

Traditional use of medicinal plants: First record of Ethno- medical plants of Azmat abad village, Thannamandi, District Rajouri (J&K)

***Sajid Ali, Pragya Shrivastava and Mohd Junaid Jazib¹**

Department of Life Science,
Rabindranath Tagore University, BHOPAL (M.P.) INDIA

¹Department of Environmental Science,
Govt. PG College, RAJOURI (J&K) INDIA

*Corresponding Author

E-mail : sajidali30031995@gmail.com

Received : 30.08.2022; **Accepted** : 04.10.2022

ABSTRACT

The present study was conducted to document the ethno-medicinal plants and their usage by the Pahari community of Azmat abad village, Thannamandi of District Rajouri in J&K. Documentation is the first step in achieving conservation and sustainable use of medicinal plants on a local, regional, and global scale. The checklist of medical plants acts as baseline data for use by the researchers, policy makers, land managers and common people interested in documentation, conservation, and sustainable use. The altitude is 1982 m above the sea level supporting sub-tropical to temperate vegetation and offering congenial climatic condition favorable for the growth of medical plants. A total of 65 medicinal plant species belonging to 44 (Table-1) families were identified which are used by the local Pahari inhabitants as medicine, they need to be documented for the preservation and conservation.

Figure : 01

References : 11

Table : 01

KEY WORDS : Azmat abad village, Checklist, Documentation, Medicinal plant, Pahari community.

Introduction

Ethnobotany means relationship between people and plants². Pahari and tribal people obtain a variety of plant products from the wild to fulfill their own needs. Pahari community refers to the people inhabiting mountain area of the Himalayas and speaking an Indo-European dialect called Pahari⁴. Eighty percent of the world's people depend on traditional medicine for their primary healthcare needs. There are considerable economic benefits in the development of indigenous medicines and the use of medicinal plants for the treatment of various diseases¹¹. Due to fewer communication means, poverty, ignorance, and unavailability of modern health facilities, most people especially rural people are still forced to practice traditional medicines for their common day ailments. Most of these people form the poorest link in the trade of medicinal plants⁸.

Material and Method

Hotspots of Pahari-speaking people were identified and confirmed in the study area. An extensive field survey was carried out between March to July 2021 in these hotspots. Information on the use of plants and plant parts as medicine by the Pahari community of Azmat abad village was obtained through interviews with the villagers, Hakeems and elders in the Pahari language. Detailed names of plants and use of plants, parts used, method of preparation and mode of use were noted in the notebook.

Result and Discussion

A total of 65 medicinal plants belonging to 44 families (Table-1) were identified in the area and were used for various purposes^{1-3,5-10}. A vast knowledge among the old people and Hakeems of the Pahari community of Azmaabad village about the usage of plants needs to be Documented.

Nowadays changing agricultural parts, over-exploitation of the forest, and grassland soil and changing attitude of people towards the environment has resulted in tremendous decrease in medical health in the area.

Therefore, there is an urgent need to preserve and document this indigenous knowledge that prevails among the elders of the Pahari community so that our depleting plant's wealth could be saved.

Conclusion

These plant species cover an altitudinal gradient of 1680 -1982 m and are known by different local names. The plant species explored during the present survey have dual significance. Some of them are promising future food, while others carry immense medicinal importance and can have active constituents for future phytochemical analysis. These plants also represent an inexpensive source of locally available quality nutrition for the locals. Detailed research on these plants can further provide us better understanding of their medicinal and nutritional values.

TABLE-1:- List of Ethno -medicinal plants in study area and their uses

Botanical Name	Local Name (in pahari language)	Family	Ethno-medicinal uses
<i>Acacia nilotica</i>	Kikar	Mimosaceae	Leaves and bark extract is used to cure sore throat and dysentery.
<i>Aesculus indica</i>	San (Bankhori)	Hippocastanaceae	Leaves are used to cure chest disease of Donkey and horses.
<i>Allium sativum</i>	Thoom	Liliaceae	Acts as carminative and gastric stimulant, cure hypertension.
<i>Amaranthus viridis</i>	Ghanar	Amaranthaceae	Leaves are used against obesity, snake bite.
<i>Amaranthus spinosus</i>	Chaleri	Amaranthaceae	Mixture of leaves are used against pile and wounds.
<i>Berberis lyceum</i>	Simlu	Berberidaceae	Leaves are used to treat diabetes, scabies, pimple, jaundice and fever.
<i>Acorus calamus</i>	Bach	Araceae	Leaves and bark extract is used to cure sore throat and heal wounds.
<i>Leaves parvifolia</i>	Kankoli	Elaegnaceae	Twig extract is used as anticancer, fruit used against cough and pulmonary infection.
<i>Euphorbia helioscopia</i>	Dodal	Euphorbiaceae	Root extract is used as antihelminthic.
<i>Cryptolepis dubia</i>	Tamari	Asclepidaceae	Leaves are used against skin diseases.
<i>Cryptolepis dubia</i>	Tamari	Asclepidaceae	Leaves are used against skin diseases.
<i>Ficus palmata</i>	Phagwari	Moraceae	Fruits are used in lung and gall bladder infection.
<i>Debregeasia salicifolia</i>	Sanduri	Utricaceae	Grained fruits are used against bloody diarrhoea.
<i>Diospyros lotus</i>	Malook	Ebenaceae	Fruits are used as purgative and laxative agents.
<i>Euphorbia hirta</i>	Dodali	Euphorbiaceae	Plant juice is used against dysentery, cough etc.
<i>Cyperus rotundants</i>	Muthur	Cyperaceae	Stem and leaves are used against irregular menstruation and vomiting.
<i>Euphorbia royaleana</i>	Thor	Euphorbiaceae	Stem is used against joint pain.

<i>Canabis sativa</i>	Phang	Cannabinaceae	Whole plant is used as intoxicant, antiseptic, sedative and analgesic.
<i>Ficus auriculata</i>	Tussi	Moraceae	Fruits are used against constipation ,lungs etc.
<i>Bergenia ciliata</i>	Bud paow	Saxifragaceae	Leaves and roots are used in curing fever, asthma, diarrhoea, urinary disorder and for healing wounds.
<i>Cynodon dactylon</i>	Khabal	Poaceae	Whole plant with root extract is used as blood purifier, antiseptic and dressing wounds.
<i>Dioscorea bulbifera</i>	Kala ganda	Dioscoreaceae	Extract of tuber is used against diabetes.
<i>Arisaema tortulosum</i>	Sap mak	Araceae	Tuber is antidote used aganist the snake bite,also used in stomach pain.
<i>Dodonea viscosa</i>	Sanatha	Sapindaceae	Leaves are used in gout and rheumatic pain.
<i>Allium cepa</i>	Piaz	Liliaceae	Acts as stimulant, diuretic and expectorant.
<i>Desmodim triflorum</i>	Jangli methi	Fabaceae	Leaves are used against breast pain and spleen disorder.
<i>Morchella vulgaris</i>	Gucchi	Ascomycetes	Plant juice extract is used aganist headache and fever.
<i>Nasturtium officinalis</i>	Cho	crucifereae	Cooked leaves are used aganist cold, cough, and blood purifier.
<i>Aloe vera</i>	Kamalgandhal	Liliaceae	Leaves are used as antihelmintic, it is also used in pile and jaundices.
<i>Arisaema flavum</i>	Hathbis	Araceae	Mixture of seed and rhizome is given to cattle for increasing milk.
<i>Butea monosperma</i>	Dhak	Fabacceae	Leaves are used as tonic against irregular menstruation.
<i>Calenddula officinalis</i>	Satbarga	Asteraceae	Young branches extract is used to relieve kidney pain and stone.
<i>Calotropis procera</i>	Aak	Asclepiadaceae	Leaves, flowers and seeds are used against fever, cold cough and asthma etc.
<i>Carissa caranata</i>	Granda	Apocynaceae	Fruits extract is used to cure jaundice

<i>Chenopodium album</i>	Bathua	Chenopodiaceae	Whole plants extract is used against anaemia.
<i>Cissampelos pareira</i>	Batbel	Menispermaceae	Leaves extract is used against cough, diarrhoea, dropsy and stomach pain.
<i>Ficus auriculata</i>	Tussi	Moraceae	Fruits are used against constipation.
<i>Grewia optiva</i>	Thaman	Malvaceae	Leaves are given to young animals to induce puberty and to cattle for the quick discharge of after birth.
<i>Indigofera heterantha</i>	Khanthi	Fabaceae	Leaves are used against toothache.
<i>Justica adhatoda</i>	Baykar	Acanthaceae	Leaves are tied around the joints to get rid of inflammation.
<i>Lepidium sativum</i>	Heleon	Brassicaceae	Seeds are used as eye cleaner.
<i>Lycopersicum esculentum</i>	Desi tamater	Solanaceae	Fruits are claimed as anticancer.
<i>Melia azadrach</i>	Darek	Meliaceae	Leaves are used as insecticides, diuretic.
<i>Mentha longifolia</i>	Jungli pudna	Lamiaceae	Leaves and twigs are used against stomach-ache, asthma, cough and fever.
<i>Morus alba</i>	Toot	Moraceae	Used against sore throat, dyspepsia, acts as a purgative agent.
<i>Rubus fruticosus</i>	Akhra	Rosaceae	Fruits are used against diarrhoea.
<i>Rumex nepalensis</i>	Hand	Polygonaceae	Extracted leaves are used against wounds and skin problems.
<i>Olea cuspidata</i>	Khu	Oleaceae	Leaves extract is used against gonorrhoea and whooping
<i>Pinus roxburghi</i>	Chir	Pinaceae	Used against diarrhoea and tuberculosis, patients are advised to sit under the shade for quick recovery.
<i>Pistacia chinensis</i>	Kanghar	Anaracrdiaceae	The exudate secreted from plants stem is used as a therapy for treatment of burns and stomach ulcers.
<i>Plantago major</i>	Jungli isogolal	Plantaginaceae	Seeds are used in gastric problems and burning sensation of stomach, against dysentery.

<i>Pyrus persica</i>	Dandalle	Rosaceae	Antipyretic.
<i>Punica granatum</i>	Dharunna	Punicaceae	Fruits juice is used against diarrhoea, dysentery.
<i>Quercus oblongata</i>	Rein	Fagaceae	Corn and bark is used against indigestion, diarrhoea, gonorrhoea especially in children.
<i>Ranunculus sceleratus</i>	Khand baria	Ranunculaceae	Leaves are applied for gout, fever and asthma.
<i>Rhododendron arborium</i>	Hardali	Eriaceae	Flowers are used against dysentery and diarrhoea.
<i>Ricinus communis</i>	Haroni	Euphorbiaceae	Leaves are used against stomach pain.
<i>Rosa macrophylla</i>	Jungli gulab	Rosaceae	Juice is used for fever.
<i>Rosa moschata</i>	Phalwari	Rosaceae	Flowers are used against internal fever.
<i>Salix alba</i>	Bessa	Solanaceae	Bark acts as astringent and tonic is used in chronic skin infection like psoriasis.
<i>Salix babylonica</i>	Kashmiri besa	Solanaceae	Leaves and bark are used against fever, skin diseases.
<i>Salix denticulata</i>	Panjali besa	Solanaceae	Skin and bark are boiled in water and used in fever.
<i>Solanum pseudocapsicum</i>	Kach mach	Solanaceae	Leaves extract is used against weakness, fever, and intestinal worm.
<i>Viola odorata</i>	Banafsha	Violaceae	Powdered leaves and flowers are used against cold and cough.
<i>Viburnum grandiflorum</i>	Kuch	Caprifoliaceae	Leaves are given to cattle for constipation, stomachache.

References

1. Asif M, Haq SM, Yaqoob U, Hasan M, Jan HA. "A preliminary study on the ethno-traditional medicinal plant usage in tehsil "Karnah" of District Kupwara (Jammu and Kashmir) India." *Ethnobotany Research and Applications*. 2021; **21** : 1-14.
2. Azad, Shamim Ahmed, Anwer Shah. "Some ethno-medicinal plants of district Rajouri (Jammu province)." *Indian Journal of Life Sciences*. 2012; **1** (2): 47.
3. Bisht NS, Arun K Khajuria. "Ethno-medicinal plants of Tehsil, Kathua, Jammu & Kashmir." *J. Mount. Res*. 2014; **9** : 1-12.
4. Jamwal Jagbir Singh, Shashi Kant. "Ethno-Veterinary Herbal Practice in Kalakote Range, Rajouri (J&K), India." *Nat Environ Pollut Technol*. 2008; **7** : 571-2.
5. Kaul MK, PK Sharma, V. Singh. "Ethnobotanical Studies in Northwest and Trans-Himalaya VI. Contribution to the Ethnobotany of Basohli-Bani Region, J&K, India." *Nelumbo*. 1989; **31**(1-4): 89-94.
6. Kumari S, Batish DR, Singh HP, Negi K, Kohli KR. "An ethnobotanical survey of medicinal plants used by Gujar



Acacia nilotica (Kikar)



Aesculus indica (San)



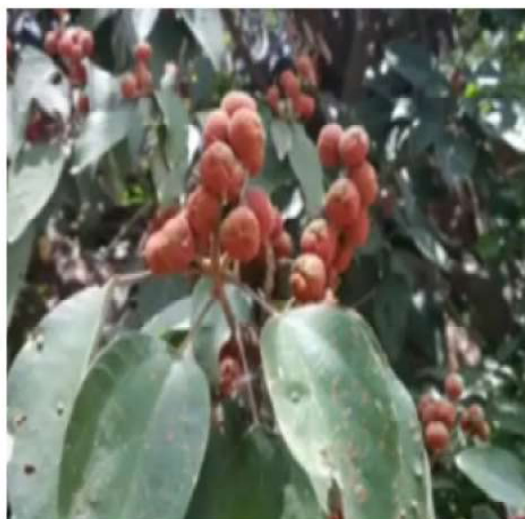
Allium sativum (Thoom)



Amaranthus viridis (Ghanar)



Berberis lyceum (Simlu)



Elaeagnus parvifolia (Kankoli)

Fig. 1 : Ethnomedicinal plants of Azmatabad village, Thanna Mandi Rajouri J&K, India.



***Ficus palmata* (Phagwari)**



***Diospyros lotus* (Malook)**



***Cyperus rotundus* (Mathur)**



***Cannabis sativa* (Phang)**



***Bergenia ciliata* (Bud paow)**



***Cynodon dactylon* (Khabal)**



***Arisaema tortulosum* (Sap mak)**



***Allium cepa* (Piaz)**



Morchella vulgaris



***Nasturtium officinalis* (cho)**

Fig. (1) Contd. Ethnomedicinal plants of Azmatabad village, Thanna Mandi Rajouri (J&K) India.

Community of Trikuta Hills in Jammu and Kashmir, India." *The Gujjars-Vol 04 (Gujjars History & Culture)*. 2013 by Dr. Javaid Rahi.

7. Rashid Abdul. "Medicinal Plant Diversity Utilized in the Treatment of Gastrointestinal Disorders by the Gujjar-Bakerwal Tribe of District Rajouri of Jammu And Kashmir State." *The Gujjars*. 2012; **4** : (*Gujjars History & Culture*) by Dr. Javaid Rahi.
8. Rashid Abdul. "Dye yielding plant diversity of district Rajouri Jammu and Kashmir state-India." *Int J Pharm Bio Sci*. 2013; **4**(1) : 263-266.
9. Sarad Shali, Anjali Sharma, Narendra Kumar. "Distribution, Diversity, Indigenous Use and its Utilization of the Ethno medicinal Flora of Rajouri District, J & K, India." *Int. J. Life. Sci. Scienti. Res*. 2017; **3**(1) : 820-827.
10. Shah Anwer, Javed Ahmad, Maheshwar Prasad Sharma. "Medicinal shrubs used by Gujjar-Bakerwal tribes against various non-communicable diseases in Rajouri district,(J&K), India." *The Gujjars*. 2017; **6** : Edited by Dr. Javaid Rahi Book series on Gujjar History and Culture.
11. Shah A, Bharti KA, Ahmad J, Sharma MP. "New ethnomedicinal claims from Gujjar and Bakerwals tribes of Rajouri and Poonch districts of Jammu and Kashmir, India." *Journal of ethnopharmacology*. 2015; **119** : 119-128.