

Culture, Habitat and Ethno-Medicinal practices by Bhotia Tribe people of Dharchula Region of Pithoragarh District in Kumaun Himalaya, Uttarakhand

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Abstract

A survey in different areas of *Dharchula* region in Pithoragarh district of Uttarakhand was conducted in different seasons of the year to identify the non-conventional uses of plants. In India, there are about 68 million people belonging to 227 ethnic groups and comprising of 573 tribal communities. Out of which 4 tribes (*Tharus, Buxas, Rajis and Bhotias*) inhabit the Kumaun division of the state. The *Bhotia* tribe living in remote thick forest of the *Dharchula* region depends on nature for their basic needs of life. The 8 major Bhotia groups in the state are i.e. *Johari, Juthora, Darmi, Chudans, Byansi, Marccha, Tolcha and Jad*. The tribal population of Bhotia community is 8.13 % and inhabited in about 18.70 % of area of the country. The present study was carried out to document the precious indigenous traditional knowledge about the ethno-medicinal uses and properties of plants which are under Red Data List of IUCN. Ethno-medicinal information on 17 plant species belonging 15 families, used in various ailments by the inhabitants of the community was recorded. The attempt is also made to describe the habitat, customs and economical aspects of *Bhotia* tribes.

Key words: Ethno-medicinal, IUCN, Indigenous Traditional Knowledge, Ailments

Introduction

The ethnic and indigenous people of the world have learnt to live in most hostile environmental condition in this universe. The most interesting feature concerning with these ethnic and tribal people is that, they live in localities which are immensely rich in biodiversity. India has one of the largest concentration of tribal communities in the world, accounting for about 68 million tribal people belonging to 227 ethnic groups and 573 tribal communities (Anon., 2001) living in different geographic locations within the country. According to Indian context, 'Tribe' means a group with traditional territory, specific name, common language, strong kin relations, association with clan structure, tribal authority and rigid inclination to religion and belief (Majumdar & Madan, 1970). Functional independence, homogeneity, primitive mean of exploiting resources, economic backwardness, rich culture, tradition and least desire to change are some other characteristics dominated in tribes (Hasnain & Nadeem, 1990). The tribes constitute very significant part of the underdeveloped people and area of the Indian republic. These people comprise about 8.13 % of the population and 18.70 % area of the country respectively.

Scheduled tribes, (*Tharus, Buxas, Rajis and Bhotias*) inhabit the Kumaun division of Central Himalayan Region. These tribal communities present a significant degree of cultural and ethnic diversity (Pangty, *et. al.*, 1989 & Samant, *et. al.*, 1998). The present study focused on the habitat, culture, economy and ethno-medicinal uses of plants by the tribals of the *Bhotia* community inhabiting *Dharchula* region of Pithoragarh District in Uttarakhand.

Habitat

The northern most part of Uttarakhand (Kumaun and Garhwal) is also known as “*Bhot*” region (Atkinson, 1989); Comprising sub-alpine and alpine zones bordering Tibet. It is believed that, ‘*Bhotias*’ are a transhumant community of semi-mongoloid people of Tibetan origin (Fuchs, 1982). They show close racial and cultural affinity to the Tibetans and probably for this similarity the Bhotia region is called as *Bod or Bhot* which is a corrupt form of *Bod*, which means “*Follower of Buddhism*” (Srivastava, 1952-53). These people in *Dharchula* region of Pithoragarh district are known as *Shauka*. The anthropological study of these tribes has not been undertaken so far and our information about the race elements in the population of the Himalayan region is extremely meager (Majumdar, 1958). They live either in the high mountain ranges, which remain snow covered for about five months, or the lower mountain ranges with rich flora and ample rainfall.

The eight major Bhotia groups in the state (*Johari, Juthora, Darmi, Chudans, Byansi, Marccha, Tolcha & Jad*) are scattered over eight main river valleys known as Johar, Darma, Byans, Chaudans (Pithoragarh District); Mana, Niti (Chamoli District); Nilang and Jadung (Uttarkashi District).

Culture

The cultural traits of Bhotias reflects close links with the Tibetans acquired through generations of association through trade, they stand distinct from Tibetians with regards to their character and mode of economy. The culture reveals much closer to socio-economic relationship with the population inhabiting the middle and lesser Himalayan region of Kumaun. Families are both joint and nuclear types; both male and female have equal rights on the affairs and decision making system of the family. The boys and girls are free to choose their partners or engage in love making without marriage. *Shaukas* practice cross-cousin marriage, while sororate and junior-levirate are practiced by all. They are monogamous and marriages are mostly arranged. Though, elopement and marriage consent through *Rangbang* is also found. Till recently the boys and girls in *Dharchula* region used to drink, dance and sing together throughout the night. This custom or social institution is known as *Rangbang/Rambang or Khel*. The participants used to pass the nights singing, dancing, eating, drinking and smoking around the fire. They practice endogamy at territorial level and exogamy at clan level. The personal adornment and dress of the Bhotias is greatly influenced by the environment. Due to the cold climate in the high hills where Bhotias inhabit, their cloths mainly comprise woolen material, quite often home made. The male dress mainly consists of the coat, trousers and a cap which is quite familiar also among hill people. The Bhotia female dress is quite different from the ordinary hill women. These women wear a skirt, coat, shirt and a waist coat.

Economy

The economy of the Bhotias is an aggregation of many elements such as a highly developed trade organization, subsistence agricultural activities, well developed handicraft, pastoralism and regional sources of income. High altitude based habitat provide them very little land. Thus, the scope for intensive agriculture is very thin (Das, 1982). They have two settlements, the upper/summer (May-June to October-November) settlement where they stay and cultivate limited varieties of crops like Buckwheat (*Fagopyrum esculantum* & *Fagopyrum tataricum*); in lower or winter settlement, where they stay for rest of the year. Here they cultivate wheat (*Triticum aestivum*), paddy (*Oryza sativa*), Maize (*Zea mays*), Jowar (*Sorghum vulgare*), Potato (*Solanum tuberosum*), etc. They engaged in organized trade with Tibet. The main terms exported were food grain, sugar, gur (unrefined sugar), spices, tobacco, cotton, cloths, hard wears, corals, beads etc. The main items of imports were borax, salt, wool, etc. The impact of physiographic environment and trade with Tibet had been so great on the *Bhotia* socio-cultural life; that they had to resort to seasonal nomadism which forced them to build a distinct socio-economic culture. Pastoralism has been closely related to Bhotia trade economy. The animals like sheep, goat, ponies, yak and jibus are of immense use for these people. Associated with trade, another element of economy is woolen industry. They have been become specialized for manufacturing the woolen materials

like Thulma, Gudma, Lawa, Danna, Galicha, Asan etc. The marketing of these woolen materials are generally done in the trade fairs.

Results & Discussion

Diversity

In the present study 17 species belonging to 17 genera and 15 families i.e. Shrub (3 spp.), tree (2sps.), herb (11 spp.), Fern (1 spp.) were recorded under the study area in *Dharchula* region. The utilization pattern of the species indicated that leaves of 1 spp., roots of 7 species, whole part of 3 species, tubers of 3 species, fruits of 1 spp., bark of 2 spp.; resin of 1 spp., each are used in various ailments i.e. eczema, indigestion, dyspepsia, pregnancy, migraine, epilepsy, rheumatism, fever, fracture, etc. (Table.1)

Nativity

Among these 9 plant species were native to Himalayan region, while others were non-native to Indian Himalayan Region (IHR) and were originated from biogeographic regions including Japan, Africa, Tropical Asia, Oriental India, etc.

Ethno-medicinal Uses

According to a report of the World Health Organization (WHO), over three fourth of the world population cannot afford the products of the modern medicine and have to rely on the use of traditional medicine of plant origin (Rai, Prasad, & Sharma. 2000). In the present attempt, major plant species used indigenously by the *Bhotia* people are *Achyranthes aspera*, *Angelica glauca*, *Betula utilis*, *Berberis aristata*, *Berginia stracheyi*, *Calotropis procera*, *Nardostachys grandiflora*, *Orchis habenarioides*, *Picrorrhiza kurooa*, *Rubia cordifolia*, etc. for major diseases like eczema, burn scar, indigestion, pregnancy, menstrual problems, whooping cough, cuts & wounds, dyspepsia, eye trouble, wormicides, kidney trouble, migraine, epilepsy, etc. (Table. 1)

Conclusion

The present study provides comprehensive information on habitat, culture, economy and ethno-medicinal uses of plants by the tribals of the *Bhotia* community inhabiting *Dharchula* region of Pithoragarh District in Uttarakhand. Traditional practice of using plant resources has a long history and wide acceptability throughout world. The inhabitants of the region use various species in various ailments. They use different plant parts in various forms to cater their daily needs.

In the present scenario, traditional knowledge system in our country is fast eroding and there is an urgent need to inventoried, record all ethno-botanical and cultural information among the diverse ethnic communities before the traditional cultures are completely lost. Therefore, documentation of information on ethno-medicinal uses will help in conserving the knowledge. Such type of information in other parts of the IHR should be documented; so that a comprehensive database of the plants used for various purposes could be saved for the forthcoming generations.

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Table 1. Ethno-medicinal uses of the plants in Dharchula region of Pithoragarh District in Uttarakhand, Kumaun Himalaya.

Family/Taxa	Common Name	Altitudinal Range (m)	Parts Used	Indigenous Uses	Disease	Nativity	IUCN Status
Achyranthaceae							
<i>Achyranthes aspera</i> Linn.	Latjeera, Apamarga	100-3000	WP	100g powder of dried leaves mixed with 20g cow's ghee is applied on the affected part.	Eczema	Geront Trop	-
Pterigaceae							
<i>Adiantum sp.</i>		100-1800	Frd	Freshly made 50g leaf paste is applied on effected part for 3-4 days regularly.	Burn Scar	As Trop	-
Apiaceae							
<i>Angelica glauca</i> Edgew.	Chhipi	Up to 3000	Rt	1. 50g roots boiled with 200ml water on moderate flame up to 15min. and kept it cooling. The liquid is drunk to cure vomiting and indigestion. 2. 20g roots dried in shady place are chewed directly to cure Dyspepsia.	Indigestion Dyspepsia	Reg Himal	CR
Asteraceae							
<i>Artemisia nilgerica</i> (Cl.) Pamp.	Pati/ Kharia	Up to 1800	WP	Freshly and washed 100g roots/leaf are dipped overnight in cold water and drunk 5-6 days before meal to cure intestinal worm.	Wormicide	Reg Temp Bor	-
Beutalaceae							
<i>Betula utilis</i> Don	Bhojpatra	2700-4300	Res	50g resin and 20g seed kernels of <i>Prunus persica</i> ground into paste and mixed with milk is drunk to conceive the delivery and for internal strength.	Pregnancy	Reg Himal, Japon	-
Berbidaceae							
<i>Berberis aristata</i> DC.	Kilmoru/ Daruhaldi	1500-3000	Rt, Br	50g root juice mixed with 150ml water and dropped in eyes to cure redness and infection.	Eye Trouble	Ind Or	EN
Saxifragraceae							
<i>Berginia stracheyi</i> (Hk.f. & Th.) Engler	Silphora	3600-4200	Rt	100g fresh roots are removed and washed thoroughly, cut in to pieces and chewed like candy to cure urinary and kidney trouble.	Kidney/ Urinary trouble	Reg Himal	VU
Asclepiadaceae							
<i>Calotropis procera</i> Br.	Aak	Upto 800	Lf	Powder of 5g dried leaves mixed with Gur given orally before Sunrises for 5 days to cure migraine.	Migraine	Peruv AfrTrop Ind Or	-
Dioscoreaceae							
<i>Dioscorea bulbifera</i> Linn.	Gethi	150-2100	Tb	Tubers are roasted in hot ash and given with Sendha Namak (Salt) to cure old cough.	Cough	As Trop	-
Orchidaceae							

<i>Dactylorrhiza hatagirea</i> D. Don	Salampanja/ Hathazari	2800-4000	Tb	1. 50g fresh roots are crushed in cold water & filtered and drunk to regularize menstruation cycle for 15 days twice in a day. 2. 5g dried and powdered tubers are mixed with 2 tablespoon mustard oil and paste rubbed externally on the effected part to check the bleeding.	Menstrual Complaints Cuts & Wounds	Reg Himal	CR
Juglandaceae							
<i>Juglans regia L.</i>	Akhrot	1000-3000	Fr	The oil extracted from seed kernels is heated mildly and massaged on the naval region of the pregnant women to facilitate the delivery.	Pregnancy	As Occ Reg Himal	-
Valerianaceae							
<i>Nardostachys grandiflora DC.</i>	Masi/ Jatamasi	3200-5000	Rt	1. Locally roots are used as incense. The smoke is given to the patient of epilepsy at the time of fits. 2. 100g rhizomes are boiled with ghee and used to cure joint pain.	Epilepsy Rheumatism	Reg Himal	CR
Orchidaceae							
<i>Orchis habenarioides</i> King & Pant	Salam Mishri	3000-4500	Tb	200ml decoction of the tubers mixed with 200ml milk & one tablespoon honey and drunk to check the excessive bleeding during child birth and also acts as a tonic.	Pregnancy	Reg Himal	EN
Polygoneaceae							
<i>Polygonum nepalensis</i> Mesin.	Bhotia Chai	1200-4100	Br, Rt	1. 100ml decoction of bark is given to women for easier child birth. 2. 10g dried roots are chewed to cure pain and hoarseness of throat.	Pregnancy Throat pain /Cough	As et Afr Trop et Sub trop	CR
Scrofularaceae							
<i>Picrorrhiza kurooa</i> Royle ex Benth.	Kutki	3300-4800	Rt	1. 50g root decoction boiled mildly for 5-10min. and flavored with honey is given to cure stomach ache. 2. 30g root powder and 5g black piper mixed with honey is given orally to cure high fever.	Stomachache Fever	Reg Himal	EN
Rubiaceae							
<i>Rubia cordifolia</i> Linn.	Manjitha	1200-2000	WP	Whole plant pulp rubbed with honey is recommended as a cure for acne and dark spots on face.	Skin Care/Acne	As Trop Temp Afr Trop	EN
Polygoneaceae							
<i>Rheum australe</i> D. Don	Dolu	3000-4200	Rt	20g roots heated mildly and plastered on fractured part covered with a bandage which reduces the swelling, pain and fracture.	Fracture	Reg Himal	VU

Abbreviations Used: VU=Vulnerable; EN=Endangered; CR=Critically Rare; Rt=Root; Lf= Leaf; Frd= Frond; Br=Bark; WP= Whole Plant; Fr=Fruit; Tb=Tuber; Ind Or= Indian Oriental; Reg Himal= Himalayan Region; As=Asia; Afr=Africa; Trop=Tropical; Occ=Occidantails; Temp=Temperate; Res=Resin.