

Ethnomedicinal plants of Bhatauliya village, District Mahottari, Nepal

Shipra Verma¹ & Indu Kumari²

¹University Department of Botany, B. N. Mandal University, Madhepura, Bihar, India

²Department of Botany, SNSRKS College, Saharsa, Bihar, India

Received : 06th January, 2026 ; Accepted : 07th February, 2026

DOI:- <https://doi.org/10.5281/zenodo.19982327>

ABSTRACT

Near the Indo-Nepal border in the central-southern part of the country of Nepal, lies a small, sleepish village called Bhatauliya located in Mahottari district. It lies at approximate coordinates 26.68 °N and 85.77 ° E and falls in the Madhesh Province (formerly Janakpur Zone) in south-eastern Nepal. Bhatauliya village is in the Nepal Terai region which hosts various medicinal plants used traditionally by local communities for health remedies. Altogether 20 plants of medicinal use were identified out of which one belongs to Pteridophytes and 19 belongs to Angiosperms. These 20 plants are used against 26 different human diseases. In addition 10 plants species were identified which are being used for the treatment of domestic animals.

Key Words - Bhatauliya, medicinal, local communities, health, traditional, herbs.

***Corresponding author** : shipraak@gmail.com

INTRODUCTION

The people of Nepal are well acquainted with the medicinal use of plants for various ailments. Several ethnic groups of this country have developed their own knowledge for the medicinal use of plants against different ailments (Rajbhandari and Wrinkler, 2015). Nepal was mentioned as a hub of medicinal plants in the Vedic and Pauranic literature (Baral and Kurmi, 2006). In Nepal, folk healers have a good knowledge of herbal medicine which they learn through generation to generation (Gupta *et al.*, 2014). A large number of workers have reported Ethno medicinal plants from different parts of Nepal. Paudyal (2021) reported 35 plant species of medicinal plants from Bhojpur district of Nepal. Shreshtha *et al.* (2016) reported 48 plant species from TMJ area of eastern Nepal. Rabina Rai and N. B. Singh (2015) reported 87 plant species for the treatment of 65 types of diseases from Bhojpur.

Bhatauliya is a small village settlement in the Madhesh region of Nepal Terai. It is located in the

Mahottari district of Janakpur zone, south central Nepal. This Terai village has traditionally depended on ethno medicinal herbs widely occurring in this area and the indigenous people here still rely on these natural plants which they commonly consume in their daily diet, as well as for maintaining their regular health and fitness. The Jaleswor Mahadev Temple is about 4.4 kilometers away from this village, which is a prominent tourist and spiritual attraction. Janakpur Dham and Mata Janki Temple is also located near to Bhatauliya village. In this village people follow traditional knowledge built upon the long experiences of ancestors which is adopted in social, economic, environmental, spiritual practices and is significant of their culture. Early memories of Bhatauliya vividly reminisces that most of the common human ailments were often treated at home using certain medicinal plants. 70% of identified species used to treat common ailments being herbs and 40% of ailments were treated using leaves. The close and traditional

dependence of the villagers and indigenous local communities on natural biological resources were sufficient for these people and the villagers are confident regarding the efficacy of such ethnic plant usage in medicinal purposes. Over the years however, the growing appreciation of the value of traditional knowledge and its importance in conservation and development is now being recognized widely. The simple, rural folk have deep knowledge of these ethno -medicinal flora which they have continued to implement in their daily life.

METHODOLOGY

This document was prepared with the help of interviews conducted with the villagers of Bhatauliya village. The villagers talked about the plants and also the methods of their usage in different ailments. This study and documentation are important due to its importance to development, conservation and other wide range of uses also for other people than those who are traditionally



Fig. 1- Photograph of Bhatauliya village, district Mahottari, Nepal.

RESULTS

Ethnomedicinal plants of Bhatauliya

Altogether 20 plants of medicinal use were identified out of which one belongs to Pteridophytes and 19 belongs to Angiosperms. These 20 plants are used against 26 different human diseases (mentioned in Table1). In addition, 10 plants species were identified which are being used for the treatment of domestic animals (Table 2).

The typical Terai plain climate of village Bhatauliya with hot, humid summers, a wet monsoon season

dependent on it. The people of Bhatauliya, located in the *Madhesh* Province of Nepal, fluently speak Hindi and Maithili. Among the 71 people interviewed, out of which 45 were from *Tharu* community (25 were women and 20 were men); 7 men were from The Tamang community and 5 were women); 14 people were from *Gurung* community). The most significant thing is that the local villagers are aware of the ethnomedicinal benefits of most of the herbs. Though the village is extremely backward and the literacy rate is quite poor here, yet these people are extremely rich in traditional knowledge regarding the natural vegetation and they have incorporated that beneficial knowledge into their daily living.

Plants were collected and herbarium was prepared from each specimen. The collected plants were identified on the basis of standard monographs (Stainton, 1988; Shreshtha, 1998; Baral and Kurmi, 2006).



Fig. 2- Village Bhatauliya-A girl collecting firewood as daily chore.

and mild, dry winters results in a characteristic natural flora with more herbs such as *Asparagus racemosus* (Kurilo), *Arisaema jacquemontii*, *Argemone mexicana*, *Artemisia indica*, *Bacopa monnieri* (Brahmi) and some common perennial trees such as *Mangifera indica* (Mango), *Psidium guajava* (guava) and *Azadirachta* (Neem). Bhatauliya village represents a diverse range of traditional medicinal flora – the fertile plains and the forests, boast of a rich ethnomedicinal flora. There are a number of wild and cultivated herbs

which are used to treat various human ailments such as cough, dysentery, fever, wounds and skin infections as well as for mental issues and pain relief.

Common regional ailments of Bhatauliya village:

Dysentery, Appetite loss, Urological Conditions, Pain relief, Gastrointestinal issues, Diarrhea, Sterility,

Respiratory problems, Memory Loss, Wounds, Diuretic issues, Tumors, Eye issues, Leprosy, Mental disorders, Schizophrenia, Digestive issues, Inflammation, Skin diseases, Hypertension, Skin infections and parasites, Fever, Infections, Cough, Hair loss.

Some Ethno medicinally important flora:

Table 1. Ethnomedicinal plants and their uses

Sl. No.	Botanical Name	Common Name	Family	Medicinal use
1.	<i>Acorus calamus</i>	Sweet flag, Muskrat	Acoraceae	respiratory and digestive disorders
2.	<i>Adiantum venustum</i>	Black Hansraj	Pteridaceae	piles/hair
3.	<i>Asparagus racemosus</i>	Kurilo	Asparagaceae	tonic, reproductive health
4.	<i>Arisaema jacquemontii</i>	Baanko/Sarpako Makai	Araceae	knee pain
5.	<i>Argemone mexicana</i>	Satyanasi/Sungure kanda	Papavaceae	eczema, ringworm, jaundice
6.	<i>Artemisia indica</i>	Titepati	Asteraceae	fever, menstrual pain, rheumatic pain
7.	<i>Azadirachta indica</i>	Neem	Meliaceae	skin diseases, infection, anti-parasital
8.	<i>Bacopa monnieri</i>	Brahmi	Plantaginaceae	memory enhancer, hair tonic, diuretic
9.	<i>Berberis lycium</i>	Kawado	Berberidaceae	kidney stones
10.	<i>Cannabis sativa</i>	Bhaango/Ganja	Cannabaceae	pain relief
11.	<i>Carica papaya</i>	Meva/Papita	Caricaceae	dysentery
12.	<i>Centella asiatica</i>	Khaanko saag/Ghod Tapre	Apiaceae	skin, leprosy, mental disorders
13.	<i>Colebrookea oppositifolia</i>	Dhursuli	Lamiaceae	dermatitis, dysentery, diarrhoea, peptic
14.	<i>Curcuma longa</i>	Haldi/Besara	Zingiberaceae	inflammation, wounds, digestive issues
15.	<i>Mimosa pudica</i>	Lajjalu/Chhuimui	Mimosaceae	piles and diarrhea
16.	<i>Rauwolfia serpentine</i>	Sarpagandha	Apocyanaceae	hypertension, insomnia, anxiety, schizo
17.	<i>Swertia chirata</i>	Bhunii neem	Gentianaceae	malaria, diabetes, fever
18.	<i>Trachyspermum ammi</i>	Jwano/Ajwain	Apiaceae	cough, diarrhea
19.	<i>Tinospora cordifolia</i>	Guduchi/Amritvalli	Menispermaceae	appetite loss, sterility
20.	<i>Viola canescens</i>	Banfasa/Safed violet	Violaceae	expectorant

Ethnoveterinary plants

This village of Bhatauliya in the Madhesh Province in Nepal, part of the Terai lowlands, not only takes care of the health of the small human population (*approx. 5000) but also vigilantly cares for the domesticated animals. They rely on ethnoveterinary plants for treating livestock ailments like gastrointestinal issues, respiratory problems, and reproductive disorders. Plants like *Kurilo* boost lactation and address sterility issues. Bhaango

(*Cannabis sativa*) is used to relieve pain, and for wounds and digestive issues in livestock. Neem is used for skin infections and against parasites for both animals and human. For respiratory and gastrointestinal relief, the most common plant used is *Trachyspermum ammi*. *Tinospora cordifolia* plant is used against cough, diarrhea, appetite loss and sterility.

Common Ethnoveterinary plants and their uses:

Table 2. Common Ethnoveterinary plants and their uses

Sl. No.	Botanical Name	Nepali Name	Family	Medicinal use
1	<i>Alstonia scholaris</i>	Chaatim/ Saptaparni	Apocyanaceae	Diarrhea, lactation, tonic
2	<i>Allium sativum</i>	Lahsun	Amaryllidaceae	Infections, GI problems
3	<i>Asparagus racemosus</i>	Kurilo	Asparagaceae	Lactation, mastitis, worms
4	<i>Achyranthes aspera</i>	Akmaaro/ Apamarg	Amaranthaceae	Placenta expulsion, parasites
5	<i>Azadirachta indica</i>	Neem	Meliaceae	Anthelmintic, wounds
6	<i>Cannabis sativa</i>	Bhaango	Cannabaceae	Pains, Cough, Diarrhea,
7	<i>Schima wallichii</i>	Chilaune	Theaceae	Stomach issues, worms
8	<i>Lindera neesiana</i>	Siltimur/Kirkiti	Lauraceae	Parasites, placenta removal
9	<i>Trachyspermum ammi</i>	Jwano/Ajwain	Apiaceae	Indigestion, cough, diarrhea
10	<i>Tinospora cordifolia</i>	Guduchi/Amritvalli	Menispermaceae	appetite loss, sterility

Traditional usage:

Bhatauliya being a fertile plain mostly, the common form of plants are dominantly herbs, along with some shrubs, trees and ferns. Some creepers of the mint family are predominantly consumed for health benefits. The method of consumption includes eating raw leaves, or making curry/ vegetable soups etc. or applying pastes on the affected area. The most common form of medicinal preparations are pastes (35%), decoctions (26%), powders (11.2%), and juices (6.6%). Local farmers use herbs, trees, and shrubs in forms such as pastes, powders, juices, and decoctions, often administered orally or dermally.

Trees like *Carica papaya*, *Azadirachta indica* are specially cultivated. Neem is the protector/ father of the village. Leaves of neem as well as its bark is applied for skin diseases, fever and infections. The papaya latex is used in *dysentery*. Roots of *Curcuma longa* is widely used for its anti-inflammatory properties and applied to wounds and digestive treatments. *Bacopa monnieri* or Brahmi- entire plant is used as a memory enhancer, hair tonic and diuretic. *Centella asiatica* used as 'saag' is also used as a decoction for skin conditions, leprosy and for mental disorders. The villagers consistently use Sarpagandha (*Rauwolfia serpentina*) to treat hypertension, insomnia, anxiety, and schizophrenia due to sedative and antihypertensive effects which is cultivated in the forest areas of Bhatauliya and a rare, endangered plant. The milky juice of *Argemone mexicana*'s treats tumors, while *Mimosa pudica* aids piles and diarrhea. *Arisaema jacquemontii* is effective in knee pain, *Adiantum venustum* for piles/hair, *Acorus calamus* for respiratory and digestive disorders and *Berberis lycium* is used for kidney stones.

CONCLUSION

Even today, Bhatauliya village has limited formal hospital infrastructure; most medical facilities available are community- level or private clinics. Most villagers in Bhatauliya rely on the traditional ethnomedicinal plants for common remedies. There is a rich variety of plants- both wild and cultivated; in the village which play their significant role in

the potential well-being and health care. They have their own reservoir of knowledge which they have perfected as a result of aeons of practice and experience. If modern science weds rural intelligence and their traditional healing knowledge the outcome shall be remarkable. Study revealed novel insights of these people into locally available medicinal plants used by farmers and healers for treating livestock ailments. Altogether 20 plants of medicinal use were identified out of which one belongs to Pteridophytes and 19 belongs to Angiosperms. These 20 plants are used against 26 different human diseases. In addition, 10 plants species were identified which are being used for the treatment of domestic animals.

The necessity is to retain and replenish this knowledge to the next generation who are rapidly migrating towards towns and cities in pursuit of higher knowledge and career prospects. Since traditional knowledge is developed through a long *trial and error*, this could guide search for new drugs. Together with the recognition of importance of traditional knowledge, serious concern about the loss of knowledge could be observed in last few years throughout the world. Despite many studies on various uses of plants a large number of plants and associated traditional uses still wait proper documentation. Some of the herbs are on the verge of being lost due to overharvesting and ecological changes. Such plants need to be conserved and this knowledge should be preserved and documented. Further analysis of the compounds present in these plants should be done. This natural reserve of biodiversity and ethnomedicinal plants should hence be highlighted and preserved.

ACKNOWLEDGEMENT

I am deeply thankful to Mr. Kamlesh Karn, Retd, PWD, Engr. and Mr. Saroj Karna, Headmaster from Bhatauliya village who gave their wise insight and all kinds of support I needed to compile this document.

DECLARATION

This document is new and original and exclusively documented and written by me, Shipra Verma, Research Scholar, BNMU, Madhepura.

REFERENCES

- Baral S.R. and Kurmi P.P. 2006. *A compedium of Medicinal plants in Nepal*, Rachna Sharma, Kathmandu Nepal.
- Gupta P, Sharma V, K. and Sharma S, 2014. *Healing traditions of north-western Himalayas*: www.springer.com 1978-81-322-1924-8
- Paudyal S.P., Rai Anita, Bishnu Dev Das, Niraj Paudyal. 2021. Ethnomedicinal knowledge of Rai community of Ramprasad Rai rural municipality, Bhojpur district of eastern Nepal, *European Journal of Biological research*. Doi <http://dx.doi.org/10.5281/zenodo.5139721>.
- Rabina Rai and N.B.Singh. 2015. Medico ethnobiology in Rai community: A case study from Baikunthe village development committee, Bhojpur, eastern Nepal. *Journal of Institute of Science and Technology*, 2015 20(1) 127-132
- Rajbhandari S. and Winkler D. 2015. Ethnobotany in Nepal: *An introduction to the natural history, ecology and human environment of the Himalayas* (Meshe G., C.A. Pendry and R. Chaudhary) Royal Botanic Garden, Edinburgh pp-271-285.
- Shreshtha K. 1998. *Dictionary of Nepalese plant name*. - Mandala Book Point, Kantipath, Kathmandu, Nepal.
- Shreshtha N., Shreshtha S., Laxmi Koju, K.K., Shreshth and Zhiheng Wang. 2016. Medicinal plant diversity and traditional healing practices in eastern Nepal, *Journal of Ethnopharmacology*. 192(2016) 292-301.
- Stainton A. 1988. *Flowers of the Himalayas: A Supplement*; Oxford University Press, New Delhi, India.
