



An Ethnobotanical Study on Medicinal Plants in Southern Western Ghats of Virudhunagar district, Tamil Nadu, India.

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Abstract

The aim of present study to investigated medicinal plants and documented the medicinal uses. The medicinal purpose information collected from traditional healers of Southern Western Ghats of Virudhunagar district, Tamil Nadu, India.. The present study reported 51 medicinal plants belonging to 37 families. In this study most dominant families were Fabaceae, Liliaceae and Lamiaceae. Leaves and roots were the most frequently used plant part for treatment diseases by traditional healers. The study was considered useful information offer to ethnomedicinal researcher, pharmaceutical industries and developing the conservation of important medicinal plants.

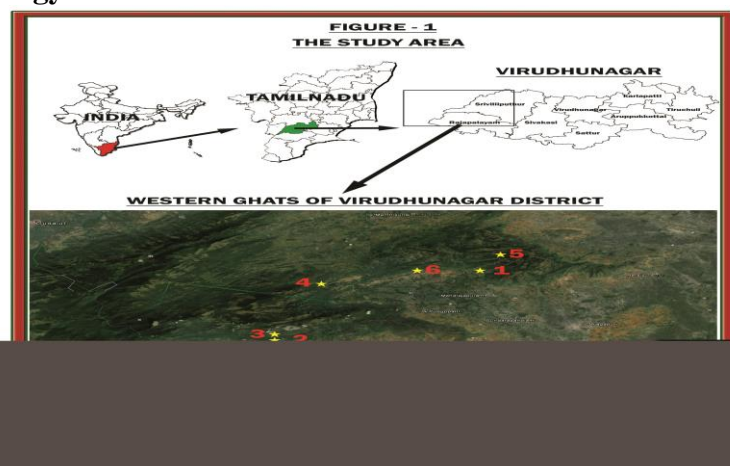
Keywords: Traditional healers, Ethno medicinal plants, Southern Western Ghats.

Introduction

Ethno medicinal system known as relationship between peoples and science^[1]. According to World Health Organization (WHO) up to 80% of the populations in some developing countries depend upon the traditional medicine^[2]. In India is the predominantly possess medicinal plants countries and delivered the traditional medicinal knowledge. Many ethnic communities are dispersed all over the country and these people are still totally depended on local traditional medicinal system for their healthcare^[3]. The use of medicinal plants has been described as prevalent in groups with poor socioeconomic conditions and less access to formal education^[4]. Ethno medicinal plants are used to various infectious disease and disorders like dysentery, skin diseases, hypertension, headache, boils, blisters, rheumatism and gout, arthritis, piles, jaundice, haemorrhoids, ophthalmic diseases, fever, toothache, diarrhoea, bone fracture, cough, insect and snake bites, worm infection, cuts and wounds, cold and catarrh, bronchitis, asthma, leprosy etc^[5,6]. Majority of the traditional medicines are prepared from plants^[7].

The current study was extensive survey of the medicinal plants and document the traditional knowledge and to evaluate the importance of medicinal plants used in local healthcare system. This study was also aimed to instruct the traditional healers about conservation status of medicinal plants. Southern Western Ghats possess a rich medicinal plants system and provided the considerable knowledge about the ethno botanical research. In previously reported some documented work on this area but, my work was evaluating the usage of medicinal plants and the investigation was originally documented from the number of dynastic traditional healers.

Study area and Methodology



This study was conducted via direct interview during October 2014 to February, 2015 in different seasoning time by traditional healers who are not writing about medicinal knowledge in the any records, but who are gathering information from old aged persons and keep it our minds and most of the healers provided the same information about medicinal plants. All the information collectives from healer's direct interview, such traditional healers come with our groups to study area collected some important medicinal plants. Some medicinal healers demonstrate medicinal usage about such plants.

First, we are collected the more plants from study area, after stored and prepare herbarium for future references. The plants' vernacular names were collected with the help of local people. Scientific names were determined by identifying herbarium species and checked again references in the India biodiversity portal website and taxonomists. The ethno-medicinal value of each plant was recorded in the following pattern: Botanical name, Family, Local Name, Parts used and Treatment of diseases. The medicinal plants used for the treatment of different diseases and disorders by local traditional healers of Thaniparai, Sadhuragiri Hills, Senbagathoppu, Nedungulam, Pilavakkal Dam, Virudhunagar District, Tamil Nadu (Figure-1).

Results

The documented details about medicinal plants are given below:

Abrus precatorius L.

Family	: Fabaceae
Vernacular name	: Kunnimuthu
Useful Parts	: Leaves, Roots
Treatment of diseases	: Dandruff, Leucoderma and Abortifacient

Abutilon indicum (L.) Sweet.

Family	: Malvaceae
Vernacular name	: Thuthi
Useful Parts	: Leaves and fruits
Treatment of diseases	: Piles, stomach problem and Urinary troubles

Aegle marmelos (L.) Correa

Family	: Rutaceae
Vernacular name	: Vilvam
Useful Parts	: Roots and Fruits
Treatment of diseases	: Stomach ache, morning sickness and head lice and foot pain

Aloe vera (L.) Burm. f.

Family	: Liliaceae
Vernacular name	: Chothukkatralai
Useful Parts	: Leaves juice
Treatment of diseases	: strengthen the body , Eczema, Leucoderma, Scabies and Ringworm infection

Alstonia scholaris (L.) R. Br.

Family	: Apocynaceae
Vernacular name	: Yezhilai Palai
Useful Parts	: Latex , stem bark
Treatment of diseases	: Wounds healing and Increase the milk secretion

Andrographis paniculata (Burm.f.) Wall. ex Nees.

Family	: Acanthaceae
Vernacular name	: Sิริyanangai
Useful Parts	: fresh leaves
Treatment of diseases	: Scabies, Leprosy and Ringworm infection

***Argemone mexicana* L.**

Family : Papavaraceae
Vernacular name : Kattukadugu
Useful Parts : Leaves
Treatment of diseases : Ringworm infection and wound healing

***Aristolochia bracteolata* Lam.**

Family : Aristolochiaceae
Vernacular name : Aaduthinnapalai
Useful Parts : Whole plant
Treatment of diseases : Eczema, Scabies and Ringworm infection and stimulation of pregnancy

***Azadirachta indica* A Juss.**

Family : Meliaceae
Vernacular name : Vembu
Useful Parts : Leaves
Treatment of diseases : Small pox, Chicken pox, stomach pain and Eczema

***Bacopa monnieri* (L.) Pennell.**

Family : Scrophulariaceae
Vernacular name : Neer Pirammi
Useful Parts : Leaves
Treatment of diseases : Dysentery and Improves memory power

***Calotropis gigantea* (L.) R. Br.**

Family : Asclepiadaceae
Vernacular name : Erukku
Useful Parts : Leaves and Latex
Treatment of diseases : Eczema, Arthritis and Migraine

***Cardiospermum canescens* Wall.**

Family : Sapindaceae
Vernacular name : Kuthumadakkan
Useful Parts : leaves
Treatment of diseases : Dysentery and Rheumatoid arthritis

***Cardiospermum halicacabum* L.**

Family : Sapindaceae
Vernacular name : Mudakkathan
Useful Parts : Fresh leaves
Treatment of diseases : Reduce earache and Rheumatism

***Catharanthus roseus* (L.) G. Don.**

Family : Apocynaceae
Vernacular name : Nityakalyani
Useful Parts : Fresh flower
Treatment of diseases : Diabetes

***Centella asiatica* (L.) Urban**

Family : Apiaceae

Vernacular name : Vallarai
Useful Parts : Leaves
Treatment of diseases : Cure mental depression, Ulcer, Headache and fever

***Chloroxylon swietenia* DC.**

Family : Rutaceae
Vernacular name : Porasamaram
Useful Parts : Leaves and Bark
Treatment of diseases : Wounds and Reduce body pain

***Cissampelos pareira* L.**

Family : Menispermaceae
Vernacular name : Malaithanki Pachilai
Useful Parts : Whole plants and Leaves
Treatment of diseases : Increase muscle strength, Sexual vigour and Fever

***Cissus quadrangularis* L.**

Family : Vitaceae
Vernacular name : Pirandai
Useful Parts : Shoots
Treatment of diseases : Born fracture, piles

***Clitoria ternatea* L.**

Family : Fabaceae
Vernacular name : Sangu Pushpam
Useful Parts : leaves
Treatment of diseases : Skin inflammation, Scabies and Ringworm infection

***Coccinia grandis* (L.) J. Voight.**

Cocos nucifera L. :
Family : Arecaceae
Vernacular name : Thennai
Useful Parts : Endosperm
Treatment of diseases : Skin diseases and Infections

***Croton bonplandianum* Baill.**

Family : Euphorbiaceae
Vernacular name : Rail Poondu
Useful Parts : Fresh root
Treatment of diseases : Stop abnormal bleeding after child birth

***Curculigo orchioides* Gaertn.**

Family : Hypoxidaceae
Vernacular name : Nilapanai
Useful Parts : Tuber
Treatment of diseases : Increase sexual vigour

***Datura metal* L.**

Family : Solanaceae
Vernacular name : Oomathai
Useful Parts : Dried leaves Roots

Treatment of diseases : Alleviate asthma

***Dioscorea bulbifera* L.**

Family : Dioscoreaceae
Vernacular name : Kattuseeragavalli
Useful Parts : Roots and fibers
Treatment of diseases : Morning sickness, Asthma, Cough, Rheumatism and Gastritis

***Evolvulus alsinoides* (L.) L.**

Family : Convolvulaceae
Vernacular name : Vishnukranthi
Useful Parts : Whole plant
Treatment of diseases : Cure syphilis, Diarrhoea, Nervous debility and Diabetes

***Ficus benghalensis* L.**

Family : Moraceae
Vernacular name : Aalamaram
Useful Parts : Aerial roots ,Stem and Bark
Treatment of diseases : Dandruff, Control blood sugar level and Vagina

***Ficus religiosa* L.**

Family : Moraceae
Vernacular name : Arasu
Useful Parts : Tender stem and Bark
Treatment of diseases : Jaundice

***Gloriosa superba* L.**

Family : Liliaceae
Vernacular name : Kalappai Kizhanku
Useful Parts : Dried leaves
Treatment of diseases : Cure skin diseases

***Grewia hirsuta* Vahl**

Family : Teliaceae
Vernacular name : Tavattai
Useful Parts : Dried fruits
Treatment of diseases : Diarrhoea and Wound

***Gymnema sylvestre* (Retz.) R. Br. ex Roem. & Schult.**

Family : Asclepiadaceae
Vernacular name : Sirukurinjan
Useful Parts : Leaves
Treatment of diseases : Reduce diabetes, Cure joint pains, Breathing trouble and Jaundice

***Helicteres isora* L.**

Family : Sterculiaceae
Vernacular name : Valampuri
Useful Parts : Tender leaves
Treatment of diseases : Wounds for healing

Hemidesmus indicus* (L.) R. Br. Var. *indicus

Family : Periplocaceae
Vernacular name : Nannari
Useful Parts : Dried root
Treatment of diseases : Reduce body heat Natural quenching agents

***Indigofera aspalathoides* Vahl.**

Family : Fabaceae
Vernacular name : Shivanar Vembu
Useful Parts : Roots
Treatment of diseases : Psoriasis

***Ixora coccinea* L.**

Family : Rubiaceae
Vernacular name : Idlipoo
Useful Parts : Dried flowers
Treatment of diseases : Reduce eczema symptoms

***Justicia adhatoda* L.**

Family : Acanthaceae
Vernacular name : Adhathodai
Useful Parts : Fresh leaves
Treatment of diseases : Reduce scabies

***Lawsonia inermis* L.**

Family : Lythraceae
Vernacular name : Maruthani
Useful Parts : Leaves
Treatment of diseases : Dandruff and reduce pressure

***Leucas aspera* (Willd.) Link.**

Family : Lamiaceae
Vernacular name : Thumbai
Useful Parts : Leaves
Treatment of diseases : Ringworm infection

***Mimosa pudica* L.**

Family : Mimosaceae
Vernacular name : Thottal Surungi
Useful Parts : Leaves and Roots
Treatment of diseases : Eczema, Wounds, Skin diseases and Piles

***Mollugo nudicaulis* Lam.**

Family : Molluginaceae
Vernacular name : Parpadagam
Useful Parts : Whole plant
Treatment of diseases : Rheumatoid arthritis

***Morinda pubescens* J.E. Smith**

Family : Rubiaceae
Vernacular name : Mannanunai
Useful Parts : Leaves and fruits
Treatment of diseases : Wounds, Cuts, Scabies and Itching

***Moringa oleifera* Lam.**

Family : Moringaceae
Vernacular name : Murungai
Useful Parts : Leaves
Treatment of diseases : Eczema

***Ocimum basilicum* L. var. *purpurascens* Benth.**

Family : Lamiaceae
Vernacular name : Karuthulasi
Useful Parts : Leaves
Treatment of diseases : Reduce blood sugar levels

***Ocimum tenuiflorum* L.**

Family : Lamiaceae
Vernacular name : Thulasi
Useful Parts : Leaves
Treatment of diseases : Cough, Headache, and Psoriasis

***Phyllanthus amarus* Schum. & Thonn.**

Family : Euphorbiaceae
Vernacular name : Kizhanelli
Useful Parts : whole plant and leaves
Treatment of diseases : Kidney stone, Gonorrhoea, Menorrhagia, Diarrhoea, Dysentery, Ulcers and Jaundice

***Piper nigrum* L.**

Family : Piperaceae
Vernacular name : Nalla Milagu
Useful Parts : Seeds
Treatment of diseases : Antiseptic, Cough

***Tephrosia purpurea* (L.) Pers.**

Family : Fabaceae
Vernacular name : Kozhingi
Useful Parts : Whole plants
Treatment of diseases : Fever

***Terminalia chebula* Retz**

Family : Combretaceae
Vernacular name : Kadukkai
Useful Parts : Dried fruits
Treatment of diseases : Fever

***Thespesia lampas* (Cav.) Dalz. ex Dalz. & Gibs.**

Family : Malvaceae
Vernacular name : Kattuparuthi
Useful Parts : Leaves
Treatment of diseases : Ringworm infection

***Vitex altissima* L.f.**

Family	: Verbenaceae
Vernacular name	: Mayilainochi
Useful Parts	: Fresh leaves
Treatment of diseases	: Headache

***Ziziphus xylopyrus* (Retz.) Willd.**

Family	: Rhamnaceae
Vernacular name	: Kottai ilandai
Useful Parts	: Stem, Bark
Treatment of diseases	: Wound

Discussion

The investigated study revealed the ethnomedicinal knowledge of people in Thaniparai, Sadhuragiri Hills, Senbagathoppu, Nedungulam, Pilavakkal Dam, Virudhunagar District, Tamil Nadu. In the following collected medicinal details of identified plants with recorded alphabetical order, followed by Botanical name, local name, family name, part used and treatment of diseases. The study area collected totally 51 species of plant belonging to 37 families. Current investigation of medicinal plants mostly used to skin disease and wound healing activity. Most of the collected plants are herb and tree habits. Plant parts used by the traditional healers of Thaniparai area to treat various ailments were mainly leaves and root. In the current investigation study area peoples have good ethno medicinal knowledge that gives quality of information. Male traditional healers involved professionally in the field of traditional medicine system. All over the world tribal communities, utilized for the preparation of herbal medicine using leaves ^[8, 9, 10]. The local people point of view leaves were used mostly that part is collected very easy to compare the underground parts flowers and fruits etc ^[11].

Conclusion

The study was revealed that study area was high medicinal plant diversity and ethno medicinal knowledge. Ethno medicinal plants usage decreasing the dependence of the other synthetic medicinal properties. Ethno medicinal knowledge which strongly conservation and breeding important and medicinal plans. In future of my studied carried out to determine the phytochemical analysis and Pharmacological activities.

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