# Traditional Medication of Namakkal District, Tamil Nadu

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**Abstract:** The present study communicates the documentation of medicinal plants used for indigenous medication by the rural communities of Namakkal areas of Tamil Nadu. These plants are used to cure different ailments like cough and cold, toothache, ear ache, stomachache, eye and skin diseases, wounds, hair tonic, scorpion bite and diabetics on the advice and with the help of the local healers in day to day life of these rural communities.

Key words: Indigenous medicine · Rural communities · Medicinal plants · Common ailments

#### INTRODUCTION

The use of plants as medicine was practiced by our ancestors, a process which must have started by trial and error [1]. Initially, in order to survive and then for civilization to develop, people needed to learn what plants were useful for foods, fuels, medicines and fibres and how such plants resources could be mined or managed for human benefits [2,3]. Medicinal plants help in alleviating human suffering and are widely used for subsistence home remedies and trade [4].

Plants have been used as traditional medicine for several thousand years [5]. In India, traditional healers are reported to use 2500- plant species, whereas 100- species of plants are found to serve as regular source of medicines [6]. Not only in underdeveloped and developing countries, but also in developed countries 25% of the medicinal drugs are based on plants and their derivatives [7]. The traditional medicinal knowledge of plants and their use by indigenous culture are not only useful for conservation of cultural traditions, but also for community health care and drug development in the present and future [8].

Traditional ethnomedicinal studies have in recent years received much attention due to their wide local acceptability and clues for new or lesser- known medicinal plants [9]. The phytomedicine is one of the ways which is widely practiced among tribal and rural population of India for treating ailments and promoting health. Caniago and Siebert [10] stated that many rural people throughout

the world rely on medicinal plants because of their effectiveness, lack of modern healthcare alternatives and cultural preferences.

It may be noted that the traditional phytomedicine is not confined to tribal groups or the original inhabitants of an area. It is not even confined to rural people. Rather any community possesses this knowledge rural and urban, settled and nomadic, original inhabitants and migrants. In the absence of any detailed account on traditional medicines, an attempt has been made to study and record the existing practices among the rural population from Namakkal district.

#### MATERIALS AND METHODS

The present study was carried out between 2009 and 2010. The methodology as proposed by Schultes [11], Jain [12], Jain and Dam [13] and Ford [14] was followed for collection of ethnobotanical data. The local knowledgeable persons helped to record general information on local customs, habits, information on the surrounding area and the local flora. The main focus was to collect oral information about as medicinal plants used by native for treatment of common ailments, did not use any statistical survey in this study.

Namakkal is located at an average elevation of 218 metres (715 feet). It is close to Kolli Hills which is part of the Eastern Ghats. The temperature ranges from 18°-42°C throughout the year. The district had a population of 1493462. Males constitute 51% of the

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population and females 49%. It has an average literacy rate of 79%, higher than the national average of 59.5%: male literacy is 84% and female literacy is 74%. In Namakkal, 10% of the population is under 6 years of age.

### RESULTS AND DISCUSSION

The present study documents the empirical phytotherapeutic knowledge of the rural communities, their skills and practices based on their experiences. During survey of Namakkal district as many as 61-species of medicinal plants belonging to 53-genera under 36-families used by the rural communities (Table 1).

Parts of the plants used by these communities vary from plant to plant, but leaves considered the major portion for the preparation of medicines. Apart from the leaves, roots, fruits, bark, latex were also found used.

Analysis of the data indicated that the plant species are employed for the treatment of fever, cough and cold,

skin diseases, eye diseases and scorpion bites. Most of the species are utilized for stomachache, cough and cold and scorpion bites.

In species like *Psidium guajava*, *Mangifera indica* and *Moringa oleifera*, more than one part or the entire plants were observed to have medicinal values. It is interesting to note that the extracts of more than one plant were used for treating single ailments as exemplified by the treatment of stomachache, skin diseases and eye diseases.

The rural communities of Namakkal district have rich and unique traditional knowledge about the use of natural resources, particularly plant species available in their surroundings for the treatment of their routine ailments. Although traditional medication is still practiced in the area, it is now fast disappearing due to modern life style. Hence, proper documentation and preservation of traditional skills and technology of medicinal plants is a vital necessity.

Table 1: Documented traditional medicinal data from Namakkal district, Tamil Nadu, India

S. No	Botanical Name	Family	Local Name	Common ailments	Mode of administration
1.	Abrus precatorius L.	Fabaceae	Gundumani	Toothache	Leaves are chewed to get relief f rom toothache.
2.	Abutilon indicum (L.) Sweet	Malvaceae	Thuthi	Fever	Infusion of the root is prescribed in fevers as a cooling medicine.
3.	Acacia nilotica Willd.	Mimosaceae	Karuvelam	Toothache	Young stem used as tooth brush.
4.	Acalypha indica L.	Euphorbiaceae	Kuppaimeni	Insect bite	Leaf extract is applied externally to cure poisonous insect bite.
5.	Achyranthes aspera L.	Amaranthaceae	Nayurvi	Scorpion bite	Crushed leaves applied externally to scorpion bite.
6.	Acorus calamus L.	Araceae	Vasambu	Cold	Powder of rhizome mixed with honey half teaspoon take orally to treat cold in children.
7.	Aegle marmelos (L.) Corr	Rutaceae	Vilvam	Eye diseases	Juice of leaf is applied externally to cure eye diseases.
8.	Aloe vera L.	Liliaceae	Sothukattalai	Boils and pimples	Fresh gel portion of the leaf applied on the boils and pimples.
9.	Alternanthera sessilis L.	Amaranthaceae	Poonangari	Eye diseases	Leaf paste is consumed orally in the early morning along with milk to cure eye diseases.
10.	Allium cepa L.	Liliaceae	Vengayam	Boils	Paste of bulb is applied on boils.
11.	Allium sativum L.	Liliaceae	Vellaipoondu	Gastro-intestinal regulator	Bulb decoction prepared with milk is given orally as gastro-intestinal regulator.
12.	Andrographis paniculata Nees.	Acanthaceae	Nilavembu	Stomachache	Decoction of the leaves is taken to treat stomachache.
13.	Anisomeles malabarica R.Br.	Lamiaceae	Peyimarutti	Scorpion sting	Leaf paste is applied on affected part of scorpion sting.
14.	Argemone mexicana L.	Papaveraceae	Biramadhandu	Scorpion bite scorpion bite.	Leaf extract is applied externally to cure
15.	Asparagus racemosus Willd.	Papaveraceae	Thanner vitten kilangu	Heel cracks	Paste of mature leaves is applied orally on the heels to cure heel cracks.
16.	Azadirachta indica A. Juss.	Meliaceae	Vembu	Skin infection	Leaf paste mixed with the powered Curcuma longa is applied once a day to treat all kinds of skin infection, small pox and chicken pox.

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17. 18.	Calotrophis gigantea L. Calotrophis procera L.	Asclepiadaceae Asclepiadaceae	Eruku Vellerukku	Burns Toothache	Latex is applied in burns.  Paste of the root is applied to toothache
	= =	=			Fruits are consumed once to cure
19.	Carica papaya L.	Caricaceae	Pappali	Constipation	constipation.
20.	Cassia auriculata L.	Caesalpinaceae	Aavarai	Diabetes	Powered flower is used to treat diabetes.
21.	Cassia italica (Mill.) Lam.	Caesalpinaceae	Nela aavarai	Ringworm	Leaf paste applied for ringworm.
22.	Centella asiatica L.	Apiaceae	Vallarai	Memory power	Leaf paste is given orally to enhance the memory power.
23.	Cissus quadrangularis L.	Vitaceae	Pirandai	Stomachache	Young top stem cooked and eaten to remove worms in the stomach.
24.	Citrus limon (L.) Burm. f.	Rutaceae	Elumiccai	Stomachache	Fruit cure nail infection and juice used as stomachic.
25.	Clome viscosa L.	Capparidaceae	Navali	Earache	Leaf juice is used against earache.
26.	Clitoria ternatea L.	Capparidaceae	Sangupoo	Earache	Flowers are crushed and applied to cure earache.
27.	Coccinia indica W.	Cucurbitaceae	Kovai	Diabetes	Fruit is consumed orally to control diabetes.
28.	Coleus aromaticus Benth.	Lamiaceae	Omavalli	Cough and cold	Leaf soaked in water and is used to control cough and cold.
29.	Cucumis sativus L.	Cucurbitaceae	Vellari	Cooling agent	Fruit is used as a cooling agent.
30.	Curcuma longa L.	Zingiberaceae	Manjal	Cough	Rhizome powder mixed with milk and is given orally to cure cough.
31.	Eclipta prostrata L.	Asteraceae	Karisalankanni	Hair promoter	Leaves crushed and used along with coconut oil as hair promoter.
32.	Euphorbia hirta L.	Euphorbiaceae	Amman paccharasi	Dysentery	Leaves crushed withyoung coconut and given in empty stomach to cure dysentery.
3.	Evolvulus alsinoides L.	Convolvulaceae	Vishnukiranthi	Burn injuries	Paste of the leaf is applied to the burn injuries.
34.	Heliotropium indicum L.	Boraginaceae	Thelkodukku	Scorpion bite	Leaf paste is applied externally as antidote to scorpion bite.
35.	Lawsonia inermis L.	Lythraceae	Maruthonri	Hair tonic	Leaf fried in coconut oil is used as hair tonic.
36.	Leucas aspera (Willd.) Link.	Lamiaceae	Thmbai	Ringworm infection	Leaf paste is externally applied twice a day to treat the ringworm infection.
37.	Limonia acidissima Wight.	Rutaceae	Vila	Cough	Leaf extract
	& Am.			is given orally to cure	-
88.	Magnifera indica L.	Anacardiaceae	Mangai Tada da kaka ka	Skin diseases	Gums used to cure cracks at foot.
39.	Mimosa pudica L.	Mimosaceae	Tothalchinigi	Kidney stones	Leaf extract is orally taken thrice a day
10.	Momordica charantia L.	Cucurbitaceae	Pavakkai	Diabetes	for 10 days to remove kidney stones.  The leaf juice is given orally to control diabetes.
1.	Morinda tinctoria Roxb.	Rubiacaeae	Nunamaram	Stomachache	Leaf juice is given orally to children before food for easy digestion.
12.	Moringa oleifera Lam.	Moringaceae	Murungai	Stomachache	Leaf used as vegetable to cure stomachache. Flower is taken as food and it gives chillness to eyes.
13.	Murraya koenigii (L.) Spreng.	Rutaceae	Kariveppilai	Hair tonic	Leaf extract is mixed with coconut oil used as hair tonic.
4.	Musa paradisiaca L.	Musacaeae	Valai	Kidney stones	Stem extract taken orally at morning to remove the kidney stones.
15.	Ocimum basilicum L.	Lamiaceae	Thirunetrupachilai	Urinary problems	Leaf juice is used in urinary problems.
16.	Ocimum sanctum L.	Lamiaceae	Thulsi	Cough	The juice of the leaves is used in cough.
<b>1</b> 7.	Phyllanthus amarus Schu. & Thonn.	Euphorbiaceae	Keelanelli	Jaundice Leaf paste is orally with milk to cur	administered
18.	Phyllanthus emblica L.	Euphorbiaceae	Aranelli	Hair tonic	Fruit fried in coconut oil is used as hair tonic.
19.	Piper betel L.	Piperaceae	Vettrilai	Head-ache	Leaf extract is administered through the nostril to cure head-ache.

Table 1: Continued

50.	Piper nigrum L.	Piperaceae	Milagu	Throat infection	The dried seeds are taken orally relief for throat infection.
51.	Plectranthus coleoides Benth.	Lamiaceae	Omavalli chedi	Cold and cough	Juice of leaves is taken internally to cure cold and cough.
52.	Psidium gujava L.	Myrtaceae	Koiya	Stomachache	Fruits are edible and tender leaf is ground and mixed with cow milk to get relief from stomachache.
53.	Ricinus communis L.	Euphorbiaceae	Amanakku	Stomachache	The oil prepared from the seeds is applied on lower stomach to get relief from stomachache.
54.	Saccharum officinarum L.	Poaceae	Karumbu	Cooling agent	Stem juice is prepared with lemon is given orally to reduce body heat.
55.	<i>Sida acuta</i> Burm.	Malvaceae	Arivahmanai poondu	Wounds	Leaf paste is applied to wounds.
56.	Solanum nigrum L.	Solanaceae	Manathakali	Stomach ulcer	Leaf juice is consumed orally to cure stomach ulcer.
57.	Solanum trilobatum L.	Solanaceae	Thuthuvalai	Cold and cough	Leaf extract is consumed orally in milk to cure cold and cough.
58.	Syzygium cumini (L.) Skeels.	Myrtaceae	Naaval	Cooling agent	The ripe fresh fruit are taken orally to reduce body heat.
59.	Tridax procumbens L.	Asteraceae	Kinathupoondu	Wounds	Leaf paste is applied on wounds.
60.	Vitex negundo L.	Verbenaceae	Nocci	Headache and cold	Leaves boiled in water and inhaled to relive headache and cold.
61.	Wrightia tinctoria (Roxb.) R.Br.	Apocynaceae	Vetpalai	Skin diseases	The bark paste is used to treat various skin diseases.

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