

ETHNOMEDICINAL USES OF SOME PLANTS AMONG THE TRIBAL PEOPLE OF POONCH DISTRICT OF JAMMU AND KASHMIR NORTH WEST HIMALAYA (INDIA)

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Abstract : The present manuscript highlights the occurrence of some common plants used to cure different ailments by the tribal and rural people along with local names in different areas of Poonch district of Jammu and Kashmir. An ethno botanical survey was made from January 2010 - January 2012 and the data was collected through the cross examination of the inhabitants by visiting along with them in the field and in some cases by showing the herbarium sheets, live collection of the plants and photographs. The most common plant parts used to cure different diseases are root, rhizome, leaves and even whole plant parts for the treatment of abdominal colic, sexual disorder, spermatoreia, white discharge, dysentery and even the most dreaded diseases like cancer. The paper will be very useful for the scientific community in general and also for the conservation of traditional knowledge of the region.

Keywords : Ethno traditional, Knowledge, Poonch district (J&K) India, Rural, Tribal

INTRODUCTION

The ethno botanist all over the world are continuously trying to collect the information on the use of plants for various purposes, such as food, shelter and medicines at local regional and global level. The peoples in remote areas and tribals in far-flung areas have great faith in the effectiveness of medicinal herbs available from their surroundings. India is the rich repository of floral elements with more than 17500 flowering plant species out of which 3000 plant species have officially recognized for their medicinal value. It is generally established that over 6000 plants in India are used for traditional, folk and herbal medicines, representing about 75% of the medicinal need of the third world countries (Rashid 2010). Significant work has been done to explore the medicinal plants of Jammu and Kashmir as well as other parts of the country and world like [Kachroo and Nehvi (1976), Kachroo et al (1977), Sharma and Singh (1990), Jain (1991), Aswal (1996), Kapur (1999), Dangwal and Gour (2000), Sajim and Gosai (2006), Khan (2008), Chak et al. (2009), Tantry et al. (2009), Khan et al. (2009), Khan et al. (2010), Rashid (2010), Khan et al. (2011), Khan et al (2012), Mahmmod and Shah (2012).

The Himalayan region of Jammu and Kashmir in the lap of western Himalaya decorated with snow covered silver headed mountains is a reservoir varied types of floristic diversity and is also the home of many nomadic tribes like Guggers, Bakerwals and Paharis

possessing rich amount of traditional knowledge about the plants. The way they have taken advantage of the surrounding vegetation has long been the subject of research. The Jammu and Kashmir is having a good number of medicinal plants as compared to other parts of the country and so does the India with respect to other parts of the world.

Poonch district of Jammu and Kashmir is one of the hilly districts of the state bounded by district Rajouri in the west and Shopian in the east and Muzaffarabad in the west. The district lies in between 33° 35' – 34° 10' north latitude and 73° 30' - 74° 35' east longitude with a total area of 1674 square Kilometer. Out of the total 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 the Poonch district varies from 100 m above sea level to 400 m and above. The district has 4 tehsils, 6 CD blocks and 8 Naibets. Due to lack of proper motorable roads and being in far-flung areas the tribal and rural find it feasible to rely upon local herbal medicines for the treatment of various diseases by using plants in their own traditional method. Because of its wide altitudinal range, topography and climatic conditions the area under study shows a great deal of variation in its vegetation from subtropical to temperate and alpine. The collected ethno medicinal plants have been enumerated alphabetically providing scientific name, local name in brail and the curable diseases in table-1.

S No	Botanical name	Family	Parts used	Disease to be cured	Method of preparation and mode of use
	<i>Achyranthus aspera</i> Linn. (Phutkanda)	Araceae	Rhizome	Kidney stone	Take 5 to 10 gram of fresh Achyranthus root and grind it in about 10 to 20 gram water. Give this solution of water to the patient it cures stone in urinary bladder by breaking it into fine pieces.

	<i>Acorus calamus</i> Linn. (Bach)	Araceae	Rhizome	Paralysis and abdominal worms	Give two to three gram of it rhizome powder along with water.
	<i>Abelmoschus esculentus</i> L (Bhindi)	Malvaceae	Fruit	Haematuria	Grind about 100 gram of bhindi in about 250 gram of water until it gives mucilage. Give 60 to 70 gram of it to the patient again and again.
	<i>Aconitum heterophyllum</i> Linn. (Pattees)	Ranunculaceae	Root	Fever	Take two gram powder of patrees in about 10-30 gram butter it is useful in malarial fever
	<i>Adhatoda vesica</i> Medikus (Baiker)	Acanthaceae	Leaves	Toothache Cough and cold	Prepare decoction of its leaves and use it to gargle the teeth. Prepare decoction of about 20 gram of its leaves and add misri(sugar) in it. Give it to the patient at morning and evening time.
	<i>Ajuga bracteosa</i> Wallich ex Benth (Rati booti)	Lamiaceae	Whole plant	Diuretic	About 10-20 gram fresh plant is grinded with stones and juice of the plant is given on urinary disorder
	<i>Alium cepa</i> Linn. (Payas)	sexual problem & heart problem			1; Take about 200 gram to 250 gram onion daily as salad. 2; About 10-12 gram juice of onion is very useful for heart patient.
	<i>Alium sativum</i> Linn. (Thoom)	Liliaceae	Bulb	Dog bite	Paste of bulb is applied externally. About 2 to 4 gram bulb is also taken orally for three to four days.
	<i>Argyrobolium indica</i> (Baguni)	Fabaceae	All aerial parts	White discharge and spermatorrhea	About 20 to 30 gram its aerial parts are grinded and soaked in about 200 ml of water at night and given in the morning.
	<i>Asparagus filicinus</i> Buch.Ham. (Bansabooni)	Asparagaceae	Root	Dandruff	Grind its roots in water and wash hairs with it.
	<i>Abies pindrow</i>	Pinaceae	Stem bark	Abdominal colic	Decoction of the bark is taken on abdominal colic.
	<i>Berberis lycium</i>	Berberidaceae	Fruit and leaves	Constipation and wounds	Take fruits of it as much as can be eaten or about 250 gram two to three times in a day. Paste of leaves is applied on wounds caused by sickle during cutting of grass.
	<i>Calotropis procera</i> R Br (Ak)	Asclepiadaceae	1 Eye pain 2 Earache	Latex and leaves	1 Smear the nails of right foot if the pain is in left eye and left foot if the pain is in right eye. It will give quick pain in eyes. 2 crush the leaves and take their juice put two to three drops in ear.
	<i>Capsicum annuum</i> Linn. (Rati marchi)	Solanaceae	Fruit	Cholera	Dip finely dried powder in honey and give this to the patient of cholera equal to the grain of wheat (1 rati) after an interval of two hours.
	<i>Chenopodium album</i> Linn. (Bathwa)	Chenopodiaceae	Leaves	Bladder stone	Boil about 60-70 gram of its leaves in water at night as you make vegetable. Give this vegetable to the patient at morning at empty stomach for one month it cures the stone of urinary bladder
	<i>Coriandrum sativum</i> L. (Tandel)	Apiaceae	Leaves	Dysentery & Vomiting	Take 10 gram leaves of coriander 6 gram ajwain 6 gram salt and crush them in water to form a solution and give this solution to the

					patient.
	<i>Dactylorhiza Hategera</i> (Panj anglio)	Orchidaceae	Root	Sexual problem	About 6 gram powder is used daily along with milk.
	<i>Datura stramonium</i> Linn. (Tatura)	Solanaceae	Fruit	Rheumatism	Paste of seeds is made by grinding with stones along with water .Apply this paste on rheumatoid swelling of knees at bed time and tie with the help of cotton cloth
	<i>Flemingia fruticulosa</i> Linn. (Morini jari)	Fabaceae	Root	Respiratory problem	Prepare a deep red decoction of root by mixing with milk and salt as per taste and give the patient on phelum in chest.
	<i>Fumaria indica</i> L. (Papera)	Fumariaceae	Whole plant	Blood purifier	Use five gram of its powder daily
	<i>Gerbera Gossypina</i> Royle (Kough)	Asteraceae	Whole plant	Sexual problem	Take about 20 gram of whole plant of gerbera and grind it .Add about 200 gram of water and sugar (misri) ,soak it for at over night .Give this to the patient at morning .It cure sexual disorder caused by heat.
	<i>Heleanthus annuus</i>	Asteraceae	Leaves	Malaria	Grind about 12 gram of its leaves in 5 kali mirch pipper nigrum and give the patient to drink .
	<i>Hydrocotyl asiatica</i> (ghorey sumbhi)	Apiaceae	Whole plant	Dysurea and burning sensation in urin	Grind about 10 to 12 gram of its leaves in water and add misri in it .Give this to the patient at morning .
	<i>Jasminum dispersum</i> Wallich in Roxb (Chamba)	Oleaceae	Leaves	Healing up of wounds &crack of heals	Dried powder is applied on cuts and wounds. Apply fresh juice obtained by grinding with stones
	<i>Jurinia macrocephala</i> (Guggal)	Asteraceae	Root	Muscular pain in body &backache	Roots are grinded with stones and finley bruised .The bruised roots are boiled in water and after frying in excess ghee rice are boiled by adding jaggery .(gur).The soup of rice is the taken and boiled rice are eaten.
	<i>Linium usitatissimum</i> L. (Alsi)	Linaceae	Seeds	Backache and muscular pain Sexual potency	Prepare its halva in desi ghee it is very usefull in muscular pain Take about 5 gram line seed with black pepper and honey it thickens the semen and also increase the sexual potency
	<i>Malvastrum coromandalianum</i> L. (Tamni)	Malvaceae	Leaves	Spermmator ea and white discharge	Take about 5 to 10 gram powder of its leaves daily at morning and evening time. Soak about 20 to 40 gram fresh leaves (crushed and grinded with stones) in about 200 gram of water at night or until it gives mucilage and give the patient at morning time or two tmes if seriously ill.
	<i>Mangifera indica</i>	Anacardiaceae	Kernal	Diarroea	Take 4 to 5 gram pooweder of its kernel along with water.
	<i>Mentha arvensis</i> L. (Poodna)	Lamiaceae	Leaves	Dog bite	Paste of leaves is applied externally.Take decoction of about ten gram leaves in one cup of water for four to five days.
	<i>Narium indicum</i> L. (kaner)	Apocynaceae	Leaves	Cold	Use about two drops of its juice as nasya. It will cause sneezing and give releaf from cold.
	<i>Pinus roxburghi</i> Sargent (chir)	Pinaceae	Wood	Renal colic	Burn its wood and prepare powder .Mix four gram black salt in 12 gram of powder and

					prepare four doses .Give its one dose after an interval of 4 hours.
	<i>Pistacia chinensis</i> (Kanger)	Anacardiaceae	Galls	Dysentery and nose bleeding	Take about 3 to 4 gram powder of galls and take it along with curd on dysentery. About 2 gram powder of galls is given along with butter on nose bleeding.
	<i>Plumbago zeylanica</i> L. (Chitri boot i)	Plumbaginaceae	Root	Delivery	Dry its root in shade and grind it to form powder .Give 10 gram of its powder with 10-15 gram honey it causes easy delivery.
	<i>Polygonatum verticillatum</i> L. (Shirkunkal)	Liliaceae	Root	Weakness	Roots are collected in the month of sept and dried in shade .10- 20 gram of root powder is taken along with one glass of milk
	<i>Polygonatum multiflorum</i> L. (Kachli)	Liliaceae	Root	Complexation and weakness	About 10 to 20 gram root powder is given along with one glass of milk daily
	<i>Potentilla fragrioid</i>	Rosaceae	Root	Cough and fever	A deep red decoction of the root is prepared and given on cough (particularly to children) and fever with red rashes (rati mori in local dialect)
	<i>Pleurospermum candolli</i> (Sanji, Bri jari)	Apiaceae	Leaves and whole plant	Healing up of wounds and cancer	1 Paste of leaves is applied on wounds 2, About 5 to 7 gram powder of whole plant is given .
	<i>Quercus leucotrichophora</i> (Rein)	Fagaceae	Kernels	Diarrhea	Grind its kernel and give about 3 to 5 gram to the patient along with water
	<i>Sarcococa saligna</i> (Bansathra)		Root	Blood purifier	Give about three to four gram powder of its root bark .
	<i>Skimmia anquiltia</i> (Nera, Patla, Sagli)	Rutaceae	Leaves	Pneumonia, parasthesis and cancer	Prepare decoction of its leaf to the patient by adding milk or alone
	<i>Sorghum halepense</i> L. (Baru)	Poaceae	Root	Swelling of throat	Apply paste of it externally on throat .
	<i>Thalictrum foliosum</i> D. C. (Beny)	Ranunculaceae	Root	Blood purifier	Give 10 gram juice of its root daily to the patient .
	<i>Viburnum grandiflorum</i> Linn. (Kuch)	Caprifoliaceae	Flower	Pneumonia	Boil about 5 to 7 gram of flower in one glass and give it to the patient on pneumonia.
	<i>Valeriana jatamonsi</i> Jones (Bala)	Valerianaceae	leaves	Wounds	Paste of leaves is applied on wounds.
	<i>Vitis lanata</i> Roxburg (Dakh)	Vitaceae	Stem juice	Diuretic	Make a small hole in the stem of the plant and tie an earthen pot with it for at night so that the juice come in it. Use half to one glass of this by adding sugar at morning it cures retention of urine and dysuria.
	<i>Vitis vinefera</i> L. (Angur)	Vitaceae	Leaves	Kidney stone	Grind leaves of the plant in water and give this to the patient.
	<i>Withania somnifer</i> L. (Asgandh)	Solanaceae	Root	Sexual disorder	5 gram of its root powder is given daily along with milk
	<i>Zea mays</i> (mak)	Poaceae		Renal colic	Give decoction of its cob hairs .

	<i>Zingiber officinale</i> Roscoe (Adrak)	Zingibera ceae	Rhizom e	Sexual disorder	Take 10 gram juice onion 10 juice of ginger 10 gram pure honey and one egg yolk (remove white albumen from egg yolk completely) and give the patient at bed time it cures erectile dysfunction in three to four days.
	<i>Zyzyphus vulgaris</i> (Broi)	Rhamnaceae	Leaves	White discharge & Spermatorea	Take about 50 gram leaves and grind them .Soak the leave in water for at overnight and give the patient at morning.

MATERIAL AND METHOD

The paper is based on the data collected on the use of ethno medicinal plants by tribal, rural and elder citizen of the area from January 2010 to January 2012. The author collected a total of 30 plant species from different localities of the Poonch district used for medicinal purpose by the tribal and rural people. All the plants found in a particular area used for medicinal purpose were collected and the precise location of each plant was recorded on a separate note book.

Plant material was collected freshly from the respective villages and standard method of collection preservation and maintenance of specimens were followed as suggested by (Jain & Rao 1977). The plant species were identified with the help of available floras [Hooker (1872-1897); (Duthie 1903-1929); (Gour 1999)]. Doubtful plant specimens were matched with the herbaria housed at Indian Institute of Integrative Medicine Jammu. The standard methodology regarding the documentation was followed as suggested by Schultzes (1990), Jain (1981-1987) and Ford (1978).

OBSERVATION AND DISCUSSION

The Himalaya, known for its loftiest and longest mountain ranges in the world is a reservoir of enormous natural resources including the wealth of medicinal plants. The present paper enlists 44 plant species belonging to --- genera and ---- families. Among the enlisted plant species --- are monocotyledons and --- are dicotyledons. In the upper Pir Panjal and hilly areas of the district the traditional health care system is commonly practiced by the majority of the population of the tribal and rural people, both logistically and economically. The traditional health care system as practiced in the region consists of two systems; classical and folk stream. The folk stream system is based on oral traditions practiced by elderly village people and tribal communities (Non Codified system – N C S) whereas classical stream is based on theoretical knowledge, experimental and philosophical explanation provided by many learned physicians of early times like Charaka, Sushruta, Galen and Rhazes etc (Codified System – C S). Most of the modern

drugs that have revolutionized the modern medical practices have been isolated from plants and were used in the recent past for one or more purposes. Vincoblastin, Strophanthine, Resprine, Colchicine, Podophylotoxin, Steroids and Cortisone are some of the examples. The most common plant parts used are leaf, stem, root, bark and rhizome as fresh or in dried up condition and the preparations are mostly internally or sometimes externally in the form of juice, powder. Plant specimens are mostly collected from their surrounding and sometimes from long distantly located forest areas. The enlisted plant specimens are used to cure some common diseases like weakness, sexual disorder, fever, cough, pneumonia, parasthesia, muscular pain, cancer, dysuria, bladder, stone and toothache. The ethno medicinal uses of *Pleurospermum candollei* and *Skimmia anquillia* against cancer have been reported for the first time but the detail method of preparation and mode of use could not be worked out due to very rare information so the uses have been marked with an asterisk. The pharmacological activity of the above said plants are still required to be investigated which may become a milestone towards the identification of new compounds for the treatment of cancer. In the present day conditions most of the people of the rural areas are accepting the modern allopathic drugs leaving their traditional herbal medicine for the treatment of different diseases. But interestingly, it has been noticed that the tribal people in the upper Pir Panjal range.

REFERENCES

- Aswal, B.S. (1996). Conservation of Ethnomedicinal plants of Garwal Himalaya, India. In Jain S K (ed). Ethnobiology of Human Welfare. Deep publications, New Delhi.
- Badoni, A. K. and Badoni, K. (2001). Ethnobotanical heritage. In O P Kandari & O P Gusain (eds) Garwal Himalaya: Nature Culture and society. Transmedia media, Media House, Srinagar Garwal.
- Chak, I. Agarwal, R. K. Kak, A. AMD (2009). Ethnomedicinal study of some important medicinal plants used in the treatment of hair and boils in district Pulwama of Kashmir. Ann For, 17(1):101-107.

- Dangwal, L. R. and R. D. Gour** (2000). A new species of *Oxytropis*, D C .(Fabaceae) from Garwal Himalya ,U P ,India .,j Bombay ,Nat .Hist.Soc.**93**;570- 572
- Duthéi, J. F.** (1903 – 1929). Flora of Upper Gangetic Plain and of Adjacent Shiwalik and Sub himalyan Tract 3 .vol sri Gourang press Pvt .Ltd .Calcuta.
- Ford, R. L.** (1978). The nature and status of ethno botany .Anthropologica paper no 67 ,Mus,Anthrop ,University Michigam Arnold Arboretum.
- Hooker, J. D.** (1872- 1897). The Flora of British India .London 7 vol.
- Jain, S. K. and Rao, R. R.** (1977). Feild Herbarium Methods .Today and Tommorrow printers and publishers ,New Delhi .
- Jain, S. K.** (1991). Dictionary of Indian Folk Medicine and Ethnobotany Deep Publication ,Paschim Vihar ,New Delhi .
- Kachroo, P. and Nahvi, I. M.** (1976) .Ethnobotany of Kashmir in G singh and P Kachroo eds .Forest flora of Srinager and plants of Neighborhood, Dehradun , India
- Kachroo, P., Sapru., B. L. and Dhar, U.** (1977). Flora of Ladakh.Bishen Singh Mendher Paul singh ,Dheradun ,India.
- Kapur, S. K.** (1999 a). Tradionally important medicinal plants of Bhadewah Hills- Jammu Province – III J Econ and Tax Additional Series 12 scientific publishers Jodhpur (India) pp 70 – 74 .
- Khan, Ajaib, M., Zaheer, ud – din, Khan, N. Whab, M.** (2010). Ethnobotanical studies on some usefull shrubs of district Kotli Azad Jammu and Kashmir ,Pakistan pak J Bot **42** (3);1407- 1415.
- Khan, M., Kumar, S. and Irshad, H. A.** (2009). Medicinal plants of sewa River Cachment Area . in the North West Himalya and its Implications for conservation .Ethnobotanical leaflets **13** 1113 39 .
- Khan, M. A., Khan, A. S., Qureshi, M. A., Ahmed, G., Khan, M. A., Hussain, M. and Ghulam, M. G.** (2011). Ethnobotany of some usefull plants of Poonch Valley Azad Kashmir Journal of Medicinal plants Research vol **5**(26) pp 6160 – 6151.
- Kaul, M. K., Sharma, P. K. and Singh, V.** (1990). Ethnobotanical studies in North West and Trans Himalyas J Eco and Taxo Bot **14** (2): 271- 279.
- Khan, J. A., Wani, T. A., Kumar, S. and Ram, G.** (2012). Ethno medicinal plants used for toothache in poonch District of Jammu and Kashmir (India) ASIAN J . EXP.BIOLO.SCI.VOL **3**(2)2012: 415- 419.
- Khan, M. A.** (2008). Biodiversity and ethnobotany of Himalyan Region Poonch Valley Azad Kashmir ,Pakistan .Ph D Thesis Submitted to the Qued e Azam University Islamabad 2008 : 25 – 34 .
- Mahmood, T. and Shah, A.** (2012). Medicinal plants used by traditional healers of poonch district.Life Science Leaflets **5** ; 53 – 60 .
- Rashid, A.** (2010). Ethnobotanical studies of district rajouri of jammu and Kashmir ph D Thesis Jammu university jammu.
- Sajim, L. A. and Gosai, K.** (2006). Traditional use of Medicinal Plants by the Jaintia tribes in north Cachar Hills of Assam ,North East India .Journal of Ethnobiology and Ethnomed ;2;33
- Singh, H. B. and Subramaniyam** (2008) .Feild Mannual of Herbarium Techniques.Niscar (C S I R) , New Delhi
- Schultes, R. E.** (1960). Topping our heritage of Ethnobotanica lore.Eco. Bot.14 ,257 – 262.
- Tantry, M. A., Tariq, K. A., Mir, M. M., Bhat, M. A. and Shawl, A. S.** (2009). Ethnomedicinal survey of Shopian ,Kashmir J &K ,Asian Journal of Traditional Medicine;**4** (1) ;1- 6.