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Less Known Ethnomedicinal Plants Used by *Kurichar* Tribe of Wayanad District, Southern Western Ghats Kerala, India

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Abstract: The present study provides an over view of 44 medicinal plants belonging to 30 families have been used for indigenous medication by the tribe *Kurichar* of Wayanad district of Kerala. Among them Asclepiadaceae, Fabaceae, Acanthaceae, Rutaceae, Apocynaceae, Marantaceae, Rubiaceae and Solanaceae are the most common plant families, respectively. The different parts of plants of these famililies are used to cure various ailments like stomach problems, urinary complaints, rheumatism, leprosy, eye diseases, bronchitis, malaria, diabetes, chicken pox, cough and cold, head ache, hair tonic, cuts and wounds, skin problems *etc.* The botanical, vernacular and family names along with mode of preparation and uses have been provided for further pharmacological and clinical evaluations.

Key words: Ethnomedicinal plants · *Kurichar* tribe · Wayanad · Western Ghats · Kerala

INTRODUCTION

The primitive peoples are well acquainted with the properties and uses of plants of their surroundings. They inherit rich traditional knowledge of surrounding plants used as food, fodder, fibre, wood, fuel and medicines [1]. The knowledge acquired by the tribal community through experience of ages is passed on by verbal sayings from generation to generation as part of their cultural heritage [2]. Many tribal groups have been using several plant or animals products for medicinal preparations and these medicines are known as ethno-medicine [3].

Man is dependent on plants from time immemorial. The human life and culture has directly or indirectly been influenced by their surrounding environment [4, 5]. Medicinal plants have attracted considerable global interests in recent years. Due to various human activities such as deforestation, rapid industrialisation, urbanisation and other developmental activities, both natural vegetation as well as traditional culture in India is fast declining [6, 7].

MATERIALS AND METHODS

Wayanad district (11°27"-15°58" N and 75°47"-70°27" E) is situated in the Western Ghats region of Kerala with an altitude varying from 700 to 2100 m from sea level. Nilgiri and Mysore districts of Tamil Nadu and Karnataka, respectively bound it on east, Coorg district of Karnataka on north, Malappuram district of Kerala on the south and Kozhikode and Cannore districts of Kerala on the west.

Kurichar is the dominant scheduled tribal community in Wayanad district. The principal occupation of the *kurichar* is wood cutting and collection of minor forest products [8]. Several field visits were conducted to the *Kurichar* tribes of Wayanad district during May-September 2009. The collection of data was an interview with tribals, observations and one to one discussions with men and women informers separately. The collected specimens were identified with the help of floras, manuals and revisions. The table in the appendix gives an overview of the ethnomedicines used by *Kurichar* tribe of the Wayanad district (Table 1).

RESULTS AND DISCUSSION

The traditional knowledge of *Kurichar* communities of Wayanad has high ethnobotanical importance. They utilize numerous plants and their different parts *viz.,* roots, leaves, stem and rhizome for various ethnomedicinal practices. During the study a total of 44 species belonging to 30 families have been collected

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Table 1: Documented traditional less known medicinal plants from *Kurichar* tribe of Wayanad district, Kerala, India

S.No.	Botanical Name	Family	Local Name	Parts used	Mode of administration
1.	*Abrus precatorius* L.	Fabaceae	Kunni	Leaves	Leaf decoction in the affected portion of inflammation.
2.	*Acacia sinuata* (Lour.) Merr.	Mimosaceae	Cheenikka	Pods	Powdered pods are used in all cases of skin diseases.
3.	*Adhatoda zeylanica* Medic.	Acanthaceae	Adalodakam	Leaves and Roots	Leaf and root decoction are taken internally for asthma and cough.
4.	*Allophylus serratus* (L.) Juss.	Sapindaceae	Mukkan	Laeves	Leaf paste with turmeric is applied for fracture and sprains.
5.	*Amorphophallus paeoniifolius* (Dennst.) Nicol.	Araceae	Kattuchena	Corm	Corm pieces are fried in ghee and used internally in treatment of piles.
6.	*Aristolochia bracteolata* Lam.	Aristolochiaceae	Karala	Leaves	Leaf paste is applied on the affected portion in the treatment of inflammation and boils.
7.	*Aristolochia indica* L.	Aristolochiaceae	Karalakam	Leaves	Leaf juice is mixed with rhizome juice of *Zingiber officinale* is used for blood clotting.
8.	*Artemisia nilagirica* (C.Clarke) Pamp.	Asteraceae	Kattukarpuram	Leaves and Flowers	Inhalation of smoke from the flowering twigs is effective in the treatment of asthma and bronchitis
9.	*Caesalpinia bonducella* (L.) Roxb.	Caesalpiniaceae	Kazhangikkuru	Seeds	Seed paste is applied on fore head in the treatment of headache.
10.	*Cinnamomum verum* J.S. Presl.	Lauraceae	Edana	Root	Root bark powder mixed with milk and sugar for cough.
11.	*Cissus discolor* Blume	Vitaceae	Kattu valli	Whole plant	Plant paste is mixed with egg white is applied on the affected portion in the treatment of fractures.
12.	*Clematis gouriana* Roxb.	Ranunculaceae	Eruvalli	Leaves	Leaf decoction is mixed with water for rheumatism bath.
13.	*Cyclea peltata* (Lam.) Hook.f. And Thoms.	Menispermaceae	Padathali	Roots	Oil is prepared from rhizome used for tooth ache.
14.	*Cymbopogon citrates* (DC.) Stapf.	Poaceae	Theruvupullu	Leaves	Oil prepared from leaves used for toothache.
15.	*Eclipta prostrata* L.	Asteraceae	Kyyunni	Whole plant	Plant extract is used for the treatment of dandruff.
16.	*Emilia sonchifolia* (L.)DC.	Asteraceae	Muyalcheviyan	Whole plant	Plant paste with salt is applied both inner side and outer side of the throat in the treatment of tonsillitis.
17.	*Erythrina variegata* L.	Fabaceae	Murikku	Leaves	Leaf decoction is used for malaria.
18.	*Glycosmis pentaphylla* (Retz.) DC.	Rutaceae	Panal	Leaves	Leaf juice used along with neem leaves are applied externally for the treatment of chicken pox.
19.	*Gymnema sylvestre* (Retz.) R.Br.	Asclepiadaceae	Chakkarakolli	Leaves	Leaves are eaten for diabetes.
20.	*Heliotropium keralense* Sivarajan and Manilal	Boraginaceae	Thelkatta	Leaves	Leaf paste is applied on bitten spot in the treatment of scorpion bites.
21.	*Hemidesmus indicus* (L.) R.Br.	Periplocaceae	Nannari	Roots	Root decoction is taken internally for the treatment of leucorrhoea and diabetes.
22.	*Hemigraphis colorata* (Blume) H.G. Hallier	Acanthaceae	Murikootti	Leaves	Leaf juice is applied on wounds.
23.	*Holostemma adakodien* Schult.	Asclepiadaceae	Adapathiyan	Roots	Root decoction is recommended for body strength.
24.	*Hydnocarpus pentandra* (Benth-Ham.) Oken Almedia	Flacourtiaceae	Marotti	Seeds	Oil obtained from seeds mixed with leaf juice of *Calotropis* is applied externally for scabies and leprosy.
25.	*Hygrophila schulli* (Buch.-Ham.) M.R. and S.M. Almedia	Acanthaceae	Vayalchulli	Roots and Leaves	Both root and leaf paste is applied for inflammation
26.	*Ichnocarpus frutescens* (L.) R.Br.	Apocynaceae	Paravalli	Roots	Root juice is used internally for treatment of anaemia and kidney stone.
27.	*Ipomoea marginata* (Pesr.) Verdc.	Convolvulaceae	Thiruthali	Roots	Root decoction is taken internally for urinary infection.
28.	*Jasminium grandiflorum* L.	Oleaceae	Pichakam	Leaves	Leaf juice is mixed with coconut flower juice is dropped in to nose for the treatment of nasal bleeding.
29.	*Kalanchoe pinnata* (Lam.) Pers.	Crassulaceae	Elamulachi	Leaves	Leaf juice is an effective medicine for the treatment of dysentery and cholera.
30.	*Luffa cylindrica* (L.) Roem.	Cucurbutaceae	Peechil	Leaves	Leaf paste is used externally in the treatment of leprosy.
31.	*Maranta arundinacea* L.	Marantaceae	Koova	Rhizome	Rhizome powder along with milk is used in the treatment of urinary complaints.
32.	*Mussaenda frondosa* L.	Rubiaceae	Vellila	Leaves	Leaf juice is used as poultice for dandruff.

Table 1: Continued

33.	*Pandanus odorattissimus* L.f.	Pandanaceae	Kaitha	Leaves	Oil prepared from younger leaves is smeared in the burned portion in the case of burns.
34.	*Physalis angulata* L.	Solanaceae	Nhottanodiayan	Leaves	Leaf paste is applied at the inflated portion in case of Inflammation.
35.	*Pterospermum canescens* Roxb.	Sterculiaceae	Idinjil	Leaves	Leaf paste is applied on the affected portion for the treatment of fracture.
36.	*Rhychostylis retusa* (L.) Blume.	Orchidaceae	Marathali	Leaves	Leaves are slowly heated and juice is dropped in to ears to cure ear pain.
37.	*Rubia cordifolia* L.	Rubiaceae	Manchatti	Roots	Root paste mixed with rhizome paste of turmeric is applied on the affected portion in the treatment of skin disaeases.
38.	*Ruta chalepensis* L.	Rutaceae	Arutha	Leaves	Leaf juice is used for small pox and worm infection.
39.	*Schumannianthus virgatus* (Roxb.) Rolte	Marantaceae	Kattukoova	Rhizome	Rhizome paste is applied for skin diseases.
40.	*Scoparia dulcis* L.	Scrophulariaceae Kallurukki	Whole plant	Plant extract is taken internally in the treatment of urinary diseases.	
41.	*Solanum violaceum* Ortega	Solanaceae	Putherichunda	Roots	Root paste is applied for poison.
42.	*Tabernaemontana divaricata* (L.) R.Br.	Apocynaceae	Nathyarvattam	Flowers	Flower juice along with breast milk is used as eye drop in case of eye diseases.
43.	*Vernonia anthelmintica* (L.) Willd.	Asteraceae	Kattu jeerakam	Seeds	Seed paste mixed with salt and hot water is taken internally in the case of stomachache.
44.	*Wattakaka volubilis* (L.) f. Stapl.	Asclepiadaceae	Kaimavolli	Bark	Bark paste is mixed with hot milk is used internally for treating urinary troubles.

and identified. Among the documented medicinal plants, the family Asteraceae is frequently represented with a total of 4 species followed by Asclepiadaceae with 3 species, the families like Fabaceae, Acanthaceae Rutaceae, Apocynaceae, Marantaceae, Rubiaceae and Solanaceae with 2 species each and others with one species each.

The present study reveals that the local health care practices of *Kurichar* tribe in Wayanad district is very important. It was also observed that local people used the identified medicinal plants mostly for curing several ailments like stomach problems, urinary complaints, rheumatism, leprosy, eye diseases, bronchitis, malaria, diabetes, chicken pox, cough and cold, head ache, hair tonic, cuts and wounds, skin problems *etc*. Leaves were found to use heavily for medicinal preparation as compared with other parts. Another interesting to note that the extracts of more than one plant were used for treating single ailments.

The ethnomedicinal practices of *Kurichar* tribe of Wayanad district possessing good knowledge of herbal drugs. Such studies may provide some information to phytochemist and pharmacologist to develop new drugs for various human ailments. The present generation takes no interest for preserving the traditional resources. In this situation highlights the need for complete record of their knowledge for future generations. These type of studies may stimulate researches to take up similar investigations in other tribal areas of Kerala.

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