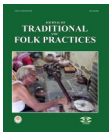
Volume 12 (02) December 2024, 20-27
ISSN 2278- 5906
https://doi.org/10.25173/jtfp.308
http://jtfp.jntbgri.res.in



Journal of Traditional and Folk Practices

Documentation of wild edible ethnomedicinal fruits in the Chamba region of Garhwal Himalaya, India

Lakhi Ram Dangwal*, Umang Kumar Shukla*, Tarseem Lal, Minakshi Rawat, Manisha Pundir, Biswaranjan Bhujabal and Aniket Panwar

Herbarium and Plant Systematic Laboratory, Department of Botany, HNB Garhwal University (A Central University), SRT Campus, Badshahi Thaul, Tehri Garhwal - 249 199, Uttarakhand, India

*drlrdangwal@gmail.com, shuklaumangkumar@gmail.com

Received: 28 August 2024 Accepted: 29 October 2024

Abstract

This study investigates the traditional knowledge of Wild Edible Fruits (WEFs), and its ethnomedicinal uses in the Chamba region of Tehri Garhwal, Uttarakhand, India. The field survey was conducted from January to July 2024, and it highlights the importance of these fruits in the local culture, socio-economic and their potential health benefits. The present study documented the 32 plant species from 27 genera and 19 families, showcasing the region's rich biodiversity of wild edible plants. The study area, characterized by its challenging geography and climate, supports a diverse range of WEFs, which are integral to the local diet and traditional medicine. These fruits, prized for their nutritional value and unique flavours, are consumed raw or used in various forms to treat ailments such as diabetes, digestive issues, and arthritis. The research underscores the significance of WEFs in maintaining traditional knowledge and supporting the livelihoods of local communities. The study observed that habitat loss, overharvesting, and policy gaps are serious threats to wild edible fruits (WEFs). It calls for the integration of WEFs into broader food systems and promoting sustainable use practices to protect the species and their habitats. The study documents the traditional uses and benefits of WEFs to strengthen conservation efforts and preserve their rich medicinal and cultural heritage for future generations.

Keywords: Health benefits, Tehri Garhwal, Traditional knowledge, Wild fruits

1. Introduction

The fruits grown or occurring in the wild are utilized by local people as a source of food are known as Wild Edible Fruits (WEFs). Humans have been dependent on forests to meet their needs since ancient times, with forests being a significant source of food, nutritional supplements and medicine. One of the best aspects of forest fruits is that they can be eaten raw, providing immediate satisfaction, energy and fulfil the deficiency of the essential mineral of the body. Climate and season of a place influence the variety of forest fruits, each offering unique tastes and colors. Since wild fruits have distinct tastes, textures, and colors, they are highly prized fruit crops. Recent research has demonstrated that the high antioxidant content, vitamins, minerals, and fibers of WEFs offer substantial health benefits (Saka and Msonthi, 1994). WEFs used as traditional medicine offer a more affordable, user-friendly, and long-term substitute for pharmaceuticals and synthetic medications (Dilshad *et al.,* 2010; Ajesh *et al.,* 2012). These wild fruits provide resistance against many diseases and are commonly used in various Ayurvedic treatments in traditional Indian medicine. India, recognized as one of the world's mega biodiverse countries, harbours approximately 45, 000 plant species. Out of which 15,000 to 20,000 plants are used as herbal remedies (Hazarika *et al.,* 2022). A large proportion of India's rural populace depends on wild flora for additional sustenance (Tiwari *et al.,* 2010; Dangwal and Lal, 2024). Most of these fruits have found use over the years within various cultures for the treatment of different kinds of afflictions. For instance, (Dangwal and Lal, 2024; Lal *et al.,* 2024) conducted an ethnobotanical investigation in

the Jaunpur region of Tehri district to document the ethnomedicinal uses of several species of WEFs. This highlights the significance of such fruits in local food culture and the role of such foods played in keeping traditional knowledge alive (Paul *et al.,* 2020).

Nevertheless, even though wild edible fruits have many advantages, they face significant challenges, including habitat destruction, overharvesting, and lack of integration into agricultural and conservation policies that must be addressed to ensure their sustainability. This perspective has been shared by researchers such as (Kennedy *et al.,* 2022), who have called for their integration into the wider food systems and devised conservation strategies that ensure the species, and their habitats are protected. Taking all these factors into account, the present study focuses on the documentation of wild edible ethnomedicinal fruits in the Chamba region of the Garhwal Himalaya, India.

2. Materials and methods

2.1. Study area

The investigation was conducted in Chamba block, a hill station in Tehri District of Garhwal Himalaya (Fig. 1). The investigation was conducted in the 10 key representative villages *viz*., Chopariyal Gaon, Shrikot, Pali, Dobhal Gaon, Uniyal Gaon, Lamkot, Dharsal Gaon, Saundkoti, Jagdhar and Koti, which are solely dependent on wild edible ethnomedicinal fruits. Tehri District of Garhwal Himalaya is unique and rich in vegetation, covering a diverse range of habitats from 400 -2000m above sea level (Dangwal, 2016). Geographically, this area comprises 34,832 hectares, which is equivalent to 6.96% of the overall land area of the district. It is situated between 78°36′ to 78°55′ E longitude and 30°26′ to 30°40′ N latitude (Dangwal *et al.,* 2010). Administratively, the Chamba block comprises 221 villages with a total population of 50,950 (eUttaranchal, 2025). It is located around 10.4 km from the District Headquarters in New Tehri. The local dialect Garhwali is predominantly spoken in Chamba interior, and Hindi was spoken in some parts of the block. Hindi-English language is more commonly spoken in ecotourism-linked places such as Tehri Lake, Surkanda Devi Temple (a peak of 2700 m above sea level), Khaadukhal, Kanatal, New Tehri, and Dhanaulti due to tourist arrival. The area is hilly in nature, with an average minimum temperature of 9.55° and a maximum temperature of 19.47°C, respectively, and the average annual rainfall is 108.88 mm (Dobhal *et al.,* 2023). This place has four distinct seasons *viz*., summer, spring, rainy, and winter in the region. The weather remains pleasant throughout the year at mid and upper elevations. However, the months from July to October typically experience heavy rainfall, landslides, and rainstorms, which cause significant disruption and hardship for the local population during the monsoon season.

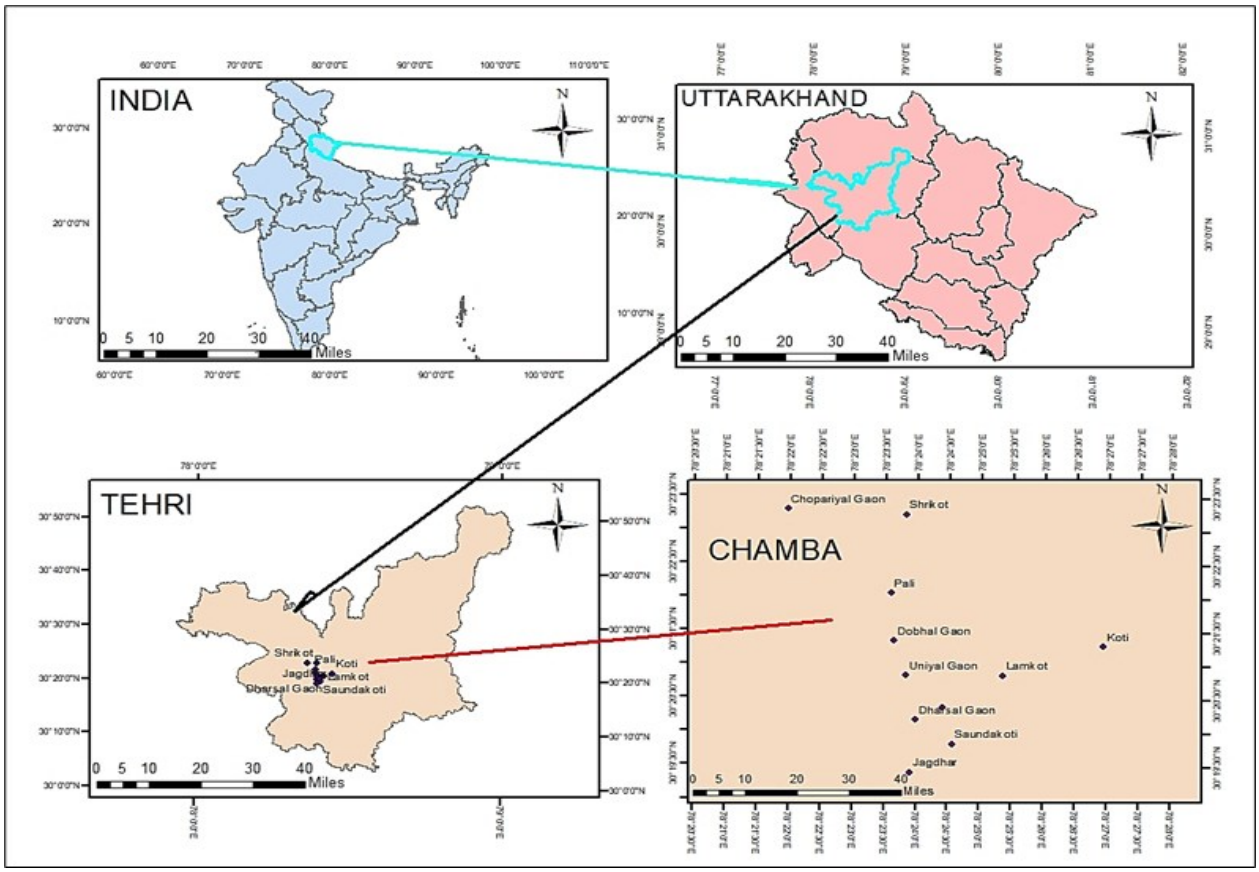


Fig. 1. Map of the study sites

The climatic conditions of the Chamba region are varied from subtropical (1000 m) to temperate zone (1800 m) at the elevation range. *Pinus roxburghii* Sarg, is an evergreen coniferous forest in the area followed by *Cedrus deodara* (Roxb. ex D. Don) G. Don., *Quercus leucotrichophora* A. Camus., and *Rhododendron arboreum* Sm.

2.2. Data collection

The ethnomedicinal surveys on WEFs were carried out from January to July 2024. The information on WEFs was collected through frequent field visits from local inhabitants through various methods such as questionnaires, semi-structured interviews, meetings and group discussions. Free, Prior Informed Consent (FPIC) was obtained prior to collecting the traditional knowledge of ethnomedicinal wild edible fruits (Plate 1 a-e).

Plate 1. a. Documentation of information of WEFs Interview with Mr. Manglanand Dabral at Chopyrial village; b. Personal meeting with Vaidya at Chamba with Mr. Mohamadh Inam; c-e. Interview with informants on wild edible fruits through questionnaires; f. Collection of *Rubus ellipticus* Sm., for edible purposes by Mr. Tarseem Lal at S.R.T. Campus.

The main respondents in the study were randomly selected and included a total of 92 individuals, consisting of 57 females and 35 males. Most of the local population worked as farmers, with other common occupations including housewives, priests (Pujari), shopkeepers, vaidyas, shepherds, teachers, Anganwadi workers, and retired officers. Potential threats to wild edible fruits (WEFs) were assessed through careful observation and semi-structured interviews (open-ended and semi-open-ended questions) with local informants of various age groups, ranging from 20 to 80 years, to verify the information. The information was gathered in the local dialect (Garhwali language) for the convenience of the local informants. The various methods of herbal preparation include decoction, powder, juice, paste, oil, pickle, and beverages, each creating distinct recipes. The consumption of harvested ripe fruits and raw fruits can be done directly (orally administrated) or indirectly (applied to the skin and the entire body) to treat specific ailments of the body.

The collected specimens of wild edible fruits were collected (Plate 1f), processed, and then identified by using regional Flora i.e., Flora of the district Garhwal northwestern Himalaya (Gaur, 1999) and validated from regional herbaria at the Botanical Survey of India, Northern Circle (BSD), Dehradun. The standard survey methods were used to collect, maintain, and preserve specimens (Jain and Rao, 1977; Singh and Subramaniyam, 2008). The processed botanical specimens were submitted to the herbarium of Department of Botany, (H.N.B. Garhwal University, S.R.T. Campus, Badshahi Thaul, SRTGUH Herbarium). The currently accepted botanical names of the plants are based on the Plant of the World Online (POWO, 2025).

3. Results and discussion

The study identified 32 plant species from 27 genera and 19 families as wild edible fruits, listing their botanical names in alphabetical order, families, vernacular names, habits and uses (Table 1; Plate 2). The recorded species consisted of 14 were trees (50.00%), 1 was herb (3.57%), 11 were shrubs (39.28%), and 2 were climbers (7.14%) (Fig. 2). Rosaceae is the most prominent family include (8 plant species), proceeded by Moraceae (3 species), followed by Malvaceae, Cucurbitaceae and Rhamnaceae (2 species each) revealed as third most leading families with reference to species number, then Anacardiaceae, Rutaceae, Apocynaceae, Cannabaceae, Cornaceae, Coriariaceae, Urticaceae, Elaeagnaceae, Salicaceae, Juglandaceae, Myricaceae, Cactaceae, Solanaceae, Myrtaceae, Combretaceae and Viburnaceae (1 species each) (Fig. 3). This research explores the traditional knowledge of local inhabitants in Chamba block, Tehri Garhwal, Uttarakhand (India), about wild edible fruits.

Additionally, species *Berberis aristata* DC*, Bombax ceiba* L.*, Carissa carandas* L.*, Celtis australis* L.*,*

Table 1. Utilization of wild edible fruits

Sl. No.	Scientific name	Family	Vernacular name	Habit*	Ethnomedicinal uses
1	*Bombax ceiba* L. TL-SRTGUH-1831	Malvaceae	*Semal*	Tree	Consumption of ripened fruit directly, cure female infertility.
2	*Carissa carandas* L. TL-SRTGUH-1834	Apocynaceae	*Karaunda*	Shrub	Consuming ripe fruit provides relief for diabetes and jaundice.
3	*Celtis australis* L. TL-SRTGUH-1838	Cannabaceae	*Khadak*	Tree	Decoction of the fruit is orally consumed to treat menstrual bleeding.
4	*Coccinia grandis* (L.) Voigt TL-SRTGUH-1837	Cucurbitaceae	*Kaduri*	Climber	Fresh fruit juice utilized orally refreshes the mind and boosts immunity.
5	*Cornus capitata* Wall. BB-SRTGUH-1567	Cornaceae	*Bhamora*	Shrub	Consuming latex found in fruits is beneficial for dehydration and digestion.
6	*Coriaria napalensis* Wall. TL-SRTGUH-1843	Coriariaceae	*Rekhola*	Shrub	Fruits are eaten raw or used as beverages to cure toothache.
7	*Cucumis maderaspatanus* L. TL-SRTGUH-1846	Cucurbitaceae	*Gol-Kakhri*	Climbing herb	Making a paste from the fruit and applying it on the head provides relief from pain and cools the head.
8	*Debregeasia saeneb* (Forssk.) Hepper & J.R.I. Wood TL-SRTGUH-1851	Urticaceae	*Synaru*	Shrub	Fresh fruit is orally consumed to get relief from arthritis.
9	*Elaeagnus umbellata* var. *umbellata* TL-SRTGUH-1856	Elaeagnaceae	*Giwain*	Shrub	Powder of dried fruits is mixed with a cup of milk and consumed for 24 days to treat internal wounds and stomach issues.
10	*Ficus auriculata* Lour. BB-SRTGUH-1564	Moraceae	*Timla*	Tree	Unripen fruit helps in sugar patent as vegetable and pickle.

11	*Ficus palmata* Forssk. TL-SRTGUH-1862	Moraceae	*Bedu*	Shrub	Ripe fruit, of figs helps in the metabolism of the body.
12	*Flacourtia indica* (Burm. f.) Merrill TL-SRTGUH-1864	Salicaceae	*Kangu*	Shrub	Ripened fruits are directly eaten to cure arthritis and diarrhoea.
13	*Grewia optiva* J.R. Drumm. ex Burret BB-SRTGUH-1576	Malvaceae	*Bhimal*	Tree	Usage of dried fruits in powdered form to relieve from tooth problems.
14	*Juglans regia* L. TL-SRTGUH-1863	Juglandaceae	*Akhrot*	Tree	The seeds of dried fruit are taken with milk to improve memory.
15	*Morus alba* L. BB-SRTGUH-1569	Moraceae	*Sehtoot*	Tree	Consumption of ripened fruit serves as a blood purifier, antibiotic and as immunity booster.
16	*Myrica esculenta* Buch. -Ham. ex D. Don TL-SRTGUH-1866	Myricaceae	*Kaphal*	Tree	Consuming ripe fruit in the form of juice is beneficial for managing blood pressure, and heart attack, and alleviats jaundice.
17	*Prinsepia utilis* Royle TL-SRTGUH-1852	Rosaceae	*Bhainkal*	Tree	The fruit oil is massaged to cure the muscular pain and joint pain of the body.
18	*Prunus cerasoides* Buch.-Ham. ex D.Don BB-SRTGUH-1551	Rosaceae	*Payain*	Tree	The paste of dried fruit is externally applied to cure skin disease.
19	*Prunus persica* (L.) Batsch TL-SRTGUH-1869	Rosaceae	*Aaru*	Tree	Ripe fruits are consumed to maintain proper hydration levels in the body while boosting immunity.
20	*Prunus armeniaca* L. BB-SRTGUH-1565	Rosaceae	*Chulu*	Tree	Ripened fruit is directly consumed to cure anaemia and helps to improve the digestive problems.
21	*Pyracantha crenulata* (D.Don) M.Roem. TL-SRTGUH-1870	Rosaceae	*Ghingaru*	Shrub	The fruit is taken directly to treat diabetes and liver problems.
22	*Rhamnus virgata* Roxb. TL-SRTGUH-1873	Rhamnaceae	*Chodelu*	Tree	Dried fruit powder is combined with milk, is consumed orally to treat vomiting, liver issues.
23	*Rubus ellipticus* Sm. BB-SRTGUH-1560	Rosaceae	*Hissar*	Shrub	Consuming fruit juice increases eyesight and supports brain development.
24	*Rubus paniculatus* Sm. TL-SRTGUH-1881	Rosaceae	*Anchu*	Shrub	Fruit is directly eaten to cure diabetes, detox the body and alleviate anaemia.
25	*Rubus niveus* Thunb. TL-SRTGUH-1872	Rosaceae	*Kala-Hinsar*	Shrub	Fruit is directly eaten to cure diabetes.
26	*Solanum nigrum* L. BB-SRTGUH-1563	Solanaceae	*Makoi*	Herb	The paste made from ripened fruit is externally applied to the head to alleviate headache, while the juice of unripe fruit is utilized as ear drops (2 to 3 drops) for relieving ear pain.
27	*Spondias pinnata* (L.f.) Kurz BB-SRTGUH-1572	Anacardiaceae	*Amara*	Tree	Fresh fruit is used to make pickles and consumed orally to enhance energy.
28	*Syzygium cumini* (L.) Skeels. TL-SRTGUH-1885	Myrtaceae	*Jamun, Jamoya*	Tree	Mature fruit pulp is combined with milk and orally given once a day to cure pancreatic, liver, and blood infections.
29	*Terminalia bellirica* (Gaertn.) Roxb. TL-SRTGUH-1887	Combretaceae	*Bahera*	Tree	A daily oral treatment for cough involves adding dried fruit powder to hot water.
30	*Viburnum grandiflorum* Wall. ex DC. TL-SRTGUH-1895	Viburnaceae	*Thakla*	Tree	Fruit decoction is taken orally three times daily for upto two weeks to alleviate abdominal pain and stomach infections. .
31	*Zanthoxylum armatum* DC. TL-SRTGUH-1899	Rutaceae	*Timroo*	Shrub	Raw fruit is made into dry powder and used in dental diseases. Chewing the fruit helps to eradicate the mouth infection.
32	*Ziziphus mauritiana* Lam. TL-SRTGUH-1548	Rhamnaceae	*Ber*	Shrub	Fever and cough are treated by oral administration of fruit decoction twice daily after meals.

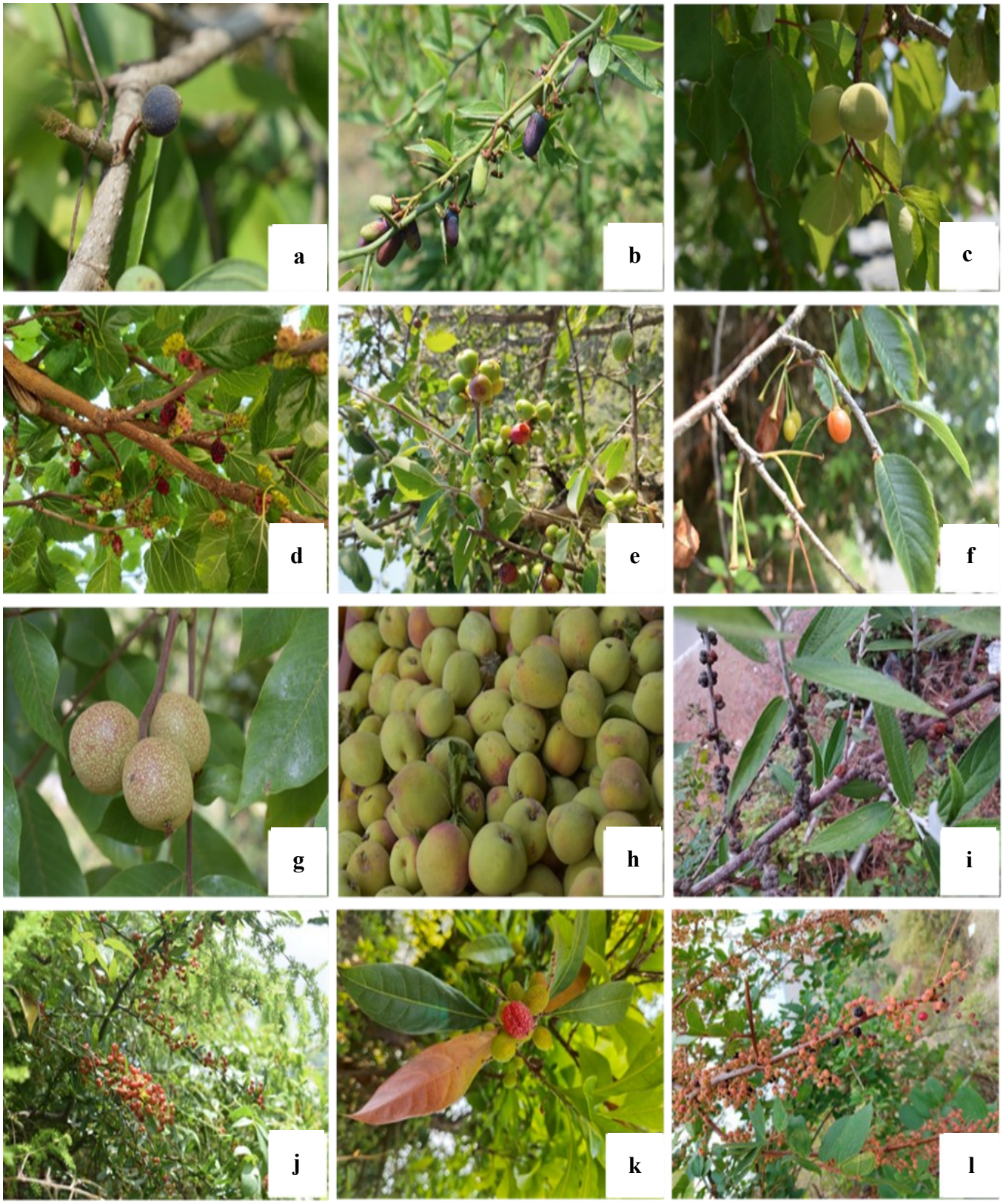


Plate 2. a. *Ficus palmata* Forssk.; b. *Prinsepia utilis* Royle.; c. *Prunus armeniaca* L.; d. *Morus alba* L.; e. *Flacourtia indica* (Burm. f.) Merrill.; f. *Prunus cerasoides* Buch.-Ham. ex D.Don.; g. *Juglans regia* L.; h. *Prunus persica* (L.) Batsch.; i. *Debregeasia saeneb* (Forssk.) Hepper & J.R.I. Wood.; j. *Pyracantha crenulata* (D.Don) M.Roem.; k. *Myrica esculenta* Buch. -Ham. ex D. Don.; l. *Coriaria napalensis* Wall.

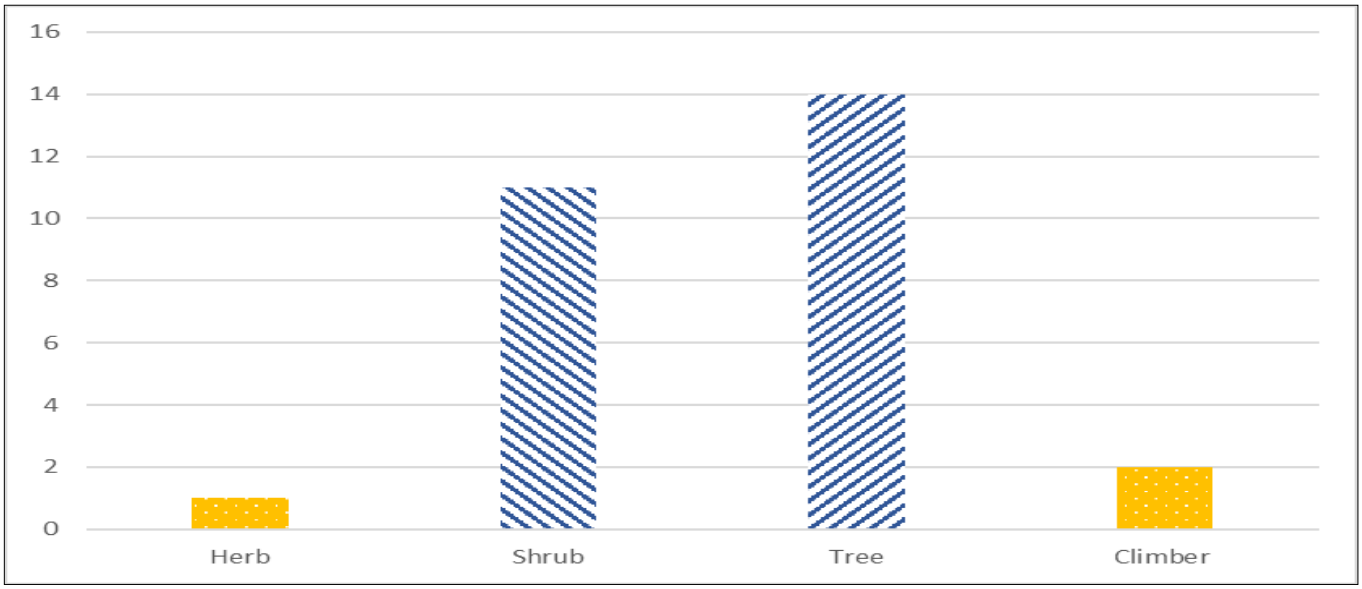


Fig. 2. Habits of the recorded plant species

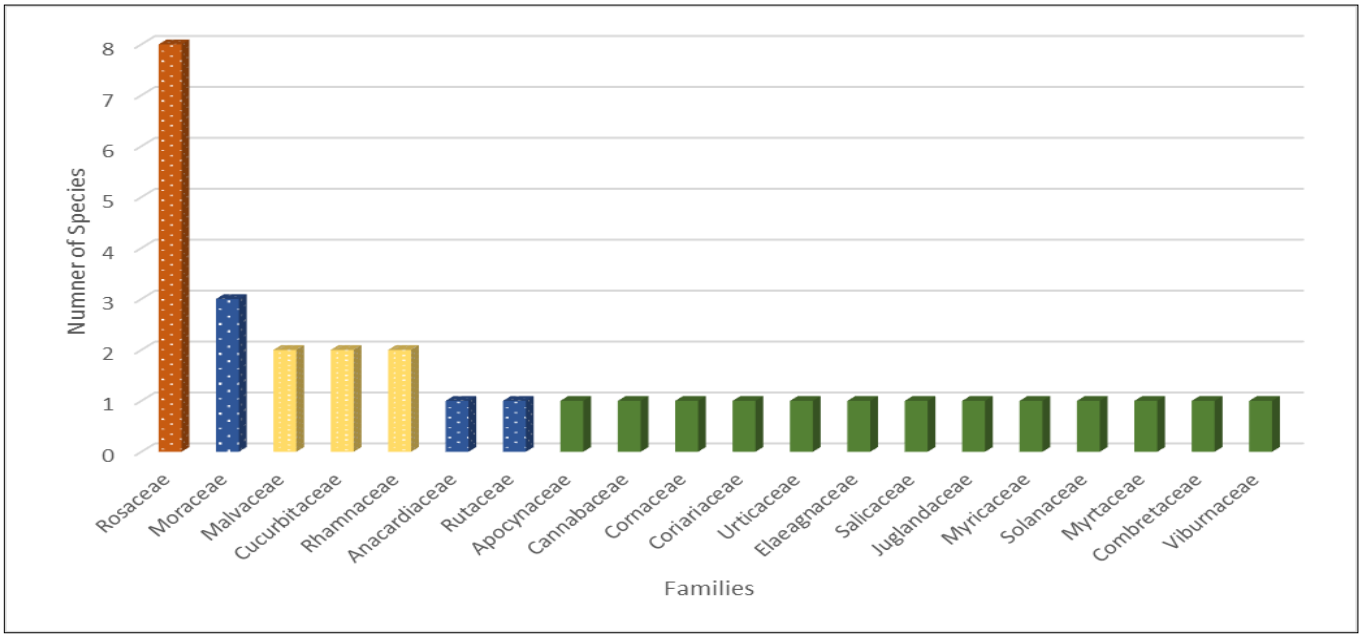


Fig. 3. The recorded plant families along with their respective species numbers

Coccinia grandis (L.) Voigt, *Cornus capitata* Wall, *Coriaria napalensis* Wall, *Cucumis maderaspatanus* L, *Elaeagnus umbellata var. umbellata, Ficus auriculata* Lour., *F. palmata* Forssk., *Flacourtia indica* (Bum. f.) Merrill, *Grewia optiva* J.R. Drumm. ex Burret, *Juglans regia* L., *Morus alba* L., *Myrica esculenta* Buch-Ham. ex D. Don, *Prinsepia utilis* Royle, *Prunus cerasoides* Buch. -Ham. ex D. Don, *P. persica* (L.) Batsch, *P. armeniaca* L, *Pyracantha crenulata* (D. Don) M. Roem., *Rhamnus virgata* Roxb, *Rubus ellipticus* Sm., *R. paniculatus* Sm., *R. niveus* Thunb., *Viburnum grandiflorum* Wall. ex DC., *Zanthoxylum armatum* DC., *Ziziphus mauritiana* Lam. are recognized for their valuable medicinal properties.

The earlier conservation efforts were made by (Dangwal *et al*., 2010; 2011; 2014; Dangwal and Chauhan, 2015), to protect the ethnomedicinal plants in the various region of Garhwal, Himalaya. However, it also highlights the threats of these fruits, including habitat destruction, overharvesting, and lack of inclusion in conservation policies. The declining population of wild edible ethnomedicinal fruit plants due to overharvesting for timber and fuel wood has impacted several species, including *Celtis australis* L., *Flacourtia indica* (Burm. f.) Merrill, *Grewia optiva* J.R. Drumm. ex Burret, *Morus alba* L., *Prunus cerasoides* Buch.-Ham. ex D.Don, and *Syzygium cumini* (L.) Skeels. Additionally, construction activities, such as road and house building, have affected the population of wild edible fruit plants, including *Carissa carandas* L., *Coriaria napalensis* Wall., *Ficus* spp., *Prinsepia utilis* Royle, *Pyracantha crenulata* (D.Don) M.Roem., *Rubus* spp., and *Solanum nigrum* L.

Among these fruits *Myrica esculenta* Buch. -Ham. ex D. Don, *Syzygium cumini* (L.) Skeels., *Terminalia bellirica* (Gaertner) Roxb., *Ficus* spp., *Pyracantha crenulata* (D.Don) M.Roem., *Ziziphus mauritiana* Lam., and *Rubus* spp., are extracted from the wild in huge amounts to self-use and sell in the local market as a source of extra income in the area. Unfortunately, there are no existing conservation policies aimed at protecting wild edible ethnomedicinal fruits in the study region. These fruits not only possess high nutritional and medicinal value but also require sustainable practices for their management. Engaging local communities in conservation efforts could generate livelihoods and serve as a significant source of income for them.

4. Conclusion

The study emphasizes the significant traditional knowledge of wild edible fruits in the Chamba region, Uttarakhand, India. The area is known for its richness of flora diversity, and local community leverages this plant species for their several purposes, as well as medicinal uses to treat various health conditions. Wild fruits are found worldwide, albeit in small quantities. They thrive in areas largely untouched by human activity due to challenging geography and climate unsuitable for human habitation. Uttarakhand, exemplifying such conditions, boasts a rich diversity of wild edible fruiting plants, cherished by locals for their nutritional value and exquisite taste. The further scope of the study is to make the pills of dried WEFs after the biochemical analysis and preserve in natural forms to cure the distinct diseases and as a good source of income for the younger generation of the area.

Acknowledgements

The authors are highly thankful to the local villagers who had provided us the information of the wild ethnomedicinal fruits and feel immense gratitude for imparting their valuable knowledge among us, to fulfil this incredible work.

References

Ajesh T P, Naseef S A and Kumuthakalavalli R 2012. Ethnobotanical documentation of wild edible fruits used by Muthuvan tribes of Idukki, Kerala-India. Int. J. Pharma. Bio. Sci. 3(3): 479–487.

Dangwal L R and Chauhan A S 2015. *Dioscorea deltoidea* Wall. ex Griseb. a highly threatened Himalayan medicinal plant: an overview. Int. J. Pharm. Bio. Sci. 6(1): 452–460.

Dangwal L R and Lal T 2024. Diversity, informant consensus factor and cultural significance index of wild edible plants in the Jaunpur region, Tehri Garhwal, Uttarakhand. Ecol. Quest. 35(2):7-14.

Dangwal L R, Sharma A, Kumar N, Rana C S and Sharma U 2010. Ethno-medico botany of some aquatic Angiospermae from north-west Himalaya. Res. 2(4): 49–54.

Dangwal L R, Sharma A, Rana C S, Singh A and Singh T 2011. Ethno-medicinal plants diversity and their conservation in and around Koteshwar Hydroelectric Power Project (KHPP), Tehri Garhwal, Uttarakhand (India). Ethnobot. Leafl. 19: 136–55.

Dangwal L R, Singh A and Singh A 2014. Conservation and cultivation possibilities of *Dioscorea deltoidea* (a threatened species) in village Budogi, district Tehri Garhwal, Uttarakhand, India. J. Plant Dev. Sci. 6(1): 7–12.

Dangwal L R. 2016. Self-Employment through cultivation of medicinal plants in block Chamba district Tehri Garhwal, Uttarakhand. WJPPS. 6(01): 1167–1180.

Dilshad S R, Rehman N U, Nazir Ahmad N A and Iqbal A 2010. Documentation of ethnoveterinary practices for mastitis in dairy animals in Pakistan. Pak. Vet. J. 30(3): 167–171.

Dobhal A, Sharma D and Rawat S. 2023. Regenerational analysis of seedlings and saplings of Badshahithaul forest area of Chamba Block (near New Tehri town), District Tehri Garhwal, Uttarakhand, India. Int. J. Environ. Sci. 12(4): 66–73.

eUttaranchal. 2025. https://myroots.euttaranchal.com/block-chamba-tehri-garhwal-26.html (Assessed on 29 April, 2025).

Gaur, R D. 1999. Flora of the District Garhwal, northwest Himalaya. Transmedia.

Hazarika T K, Tayeng B, Ngurthankhumi R, Lalruatsangi E, Upadhyaya K and Lyngdoh N 2022. Unlocking wild edible fruits of Indo-Burma biodiversity hot spot, Arunachal Pradesh, India, to support food security and sustainable rural livelihood. Sustainability. 14(23): 16088 (1–14).

Jain S K and Rao R R. 1977. Field and Herbarium Methods. Today and tomorrow's Printers and Publishers, New Delhi.

Kennedy G, Wang Z, Maundu P and Hunter D 2022. The role of traditional knowledge and food biodiversity to transform modern food systems. Trends Food Sci. Technol. 130: 32–41.

Lal T, Dangwal L R and Rawat M 2024. Treatment of diarrhea and dysentery through ethnomedicinal plants in the Jaunpur region of Garhwal Himalaya, India. Ethnobot. Res. Appl. 28: 1–14.

Paul A K, Alam M J and Alam A H 2020. Assessment of wild edible fruits consumed through the tribal people of Chittagong Hill Tracts (CHTs), Bangladesh. National Institute of Science Communication and Information Resources (NISCAIR) under the Council of Scientific and Industrial Research (CSIR), 19(3): 598–603.

POWO (Plants of the World Online)., 2025, POWO, Board of Trustees of the Royal Botanic Gardens, Kew. https:// powo.science.kew.org/ (Accessed 29.04.2025).

Saka J K and Msonthi J D 1994. Nutritional value of edible fruits of indigenous wild trees in Malawi. For. Ecol. Manag. 64(2-3):245–248.

Singh H B and Subramaniyam 2008. Field Manual on Herbarium Techniques. National Institute of Science Communication and Information Resources.

Tiwari J K, Ballabha R and Tiwari P 2010. Some promising wild edible plants of Srinagar and its adjacent area in Alaknanda valley of Garhwal Himalaya, India. Am. J.s Sci. 6(4): 167–174.