

Ethno-medicinal Plants Used by the Traditional Healers of Pachamalai Hills, Tamilnadu, India

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KEYWORDS Medicinal Plants. Ethnomedicine. Malayalis. Disease

ABSTRACT The traditional healers of Pachamalai hills were studied for the use of medicinal plants. We report 12 species of medicinal plants used for common ailments such as asthma, cough, cold, fever, stomach problems, snake bites, skin disease etc. The traditional healers are on the decline because the younger members of the tribe have started moving towards the towns and cities and are not willing to practice this form of medicine. There is danger that the knowledge of these medicinal plants will also die with them. It is therefore, necessary to document the plants and take efficient steps to conserve them.

INTRODUCTION

Herbal medicine is widely practiced throughout the world from time immemorable. These medicines are safe and environment friendly. Nearly 80% of the world population depends upon traditional system of health care. The indigenous traditional knowledge of medicinal plants of various ethnic communities, where it has been transmitted orally for centuries is fast disappearing from the face of the earth due to the advent of modern technology and transformation of traditional culture (Ganesan et al. 2004).

During the last few decades there has been an increasing interest in the study of medicinal plants and their traditional use in different parts of the world. The traditional healers are dwindling in number and there is a grave danger of traditional knowledge disappearing soon since the younger generation is not interested to carry on this tradition. Therefore, it becomes the responsibility of the scientific community to unravel the information and to document it for availability to the whole world for the benefit of human beings.

MATERIAL AND METHOD

The present study was undertaken in the Pachamalai hills, located between the districts of Salem and Tiruchirappalli, Tamilnadu, South

India. The hills lie between East 78.31' longitude and 11.28' North latitude at an altitude of 2000 to 3000 feet above mean sea level. The total geographical area is 14,122 sq. km there are two villages in Ganagavalli block of Salem district and 17 and 34 villages, respectively in Uppilipuram and Thuraiyur blocks of Tiruchirappalli District. Relevant information on ethno-medicine of the area has been collected from the elderly persons of the tribal community the Malayalis residing in these villages.

RESULTS

Through the present study 12 species of ethno medicine were recorded. The preventive measures for the major causes among the local traditional healers are given Table 1.

1. *Cough*: Juice of whole plant Siru peelai (*Aerva lanata*) is taken orally to treat cough, sore throat and wounds. Paste of whole plants (*Hybanthus emeaspermus*) is applied topically to treat cough.
2. *Asthma*: Decoction of roots Soaranai (*Tri-anthema portulacastrum*) internally to treat constipation and asthma.
3. *Stomach Problem*: The seeds Nathaichuri (*Sermacoe hispida*) are crushed into paste and taken orally to treat stomach problem.
4. *Body Cool*: Juice extracted from the whole plant of Nannari (*Hamidesmas indicus*) and decoction of stem bark is taken internally to keep the body cool.
5. *Eye Infection*: Dried fruits of Pulia maram (*Tamarindus indica*) are taken orally to treat eye infection.

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Table 1: List of medicinal plants used by the traditional healers (Malayalis) in Pachmalai hills.

S. No.	Disorder	Name of the Plant	Local Name	Part of the used	Method of preparation	Active compound
1.	Asthma	<i>Trainthema portula castrum</i>	Soaranai	Root	Decoction of Roots is taken internally to treat Constipation and asthma	Arichloroacetic acid
2.	Body cool	<i>Hemidesinus indicus</i> Linn	Nannari	Whole plant	Juice extracted from the whole plants is taken internally to keep the body cool	Coumarin, hemidesmine, emiden.
3.	Cough	<i>Aerva lanata</i>	Siru peelai	Whole plant	Juice of whole plants is taken orally to treat cough ,score throat and wounds	Aervine, methylaervine, aervoside, propionic acid
4.	Eye infection	<i>Tamarindus indica</i>	Pulia maram	Fruits	Dried fruits are taken orally to treat eye infections	2-phenylacelde hyde, 2-furfural, hexa decanoic acid
5.	Fever	<i>Wattakaka volubitis</i> cooke <i>Vitex negundo</i>	Kurinjan Notchi	Leaf Leaves	Leaf Paste is applied topically to treat rheumatic pain, cough, fever and severe cold Leaves are boiled in water and vapour is inhaled twice a day to get relief from headache, fever, cold and cough	Allophranosyl, cymarophyranoside, Alloopyranosql Flavone glycoside, vitrototal, Diasyryng aresional
6.	Stomach problem	<i>Spermacoce hispida</i>	Nathaichuri	Seed	The seeds are crushed into paste and taken orally to treat stomach problem.	Not available
7.	Snakes bites	<i>Antrographis</i> <i>Paniculata</i> <i>Abrus precatorius</i>	Nilavembu Kundumani	Leaf Root	Leaf is Paste applied topically at the bitten site of the snake beetle and scorpion. Root Powder is taken orally along with cow's milk to treat Scorpionsting and snakes bite.	Deoxyandrographolide, andrographolide,neo-andrographolideiso flavanquinone, abiuquinone, abruquinone
8.	Skin disease	<i>Sphaeranthus indicus</i>	Kottai kkarantai	Leaf Flower Seeds	Leaf ,Flower and seeds are Ground into paste and applied topically to treat skin disease.	B-glucopyransoyl, Parkerine, 8-formyl protoberine, berberin cation
9.	Urinary troubles	<i>Tribulus terrestris</i>	Nerunchimul	Fruit Root	The fruit and root are mixed with boiled raw rice, taken orally to prevent white discharge in women and to treat urinary troubles	Oryzalin, benefin,trifluratin
10.	Vomiting	<i>Murraya koenigii</i>	Karuveppilai	Leaf	Juice taken tender leaves is taken orallyTo arrest vomiting.	Mahanimbine, girinnimbine, Murraya fuline.

6. *Urinary Troubles:* The fruit and root Nerunchimul (*Tribulis terrestris*) are mixed with boiled raw rice, taken orally to prevent white discharge in women and to treat urinary troubles.

7. *Snakes Bites:* Leaves of Nilavembu (*Antrographis paniculata*) paste applied topically at the bitensite of snake. Root powder Kundumani (*Abrus Precatorus*) is taken orally along with cow's milk to treat snake bite.

8. *Vomiting*: Juice of tender leaves Karuveppilai (*Murraya koenigii*) is taken orally to arrest vomiting.
9. *Fever*: Leaves of Notchi (*Vitex negundo*) are boiled in water and the vapour is inhaled twice a day get relief fever, leaves of Kurinjan (*Wattakaka volubilis*) paste is applied topically to treat fever.
10. *Skin Disease*: Leaves and flowers Kottaikkarantai (*Spharanthus indius*) and seed are ground into paste and applied topically to treat skin diseases; the stem Thirugu kalli (*Euphorbia tirucalli*) is boiled with water and given to children to treat skin diseases.

DISCUSSION

Plant-based traditional knowledge has become a recognized tool in search for new sources of drugs and nutraceuticals. The traditional use of plants has declined due to the scarcity of species, which is caused by human activities and over grazing by animals. Therefore, it has become essential and need of the hour to focus on conservation of these plants.

Tribal population has good knowledge about the use of many plants. They believe that all afflictions are caused by supernatural forces. Tra-

ditional healers, use their eyes, ear, nose and hands to diagnose the diseases, this way of diagnose is interesting because they live in interior areas and lack the use of modern scientific equipment for treatment, they however treat diseases using medicinal plants (Santhya et al. 2006). Herbal medicines prescribed by tribal healers are either preparation based on single plant part or a combination of several plant parts.

The forests of Pachamalai Hills are rich in medicinal plants, many are still not known to us. Our preliminary effort helped identify 12 species of commonly used plants. Further, studies have to be carried out to identify the numerous medicinal plants and the most important thing would be to conserve these plants. Dissemination of the knowledge of medicinal property would improve the socioeconomic status of the Malayali tribe.

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