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Study on some Medico-Religious Plants of Kinnaur (Himachal Pradesh)

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Abstract: Himachal Pradesh, the mountains state of India is famous for its religious culture, traditions and its unique flora. People of this state are highly religious and variety of rituals related to deities is performed in various ways by local -people. These rituals not only show humans relations with plant but also help in conserving these plants. The present study is carried out in various villages of district Kinnaur of Himachal Pradesh, regarding the medico-religious plant used by the locals in our own socio-culture and religious activities.

The information regarding the utilization of medico-religious plants in socio-cultural and religious activities was collected through the personal observation understand how tribal's of Kinnaur district are dependent on medicinal and religious plants to safeguard their inherent socio-cultural and religious activities.

Keyword: Medico-religious, Kinnaur, Himachal, Tribes, Flowers, Sacred plants.

I. INTRODUCTION

People value many plants because of their ancient believe and experiences. Plants provide people with food, as well as materials for construction and the manufacture of craftsman tools and many other products like fuel, paints & dyes and man has use plants as a source of medicine ¹. Since the beginning of civilization man has used plants for various ailments, before the allopathic system of medicine.

During struggle for existence men must have encountered pains and sickness. These sufferings lead men to experimentation through trial and error method and discovery of healing properties of plants. On realizing the importance of those "Wonder Herbs" he began communicating about them and passed this knowledge to its successors ^{2,3}.

Medicinal plants have traditionally occupied important position in the socio-cultural, spiritual & health arena of rural & tribal communities ^{4,5}.

Himachal Pradesh situated in the centre of the Western Himalayas, having diverse agro climatic conditions ranging from semi-tropical to alpine and culminating to the cold desert region, is bestowed with a veritable emporium of medieval and religious plants. Unfortunately, these traditional knowledge based system started to disappear with the passage of time, due to lack of documentation, because of ignorance & illiteracy of the tribal communities, this, results in erosion of knowledge associated with medicinal plants ^{6,7}. Low income of these traditions compels the persons to give up these practices and look for other occupation.

II. METHODOLOGY

A. Study Area

Kinnaur has spectacular terrain of lush green vegetation, orchards, vineyards, snow covering peaks & cold desert mountains. It is rich in flora and fauna. It is the part of Greater Himalayas situated at 31°6' to 31°3' N latitude and 78°10' to 79.47° E longitude.

An altitude varies from 1500m to 6000m. Uppermost part of the mountain peak are usually covered with snow for 2-4 month with the melting of snow extraordinary variety of beautifully colored flower inhabiting these mountains forming a rich storehouse of medicinal and religious plants.

B. Discussion Method

Discussions were held with different people of the localities. All aspects of the medicinal herbs and shrubs that are used for medicinal purposes were discussed. Data was collected by questionnaire, interviews and discussion.

C. Field Survey Method

Extensive field surveys were conducted for the collection of data. The knowledgeable person was engaged with us to locate the sites where these plants were present. During the investigation, the villagers and the people of different communities of the area were interviewed (Table 1). The information was collected about particular season for collecting plants and plant parts used for medicinal purpose. Plant specimens were photographed and sample of some plants were collected from the field. Local names were obtained from the informant and the species were further identified by using secondary sources. The secondary data was collected from libraries or research organizations, journals, magazines and internet such as Wikipedia, eBooks, Flora similensis (1902), A handbook of Et Mud(1999), Ethno medicinal plants of Mandi district (Gaur and Singh,1995) etc.

Table 1. Profile of informants of District Kinnaur of Himachal Pradesh

Sr.No.	Name	Sex	Age	Profession	District
1.	Savitri	Female	68	Housewife	Kinnaur
2.	Govind	Male	35	Farmer	Kinnaur
3.	Bhupender	Male	48	Farmer	Kinnaur
4.	Rajesh Sharma	Male	52	Employee	Kinnaur
5.	Sita	Female	30	Housewife	Kinnaur
6.	Meera Sharma	Female	50	Employee	Kinnaur
7.	Narain Singh	Male	45	Employee	Kinnaur
8.	Rooplal	Male	75	Farmer	Kinnaur
9.	Adesh Sharma	Male	79	Farmer	Kinnaur
10.	Dharmender kumar	Male	47	Farmer	Kinnaur

III. OBSERVATIONS

Plants are the source of wide variety of nutrients required to keep the human body in perfect working condition. The present study revealed that plants growing in Kinnaur region are of great medicinal importance and form a strong backbone of traditional medicine system. The basic component of traditional medicinal system are medicinal plants, thus these resources are depleting from the nature at very fast pace due to growing demand and consumption

A. *Arctium Lappa*

FAMILY - Asteraceae COMMON NAME - Jungli kuth

LOCATION - kafnoo ALTITUDE - 2756m above sea level

Plant is biennial, rather tall, reaching as much as 3m. It has a large alternating, cordiform leaves that have a long petiole and are pubescent on the underside. Flowers are purple and grouped in globular capitula, united in clusters. It is used for treatment of heart problem as it possesses heart stimulant. It is ant scorbutic, laxative, anti inflammatory and diuretic. It is used to treat cold, stomach ache, cancer, blood infection, skin problems. It is also recommended as a healthy and nutritive food and medicine. Roots and stem used in ayurveda (Fig.1)

MODE OF APPLICATION:-Decoction.

B. Hippophae Rhamnoides

FAMILY - Elaeagnaceae LOCAL NAME - Surch
LOCATION - Shango ALTITUDE - 1500- 2300 m above sea level
PART USED - Berry's

It is a spiny deciduous shrub. The height of the plant is between 2-4m. It has a rough, brown or black bark and a thick greyish crown. The leaves are alternate and lanceolate, with silvery green upper faces. The oval and lightly roundish fruits grow in compact grapes varying from pale yellow to dark orange. Liver ailment, male impotency, high cholesterol and excessive menstrual bleeding. (Fig.2)

MODE OF APPLICATION - Juice.

C. Aconitum Violaceum

FAMILY - Ranunculaceae LOCAL NAME - Meetha patish
LOCATION - Ramni ALTITUDE - 2759m above sea level
PART USED - Tuberous

It is a species of perennial plant distributed in the Himalayan region of India. The stem grows from a biennial tuberous root that produces a new tuber each year. The old tuber dries after the plant flowers.

Its roots are eaten as a pleasant tonic. It is said to have a bitter taste with cooling potency. It is an antidote and febrifuge. Used in the treatment of snake bites, contagious infection and inflammation of intestine (Fig.3)

MODE OF APPLICATION: Decoction

D. Jurinea Macrocephala

FAMILY - Asteraceae LOCAL NAME - Guglang
LOCATION - Daiya, Kinnaur ALTITUDE - 3000-4300 m above sea level

Plant is a herb and grows between an altitude range of 3000-4300 m. It is a prostrate stemless perennial herb. Roots of this plant are used as dhoop during the prayer time to please the deity. It is also a source of income for locals ((Fig.4)

E. Bunium Persicum

FAMILY - Apiaceae LOCAL NAME - Kala jeera
LOCATION - Kafnoo ALTITUDE - 2300- 4000 m above sea level
PART USED - Seed

It is an erect, herbaceous perennial plant growing from underground tubers. It produces one or more stems whose branches are growing from 40-60cm tall. The plant is usually self-fertile. The plant is cultivated in wild areas. It is used in the treatment of intestinal illness including diarrhea, inflammatory bowel disease. Seeds used as carminative and diuretic. It is used for weight loss (Fig.5)

F. Arnebia Bentharii

FAMILY - Boraginaceae LOCAL NAME - Ratanjot, Khomae
LOCATION - Mulling ALTITUDE - 2569 m above sea level
PART USE - Roots

It is a hairy perennial plant. Leafy stem can grow in height 40cm bearing very dense cylindrical spike of red purple flowers and much longer grey or hairy bracts. It is used for imparting pleasing red colour to food stuff, oils and fats. The flowering shoots are used in preparation of sherbat and useful in many diseases of tongue, throat and fever and cardio disorder (Fig. 6)

MODE OF APPLICATION:-Powder.

G. Dactylorhiza Hatagirea

FAMILY - Orchidaceae LOCAL NAME - Salam panja
LOCATION - Kafnoo ALTITUDE - 3000 m above sea level
PART USED - Rhizome

Plant is terrestrial glabrous herb. Attends height of 20-25 cm. Tubers slightly flattened, palmately divided into 3-5, finger-like lobes. Flowers stalk up to 90 cm long, erect, hollow, leafy throughout or the lower portion bears few sheathing scales. Leaves are 4-6, cauline, leafy blade oblong to linear lanceolate, apex obtuse or acuminate. Cold, cough, sexual dysfunction and diarrhea (Fig.7).

MODE OF APPLICATION: Powder and paste.

H. Picrorhiza Kurroa

FAMILY - Scrophulariaceae LOCAL NAME - Kadu

LOCATION - Kara ALTITUDE - 3000- 4300 m above sea level

PART USED - Rhizomes

It is a small perennial herb. Stem is small, weak, creeping, erect at flowering, leafy and slightly hairy. Roots are about 5-10 cm long. Rhizomes are jointed and zigzag, greyish-brown, cylindrical, irregularly curved with branching and rooting at the jointed nodes. Leaves are 5-10 cm long, almost radical, sharply serrate, turning black on drying (Fig.8).

I. Arisaema Flavum

FAMILY - Araceae LOCAL NAME - Arsina

LOCATION - Kafno ALTITUDE - 2000 m above sea level

PART USED - Tuber

Plant is 0.4m in height with its tuber being sub globose and 1.5-2.5cm wide. Its petiole is either green or purplish in colour, and is 11.35cm long. Used in the treatment of chronic tracheitis, bronchitis and epilepsy. The plant is harvested from the wild for local uses as a medium of food and source of pesticide. Used in the treatment of stomach ache (Fig.9).

MODE OF APPLICATION:-Tubers are eaten raw.

J. Saussurea Gossypiphora

FAMILY - Asteraceae LOCAL NAME - Khasbal, kasturi kamal

LOCATION - Rushkulang ALTITUDE - 4300-5600 m above sea level

The plant look like a wooly snow-ball. It is densely white or grey wooly more or less globular high altitude plant. Stem 10-20 cm, stout, hollow, enlarged, club-shaped and densely leafy above, base covered with black shining leaf bases. Leaves linear, coarsely toothed or lobe, embedded in dense wooly hair. People keep dried flowers and leaves in their houses to keep away the evil spirit and to bring good health and wealth (Fig.10).

K. Saussurea Obvallata

FAMILY - Asteraceae LOCAL NAME - Dongur

LOCATION - Batseri kanden ALTITUDE - 3500-4600 m above sea level

The plant is a perennial herb growing up to a height of 30 cm. It is a striking herb with large, pale yellow, boat-shaped, papery bract surrounding the dense cluster of flower heads. The flower heads are several, in a dense umbel-like cluster, each 1.5-2.5 cm long and with involucre bracts with black margins and nearly hairless tips. Several eccircling, ovate, bristly-margined, translucent and conspicuously veined bracts overlaps the flowers. The leaves are oblong-lanceolate, blunt, toothed, lower stalked, upper half-clasping with the blade continuing in a stout stem 15-

45 cm long. It is used in the treatment of paralysis of the limbs and cerebral ischemia. The plant is also used to cure skin diseases. Flowers are offer to the local dieties during festival season. Dried leaves and flowers are kepted in the houses to keep away evil spirits and to bring good health and wealth (Fig.11).

L. Trillium Govanianum

FAMILY - Melanthiaceae LOCAL NAME - Nagchhatri

LOCATION - Kara-pash ALTITUDE - 2500-4000 m above sea level

PART USED - Rhizome

The plant is a small herb and can be identified by its three leaves in one whorl at the summit of the stem and a solitary, purple flower in the centre. Leaves are broadly ovate, acute and conspicuously stalked. Root stock thick, creeping, stem erect unbranched. Fruit globular, red berry 1-2 cm long, seed ovoid, numerous, having a pulpy lateral appendages. Used in antifungal, anti-cancer and analgesic. The rhizome is used in condition like dysentery, wound healing, menstruation and sexual disorder. Medicinal activity is due to the presence of various important phytoconstituent and metabolites (Fig.12).

MODE OF APPLICATION: Powder and paste



Fig. 1 *Aractium lappa*



Fig. 2 *Hippophae rhamnoides*



Fig. 3 *Aconitum violaceum*

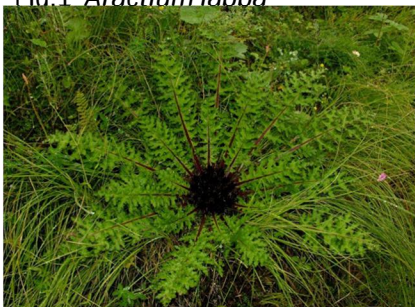


Fig. 4 *Jurinea macrocephala*



Fig. 5 *Bunium persicum*



Fig. 6 *Arnebia benthamii*



Fig 7 *Dactylorhiza hatagirea*



Fig 8 *Picrorhiza kurroa*



Fig 9 *Arisaema flavum*



Fig 10 *Saussurea gossypiphora*



Fig 11 *Saussurea obvallata*



Fig 12 *Trillium govanianum*

IV. CONCLUSION

The biodiversity of an area is markedly influenced by climatic and physiognomic changes. Ethnobotanical plants occupy varied habitat ranging from open exposed to shady moist areas. The flora of the Kinnaur is also greatly influenced by the prevailing climatic conditions. The study of medicinal herbs and shrubs of Kinnaur Distt. of Himachal Pradesh makes us to understand how various plants are important. the present study reveals that 12 medicinal sp. (shrubs and herbs) which were used by the local people of Kinnaur not only for the medical purposes but also for the religious purposes. This document will help in raising awareness for conserving ethnobotanical knowledge for the benefits of future generation. As in today's world demand for the medicinal plants is increasing day by day, so there is a need to aware local people for the cultivation of these medicinal herbs and shrubs. This practice will also provide self employment as well as it will also help to increase the economy of the state.

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