

**ETHNOMEDICINAL PLANTS USED BY THE URALY TRIBES OF IDUKKI DISTRICT, KERALA WHICH ARE HITHERTO UN REPORTED IN CODIFIED AYURVEDA SYSTEM OF MEDICINE**

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**ABSTRACT**

Uralies are one of the major tribal groups inhabiting in the catchment area of Idukki reservoir in Idukki District, Kerala. Like any other ethnic groups, Uralies are also rich in the traditional knowledge passed from generation to generation through the word of mouth. A detailed ethnobotanical study was carried out among the Urali tribal group in Idukki district, Kerala, India. Different approaches of ethnobotanical data collection were adopted to collect the information about the plant species used. There were 15 plant species, which are not reported in Ayurveda Grandas were documented from the practices followed by the Uraly tribes, which could be useful for further Ayurvedic research.

**KEY WORDS:** Idukki, Uraly, Ethnomedicine, Traditional Knowledge

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**INTRODUCTION**

Ayurveda represents the most ancient and classical knowledge base pertaining to life science, health and cure, its antiquity going back to the *Vedas*. It seems to have been the world view of its time, although subsequently the world view of this knowledge base shrank to India alone and India remained its sole custodian till the end of the 20th century<sup>1</sup>.

Traditional system of medicine exists in India not only the form of the organized sector like Vaidyas, Physicians etc., who are trained in the colleges but also local health tradition. They cover an entire spectrum of practitioners – the housewife or grand mother who is adept at handling whom remedies, the traditional birth attempt, the folk or tribal local health practitioners<sup>2</sup>. Tribal people, who have learned to live in harmony with the nature were the custodians of the forest resources and possess valuable traditional knowledge on the availability and sustainable usage of the forest resources. It is reported that about 80% of the population of the developing countries still use traditional medicines for their health care<sup>3</sup>. The most established types of herbalism are those of Asian origin, particularly from

India, China and Japan, and today they still follow the ideas of diagnosis and treatment known for millennia<sup>4-6</sup>. Narayana *et al.*<sup>7</sup> report that Indian Materia Medica includes about 2000 drugs of natural origin almost all of which are derived from different traditional systems of folklore practices.

Medicinal herbs as a potential source of therapeutic aids have attained a significant position in health systems all over the world for both humans and animals not only in the disease condition but also as a potential material for prevention and more than 25,000 single or polyherbal formulations are used by the tribal and rural population in India for treatment of various ailments<sup>8</sup>. But many a times, the documented practices match or overlap with the codified system of Ayurveda. The plant based treatment practices, which are not reported in Ayurveda provides a greater scope for further research. The traditional medical practices of the Uralies comprises of 15 plant species, which are not reported in Ayurveda *Grandas*.

**STUDY AREA**

Idukki is the second largest district in the state with an area of 5105. 22 sq. kms. The district was formed on

January 26, 1972 and comprises of four taluks, Peermade, Udumbanchola, Devikulam and Thodupuzha. Idukki, which forms 13% of the geographical area of the state, is the largest district. It is also one of the most backward districts of the state. It lies between 9°15' and 10°21' of the north latitude and 76°37' and 77°35' of east longitude. Kannampady tribal settlement is situated in the Upputhara Panchayat of Peermade Taluk in Idukki District. Previously this particular tribal settlement was part of Arakkulam Panchayat of Thodupuzha Taluk in Idukki District. Kannampady tribal settlement lies approximately between 9°45' and 9°55' North latitude and between 77°00' and 77°10' East longitude at an altitude of 2500 and 3200 feet. The entire Kannampady tribal settlement is located around Idukki reservoir in the reserve forest. Vanchivayal is situated in the Vandiperiyar Panchayat of Peermade Taluk in Idukki District. Vanchivayal settlement lies between 9°32' and 9°36' North latitude and between 77°06' and 77°10' East longitude in the midst of Periyar Wild life Sanctuary at an altitude of 2700 and 3000 feet above MSL. The location has an undulating topography of steep hills and deep valleys. The transportation facilities to the study area at Kannampady are poor but Vanchivayal is better connected through transportation facilities.

#### URALY TRIBE

Uralies are one of the major tribal groups in Kerala. Nearly 58% of the total Urali populations in Kerala live in Idukki District, followed by Wayanad District. Singh<sup>9</sup> informs that the Uralies inhabit Tamilnadu and Kerala, Iyer<sup>10</sup> in the third volume of his book, tells that the highland region of Pirmade and Thodupuzha taluks forms the home of the Urali tribes. As per the 2001 census, a total of 11103 Uralies are living in different districts of Kerala. The Urali population is mostly living in rural areas, whereas a small number of Uralies live in Urban areas also, who have migrated to those places in search of jobs.

There are a total of eleven Urali hamlets in Kannampady and one hamlet in Vanchivayal of Peermade taluk of Idukki District, Kerala. Only very few Uralies are the original inhabitants of these settlements and others have migrated to these places from their original hamlets once they were evicted for the construction of the Idukki reservoir in the late 1960s.

#### MATERIALS AND METHODS

Before the start of the study, a reconnaissance survey was conducted in the area. A preliminary inspection was carried out in the study area to analyze the available resources and other infrastructural facilities that may foster and hamper the progress of the study. The methodologies suggested by Jain<sup>11</sup>, Jain and Rao<sup>12</sup> and

Martin<sup>13</sup> were used to gather the ethnobotanical data from the community. The researcher had adopted Ethnobotanical Inventory, in which he had accompanied some of the *Vaidyas* to the field while collecting the medicinal plants. This had helped in the scientific identification of the plants and minimized the risk of misidentification. For the right identification of the plants, plant interview was also adopted. The fresh or pressed specimen of plants brought to the informants and presented before them to ascertain the identification of the plants and to reconfirm the collected data on plants. Collections of the plant specimen were made with the help of the informants and voucher specimens were made. The plant specimens with flowers/ fruits wherever possible were collected and pressed in the field itself with the help of the informants.

#### RESULT AND DISCUSSION

The present investigation revealed that the Uraly tribes of Idukki District are using 15 species of plants belonging to 12 families (**Table 1**) for medicinal use, which are not reported in the traditional codified Ayurveda system of medicine. Out of the total 15 species, 7 were herbs, 3 were shrubs, 3 were climbers, 1 was a straggler and one was a tree. The formulations from these plant parts were used against different conditions like sprain, burn, abdominal distension, dystocia, cuts and wounds, gas trouble, conjunctivitis, swelling, rheumatism, abscess, diarrhea, stomach pain, poisoning of scorpion, lizard and centipede etc.,

#### CONCLUSION

The plant species, which are not codified in the Ayurveda system of medicine but used by the Uraly tribe for the treatment of various disease conditions, require further research and validation on its efficacy. The documented species were found to be used for the treatment of an array of disease conditions and if validated and standardized, it could be of greater use in the Indian systems of medicines in future.

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**Table:1 List of traditional Uraly drugs not reported in Ayurvedic Grandas**

S. No	Botanical Name	Vernacular Name in malayalam	Habit	Disease against which used	Part(s) used	Administration
1.	<i>Biophytum sensitivum</i> L. (Jeraneaceae)	Nilam Thengu	Shrub	Sprain	Whole Plant	Past is applied externally on the affected part 2 to 3 times and massage
2.	<i>Bryophyllum pinnatum</i> (Lam.) Oken (Crassulaceae)	Elamulachy	Herb	Burn	Leaf	To heal burns, Crush leaves and apply juice externally on the burn till it heals completely
3.	<i>Caesalpinia bonduc</i> (L.) Roxb. (Fabaceae)	Kazhanji	Shrub	Abdominal distension	Seed	Cover the seed with soil and burn till the soil turns brick red. Then break the seed shell and make the pulp into paste.
4.	<i>Cassia tora</i> L. (Leguminaceae)	Thakara	Shrub	To remove thorn, nail etc., pierced into the skin	Leaf	Crush the leaves and apply the juice on the pierced part
5.	<i>Cyathula prostrate</i> (L.) Blume (Amaranthaceae)	Kadalady	Herb	Dystocia (Delayed delivery)	Whole plant	Make past and apply on the whole body
6.	<i>Eclipta alba</i> (L.) Hassk. (Compositae)	Kayyunyam	Herb	Cuts and wounds	Leaf	Apply crushed leaves on the wound and bandage
7.	<i>Elephantopus scaber</i> L. (Asteraceae)	Anachuvatan	Herb	Chest pain due to gas trouble	Root	Crush the roots and consume ½ ounce of juice three times a day
8.	<i>Holestemma ada-kodien</i> Schultes. (Asclepidaceae)	Adapathiyan	Herb	For blood purification and blood formation	Tuber	Consume fresh tuber
9.	<i>Mussaenda frondosa</i> L. (Rubiaceae)	Vellila	Shrub	Conjunctivitis	Leaf	Crush a tender leaf and a black leaf and pour the juice in the eye
10.	<i>Myxopyrum serratum</i> A. W. Hill (Oleaceae)	Chathuramulla	Herb	Swelling	Leaf	Put the leaves in water and boil. Pour the water on the swollen part. Fomentation with the water can also be done.
				Cuts caused by iron implements	Leaf	Char the leaves in an earthen pot and apply the powder on the wound.
11.	<i>Naravelia zeylanica</i> (L.) DC. (Ranunculaceae)	Vathakodi	Herb	Rheumatism	Leaf	Water boiled with leaves and used for bathing.
12.	<i>Pavetta indica</i> L. (Rubiaceae)	Pavattu	Tree	Boil (Abscess)	Root	Make paste and apply on the abscess for immediate bursting of the abscess. Same is used for the healing.

13.	<i>Polygonum chinense</i> L. (Polygonaceae)	Karalagam	Herb	Diarrhea	Root	Chew the root and swallow the juice thrice in a day.
14.	<i>Rubia cordifolia</i> L. (Rubiaceae)	Uthiravally	Herb	Dystocia (Delayed delivery)	Root	Grind the roots and massage on the stomach from top to bottom
				Stomach pain	Root	Grind the roots and make it into 3 tablets. Consume one tablet with cow's raw milk three times a day.
15.	<i>Strychnos nux-vomica</i> L. (Leguminaceae)	Kanjiram	Tree	Poisoning of scorpion, Lizard and Centipede	Root	Apply root paste on the bitten part.

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