

ETHNOVETERINARY MEDICINAL USES OF SOME MEDICINAL PLANTS USED BY THE GUJJAR AND PAHARI TRIBES OF POONCH DISTRICT OF JAMMU AND KASHMIR

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ABSTRACT

Poonch district of Jammu and Kashmir is a reservoir of enormous natural resources including the wealth of medicinal plants. The present paper deals with 12 medicinal plant species belonging to 10 genera and 7 families of angiosperms used on pneumonia in cattle such as cows, sheep, goats and buffaloes in different areas of Poonch district. Due to poor conditions of poverty and modern health care facilities the indigenous people of the area partially or fully depend on surrounding medicinal plant to cure the different ailments of their cattle. Further research on modern scientific line is necessary to improve their efficacy, safety and validation of the traditional knowledge.

Key words: *ethno vet poonch JK Ind.*

I. INTRODUCTION

The knowledge of ethnoveterinary medicinal plants since time immemorial have been used in virtually all cultures as a source of medicine to cure the different ailments of cattle. A large human population with diverse lifestyles, beliefs and cultures have learnt to use the surrounding plant diversity in various ways. Jammu and Kashmir state has 22 districts, out of these, one of the botanically interesting district is Poonch district which has unique vegetation in wide range of habitat from subtropical to temperate and alpine.

Poonch district of Jammu and Kashmir is one of the hilly districts of the state surrounded by Kashmir vally in the north east, district Rajouri in the south and Pakistan occupied Kashmir in the west. The district lies between 33° 35' – 34° 10' north latitude and 73° 30' - 74° 35' east longitude with a total area of 1674 sq km. About 56% area is under forest where vegetation is degrading at an alarming rate due to cutting of roads and huge no of cattle. The altitude of Poonch district varies from 1000 to 4700 m and above.

A review of literature shows that a lot of research has been carried out on ethno medicine and floristic diversity in different areas of Jammu and Kashmir as well as in India but Poonch district of J & K is very less explored. Jain (1991) worked on Indian Folk medicine, Aswal (1996) carried out studies on ethno medicinal plants of Garhwal Himalaya whereas Jain (2000) worked on ethno veterinary medicinal plants of india. Tiwari and

Pandey (2006) studied indigenous veterinary practices of Dharma Valley of Pithoragarh district, of Uttranchal, Rashid (2010) carried out ethno botanical studies of district Rajouri of Jammu and Kashmir whereas Renu (2010). Similarly studied on Taxonomical studies of some plants of ethnoveterinary importance in curing milk yielding animals of Kathua district (J & K). Khan, et. al. (2012) studied ethnomedicinal plants used on toothache in Poonch district of Jammu and Kashmir. Khan and Kumar(2012a) studied ethno medicinal uses of some medicinal plants used on snake bite in Poonch district of Jammu and Kashmir, Khan and Kumar (2012b) similarly studied ethnomedicinal uses of some medicinal plants among the tribal people of Poonch district of Jammu and Kashmir, Khan and kumar(2012c) also worked on ethnoveterinary values of some medicinal plants used against snake bite in Poonch district of Jammu and Kashmir. Khan (2013) worked on folk medicinal uses of some medicinal plants among the tribal people of Poonch district of Jammu and Kashmir.

II. MATERIAL AND METHODS

The work was undertaken through field studies carried out during the period of February 2009- March 2011 in different areas of Poonch district of Jammu and Kashmir. Intensive and extensive field studies were carried out in different areas of the district for a duration of four to five days each, but in some cases the stay during the field study exceeded up to fifteen days. While collecting the plant specimens, voucher numbers were allotted to each specimen and detail regarding the botanical characters and folk uses were recorded on the field note book. Data regarding place of collection, collection number, altitude, date of collection, flower colour, fragrance and other characters which may be lost during the pressing of the specimen have been recorded. While making collection for preservation care was also exercised to collect the disease free specimen. At high altitude we used old news paper for pressing the plant specimens. The specimens were tagged and carried to the laboratory in plant press. During first few days the sheets were changed at an interval of six hour in rainy season so that the discoloration of foliage and flowers may not take place. The plant specimens have been identified with the help of standard floras of Hooker (1872- 1897), Duthe (1903- 1929) and Gour (1999). Finally the identified specimens have been deposited in the department of Botany. K. P. G. College Simbhoali for further references.

III. RESULTS

It has been observed that a total of 12 medicinal plant species are used by tribal people as ethno veterinary medicine in the study area belonging to 10 genera and 7 families. Out of these one species namely *Capsicum annuum* is commonly cultivated. Three species of plant are highly endangered and need immediate attention for their conservation. There is roughless extraction of these species by the tribal people for the ethno medicinal purpose as well as to sale them in the market. The most common plant parts used are berries followed by leaves, rhizome, fruit, root and whole plant. The detailed pharmacological activities of some plants are still required to be investigated. The collected ethnoveterinary medicinal plants have been arranged alphabetically with their botanical name and local name in bract followed by family name, occurrence, parts used and method of preparation in the table given below.

Table.



S. No.	Bot. name	Family	Occurrence	Parts used	Method of preparation and mode of use.
1	<i>Acorus calamus</i> Linn (Bach, Pyozkartal)	Araceae	Common	Rhizome	Rhizome of the plant is grinded and given orally to the animal by wrapping in wheat dahlia on allergy.
2	<i>Angelica glauca</i> Edgew (Choura)	Apiacea	Endangered	Root	Root is grinded in water and given orally on pneumonia on abdominal colic on foot and mouth disease.
3	<i>Aresaema jacquemontii</i> Blume(Sap ki mak)	Araceae	Common	Berries	Berries are wrapped in wheat dahlia and given orally on snake bite.
4	<i>Aresaema propinquum</i> (Schot)Sarf makyoth	Araceae	Common	Berries	Berries are grinded in water and given orally by wrapping in wheat dahlia on allergic infection to cows and buffalows.
5	<i>Aresaema tortuosum</i> Wallich (Sap ni mak)	Araceae	Common	Berries	Berries are grinded applied externally by mixing in mustard oil.
6	<i>Capsicum annuum</i> Linn. (Marchi)	Solanaceae	Common	Fruit	Fruits are burnt in mustard oil and applied externally.
7	<i>Sauromatum pedatum</i> Wild (Surganda)	Araceae	Common	Fruit	Fruits are given orally by wrapping in wheat dahlia on on foot and mouth diseases.
8	<i>Skimmia anquitelia</i> Taylor & Airy Shaw.(Nera, patla)	Rutaceae	Endangered	Leaves	Leaves are grinded and paste is given orally on cough and other lungs diseaseses.
9	<i>Sausurea lappa</i> (Decne) Sch- Bip (Kuth)	Asteraceae	Endangered	Rhizome	Rhizome of the plant is made into paste and boiled in mustard oil. This paste is applied externally on rheumatism.
10	<i>Thymus linearis</i> Benth. (Chicken, chikney)	Lamiaceae	Common	Whole plant	Paste of whole plant is given orally on lungs disease.
11	<i>Vitex negunda</i> Linn (Bana)	Verbenaceae	Common	Young leaves	Paste of leaves is given orally on indigestion.
12	<i>Zanthoxylum armatum</i> Linn (Timer)	Rutaceae	Common	Fruits	Fruits are grinded and given orally on digestive troubles.

IV. DISCUSSION

The study revealed that Gujjar and Pahari tribes are having a good knowledge in plant based ethno veterinary medicine. The preparation and dosage of administration against the ailment is mostly oral and in crude form. Seventy percent of the herbalists are from old generation, strongly bonded with their traditional wisdom. A

small cut is also made on ears with razor to cause blood flow. The traditional knowledge in the young generation is degrading at an alarming rate and needs to be reported immediately. The plants used in the herbal preparations are mostly collected from wild. The local people and researchers face the challenging task of not only documenting knowledge on plants but also applying the result of their studies to biodiversity conservation and community developments as well as to realize the invaluable therapeutic properties of this phytodiversity Bhera, *et. al* (2008).

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