

**A REVIEW ON ETHNOBOTANICAL USES OF SOME COMMON PLANTS IN MATLI
VILLAGE, UTTARKASHI, UTTARAKHAND.**

Chhaya Singh*, Priyanka Nautiyal,**Neha Chauhan**, Shagun Gupta**

**, *Shri Guru Ram Rai University, Patel Nagar, Dehradun

Email: singh_june07@rediffmail.com

ABSTRACT: The present study focuses on the Ethnobotanical uses of some common plants of Matli village, Uttarkashi district. 15 tree species belonging to 14 families common in the area have been reported. All the plants reported from the area have medicinal importance. The details of the plants such as botanical name, family, parts used, uses, common name, plant parts most harvested and the use of different parts for different medicinal purpose etc are also given in the paper.

*Corresponding author: Chhaya Singh, ¹Division of Life Sciences, Shri Guru Ram Rai Institute of Technology and Sciences, Dehradun, India. singh_june07@rediffmail.com

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INTRODUCTION

Form the ancient time till the present day the plants are used by humans for different purpose and the most important among them is medicinal purpose. As the importance of indigenous knowledge was understood it was formulated, documented and eventually past into the organize systems of medicines such as Ayurveda, Yunani, Sidha or other systems. Subsequently, with the advanced in the techniques of phytochemistry and pharmacology, a number of active principles of medicinal plants were isolated and introduce as valuable drugs in modern system of medicine (Ved Prakash, 2001). Due to variation in size and elevation, the Himalaya represents a complete transaction from tropical to temperate conditions inspire of its location near the tropics. 1748 species of medicinal plant have been reported from the Indian Himalayan region (IHR), of these 701 species occur in Uttarakhand state (West Himalaya). In the region most medicinal plants are being extracted for drug and pharmaceutical industries from the wild (Mehta, 2001). The earliest references of the curative properties of plants appear in Rigveda, which is said to be written between 3,500-1,600 B.C. Large number of drugs their properties and uses in some details are described in Ayurveda. Works of charaka and susruta namely 'Charak Sanhita' deals with about 700 drugs, few of which were not indigenous to India (Jain, 1968). Uttarkashi located in the upper Himalayas is shows varied geographic environment ranging from snow free valley and outer hills to the peaks laden with snow and glaciers. Due to varying climate and topography there s a wide range of vegetation which serve as habitats to diverse species of wild life. Due to the richness in variety of vegetation the forest occupies a place of pride in the environment of the district. The forest cover in the region is around 60 percent to 80 percent, housing variety of trees, flowers, wild animals, birds, fish and butterflies. Different types of trees are found in different altitude ranges .Between 1,000 metres to 2,000 metres, the forest cover is almost exclusively of pine. Between 2,000 metres to 3,000 metres are found forests of Deodar, oak and rhododendron. Several medicinal herbs and plants are found at higher altitudes and in the valleys of Uttarkashi District.

The descriptions of forest of district Uttarkashi are as follows:
Pine forest (900-2000 meters) Deodar forest (2000-3000 meters)

Fix and spruce forest (over 3000 meters) Kharshu,

Birch and Junipers forests (up to 4000 meters)

Alpine zone (3500-4877 meters).

Village Matli is situated on the Rishikesh-Gangotry Highway hardly 7 km earlier from its Distt Hq Uttarkashi. The area is inhabitant by Nautiyal Cast who migrated from village Nauti of Distt Pauri garhwal.

MATERIAL AND METHODS

The present study was based on a field survey in Matli village, Uttarkashi, to find the plants of ethnobotanical uses. The work was conducted among local people, rural persons, farmers and vaidyas to know the local names and different uses as well as medicinal importance of mentioned plants. The plants with medicinal values, as known from local people and rural persons were collected and studies were made to know their medicinal uses.

RESULT AND DISCUSSION

Ethnobotanical information on plants and their different uses by indigenous people is useful not only for the conservation of traditional knowledge and biodiversity, but also to promote community health care, and also help in drug development. The study provides the scientific names for all plants collected, taxonomic description as well as information on the parts used in Table 1. 15 tree species belonging to 14 families common in the area of ethnobotanical importance have been recorded in Matli, Uttarkashi district. Out of the 15 plants all of them have medicinal importance while 6 of them are used for edible purpose, while 2 for fodder and 1 plant species for fuel as mentioned in fig 1. If we notice the medicinal use of these plants it is found that leaves of 7 plants are used for medicinal purpose such as *Melia azedarch*, *Zanthoxylem armatum*, *Mentha*, *Cannabis etc* while fruit of 6 plant species such as *Phyllanthus emblica*, *Carissa opaca*, *Mallotus Philippensis etc* followed by 4 plant species have flower of medicinal importance such as *Phanera variegata*, *Bomax ceiba etc*. Apart from these plant parts such as resin, glands, bark of the plant listed also holds medicinal importance as shown in fig 2. The plant parts of the plant are used in disesase such as asthma, kidney problems, jaundice, osteoarthritis, bowel diseases etc. It can be concluded from the study that medicinal plants are commonly used by local people of the region. The plants of the area can come under threat because of overexploitation, including clearing land for agriculture, encroachment and abrupt change in environmental conditions. The majority of the inhabitants seem to be unaware of the great threat to medicinal plants growing in the wild. The data presented will help to fill this educational and awareness gap. Therefore there is an immediate requirement to educate and bring awareness in the local communities, through meetings, awareness and training programs about the importance of medicinal plants and their protection. In particular, emphasis of the plants used for medicinal purpose and their importance should be highlighted and their preservation and sustainable use must be included in future conservation strategies. Further studies are required in different aspects such as photochemical, biochemical, antimicrobial, antifungal, antihelminthic of these plants for detailed study.

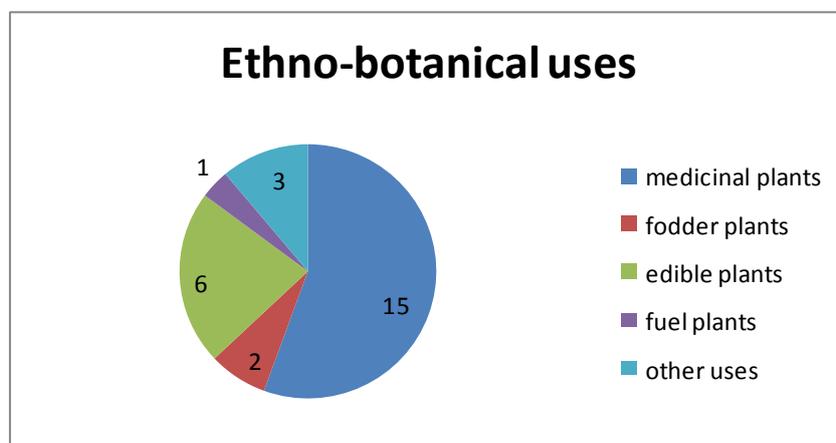


Fig 1. Plants and their Ethnobotanical uses

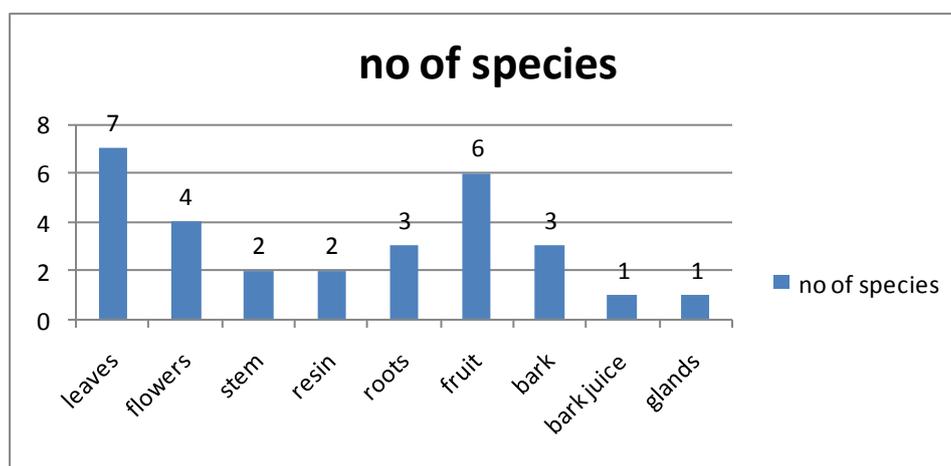


Fig 2. Number of plant species produced medicine from different parts

Table 1. Ethnobotanical uses of plants along with botanical, parts used and family

Botanical name	Common name	English name	Family	Part used	Uses
1. <i>Murraya koenigii</i>	Gandela	Curry leaf	Rutaceae	Leaf	Its leaves are used in many dishes in India. The leaves of <i>Murraya koenigii</i> are used for liver damage, body aches and snake bites.
2. <i>Pinus roxburghii</i>	Cheer	Pine tree	Pinaceae	Leaf,seed,stem	Pinus are among the most commercially important tree species valued for their timber and wood pulp through the world. The plant helps in arthritis, dizziness.
3. <i>Aloe vera</i>	Rambaans	Alovera	Asphodelaceae	Stem	It is found in many consumer products including skin lotion, cosmetics, or ointments for minor burns and sunburns. Apart from it also used for osteoarthritis, bowel diseases, fever, itching and inflammation.
4. <i>Zanthoxylum armatum</i>	Tumburu	Tomar	Rutaceae	Seed,stem	Tumburu is a medicinal tree. its leaves, roots, stem and seeds are used for medicinal purpose. It is used traditionally to get relief from tooth ache .
5. <i>Phyllanthus emblica</i>	Amla	Emblic	Phyllanthaceae	Fruit	In traditional Indian medicine, dried and fresh fruits of the plant are used. The most common use is for reliving digestive system.
6. <i>Carissa opaca</i>	Karonda	Natal plum	Apocynaceae	Fruit	The fruit used for making pickles, jems and antiscorbutic. They are used for asthma, kidney problems and jaundice.

7. <i>Bombax ceiba</i>	Semal	Cotton tree	Malvaceae	Flower bud	Bombax ceiba can be used at home to treat diarrhoea, dysentery.
8. <i>Phanera variegata</i>	Guryal(kachnar)	Orchid tree	Fabaceae	Flower,bud	Kachanar tree is one of the most important herb in ayurvedic medicine system.its leaves and buds are eaten as vegetable.
9. <i>Prunus cerasoides</i>	Papaya	Sour cherry	Rosaceae	stem	Prunus cerasoides is cultivated as an ornamental tree.The wood is hard,strong, durable and aromatic,and branches are used as walking sticks. it is an Ayurvedic herb used for the treatment of skin diseases.
10. <i>Melia azedarach</i>	Dainkan	China berry tree	Meliaceae	Leaves stem	Melia azedarach have been grown by farmers and used as fodder trees. The leaves can be fed to cattle to improve milk yields and improve farm incomes.
11. <i>Mallotus philippensis</i>	Riunya	Kamala tree	Euphorbiaceae	Leaves,stem	Mallotus philippensis is used to produces red dye and herbal remedies. it is used for skin disease. The leaves of mallotus philippensis used for fungal skin infection.
12. <i>Grewia optiva</i>	Bheemal	Dhaman	Tiliaceae	Leaf,stem,branches	Folk medicine makes use of some species, which are reputed to cure upset stomachs and some skin and intestinal infection, and seem to have mild antibiotic properties. The leaves of grewia optiva used for cattle feed.
13. <i>Mentha longifolia</i>	Pudina	Mint	Lamiaceae	Leaves,stem	Found in most parts of the country and easy to harvested, wild mint is a popular traditional medicine. it is mostly the leaves that are used, usually to make a tea that is drunk for cough,cold, stomach cramps,asthma, indigestion and headaches.
14. <i>Ficus palmata</i>	Bedu(fedu)	Wild fig	Moraceae	Fruit,leaves,stem	The whole fruit, along with the seeds, is edible. The unripe fruits and young growth are cooked and eaten as a vegetable.
15. <i>Cannabis sativa</i>	Bhang	Bhang	Cannabaceae	Leaves,stem	Its seeds are chiefly used to make hempseed oil which can be used for cooking,lamps, lacquers,or paints. They can also be used as Caged-bird feed,as they provide a moderate source of nutrients for most birds.

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