



Research Article

**SURVEY OF TRADITIONAL MEDICINAL PLANTS IN AND AROUND  
ARIYALUR IN TAMILNADU, INDIA**

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**Abstract**

The medicinal plants survey of conducted in different sites of Ariyalur areas of Tamil Nadu during the period of January 2018 to December 2018. India has old tradition of herbal medicines which are obtained from plants collected in nature. Ariyalur district is endowed with diverse flora with many medicinal plants which are used by local people to cure many diseases. Recently considerable attention has been paid to utilize eco friendly and bio friendly plant based products for the prevention and cure of different human diseases. In this present study, it is observed that the 85 valuable plants species, were identified with relevant information and documented in this paper with regards to their botanical name, family, vernacular name, parts used and utilization by the different human aliments.

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**1. Introduction**

Ariyalur is considered as one important place in Tamil Nadu, since it is a major center for cement production. There are many limestone mines and many cement factories located in and around Ariyalur, right from British rule. The demand for good quality of cement has been increasing day by day. It is achieved through extensive mechanization of cement industry. Cement industry is one among the energy intensive industries. The major air pollutant in cement industry is Total Respirable Particulate Matter (TRPM) which is emitted from almost all operations carried out at a cement factory.

and Mishra, 1994). Rapid industrialization and addition of the toxic substances to the environment are responsible for altering the ecosystem (Mudd and Kozlowski, 1975; Niragau and Davidson, 1986; Clayton and Clayton, 1982). Air pollution has been described as an additional stress on plants since they often respond to atmospheric contamination in the same way as they respond to drought and other environment stress. The role of air pollutants causing injury to plants either by direct toxic effect or modifying the host physiology rendering it more susceptible to infection. In severe case of pollution, the injury symptoms were expressed as foliar necrosis or completely disappearance of the plant. Several workers have also previously studied the impact of air pollution on plants with reference to foliar anatomical and biochemical changes by

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Air pollution has become a major threat to the survival of plants in the industrial areas (Gupta



experimenting on various sensitive plants (Samal and Santra, 2002).

The use of medicinal knowledge was passed down entirely through the oral tradition and personal experience (Bhattari, 1998). India has one of world's richest medicinal plant heritages, about two million traditional health practitioners still use medicinal plants for curing various ailments (Venkatesh, 2002). The herbal medicines are increasingly becoming economically important due to the growing demand in the domestic and global market, therefore the value and importance of medicinal plants are now being increasingly acknowledged all over the world (Chevallier, 1996). Medicinal plants are in demand since the beginning of human civilization (Chopra, 1956) and various plant products features prominently in traditional therapeutics. Therefore, a survey was conducted to enumerate the medicinal plants from Ariyalur district and obtained data was presented in this paper.

## 2. Materials and Methods

During the present investigation intensive and extensive field explorations were carried out throughout the district to various corners and pockets to identify the traditional medicinal plants

growing in the study area from January 2018 to December 2018 at a regular interval to find out the medicinal useful plant species. Due consideration was given to season of occurrence of plant species, their habit and habitat. More importance was given to those localities from where large number of medicinal plants has been reported. The plants were collected, pressed, dried and mounted on herbarium sheets. Collected plants were identified with the help of available literature and classical floras viz., Hooker (1872-1897), Cooke (1901-1908), Deshpande *et al.* (1993, 1995), Zafar (1999) and Singh and Karthikeyan (2000).

## 3. Results and Discussion

During the period of present survey, 85 medicinal plants were identified which were used by local people to cure different diseases and other health related problems. The plant parts used for medicinal preparations by the local people were leaf, root, bark, flower, fruits, rhizome, tuber, seed, resin etc. In some cases whole plant was utilized. The herbal preparations are used in treatment of bronchitis, asthma, cough, fever, headache, gastro-intestinal problems, muscular pains, arthritis, rheumatism, swelling and skin diseases (Table - 1).

**Table - 1: Identification of Medicinal plants of Ariyalur district and uses for human being**

S.No	Binomial Name	Vernacular Name	Family	Medicinal Uses
1	<i>Acalypha indica</i>	Kuppaimeni	Euphorbiaceae	Scabies, Cough and cold.
2	<i>Achyranthus aspera</i>	Nauruvi	Amaranthaceae	Kidney stone, Piles, Haemorrhagia, Diuretic and Snake bite.
3	<i>Abutilon indicum</i>	Thuthi	Malvaceae	Cough and Fever.
4	<i>Allium cepa</i>	Onion	Liliaceae	Anti malarial, Anti rheumatic, Antibacterial, Appetizer and Night blindness.
5	<i>Andrographis Paniculata</i>	Nilavembu	Acanthaceae	Chikenguinea, Swine flu and Typhoid.
6	<i>Bacopa monnieri</i>	Niirbrahmi	Scrophulariaceae	Tranquilizer, Muscular relaxant, Antispasmodic, Spasmogenic and Anticancer.
7	<i>Cassia auriculata</i>	Avaram	Caesalpinaceae	Astringent, Skin disease, Anthelmentic and Ophthalmia.
8	<i>Cassia fistula</i>	Sarakonrai	Caesalpinaceae	Diabetes and Liver disorder.
S.No	Binomial Name	Vernacular Name	Family	Medicinal Uses

9	<i>Cassia fistula</i>	Konnei	Caesalpiaceae	Purgative, Skin disease, Antiviral, Anticancer and Antifungal.
10	<i>Cardiospermum halicabium</i>	Mudakathan	Sapindaceae	Hypertensive, Spasmodic, Depressant and Antibacterial.
11	<i>Cassia siameae</i>	Ponaavarai	Caesalpiaceae	Purgative, Intestinal worms and Anticonvulsant.
12	<i>Catharanthus roseus</i>	Nithyakalyani	Apocynaceae	Anticancer.
13	<i>Coccinia grandis</i>	Kovai	Cucurbitaceae	Skin disease, Fever and Asthma.
14	<i>Cretavea nurvala</i>	Mavilangam	Capparaceae	Antilithic, Anti-inflammatory and Antiseptic.
15	<i>Crotalaria retusa</i>	Kilu killupai	Fabaceae	Skin disease.
16	<i>Curculigo orchiodes</i>	Nillapanaikilangu	Hypoxidaceae	Gastric Problem.
17	<i>Cucumis sativus</i>	Mull Vellarikai	Cucurbitaceae	Whooping cough.
18	<i>Curculigo orchiodes</i>	Nilapani	Hypoxidaceae	Filarial, Venereal disease and Anticancer.
19	<i>Cynodon dactylon</i>	Arugampull	Poaceae	Gastric ulcer, Bleeding, Convulsion, Diuretic, Skin disease and Asthma.
20	<i>Eclipta alba</i>	Karisilangani	Asteraceae	Skin disease and Eye problem.
21	<i>Emblia officinalis</i>	Nellikai	Euphorbiaceae	Blood Purifier.
22	<i>Enecostema hyssopitolum</i>	Vellarugu	Gentianaceae	Antioxidant.
23	<i>Ficus benghalensis</i>	Aalamaram	Moraceae	Tooth aches.
24	<i>Foeniculum vulgare</i>	Vendhayam	Apiaceae	Stomach disorder and Cooling agent.
25	<i>Hibiscus rosasinensis</i>	Sembaruthi	Malvaceae	Hair growth and Increase memory.
26	<i>Imperata cylindrical</i>	Dharbai pull	Poaceae	Cooling agent.
27	<i>Ipomoea batatas</i>	Sarkaravalikilangu	Convolvulaceae	Food supplement.
28	<i>Lablab purpureus</i>	Avarakai	Fabaceae	Anticholesterolemic and Antidote.
29	<i>Lanea coromandelica</i>	Odhiya maram	Anacardiaceae	Anticancer, Narcotic, Dyspepsia and Gout.
30	<i>Marsilia quadrifolia</i>	Aarakeerai	Myrsiliaceae	Food supplement.
31	<i>Melia azadiracta</i>	Vembu	Meliaceae	Stimulant, Insecticide, Leprosy and Antibacterial.
32	<i>Mimosa pudica</i>	Thotachurungi	Mimosaceae	Antidepressant and Skin disease.
33	<i>Murraya koenigii</i>	Karuvepilai	Rutaceae	Hair growth and Skin disease.
34	<i>Mucena pruriens</i>	Poonaikaalli	Fabaceae	Parkinson's disease, Stimulates growth and Hormone.
35	<i>Naringi crenulata</i>	Mahavilvam	Rutaceae	Body pain, Colic and Dysentery.
36	<i>Nelumbium album</i>	Venthamarai	Nelumbonaceae	Abdominal cramps and Bloody discharge.
37	<i>Ocimum sanctum</i>	Thulasi	Lamiaceae	Cough, Cold and Fever.
38	<i>Ocimum americanum</i>	Nayi thulasi	Lamiaceae	Mosquito repellent and Antibacterial.
39	<i>Phyllanthus amarus</i>	Keezhanelli	Euphorbiaceae	Jaundice.
<b>S.No</b>	<b>Binomial Name</b>	<b>Vernacular Name</b>	<b>Family</b>	<b>Medicinal Uses</b>

40	<i>Polygala chinensis</i>	Siriyangai	Polygalaceae	Expectorant and Stimulant.
41	<i>Punica granatum</i>	Madhulai	Puniceae	Blood purifier and Skin infection.
42	<i>Strychnos potatutum</i>	Thetrankottai	Strchnaceae	Increases body weight.
43	<i>Syzigium cumini</i>	Naval	Myrtaceae	Food supplement
44	<i>Tribulus terrestris</i>	Sirunerungil	Zygophyllaceae	Skin infection
45	<i>Uvaria narum</i>	Pulichan	Annonaceae	Stomach disorder
46	<i>Vateria indica</i>	Pineymaram	Dipetrocarpaceae	Skin disease
47	<i>Vigna mungo</i>	Ulundhu	Fabaceae	Food supplement
48	<i>Vigna radiate</i>	Pasi payiru	Fabaceae	Food supplement
49	<i>Vitex trifolia</i>	Niirnochii	Verbenaceae	Cooling agent
50	<i>Withania somnifera</i>	Amukran	Solanaceae	Male infertility
51	<i>Zea mays</i>	Makka solam	Poaceae	Food supplement
52	<i>Zingiber officinale</i>	Inji	Zingiberaceae	Apetizer and Stomach disorder.
53	<i>Ziziphus mauritiana</i>	Ellandai	Rhamnaceae	Blood purifier
54	<i>Allumania longipedunculata</i>	Kumuttikerai	Amaranthaceae	Food supplement
55	<i>Aerva lenata</i>	Sirupoolai	Amaranthaceae	Head ache
56	<i>Boerhaavia diffusa</i>	Mookkarattai	Nyctaginaceae	Jaundice, Anemia, Cough and Bronchitis.
57	<i>Cissus quadrangularis</i>	Pirantai	Vitaceae	Eaten as appetizer.
58	<i>Cleome viscosa</i>	Naivelai	Capparidaceae	Fever and cardiac disorder.
59	<i>Commelina clavata</i>	Thanneervittan	Commelinaceae	Eye pain.
60	<i>Cyperus rotundus</i>	Korai	Cyperaceae	Leprosy, skin diseases, scabies, verminosis, flatulence, colic, dysentery,
61	<i>Datura metal L.</i>	Umathai poo	Solanaceae	Reduce eruptions on face and swelling of the feet.
62	<i>Euphorbia antiquorum</i>	Sathurakkalli	Euphorbiaceae	Rheumatism, dropsy, gout, neuropathy, deafness, cough and cutaneous diseases.
63	<i>Euphorbia hirta</i>	Ammanpacharusi	Euphorbiaceae	Worms, bowel complaints, asthma, cough and Gonorrhoea.
64	<i>Evolvulus alsinoides</i>	Vishnukaranti	Convolvulaceae	Brain tonic and sedative.
65	<i>Leucas aspera</i>	Thumbai	Lamiaceae	Epilepsy, hysteria, dyspepsia, colic, intestinal worms, fever arising from teething in children, swellings and diarrhea.
66	<i>Pedaliium murex</i>	Perunerunci	Pedaliaceae	Spermatorrhoea, spasmodic affections, amenorrhoea, dysmenorrhoea, inflammation dyspepsia, ulcers, fever and general debility.
67	<i>Pergularia extensa</i>	Velipparuthi	Asclepiadaceae	Helminthiasis, haemorrhoids and leprosy.
68	<i>Prosopis juliflora</i>	Vaelikaruvai	Mimosaceae	Diarrhoea, Stomach inflammation, system cleansing or to settle the intestines.
<b>S.No</b>	<b>Binomial Name</b>	<b>Vernacular Name</b>	<b>Family</b>	<b>Medicinal Uses</b>

69	<i>Ricinus communis</i>	Aamanakku	Euphorbiaceae	Oil is used as culminatory.
70	<i>Sesamum laciniatum</i>	Ellu	Pedaliaceae	Diaphoretic and alternaria.
71	<i>Solanum torvum</i>	Sundai	Solanaceae	Carminative, diuretic, and vermifuge.
72	<i>Tephrosia purpurea</i>	Kattukkolinchi	Fabaceae	Dyspepsia, pectrol diseases, haemorrhoids, syphilis, gonorrhoea and bruises.
73	<i>Thevitia neriifolia</i>	Ponnarali	Apocynaceae	Treatment of cardiac insufficiency and therapeutically used.
74	<i>Tridax procumbens</i>	Vettukayapoondu	Asteraceae	It possesses anti-bacterial and anti-fungal properties and head ache.
75	<i>Achras sapota</i>	Sapota	Sapotaceae	Food supplement
76	<i>Aloe vera</i>	Kattrazhai	Liliaceae	Sexual debility
77	<i>Andrographis paniculata</i>	Siriyangai	Acanthaceae	Snake bite and Diarrhea.
78	<i>Basella alba</i>	Kodipasalai	Basellaceae	Piles
79	<i>Calotropis gigantea</i>	Erukku	Asclpiadaceae	Tumors and skin diseases.
80	<i>Coleus aromaticus</i>	Omavalli	Lamiaceae	Cough and cold
81	<i>Eucalyptus globulus</i>	Eucalyptus	Myrtaceae	Head ache, Body pain, Cold and cough.
82	<i>Jatropha curcas</i>	Kattamanakku	Euphorbiaceae	Killed Stomach worms and toothache.
83	<i>Justica adhatoda</i>	Aadhatodai	Acanthaceae	Asthma, Diarrhea, Cough and Fever.
84	<i>Solanum torvum</i>	Kandankathiri	Solaneceae	Cough and Skin diseases.
85	<i>Solanum trilobatum</i>	Thuthuvalai	Solaneceae	Cough and Fever

It also includes medicines for cardiovascular diseases, diabetes, jaundice, ulcers, urinary disorders, kidney stones, dysentery, diarrhea and piles. The preparation methods included were juice, decoction, paste, extracts, infusion etc. Some plants are also used as tonic, astringents, stimulants, antioxidants and memory enhancers.

The need for great individual or family life began with time. God the almighty himself knows that the need by man to have good and healthy life cannot be over-emphasized. He made man and gave him every good thing of life. Man has never lacked good things of life. It is only unfortunate however, and you may contradict this if you can, that the reason why there are a lot of inconsistencies, complications, diseases, sicknesses and afflictions in the world today is due to man's insatiable quest for knowledge, his inordinate ambition to live inside the sun ( moon or wherever) and his unquenchable hunger to have all no matter whose ass is on the line. Man no

longer listens to himself, he has long-lost touch with the environment, the natural and the quintessential order of things; man has failed himself.

#### 4. Conclusion

The herbs species are always considered as a very important source of medicine especially for the population of the rural areas, because of the high cost and different accessibility to modern medicine. Man continues in self-induced bondage. Man should go back to nature, open his own eyes and see where he missed it. Back to nature, the environment, wealth and health. Returning back to nature is not just about increasing the physical life force of man, it is a call to a total liberation of the human beings. A call that man should break loose from the untimely inevitable death. Death is a reality from which no one can hide. The universally acceptable truth about death is this as humans, one day, we shall join our ancestors. This may shatter our illusions of invincibility of power, might, strength and greatness.

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