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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 peeks & 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.

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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 t 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.

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B. Hippophae Rhamnoides

FAMILY - Elaegnaceae 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 lanceolte, 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 cholestrol and excessive menstrual bleeding. (Fig.2)

MODE OF APPLICATION - Juice.

C. Aconitum Violaceum

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

It is a species of perennial plant distributed in the himalyan region of India. The stem grows from a binnial tuberous root that produces a new tuber each year. The lod tuber dying after the plant flower

Its roots are eaten as a pleasant tonic.It is said to have a bitter taste with cooling potency. It is an antidode 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 grow between an altitude range of 3000-4300 m. It is a prostrate stem-less perennial herb. Roots of this plant are used as dhoop during the prayer time to please the diety. 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 stm whose branches are growing from 40-60cm tall. The plant is ususally self fertile.the plant is cultivated in wild area.It is used in the treatement of intestinal illness including diarrhia, inflam-matory bowel disease. Seeds used as carminative and duretic. It is used for weight loss (Fig.5)

F. Arnebia Benthamii

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 flowrs 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 usesful in many diseases of tongue, throat and fever and cardio disorder (Fig. 6)

MODE OF APPLICATION:-Powder.

G. Dactylorhiza Hatagirea

FAMILY - Orchidaceae LOACAL 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 upto 90 cm long, erect, hollow, leafy throughout or the lower portion bear 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.

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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 involucral bracts with black margins and nearly hairless tips.Several eccircling, ovate, bristly-margined, transluscent and conspicuously veined bracts overlaps the flowers.The leaves are oblong-lanceolate, blunt, toothed, loer 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 keeped 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 appandages. 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

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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

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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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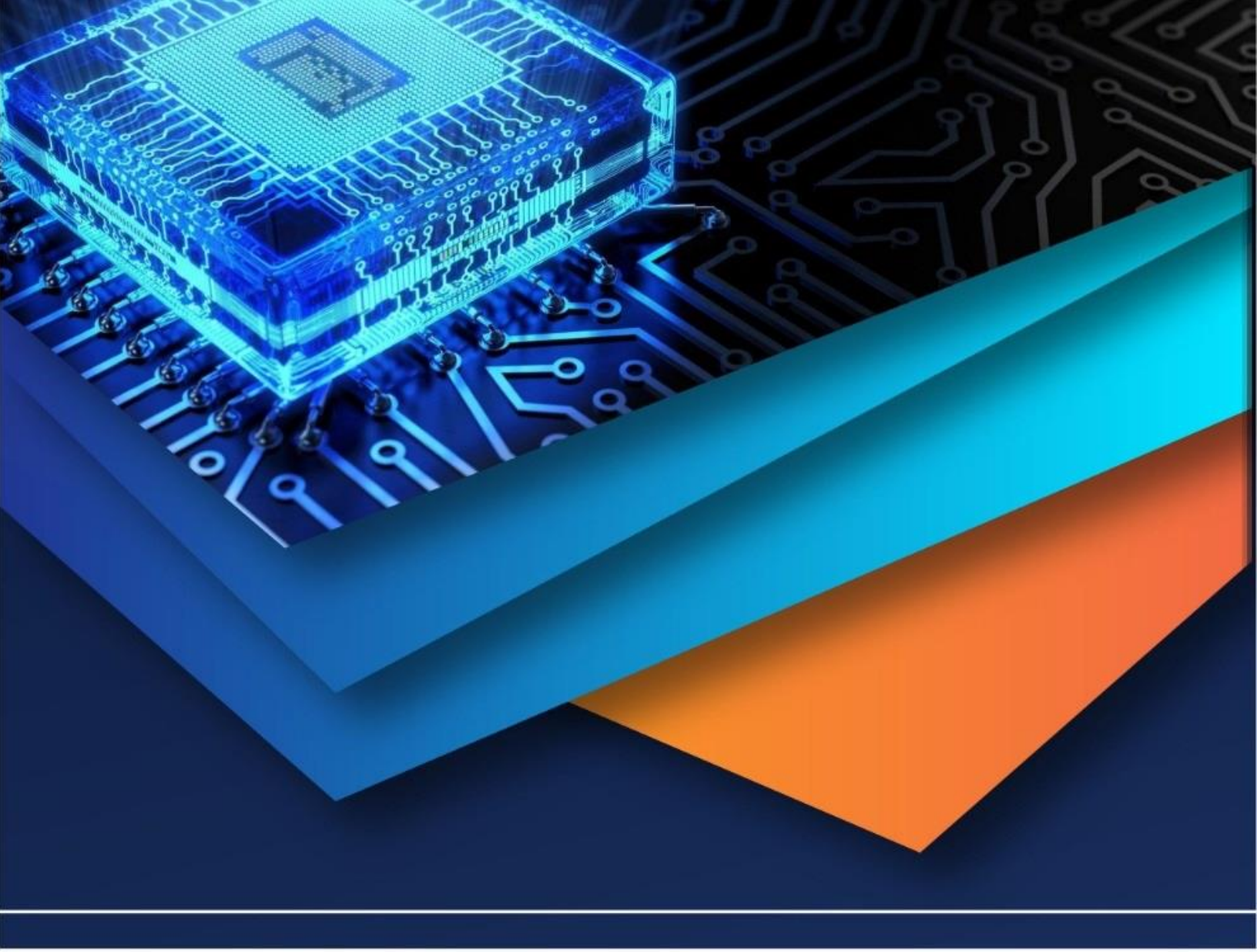

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