



## RESEARCH ARTICLE

### INDIGENOUS KNOWLEDGE OF MEDICINAL PLANTS USED BY TRIBAL'S AND RURAL PEOPLE OF SOUTH KASHMIR HIMALAYAS

**\*Zakir Hussain Khanday and Dr. Sumer Singh**

Department of Botany, Singhania University, Rajasthan, India

#### ARTICLE INFO

##### Article History:

Received 22<sup>nd</sup> May, 2017

Received in revised form

25<sup>th</sup> June, 2017

Accepted 09<sup>th</sup> July, 2017

Published online 31<sup>st</sup> August, 2017

##### Key words:

Indigenous knowledge, Medicinal plants,  
Himalaya, Kashmir.

#### ABSTRACT

Kashmir Himalaya harbors a unique proportion of endemic as well as non endemic flora based on its endemicity and unique geography. It has attracted the attention of explorers and botanists from the time when journey was most tedious and unsafe. The people of the Kashmir valley have been endowed with many natural blessings in terms of health climate herbal medicines wild vegetables fruits and food plants. The aim of present piece of research is to investigate the plants which are being traditionally used by the tribal and rural people of the Kashmir Himalayas for the alleviation of various ailments. Results show the important role of medicinal plants in treating several diseases.

Copyright©2017, Zakir Hussain Khanday and Dr. Sumer Singh. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Citation: Zakir Hussain Khanday and Dr. Sumer Singh, 2017.** "Indigenous Knowledge of Medicinal Plants used by Tribal's and Rural people of South Kashmir Himalayas", *International Journal of Current Research*, 9, (08), 55469-55471.

#### INTRODUCTION

The Himalaya known for its loftiest and longest mountain range in the world is a reputed treasure of medicinal plants. The ranges of the Himalayan system are grouped into two major divisions viz. the Cis-Himalayan and the Trans-Himalayan. The Cis-Himalayan ranges lie south of the major range the Great Himalayan ranges. The Trans-Himalayan ranges lie to the north of Great Himalayas. In western Himalaya drastic climatic conditions have necessitated the prevalence of indigenous traditional medical system. In Kashmir there has been a good impact of Unani system of traditional medicine. Lawrence (1967), a British settlement commissioner, in his book on the valley of Kashmir writes "When I have made inquiries as to various herbs which I have seen in the valley and on hill sides, I am always told that they are hot and good for cold humours cold and good for hot humours, dry and beneficial to damp humours, damp and beneficial to dry humours." He has listed the herbs used by Hakims in indigenous medicine of Kashmir. Kaul (1928) in his book on Forest products of Jammu and Kashmir has enlisted 19 drug plants which were collected from forest areas of Kashmir. Several reports on Amchi system of local medicinal practitioners (Amchis) have appeared (Ragunathan, 1976; Dhar 1980; Srivastava and Gupta 1981; Visanath and Mankad, 1984; Navchoo and Buth, 1989; Kaul, Sharma and Singh, 1995).

\*Corresponding author: Zakir Hussain Khanday  
Department of Botany, Singhania University, Rajasthan, India.

An in-depth ethnobotanical survey of western Himalaya carried out by Kaul, M.K (1975-1997), revealed wealth of information on ethnomedicinal properties of more than 350 plant species which is in the process of consolidation. These plants have been traditionally used as home remedies and form an important part of Himalayan folk medicine. During the recent past many illustrated reference books on Indian Drug plants have appeared (Chatterjee and Pakrashi, 1991; Chemexil, 1992; Akhtar Hussain, 1992; Sivarajan and Balachandran, 1994). These books have described medicinal plants of tropical and sub-tropical regions and hardly 10% plants described are from temperate and cold regions. Although current increase in research activities to develop new drugs is based on exploitation of tropical rain forests of South America, Africa and Asia, yet the medicinal plants of temperate and cold arid regions have lost none of their importance and continue to hold reputation as the best source of potential herbal drugs.

#### MATERIALS AND METHODS

The present ethnobotanical study of medicinal plants was carried out through field surveys, during May 2016 May 2017, with a view to document the indigenous knowledge of medicinal plants. A well-structured questionnaire was used for the interview. Usually, the survey in each area started with the knowledgeable persons and Key informants (Hakims). Informants were asked the questions in local language. However, Urdu language was also used in tribal areas.

Table 1(a). List of plant species (Angiosperms) Used in various Ailments

S.No.	Botanical Name	Local name	Habit	Part Used	Tribal/ Rural use(s) in various ailments
1	<i>Achillea mille folium</i> L.	Pahel- gas	Herb	Whole plant Root	Common cold, Toothache, Dysentery Gastritis.
2	<i>Aconitum heterophyllum</i> wall.ex. Royle	Patris	Herb	Root	Diarrhea, Dysentery, Tooth ache, Dry cough.
3	<i>Aesculus indica</i> Hook	Handoon	Tree	Fruit	Cracked Heel, Dandruff, and Hair fall.
4	<i>Allium cepa</i> L.	Gande	Herb	Bulb	Bad cold, Boil, Hair fall, Diarrhea, Male sterility.
5	<i>Allium sativum</i> L.	Rhoon	Herb	Cloves	Influenza, Alopecia aerate, Rheumatism, Hyper cholesterolacnia.
6	<i>Anagalis arvensis</i> L.	Teheri Saben	Herb	Arial parts	Pimples, Ringworm.
7	<i>Arisaema Jacquemontii</i> Blume	Haput Gogej	Herb	Bulb	Skin eruption, Boil, Abscess.
8	<i>Artium lappa</i> L.	Phaghood	Herb	Leaves	Boil Blood impurity.
9	<i>Bergenia lingulata</i> (Wall) Engl.	Palpashand	Herb	Root	Wound, Boil.
10	<i>Brassica campestris</i> (L.) Clapham	Tilgogul	Herb	Seed	Frost bite, Dandruff, Hair fall, Abdominal pain.
11	<i>Borago officinalis</i> L.	Botin	Herb	Leaves, flower, seed	Skin rashes Rheumatism.
12	<i>Calendula officinalis</i>	Hamesh Bahar	Herb	Leaves, flower, root	Boil, Muscle spasm, Burn.
13	<i>Colchium luteum</i> Baker.	Whirkin posh	Herb	Corn	Dandruff, Joint pain.
14	<i>Cuscuta reflexa</i> Roxb.	Kuklipot	Parasitic	Whole plant	Skin infection, Double Pneumonia, Dandruff, Warts, Epilepsy.
15	<i>Cydonia oblongata</i> Mill.	Bomb chont	Tree	Fruit, seed	Chopped skin, Asthma, Bowl pain, Itching, Constipation
16	<i>Cynoglossum glochidiatum</i> Wall.ex.Benth.	Nanzeur	Herb	Root	Boil, Abscess.
17	<i>Datura stramonium</i> L.	Datur	Herb	Seed, leaves	Asthma, Boil, Rheumatism, Dental caries, Neuralgia, Blood impurity.
18	<i>Ficus carica</i> L.	Anjeer	Tree	Leaves, fruit	Hyper critic dermatitis, Constipation.
19	<i>Fritillaria imperialis</i> L.	Yemberzoul	Herb	Bulb	Fever.
20	<i>Iris nepalensis</i> wall ex lindle	Mazarmond	Herb	Rhizome	Boil, Pimples, Rheumatism.
21	<i>Juglans regia</i> L.	Doonkul	Tree	Drupe, root	Grey hair, Rheumatism, Constipation, Frost bite.
22	<i>Lycopus europaeus</i> L.	Gagermanz	Herb	Aerial part	Skin allergy.
23	<i>Marrubium vulgare</i> L.	Troped	Herb	Seed, leaves	Skin infection, Rheumatism.
24	<i>Ocimum canum</i> Sims.	Baber	Herb	Seed, Aerial part	Micturition, skin problems, Constipation.
25	<i>Organum vulgare</i> L.	Mazren	Herb	Aerial part	Tonsillitis, Tooth aches.
26	<i>Oxalis corniculata</i> L.	Chok-chin	Herb	Whole plant	Skin allergy chronic dysentery Rickets, Thrush.
27	<i>Plantago major</i> L.	Logout gul	Herb	Seed, Root, leaves	Gastric ulcers, Tooth ache.
28	<i>Podophyllum hexandrum</i> Royle.	Wan wangun	Herb	Rhizome, fruit leaves	Boil, Diarrhea, Cancer Constipation, Stomach trouble.
29	<i>Polygonum hydropiper</i> L.	Marchagangass	Herb	Leaves	Toothache, Uterine disorders.
30	<i>Potentilla nepalensis</i>	Panzpater	Herb	Leaves, root	Boil, Fever.
31	<i>Prunella vulgaris</i> L.	Kal-weeth	Herb	Flower, Aerial part	Dizziness, High fever, Rheumatism.
32	<i>Punicagranatum</i> L.	Dan	Herb	Fruit	Dysentery, Pimples, Jaundice, Burn.
33	<i>Ranunculus scleratus</i> L.	Good sochal	Herb	Root	Hypercritic dermatitis.
34	<i>Raphanus sativus</i> L.	Muj	Herb	Whole plant, seed, root	Hair fall, Jaundice, Impotency Bleeding piles.
35	<i>Rheum emodi</i> Wall.ex.Meissn.	Pump- chalan	Herb	Rhizome	Boil, Rheumatism, Wound.
36	<i>Rhododendron campanulatum</i> D. Don.	Wan-nas	Shrub	Leaves	Cold, Toothache.
37	<i>Salvia mourocroftiana</i> Wall. Ex. Benth.	Shermatas	Herb	Root, Leaves	High fever, Boil, Cough and Chest Congestion.
38	<i>Sagittaria sagittifolia</i> L.	Kew	Herb	Leaves	Skin rashes, Stomach trouble.
39	<i>Saussurea sacra</i> Edgew.	Zoogpadshah	Herb	Whole plant, root	Pimples, Acnes, Boil, Rheumatism.
40	<i>Senecio Jacquemontianus</i> Benth.	Haputgogej	Herb	Tuber	Stomach trouble, Boil.
41	<i>Senecio graciliflorus</i> D.C.	Mongoal	Herb	Leaves, Aerial part	Skin eruption, Acidity.
42	<i>Solanum nigrum</i> L.	Kambai	Herb	Leaves fruit	Skin eruption, Cough.
43	<i>Sonchus asper</i> (L.) Hill.	Dudh- Kandij	Herb	Aerial part	Fever, Burn.
44	<i>Thymus serpyllum</i> L.	ArdJavind	Herb	Flower whole plant	Asthma, Skin rashes
45	<i>Urtica dioica</i>	Soi	Herb	Arial part, leaves Root	Skin infection, Asthma, Dandruff.
46	<i>Vicia faba</i> L.	Bagle	Herb	Whole plant	Skin abrasions.
47	<i>Vitis vinifera</i> L.	Dush	Climber	Leaves, Fruit	Boil, Diarrhea, Ear ache.
48	<i>Xanthium Strumarium</i> L.	Phaghood	Herb	Leaves, Root	Herpes iris, Abscess, Boil

Table 1(b). List of Plant Species (Gymnosperms) Used in Various Ailments

S.No.	Botanical Name	Local Name	Habit	Part Used	Tribal/ Rural use(s) in various ailments
1	<i>Cedrus deodara</i> G. Don.	Deodar	Tree	Resin, Heart wood	Piles, Skin allergy.
2	<i>Picea smithiana</i> (wall.) Boiss.	Kachul	Tree	Resin	Cracked Heel.
3	<i>Pinus wallichiana</i> A.B. Jackson	Kayur	Tree	Resin	Muscular pain, Cracked Heel.

Table 1(c). List of Plant Species (Pteridophytes) Used in Various Ailments

S.No.	Botanical Name	Local Name	Habit	Part Used	Tribal/ Rural use(s) in various ailments
1	<i>Adiantum venustum</i> G. Don.	Geutheer	Herb	Leaves	skin eruptions, Pimples

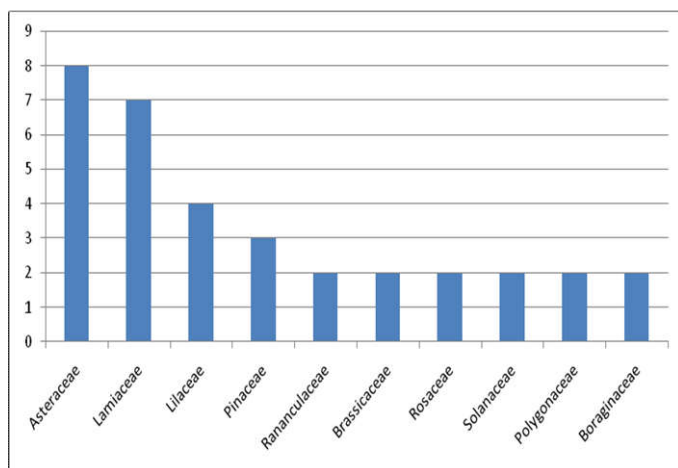
In order to bring an element of accuracy, the information obtained from one area was cross check with that of other area. The necessary information collected from the above people was recorded in the field book. Data was obtained as per the appropriate Methodology (Jain 1967, 1995; Khan 1993). A number of standard publications pertaining to the taxonomic identification of various species of medicinal plants were consulted. Some of the important works are Forest flora of North and Central India (Brandis, 1972); Wild flowers of Kashmir (Coventry, 1923-1930).

The flora of British India (Hooker (1872-1897). The flora of Jammu and plants of neighbourhood (Sharma and Kachroo, 1981). The Alpine flora of Kashmir (Dhar and Kachroo, 1983) and the Flora of Pulwama Kashmir (Navchoo and Kachroo 1995).

## RESULTS AND DISCUSSION

In the present investigation 52 plant species belonging to 28 families are incorporated, which reflect the ethnomedicinal

importance among the tribal and rural people of Kashmir Himalaya. The survey work resulted in the collection of 3 species of Gymnosperms of Pinaceae family (Table.1b), 1 species of Pteridophytes of Filicinae family (Table.1c) and 48 species of Angiosperms (Table.1a) (Both Dicotyledons and Monocotyledons) of 26 different families. What was found in the survey work were trees, shrubs, herbs, climbers, creepers and species of grasses. In the present investigation an emphasis has been laid on ethno medicinal aspects pertaining to various herbal drugs used invariably by these people in case of suffering from any sort of disorders. As the life of tribals and rural people revolve round the plants, they have some very interesting folklore, which mention one plant or the other. The present ethnomedicinal exploration revealed that the family Asteraceae dominates the area and is represented by 8 species followed by Lamiaceae by 7- species. Among monocotyledons liliaceae dominates the area and is represented by 4 plant species followed by Pinaceae with 3- species and Ranunculaceae, Brassicaceae with 2 species each. Rosaceae, Solanaceae, Polygonaceae, Boraginaceae are also represented by 2 plants species (Table.2). While as remaining other families represent only 1 plant species. Among Pteridophytes also a single species Filicinae represent the area.



**Table 2. Ten Medicinally Important and Dominant Families of Kashmir Himalaya**

According to information the tribal and some rural people are capable of curing various diseases such as abscess, abdominal pain, alopecia areate, acnes, arthritis, asthma, boils, chest congestion, cough, cracked heels, dandruff, dental caries, dysentery, epilepsy, eye infection, high fever typhoid, tooth ache, and various skin infections and diseases. Even for much serious ailments tribal hardly prefer to go to civil hospitals which speak of their strong and deep rooted belief in their own mode of treatment which has descended down to them in the form of oral information which is based on years of experimentation.

#### Acknowledgement

The authors are thankful to the knowledgeable people of South Kashmir and especially Tribal people whom we consulted during the field survey.

#### REFERENCES

- Akhtar, Hussain, 1992. Status Report on Cultivation of Medicinal plants in NAM countries. Centre for Science and Technology of Non-aligned and other Countries, New Delhi:
- Brandis, D. 1972. The flora of North West and Central India, reprinted by Bishen Singh Mahendra Pal Singh, Dehradun.
- Chatterjee Asima and S.C Pakrashi, 1991. The Treatise of Indian Medicinal plants, vol. 1, Publication and Information Directorate, New Delhi.
- Chemexcil (Basic chemicals, Pharmaceuticals and cosmetics export promotion council, Bombay (India). 1992. Selected Medicinal plants of India. PP. 387, Plates III.
- Coventry, B.O. 1923-1930. Wild flowers of Kashmir, series 1-3 London.
- Dhar, U. 1980. Plants of Kargil Zaskar: An Integrated survey Kashmir University. Srinagar, India, 48-51.
- Dhar, U. and Kachroo, P. 1983. Alpine flora of Kashmir Himalaya, Scientific Publishers, Jodhpur, India.
- Hooker, J.D. 1872-1897. The Flora of British India Vols. 1-7, Reeve and Co. Ltd., Kent.
- Jain, S.K. 1967. Ethnobotany: Its scope and study. Indian Museum Bulletin, 2: 39-43.
- Jain, S.K. 1995. A Manual of Ethnobotany. (2<sup>nd</sup> edn). Scientific publishers, Jodhpur.
- Kaul, M.K. 1997. Medicinal plants of Kashmir and Ladakh. (Temperate and cold Arid Himalaya) Indus publishing company, New Delhi.
- Kaul, M.K., Sharma, P.K and Singh, V. 1995. Crude drugs of Zaskar (Ladakh) used in Amchi system of traditional Medicine. Glimpses of Indian Ethno Pharmacology. India PP: 163-172.
- Kaul, R.N. 1928. Forest products of (J and K) Srinagar, Kashmir.
- Khan, S.S. 1993. Ethnomedicinal studies on plants of Bhopal district of M.P. Ph.D. Thesis Barkatullah University, Bhopal. India.
- Lawrence Walter, R. 1967. The valley of Kashmir. Kesar publishers Srinagar (reprint of original publication of 1895).
- Navchoo, I.A and Buth G.M. 1989. Medicinal system of Ladakh. *India Journal of Ethnopharmacology*, 20, 137-146.
- Navchoo, I.A and Kachroo P. 1995. Flora of Pulwama (Kashmir). Bishen Singh and Mahindra Pal) Singh. Dehradun.
- Raghunathan, K. 1976. Preliminary Techno-economic Survey of Natural resources and Herbal wealth of Ladakh CCRIMH Publications, New Delhi.
- Sharma, B.M. and Kachroo, P. 1981. Flora of Jammu and Plants of Neighbourhood Vol 1. Bishen Singh Mahendra pal Singh, Dehradun, India.
- Sivarajan, V.V and Balachandran, I. 1994. Ayurvedic Drugs and their plant sources, Oxford and IBH publishing company, New Delhi.
- Srivastava, T.N., Badola, D.P and Gupta, O.P. 1981. Medicinal herbs used by Amchis of Ladakh. *J. Recent Res. Ethn. Bot.*, 193-202.
- Visvath, M.V. and Mankad, N.R. 1984. Medicinal plants Ladakh (J and K.) *Journal of Economic and Taxonomic Botany*, Jhodpur, India, 5, 401-407.

\*\*\*\*\*