

World Journal of Pharmaceutical ReseaRch

Volume 2, Issue 6, 2111-2124.

Review Article

ISSN 2277 - 7105

TRADITIONAL MEDICINAL PLANTS USED IN THE HEALING OF SKIN RELATED PROBLEMS IN COIMBATORE DISTRICT: A REVIEW

Subhashini R, Jeyam M*

Department of Bioinformatics, Bharathiar University, Coimbatore, Tamilnadu, India.

Article Received on 21 August 2013,

Revised on 29 Sept. 2013, Accepted on 24 October 2013

*Correspondence for Author:

Dr. Jeyam M

Department of
Bioinformatics, Bharathiar
University, Coimbatore,
Tamilnadu, India
jeyamvel@yahoo.co.in

ABSTRACT

Infectious diseases cause continuous trouble to humans throughout the history. The fungal infections are of importance as they are a major cause of morbidity worldwide. In the field of infectious disease, fungi cause the most devastating and stubborn infections and the superficial fungal infections affect millions of people around the world. Thus there is demanding need in the development of antifungal drugs due to the non-availability of effective antifungal drugs for the treatment of mycoses and it is important to find new sources of antifungal agents due to the toxicity of the available drugs like amphotericin-B. Hence screening the local medicinal plants in search of suitable phytochemicals to treat fungal and the other infections and also easy to check whether the same compound could also be used to treat

the same infection in the other region due to the growing number of strains of the same species which emphasize the importance of multifactor studies.

Keywords: *Mycoses, Antifungal drugs, Phytochemicals.*

INTRODUCTION

Dermatology is the branch of medicine dealing with skin and its disease. Skin disease is a common disorder of predominantly the superficial layers of the skin which affects all age groups from the neonate to the elderly stage. According to World Health Organization (WHO), skin diseases especially infectious disorders like pyoderma, scabies, pediculosis capitis, tinea capitis are very common and non-infectious disorders such as dermatitis are also common in developing countries like India due to low socioeconomic status, climatic factors, difficulties in access to water, overcrowding, poor standards of hygiene and also the immune

related problems are the important factors ^[19]. All these factors are not regarded as a significant problem due to the assumption that skin diseases are a benign and not life-threatening. A study in India also indicated that 34% of persons were affected in a year because of scabies and observed as the second most call on health cost for families when compared to common water-related disorders such as enteric fever or conjunctivitis ^[18].

Prevalence studies of skin diseases in less developed countries also suggests that skin diseases are common in children where one-third of population under fifteen years of age is affected and also common among the tribal inhabitants due to the said factors ^[7]. Study in south India also reveals that more number of children especially female children were affected by various dermatoses like pyoderma infestations, and fungal infections ^[5]. An important group of these skin pathogens are the fungi, among which dermatophytes and *Candida* spp., besides certain pathogenic bacteria are the most frequent ^[3, 14]. Kannan *et al.* performed a study to identify the fungal agents from clinical samples from patients with different mycoses and about 66.3% of dermatophytes were isolated from the patients suffered from dermatophytosis. The prevalence rate of the microorganism used to assess the impact of the organism on disease status in those patients and the management process also depends upon the understanding of the severity of the illness, investigations taken to identify the problem and cause of the problem correctly and then to treat with correct medications ^[7].

Thus there is demanding need in the development of antifungal drugs due to the non-availability of effective antifungal drugs for the treatment of mycoses and it is important to find new sources of antifungal agents due to the toxicity of the available drugs like amphotericin-B ^[9, 16]. One possible approach is to screen the local medicinal plants in search of suitable phytochemicals to treat fungal and the other infections. The people in developing countries depend on the traditional medicine because it is cheaper and more accessible than orthodox medicine ^[8]. In India, extensive studies about the medicinal plants are being carried out and large numbers of wild species are available. Since the demand for the herbal medicine is increasing more due to their lack in side effects. It is important to protect and preserve endangered species and the farmers would have a good opportunity to commercially cultivate these medicinal plants.

Coimbatore district is in the state of TamilNadu as one of the few districts where some dense forest exists ^[1]. More number of plant species are used by the different tribals in the different regions of this district to treat various diseases such as dermatological illness, fever, gastrointestinal, respiratory, urinary, jaundice, etc. and many species are used in more than 50

<u>www.wjpr.net</u> 2112

pharmaceutical preparations. It is very tuff job to summarize all the medicinal plants of different region of India which have been potentially used to treat various skin disorders ^[10]. Hence, the present aim is to screen out the medicinal plants reported only for skin diseases by ethno scientists in and around Coimbatore which helps to screen down the efficient lead compound in specific plant to combat the skin infections and the skin diseases and easy to check whether the same compound could also be used to treat the same infection in the other region due to the growing number of strains of the same species which emphasize the importance of multifactor studies.

Medicinal plants used in the healing of skin diseases by different tribals of various regions in the Coimbatore district

Medicinal plants are widely used in the treatment of skin diseases in various countries including India, and in different states of India like Andhrapradesh, Assam, Karnataka as well as in southern regions of TamilNadu like Kanyakumari and Tirunelveli district. It was tough to summarize all the medicinal plants of different regions in India in a single paper. Present review is an effort to put collectively all the medicinal plants of different places in Coimbatore district which have the potential in the healing of dermatological or the skin related problems.

1. Description of the medicinal plants used by irulars in and around Anaikatty hills for healing skin diseases $^{[1]}$

Bhanumathi *et al.* compared the ethnobotanical medicine used by tribals to the modern biological science and reported 41 medicinal plants in which leaves of 13 plants, roots of 2 plants, fruits of two plants, latex of a plant and seeds of one plant are not studied and 14 plants are given for healing skin diseases (**Table 1**).

Table 1. Traditional plants reported in and around Anaikatty

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Achyranthes aspera L.	Amaranthaceae	Leaves	Nai Urivi	Antiseptic
2	Cardiospermum canescens Wahl.	Sapindaceae	Leaves	Kuthumadakan	Boils
3	Cassia auriculata L.	Caesalpiniaceae	Leaves	Aviram	Dandruff
4	Datura metel L.	Solanaceae	Leaves	Oomathai	Swelling
5	Dichrostachys cinerea (L.) Wight & Arn.	Mimosoideae	Leaves	Veduttalam, Vedathalaa	Antiseptic
6	Jatropha gossypifolia	Euphorbiaceae	Leaves	Seemayamanakku,	Inflammation

<u>www.wjpr.net</u> 2113

	L.			Kattamanakku	
7	Leucas aspera Spr.	Lamiaceae	Leaves	Thumbai	Inflammation
8	Ocimum americanum L.	Lamiaceae	Leaves	Naithulasi	Antifungal properties
9	Ocimum gratissimum L.	Lamiaceae	Leaves	Elumichantulas, Peruntulasi	Antifungal properties
10	Ocimum tenuiflorum	Lamiaceae	Leaves	Thulasi	Antifungal properties
11	Physalis minima L.	Solanaceae	Leaves	Kupanti, Thol takkali	Inflammation
12	Tephrosia purpurea (L.)	Paplionaceae	Root	Kolinji	Antifungal properties
13	Toddalia asiatica (L.) Lam. var. gracilis	Rutaceae	Root	Eligundai Kattu-milaku	Antiseptic
14	Tridax procumbens L.	Asteraceae	Leaves	Vettukaaya poondu	Wound healing

2. Description of the medicinal plants used by malasars in Anamalai union for healing skin diseases^[2]

Brinda *et al.* studied on ethno botany of medicinal plants used by dominated tribals in this area for various skin ailments. They reported 25 plants in which 5 plants are used to treat skin ailments (**Table 2**).

Table 2. Traditional plants reported in Anamalai union

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Curcuma longa	Zingiberaceae	Rhizome	Manjal	Pimples
2	<i>Eclipta alba</i> . L. Hassk.	Asteraceae	Leaves	Karisalankanni	Dandruff
3	Ficus religiosa Linn.	Moraceae	Bark	Arasa Maram	Scabies
4	Myristica fragrans Linn.	Myristicaceae	Fruit	Jatikkai	Mouth wounds
5	Thespesia populnea	Malvaceae	Stamens & Pollengrains	Puvarasu	Skin diseases & allergies

3. Description of the medicinal plants used by irulars of Marudhamalai hills $^{[15]}$

Senthilkumar *et al.* reported the irulars mode of preparation of various medicinal plants by the tribal's in this region. Fifteen plants out of 75 documented plants are given for skin disorder or the dermatological illness (**Table 3**).

Table 3. Traditional plants reported in Marudhamalai hills

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Abrus precatorius Linn.	Fabaceae	Leaves	Kundumani	Scabies
2	Albizia lebbeck (L.) Benth.	Mimosaceae	Flowers	Vagai	Skin eruptions, swellings
3	Argyreia nervosa (Burm.f.) Boj.	Convolvulaceae	Leaves	Samuthrapachai	Wounds & skin diseases
4	Aristolochia indica Linn.	Aristolochiceae	Root	Isvaramuli	Leucoderma
5	Asystasia gangetica (L.) T Anders	Acanthaceae	Root	Palagai, miti-kirai	Skin allergies
6	Capparis sepiaria Linn.	Capparidaceae	Leaves	Karunjurai	Skin diseases
7	Cassia auriculata Linn.	Caesalpiniaceae	Seeds	Aavarai	Skin diseases
8	Cassia occidentalis Linn.	Caesalpiniaceae	Seeds & Leaves	Thagarai	Skin troubles
9	Crotalaria retusa Linn.	Fabaceae	Plant	Kilukillapa	Scabies and impetigo
10	Gloriosa superba Linn.	Liliaceae	Root	Kannuvalikodi	Leprosy, skin infections and piles
11	Lawsonia inermis Linn.	Lythraceae	Shoot	Maruthani	Leprosy
12	Leptadenia reticulata (Retz.) Wight. & Arn.	Asclepiadaceae	Plant	Palaikkodi	Leprosy
13	Mirabilis jalapa Linn.	Nyctaginaceae	Seeds	Pattarashu, Anthi Mandhaarai	Skin eruptions
14	Toddalia asiatica (Linn.) Lam. var. floribunda Gam.	Rutaceae	Root	Milakaranai	Itching, allergies and skin diseases
15	Vernonia cinerea Less.	Asteraceae	Plant	Mukuttipundu Ehitiviyarchenkalainir	Eczema, ringworm and other skin troubles

4. Description of the medicinal plants used by irulars in Anaikatty ${\it hills}^{[6]}$

Geetha *et al.* studied ethnobotany of medicinal plants used as herbal remedies for various diseases by the tribals in 3 villages in the area. In this study 28 medicinal plants were reported in which 7 plants are given specifically for skin related problems (**Table 4**).

Table 4. Traditional plants reported in Anaikatty hills

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Aristolochia bracteolata Linn.	Aristolochiaceae	Leaves	Aaduthinnapalai	Dandruff and fungal infections
2	Aristolochia indica Linn.	Aristolochiaceae	Root	Isvaramuli, Adagam	Leucoderma
3	Gloriosa superba Linn.	Liliaceae	Root	Kannuvalikodi Kalapai Kizhangu	Leprosy, Skin infections, Piles
4	Albizia amara (Roxb.) Boivin	Mimosoideae	Leaves	Unja Maram, Usilai	dandruff
5	Erythrina indica Lam.	Papilionaceae	Leaves	Kalyana Murungai	Skin diseases
6	Toddalia asiatica (Linn.) Lam.	Rutaceae	Root	Milakaranai, Kaatumilagu	Skin diseases
7	Lippia nodiflora Mich.	Verbenaceae	Leaves	Poduthalai	Hair tonic

5. Description of the medicinal plants used by malasars in Velliangiri holy hills^[13]

Newmaster *et al.* researched the consensus of the malasar's traditional aboriginal knowledge of medicinal plants in the Velliangiri holy hills and reported 95 plants belonging 50 genera in which 23 plants are given exclusively for skin ailments (**Table 5**).

Table 5. Traditional plants reported in Velliangiri hills

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Belpharis repens (Vahl) Roth.	Acanthaceae	Leaves	Elumbotti	Wounds
2	Glinus lotoides	Aizoaceae	Leaves	Siruserruppadai	Eczema
3	Achyranthes aspera L.	Amaranthaceae	Leaves	Nai Uruvi	Cuts, wounds
4	Amaranthus spinosus L.	Amaranthaceae	Whole plant	Mullukeerai	Antiseptic
5	Centella asiatica (L.) Urban	Apiaceae	Leaves	Vallarai	Leucorrhoea
6	Wrightia tinctoria (Roxb.) R. Br.	Apocynaceae	Latex and Leaves	Veppalai	Blisters
7	Holostemma ada- kodien Schultes	Asclepiadaceae	Latex	Paalai Kirai	Blisters
8	Sphaeranthus indicus L.	Asteraceae	Leaves	Kottakaranthai	Skin diseases
9	Trichodesma indicus (L.) R. Br.	Boraginaceae	Leaves	Kavuthumbai	Wounds
10	Canarium strictum	Burseraceae	Resin	Kungilium	Cracks

	Roxb.				
11	Ipomoea obscura (L.) Ker Gawl.	Concolvulaceae	Leaves	Siruoonan	Blisters
12	Kalanchoe floribunda	Crassulaceae	Leaves	Ranakalli	Skin diseases
13	Acalypha indica L.	Euphorbiaceae	Leaves	Kuppaimeni	Skin allergies
14	Euphorbia hirta L.	Euphorbiaceae	Latex	Ammanpacharisi	Wounds
15	Lycopodium phlegmaria L.	Lycopodioceae	Plant	Sivanjadai	Skin diseases
16	Azadirachta indica A. Juss	Meliaceae	Leaves	Veppamaram	Eczema and antispetic
17	Tinospora cordifolia (Willd) Miers ex Hook. F & Thoms.	Menispermaceae	Leaves	Chintil kodi	Piles
18	Mimosa pudica L.	Mimosaceae	Leaves	Thottal sinungi	Psoriasis
19	Malaxis rheedii Sw.	Orchidaceae	Whole plant	Kattu vengayam	Blisters
20	Argemone mexicana L.	Papaveraceae	Latex	Pirama thandu	Blisters
21	Ziziphus mauritiana Lam.	Rhamnaceae	Leaves	Elanthai	Piles
22	Azima tetracantha Lam.	Salvadoraceae	Root	Sangumullu	Wounds
23	Phyla nodiflora (L.) Greene.	Verbenaceae	Leaves	Poduthalai	Dandruff

6. Description of the medicinal plants used by different tribal communities in Anaikatty hills for healing skin diseases^[15]

Ramachandran *et al.* studied the ethno botany of Amaravathy Range of Indira Gandhi Wildlife Sanctuary, Western Ghats where different groups of tribal communities like Kadars, Malasars, Malaimalasars, Muthuvars & puliyars are residing and categorized the plant species as list of vegetables, edibles, fruits, medicinal plants and plants used for miscellaneous purposes. Twenty six plants were reported by them of which 6 plants are given for skin related problems (**Table 6**).

Table 6. Traditional plants reported in Anaikatty hills

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Achyranthes aspera L.	Amaranthaceae	Leaves	Nayuruvi, Shiru-kadaladi	Wound
2	Bidens triplenervia HBK. var macrantha Wedd.	Asteraceae	Leaves	-	Wound

3	Boerhavia diffusa L.	Nyctaginaceae	Leaves	Mukaratee- Kirei	Wound
4	Chloroxylon swietenia DC.	Rutaceae	Stem bark	Porasu	Itchy skin
5	Drymaria cordata (L.) Roem. ex. Schultes. Ssp. diandra (Blume) Duke	Caryophyllaceae	Whole plant	-	Wound
6	Tridax procumbens L.	Asteraceae	Leaves	Whitesnow	Wound

7. Description of the medicinal plants used by malasars in Ayyasamy $hills^{[18]}$

Venkataswamy *et al.* studied ethnomedicinal plants used as traditional folk medicine for various diseases by the tribals living in and depend on the hills. In this study 75 medicinal plants belonging to 71 genera and 40 families were reported. Out of that 28 plants are used specifically for skin related problems (**Table 7**).

Table 7. Traditional plants reported in Ayyasamy hills

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Abrus precatorius L.	Fabaceae	Seed	Kundumani	Leucoderma
2	Abutilon indicum G. Don.	Malvaceae	Leaves	Thuthi	Inflammation, Piles and skin eruptions
3	Acacia arabica Willd.	Mimosaceae	Bark	Incakkai	Skin diseases
4	Acacia catechu Willd.	Mimosaceae	Heartwood	Karungali	Inflammation
5	Acacia leucophloea (Roxb.) Willd.	Mimosaceae	Bark	Velvelam	Skin diseases
6	Acalypha indica L.	Euphorbiaceae	Leaves	Kuppaimeni	Inflammation
7	Achyranthes aspera	Amaranthaceae	Leaves	Nayuruvi, Shiru-kadaladi	Wound healing
8	Ailanthus excelsa Roxb.	Simaroubaceae	Bark	Perumaram, Pee maram	Skin diseases
9	Albizia lebbeck (L.) Benth	Mimosaceae	Stem and bark	Vagei	Swellings and Wound healings
10	Aristolochia indica L.	Aristolochiaceae	Leaves	Isvaramuli	Skin diseases
11	Borassus	Palmae	Bark	Paanai	Skin

	flabellifer L.				infections
12	Cassia auriculata L.	Caesalpiniaceae	Bark	Avarai, Avaram	Inflammation
13	Chloroxylon swietenia DC.	Rutaceae	Leaves	Porasu	Wound healing
14	Citrullus colocynthis Schrad.	Cucurbitaceae	Fruits and seeds	Peykumutti	Antifungal
15	Cordia obliqua Roem & Sch.	Boraginaceae	Bark	Perunaruvuli	Antifungal
16	Dodonaea viscosa L.	Sapindaceae	Leaves	Virali	Wound healing
17	Ficus benghalensis L.	Moraceae	Stem bark	Alamaram	Skin diseases
18	Ficus religiosa L.	Moraceae	Stem bark	Arasamaram	Skin diseases
19	Helicteres isora L.	Sterculiaceae	Stem bark	Idampuri- valampurikkai	Inflammation and skin diseases
20	Holoptelea integrifolia Planch.	Ulmaceae	Stem bark	Aya, Ayil	Inflammation
21	Lantana indica Roxb.	Verbenaceae	Leaves	-	Inflammation and antiseptic
22	Melia azedarach L.	Meliaceae	Leaves	Malaivembu	Antiseptic
23	Momordica charantia L.	Cucurbitaceae	Leaves	Pavaikai	Wound healing
24	Pongamia glabra Vent.	Fabaceae	Bark	Pungai	Skin diseases
25	Psidium guajava L.	Mrytaceae	Leaves	Koiyaa	Antiseptic
26	Sida cordifolia L.	Malvaceae	Leaves	Kuruthooti	Skin disease
27	Tamarindus indica L.	Cucurbitaceae	Bark	Pulia maram	Wound healing and skin problems
28	Thespesia populnea Cav.	Malvaceae	Leaves	Poovarasu	Skin infections

8. Description of the medicinal plants used as crude drugs in Coimbatore City^{10}

Sevanan *et al.* reported 72 plants spreading over 41 families that are used as crude drugs to treat several common diseases in that more number of plant species (45) was given for the skin related problems (**Table 8**).

Table 8. Traditional plants reported in Coimbatore city

S. No	Botanical name	Family	Parts used	Common Name	Major Cure
1	Acacia nilotica (Linn.) Willd, ex Del. Subsp. Indica (Benth.) Brenan.	Mimosaceae	Bark	Karuvelam	Wounds and skin diseases
2	Acacia sinuata (Lour.) Merrill.	Mimosaceae	Pods	Shikakai	Dandruff
3	Adhatoda zeylanica Medic.	Acanthaceae	Leaves	Adhothoda	Wounds
4	Aerva lanata (Linn.) Juss. ex Schult.	Amaranthaceae	Whole plant	Cerupulai	Boils and piles
5	Andrographis paniculata (Burm. f.) Wall. ex. Nees.	Acanthaceae	Whole plant	Serianangai	Wounds
6	Asparagus racemosus Willd.	Liliaceae	Tuberous roots	Thanirvittam Kilavari	Inflammations
7	Azadirachta indica A. Juss.	Meliaceae	Whole plant	Vempu, veppu	Skin diseases
8	Cardiospermum halicacabum Linn.	Sapindaceae	Whole plant	Mudukkottan, Mudakattan	Wounds
9	Cassia absus Linn.	Caesalpiniceae	Seeds	Karunkkollu	Wounds
10	Cassia auriculata Linn.	Caesalpiniceae	Flowers and seeds	Aavarampu	Skin diseases and leprosy
11	Cassia obovata	Caesalpiniceae	Whole plant	Nilavari	Piles and skin diseases
12	Cayratia pedata Gagnep.	Vitaceae	Whole plant	Pannikkodi	Boils
13	Centella asiatica (Linn.) Urban	Apiaceae	Whole plant	Vallarai	Skin diseases. Leprosy
14	Clitoria ternatea Linn.	Fabaceae	Roots, leaves and seeds	Kaddanam	Leprosy
15	Curcuma zerumbet Roxb.	Zingiberaceae	Stem	Kasthuri manjal	Cuts and wound, Skin diseases
16	Cynodon dactylon (Lin.) Pers.	Poaceae	Whole plant	Arugampullu	Piles, cuts, wounds, leprosy, scabies and skin diseases
17	Cyperus esculentus Linn.	Cyperaceae	Whole plant	Korai	Leprosy
18	Cyperus rotundus Linn.	Cyperaceae	Whole plant	Korai	Scabies, skin diseases
19	Eclipta prostrata (Linn.) Linn.	Asteraceae	Whole plant	Karislangkanni	Wounds, Leucoderma, Leprosy
20	Embelia ribes	Myrsinaceae	Seeds, and	Vayuvilangam	Skin diseases,

	Burm. f.		fruits		ring worms, leprosy
21	Ficus benghalensis Linn.	Moraceae	Bark	Aalamaram	Skin diseases
22	Ficus racemosa Linn.	Moraceae	Bark	Attimaram	Wounds, swellings, inflammations
23	Glycyrrhiza glabra Linn.	Fabaceae	Roots	Atimadhuram	Skin diseases
24	Gymnema sylvestre (Retz.) Schult.	Asclepiadaceae	Leaves	Pasaani, Sirukurinnchaan	Wounds, piles
25	Hemidesmus indicus (Linn.) R. Br.	Asclepiadaceae	Root	Nannari	Skin diseases
26	Hibiscus rosa- sinesis Linn.	Malvaceae	Whole plant	Semparuti	Skin diseases
27	Hygrophila auriculata (Schum.) Heine	Acanthaceae	Seeds and fruits	Nallimulli	Burns, cuts, wounds, itch
28	Indigofera tinctoria Linn.	Fabaceae	Bark	Avuri	Leprosy, Leucoderma, skin diseases, boils, piles
29	Lawsonia inermis Linn.	Lythraceae	Bark, seeds and flowers	Maruthani	Burns, skin diseases
30	Murraya koenigii (Linn.) Spreng.	Rutaceae	Leaves	Karuvepelai	Burns
31	Nymphaea nouchali Burm. f.	Nymphacaceae	Flowers	Neelambal	Skin diseases, Scabies, wounds
32	Phyla nodiflora Linn. F.	Verbenaceae	Stem	Poduthalai	Boils, burns and also used in hair treatment
33	Piper nigrum Linn.	Piperaceae	Fruits	Milagu	Piles and skin diseases
34	Piper longum Linn.	Piperaceae	Fruits	Pippali, Tippili	Skin diseases, leucoderma
35	Pterocarpus santalinus Linn. f.	Fabaceae	Stem	Rathasandanam	Skin diseases
36	Saraca asoca (Roxb.) De Wilde	Caesalpiniceae	Stem and bark	Asogam	Piles
37	Sesbania grandiflora Pers.	Fabaceae	Leaves	Agathi	Inflammation
38	Sida rhombifolia Linn.	Malvaceae	Root	Kurunthotti	Piles
39	Solanum nigrum Linn.	Solanaceae	Whole plant	Manathakkali	Leucoderma
40	Solanum xanthocarpum	Solanaceae	Whole plant	Kandankathri	Scabies and skin diseases

	Schrad. & Wendl.				
41	Terminalia bellirica (Gaertn.) Roxb.	Combretaceae	Fruits	Thandrikkai	Piles, Skin diseases, Leucoderma
42	Terminalia chebula Retz.	Combretaceae	Fruits	Kadukkai	Skin diseases
43	Tribulus terrestris Linn.	Zygophyllaceae	Root	Nedungimul	Wounds
44	Withania somnifera (Linn.) Dunal	Solanaceae	Root	Ashvagandha	Leucoderma, scabies, ring worm

9. Description of the medicinal plants used by irulars in Palamalai ${\rm hills}^{[14]}$

Rajendran *et al.* highlighted a total of 50 plants species belonging to 47 genera and 31 families used by the irulars as herbal medicines to treat several common diseases. Out of which, 14 plant species are given only for the skin related problems (**Table 9**).

Table 9. Traditional plants reported in Palamalai hills

S. No	Botanical name	Family	Parts used	Tamil Name	Major Cure
1	Allium cepa Linn.	Liliaceae	Bulb	Vengayam	Boils
2	Andrographis paniculata (Burm. F.) Wall. ex Nees.	Acanthaceae	Bark	Nilavembu	Skin diseases
3	Aristolochia bracteolata Lam.	Aristolochiaceae	Bark	Aaduthinnappal ai	Skin diseases
4	Bambusa arundinaceae (Retz.) Roxb.	Poaceae	Leaves	Mungil	Cuts and wounds
5	Cassia auriculata Linn.	Caesalpiniaceae	Leaves	Avarai	Scabies
6	Cassia tora Linn.	Caesalpiniaceae	Leaves	Tagarai	Leprosy
7	Eclipta prostrata Linn.	Asteraceae	Leaves	Karasilaganni	Skin diseases and wounds
8	Evolvulus alsinoides Linn.	Convolvulaceae	Leaves	Vishnukranthi	Burn
9	Lablab purpureus (Linn.)	Fabaceae	Leaves	Avarai	Ring worm
10	Lantana camara Linn.	Verbenacea	Leaves	Unnichedi	Cuts and wounds
11	Mangifera indica Linn.	Anacardiaceae	Leaves and stem bark	Maamaram	Heel cracks
12	Mollugo nudicaulis Lam.	Aizoaceae	Leaves	Parpadakam	Boils
13	Tectona grandis	Verbenaceae	Leaves	Tekkumaram	Skin diseases

	Linn. F.				
14	Tridax procumbens Linn.	Asteraceae	Leaves	Kinathupoondu	Cuts and wounds

CONCLUSION

Finding out the suitable lead compound from medicinal plants for any disease/disorder/the infection is the most important step in the drug discovery process. This review helps the researchers working on the skin related problems to filter out the efficient or to find out the new compound in the reported plants and also to search for the similar compounds in other plants.

REFERENCES

- 1. Bhanumathi N, Berit S Paulsen, Pushpandagam P. (An Ethnopharmacological study from the Coimbatore district, Tamil Nadu, India: Traditional knowledge compared with modern biological science). *Pharmaceutical Biology*, 1999; 37(5): 378-390.
- 2. Brinda R, Parvathy S. (Ethnobotanical medicines of Anaimalai union Pollachi taluk, Coimbatore district, Tamil Nadu). *Ancient Science of Life*, 2003; 22(4): 166–168.
- 3. Caceres A, Fletes L, Aguilar L, Ramirez O, Ligia F, Tareena A M. (Plants used in Guatemala for the treatment of gastrointestinal disorders Confirmation of activity against *Entero-bacteriaceae*). *Journal of Ethnopharmacology*, 1993; 38: 31-38.
- 4. Desta B. (Ethiopian traditional herbs Part II antimicrobial activity of 63 medicinal plants). *Journal of Ethnopharmacology*, (1993); 39: 263-276.
- 5. Devinder Mohan Thappa, Kaliaperumal Karthikeyan, Jeevankumar B. (Pattern of pediatric dermatoses in a referral in South India). *Indian Pediatrics*, 2004; 41: 373-377.
- 6. Geetha S, Poornima S, Vaseegari J. (Studies on the Ethnobotany of irrulars of Anaikatty hills, Coimbatore district). *International Journal of College Science in India*, 2007; 1: 2.
- 7. Kannan P, Janaki C, Selvi GS. (Prevalence of dermatophytes and other fungal agents isolated from clinical samples). *Indian Journal of Medical Microbiology*, 2006; 24(3): 212-215.
- 8. Lalitha Rani S, Kalpana Devi P, Tresina Soris, Maruthupandian A, Mohan VR. (Ethnomedicinal plants used by kanikkars of Agasthiarmalai Biosphere Reserve Western Ghats. *Journal of Ecobiotechnology*). 2011; 3(7): 16-25.
- 9. Maddux MS, Brarriere SL. (A review of complications of amphotericin B therapy: recommendation for prevention and management). *Drug Intelluctual Clinical Pharmacology*, 1980; 14: 177-181.

- 10. Mathan C Nisha, Sevanan Rajeshkumar. (Survey of crude drugs from Coimbatore city). *Indian Journal of Natural Products and Resources*, 2010; 1(3): 376-383.
- 11. Nagariya AK, Meena AK, Dipika Jain, Gupta BP. Yadav K, Gupta MR, Pathak AK, Neelam. (Medicinal plants used in the healing of skin diseases in different regions in India: A review). *International Journal of Chemical and Analytical Science*, 2010; 1(5): 110-113.
- 12. Rajendran A, Umapriya T, Aravindhan V, Binu Thomas, Maharajan M. (Ethnobotany of irular tribe in Palamalai hills, Coimbatore, Tamil Nadu). *Indian Journal of Natural Products and Resources*, 2011; 2(2), 250-255.
- 13. Ramachandran VS, Shijo Joseph, Aruna R. (Ethnobotanical studies from Amararvathy Range of Indira Gandhi wildlife sanctuary, Western Ghats, Coimbatore district, Southern India). *Ethnobotanical Leaflets*, 2009; 13(9):1069-1087.
- 14. Saral R. (*Candida* and *Aspergillus* infection in immunocompromised patients: an overview). *Revision on Infectious Diseases*, 1991; 13(3): 487-492.
- 15. Senthikumar M, Gurumoorthi P, Janardhanan K. (Some medicinal plants used by irrular, the tribal people of Marudhamalai hills, Coimbatore, Tamil Nadu). *Natural Product Radiance*, 2006; 5(5): 382-388.
- 16. Subramanyam Ragupathy, Newmaster G Steven, Murugesan Maruthakkuti, Balasubramaniam Velusamy, Munner M UL-Huda. (Consensus of the malasar's traditional aboriginal knowledge of medicinal plants in the Velliangiri holy hills, India). *Journal of Ethnobiology and Ethnomedicine*, 2008; 4:8.
- 17. Venkataswamy R, Mohamad Mubarack H, Doss A, Ravi TK, Sukumar M. (Ethnobotanical study of medicinal plants used by malasar tribals in Coimbatore District of Tamil Nadu (South India)). *Asian Journal of Experimental Biological Sciences*, 2010; 1(2): 387-392.
- 18. Verma BL, Srivastava RN. (Measurement of the personal cost of illness due to some major water-related diseases in Indian rural population). *International Journal of Epidemiology*, 1990; 19:169-76.
- 19. World Health Organization. (Epidemiology and management of common skin diseases in children in developing countries) 2010, WHO/FCH/CAH/05.12.