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ORIGINAL ARTICLE

Ethno-botanical study of few genus of District Pulwama (Jammu and Kashmir)

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ABSTRACT

The conventional knowledge system has gained major importance throughout the world in perspective with conservation, suitable development and search for new exploitation patterns of plant resources. An attempt has been made in the present study to enumerate the traditional importance of certain locally available medicinal plants of district Pulwama, Jammu and Kashmir, India. Ethno botanical data was collected by small interviews and discussions with tribal people (Gujjars, Bakirwals) and traditional practitioners. The result revealed that people of the region have always used these medicinal plants for curing various human ailments and are still dependent on them for food, fodder, and other cultural purposes. Due to various anthropogenic factors many medicinal plants are on the verge of extinction. In order to have knowledge about the plants in terms of their medicinal value the efforts like present study should be encouraged and promoted in order to conserve such natural treasure. **Key words:** Pulwama, ethnomedicin, tribal, traditional knowledge.

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INTRODUCTION

India is commonly called the Botanical Garden of the world, owing to her wealth of herbal medicines [1]. India has two major hotspots - the Eastern Himalayas and the Western Ghats recognized out of 34 hotspots. The central part of India is well known for great diversity of medicinal plants due to its distinct geography and ecological marginal conditions [2]. Medicinal plants are majorly utilized by the people to treat many diseases not only in India but also all over the world [13]. The medicinal plants are extensively utilized throughout the world in two distinct areas of health management; traditional system of medicine and modern system of medicine. The world average stands at 12.5% while India has 20% plant species of medicinal value and which are in use [12]. India is one of mega-diversity country with significantly high number of medicinal plant resources. India occupies a premier position in the use of herbal drugs utilizing 2,500 plant species in different formulations. It has 7800 medicinal drug-manufacturing units which consume about 2000 tons of herbs annually [8] and over 500 million people of the country receive the benefits of Traditional Health Care System with nearly 460,000 practitioners of the system [10]. The use of plant species as medicine has been known for a long time and about 1748 medicinal plants is reported from Indian Himalaya [9]. Primitive people chiefly depend on plants for their survival. With the passage of time their dependency on plants increased both directly and indirectly [4]. Trial and error method helped indigenous communities to develop knowledge about useful and harmful plants. About 70% to 80% of the world population use traditional medicine for curing their illness and ailments [3]. The state of Jammu and Kashmir, often called as paradiseon earth is cradled in the lap of Himalayas

and is also called the "Biomass" state of India. The state of jammu and Kashmir is located in the far north of the Indian Republic. This area is bestowed with diverse variety of plant species especially ethnomedicinally important plants due to wide variations in its topography and microclimatic conditions. Pulwama district is one of the 10 districts of Kashmir and is a beautiful spot of kashmir, because of its congenial climate, streams, waterfalls, fragrant flowers, delicious fruits and other natural sceneries. It is located in the south Kashmir about 30 km's from summer capital of the state srinager. The district is populated by several ethnic groups such as Bakerwals, Gujjars and Shepherds. These ethnic groups have their own knowledge of traditional herbal medicine inherited from their forefathers. These medicines are well accepted by the local people since generations have experienced their efficacy in alleviating a variety of diseases[6].Since, least documented information is available about the traditional medicinal plant knowledge of this floristically rich area. Unfortunately, much of this herbal wealth knowledge is getting depleted day by day due to the erosion of traditional cultures. The availability of medicinal plants is not only drastically decreasing due to various reasons such as increased marketing pressure, lack of job opportunities, developmental works, increased population of the area, over-grazing by animals and indiscriminate harvesting by unskilled gatherers but also the existing traditional medicinal knowledge of these plants is depleting at an alarming rate. Therefore, it is high time that a feasible conservation strategy and action plan should be formulated and implemented effectively in order to save this high value dwindling resource. For sustainable and long term conservation of these plant species it would be better to involve the local people through creating awareness among them as they are the best judges of the area [7].

MATERIAL AND METHODS

Present study was conducted in District Pulwama during year 2013. The tribe namelyGujjars with the knowledge of medicinal plants were selected based on the experience in the preparation of medicines, the way theyacquired knowledge on the medicinal plants and their ability totreat a specific disease. Local names, plant parts used and mode of administration were recorded.

RESULTS

Aesculus indica:Family :Sapindaceae : Local name: Handoon

Uses: Extract of leaves given for fever. Seed oil used for healthy hair and in treatment of headache.

Allium cepa: Family : Alliaceae: Local name: Gande

Uses: Crushed bulb applied externally for boils. Crushed bulb mixed with mint eaten for increasing appetite. A mixture of crushedbulbs and common salt is made into balls. These balls are widely used as a traditional household remedy for cattle against cold, anorexia and in cows to stimulate the oestrus cycle.

Allium ursinum:Family : Amyryllidaceae, (previously in Alliaceae); Local name : Wan Roohun

Uses:Cloves rubbed on portions of baldness grow new hair. For highblood pressure and obesity cloves are eaten raw or mixed withvegetables as spice.

Anagallisarvensis : Family : Primulaceae ; Local name : Chari Saben

Uses: For ulcers crushed plant is applied on effected area. Extract of rhizome given for sore throat and as an expectorant.

Amaranthus retroflexus: Family: Amaranthaceae: Local name : Ganhaar

Uses : Children suffering from measles are advised to inhale smell that emanates from roasting dried seeds. Seeds once roasted are mixed with gur (local sugar) and made into small balls. Balls are given to the same children to treat measles. Plant is burnt to get ash

which is locally called "Suzz". It is gently applied on scalp and then washed with water to clean the hair and check dandruff.

Artmisiaabsinithium; Family :Astraceae ; Local name : Tethwan

Uses : For abdominal pain extract of whole plant is taken in small doses. Extract of whole plant is also used for chronic fever and gout.

Brassica oleracea ; Family : Brassicaceae; Local name : Hakh

Uses : Leaves are taken as vegetable. Fresh leaf is gently placed in warm mustard oil with haldi and salt till it becomes soft. It is then tightly tied with muslin cloth on painful corns of toes and fingers which helps them to ripe, burst and evacuate the pus and hence to alleviate the pain. The petiole of the leaf after peeling off the rind is placed in the rectum of the new born baby as a best home remedy to cure constipation.

Brassica rapa; Family :Brasicaceae; Local name: Tilgogul

Uses: For abdominal pain, seed oil is applied. For healthy hair massage of seed oil is done regularly. For cold, warm seed oil is applied on chest and nose.

Calendula officinalis; Family :Asteraceae; Local name; HameshBahar

Uses: Leaves and flowers are crushed and paste is made by mixing with cow butter. Paste is then applied on boils, burns and abscesses of eye lids to give relief from pain. Poultice is made by crushing of fresh leaves and flowers which is slightly warmed and then spread on a cloth and tied on chest to cure pneumonia in children.

Cannabis sativa; Family :Cannabaceae; Local name : Bhang

Uses: For diahhrea extract of leaves is taken. For menstrual problems, fine powder of leaves mixed with eggs is made into an omelet and taken.

Cichoriumintybus; Family :Asteraceae; Local name : Kasni/Wari Hundh

Uses: Leaves are cooked and given to fresh mothers to cure body weakness, loosening of joints, bodymuscular pains, frequent bleeding and as appetizer and liver tonic.

Cydonia oblonga; Family: Rosaceae; Local name :Bumchuont

Uses: Seed infusion is given to pregnant women against constipation and to loosen body parts so as to facilitate the normal delivery. The seeds also form an important ingredient of a combination of different herbs such as seeds of *Cucumis sativa, Malva neglecta, Foeniculum vulgare*, fruits of *Zizyphus jujuba*, leaves and flowers of *Arnebia benthamii* and fronds of *Adiantum capillus-veneris*. This combination is locally called as "Sharbeth". The composite decoction of "Sherbeth" is given to cure jaundice, cough, cold, chronic constipation, fever and as a good blood purifier. Fruit slices are sun dried, stored for winter season. Slice decoction is administered orally in case of dysentery. Ripe fruits after being coated externally with a thin layer of mud are roasted and then eaten as a best home remedy against asthma, cold, chest problems and general body weakness. Sundried flowers and sugar after mixing are crushed. The same is then kept in air tight jar for about 10-15 days for fermentation. This fermented mixture is locally called "KhambirBihi". It is given to cure cough, cold, asthma and body muscular pains

Euphorbia helioscopia; Family : Euphorbiaceae; Local nama : Gursochal

Uses: For boils, milk sap of whole plant is applied on affected parts. For cancer, decoction of plant is taken in small concentration for long periods. For cholera seed powder mixed with pepper is taken in small concentrations.

Foeniculum vulgare: Family : Apiaceae; Local name : Badiyan

Uses: For blood purification, decoction or extract of seed is taken. For increasing digestion, seeds are eaten raw.

Glycyrrhiza glabra; Family: Fabaceae; Local name : Shanger

Uses: For cough, decoction of root is taken. For hepatitis, fine powder of dried root is taken with water.

Papaver somniferum; Family :Papaveraceae; Local name – Khash-Khash

Uses:-For pain, dried milk of whole plant is taken. For cancer, grindedseed powder or oil of seeds is taken in small amounts.

Podophyllum hexandrum: Family: Berberidaceae; Local name: Banwangun

Uses: For acidity and diarrhea juice of fruits or extract of roots is taken. For heart diseases, extract of root is taken.

Portulacaoleraceae: ; Family – Portulacaceae; Local name – Nuner

Uses:-

For liver inflammation, it is eaten as vegetable. For cough, extract of whole plant is taken. For burns crushed plant is applied on affected area.

Rumexacetosa; Family – Fabaceae; Local name – Obej Uses:-

For stomach problems, whole plant is eaten as vegetable. For sting of nettles, leaves are rubbed on affected part to get relief.

Saussureacostus; Family – Astraceae; Local name – Kouth Uses:-

For asthma and cough extract or powder of root is taken. For joint pain, crushed root is applied on affected area.

Urticadioica; Family - Urticaceae; Local name - Soi

Uses:-

For fractures, crushed plant is applied on fractured bones. For dandruff, extract of whole plant is used for washing hair. For stomach pain, filtered extract of whole plant is taken.

Viola odorata; Family – Violaceae; Local name – Banafsha

Uses:-

For sore throat and cough, paste or juice of flower is taken. For constipation and fever, crushed root is eaten raw.

DISCUSSION

The present study revealed that the practice of using local herbs as medicinal remedies is widely known in Kashmir valley especially in Pulwama district. The reason for this was due to preference given to herbal medicines at high altitude areas as well as having no alternative choices, poverty, and trust in the effectiveness of traditional herbal medicines. The present study is in accordance with the [5,11]. Ethnobotanical investigations. Based on the indigenous knowledge collected during the study, it can be seen that the area is a valuable source of medicinal flora with different medicinal properties. Due to extensive usage they are over harvested. Many of the plants from the area are endangered and need immediate attention towards preservation on high priority bases.

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