium oleander</i>	Root	Resolving and attendant oil used in skin diseases.
84	<i>Nymphaceae stellata</i>	Rhizome Flowers Seeds	Demulcent used in dysentery and dyspepsia Cardio tonic Citreous diseases
85	<i>Ocimum americanun</i>	Whole Plant	Diuretic and tonic
86	<i>Ocimum basilicum</i>	Plant Leaf Seed	Stomachic, alexipharmic antipyretic, diaphoretic, expectorant, carminative Stimulant and anthelmintre Juice given for ringworm Demulcent, stimulate, diaphoretic, diuretic, piles
87	<i>Ocimum tenuiflorum</i>	Leaves Root Seed	Stimulant, diaphoretic, ant periodic and expectorant chef in catarrh and bronchitis ringworm and other cut nears diseases infusion used as a stomachic Decoction given as a diaphoretic in material fever Mucilaginous and demulcent used in genitor urinary disorders
88	<i>Oldenlandia umbellata</i>	Root	Decoction used as a liquorices
89	<i>Oryza sativa</i>	Root & Seed	Vomiting, abdominal disorders, fainting debility piles
90	<i>Parthenium hysterophorus</i>	Plant Root	Tonic, Febrifuge, Emmenagogue analgesic Decoction used in dysentery
91	<i>Passiflora foetida</i>	Fruits Leaf Root	Erratic, Decoction used in asthma and biliousness Decoction Emmenagogue used in hysteria
92	<i>Pavonia odorata</i>	Roots	Antipyretic, Stomachic and refrigerant. Used in dysentery and intestinal haemorrhage
93	<i>Pedaliium murex</i>	Root Fruits	Decoction ant bilious Aphrodisiac decoction given in incontinence of urine nocturnal emissions spermatobhoca and impotence.
94	<i>Pergularia extensa</i>	Plant Leaf	Emetic, expectorant, anthelmintric Decoction used in asthma Juice infantile diarrhoea combined with lime. Juice applied to rheumatic swellings pulp applied to carbuncles. Plant extract given to uterine and menstrual troubles and to facilitate parturition
95	<i>Phyllanthus acidus</i>	Root & Seeds	Cathartic
96	<i>Phyllanthus amarus</i>	Herb Root	Astringent, deobstruent, stomachic, diuretic and febrifuge used in stomach troubles likes diarrhoea, dysentery, dyspepsia colic also used in dropsy and diseases of Crino genetal system Given in Jaundice and also used as a galtagogu
97	<i>Physalia minima</i>	Fruits & Leaves	Tonic, diuretic purgative
98	<i>Physalia peruviana</i>	Leaves	Used in abdominal disorders
99	<i>Pithecellobium dulce</i>	Bark & pulp Leaves & Seeds	Astringent and hemostatic extract used against dysentery chronic diarrhoea tuberculosis Leaf extract used heat gall ailments clear ulcer
100	<i>Plectranthusamboinicus</i>	Leaves	Used in urinary diseases Decoction given in chronic cough and asthma Juice carminative used in dyspepsia
101	<i>Polyalthia longifolia</i>	Bark	Febrifuge
102	<i>Psidium guajava</i>	Bark Fruits	Decoction given in diarrhoea Tonic, cooling and laxative useful in colic & bleeding gum
103	<i>Punica granatum</i>	Bark Flower buds	Used to expel tapeworms Rind used as an astringent in diarrhoea and dysentery Used in bronchitis
104	<i>Ricinus communis</i>	Root Leaves Seed	Decoction given in lumbago Poultice applied to boils and sores Yield Oil as cathartic
105	<i>Ruellia tuberosa</i>	Plant	Emetic used as a substitute for Ipecac
106	<i>Sennaitalile</i>	Leaves	Diarrhoea
107	<i>Senna alata</i>	Leaves	Juice used in skin troubles

		Seeds	Vermifuge
108	<i>Senna auriculata</i>	Roots Bark Leaves & Fruits Seeds	Used in skin troubles Astringent anthelmintic Used in eye troubles diabetes and chylous urine
109	<i>Senna italica</i>	Leaves	Diarrhoea
110	<i>Sida acuta</i>	Roots Leaves	Tonic, stomachic diaphoretic and antipyretic Used in nervous and urinary disorders and bowel complaints also used as an electuary for expelling worms Demulcent and diuretic boiled in oil, they are applied to reticular swellings and elephantiasis Decoction used in haemorrhoids and impotence
111	<i>Lycopersicon lycopersicum</i>	Fruit	Cooling Tonic
112	<i>Solanum nigrum</i>	Herb Fruits	Antiseptic and ant dysenteric used in cardalgia and gripe infusion of herb applied to anthrax pastels also used as a diuretic and laxative Decoction narcotic and antispasmodic Extract effective in cirrhosis' of liver Tonic, diuretic and cathartic used in anasarca and heart diseases. They are used in fever diarrhoea and eye troubles, dilatation of pupils
113	<i>Solanum Suratense</i>	Roots Stem Flower & Fruits Berries seed	Expectorant used in cough asthma and pain in the chest Carminative used in burning sensation of the feet accompanied by vesicular watery eruption. Juice of leaves mixed with black pepper and used in rheumatism Juice used in sore-throat used as expectorant in asthma and cough
114	<i>Solanum torvum</i>	Herb Roots	Useful in liver as well as spleen enlargement Decoction given in cough Sedative, diuretic and digestive Used in poultices applied for cracks in the feet
115	<i>Solanum trilobatum</i>	Roots	Used for consumption in the form of electuary Decoction or powder used to relive cough
116	<i>Stahytarpheta jamaicensis</i>	Herb Bark Leaves	Used in intestinal worms. Venereal diseases, ulcers, erysipelas, dropsy and stomach ailments. Juice employed to remove cataract and decoction as an abortifacient Used in diarrhoea and dysentery Used in cardiac troubles Decoction used in ulceration of the nose
117	<i>Stemodia viscosa</i>	Plant	Used a demulcent
118	<i>Striga asiatica</i>	Plant	Given to improve appetite
119	<i>Syzygium cumini</i>	Bark Seed	Used in gargles and mouth waster Decoction & Powder used in diabetes
120	<i>Tamarindus indica</i>	Fruit	Pulp refrigerant Carminative and laxative given as an infusion in biliousness and febrile conditions
121	<i>Tectona grandis</i>	Wood Flowers Seeds Bark	Oil, applied to eczema Used in biliousness, bronchioles' and urinary discharges Flower and seed considered diuretic Astringent used in bronchitis
122	<i>Tephrosia purpurea</i>	Roots Pod Seed	Tonic, Laxative, diuretic and deobstruent; used in bronchitis and bilious febrile attacks also for boils pimples and bleeding piles Decoction given in dyspepsia diarrhoea rheumatism, asthma and urinary disorders. Roots given with black pepper in colic, Pulverized roots smoked for relief from asthma and Cough

			Decoction used as a vermifuge and to stop vomiting Oil used in scabies ich.eczem a and other skin eruption
123	<i>Terminalia catappa</i>	Leaves Bark	Soporific also applied to rheumatic joints Juice used in ointment for scabies and coetaneous affections Diuretic and card ionic also used in dysentery
124	<i>Thespesia populnea</i>	Bark, leaves, flowers & fruits Seed Bark, Root & fruits Seeds	Used in cutarieaus affections Oil used in skin troubles Are astringent used in dysentery and haemorrhoids Purgative
125	<i>Tragia involucrate</i>	Plant Roots	Diaphoretic, Paste applied for extraction of guinea worms
126	<i>Tribulus terrestris</i>	Roots Leaves Fruits	Aperients Stomachic used as lithotripter Tonic and diuretic used in painful maturation and calculus affections also prescribed in Bright's disease
127	<i>Tridax procumbens</i>	Leaves	Used in bronchial catarrh, dysentery and diarrhoea juice used to check haemorrhage or wounds.
128	<i>Typha angustata</i>	Rhizome	Astringent and diuretic
129	<i>Vernonia cinerea</i>	Herb Roots Flowers Seeds	Useful combination against malaria. Juice given in incontinence of urine. Used as an anthelmintic Decoction given in diarrhoea and stomach-ache. Juice for cough and colic. Used in fever, rheumatism and conjunctivitis Anthelmintic and alexipharmic effective against thread worms and round worms. Also given in cough, flatulence, intestinal colic dysuria, leucoderma, psoriasis and other skin diseases.
130	<i>Vicoa indica</i>	Whole Plant Roots Inflorescence	Anti fertility activity Used in scorpion sting. Used in throat disorders
131	<i>Wedelia chinensis</i>	Leaves Herb	Tonic used in cough, cephalgia and alopecia. Decoction used in menorrhagia and uterine haemorrhages.
132	<i>Xanthium indicum</i>	Herb Roots Leaves Fruits Seeds	Tonic diuretic and sedative. Tonic used against cancer and scrofula. Extract applied to ulcers, boils and abscesses. Astringents, diuretic and anti-syphilitic used in scrofula and herpes. Rich in vitamin C and considered cooling and demulcent anti- inflammatory. Used in the treatment of arino-genital dis orders Used for resolving inflammatory swellings and their erysipelas.

Demographics of the participants

This survey is taken during the pandemic situation that happened in 2020. So to avoid the direct contact, the people of the village are given with Google form through electronic medium. About 123 people who participated, 70% are female and 30% are male. Based on the age group, most of them are young adults with the age group ranging between 15 to 25 years. The students with the masters and bachelors degrees actively participated in the survey which is been shown in Figure 3 – 5. Many researchers previously documented the ethnobotanical surveys also stated that, the gastrointestinal system disorder reports higher number of plants². These results confirm the results of other ethnobotanical work carried out at a national scale¹⁰. The

relatively high score of the older informants, as expected, is due to experience¹¹.

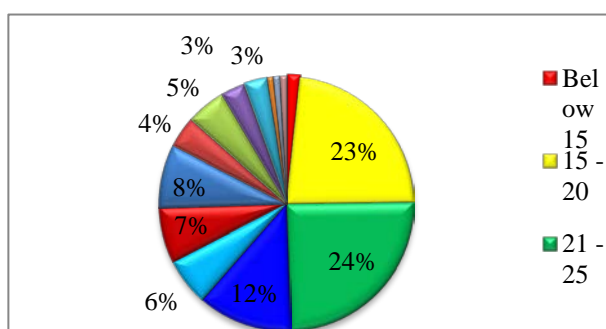


Figure 3: Age of the Informants of the Survey Study

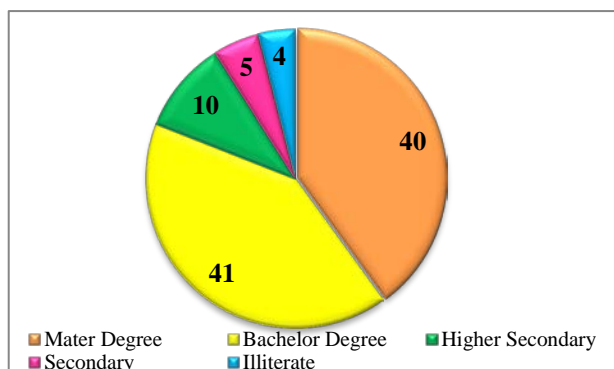


Figure 4: Education Qualification of the Informants

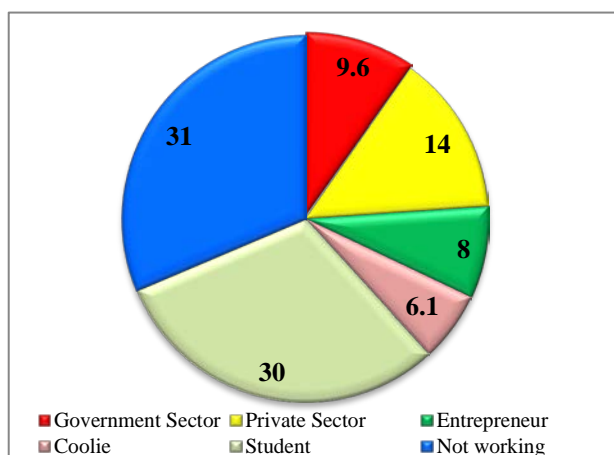


Figure 5: Employment Status of the Informants

CONCLUSION

A total of 129 plant species belonging to 62 families were recorded for Korampallam village of Thoothukudi district in Tamilnadu, India. Among the species, 1 species belongs to Pteridophyta, while the other 128 species belongs to Angiosperms. Among the documented species belonging to 62 families, the family Fabaceae is most frequented represented with 9 species. Analysis of habit forms indicated 73 species of herbs, 30 species of shrubs, 32 species of trees, 9 climbers, creepers and aquatic plants were recorded. The survey indicates that leaves are predominantly used for treating any ailment which was followed by stem with 34%, roots with 13% followed by whole plant and seeds with 9% and 3% respectively. Based on the age group, most of them were young adults with the age group ranging between 15 to 25 years. The students with the masters and bachelors degrees actively participated in the survey. Current research work suggests that priority research projects in this area should be planned for the pharmacological evaluation and conservation of medicinal plants in this field.

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