

## Diversity and traditional knowledge of wild edible plants in Jiyuni valley, Mandi district, Himachal Pradesh, India

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### ABSTRACT

A study was conducted in the Jiyuni valley of Himachal Pradesh to document the diversity, distribution and utilization patterns of wild edible plants. The research, carried out from 2023 to 2025, involved extensive field surveys and interviews with local residents. A total of 70 wild edible plant species, belonging to 37 families and 55 genera, were documented, including 66 angiosperms, 2 gymnosperms, 1 pteridophyte and 1 fungus. The flora comprised 13 trees, 16 shrubs, 39 herbs, 1 fern and 1 fungus. The most species-rich families were Rosaceae (12 species), Balsaminaceae (4 species), Berberidaceae (4 species) and Asteraceae (4 species). Of the documented species, 34 were native to the Himalayan region, with one species, *Angelica glauca*, identified as endemic to the Indian Himalayan region. The study found that local communities utilized various plant parts, with fruits (28 species) and leaves (25 species) being the most frequently consumed. These plants were used in various ways, including being eaten raw, cooked as vegetables or processed in the form of jams, chutneys and oils. In addition to their dietary role, these plants were used for medicinal purposes, fuel, fodder and religious practices, highlighting their socio-economic and cultural importance. The findings underscore the need for scientific validation and sustainable management of these resources to support local livelihoods and address increasing nutritional demands. The study's documentation serves as a valuable resource for preserving traditional knowledge and guiding future research and conservation efforts.

**Keywords:** Wild edible plants; ethnobotany; Jiyuni valley; biodiversity; traditional knowledge

### INTRODUCTION

India, well-known for its enormous range of plants and rich ethnic diversity, is recognized as one of the world's mega biodiversity centres (Sasi et al 2011). The Indian Himalayan region serves as a significant reservoir of biodiversity, which is actively harnessed by the rural communities for various essential needs, including medicines, wild edibles, fodder, fuel, timber, agricultural tools, religious practices and numerous other uses (Samant and Dhar 1997). Wild edible plants are non-cultivated species gathered from natural environments, primarily utilized to enhance diet, nutrition, medicine and various other requirements by indigenous communities worldwide (Shaheen et al 2017). Throughout human history, wild edible plants

have played a significant role in many geographical locations of the world (Sekeroglu et al 2006). The use and consumption of wild edible plants is part of the traditional and cultural practices of indigenous rural and tribal groups around the world (Samant and Dhar 1997). Native forests in the Himalayan areas are easily accessible, naturally free and simple to use, meeting over 76 per cent of the local population's demands for natural resources (Chettri and Sharma 2006).

Himachal Pradesh may be divided in three geographical regions viz outer Himalayas, the lesser Himalayas and the greater Himalayas or the Alpines and covers 55,673 km<sup>2</sup> area (Gill 2023). The state is endowed with rich biodiversity representing the uniqueness of the region (Kumar and Gupta 2023).

The presence of high species abundance and diverse community structure makes Himachal Pradesh a stunning repository of floral diversity in the Himalaya (Aswal and Mehrotra 1994). Since time immemorial, inhabitants in remote areas have utilized forest resources for medicines, resins, fuel, timber, fibre, gums, agricultural equipment, religious purposes and other uses (Samant and Dhar 1997).

Among their multiple uses, wild edible plants are of particular dietary significance, as they exhibit a rich phytochemical profile and possess higher nutritional value compared to several conventionally cultivated crops (Assefa and Abebe 2010, Vanzani et al 2011). In India and other developing countries, wild edible plants serve as an important alternative source of income for local communities (Shrestha and Dhillion 2006).

The consumption of most wild edible plants and the knowledge of their consumption remain confined to specific local groups, while largely unknown to the wider population. However, the availability of these plants is declining due to multiple factors, including depletion of natural resources, migration from rural areas and change in cultural practices (Rao et al 2015). With the rapid depletion of traditional knowledge of wild edible plants and the increasing dependence on a limited number of staple crops, the documentation, valuation and scientific assessment of these plants have become increasingly important.

Many studies have been conducted on wild edible plants (wild edible) in Indian Himalayan region (Gaur and Semwal 1983, Samant et al 2001, Samant and Dhar 1997, Ballabh et al 2007, Chaithanya et al 2015, Chandra et al 2013, Jana and Chauhan 1998, Rashid and Anand 2009, Sundriyal et al 1998, Sundriyal and Sundriyal 2001, Tiwari et al 2010, Singh et al 2023) and in Himachal Pradesh (Negi and Subramani 2015, Sharma et al 2013, 2018, Lata et al 2016, Pant et al 2014, Sen et al 2013, Singh et al 2014, Jhamta et al 2019, Bharti and Verma 2021, Prakash et al 2020, Kumar et al 2023) but in specific, nobody explored these plants (wild edible) in Jiyuni valley of Himachal Pradesh. Therefore, it was essential to systematically document the diversity of wild edible plants utilized by the local inhabitants of the valley, not only to support future research and development initiatives but also to serve as a freely accessible reference for knowledge preservation. In light of these gaps, efforts have been made in the current study to diversity and distribution pattern assessment of wild edibles, analysis on

endemism, analyze the traditional practices and native uses and provide suitable management strategies.

### Study area

The current study was conducted in the Jiyuni valley, situated in the Mandi district of Himachal Pradesh, which lies in the mid-Himalayan zone with an altitudinal range of 1,300-2,500 m amsl. The valley is characterized by diverse altitudinal gradients, rich forest cover and varied agro-climatic conditions that support high floral diversity. The valley encompasses sub-tropical, temperate and sub-alpine habitats, sustaining a wide range of plant and animal populations. Here, the temperatures range between  $-10$  to  $25^{\circ}\text{C}$ . The vegetation is dominated by sub-tropical Chir pine forests, western mixed coniferous forests and moist temperate deciduous forests. The valley supports sensitive biodiversity elements, including orchids, aromatic and medicinal plants, rare wild edibles, endemic plants, endangered, native and unique faunal species.

## METHODOLOGY

The current study based on extensive and intensive surveys was carried out in the Jiyuni valley, Mandi district, Himachal Pradesh from 2023 and 2025. Periodically, surveys and visits were conducted to neighbour villages, namely Jahal, Dhangyara, Dhisti, Bhurla, Bag, Karnala, Tunna, Dari, Bakhrog, Shalla, Nauna etc. Local residents were interviewed and one of the local knowledgeable people was hired for survey and collection of the wild edible plants samples from their natural habitats. Samples of every species were collected and information regarding each species like habitat, habit, altitudinal range, local uses and use pattern was generated. The method of interview was open ended and informal instead of using strict questionnaire. The language used to interact with the informants was the local dialect of the study area, ie Pahadi and in some cases, Hindi. Local and regional floras were used to identify the samples of edible wild plants (Aswal and Mehrotra 1994, Chowdhery and Wadhwa 1984, Singh and Rawat 2000). Additionally, information about indigenous uses was gathered from the available literature (Samant and Dhar 1997, Sharma et al 2018, Jhamta et al 2019, Prakash et al 2020, Thakur and Gupta 2020, Bharti and Verma 2021, Gajurel et al 2023, Kumar et al 2023). The nomenclature was obtained from International Plant Name Index, WFO Plant List and Index Kewensis. Endemic species were those

restricted to the Indian Himalayan region, whereas, near-endemic species had wider distribution in the neighbouring countries.

## RESULTS

### Diversity and distribution pattern

A total of 70 species (angiosperms: 66, gymnosperms: 2, pteridophytes: 1, fungus: 1) of wild edible plants belonging 37 families and 55 genera were recorded (Table 1). A total of 13 trees, 1 fern, 1 fungus, 16 shrubs and 39 herbs were observed (Fig 1). The most abundant wild edible families were Rosaceae (12 spp), followed by Balsaminaceae, Berberidaceae and Asteraceae (4 spp each) and Apiaceae, Lamiaceae, Polygonaceae and Viburnaceae (3 spp each). Among the genera, *Rubus* and *Impatiens* (4 spp each), *Viburnum* and *Berberis* (3 spp each), *Chenopodium*, *Trifolium*, *Rosa* and *Pinus* (2 spp each) were the rich genera of species.

### Nativity and endemism

Thirty four species of wild edibles were native to the Himalayan region, while the rest species were non-natives. One species ie *Angelica glauca*, was found endemic to the Indian Himalayan region, while 15 other species were found near endemic (Table 1, Fig 2).

### Utilization pattern

Local inhabitants consumed wild edible plants in diverse forms, including boiled, raw, roasted, fried, cooked as spices, processed into oils or preserved as jams and pickles. The natives used a variety of parts, including leaves, fruits, seeds, roots, entire plants, flowers, tubers, rhizomes etc. Amongst the parts used, fruits (28 spp) were used maximum, followed by leaves (25 spp), seeds (11 spp), roots (7 spp), whole plant (5 spp), aerial parts (4 spp), tubers and flowers (3 spp each) and stem (2 spp) (Table 1, Fig 3).

Out of the total reported species, 37 were eaten as raw, while 33 were eaten as cooked such as roasted, boiled as vegetables, soup, flavouring agents etc. The majority of plants (23 spp) were eaten as ripe fruits, 18 spp as vegetables and 2 spp as tea.

### Indigenous uses and traditional practices of wild edibles

The local inhabitants used different parts of the plants viz leaf, fruit, whole plant, root, flower, seed, aerial part etc. Different parts of wild edibles were

used in different seasons. Mostly the raw eaten plants were consumed as a fruit; such plants included *Berberis lycium*, *B aristata*, *Elaeagnus umbellata*, *Juglans regia*, *Fragaria nubicola*, *Duchesnea indica*, *Rubus biflorus*, *R foliolosus*, *R niveus*, *Morus serrata*, *Pyrus pashia* etc. The processed form included cooked, fried, roasted, tea, grinded, dried, boiled, pickle, oil etc. The leaves of *Sonchus asper*, *Urtica dioica*, *Phytolacca acinosa*, *Chenopodium album*, *C foliosum* and *Fagopyrum acutatum*, fruits of *Pistacia chinensis* subsp *integerrima* and aerial parts of *Diplazium esculentum* were cooked and eaten as vegetable. A delicious chutney was prepared from flowers of *Rhododendron arboretum* and whole plant of *Origanum vulgare*. In addition to this, flour was obtained from the seeds of *Aesculus indica* to make chapati and Halwa. Some species viz *Thymus linearis* and *Elsholtzia fruticosa* were used as spices. Some of the species were also oil yielding like *Juglans regia*, *Elsholtzia fruticosa*, *Prinsepia utilis* and *Pinus roxburghii*. These plants were also used for medicine, fuel, fodder, religious purposes, fiber, agricultural tools, timber, soap and as an insecticide.

## DISCUSSION

Biological resources, upon which human societies critically depend, are renewable when managed sustainably; however, unsustainable exploitation can lead to their depletion and eventual extinction (Heywood 1995). The Indian Himalayan region is rich in edible plant diversity, with over 675 species of wild edible plants (Samant and Dhar 1997, Pal et al 2014). The local inhabitants of the valley possessed extensive knowledge regarding the utilization of native flora. This study documents the distribution, diversity, endemism, indigenous uses and local practices related to wild edible plants in Jiyuni valley, Mandi district, Himachal Pradesh. The occurrence of 70 wild edible species in the area emphasises their high socio-economic significance. The occurrence of 34 native species, 15 near-endemic species and one endemic species indicates that the area holds considerable potential as a biodiversity hotspot, warranting focused conservation efforts. Since local communities have a history of using these species for sustenance and health, they represent a promising resource for meeting the region's increasing nutritional needs if they are properly managed and subjected to scientific validation. The extensive collection and commercialization of several of these species have the potential to enhance the income of local communities. Traditional knowledge

Table 1. Distribution, utilization, endemism and traditional uses of wild edible plants in Jiyuni valley, Himachal Pradesh

Family/taxa	Local name	Altitudinal range (m)	PT	E/NE	Part used	Indigenous use
<b>Amaranthaceae</b>						
<i>Amaranthus spinosus</i> L	Sariyara	1,300-2,500	H	-	Leaf, stem	Spinach prepared from stem, leaves
<b>Anacardiaceae</b>						
<i>Pistacia chinensis</i> subsp <i>integerrima</i> (JL Stewart) Rech f	Kakare/ Kakar Singhi	1,800-2,200	T	-	Fruit	Young shoots, leaves cooked; used as vegetable
<b>Apiaceae</b>						
<i>Angelica glauca</i> Edgew	Chaura	2,000-2,500	H	E	Whole plant	Rootstocks, seeds used to enhance food flavour
<i>Chaerophyllum villosum</i> Wall & DC	Khelti	2,100-2,500	H	-	Root	Fresh roots eaten straight with milk as high-nutrition dish
<i>Heracleum candicans</i> Wall ex DC	Badiyacha	1,800-2,500	H	-	Leaf	Tender shoots loaded with curd consumed
<b>Araliaceae</b>						
<i>Aralia cachemirica</i> Decne	-	2,300-2,500	H	NE	Root	Used as condiment
<b>Asparagaceae</b>						
<i>Asparagus racemosus</i> Willd	Sansarpali	1,500-1,700	H	-	Tuber	Tubers eaten
<b>Asteraceae</b>						
<i>Artemisia maritima</i> L	-	2,300-2,500	H	-	Leaf, root	Extract from fresh, dry leaves utilized
<b>Balsaminaceae</b>						
<i>Impatiens glandulifera</i> Royle	-	2,200-2,500	H	-	Seed, leaf	Raw leaves, seeds consumed
<i>Iracemosa</i> Hook f	-	1,800-2,500	H	-	Seed, aerial part	Raw leaves, seeds consumed
<i>Iscabrida</i> DC	-	1,800-2,500	H	-	Seed, whole plant	Raw leaves, seeds consumed
<i>I sulcata</i> Wall	-	2,000-2,500	H	NE	Seed, aerial part	Raw leaves, seeds consumed
<b>Berberidaceae</b>						
<i>Berberis aristata</i> DC	Kasmal	1,800-2,500	Sh	NE	Fruit, leaf	Flowers, foliage, fruits consumed raw
<i>B jaeschkeana</i> CK Schneid	Kasmal	2,700-2,500	Sh	-	Root, fruit	Ripe fruits eaten
<i>B lycium</i> Royle	Kasmal	1,800-2,200	Sh	NE	Fruit, leaf	Flowers, foliage, fruits consumed raw
<i>Podophyllum hexandrum</i> Royle	Ban Kakri	2,100-2,500	H	-	leaf	Ripe fruits consumed
<b>Cannabaceae</b>						
<i>Cannabis sativa</i> L	Bijya	1,800-2,000	H	-	Leaf, seed, fruit, flower	Roasted Bhang seeds with wheat seeds consumed
<b>Caprifoliaceae</b>						
<i>Lonicera angustifolia</i> Wall ex DC	-	1,700-2,500	Sh	NE	Fruit	Ripe fruits utilized

Family/taxa	Local name	Altitudinal range (m)	PT	E/NE	Part used	Indigenous use
<b>Asteraceae</b>						
<i>Cirsium wallichii</i> DC		1,800-2,500	H	NE	Root, stem	Root, stem consumed as food
<i>Myriactis nepalensis</i> Less	-	1,800-2,500	H	-	Leaf	Fresh leaves used as vegetable
<i>Sonchus asper</i> Wulfen ex DC		1,500-2,200	H	-	Leaf	Young leaves eaten raw or as salad
<i>Taraxacum campyloides</i> GE Haglund		1,500-2,500	H	-	Whole plant	Young leaves boiled, prepared like spinach; entire plant tastes harsh when eaten raw
<b>Caryophyllaceae</b>						
<i>Silene conoidea</i> L	-	1,800-2,500	H	-	Leaf	Young leaves utilized as green vegetable
<i>Stellaria media</i> (L) Vill	Bariyala	1,800-2,000	H	-	Aerial part	Aerial parts cooked as vegetable
<b>Chenopodiaceae</b>						
<i>Chenopodium album</i> L	-	1,800-2,500	H	-	Leaf	Young leaves utilized as green vegetable
<i>C. foliosum</i> Asch	-	1,800-2,500	H	-	Leaf	Young leaves utilized as green vegetable
<b>Cornaceae</b>						
<i>Cornus disciflora</i> Moc & Sessé ex DC	Kreeva	1,800-2,000	T	NE	Fruit	Leaves, fruits used as vegetable, flower buds as flavouring agents; ripe fruits eaten raw
<i>C. macrophylla</i> Wall	Khrembal	1,800-2,500	T	-	Fruit	Ripe fruits eaten
<b>Dioscoreaceae</b>						
<i>Dioscorea deltoidea</i> Wall ex Griseb	-	1,800-2,500	H	-	Tuber	Tubers consumed as vegetable
<b>Elaeagnaceae</b>						
<i>Elaeagnus umbellata</i> var <i>umbellata</i> Thunb	Geai	1,800-2,400	T	-	Fruit	Edible fruits used to make juice, jam, tea; dried leaves used in tea making
<b>Ericaceae</b>						
<i>Rhododendron arboreum</i> Sm	Brash	1,800-2,200	T	-	Flower	Flowers used for making juice, chutney
<b>Juglandaceae</b>						
<i>Juglans regia</i> L	Akhrot	1,800-2,000	T	NE	Fruit, flower	Ripe fruits eaten
<b>Lamiaceae</b>						
<i>Elsholtzia fruticosa</i> (D Don) Rehder	Pothi, Jaunkra	1,800-2,200	H	-	Seed	Ripe fruits eaten
<i>Origanum vulgare</i> L	Bantulsi	1,600-2,500	H	-	Whole plant	Used as spice for chutney making
<i>Thymus linearis</i> Benth	Ban Jira	2,000-2,500	H	-	Leaf	Leaves utilized as condiment
<b>Liliaceae</b>						
<i>Polygonatum verticillatum</i> (L) All	Salam Mishri	2,000-2,500	H	-	Tuber	Tubers eaten
<b>Malvaceae</b>						
<i>Malva verticillata</i> L	Sochali	1,800-2,000	H	-	Leaf	Leaves utilized as green vegetable
<b>Moraceae</b>						
<i>Morus serrata</i> Roxb	Cheemu	1800-2,200	T	NE	Fruit	Ripe fruits edible
<b>Oxalidaceae</b>						
<i>Oxalis corniculata</i> L	Malori	1,600-2,200	H	-	Leaf	Leaves eaten raw as vegetable

Family/taxa	Local name	Altitudinal range (m)	PT	E/NE	Part used	Indigenous use
<b>Myricaceae</b>						
<i>Myrica esculenta</i> Buch-Ham ex D Don	Kaphal	1,800-2,400	T	-	Fruit	Ripe fruits edible
<b>Papilionoideae</b>						
<i>Trifolium pratense</i> L	Malori	1,800-2,500	H	-	Leaf	Leaves consumed as vegetable
<i>Trepens</i> L	Malori	1,600-2,500	H	-	Leaf	Leaves consumed as vegetable
<b>Phytolaccaceae</b>						
<i>Phytolacca acinosa</i> Roxb	Jharka	2,000-2,500	H	-	Leaf	Leaves cooked, consumed as vegetable
<b>Poaceae</b>						
<i>Cenchrus americanus</i> (L) Morrone	Siuh	1,800-2,500	H	-	Seed	Like rice, seeds eaten sweet or savory; ground into powder, added to porridge, cakes, puddings, other dishes
<b>Polygonaceae</b>						
<i>Fagopyrum cymosum</i> (Trevir) Meisn	Fafra	1,800-2,500	H	-	Leaf	Leaves, seed flour used to make regional delicacy Thotha, eaten with Aloo curry
<i>Persicaria nepalensis</i> (Meisn) Miyabe	Nalora	1,800-2,000	H	-	Leaf	Roots utilized as tea substitute
<i>Rumex hastatus</i> Don	Malori	1,500-1,800	H	-	Leaf	Young, tender leaves prepared like vegetable
<b>Rosaceae</b>						
<i>Cotoneaster horizontalis</i> Decne	Chinchri	2,000-2,500	Sh	-	Root, leaf, fruit	Fruits edible
<i>Duchesnea indica</i> Focke		1,600-2,500	H	-	Fruit	Fruits edible
<i>Fragaria nubicola</i> (Lindl ex Hook f) Lacaita	Gamphal	2,000-2,500	H	-	Fruit, root	Fruits edible; roots used to make tea
<i>Prinsepia utilis</i> Royle	Bekhal	1,800-2,500	Sh	-	Seed, fruit	Fruits edible; used to extract oil
<i>Prunus campanulata</i> Maxim	Paja	1,800-2,200	T	-	Fruit	Fruits utilized
<i>Pyrus pashia</i> Buch-Ham ex D Don	Kainth	1,800-2,200	T	-	Fruit	Fruits utilized
<i>Rosa brunonii</i> Lindl	Kuja/Shami	1,800-2,200	Sh	-	Fruit	Fruits utilized
<i>R sericea</i> Lindl	-	2,000-2,500	Sh	-	Fruit	Fruits utilized
<i>Rubus biflorus</i> Buch-Ham ex Sm	Akhaey	1,800-2,500	Sh	-	Fruit	Fruits utilized
<i>R foliolosus</i> Halácsy	Akha	2,700-2,500	Sh	-	Fruit	Fruits utilized
<i>R niveus</i> Wall	-	1,800-2,500	Sh	-	Fruit	Fruits utilized
<i>R thuillieri</i> Poir ex Steud	Kalanche, Kalaakha	1,800-2,500	Sh	NE	Fruit	Fruits utilized
<b>Rutaceae</b>						
<i>Zanthoxylum armatum</i> DC	Timira, Trimbar	1,500-1,800	Sh	-	Seed	Seeds ground into powder, used as condiment
<b>Sapindaceae</b>						
<i>Aesculus indica</i> (Wall ex Cambess) Hook	Khanor	1,800-2,500	T	NE	Fruit	Flour mixed with wheat flour to make Chapati, Halwa

Family/taxa	Local name	Altitudinal range (m)	PT	E/NE	Part used	Indigenous use
<b>Saxifragaceae</b>						
<i>Bergenia ciliata</i> (Haw) Sternb	Pashan Bhed, Mirdu Ka Patta	1,800-2,000	H	NE	Leaf	Dried leaves utilized to make tea
<b>Viburnaceae</b>						
<i>Viburnum cotinifolium</i> D Don	Dab	1,800-2,500	Sh	NE	Fruit	Ripe fruits consumed
<i>V brevityubum</i> (PS Hsu) PS Hsu		2,000-2,500	Sh	-	Fruit	Ripe fruits consumed
<i>V mullaha</i> Buch-Ham ex D Don		1,800-2,500	Sh	-	Fruit	Ripe fruits consumed
<b>Urticaceae</b>						
<i>Urtica dioica</i> L	Kungshi	1,800-2,300	H	-	Leaf	Vegetable made from leaves
<b>Gymnosperms</b>						
<b>Pinaceae</b>						
<i>Pinus roxburghii</i> Sarg	Chir	1,800-2,200	T	NE	Seed	Seeds edible, used to extract oil
<i>P wallichiana</i> (Wall ex D Don) AB Jacks	Kail	2,000-2,500	T	NE	Seed	Seeds edible
<b>Pteridophytes</b>						
<b>Athyriaceae</b>						
<i>Diplazium esculentum</i> (Retz) Sw	Kisrod/ Lingdu	2,100-2,500	Fr	-	Aerial part	Aerial parts used as vegetable
<b>Fungi</b>						
<b>Morchellaceae</b>						
<i>Morchella esculenta</i> (L) Pers	Guchhi	1,800-2,500	FB	-	Whole plant	Has high nutritional value; eaten as vegetable

E = Endemic, NE = Near-endemic, PT = Plant type, H = Herb, T = Tree, Sh = Shrub, Fr = Frond, FB = Fruiting body

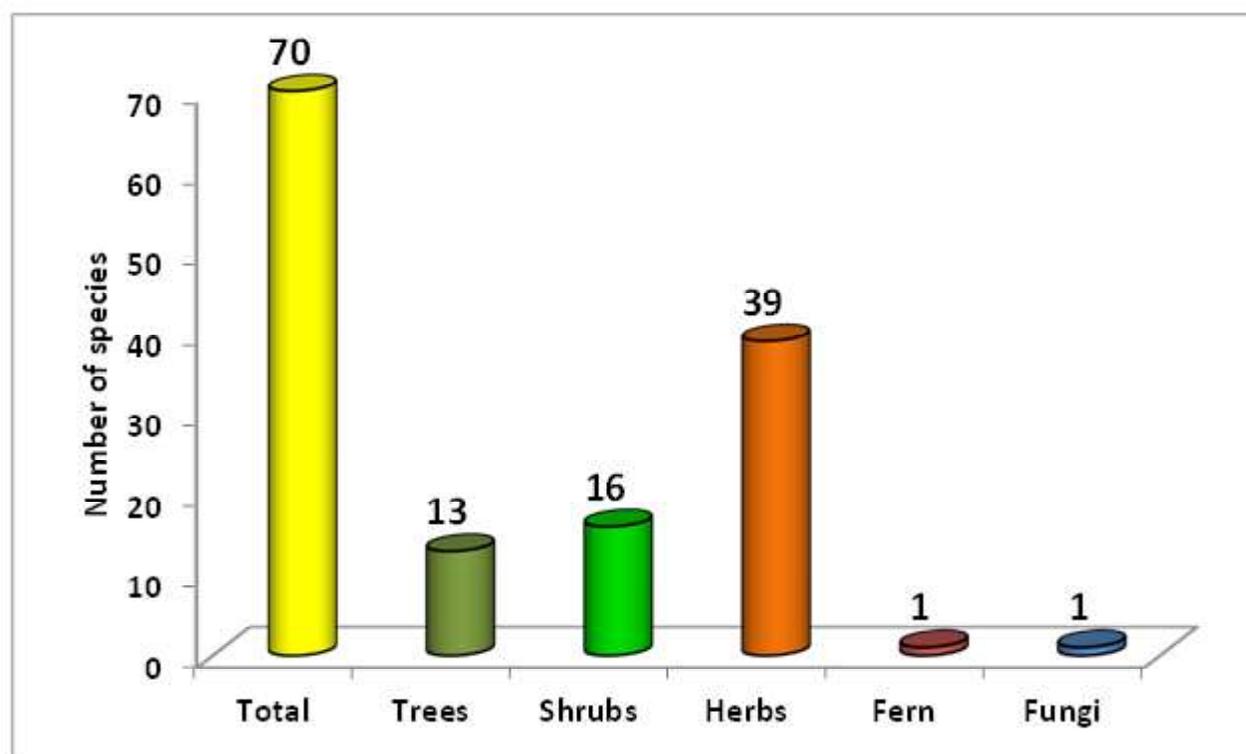


Fig 1. Plant types of wild edible plants recorded in Jiyuni valley, Mandi district, Himachal Pradesh

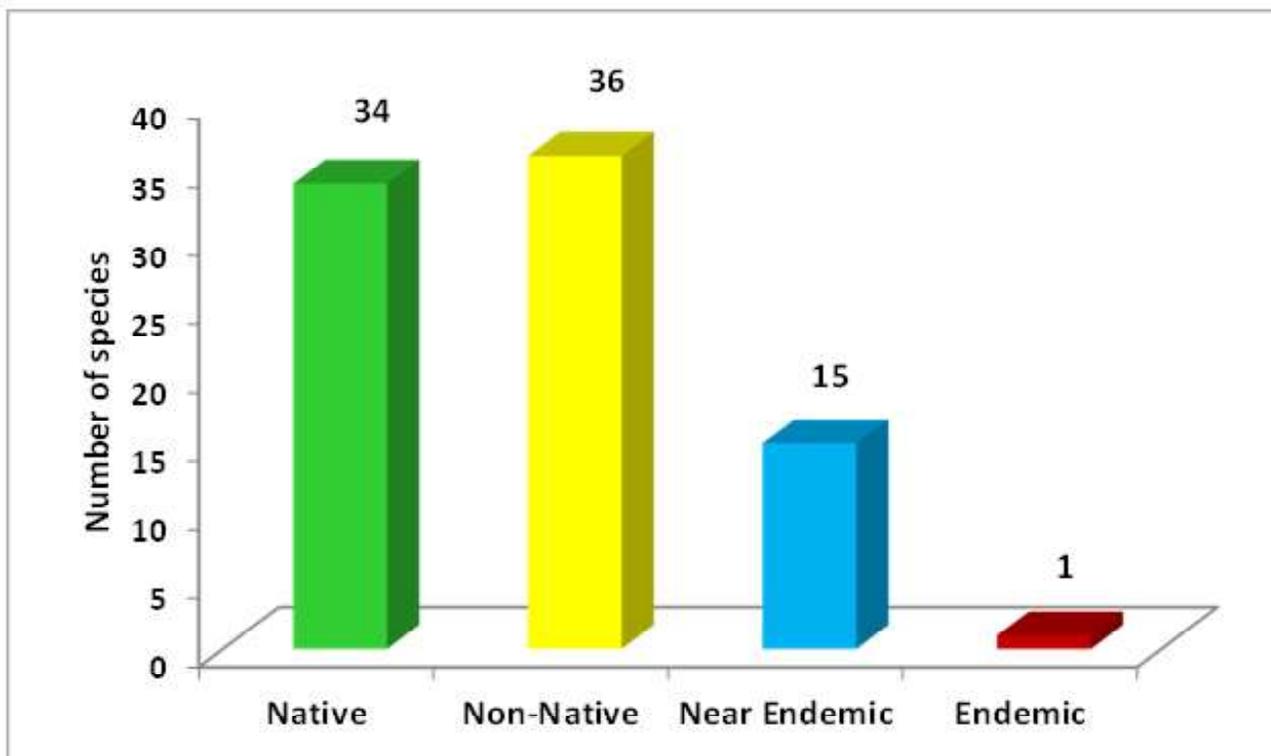
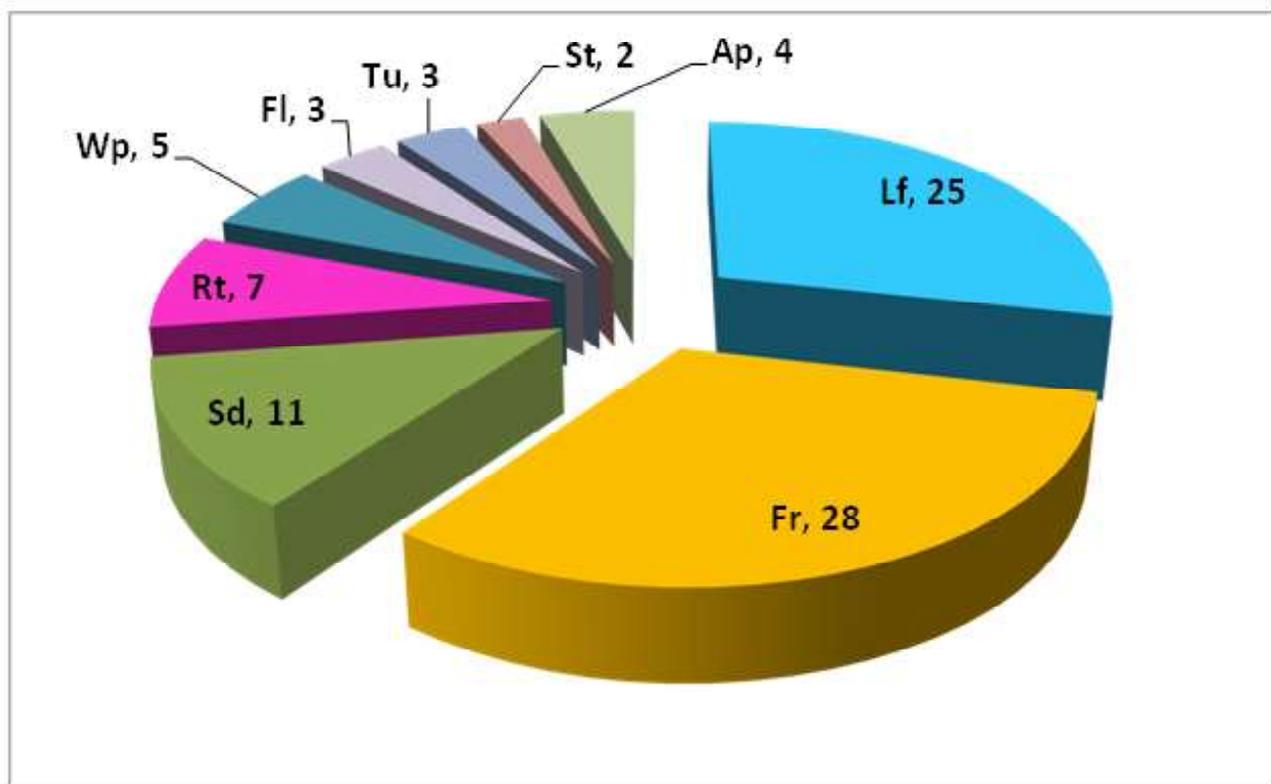


Fig 2. Nativity and endemism of wild edible plants recorded in Jiyuni valley, Mandi district, Himachal Pradesh



Lf= Leaf, Sd = Seed, Rt= Root, St= Stem, Wp = Whole plant, Fr = Fruit, Fl = Flower, Tu = Tuber, Ap =Aerial part

Fig 3. Plant part consumption pattern of wild edible plants recorded in Jiyuni valley, Mandi district, Himachal Pradesh

and practices related to wild edibles are confined to local communities. In this context, the present study described the distribution, diversity, local uses and traditional practices of wild edible plants in the study area.

## CONCLUSION

This study successfully documented the rich diversity of wild edible plants in the Jiyuni valley, Mandi district, Himachal Pradesh highlighting their critical role in the sustenance, health and cultural practices of local communities. The identification of 70 species, including 34 native and 1 endemic, confirms the valley's status as a significant biodiversity hotspot. The extensive utilization of these plants from fruits and leaves for daily consumption to seeds for oil and plants for medicinal and religious purposes, demonstrates the deep-rooted traditional knowledge present in the region.

However, the findings also point to an urgent need for conservation. The rapid erosion of traditional practices, coupled with the potential for over-exploitation, puts these valuable resources at risk. Therefore, it is essential to combine this traditional knowledge with modern scientific validation to ensure the sustainable management of these plants. By promoting their proper cultivation and processing, these wild edibles can not only help meet the nutritional needs of the growing population but also create new economic opportunities for local communities. The documentation provided in this study is a vital step toward preserving this invaluable heritage for future generations.

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