

## TRADITIONAL MEDICINES AND HEALTH CARE FROM THE FLORA AND FAUNA OF MANIPUR

**Dr. S. Shyamkiran Singh\***

Assistant Professor, Department of Chemistry, Waikhom Mani Girls' College, Thoubal  
Okram, Manipur.

Article Received on  
25 June 2020,  
Revised on 15 July 2020,  
Accepted on 05 August 2020  
DOI: 10.20959/wjpr20209-18377

**\*Corresponding Author**

**Dr. S. Shyamkiran Singh**

Assistant Professor,  
Department of Chemistry,  
Waikhom Mani Girls'  
College, Thoubal Okram,  
Manipur.

### ABSTRACT

Manipur is a rich state of Flora and fauna. Medicinal products of these flora and fauna have been used by the different ethnic groups of people of the state since time immemorial. The present paper attempts to document the traditional ethno-medicinal knowledge of various flora and fauna available in the state. It presents some concepts and practices, some characteristics of indigenous knowledge transfer system and some aspects of their link with the modern health care systems. Altogether sixty six species of plants and twenty species of animals and their products are listed along with their treatment in ailments. The application of the traditional knowledge system in the everyday life is very much relevant to sustainable livelihood of the peoples of Manipur.

**KEYWORDS:** Flora and Fauna; Traditional medicine, Indigenous Knowledge.

### INTRODUCTION

Manipur, situated in the Himalayan range of North Eastern India, is known for its rich and distinctive biodiversity having many flora and fauna. It has distinction of possessing a wide range of forest types e.g. Tropical West Evergreen Forest, Tropical Moist Deciduous Forest, Sub-Tropical Pine Forest, Tropical Dry Deciduous Forest and Mountain Wet Temperate Forest. These forests are home of wide range of flora and fauna. Manipur has flora of two hot spots of bio-diversity of the world i.e. Eastern Himalayas and Indo-Malaya region. These forests are repository of large number of medicinal plants and animals. The flora of this region includes aromatic and medicinal plants with a number of bioactive compounds. Most of these medicinal plants are required to identify the active ingredients present in these plants.

Before coming of the modern pharmaceutical medicines, the people of Manipur are using medicinal plants and animals for treatment of various diseases. Even today, people not only in the rural areas but also from the urban areas are using these herbal medicines and give first preference to herbal treatments by consulting local traditional health practitioners. Plants used for traditional medicine contain a wide range of substances that can be used to treat chronic as well as infectious diseases (Duraipandiyam et. al., 2006).

Manipur has a rich heritage of indigenous knowledge or traditional medicine from plants and animals that are found widely in forest and hill areas. All these plants and animal resources and their products have found their uses by the local peoples in treatment of various ailments. Traditional medicine refers to health practices, approaches knowledge and beliefs incorporating plant, animal & mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being (WHO, 2002). Every community in the state has its own traditional system of health care practices though there are slight similarities in some respects. In the past few decades there has been a growing interest in traditional medicine/complementary and alternative medicine and their relevance to public health both in developed and developing countries. Several classifications have been attempted for defining and classifying traditional medicine. It is pointed that there is no homogenous body of medical thought and practice which can be put under one name (Van der geest, 1997, Patwardhan, 2005).

New efforts have been initiated globally in the field of Traditional Health Care Systems and the newly emerging scientific discipline of ethnopharmacology forms a major part of it. Traditional medicines have been relied upon to support, promote, retain and regain human health. The use and search for drugs derived from plants and animals have been accelerated in recent years. The present study targets to elucidate traditional knowledge in treatment of various kinds of ailments using plants and animal products.

### **Study area**

Manipur is located between 23.83<sup>0</sup> N and 25.68<sup>0</sup> N latitude and 93.03<sup>0</sup> E and 94.78<sup>0</sup> E longitudes as a part of the North-East India and a major part of the Indo-Burma Hot Spot. The total area covered by the state is 22,327 square kilometres. It comprises 1820 Sq. Km. of valley and 20,507Sq. Km. of Hill areas. The Meitei, Meitei Pangal (Muslim), Anal, Aimol, Chiru, Chothe, Gangte, Inpui, Hmar, Kharam, Khoibu, Koirao, Kom, Lamkang, Liangmai,

Mao, Maram, Maring, Mate, Monsang, Moyon, Paite, Poumai, Purum, Ralte, Rongmei (Kabui), Simte, Suhte, Tangkhul, Tarao, Thadou, Thangal, Vaiphei communities are located in the valley and Hills of Manipur. Land under natural forest including degraded forest is covered with valuable plants and many animals are found. The state is lying in the Indo-Burma Biodiversity Mega Hot-Spot rank in the 8<sup>th</sup> amongst the 34 Biodiversity Hot-Spots of the world (Meyer et. al. 2000).

## **MATERIAL AND METHODOLOGY**

Informations and documentations of herbal and animal remedies practiced by different ethnic communities of the state was collected and vividly observed. The procedure for obtaining the information differs from person to person and place to place. The data of the habitats and the uses of these medicinal plants and animals were collected from the local medicine men (Amiba/Amaibi) of different ethnic groups. The plants and animals were grouped according to the habitat they were found at and their mode of cultivation and conservation.

The collected plant species which were used by the ethnic groups were identified based on Sinha, 1987, Hooker, 1872-1898, Kanjilal et al., 1934-1940, Bor, 1940 and by comparing them with the published works on the flora of the region for the authentic identification. After identification, the correct nomenclature, common and English names were given to the specimens. The socio-economic importance of the medicinal plants and animals are also studied.

## **OBSERVATION**

Different plant and animal species with different applications were selected and studied. The studies were based on their medicinal valued as well as their habitat in and around Manipur. Regular exploration trips and correspondence with the medicine man of the different areas were conducted for a period of six months. For each plant and animal species, their scientific names, local Manipuri names and English/ common names are given along with other data (Table 1 and 2). The plant and animal species which are found both in hills and valley are usually wild. The most common application of different plant and animal species were found to be for treating injuries/ wounds, dysentery/ diarrhoea/ dyspepsia, asthma/ bronchitis and fever/cough etc.

Table 1: List of Aromatic and Medicinal plants commonly used in Manipur.

Sl. no.	Scientific Name	Local Name	Common Name	Habitat	Ethno medicinal Uses
1	<i>Acorus calamus</i>	Ok Hidak	Sweet flag	Wild and cultivated	Cough, Fever, Skin & Hair problem
2	<i>Adhatoda vasica</i>	Nongmangkha	Malabar nut	Wild and cultivated	Menstrual/ reproduction, Cough, fever, Lungs
3	<i>Aegle marmelos</i>	Hei-khagok	Beal tree	Wild and cultivated	Indigestion, Diabetes, Nerve and Menstrual/ reproduction
4	<i>Alocasia marcorrhiza</i>	Hong-ngoo	Giant taro	Wild and cultivated	Cardiovascular, Poison and others
5	<i>Aloe barbadensis</i>	Ghritakumar	Indian aloe	Cultivated	Antiseptic, Indigestion and Hair problem
6	<i>Alpinia galangal</i>	Kanghoo	Greater galangal	Wild and cultivated	Antiseptic, Worm, Cardiovascular, Cough, fever and Skin
7	<i>Alpinia allughas</i>	Pullei	Shell ginger	Wild	Antiseptic, Poison & others
8	<i>Aphanamixix polystachya</i>	Heirangkhoi	Pitraj tree	Wild	Liver and Indigestion
9	<i>Artemisia nilagirica</i>	Laibak-ngou	Mugwort	Wild	Antiseptic, Diabetes and Hair problem
10	<i>Azadirachta indica</i>	Neem	Margosa tree	Wild and cultivated	Menstrual/reproduction, Antiseptic, worm, liver, Diabetes, Lung, Hair Problem, Cough, Skin, Piles, Ulcer & others
11	<i>Bixa Orellana</i>	Urei-rom	Annatto	Cultivated	Antiseptic, indigestion and Poison
12	<i>Blumea balsamifera</i>	Langthrei	Ngai Camphor	Wild and cultivated	Ritual, stomach, Piles, Kidney & stone cases
13	<i>Blumea hieracifoliav</i>	Ching terapaibi	Sahasra booti	Wild	Antiseptic
14	<i>Blumeopsis flava</i>	Haochak	Lettuce hump	Wild	Lungs, Cough & fever, joints
15	<i>Cajanus cajan</i>	Mairongbi	Pigeon pea/ Red gram	Cultivated	Liver, Poison & others
16	<i>Cannabis sativa</i>	Ganja	Marijuana/ True hemp	Cultivated	Cardiovascular, menstrual/ reproduction, Piles
17	<i>Cassia fistula</i>	Chou-hui	Amaltas	Wild	Liver, Skin, Joints and others
18	<i>Cedrela toona</i>	Tairen	Red Cedar	Wild and cultivated	Indigestion and skin
19	<i>Centella asiatica</i>	Peruk	Asiatic pennywort	Wild	Cardiovascular, Indigestion and Cough & fever
20	<i>Citrus macroptera</i>	Heiribob	Wild orange	Wild and cultivated	Indigestion and Lungs
21	<i>Cyphomandra betacea</i>	U-Khamen ashinba	Tree Tomato	Cultivated	Stomach trouble
22	<i>Dillenia indica</i>	Heigri	Elephant Apple	Wild and cultivated	Liver, Lungs , Hair fall and dandruff
23	<i>Drymaria cordata</i>	Tandal pambi	West Indian chickweed	Wild	Jaundice, Scabies, Pneumonia, Tonsilitis, Indigestion, Cough, fever, sinusitis
24	<i>Enydra fluctuans</i>	Komprek	Common	Wild	Urinary tract infection

		tujombi	enhydra		
25	<i>Erythrina variegata</i>	Kurao angouba	Coral tree	Wild and cultivated	Skin
26	<i>Euphorbin hirta</i>	Pakhang-leiton	Asthma weed	Wild	Indigestion, Lungs and Skin
27	<i>Ficus auriculata</i>	Heirit	Fig	Wild and cultivated	Liver, indigestion, Diabetes, Lungs and Skin
28	<i>Ficus glomerata</i>	Heibong	Fig	Wild and cultivated	Diabetes and Dysentery
29	<i>Fragaria indica</i>	Heirongkak	Indian strawberry	Wild	Lungs, Stone problems
30	<i>Fragaria nilgerrensis</i>	Heirongkak mana ahum panbi	Strawberry	Wild	Kidney, Stone problems and others
31	<i>Glycosmis arborea</i>	Yong Komla	Ban nimboo	Wild	Antiseptic, Liver, Hair, Cough, Skin, Poison
32	<i>Hedychium coronarium</i>	Takhellei angouba	Common ginger lily	Wild and cultivated	Cough and fever
33	<i>Hedychium marginatum</i>	Takhellei angangba	Red ginger lily	Wild and cultivated	Lungs and Ulcer
34	<i>Hedychium spicatum</i>	Takhellei hangamapal	Spiked ginger lily	Wild and cultivated	Liver, indigestion, Cough, fever and Poison
35	<i>Hedyotis auricularia</i>	Langban koukha	Er cao (Chinese)	Wild	Antiseptic, Liver, Indigestion and Muscle
36	<i>Hibiscus sabdariffa</i>	Shilosougri	Red sorrel	Cultivated	Indigestion and Stone problem
37	<i>Asparagus officinalis</i> Linn.	Nungarei	Asparagus	Wild	Jaundice, cardiac dropsy, dysentery, epilepsy, chronic gout
38	<i>Juglans regia</i>	Heijuga	Akhrot	Wild	Poison and others
39	<i>Kalanchoe pinnata</i>	Mana-hidak	Zakham haiyat	Cultivated	Antiseptic, Indigestion, Lungs and Skin
40	<i>Leucas lavandulaefolia</i>	Mayang lemboom	Guma	Wild	Indigestion, Cough Fever and skin
41	<i>Litsea cubeba</i>	Ngairong	Moutain pepper	Wild and cultivated	Psychosomatic disorder, Sore throat and spices
42	<i>Lysimachia candida</i>	Kengoi	Manipur loosestrife	Wild	Diabetes, Piles and intestinal disorder
43	<i>Marsilea minuta</i>	Eesing Yensil	Dwarf waterclover	Wild	Wounds
44	<i>Mentha spicata</i>	Loi hidak	Spear mint	Wild	Indigestion
45	<i>Melothria purpusilla</i>	Lamthabi	Chirati/ musmusa	Wild	Liver/Jaundice, Indigestion, Cough, fever and Kidney
46	<i>Nelumbo nucifera</i>	Thambal	Lotus	Wild and cultivated	Diabetes and tonsillitis
47	<i>Nicotiana tobacum</i>	Hidak mana	Cultivated tobacco	Wild	Leech wounds
48	<i>Ocimum basilicum</i>	Naoseklei	Sweet basil	Wild and cultivated	Piles
49	<i>Oroxylum indicum</i>	Shamba	Broken bone plant	Wild	Muscle, Lungs and others

50	<i>Oryza sativa</i>	Phou	Paddy	Cultivated	Quick healing for Fracture bones
51	<i>Oxalis corniculata</i>	Yensil	Creeping woodsorrel	Wild	Gastric and Indigestion
52	<i>Passiflora edulis</i>	Sitaphal	Passion fruit	Wild and cultivated	Clotting of blood
53	<i>Phlogacanthus jenkinsii</i>	Nongmangkha Ashinba	--	Wild and cultivated	Liver, Indigestion, Cough and fever
54	<i>Phoenix sylvestris</i>	Thangtup	Dwraf date palm	Wild	Diarrhoea and Dysentery
55	<i>Phyllanthus amarus</i>	Heigru	Emblic myrobalan/ Gooseberry	Wild and cultivated	Diabetes
56	<i>Piper longum</i>	Uchi-thi	Pipli/ Long pepper	Wild and cultivated	Stomach disorder, Piles
57	<i>Polygonum posumbaa</i>	Phakphai	Knotgrass	Cultivated	Hypertension
58	<i>Pratia nummularia</i>	Nungai Peruk	--	Wild	Kidney stone
59	<i>Portulaka oleracea</i>	Leibak Kundo	Duckweed or Little hogweed	Wild	Stomach disorder
60	<i>Spondius pinnata</i>	Heining	Wild or forest mango	Wild and cultivated	Swelling
61	<i>Solanum anguivi</i>	Leibung Khanga	Forest bitter berry	Wild	Cough, Cold and fever
62	<i>Solanum myriacanthum</i>	Lam Khamen	Nightshade	Wild	Toothache , intestinal worm
63	<i>Solanum nigrum</i>	Leipung Khanga	Indian night shade	Wild	Indigestion, Lungs , Cough and fever
64	<i>Tamarindus indica</i>	Mange	Indian tamarind	Wild and cultivated	Dog bite
65	<i>Tetrastigma bracteolatum</i>	Monja-mahei	Nal-tenga (Assamese)	Wild and cultivated	Indigestion and stomach disorder
66	<i>Wendlandia paniculata</i>	Pheija	--	Wild	Dysentery

**Table 2: List of animals commonly used as medicine in Manipur.**

Sl. no.	Zoological Name	Local Name	Common Name	Habitat	Ethno medicinal Uses
1	<i>Python sps</i>	Lairen	Python	Wild	Antidote against snake bite, fat is used to relieve body ache, rheumatic and burn wounds.
2	<i>Wallagoatlu</i>	Shareng	Catfish	Wild	Liver and body strength
3	<i>Salenarctos sps</i>	Sawom	Bear	Wild	Stomach Disorder, Joints relieve from rheumatic pain, burns, wounds and boils.
4	<i>Pteromys sps</i>	Kheiroi apaibi	Flying Squirrel	Wild	Antidote to general poisoning.
5	<i>Sus scrofa</i>	Lam Ok	Wild boar	Wild	Fat is used as nourishment of the hair.
6	<i>Capra sps</i>	Hameng	Goat	Wild and Domestic	Milk is used to avoid weakness, Urine is used to cure paralysis,

					asthma, tuberculosis, skin diseases, and Liver related problems.
7	<i>Panther sps</i>	Kei	Tiger	Wild	Fat is applied for relieving body ache, rheumatic, burns and wounds. Milk cures cataract and night blindness.
8	<i>Monopterus albus</i>	Ngaprum	Eel fish	Wild	Weakness, anaemia and asthma.
9	<i>Pethia ticto</i>	Ngakha	Fire fin barb	Wild	Purity of blood.
10	<i>Clarius batrachus</i>	Ngakra	Cat fish	Wild	Small pox and regain health after delivery.
11	<i>Mystus ngasep</i>	Ngashep	Cat fish	Wild	Small pox
12	<i>Anguilla bengalensis</i>	Ngaril leina	Eel	Wild	Rheumatic and arthritis
13	<i>Columba sps</i>	Khunu	Pigeon	Wild	General weakness
14	<i>Canis aureus</i>	Lam Hui	Wild fox	Wild	Cholera, tuberculosis, asthma and chest pain.
15	<i>Bos sps</i>	Shan	Cow	Wild and Domestic	Urine is used as disinfectant, pesticide and compost. Milk and fat is used as nourishment.
16	<i>Canis sps</i>	Hui	Dog	Wild and Domestic	Impotency
17	<i>Rucervus unicolor</i>	Sajan	Sambar	Wild	Chest pain, rheumatic pain, fever, burn wounds and piles.
18	<i>Axis Porcinus</i>	Kharsa	Hog deer	Wild	Chest pain, rheumatic pain, fever, burn wounds and piles.
19	<i>Muntiacus muntjak</i>	Shaji	Barking deer	Wild	Chest pain, rheumatic pain, fever, burn wounds and piles.
20	<i>Passer domesticus</i>	Sendrang	Sparrow	Wild	Sexual desire, arthritis.
21	<i>Periplanata sps</i>	Kharambi	Cockroach	Wild	Asthma, diabetes, tuberculosis and normal flow of urine.
22	<i>Apis sps</i>	Haying Khoi	Honey bee	Wild	Body ache and gastric, tongue wound
23	<i>Pheritima sps</i>	Tinthrok	Earth worm	Wild	Boils, antidote in snake bite and spider bite.
24	<i>Puntius sophore</i>	Phabounga	Fire fin barb	Wild	Common cold
25	<i>Homo sapiens</i>	Mee	Human	--	Urine is applied to muscle pain and eye ache.

## RESULT AND DISCUSSION

The existing tradition of treating ailments by using different plants and animal products in the various ethnic communities of Manipur has been collected. Each community has their own medicine man called Amaiba or Amaibi who conduct different rituals for the prescription of these herbal and animal medicines. Different communities also have different medium of prescriptions and preparation of these plants and animals. People living in rural areas still

undergo these treatments. Even without definite proof of their actual benefits we can find instances when the person recovers without any side effects. Only a few individuals still carry on this knowledge for the future while the younger generation does not believe in it. This kind of knowledge is considered old-aged by the young peoples, who get influenced by the modern medicines, and the practices declined. Excessive extraction and utilization of herbal and animal raw materials in the recent time has also resulted in the decline of availability of some of these plant and animal species.

## CONCLUSION

Based on the flora and fauna available in Manipur, the present study reveals that plants and animals and their products might serve as potential sources in curing a wide range of ailments. Wild and cultivated/domestic plants and animals are major sources of medicine in human beings. Small plants like herbs and shrubs to large trees have most potent therapeutic values. Likewise small animals like Cockroach, Earth worm, crab etc. to big animals like Tiger, Bear etc. have high therapeutic remedies. The present study shows the valuable traditional knowledge regarding various uses of plants and animals in treatment of ailments. This traditional practice is mostly done in the remote areas and hill belts where there are lack of proper education and economically backward. From the study it is clear that there is erosion in the ethno medicinal knowledge in the state. So, for sustainable livelihood, traditional medicines/ health care systems needs the attention of the Government and mass awareness among the ethnic peoples of the state. This kind of joint effort will definitely give justice to the traditional health care system.

## ACKNOWLEDGEMENT

The author acknowledge the profound gratitude to the Principal, Waikhom Mani Girls' College for providing kind support and facilities, traditional health workers and ethnic local elders who extended their helped and sincere co-operation throughout the survey in their respective locality and Th. Pushpa Devi, Office Assistant for her tireless support while collecting information.

## REFERENCES

1. Darsan s. Bestus H 2000. Vitality, Health and Cultural Diversity, Compas Newsletter for Endogenous Development, 2000; 3: 4-7.



2. Rajesh SY, Devi Onita; Singh Abujam and Chetia: Study on the ethnomedicinal system in Manipur. International Journal of Pharmaceutical & Biological Archives, 2012; 3(3): 587-591.
3. Singh SS; The Economic plants of Manipur and their uses 2006; 96.
4. De Smet P 2000, African Herbs and Healers. Compas Newsletter for Endogenous Development, 2000; 3: 26.
5. H.B. Singh, R.S. Singh & J.S. Sandhu, Herbal Medicine of Manipur, a colour Encyclopaedia Book, 2003.
6. Haverkort B., Hemstra W Food for thought: Ancient visions and new experiments of rural people. London: ZED Books/ Books for change, 1999.
7. Tombi Raj N. 2015, Past, Present and perspectives of Manipur traditional medicine: A major health care system available for rural population in the North East India, Journal of Ethnopharmacology, 2015; 169: 387-400.
8. NS Jamir and P Lal: Ethno Zoological practices among Naga Tribe. Indian Journal of Traditional Knowledge, 2005; 4(I): 100-104.
9. Kakati LN and Doulo V.: Indigenous knowledge system of Zootherapeutic use by Chakhesang Tribe of Nagaland, India. J Hum, 2002; 13(6): 419.