

ETHNOBOTANICAL NOTES ON SOME IMPORTANT PLANTS OF POONCH DISTRICT, JAMMU AND KASHMIR

Mahroof Khan, Rajesh Kumar and Sanjeev Kumar

Department of Botany, University of Jammu, J.&K.

Email-arafju80@gmail.com

Abstract: The present survey was conducted in District Poonch of Jammu and Kashmir State (Northwest Himalaya) with a view to consider only those plants which are easily available to the local populace for their day to day needs as most of the population in far flung areas is economically weak. The survey includes 28 plant species, of these, 11 are trees and have maximum pressure, as these yield fuel wood, wood for construction purposes, fodder, agricultural implements and edible fruits which are basic requirements of every household in rural areas.

INTRODUCTION

Himalayas are also known to provide the life support system to human beings, particularly due to the fact that on account of remoteness and inaccessible terrain, the local populace has largely depended on plants numerous subsistence needs. The number of people in India who rely on forest products is assumed to be approximately 50 million (Shiva, 1993). The rural populace dwelling Himalayas is economically weak and most of the areas are not connected by roads. They use forests for grazing, firewood collection and numerous other subsistence needs (Sabarwal and Ranagarajan, 2003). Forests are recognised means of meeting the needs of rural people for income, social and cultural benefits, while at the same time being sustainable. Himalayas are a treasure house of medicinal plants is a well known fact. The wealth is not only in terms of the number of unique species documented for their medicinal use but also in terms of the tremendous depth of traditional knowledge about such uses for human & livestock health besides agriculture (Kumar *et al.*, 2009b).

The realization of significance of the biodiversity in human welfare and in environmental and developmental context during earth summit has necessitated mandatory assessment of plant, animal and microbial resources of any region in the world (Kumar *et al.*, 2009a). Ethnobotanical assessment have been made by several workers in different pockets of Himalayas (Kaul *et al.*, 1986, 1989, 1990; Gurung, 1988; Kapur, 1989; Sharma and Singh, 1989; Amatya, 1996; Samant and Dhar, 1997; Samant *et al.*, 1998; Samant and Pal, 2003; Beigh *et al.*, 2004; Kumar *et al.*, 2009b, Kumar and Hamal, 2009; Khan, 2009a, 2009b), but only a few references are available as far as Poonch District is concerned (Kiran *et al.*, 1999; Kiran and Kapahi; 2001).

MATERIALS AND METHODS

Poonch is situated between 33°25' to 34°01' north latitude and between 73°58' to 74°35' east longitude. It is surrounded by Kashmir Valley in the north east; district Rajouri in the south and Pakistan Occupied Kashmir in the west. Spread over an area of 1,674 Sq. Km, Poonch District is totally hilly and mountainous barring few-low lying valleys. The area is inhabited by Gujjar, Bakerwal and Pahari tribes. The area has maximum rural population and in every house plants are used in one or the other way on daily basis for their basic requirements like fuel, wood fodder, construction purposes, agricultural implements, edible fruits and medicine. The present study is based on the intensive field surveys conducted in the different parts of the study area. Almost all the tribal inhabited areas were explored and attempts were made to gather the information from the local inhabitants. The information was gathered either by taking interviews of the informants or as a witness of the use during the period of studies in the field. Informants were also requested to accompany in the field to detect plants. The information received on the uses of plant species were verified from 2 to 3 other persons apart from primary source. The specimen of plant species were collected, dried and used for making voucher specimen following conventional methods of drying and preservation. The specimens were identified using available floristic literature (Hooker, 1872-1897; Sharma and Kachroo, 1981; Swami and Gupta, 1998; Singh and Kachroo, 1994; Anonymous, 2002).

RESULTS AND DISCUSSION

Quercus leucotrichophora A. Camus

Family: Fabaceae

Local name: Reen

Uses: Leaves extensively used as fodder during winter and springs, wood main source of construction, handles for agricultural implements, ploughs and fuel wood, fruits collected and fed to goats and sheep during winters.

***Pyrus pashia* Buch.-Ham. ex D. Don**

Family: Rosaceae

Local name: Batangi

Uses: Wood durable and preferred source for construction purposes, handle for agricultural implements and walking sticks and fuel wood, leaves used as fodder, Fruits edible.

***Ulmus wallichiana* Planch.**

Family: Ulmaceae

Local name: Manu

Uses: Bark used as rope substitute, wood for construction purposes, leaves as fodder for milch animals.

***Ficus palmata* Forssk.**

Family: Moraceae

Local name: Kameri

Uses: Sprouting leaves cooked with whey as vegetable, Latex applied to remove thorns from human skin, stem yield fuel wood and leaves as fodder.

***Prunus armeniaca* L.**

Family: Rosaceae

Local name: Haari

Uses: Seeds from nuts are crushed and used as flavouring agent in vegetable called "khatta saag" which has whey and *Amaranthus viridis* as other ingredients, wood burnt and coal is collected to use in winters

***Pistacia chinensis* Bunge**

Family: Anacardiaceae

Local name: Kangar

Uses: Leaves chopped and kept in heaps to feed animals during winters, dried pods are sold and also used for manufacturing desi liquor

***Broussonetia papyrifera* (L.) Vent.**

Family: Moraceae

Local name: Bankaimri

Uses: Leaves used as fodder, wood for construction purposes and fuel wood.

***Melia azedarach* L.**

Family: Meliaceae

Local name: Daraink

Uses: The young leaves are chopped and kept under water in rice fields to enhance seed germination, also used to enhance fruit ripening in *Pyrus communis*, Fruits collected and fed to sheep and goats during winters, wood preferred for doors and windows.

***Toona ciliata* M. Roem.**

Family: Meliaceae

Local name: Darove

Uses: Wood used for making doors and windows.

***Juglans regia* L.**

Family: Juglandaceae

Local name: Khor

Uses: Young leaves and bark used to cleanse teeth beside substitute of lipstick, wood preferred for boxes.

***Cedrus deodara* (Roxb. ex D. Don) G. Don**

Family: Pinaceae

Local name: Diyar

Uses: The resin extracted from roots is used to massage animals suffering from cold related diseases; wood is highly preferred source for construction purposes.

***Punica granatum* L.**

Family: Punicaceae

Local name: Daroo

Uses: Stem preferred source for thatching, fruit peelings dried and used for manufacturing desi liquor, fruit peeling and seeds are also sold in market.

***Grewia optiva* J. R. Drumm. ex Burret**

Family: Malvaceae

Local name: Tahman

Uses: Leaves considered highly nutritious for milch animals, barks used as rope substitute

***Berberis lycium* Royle**

Family: Berberidaceae

Local name: simlu

Uses: whole plant is used as fuel wood, decoction of plant roots especially with dark barks is effective against jaundice, chewed leaves are applied on injuries as coagulants and fruits are edible.

***Viburnum grandiflorum* Wall. ex DC.**

Family: Caprifoliaceae

Local name: Guch

Uses: The tender branches used in making basket, also used for thatching, twigs used to cleanse teeth.

***Zanthoxylum armatum* DC.**

Family: Rutaceae

Local name: Timer

Uses: Fruits used to prepare chattani, twigs are used to cleanse teeth and also sold in market

***Buddleja paniculata* Wall.**

Uses: Stem used extensively for basket making, twigs (maswaks) used to cleanse teeth

***Vitis vinifera* L.**

Family: Vitaceae

Local name: Daakh

Uses: Leaves used as fodder, Stem as rope substitute, fruits considered as tonic, Sap collected after making an incision near stem base during early springs is used against various liver ailments.

***Indigofera tinctoria* L.**

Family: Fabaceae

Local name: Kanthie

Uses: Young leaves used as fodder, stem preferred source for thatching and baskets which are also sold.

***Rumex nepalensis* Spreng.**

Family: Polygonaceae

Local name: Hula

Uses: Cooked leaves given against liver ailments, also rubbed with mustard oil and applied on swollen parts of human body.

Rumex hastatus

Family: Polygonaceae

Local name: Khateemal

Uses: Young leaves cooked with whey as vegetable

***Viola odorata* L.**

Family: Violaceae

Local name: banaksha

Uses: Decoction of whole plants mixed with maize flour is given to milch animals for better milk yield.

***Heracleum candicans* Wall. ex DC.**

Family: Apiaceae

Local name: Pandhe kooch

Uses: Leaves used to wash utensils meant for keeping milk as it is believed that it increases butter yield besides giving fragrance.

***Hedera nepalensis* K. Koch**

Family: Araliaceae

Local name :

Uses: Leaves used as fodder during winter for sheep and goats

***Solanum virginianum* L.**

Family: Solanaceae

Local name: Phatkari

Uses: The ripened fruits are squeezed in nostrils to remove leaches in humans and animals; juice extracted from stem is given orally to check excessive bleeding after delivery.

***Bergenia ciliata* (Haw.) Sternb.**

Family: Saxifragaceae

Local name: Banvewa

Uses: The rhizome is used as tea substitute, oiled leaves (mustard) bandaged on swollen parts.

***Amaranthus viridis* L.**

Family: Chenopodiaceae

Local name: Ghanar

Uses: Leaves cooked with whey and dish called "khata saag", Seeds kept in hand by women are moved around head of child seven times and thrown in fire to avoid evil spirits.

***Cynodon dactylon* L.**

Family: Poaceae

Local name: Khabal

Uses: Plants used along with leaves of *Vitex negundo* and capsule of *Capsicum annum*, kept on newly thrashed heaps of maize to prevent evil spirits from destroying grains.

REFERENCES

- Amatya, G.** (1996). Ethno-medicinal use of plants of Bara district, Nepal. In: Environment and Biodiversity in the context of South Asia, P.K. Jha; G.P.S. Ghimire; S.B. Karmacharya; S.R. Baral and P. Lacoul (Eds.). *Ecol. Soc.* Kathamandu, Nepal, pp: 260-263.
- Aswal, B.S.** (1994). Conservation of ethno-medicinal plant diversity of Garhwal Himalayas. Ethnobiology in human welfare. Abst. 4th Int. Cong. of Ethno-biology, Lucknow, U.P., India. Nov. 17-21, p145.
- Beigh, S.Y.; Nawchoo, I.A. and Iqbal, M.** (2004). Ethnobiology of Kashmir-studies on traditional medicine in Kashmir Himalaya and State, India. In: Azra, N. Kamili and A. R. Yousuf (eds.), Bioresource: concern and conservation, pp: 345-351. C.O.R.D., University of Kashmir.
- Gurung, V.L.** (1988). Useful pteridophytes of Nepal Himalaya. *Ad. Plant Sci.*, 1(1) : 67-76.

- Kant, S. and Dutt, H.C.** (2004). Plant species causing dermatitis from Bhaderwah, J&K, India. *Nat. J. Life sci.*, **1**(2): 449-452.
- Kapur, S.K.** (1989). Economically useful fodder plants of Ramnagar-Dudu Valley (Jammu Province). *J. Econ. Tax. Bot.*, **13**(1): 93-102.
- Kaul, M.K.; Sharma, P.K. and Singh, V.** (1986). Ethnobotanic studies in north-west and Trans Himalaya IV. Some traditionally used tea substitutes from Jammu and Kashmir. *Him. Plant J.*, **4**: 23-28.
- Kaul, M.K.; Sharma, P.K. and Singh, V.** (1989). Ethnobotanical studies in north-west and trans Himalaya VI. Contribution to the ethno-botany of Basohli-Bani region, J&K, India. *Bull. Bot. Surv. India*, **31**(1-4): 89-94.
- Kaul, M.K.; Sharma, P.K. and Singh, V.** (1990). Ethnobotanical studies in Northwest and Trans-Himalaya VII. Home remedies for arthritis in Kashmir Himalaya. *Arogya – J. Health Sci.*, **XVI**, 81-87.
- Kiran, H.S. and Kapahi, B.K.** (2001). Ethno-botanical notes on some fern and fern allies of Jammu and Kashmir State, India. *Indian Fern. J.*, **18**: 35-38.
- Kiran, H.S.; Kapahi, B.K. and Srivastava, T.N.** (1999). Ethno-botanical observation on the gymnosperms of Poonch district (J.&K. state) India. *J. Econ. Tax. Bot.*, **23**(1): 155-160.
- Kumar, S. and Hama, I.A.** (2009). Wild Edibles of Kishtwar High Altitude National Park in Northwest Himalaya, Jammu and Kashmir (India) *Ethnobotanical Leaflets* **13**: 195-202.
- Kumar, S.; Khan, M.; Araf, M. and Hamal, I.A.** (2009a). Diversity of Vascular plants in Kishtwar High Altitude National Park, Jammu and Kashmir (Northwest Himalaya). *The Ecoscan*, **3** (1&2): 177-187.
- Kumar, S.; Khan, M.; Araf, M. and Hamal, I.A.** (2009b). Indigenous Medicinal Plants of Kishtwar High Altitude National Park (Northwest Himalaya) Jammu and Kashmir, India- Diversity, Uses and Conservation concerns. *The Bioscan*, **4**(2): 335-343.
- Khan, Mahroof; Kumar, Satish and Hamal, Irshad Ahmed.** (2009). Diversity and ethnobotany of Pteridophytes of Sewa river Catchment area in Northwest Himalaya. *Life Science Bulletin*, **6**(2): 205-209.
- Khan, Mahroof; Kumar, Satish; Hamal, Irshad Ahmed and Kaul, Sanjeev.** (2009). Wild edible plants of Sewa river Catchment area in Northwest Himalaya. *Journal of Plant Development Sciences*, (1-2): 1-7.
- Samant, S.S. and Dhar, U.** (1997). Diversity, endemism and economic potential of wild edible plants of India Himalaya. *Int. J. Sustain. Dev. World Ecol.*, **4**: 179-91.
- Samant, S.S. and Pal, M.** (2003). Diversity and conservation status of medicinal plants in Uttaranchal State. *Indian Forester*, **129**(9):1090-1108.
- Samant, S.S.; Dhar, U. and Palni, L.M.S.** (1998). Medicinal plants of Indian Himalaya: Diversity Distribution Potential Values. Nainital:Gyanodaya Prakashan.
- Sharma, P.K. and Singh, V.** (1989). Ethno-botanical studies in northwest and trans Himalaya-V. Ethno-veterinary medicinal plants used in Jammu and Kashmir, India. *J. Ethno pharmacology*, **27**: 63-70.
- Venkatesh, V.,** (2002). *Medicinal plants senerio in India*. Foundation for revitalization of local health traditions. Banglore, India.
- Swami, A. and Gupta, B.K.** (1998). *Flora of Udhampur*. Bishen Singh Mahendra Pal Singh, Dehradun, India.
- Singh, J.B. and Kachroo, P.** (1994). *Forest flora of Pir Panjal range (Northwest Himalaya)*. Bishen Singh and Mahendra Pal Singh, Dehra Dun, India.
- Sharma, B.M. and Kachroo, P.** (1983). *Flora of Jammu and plants of neighborhood*. Dehradun.
- Hooker, J.D.** (1872-1897). *Flora of British India*. Vol. I-VII. London.