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## Traditional Knowledge on Ethnomedicinal plants used by the Malayali tribe of Pachaimalai Hills, Eastern Ghats of Tamil Nadu, India

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### ABSTRACTS

*An ethnobotanical survey was carried out among the ethnic group namely, Malayali tribes in Pachaimalai Hills, Tamil Nadu, India. The tribal communities of Malayali cherish rich knowledge about medicinal plants and their uses. Therefore, we have done a comprehensive ethnobotanical survey in this area. In this present investigation, it is observed that the tribal used 80 wild valuable plant species belonging to 42 families were identified with relevant informations and documented in this paper with their botanical names, families, local names, parts used and their utility against different human ailments. The common diseases treated by the herbal practitioners were asthma, digestive problems, paralyzes, skin diseases and diabetes.*

**Keywords:** Ethnobotany, Medicinal plants, Pachaimalai hills, Malayali tribe, Eastern Ghats.

### INTRODUCTION

Plants have been used in traditional medicine since several thousand years. The knowledge of medicinal plants has been accumulated in the course of many centuries by the different medicinal systems such as Ayurveda, Unani, Homeopathy and Siddha. In India, it is reported that traditional healers use 2500 plant species and 100 species of them serve as regular sources of medicine [1]. Presently, there has been an increasing interest on the study of medicinal plants and their traditional uses in different parts of the world [2]. Herbal remedies are considered as the oldest forms of health care known to mankind on this earth. Prior to the development of modern medicine, the traditional systems of medicine that have evolved over the centuries within various communities, are still being maintained as a great traditional knowledge on herbal medicines [3-4]. Traditionally, this treasure of knowledge has been passed on orally from generation to generation without any written document [5-6] and is still being retained by various indigenous groups of India.

Documenting on indigenous knowledge through ethnobotanical studies is important for the conservation and utilization of biological resources. Ethnobotanical survey has been found to be one of the reliable approaches to drug discovery [7]. Several active compounds have been discovered from plants on the basis of ethnobotanical informations and are being administered against various diseases [8]. As indigenous cultures are closely maintained

by the tribal and other forest dwellers throughout the world, the ethnobotanical investigation is a prerequisite for any developmental planning concerned with the welfare of tribal and their environment. It is an urgent, necessity to record all the information about plants and the role of tribes in conserving them. Hence a survey was conducted to explore the nature and extent of knowledge possessed by local healers of Pachaimalai hills, Eastern Ghats of Tamil Nadu. [9-12].

## MATERIALS AND METHODS

### Study Area

An ethnobotanical survey has been carried out on Pachaimalai Hills, Thiruchirappalli District, Tamil Nadu, India (Figure 1). Pachaimalai Hill is a part of Eastern Ghats covered with tropical dry deciduous vegetation. The Pachaimalai Hill is situated at 933 meters above the sea level with a total area of 4532.53 hectare. It lays between the latitude 11°09' 00'' and 11°27'00'' North and longitude 78°28'00'' and 78°49'00'' East. It includes almost all types of vegetations. The ethnobotanical survey was carried out with the assistance of the tribes called Malayali habituated in this area covering the three panchayat unions Thenpuranadu, Vadapuradu and Aathinadu. [10].

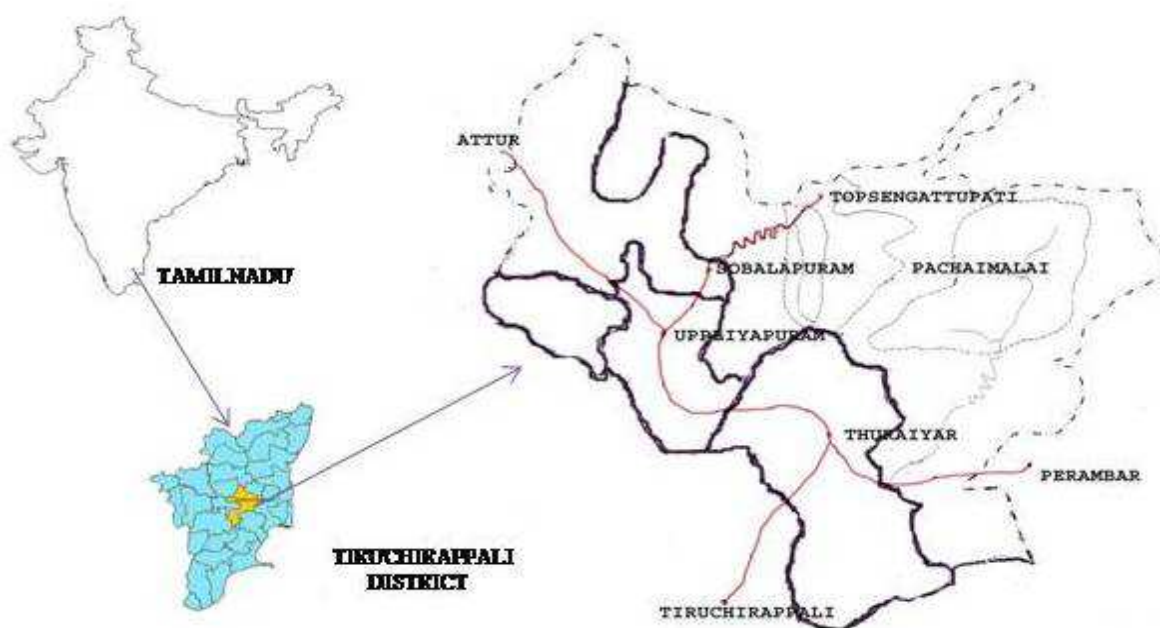


Figure 1, Location map for the ethnobotanical survey of the medicinal plants in Pachaimalai Hills

### METHODOLOGY

The field visits have been conducted monthly once regularly during the study period from September 2013 to August 2014. Ethnomedicinal informations were gathered from the local Malayalis and herbalists, through personal communications, while they accompanied us as local guides in the field. The mode of drugs preparation and identification of local medicinal plants with the help of experienced Malayalis, which was later, verified and reconfirmed. Plant species collected were identified with the help of Gamble [14-16] and were confirmed by comparing the Herbarium repository of Botanical survey of India, Coimbatore and the Flora of Presidency of Madras.

## RESULTS AND DISCUSSION

During the present observation, 80 Angiosperms were enumerated with their medicinal importance. Out of 80 plant species studied, 7 are monocotyledons and 73 are dicotyledons. In the habit wise study, 33 herbs were found to be the most used plants followed by 25 shrubs, 16 Trees, 5 Climbers, and 1 Twiner (Figure 2). All the 80 species are medicinally significant. Out of these, about 10 species were used against snake bite. Some species are used to treat jaundice, asthma, gonorrhoea, dyspepsia, diarrhoea and rheumatism. Species such as *Chloris barbata*, *Coccinia indica*, *Ficus glomerata*, *Gymnema sylvestre* *Cyanodon dactylon* and *Syzygium cumini* are used to treat diabetes. Plants like *Butea frondosa*, *Carica papaya* and *Vetiveria zizanioides* are used to control blood pressure. Pyresis is

treated effectively with *Andrographis echinoides*, *Andrographis paniculata* and *Sida acuta*. The local people utilize *Abutilon indicum*, *Achyranthes aspera* and *Santalum album* as anti-diuretic agents. People also make use of *Argemone mexicana*, *Calatropis gigantea*, *Euphorbia antiquorum*, *Gloriosa superba*, *Melia azedarach*, and *Ocimum sanctum* to cure leprosy. For treating skin diseases, *Azadirachta indica*, *Cissus quadrangularis*, *Solanum nigrum* and *Vernonia cinerea* are serving as tremendous remedies. Due to more demand for ethnomedicinal plants, the local villagers have been motivated for conservation and regeneration of these plant species.

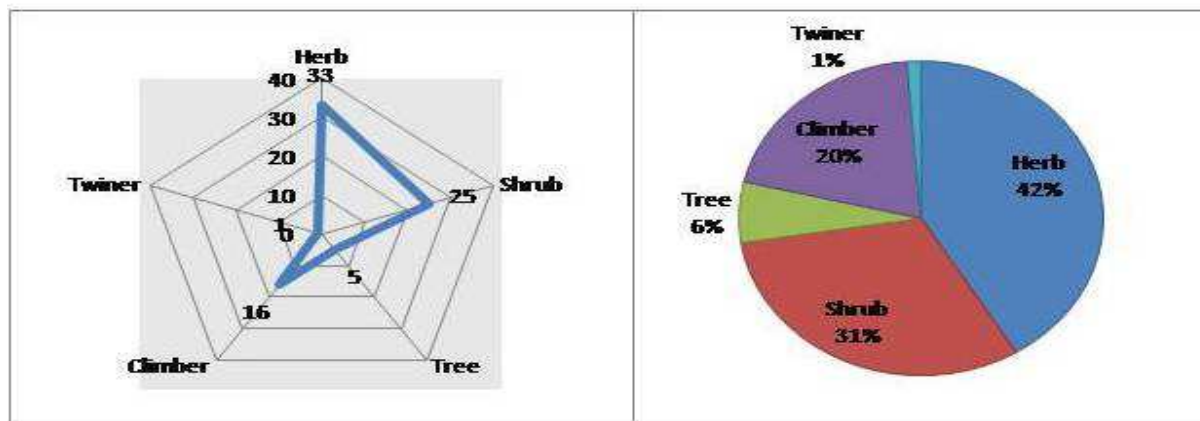


Figure 2, Habit wise classifications of the collected medicinal plants from the study area

#### Enumeration of Ethnomedicinal plants:

The ethnomedicinal plant species are arranged in the alphabetical order. Each plant is followed by its family, vernacular name (Tamil) and common name. The medicinal uses are described with details such as the part(s) used singly, in combination of other plants, methods of preparation and mode of administration. The following is the list of 80 plants species studied;

1. *Abutilon indicum* L. (Malvaceae). **Habit:** Herb, **Vernacular name:** Thuthi.

**Common names:** Crab's eye, Bead tree.

Roots are mingled with leaves, the mixture is added with little amount of water. The obtained mixture is boiled and the decoction is given internally as diuretic and purgative.

A hand full of leaves ground with 5ml of water and the obtained paste is used to treat toothache.

2. *Acacia leucophloea* Willd. (Fabaceae). **Habit:** Tree, **Vernacular name:** Vel – Velam.

**Common names:** White Acacia, Panicked Acacia,

Leaves are ground with water and the obtained juice is given orally to treat fever and stomachache.

Leaves are boiled with 50 ml of water and the obtained juice is mixed with 30 ml of cow milk and administered to treat bleeding piles.

3. *Acalypha indica* L. (Euphorbiaceae). **Habit:** Herb, **Vernacular name:** Kuppaimeni.

**Common name:** Indian Acalypha.

The whole plant parts are dried in shade and ground without water. The obtained paste is used to brush regularly against toothache.

The leaf is ground with water to make a paste and is applied externally to treat bed-sores.

4. *Achyranthes aspera* L. (Amaranthaceae). **Habit:** Herb, **Vernacular name:** Nayuruvi.

**Common names:** Cadillo, Chichoborugo.

Leaves decoction taken orally in stomach problems, diuretic, piles and skin diseases.

5. *Acorus calamus* L. (Aroideae). **Habit:** Herb, **Vernacular name:** Vashambu.

**Common names:** Calamus, Rat root.

Decoction of the rhizome is taken internally to treat dyspepsia, asthma and diarrhoea.

6. *Adathoda vasica* Nees (Acanthaceae). **Habit:** Shrub, **Vernacular name:** Adathoda.

**Common name:** Adusa.

The decoction of the leaves is given internally to treat asthma, dysentery and diarrhoea.

7. *Aegle marmelos* L. (Rutaceae). **Habit:** Tree, **Vernacular name:** Vilvam.

**Common name:** Bael

Decoction of the fruit is given orally to treat dysentery and dyspepsia.

Decoction of the stem and root powder is given orally to cure fever.

8. *Aloe vera* (L) Burm.f. (Xanthorrhoeaceae). **Habit:** Shrub, **Vern. name:** Chotthukathazhai,

**Common name:** Common Indian Aloe.

The juice of the whole plant is given orally to treat jaundice, fever, rheumatism and piles.

9. *Andrographis echinoides* Nees. (Acanthaceae). **Habit:** Herb, **Vern. name:** Gopuramthangi.

**Common name:** False Water willow.

Leaves juice is antipyretic, anthelmintic and cure stomach problems.

10. *Andrographis paniculata* Nees. (Acanthaceae). **Habit:** Herb, **Vern. name:** Nilavembu.

**Common name:** Green chirayta.

Decoction of the leaves administered against dyspepsia, anthelmintic and stomachache. Decoction of the root is given as tonic to cure fever.

11. *Anisomeles indica* O.Kze. (Lamiaceae). **Habit:** Herb, **Vernacular name:** Peyi-mirati.

**Common name:** Indian catmint.

Leaves juice is given orally to treat to fever and dyspepsia.

The leaves paste is applied over biting parts to cure snake bites and scorpion stings.

12. *Anisomeles malabarica* R.Br. (Lamiaceae). **Habit:** Shrub, **Vern. name:** Irrattai peymiratti,

**Common name:** Malabar catmint.

Leaves juice is given orally to treat fever and stomach ache.

The leaves juice is given internally to cure scorpion sting and snake bite.

13. *Annona squamosa* L. (Annonaceae). **Habit:** Shrub, **Vernacular name:** Ram-sitapalam.

**Common name:** Custard Apple.

Decoction of the bark is astringent. Fruit juice is given orally as a vermifuge.

14. *Argemone mexicana* L. (Papaveraceae). **Habit:** Herb, **Vernacular name:** Pirammathandu.

**Common names:** Prickly poppy, Mexican Poppy.

The leaves decoction is given orally to treat ulcers and malarial fever.

Seeds are useful in dropsy, jaundice, and leprosy. Latex is applied over scorpion sting.

15. *Aristolochia bracteata* Retz. (Aristolochiaceae). **Habit:** Shrub, **Ver. name:** Aaduthinnapalai.

**Common name:** Bracteated birthwort.

Decoction of the whole plant mixed with castor oil is taken orally to cure fever.

Leaves paste is applied externally to cure skin diseases and snake bite.

16. *Aristolochia indica* L. (Aristolochiaceae). **Habit:** climber **Vern. name:** Perumarindu.

**Common name:** The Indian birthwort.

Decoction of the whole plant mixed with honey is administered against leprosy.

Root paste is applied externally on snake bite and scorpion sting.

17. *Azadirachta indica* A.Juss. (Meliaceae). **Habit:** Tree, **Vernacular name:** Vembu.

**Common names:** Neem tree, Nim, Margosa Tree.

Decoction of the bark is given orally to treat liver ailments.

Paste of leaves is applied for skin diseases. Leaves juice is given internally to treat fever.

18. *Boerhavia diffusa* L. (Nyctaginaceae). **Habit:** Herb, **Vernacular name:** Mookarattai.

**Common names:** Hog Weed, Pig Weed, Horse Purslane, Tar Vine

Decoction of the whole plant is given orally to treat cough, scabies and jaundice.

19. *Bougainvillea spectabilis* Willd. (Nyctaginaceae). **Habit:** Shrub, **Ve. name:** Kaagithapoo. **Common name:** Brazilian hogweed.

Leaves juice is given orally to treat jaundice, dysentery and diarrhoea.

Roots juice is given to treat cough and fever.

20. *Butea frondosa* Koen. (Fabaceae). **Habit:** Tree, **Vernacular name:** Porasan.

**Common names:** Flame of the Forest, Dhak, Palas, Bastard Teak, Parrot Tree.

Juice of leaves is given orally as an antiseptic, alterative and to control blood pressure.

21. *Cadaba indica* Lam. (Capparidaceae). **Habit:** Shrub, **Vernacular name:** Viluthi.

**Common name:** Dabi.

The mixture of leaves and flowers ground with 50ml castor oil and turmeric to treat menorrhagia, and syphilis.

22. *Calophyllum inophyllum* L. (Clusiaceae). **Habit:** Tree, **Vernacular name:** Punnai,

**Common name:** Alexandrian laurel

Ten to fifteen gram of leaves is made into paste with a few drops of hot water to apply externally on rheumatism and gonorrhoea.

Fresh and clean bark juice is used as drops on eyes to cure eye infections.

23. *Calotropis gigantea* (L) R.Br. (Asclepiadaceae). **Habit:** Shrub, **Vern. name:** Erukku.

**Common name:** Crown flower

The plant powder mixed with cow milk is used to treat leprosy, syphilis, ulcer, dysentery, diarrhoea and rheumatism.

Decoction of the flowers is given orally to treat cough and asthma.

24. *Calotropis procera* L. (Asclepiadaceae). **Habit:** Shrub, **Vernacular name:** Vellerukku.

**Common names:** Giant Swallow wort, Milkweed.

Roots in the form of paste is applied against toothache.

The flowers powder with black pepper is take internally to treat snake bite and cholera.

25. *Canna indica* L. (Musaceae). **Habit:** Herb, **Vernacular name:** Kalvazhai.

**Common names:** Wild canna lily, canna, Indian shot.

The rhizome and fruit juice is given orally to treat fever, dropsy and dyspepsia.

26. *Cardiospermum halicacabum* L. (Sapindaceae). **Habit:** Herb, **V. name:** Mudakkaruthaan

**Common names:** Balloon Vine, Heart-seed.

The whole plant powder mixed with goat milk is taken internally to cure snake bite.

The plant paste is applied on swellings and rheumatic pains.

27. *Carica papaya* L. (Caricaceae). **Habit:** Tree, **Vernacular name:** Pappali.

**Common names:** Papaya, Paw Paw, Kates.

Flowers are used as anthelmintic. Fruit decoction is used to control blood pressure.

28. *Cassia auriculata* L. (Caesalpiniaceae). **Habit:** Shrub, **Vernacular name:** Avarai.

**Common names:** Aadari, Simbi.

Juice of seeds is given orally for 4 days to treat diabetes and chylous urine.

Leaves juice is given orally to treat heart discomforts.

29. *Centella asiatica* Urban. (Apiaceae). **Habit:** Herb, **Vernacular name:** Vallarai.

**Common names:** Gotu kola, hydrocotyle, Indian pennywort, Brahmi, Manduukaparani.

Leaves juice is given orally to improve memory power.

30. *Chloris barbata* SW. (Poaceae). **Habit:** Herb, **Vernacular name:** Kodai Pullu,  
**Common names:** Swollen finger grass, Feather finger grass.  
Leaves paste applied externally for skin diseases.  
Leaves juice is given orally to treat fever, diarrhoea and diabetes.
31. *Cissus quadrangularis* L. (Vitaceae). **Habit:** Shrub, **Vernacular name:** Perandai.  
**Common names:** Bone-setter, Edible stemmed vine  
The whole plant powder is taken orally with cow milk in asthma.  
Plant extract is taken orally to cure skin diseases.
32. *Citrus medica* L. (Rutaceae). **Habit:** Tree, **Vernacular name:** Narathankaai.  
**Common name:** Citron.  
Leaves juice is used against fever and dyspepsia.
33. *Cleome viscosa* L. (Capparidaceae). **Habit:** Herb, **Vernacular name:** Nayi-velai.  
**Common name:** Yellow mesambay.  
Seed paste is taken orally with hot water to treat liver problems.
34. *Clitoria ternatea* L. (Fabaceae). **Habit:** Shrub, **Vernacular name:** Sangupoo.  
**Common name:** Butterfly-pea.  
Leaves juice is given internally to treat fever.
35. *Coccinia grandis* (L.) Voigh. (Cucurbitaceae). **Habit:** Climber, **Verna. name:** Kovai.  
**Common names:** Aiwi guard, Kovai fruit, Ivy gourd  
Leaves juice is mixed with honey and given orally to treat diabetes and bronchitis.
36. *Crotalaria verrucosa* L. (Fabaceae). **Habit:** Herb, **Vernacular name:** Narimiratti.  
**Common names:** Blue Rattlepod, Purple popbush, Shack-shack, Tooth-leaves rattlepod.  
Flowers are ground with cow milk and given to treat scabies.  
Fruits juice is given orally to treat dysentery and diarrhoea.
37. *Cyanodon dactylon* Pers. (Poaceae). **Habit:** Herb, **Vernacular name:** Arugampullu.  
**Common name:** Bermuda grass.  
Decoction of plant is given orally to treat diabetes and chronic ulcer.
38. *Datura metal* L. (Solanaceae). **Habit:** Herb, **Vernacular name:** Umathai.  
**Common names:** Thorn Apple, Angel's Trumpet, Hindu Datura, Horn of Plenty.  
Juice of leaves is given orally to treat spasm, asthma and chronic ulcer.
39. *Datura stramonium* L. (Solanaceae). **Habit:** Herb, **Vernacular name:** Periya-umathai.  
**Common name:** Jimson Weed.  
Leaves-paste is used externally to treat rheumatism, toothache and earache.
40. *Eclipta alba* Hassk. (Asteraceae). **Habit:** Herb, **Vernacular name:** Karishalanganni.  
**Common name:** Eclipta.  
Decoction of leaves is used as tonic against jaundice and skin diseases.
41. *Emblica officinalis* Gaerth. (Euphorbiaceae). **Habit:** Tree, **Vernacular name:** Nellikkai.  
**Common names:** Gooseberry, Phyllanthus Emblica, Emblica, Indian Gooseberry, Amla.  
Dried fruit powder is used in diarrhoea, anaemia, jaundice and dyspepsia.  
The leaves juice mixed with black pepper and drink internally against scorpion sting.
42. *Ervatamia coronaria* Steapf. (Apocynaceae). **Habit:** Shrub, **Ve. name:** Nandhiyavatai.  
**Common name:** Crepe jasmine.  
Two grams of leaves powder with honey is used to cure rheumatism, dysentery, dyspepsia and diarrhoea.



43. *Euphorbia antiquorum* L. (Euphorbiaceae). **Habit:** Shrub, **Ver. name:** Shadurakkilly.  
**Common name:** Spurge.  
Latex is applied against ear-ache, dropsy, syphilis and leprosy.
44. *Euphorbia hirta* L. (Euphorbiaceae). **Habit:** Herb, **Ver. name:** Amman-pacharisi.  
**Common names:** Asthma plant, garden spurge.  
Crushed leaves with goat milk are given orally to treat dysentery, diarrhoea and asthma.
45. *Evolvulus alsinoides* L. (Convolvulaceae). **Habit:** Herb, **Ver. name:** Vishnukaranti.  
**Common names:** Dwarf Morning-glory, Shankhpushpi, Shankhahuli.  
The plant decoction is given orally to treat syphilis, diarrhoea, and nervous disorders.
46. *Ficus benghalensis* L. (Moraceae). **Habit:** Tree, **Vernacular name:** Alamaram.  
**Common name:** Banyan Tree.  
Latex is applied on sores, ulcers and rheumatism.  
Decoction of the bark and seeds cure gonorrhoea and dysentery.
47. *Ficus glomerata* Roxb. (Moraceae). **Habit:** Tree, **Vernacular name:** Atti.  
**Common names:** Cluster fig, Gular, Doomar.  
Decoction of the leaves and bark is given orally to treat dysentery.  
Seed powder mixed with honey is given to cure dysentery and diabetes.
48. *Ficus religiosa* L. (Moraceae). **Habit:** Tree, **Vernacular name:** Arashamaram  
**Common names:** Bo-tree, Pipal, Asvattha.  
Leaves paste is applied in skin diseases.  
The dried bark powder mixed with honey is used as an aphrodisiac.
49. *Gloriosa superba* L. (Liliaceae). **Habit:** Climber **Vernacular name:** Kalappai Kilangu.  
**Common names:** Flame lily, glory lily, climbing lily, creeping lily.  
Decoction of the tuber is an aphrodisiac.  
Tubers juice with goat milk is taken orally to treat leprosy, gonorrhoea and piles.
50. *Glycyrrhiza glabra* L. (Fabaceae). **Habit:** Shrub, **Vernacular name:** Athimathuram.  
**Common names:** Licorice, Liquorice, Sweetwood.  
The root decoction is given orally to treat throat pain.
51. *Gymnema sylvestre* R.Br. (Asclepiadaceae). **Habit:** Twiner, **Vern. name:** Shiru-kurunja.  
**Common names:** Gurmar, Merasingi, Meshashringi, Gurmarbooti.  
The leaves juice is given orally to treat urinary complaints and diabetes.
52. *Heliotropium indicum* L. (Boraginaceae). **Habit:** Herb, **Vern. name:** Thael kodukku,  
**Common names:** Indian Heliotrope, Erysipelas plant, Scorpion weed, Indian turnsole.  
The leaves is given orally to treat snake bite and scorpion sting.
53. *Ixora coccinia* L. (Rubiaceae). **Habit:** Shrub, **Vernacular Name:** Vitchie.  
**Common names:** Jungle Geranium, Flame of the Woods, Jungle Flame.  
The flowers and root juice is given to cure diarrhoea, fever and dysentery.
54. *Lantana camara* L. (Verbinaceae). **Habit:** Shrub, **Vernacular name:** Arippu.  
**Common names:** Lantana, tick berry, Spanish flag.  
The leaves juice mixed with cow milk is given orally to treat snake bite and insect bites.  
Leaves and turmeric paste is applied against cuts and wounds.
55. *Leucas aspera* Spreng. (Lamiaceae). **Habit:** Herb, **Vernacular name:** Thumbai.  
**Common name:** Leucas.  
The leaves juice is given orally to treat scabies.

The root juice with goat milk is given three times a day for four days to cure poisonous bites.

56. *Lippia nodiflora* Mich. (Verbinaceae). **Habit:** Herb, **Vernacular name:** Poduthalai.

**Common names:** Frog fruit, Turkey tangle, fog fruit.

The decoction of the plant is astringent and used to cure diarrhoea.

57. *Melia azedarach* L. (Meliaceae). **Habit:** Tree, **Vernacular name:** Mallay vembu.

**Common names:** Chinaberry tree, Persian lilac, Pride of India, Bead tree.

The flowers powdered with cow milk is used to cure headache.

The leaves paste is applied externally to cure leprosy, skin diseases and nervous disorders.

58. *Mimusops elengi* L. (Sapotaceae). **Habit:** Tree, **Vernacular name:** Maghizham.

**Common name:** Spanish cherry.

The decoction of bark, fruit and seeds are used as tonic in fever, diarrhoea and headache.

59. *Mirabilis jalapa* L. (Nyctaginaceae). **Habit:** Herb, **Vernacular name:** Andhi mantharai.

**Common names:** Clavillia, Four-o'clock plant, bonina, Beauty of the night.

The Leaves juice cures jaundice, dysentery, diarrhoea and dyspepsia.

60. *Mollugo midicalis* Lam. (Aizoaceae). **Habit:** Herb, **Vern. name:** Siriyapaeyamarati.

**Common names:** Thread stem, carpet weed

Leaves juice is an antiseptic and given against ear-ache.

61. *Morinda tinctoria* L. (Rubiaceae). **Habit:** Herb, **Vernacular name:** Nuna.

**Common names:** Morinda tree, Indian Mulberry, Noni.

Decoction of the leaves is given orally as a febrifuge.

A decoction of the roots with black pepper is given orally to treat dysentery.

62. *Ocimum basilicum* L. (Lamiaceae). **Habit:** Herb, **Vern. name:** Thirunetru pachilai.

**Common names:** Sweet Basil, Common Basil, Thai Basil, Tropical Basil.

The leaves juice is given orally to treat urinary problems and gonorrhoea.

63. *Ocimum sanctum* L. (Lamiaceae). **Habit:** Herb, **Vernacular name:** Tulasi.

**Common name:** Holy Basil, Tusli, Tulasi, Madura-tala.

The juice of the leaves is given orally to treat fever, leprosy and cough.

64. *Opuntia dillenii* Haw. (Cactaceae). **Habit:** Shrub, **Vernacular name:** Sappathi kalli.

**Common name:** Figueira-da-índia.

The fruits are used in gonorrhoea. The fruits paste is applied on snake bite and dog bite.

65. *Pedaliium murex* L. (Pedaliaceae). **Habit:** Herbs, **Vernacular name:** Anai-nerinji.

**Common names:** Bara Gokhru, Kattunjerinjil, Aanayiruthimullu, Ananerinnil.

The leaves extract is given orally to treat fever.

66. *Pergularia daemia* L. (Asclepiadaceae). **Habit:** Climber, **Vern. name:** Veliparuthy.

**Common names:** Amaradudheli. Asclepias.

The paste of the leaves and black pepper is applied on forehead in headache.

The decoction of the leaves is given orally to treat asthma and snake bite.

67. *Phyllanthus amarus* L. (Euphorbiaceae). **Habit:** Herbs, **Vernacular name:** Kizha nelli.

**Common names:** Gale-o-Wind, Hurricane weed.

Decoction of the whole plant with sugar is given for jaundice and liver complaints.

68. *Pterocarpus marsupium* Roxb. (Fabaceae). **Habit:** Tree, **Vern. name:** Vengai.

**Common names:** Indian Kino Tree, Malabar Kino Tree.

Decoction of the bark is given orally to treat stomach-ache.



69. *Punica granatum* L. (Punicaceae). **Habit:** Shrub, **Vernacular name:** Madulai.  
**Common names:** Pomegranate, Anar.  
The flower buds mixed with salt are used in bronchitis, dysentery and diarrhoea.
70. *Quomoclit pinnata* L. (Convolvulaceae). **Habit:** Climber, **Vern. name:** Mayilmaniccum.  
The juice of the leaves is given orally to treat bleeding piles and abdominal pains.
71. *Santalum album* L. (Santalaceae). **Habit:** Tree, **Vernacular name:** Sandhanam.  
**Common name:** Sandalwood  
Decoction of the bark is sedative and diuretic.  
Leaves extract with cow milk is taken orally three times a day for four days against gonorrhoea.
72. *Sida acuta* Burm. (Malvaceae). **Habit:** Shrub, **Vernacular name:** Vathathiruppi.  
**Common name:** Spinyhead sida.  
Fresh root crushed with black pepper is antipyretic, diuretic and cures gonorrhoea.
73. *Solanum nigrum* L. (Solanaceae). **Habit:** Herb, **Vernacular name:** Manathakkali.  
**Common names:** Black nightshade; wonder berry.  
The leaves and flowers juice with salt and black pepper is given orally to treat skin diseases, piles and ulcer.
74. *Solanum virginianum* L. (Solanaceae). **Habit:** Shrub, **Vernacular name:** Kandan-katteri.  
**Common names:** Yellow-Berried Nightshade.  
Fruits paste with cow milk is taken twice daily for seven days to cure toothache.  
The leaves are burnt and the ash is mixed with hot water and given to treat dyspepsia and constipation.
75. *Solanum trilobatum* L. (Solanaceae). **Habit:** Shrub, **Vernacular name:** Thudhuvalai.  
**Common name:** Achuda.  
Juice extracted from leaves is given orally to treat asthma and lung diseases.
76. *Syzygium cumini* L. (Myrtaceae). **Habit:** Tree, **Vernacular name:** Naval.  
**Common names:** Java plum, Jamun.  
The seeds decoction is given orally to treat diabetes.
77. *Vernonia cinerea* (L.) Less. (Asteraceae). **Habit:** Herb, **Vern. name:** Mukuthipoondur.  
**Common name:** French bouton violet.  
The whole plant is used as anthelmintic, alterative and against skin diseases.
78. *Vetiveria zizanioides* Nash. (Poaceae). **Habit:** Shrub, **Vernacular name:** Vettiver.  
**Common names:** Khas-khas grass, vetiver, lacate violeta.  
Decoction of the rhizome is taken to treat blood pressure and stomach problems.
79. *Vitex nugundo* L. (Verbinaceae). **Habit:** Shrub, **Vernacular name:** Notchi.  
**Common name:** Chaste tree.  
Leaves juice is administered as a vermifuge.  
Flowers powered with cow milk is given orally to treat cholera and liver complaints.
80. *Withania somnifera* Dun. (Solanaceae). **Habit:** Shrub **Vern. name:** Amukra kizhangu.  
**Common name:** Ashagwanda.  
Decoction of the leaves is given orally as anthelmintic.  
The root powder mixed with black pepper used in rheumatic swellings.

### CONCLUSION

The people of Pachaimalai Hills, Tamil Nadu have been using numerous herbs of therapeutic purpose since time immemorial. Villagers chiefly depend on the herbs for all diseases. Their plant remedies are helpful for common ailments like diarrhoea, jaundice, rheumatism, dyspepsia, asthma, diabetes, dysentery, leprosy, gonorrhoea and skin

diseases. They are also very familiar with the varieties of plant based antidotes for snake bites and scorpion stings. Pharmacological and clinical trials will help in the confirmation of the efficacy of the reported herbs. The use of the reported plant species were collected from the study area with the help of the tribes, who use them as medicine for varied ailments. For the benefit of the community the recorded plant species should be taken care of and also steps be taken for conservation as well as cultivation of these plant species.

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#### REFERENCES

- [1] Pei, S.J. *Pharma. Biology*, **2001**, 39: 74-79.
- [2] Lev. E. *J. of Ethnobiology and Ethnomedicine*, **2006**, 2:4.
- [3] Kadirvelmurugan V., Arumugam T., Karthik V., Raju K and Ravikumar S. *Archives of App. Science Res.*, **2014**, 6 (1):159-164.
- [4] Kadirvelmurugan Venkatachlam., Dhamotharan Ramasamy and Ravikumar Sundaramurthy. *Central Eu. J. of Exp. Biology*, **2015**, 4 (1):20-26.
- [5] Perumal Samy, R. and Ignacimuthu. S. *J. of Ethnopharmacology*, **2000**, 69: 63-71.
- [6] Karthik V., K. Raju, M. Ayyanar, K. Gowrishankar and T. Sekar. *J. Nat. Prod. Plant Resour.*, **2011**, 1 (2): 50-5.
- [7] Fabricant, D.S. and Farnsworth, N.R. *Environmental Health perspectives (supplement)*, **2001**, 109: 69-75.
- [8] Carney, J.R., Krenishky, J.M., Williamson, R.T., Luo, J., Carlson, T.J., Hsu, V.L. and Moswa, J.L. *J. of Natural products*, **1999**, 62: 345-347.
- [9] Anusha Bhaskar and Lalit R. Samant. *Global J. of Pharmacology*, **2012**, 6 (1): 47-51, 2012.
- [10] C. Amarasuriyan, K. Raju, A. Raja and V. Kadirvelmurugan. *J. of Basic and App. Biology*, **2013**, 7, (1): 311 – 316.
- [11] Anandakumar, D., Rathinakumar, S. S and Prabakaran, G. *International J. of Advances in Interdisciplinary Res.*, **2014**, 1 (4): 7-11.
- [12] M. Johnson Gritto (john britto), V. Nandagopalan, A. Doss. *JMPS* **2015**; 3(2): 80-85.
- [13] Hooker, J.D. The Flora of British India, L. Reeve and Co kent. **1884**.
- [14] Gamble, J.S. Flora of the Presidency of Madras. Vol.I-III Allard & Co. London. (Reprinted - 1956) Botanical Survey of India, Calcutta. **1936**.
- [15] Henry, A., N.Kumari, G.R. and Chitra, V. Flora of Tamil Nadu, India, Series 1: Analysis Botanical Survey of India, Southern Circle, Coimbatore. **1987**.
- [16] Matthew, K.M. The Flora of Tamilnadu Carnatic. The Rapinat Herbarium, Tiruchirapalli, Tamilnadu, India. **1983**.