Traditional Plant Remedies from Bungus Valley of District Kupwara Kashmir

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Abstract:-The beautiful valley of Kashmir harbors a diversity of medicinal plants that have been used in traditional health care systems for thousands of years. This knowledge, transmitted by oral tradition from generation to generation, has been eroding in recent decades due to rapid cultural change. The present study was carried out in the forests and meadows of Bungus valley of Kupwara district. The study was aimed to document the traditional folk knowledge of local people about the use of medicinal plants. An ethnobotanical survey was carried out in different forests around the Bungus Valley during 2014-16. Field surveys were conducted during the different seasons to collect the data about the knowledge and practice of using wild plant species by local people. The data collected reveals that about 30 plant species belonging to 18 families found use in day to day life.

Keywords:-Diseases, Ethno Botany, Medicinal Plants.

I. INTRODUCTION

Medicinal plants have been known for millennia and are highly esteemed all over the world as rich source of therapeutic agents for the prevention of diseases and ailments. The importance of herbal medicine in the treatment of various diseases is indisputable. About 70-80% people around the globe rely on medicinal plants for primary health care. (1, 2) As estimated by the World Health Organisation (WHO), the present demand for ethnomedicinal plants is approximately US \$ 14 billion per year(3). WHO has made an attempt to identify all medicinal plants used globally and listed more than 20,000 species (4)

Since time immemorial, people in the region have learned and practiced medicinal usage of plants. This ancient prized wisdom has been transmitted from generation to generation as part of oral traditions. (5) The use of wild plants as food and medicine is prevalent in many rural communities of the world since ages (6). The local communities in many developing countries depend on plant based medicines even today, whereas, the modern system of health care is mainly dependent on plant based ingredients. The use of plants in modern medicine has considerably increased, on the other hand traditional knowledge is gradually decreasing due to rapid urbanization and dependence of man on modern health care system, but this folk system still prevails in the rural communities(7). Only a few studies have been carried out to review traditional use of medicinal plants of Bungus Valley of district Kupwara Kashmir. So there is an urgent need to document the use of different medicinal plants to treat various diseases and ailments.

The aim of the present study is to document the local medicinal plant diversity, plant parts used and diseases treated in traditional medicine of the region and encourage the preservation and conservation of the medicinal plants and pass on this information to future generations.

II. MATERIAL AND METHODOLOGY

The Himalaya is known for its loftiest and longest mountain ranges. Kashmir is one of the provinces of Jammu and Kashmir State in the laps of Himalayas. The study area falls in North Kashmir in district Kupwara. The Bungus Valley is 72 kilometers away from Srinagar and lies at an altitude of 10,000 ft above sea level. The valley has an estimated area of 300 sq. kilometers. It is surrounded by Rajwar andMawar in the east, Shamasbury and Dajlingun Mountains in the west and Chowkibal and Karnah in the North. A small valley known as "ChotaBungus" (small Bungus) lies in the northeastern side of the main valley. Nature has bestowed the valley with a diverse variety of flora and fauna. The meadows and the side plateaus are covered with a range of flowers and medicinal plants.

The study area was periodically visited with a special focus on the collection of various important medicinal plants from its meadows and side plateaus. A number of locals of different age groups including Gujjars, Bakarwals, Paharis and the local Hakims were interviewed during field trips from 2014-16. The common name of the plant, medicinal use, part used and mode of administration were recorded for each.

All the plants were arranged in an alphabetical order with their botanical name followed by local name, family, part used, diseases treated and preparation method in a tabulated form (Table 1).

S. No.	Plant	Local name	Family	Parts used	Ailments treated	Preparation method
1	Aconitum heterophyllum	Patris	Renanculaceae	Roots	Tooth ache, Abdominal ailments,Fever, anti helminthic, Gastric disorders	The root is used in the form of pieces or powder.
2	Acorus calamus	Vai	Araceae	Rhizome	Stomach pain, Diarrhoea, Fever, Indigestion	The root is used in the form of pieces or powder.
3	Adiantum venastum	Geutheer	Pteridaceae	Leaf, Roots	Stomach pain, Cough, Urinary Disorders	Decoction made from leaves
4	Allium sativum	Rohun	Liliaceae	Bulbs	Baldness, Dandruff, Stomach ache, Sexual potency in Males	Bulbs grounded and mixed with mustard oil
5	Amaranthus plebium	Leesa	Amaranthaceae	Leaves	Diarrhoea, Fever	Herb mostly taken in the form of vegetable
6	Arnebia benthami	Kahzaban	Boraginaceae	Flower, Roots	Fever, Cough, Throat Diseases	Flowers boiled in water to make decoction
7	Artemesia absinthium	Tethwan	Asteraceae	Leaves, Infloresenc e	Abdominal Pain, Chronic fever, Insecticide	The plant crushed and extract obtained
8	Cannabis sativa	Bang	Cannabinaceae	Leaves	Wormicide, Skin diseases, Narcotic	Extract Obtained from flowers
9	Cichorium intybus	Waare hand	Asteraceae	Leaves	Rheumatic pain, High fever, Wound Healing, Internal Ulcer	The Whole plant is crushed and made into a powder/decoctio n. Also used as vegetable
10	Cuscuta reflexa	Kokliport	Cuscutaceae	Whole herb	Skin diseases, Falling of hairs	The herb dried and crushed into powder and mixed with oil to make paste
11	Datura stramonium	Datur	Solanaceae	Seeds	Frost bites, boils	Seeds boiled in water to cure Frost. Leaves crushed to make paste which is applied to boils and sores.
12	Euphorbia royleana	Guresochal	Euphorbiaceae	Leaves and Latex	Skin eruptions, wounds	Leaves crushed to make paste
13	Ficus carica	Anjeer	Moraceae	Fruit, Bark	Throat problems and cough, Stomach pain	Fruits boiled in water for half an hour and left till it cools down
14	Iris nepalensis	Mazarmund	Iridaceae	Roots	Rheumatic pain	The root is dried, powdered and powder mixed with ghee to make paste

15	Juglans regia	Doon	Juglandaceae	Fruit, Bark	Cleaning Teeth, antibacterial, Brain Tonic. Sexual weakness	Fruit edible, Bark used for cleaning teeth
16	Mentha arvensis	Podina	Lamiaceae	Whole herb	Asthma, cough, cold, Indigestion, Diarrhoea	The whole plant crushed to make pate
17	Napeta cataria	Gandsoi	Lamiaceae	Leaves	High Fever, Abdominal Pain, Dysentery	The whole plant crushed and extract collected
18	Origanum vulgare	Babur	Lamiaceae	Seeds, Whole herb	Skin diseases, Sexual weakness, Intestinal pain, Urinary disorders	Juice made from crushed plant is used. Decoction of plant taken orally
19	Plantago lanceolata	Gull	Plantaginaceae	Whole herb	Cough, Asthma, Urinary irritation, Wounds	Paste of the herb is used. Young leaves used as vegetables
20	Polygonum alpinum	Chittahola	Polygonaceae	Roots	Arthritis	Water extract of dried root powder is used to prepare rice& fed to arthritic patients
21	Polygonum hydropiper	Marchawagan gass	Polygonaceae	Leaves	Anti-inflammatory, Astringent, Skin-itching	Leaves boiled in water.
22	Polygonum plebium	Drabb	Polygonaceae	Leaves	Pneumonia, Bowel complaints	Decoction made from leaves
23	Prunella vulgaris	Kalyuth	Lamiaceae	Flower, Leaf	Sore throat,Cough and cold, Frost bite, Headache, Wound healing	The extract obtained from leaves and flowers. Leaves crushed to make paste
24	Pyrus cyadona	bamtchont	Rosaceae	Fruit	Cough, Cold , Tonic	Juice made from the fruit
25	Rumex nepalensis	Abij	Polygonaceae	Leaves, Roots	Cough, Constipation and Skin problems	Root dried, powdered and taken orally with milk. Leaves used as vegetable
26	Saussurea costus	Kouth	Asteraceae	Roots	Arthritis,Insecticide,Coug h, cold And Asthma	The extract of root is prepared and used to prepare rice & fed to arthritic patients.
27	Solanum nigrum	Kambai	Solanaceae	Seeds, Leaves	Abdominal Pain, Jaundice, Narcotic	Seeds and leaves crushed and decoction made from it
28	Taraxicum officinale	Hand	Asteraceae	Leaves	Abdominal Swelling, Internal Ulcer, Stomach Cramps, Cough & Asthma Urine irritation	Young leaves used as vegetables

29	Thymus linearis	Jayind	Lamiaceae	Whole herb	Cough, cold and Fever	Powder of dried plant boiled in milk and taken orally
30	Urtica dioica	Soi	Urticaceae	Whole herb	Dandruff, skin infections, wounds, fractures and Fever	Wholehebcrushedandextractobtainedfrom it

Table 1: List of Plants of Bungus Valley and its Adjacent Forests Used as Ethno Medicine.

III. RESULT AND DISCUSSION

During the present study, we collected data on 30 species belonging to 18 families (table 1). The table consists of taxon name, local name, family name, preparation method, part used and diseases treated. The best represented used families in terms of species were lamiaceae (5 species), polygoneaceae and asteraceae with 4 species each, solinaceae (2 species) and other 14 families with one species each (Fig. 1). A similar survey has been carried out by Mushtaq *et al* in the chail valley of Pakistan in which he reported a total of 50 plant species belonging to 48 genera of 35 families. (8)

In the present study, the utilization of Leaves & the Whole plant (26% each) by locals in Rajwar, Mawar and Karnah valley is found to be widespread followed by roots (17%), seeds (9%), flowers and fruits (8% each), Bulbs & Rhizomes (3% each) (Fig. 2). Leaves as frequently used organ in traditional herbal drugs is also reported in some other ethno botanical studies (9,10). In addition to this leaves are the main photosynthetic organs in plants and are considered to be the natural pharmacy for synthesis of many active constituents those are pharmacologically more active against certain diseases (11).

The most important forms of preparation methods for herbal drugs were paste (22%) followed by fresh part (19%), extract (17%), Decoction & Powder (14% each), Infusion (8%) and Juice (6%). (Fig. 3)

The present study revealed that ethnomedical plants are being used to treat diseases like cough, cold, asthma, headache, fever, abdominal ailments, toothache, gastric disorders, urinary disorders, rheumatism and jaundice, etc. Similar study was carried out by Javid *et al* in which 32 plant species belonging to 22 families are reported to treat various ailments (12). In the similar study carried out by Khurshid *et al*, 44 plant species belonging to 37 genera and 26 families are reported to cure antihelminthic diseases (13).

IV. CONCLUSION

The history of human healthcare system would not be complete without a look at the role of medicinal plants. The people in rural areas, especially, elders and females have a sufficient knowledge about this prosperous natural treasure gifted to mankind by God.

The significance of the present research on the medicinal wealth of the Bungus valley has furnished us with novel information that not only will provide recognition of this undocumented knowledge but also could help the ethnopharmacological scientists to improve healthcare system globally. However to validate such information, detailed pharmacological studies must be carried out to improve the use of medicinal plants at global perspectives. The study also provides basis for the conservation of the local flora, its use as food and medicine.



Fig. 1: Percentage of Plant Part used to Treat Various Diseases

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Fig. 2: Number of Families used to Treat Various Diseases.



Fig. 3: Number of Plant Species used to Treat Various Ailments

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