



Research Article

AN OUTLOOK (GLIMPSES) ON AYURVEDIC ETHNO MEDICO-BOTANICAL SURVEY OF THATTEKAD REGION

Nirmal Narayanan^{1*}, Nimya Anand²

¹Associate Professor & H.O.D, Dept. of Dravya Guna Vijnana, Vishnu Ayurveda College, Palakkad, Kerala.

²Assistant Professor, Dept of Rachana Sharira, Ramakrishna Ayurvedic Medical College, Bangalore

Article info

Article History:

Received: 10-03-2018

Accepted: 06-04-2018

KEYWORDS: Ayurvedic Ethno medico botanical study, Survey, medicinal plants, Thattekad.

ABSTRACT

Since centuries from tribes, to the rural folk and old aged people were found to depend on their traditional medicines for treatment of various ailments. But the information related to this type of medicines and its availability is still not well documented. There is an urgent need for documenting these folklore and traditional knowledge in some form before such valuable knowledge becomes inaccessible and extinct. Thattekad is famous for the Salim Ali Bird Sanctuary which has a rich and varied birdlife and rich source for many medicinal plants.

A survey was carried out among the various species of medicinal plants in Thattekad region, Ernakulam District, Kerala, India. A comprehensive survey on Thattekad area with the help of local *Vaidyas*, Folk practitioners, expert ornithologists, Botanists, and Ayurvedic vaidyas specialised in the field of Dravya guna vijnana conducted during the period of December to February. Samples are systematically photographed and information's from the local Vaidyas and traditional Folk practitioners are documented and analyzed by expert Ayurvedic vaidyas and Botanists. In the survey conducted, a total of 31 drugs having medicinal properties have been identified. This particular area of Western Ghats is rich with varied flora and endemic species.

The present paper is an effort to fulfil the gap in the field of medicinal plants availability and to enlist existing wild medicinal plants in Thattekad region.

*Address for correspondence

Dr.Nirmal Narayanan

Associate Professor & H.O.D,
Dept. Of Dravya Guna Vijnana,
Vishnu Ayurveda College,
Shoranur, Palakkad, Kerala.

Email:

dr.nirmalnarayanan@gmail.com

Phone: 9961838440

INTRODUCTION

Medicinal plants play an important role in supporting healthcare system in India. According to the World Health Organization (WHO, 2013), 80% of the rural population in developing countries utilizes locally available medicinal plants for their primary healthcare needs. About 90% of the country's medicinal plants are found in forest habitats. Only 10% of the medicinal plants are distributed among other landscape sources like open grasslands, agricultural pastures and in and around fresh water bodies, etc. It may be noted that India is one amongst those nations which possess a historical track record of having made a significant global contribution by virtue of its traditional knowledge of the medicinal plants. India has rich medicinal plant heritage of 8000 species and an

estimated 40,000 herbal formulations. If conserved and sustainably utilized it has global relevance. Thus there is an urgent need to conserve the wild populations of medicinal plant diversity in prioritized forest regions of India. Conservation of medicinal plants will contribute to self-reliance of millions for India's own health needs (Trivedi, P.C 2004). Both indigenous communities and forests are fast disappearing because of encroachment of modern civilization. It is necessary to document the knowledge of these communities and perform research on endangered plant species before they become totally extinct. The Thattekad is located about 15 km from Edamalayar which is an evergreen forest.

The Western Ghats are across the world recognized as a area of massive international importance for the conservation of organic diversity, besides containing regions of high geological, cultural and aesthetic values. A series of mountains jogging parallel to India's western coast, about 30-50 km inland, the ghats traverse the states of Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat. Those mountains cowl a place of round 140,000 km² in a 1,600 km long stretch this is interrupted handiest by way of the 30 km Palaghat gap at round 11°n

The mountains of the Western Ghats and their feature montane forest ecosystems impact the Indian monsoon climate styles that mediate the nice and cozy tropical climate of the vicinity, imparting one of the pleasant examples of the tropical monsoon system on earth.

A good sized characteristic of the western ghats is the relatively excessive stage of organic diversity and endemism. This mountain chain is recognized as one of the world's 8 'most up to date hotspots' of organic diversity along with Srilanka. The forests of the western ghats encompass a

OBSERVATIONS

number of the first-rate representatives of non equatorial tropical evergreen forests inside the global. At least 325 globally threatened (IUCN pink facts list) species arise in the western ghats. The globally threatened vegetation and fauna in the western ghats are represented with the aid of 229 plant species, 31 mammal species, 15 chicken species, 43 amphibian species, 5 reptile species and 1 fish species. Of the overall 325 globally threatened species inside the western ghats, 129 are classified as inclined, 145 as endangered and 51 as seriously endangered^[1]

METHODOLOGY

Done an comprehensive survey on Thattekad area with the help of local vaidyas, Folk practitioners, expert ornithologists, Botanists, and Ayurvedic vaidyas specialized in the field of Dravya guna vijnana conducted during the period of December to February. Samples are systematically photographed and information's from the local Vaidyas and traditional Folk practitioners are documented and analyzed by expert Ayurvedic Vaidyas and Botanists.

Botanical Name	Family	Local Name	Medicinal Uses
<i>Rhaphidophora pertusa</i>	Araceae	<i>Elithadiyan, Aanathandan, Aanamakudam</i>	Stem boiled in coconut oil is beneficial if applied in ear ache. Stem juice with pepper powder is useful in snake poison. Juice of whole part is useful in abdominal pain
<i>Meiogyne pannosa</i>	Annonaceae	<i>Pandhal maram</i>	Leaf,bark and seeds are used in Allergy, Menorraeoa, Cough.
<i>Baccaurea courtallensis</i>	Phyllanthaceae	<i>Mootil pazham, Mootilthoori, Mootikaya, Mootippuli, Muttipazham</i>	The bark is used as a tonic in disorders of mucous membrane and heal wounds. Its root is used in controlling diabetes.
<i>Pterospermum rubiginosum</i> Heyne ex Wight & Arn	Sterculiaceae	<i>Ellooti</i>	Flower of this plant when applied with <i>Dhanyamlam</i> is beneficial in migraine. Fruit is edible, Flower paste when taken internally is useful in white discharge. Oil prepared with dried leaf is useful in head ache.
<i>Naravelia Zeylanica</i> (Linn.) DC	Ranunculaceae	<i>Thalavedana kodi/ Valli, Poithalachi</i>	Used by tribes for cephalalgia. The stem can be twisted into rough but strong ropes. They are also reported to be used as tooth sticks to cure tooth aches. Root when crushed emit a smell which helps in relieving head ache.

<i>Calamus rotang</i> Synonym C. roxburghii	Palmae; Arecaceae.	<i>Vetra,</i> <i>Abhrapushpa.</i>	The plant is used in convulsions and cramps.
<i>Myxopyrum serratulum</i>	Oleacea	<i>Chaturamulla,</i> <i>Chaturavalli</i>	In skin diseases especially scabies and herpes the <i>Taila</i> prepared with the <i>Swarasa</i> of the plant is applied. In <i>Vata roga</i> the <i>Taila</i> prepared with the <i>Swarasa</i> of the plant is applied. The roots are useful in scabies and pruritis in children.
<i>Acacia caesia</i>	Leguminosae	<i>Incha</i>	Flower Is useful in irregular menstruation. Bark is beaten and dried is used as an alternative for soap, this is useful in skin diseases. Leaf is <i>Vatahara</i> (Father Raphel Tharel). The juice of bark and leaf with little salt is beneficial in abdominal ache. The dried bark powder is useful in curing wounds- and ulcers.
<i>Humboldtia vahliana</i>	Caesalpiniaceae	<i>Kurathi</i>	Bark <i>Kashayam</i> is useful in <i>Apasmara</i> , cancerous condition, abdominal disorders
<i>Tetrameles nudiflora</i>	Daticaceae	<i>Cheeni</i>	Bark is laxative and diuretic. Decoction of bark is used against rheumatism, oedema and ascites.
<i>Thottea siliquosa</i> (Larnk.) Ding Hou Syn. <i>Apama siliquosa</i> Lamk. <i>Bragantia wallichii</i>	Aristolochiaceae	<i>Alpam</i>	The root is considered to be antivenomous by the local <i>Vaidyans</i> .
<i>Ecbolium viride</i>	Acanthaceae	<i>Odiyamadantha,</i> <i>Neelakurunji,</i> <i>Neelakarikurinji,</i> <i>koranda</i>	The paste of the bark is useful in application for painful ulcer. The flower is having wound healing property. <i>Samoola kashayam</i> is useful in ammenorhea. Root in small doses is useful in <i>Atyartava</i> (menerogea). The decoction of leaf is useful in Dysurea. The decoction with root and leaf is beneficial in <i>Asmari roga</i> .
<i>Strychnos aena</i> <i>Strychnos colubrina</i>	Loganiaceae	<i>Vallikanjiram</i>	Hair oil prepared with this plant is useful in cold and rhinitis. Crushed plant is used as <i>Lepam</i> in <i>Unmadam</i> . Juice extract of the root of this plant with pepper is useful in Diarhoea and other abdominal problems. The oil prepared with this plant is useful in joint pains.
<i>Anaphylum wieghti</i>	Araceae	<i>Keeri kizhangu</i> <i>Naakuli kandham</i>	Tuber is used as <i>Vishagna</i>

<i>Canarium strictum</i>	Burseraceae	<i>Thelli, Karutha kundirikkam</i>	The oleo-gum resin of the plant is used for <i>Bandagin</i> case of <i>Abhighata</i> .
<i>Vateria indica</i>	Dipterocarpaceae	<i>Vella kundirikkam</i>	The fatty oil obtained from the seeds is anti-bacterial and is useful in chronic rheumatism and neuralgia.
<i>Ixora brachiata</i>	Rubiaceae	<i>Maracheththi</i>	Roots and leaves are used as Anti-inflammatory and antipyretic.
<i>Diospyros buxifolia</i>	Ebenaceae	<i>Malamuringa</i>	Bark is <i>Sangrahee</i> , useful in diarrhoea useful in renal calculi.
<i>Legenandra ovata</i>	Araceae	<i>Neerchembu, Andavaazha, Karinpola</i>	For severe itching of whole body its <i>Lepa</i> is applied.
<i>Pholidota imbricata</i>	Orchidaceae	<i>Pannamaravazha</i>	In traditional practice Root <i>Lepa</i> on head for fever. Pseudo bulb for cleaning <i>Dushtavrna</i> . Whole plant paste application on suprapubic region for easy delivery, painful Menstruation.
<i>Anamirta cocculus</i>	Menispermaceae	<i>Pollakkai, Nanju valli</i>	For <i>Sukha prasava</i> -leaf paste poultice application. Its crushed seeds are an effective pediculicide (anti-lice).
<i>Eleocarpus tuberculatus</i>	Eleocarpaceae	<i>Kaara, Navati, Mukkanni</i>	<i>Kashaya</i> with bark is useful in <i>Raktajachardi</i> , and in <i>Ajeerna</i> . Seeds is useful in typhoid, <i>Apasmara</i> .
<i>Drynaria quercifolia</i>	Polypodiaceae	<i>Ashwakathri</i>	If grown on <i>Kupilu</i> tree it exhibits the properties of that tree. If grown on <i>Aswatha</i> tree it helps to cure the burning sensations of internal organs. A paste with <i>Chandana</i> and <i>Sthanya</i> if applied on the back of ears is good for curing the excessive watery discharge from eyes.
<i>Dillenia pentagyna</i>	Dilleniaceae	<i>Pattipunna</i>	Stem bark useful in haemorrhoids, diabetic ulcer.
<i>Vitex altissima</i>	Verbenaceae	<i>Mayilellu</i>	<i>Kashaya</i> prepared with <i>Kanji</i> using Crushed bark and leaves of this plant is useful in post delivery pain and for the expulsion of placenta.
<i>Chasalia curviflora</i> Thw.	Rubiaceae	<i>Vellamundan</i>	Effective medicine for the treatment of jaundice.
<i>Knema attenuata</i>	Myristicaceae	<i>Chorapayin, Chorapam, Chorapathiri</i>	Bark used in spleen disorders.
<i>Mallotus philippensis</i>	Euphorbiaceae	<i>Kurangumaram, Chengoli</i>	The hair of the fruit of <i>Kampillaka</i> is mixed with sesame oil and applied over the skin affected with eczema and wound as part of treatment. Decoction of this is given in a dose of 30 ml to treat skin diseases like eczema and acts like a blood purifier.

<i>Aporusa lindleyana</i>	Euphorbiaceae	<i>Kodali, Ponvetti, Vittil.</i>	<i>Kotili, Vetti,</i>	In <i>Premeha pidaka, Dhara</i> of tender leaves <i>Kashaya</i> . Root of the tree boiled in water and decoction is made which when taken loosens the bowels.
<i>Glycosmis pentaphylla</i>	Rutaceae	<i>Paanal</i>		Terminal bud paste in the size of an <i>Amalaki</i> fruit is administered internally as a preventive medicine for chicken pox. The root of this plant is grinded with water and is useful in increasing appetite.
<i>Pothos scandans</i>	Araceae	<i>Aanaparuva</i>		oil prepared with root and stem is useful in <i>Shiro kandu, Vruna</i> .



Photograph of the author during survey



B.N: *Legenandra ovata*, Family: Araceae B.N: *Knema attenuata*, Family: Myristicaceae



B.N: *Humboldtia vahliana*, Family: Caesalpinaceae B.N: *Anaphylum wieghti*, Family: Araceae



B.N: *Dillenia pentagyna*, Family: Dilleniaceae



B.N: *Apama siliquosa*, Family: Aristolochiaceae

RESULTS AND DISCUSSIONS

In the survey conducted, a total of 31 drugs having medicinal properties have been identified. The native people especially tribe used these plants to cure several diseases like dysentery, diarrhea, indigestion, worm infection, wound healing, headache, stomach disorders, Rheumatic disorders, snake bite, poisonous bite, menstrual problem etc. Some medicinally important plants have more than one part of medicinal importance. They were utilizing these herbs either alone or by mixing with other herbs or by preparing different formulations. The maximum number of plants were utilized for different poisonous stings. Most of the studies reveals that almost all parts of the plant is having one or the other uses either in a single disease or different diseases.

CONCLUSION

Survey and documentation of ethno medico botanical knowledge is essential for protecting valuable medical knowledge. These knowledge banks are now a day's depleting in all part of the world. This particular area of Western Ghats is rich with varied flora and endemic species.

Endemic species like Baccauria, Apama, Anaphylum etc are having enormous medicinal

properties. It is very much essential to look into the available information's for future research works. These types of surveys help us to find out the population of plant species and its conservations.

AKNOWLEDGMENT

I extent my sincere gratitude towards SCSVMV University, Kanchipuram for granting me permission for conducting the study and supporting me.

My sincere thanks to Dr.Ajayan.S for his motivation and inspiration and giving guidelines for the study, Dr.Gibi Kuriakose for the identification of drugs, Local people of Thattekad area for sharing their traditional knowledge and to provide local assistance.

REFERENCES

1. <http://whc.unesco.org/en/list/1342>
2. Fr. Raphael Tharayil. Oushadha Sasiyangal-Vol. I, (Sandesh Printers, Kerala, India) 1995.
3. Fr. Raphael Tharayil. Oushadha Sasiyangal-Vol. II (Divine offset Printers, Kerala, India) 1998.
4. Manilal K.S. Hortus Malabaricus. Thiruvananthapuram; Kerala University; 2008.

Cite this article as:

Nirmal Narayanan, Nimya Anand. An Outlook (Glimpses) on Ayurvedic Ethno Medico-Botanical Survey of Thattekad Region. AYUSHDHARA, 2017;4(6):1455-1460.

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.