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

JAMIL AHMED KHAN and RAJINDER PAUL

Department of Botany
Kisan. P. G. College, Simbhooali, HAPUR (U.P.) INDIA
*Corresponding Author
Email: JamilKhanmdr@gmail.com

Received: 25.08.17; Accepted: 12.10.17

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 8 genera of angiosperms used on pneumonia in cattle such as cows, sheep, goats and buffaloes in different areas of Poonch district. Due to poverty and nonavailability of modern health care facilities, the indigenous people of the area partially or fully depend on surrounding medicinal plants 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.

Figure: 00 References: 15 Table: 01

KEY WORDS: Ethnoveterinary, Medicinal plants, Pneumonia.

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 those, one of the botanically interesting district is Poonch 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 valley 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 number of cattle. The altitude of Poonch district varies from 1000 to 4700 m and above.

A review of literature showed that a lot of research has been carried out on ethnomedicine and floristic diversity in different parts of India. Poonch district of J & K is very less explored. Flora of British India4, Flora of upper Gangetic plain5, Indian Folk medicine6, ethno medicinal plants of Garwal Himalaya7 ethno veterinary medicinal plants of India8,9, indigenous veterinary practices of Dharma valley of Pithorgarh district, of Uttaranchal10, ethno botanical studies of district Rajouri of Jammu and Kashmir was studied11. Similarly taxonomical studies of some plants of ethnoveterinary importance in curing milk yielding animals of Kathua

ACKNOWLEDGEMENTS: The authors are thankful to the inhabitants of Poonch district who cooperated during the field work. Thanks are also due to Prof. H. S. Kim for his valuable suggestion and help during the identification of specimens.
### TABLE -1: Medicinal plants of Ethnoveterinary importance

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Bot. name</th>
<th>Family</th>
<th>Occurrence</th>
<th>Parts used</th>
<th>Method of preparation and mode of use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>Acorus calamus</em></td>
<td>Araceae</td>
<td>Common</td>
<td>Rhizome</td>
<td>Rhizome of the plant is grinded and given orally to the animal by wrapping in wheat dahlia.</td>
</tr>
<tr>
<td>2</td>
<td><em>Angelica glauca</em></td>
<td>Apiaceae</td>
<td>Endangered</td>
<td>Root</td>
<td>Root is grinded in water and given orally.</td>
</tr>
<tr>
<td>3</td>
<td><em>Aresaema jacquemontii</em></td>
<td>Araceae</td>
<td>Common</td>
<td>Berries</td>
<td>Berries are wrapped in wheat dahlia and given orally.</td>
</tr>
<tr>
<td>4</td>
<td><em>Aresaema propinquin</em></td>
<td>Araceae</td>
<td>Common</td>
<td>Berries</td>
<td>Berries are grinded in water and given orally by wrapping wheat dahlia.</td>
</tr>
<tr>
<td>5</td>
<td><em>Aresaema tortuosum</em></td>
<td>Araceae</td>
<td>Common</td>
<td>Berries</td>
<td>Berries are grinded and given orally by wrapping in periant of maiz cob.</td>
</tr>
<tr>
<td>6</td>
<td><em>Capsicum annuum</em></td>
<td>Solanceae</td>
<td>Common</td>
<td>Fruit</td>
<td>Fruits are grinded and given by wrapping in wheat dahlia.</td>
</tr>
<tr>
<td>7</td>
<td><em>Sauromatum pedatum</em></td>
<td>Araceae</td>
<td>Common</td>
<td>Fruit</td>
<td>Fruits are given orally by wrapping in wheat dahlia.</td>
</tr>
<tr>
<td>8</td>
<td><em>Skimmia anquielia</em></td>
<td>Rutaceae</td>
<td>Endangered</td>
<td>Leaves</td>
<td>Leaves are grinded and paste is given orally.</td>
</tr>
<tr>
<td>9</td>
<td><em>Sausurea lappa</em></td>
<td>Asteraceae</td>
<td>Endangered</td>
<td>Rhizome</td>
<td>Paste of rhizome is given orally.</td>
</tr>
<tr>
<td>10</td>
<td><em>Thymus linearis</em></td>
<td>Lamiaceae</td>
<td>Common</td>
<td>Whole plant</td>
<td>Paste of whole plant is given orally.</td>
</tr>
<tr>
<td>11</td>
<td><em>Vitex negunda</em></td>
<td>Verbenaceae</td>
<td>Common</td>
<td>Young leaves</td>
<td>Paste of leaves is given orally.</td>
</tr>
<tr>
<td>12</td>
<td><em>Zanthoxyllum armatum</em></td>
<td>Rutaceae</td>
<td>Common</td>
<td>Fruits</td>
<td>Fruits are grinded and given orally.</td>
</tr>
</tbody>
</table>
Ethnomedicinal plants are used in toothache, some plants used on snake bite, among the tribal people of Poonch district of Jammu and Kashmir.

**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 newspaper 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. Finally the identified specimens have been deposited in the department of Botany, K. P. G. College Simbhoali for further references.

**Results**

It has been observed that a total of 12 medicinal plant species are used by tribal people as ethnoveterinary medicine in the study area belonging to 10 genera and 8 families. Out of these one species namely *Capsicum annuum* is commonly cultivated. Three species of plants are highly endangered and need immediate attention for their conservation. There is roughless extraction of these species by the tribal people for the ethnomedicinal purpose as well as to sell 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.

**Discussion**

The study revealed that Gujjar and Pahari tribes are having a good knowledge in plant-based ethnoveterinary 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.

**References**


