



ISSN (E): 2320-3862  
ISSN (P): 2394-0530  
NAAS Rating 2017: 3.53  
JMPS 2017; 5(5): 99-110  
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Received: 05-07-2017  
Accepted: 06-08-2017

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## Medicinal plant resources of Bilaspur, Hamirpur and Una districts of Himachal Pradesh: An ethno-botanical enumeration

Jyoti Bhardwaj and Mk Seth

### Abstract

An ethno-botanical exploration of tropical areas of Himachal Pradesh (Bilaspur, Hamirpur and Una) was carried out to enumerate few imperative medicinal plant species used by the inhabitant to cure different ailments. Presence of 135 plant species out of which 133 angiosperms, 1 gymnosperm (*Pinus roxburghii* Sargent.) and 1 fern (*Adiantum incisum* Forssk.) were documented. 135 plant species belonging to 116 genera and 63 families found to be used by inhabitant for remedial purposes. Amongst 135 plant species (41) flowers, (49) fruits, (77) roots, (84) leaves, (47) seeds, (2) rhizomes, (6) latex, (6) kernels, (10) stems, (2) shoots, (62) bark, (14) whole plant were considered to be utilized for treatment of various diseases by local communities.

**Keywords:** Medicinal plants, Ethnobotany, Bilaspur, Hamirpur, Una

### Introduction

Plants have been used for medicinal purposes long before prehistoric period. Traditional systems of medicine continue to be widely practised on many accounts. Population rise, insufficient supply of drugs, unaffordable cost of treatments, side effects of several synthetic drugs and development of resistance to currently used drugs for infectious diseases have led to increased emphasis on the use of plant materials as a source of medicines for a wide variety of human ailments. In the midst of ancient civilizations, India has been renowned to be wealthy storehouse of medicinal plants. The forest in India is the principal repository of large number of medicinal plants, which are mostly collected as raw materials for manufacture of drugs.

Out of around 3,500 higher plants identified in Himachal Pradesh, there are about 1,500 species of medicinal and aromatic plants (Chauhan, 1999) [4]. Kumar *et al.* (2014) [14], has reported 21 plants from Hamirpur district to cure piles, alike work has also done by Rawat and Kharwal (2013) [20] from Kangra, Bohtapa and Sharma (2010) [3] have documented 33 medicinal plant species from Manali. Likewise a few more study from other areas of the Himachal viz. Sharma *et al.*, (2009) [22] listed 24 ethno medicinal plants from Shimla, Rani *et al.*, (2013) [18] listed 50 plant species from Chamba district and Gautam & Bhadauria (2009) [9-22] have recorded 23 plant species from Bilaspur belonging to 18 families. Therefore, in this enumeration, central objective was to explore diversity and distribution of ethno-medicinal plants applied for traditional medicines which were used to cure the different ailments by the local people. In this paper, we have discussed plant information and use of various plant parts for curative purpose.

### Material and Methods

**Study Area:** Himachal Pradesh experiences diverse climatic conditions due to the wide variations in altitude ranging from 350 m in the southern tract to over 6500 m in the main Himalaya and in the area lying across it. The climatic conditions vary from hot and sub-humid tropical in the southern low tracts to temperate, cold alpine and glacial in the northern and the eastern high mountains. Himachal Pradesh is prosperous in plant diversity with large numbers of plant resources confined to different climatic zones on the basis of temperature, precipitation, latitude and altitude: Arctic- above 4500 m, Sub-arctic 3500 to 4500 m, Temperate 2000 to 3500 m and Tropical below 2000 m (Balokhra 1995) [2].

**Methodology:** Exploration trips were carried out to collect, preserve and identify the plant

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species. Local inhabitants of the selected study areas were interviewed for making sustainable use of plant resources. An attempt was made to get the useful information on medicinal plants growing in wild and few of them cultivated sporadically. Data related to each ethnobotanical aspect were collected from local people of that area. After collecting the probable information on ethno- medicinal plants the data were analyzed and compiled with related literature and then the report was documented. Information was composed from different floras namely: Flora Simlensis by Collett (1902, 1921), Flora of Lahaul and Spiti by Aswal and Mehrotra (2009) [1], Flora of Kullu by Dhaliwal and Sharma (1999) [8], Flora of Sirmaur by Kaur and Sharma (2004) [13], Flora of Busshar Himalayas by Nair (1977) [16] and Flora of Himachal

Pradesh by Chaudhery and Wadhwa (1984) [5]. Information was also confirmed from Seth and Jaswal (2004) [21], Pullah (2000), Jain (1968) [10], Jain (2000), Khare (2004) [12], Maheswari (2000) [15] and Rawat and Chowdhury (1998) [19].

### Result and Discussion

The genera represented by the highest figure of species was *Ficus* with 4 species, followed by *Bauhinia*, *Diospyros* and *Solanum* with 3 species, thereafter *Acacia*, *Albizia*, *Calotropis*, *Cyperus*, *Dactyloctenium*, *Flemingia*, *Pistacia*, *Terminalia* and *Trichodesma* with 2 species representative listed with remaining genera at most having 1 species each. The diversity and indigenous uses of different medicinal plants are presented in Table 1.

**Table 1:** Diversity, brief description, elevation and traditional uses of few medicinal plants

Plant species /Family/ Common name/Vernacular name	Brief description	Habitat	Distribution World/India/Himachal Pradesh	Elevation	Parts used
<i>Abrus precatorius</i> Linn. (Fabaceae) INDIAN LIQUORICE Gunchi, Rati	A perennial climber. Leaves pinnate. Flowers reddish or white. Seeds bright scarlet with a black spot on the hilum	Common along hedges, wastelands and open forest	South China, Pacific Island, Tropical Africa, West Indies, all tropical countries/ Throughout India/ Chamba (Dalhousie), Hamripur, Kangra, Mandi, Sirmaur (Paonta Sahib, Rajgarh), Solan (Kunihar), Una	upto 2000 m	leaves, roots, seeds –nervous disorder, cattle poisoning
<i>Acacia catechu</i> Willd. (Mimosaceae) CUTCH TREE Khair	A tree with recurved prickles inserted below the leaf base. Flowers white or pale-yellow. Pods stalked, glabrous, oblong	Common in wastelands	Burma, Ceylon, eastern Africa/Throughout Northern India, Maharashtra, Gujrat, Rajasthan, Madhya Pradesh./Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Solan (Dharmapur, Kunihar), Sirmaur (Nahan, Rajgarh), Una	up to 1200 m	bark, flowers, leaves- cough, colic pain, diarrhoea, piles, bronchial infection
<i>Acacia nilotica</i> Delile spp. <i>indica</i> (Benth) Brenan. (Fabaceae) BLACK BABOOL Kikar	A tree or shrub. Flowers yellow, fragrant, crowded on long stalked, globose heads. Pods stalked, grey tomentose, flat, contracted between the seeds	Common in wastelands and scattered along agricultural fields	Temperate Himalaya./throughout the drier parts of India/Bilaspur, Hamripur, Kangra, Mandi, Sirmaur (Nalagarh, Rajgarh), Solan (Kunihar), Una	up to 2000 m	bark, flower, leaves, seeds- asthma, diabetes, diarrhoea, dysentery
<i>Adhatoda vasica</i> Nees. (Acanthaceae) VASAKA Arusha	A shrub. Leaves ovate-lanceolate. Corolla 2 – lipped, pubescent outside, white-streaked and pink – dotted	Cultivated in home gardens	Sub-Himalayan tract of Western, Central Himalaya/ throughout India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket, Balh valley, Sundernagar, Sarkaghat, Pandoh), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1500 m	flowers, fruits, leaves, roots- leprosy, fever, jaundice, sore eyes
<i>Adiantum incisum</i> Forssk. (Adiantaceae) WALKING FERN	A rhizome, short, hairy; rachis hairy; pinnae up to 25 pairs. Sori indusiate, indusia light brown, margin almost entire. Spores light-brown	In rock-cervices, slopes and walls	Western Himalaya, Pakistan, Tropical and Southern Africa, Arabia/ Sikkim, Kashmir, South-Central India. Rajasthan/ Bilaspur, Chamba (Dalhousie), Kangra, Kullu (Manali), Mandi, Shimla (Chail, Rampur Bushair), Sirmaur (Nahan), Solan (Kalka, Kasauli, Kumarhatti, Mt. Karol), Una	300– 1200 m	whole plant- fever, cough, chest infection
<i>Aegle marmelos</i> (L.) Correa. ex Roxb. (Rutaceae) BAEL TREE, GOLDEN APPLE Bel	A tree. Flowers greenish-white; in short, axillary panicles. Ovary ovoid, stigma capitate. Fruit grey or yellowish, rind woody	Common in temple surroundings	Burma/Central and South India/ throughout India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Mandi (Nachan, Suket), Kinnaur, Solan (Kunihar), Sirmaur (Nahan, Rajgarh), Una	up to 1200 m	bark, flowers, fruits, leaves, roots, seeds- diarrhoea, dysentery
<i>Agave americana</i> Linn. (Agavaceae) AMERICAN ALOE Banskeora, Barakanwar	a perennial plant. Leaves in lax rosette, up to 1 m long. Scape with panicle 4 to 6 m high. Bulbils present	Cultivated as hedge plant on the border of orchards and fields	Indigenous to tropical America/ gardens throughout India/ Bilaspur, Hamripur Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1800 m	leaves, roots- burns, cuts, insect bites
<i>Ageratum conyzoides</i> Linn. (Asteraceae) GOATWEED	An annual herb. Leaves opposite, stalked, lanceolate. Heads numerous. Flowers pale-blue or white. Achenes angles, black, viscid	Abundantly found in waste places, jhamed areas, roadsides as a weed throughout	All hot countries/Througout India./Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Sirmaur (Rajgarh), Solan (Kunihar, Rajgarh), Una	up to 1700 m	flowers, leaves, roots- cuts, wounds fever, headache
<i>Ailanthus excelsa</i> Roxb. (Simaroubaceae) TREE OF HEAVEN Maharuk	A tree. Leaves pari or imparipinnate, alternate, estipulate, Flowers polygamous, 8 mm across, yellowish	Cultivated in roadsides and garden	Bihar, Gujarat, Madhya Pradesh/ Bilaspur, Sirmaur (Nahan)	up to 1800 m	bark, leaves – diarrhoea
<i>Albizia lebeck</i> Benth. (Fabaceae) EAST INDIAN WALNUT	A tree. Flowers white, calyx pubescent, corolla glabrous. Pods glabrous	Planted along roadside, also occurs scattered in mixed deciduous	Tropical Asia, Africa, North Australia/ Throughout India/Bilaspur, Chamba, Hamripur, Kangra, Mandi Sirmaur (Nalagarh, Ramshahar), Nahan, Solan	up to 1200 m	bark, leaves, flowers, roots- asthma, cough, cold, diarrhoea

Siris		forests			
<i>Albizia odoratissima</i> Benth. (Mimosaceae) BLACK SIRIS, KALA SIRIS Kala Siri	A tree. Flowers pale-yellow, calyx and corolla hairy. Pods brown, tomentose, ultimately glabrous	Cultivated along roadside and in forests	Tropical Asia/ Throughout Indian Subtropics/ Bilaspur, Chamba (Dalhousie), Hamripur, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	600 – 1000 m	bark, flowers, roots- burns, cough, diabetes
<i>Alisma plantago-aquatica</i> L. (Alismataceae) WATER PLANTAIN, MAD-DOG WEED	A perennial aquatic herb. Leaves erect or spreading. Flowers in panicked whorls. Petals pink or rose with yellow claw. Achenes 20 – 30, in whorl	Common in muddy, marshy places and in ditches along river and ponds	Kashmir to Manipur Marshes in the lower Himalaya from Kashmir to Assam, Karnataka./ Chamba, Hamripur, Kangra, Kinnaur, Mandi, Shimla	500 – 1500 m	fruits, leaves, seeds roots- antidote to opium poisoning, sores, ulcers, wounds
<i>Anogeissus latifolia</i> Wall. ex Bedd. (Combretaceae) BUTTON TREE Dhawa, Dhaura	A tree. Leaves alternate, elliptic, entire, glabrous. Fruit winged, yellowish-green	Found in the forest	Throughout the Sub-Himalayan tract/Commonly found in dry forests of India/., Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1200 m	bark, flowers, fruits, roots, stems- wound, diarrhoea, diabetes
<i>Anthocephalus cdamba</i> (Roxb.) Miq. (Rubiaceae) WILD CINCHONA Kadamba	A tree. Leaves simple, 13-32 cm long. Flowers orange, small, in dense, globose heads	Generally cultivated or wild	Sub-Himalayan tract from Nepal, eastward to Burma/ South India to Andhra Pradesh, Western Ghats./Bilaspur (Deoli Lake), Mandi	up to 1600 m	bark, flowers, fruits, leaves- wounds, mouth ulcers, diarrhoea
<i>Argemone mexicana</i> L. (Papaveraceae) PRICKLY POPPY Bharband	An annual prickly herb with flowers bright yellow. Seeds rounded blackish-brown, with free tubercles	Abundant in waste places, cultivated fields and roadsides	Native to America/Throughout India/ Una	up to 1500 m	leaves, seeds, roots-scabies, ophthalmia
<i>Arundo donax</i> L. Bor. (Poaceae) GREAT REED Baranal	A woody perennial reed. Leaves smooth and flat. Glumes thin, narrowly lanceolate, concave	Occasionally in moist places, along roads, ditches, river banks	Western Asia, North Africa, Europe/ Lower Himalayas from Kashmir to Assam, Nilgiris/ Bilaspur, Chamba, Kinnaur Kullu, Mandi, Shimla	up to 2400 m	roots- headache
<i>Asparagus adscendens</i> Roxb. (Liliaceae) SPARROW GRASS Satavar, Safedmusli	A spinous shrub. Cladodes densely crowded in tufts. Flowers in numerous racemes. Berry globose, red. Seeds 2-6, black	Along road side and around the boundaries of fields	Throughout Western Himalayas/throughout tropical and subtropical parts of India / Bilaspur, Chamba, Hamripur, Kangra, Mandi (Joginder Nagar, Nachan, Karsog), Solan	400 – 1500 m	bark, fruits, roots, tubers- diarrhoea, dysentery, improve fertility
<i>Azadirachta indica</i> A. Juss. (Meliaceae) NEEM TREE Nim	A tree. Leaves paripinnate or imparipinnate. Drupe ovoid-oblong, yellow when ripe, glabrous. Seeds ovoid-oblong	Abundant on loose sandy river banks, waste places at the edge of lakes	Sub-tropical regions/Throughout India/ Bilaspur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar)	up to 2000 m	bark, flowers, fruits, kernel, leaves, stem, seeds, twigs- ulcers, eczema, indigestion
<i>Bambusa arundinacea</i> Willd. (Poaceae) THORNY BAMBOO Bans	A tall erect green bamboo with spines. Culms thick and erect; culm sheath triangular with spiny hairs. Leaf sheath, glabrous, ligule short.	Common throughout forest	Myanmar, Srilanka introduced into West Indies/Occurs throughout greater parts of India including Assam, Manipur, Meghalaya/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra, Mandi (Nachan, Suket), Kinnaur, Shimla, Sirmaur (Nahan), Solan (Kunihar), Una	up to 1000 m	leaves, roots, stems, seeds- cough and cold to horses
<i>Bauhinia purpurea</i> Linn. (Fabaceae) BUTTER FLY TREE Khairwal	A tree. Flowers rose to purple, showy. Pod glabrous, flat	Ornamental plant along road sides	Sub-Himalayan tracts, Nepal/ Assam, Andhra Pradesh, Khasia Hills, West Bengal/ Bilaspur, Hamripur, Kangra, Sirmaur, Solan, Una	up to 1600 m	bark, flowers, leaves, roots, seeds- diarrhoea
<i>Bauhinia racemosa</i> Lam. (Fabaceae) PURPLE BAUHINIA Ashta, Kachnal	A tree. Leaves simple, bilobed, alternate. Flowers bisexual, 10-12 mm across, yellowish-white,	Common in dry forests	China, the Malay isles, Timor/ throughout India/ Bilaspur, Hamirpur, Kangra (Nurpur), Kinnaur, Mandi (Nachan), Sirmaur (Nahan), Solan, Una	up to 1000 m	bark, flowers, leaves, roots- diarrhoea, dysentery, malaria
<i>Bauhinia variegata</i> Linn. (Fabaceae) MOUNTAIN EBONY Kachnar	A tree. Flowers in raceme, white to purplish – white. Pods glabrous	Commonly cultivated, usually occurs in chir forest and limestone soil	Sub-Himalayan tract from the Indus Eastwards Eastern, Central, South India/ Bilaspur, Chamba, Hamripur, Mandi (Joginder Nagar, Sunder Nagar, Nachan), Sirmaur, Solan, Una	300 -1800 m	bark, flowers, leaves, roots- leprosy, ulcers, diarrhoea, dysentery, piles
<i>Bombax malabaricum</i> DC. (Bombaceae) SILK COTTON TREE, Sembal, Semul, Shemal	A tree. Stem covered with stout, hard, conical prickles. Flowers fleshy, red or white. Capsule ovoid, downy	Scattered in village boundaries, frequent in leaf-shedding forests	Tropical eastern Himalaya, Java, Sumatra/Hotter parts of India. Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1400 m	bark, flowers, fruits, roots – diarrhoea, dysentery, piles
<i>Bryonia laciniosa</i> Linn. (Cucurbitaceae) THE BRYONY Shivlingi	A thin stemmed climber that grows as a weed. Matured fruit turn red	In hot and warm conditions	Distributed through Himalaya to Ceylon/ warmer parts of India/ Chamba (Dalhousie), Bilaspur, Hamripur, Kangra (Nurpur, Murtgarh, Chotidhar, Mahndhar, Tatal, Malkbal, Dhedukthed), Kinnaur, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1000 m	seeds- stimulate fertility in women
<i>Bryophyllum calycinum</i> Salisb. (Crassulaceae) Zokhm-Haiyat	A perennial herb. Flowers green, reddish-purple. Fruits enclosed in persistent papery corolla	Often cultivated	Throughout tropical regions/Throughout India /Chamba (Dalhousie), Bilaspur, Hamripur, Kangra, Kinnaur, Mandi (Nachan, Suket), Shimla, Solan (Kunihar)	up to 1000 m	leaves- used for wounds, boils, bites of insects

	and calyx				
<i>Butea monosperma</i> (Lam.) Kuntze. (Fabaceae) FLAME OF THE FOREST Dhak	A tree up to 15–16 m in height with young branches tomentose or downy. Leaves trifoliate, leaflet with unequal sides. Flowers orange-red. Pods velvety	Abundant in grazing grounds	Himalaya to Ceylon, Burma, Myanmar/ Sub-tropical regions of India/ Bilaspur, Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1400 m	bark, leaves, flowers, roots, seeds- piles, diarrhoea
<i>Caesalpinia sepiaria</i> Roxb. (Caesalpinaceae) THE MYSORE THORN, Arlei	A climbing shrub. Flowers bright yellow. Pods glabrous, flat. Seeds mottled with brown and black	In tropical and temperate regions	Himalaya, Ceylon, Java/Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Mandi (Nachan), Shimla, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1300 m	bark, leaves, shoots- ophthalmia
<i>Calotropis gigantea</i> R. Br. (Asclepiadaceae) GIGANTIC SHALLOW WORT Ak	a herb. Follicles recurved	Scattered along village outskirts, common weed of wastelands	Himalaya, Ceylon, Singapore, Malay Islands, South China/Occurs throughout India/ Bilaspur, Kangra (Nurpur), Sirmaur (Nachan, Rajgarh), Solan (Kunihar), Una	up to 1000 m	bark, leaf, flower, latex, root- cough, cold, constipation, tooth ache
<i>Calotropis procera</i> R. Br. (Asclepiadaceae) AKUND, SWALLOW-WART Akada	A shrub. Flower pink, spotted with purple. Follicles thick, wrinkled covered with wooly, pubescence	In warm dry places, common in wastelands	Persia, Tropical Africa/Common in India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1050 m	bark, flowers, leaves- leprosy, diarrhoea, dysentery
<i>Careya arborea</i> Roxb. (Lecythidaceae) KUMBI Kumbi	A tree. Leaves alternate, oblong or orbicular. Flowers white in terminal spikes, foul smelling	Sparingly found in the forests	Frequent in sub-Himalayan tract, Bengal, Burma, Central Western/Throughout India/ Bilaspur, Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1500 m	bark, flowers, fruits, seeds- cough, cold
<i>Carica papaya</i> Linn. (Caricaceae) PAPAYA Papaya, Papeeta	A tree. Large glabrous palmatifid and palminerved leaves	Generally cultivated for its delicious fruits	Native of Tropical Central America/Commonly in India/ Bilaspur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	200 – 2000 m	bark, fruits, leaves, roots, seeds –digestant, anticoagulant
<i>Carissa opaca</i> Stapf. ex Haines. (Apocynaceae) KARAUNDA	A shrub. Leaves finally puberulous beneath. Berry 5-6mm long, sub-globose, black, 4-seeded	In drier conditions, mostly throughout plains	Pakistan, Mynmar, Sri Lanka/Drier parts of India/ Kangra, Mandi, Una	up to 1800 m	roots- asthma, jaundice
<i>Cassia fistula</i> Linn. (Caesalpinaceae) CASSIA DRUMSTICK Amaltas	A tree. Flowers yellow in drooping racemes. Pods cylindrical about 30 cm long	Deciduous tree of forest, found along road sides as an avenue tree	Myanmar, Himalaya, Srilanka/ throughout India/ Bilaspur, Chamba, Hamripur, Kangra, Kinnaur, Mandi (Sundernagar, Jogindernagar, Karsog), Shimla, Sirmaur, Solan, Una	<1500 m	bark, flowers, roots- constipation, black water fever
<i>Cedrela toona</i> Roxb. (Meliaceae) TOON, RED CEDAR Mahanim, Tun	A tree. Flowers fragrant, petals ciliate. Seeds 1-3 cm long, winged at both ends	Along roadsides and waste places	Sub-Himalayan tract/ Eastern India, Assam, South India, Western Ghats/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	< 1000 m	bark, flowers- dysentery, ulcers
<i>Cichorium intybus</i> L. Hook. (Asteraceae) CHICORY, WILD ENDIVE Kasani	A perennial herb. Leaves sessile or subsessile, Achenes 1-1.5mm long, turbinate, 5-angled	As an escape along agricultural fields	Indigenous to Europe, Baluchistan/North-Western India/ Bombay, Punjab/Chamba, Una	up to 1800 m	roots, seeds- wounds, cuts, malaria
<i>Cinnamomum tamala</i> Nees & Ebesm. (Lauraceae) Tejpat	A tree. Leaves glabrous, 3-nerved from the base, long pointed. Flowers unisexual, white, in pubescent panicles	In valleys, hills and warm places	Subtropical Himalayas/Kashi, Jaintia hills/ Chamba, Hamripur, Kangra (Palampur), Mandi (Jogindernagar), Shimla (Ton Valley), Sirmaur (Nahan), Solan	up to 1800 m	leaves- colic, diarrhoea
<i>Cissampelos pareira</i> L. var. <i>hirsute</i> (Buch. ex. DC.) Formen (Menispermaceae) FALSE PAREIRA BRAVA	A perennial climbing herb. Male flowers green or greenish-yellow. Drupes subglobose, red, pilose, with persistent stylar scars.	Common in road sides and moist places, seldom cultivated in gardens	Warm parts of Asia, Eastern Africa, America/ Tropical & Subtropical parts of India. Bilaspur, Chamba, Hamripur, Kangra, Mandi (Jogindernagar), Sirmaur, Solan (Upper Nauni, Oachghat, UHF Campus, Nauni), Una	up to 1500 m	leaves, roots, whole plant – wounds, cough, diarrhoea, fever, scabies
<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai. (Cucurbitaceae) WATER MELON Tarbuj	An annual climber. Tendrils to – fd. Leaves ovate. Flowers greenish – yellow	Commonly cultivated for fruits	Throughout India/ Una	up to 1000 m	fruits, seeds- burns, swelling, diabetes
<i>Clerodendrum serratum</i> Spreng. (Verbenaceae) Barangi	A perennial shrub. Flowers purplish-blue to white. Drupe succulent, purple-black	Occasionally found in forests and waste places near villages	Ceylon, Malay, Peninsula/Decan Carnatic, West-coast district of Tamil Nadu state, Kumaon, Sikkim, Assam to Tenasserium/ Hamripur, Kangra, Sirmaur (Nahan-Paonta Sahib, Nalagarh), Una	up to 1500 m	leaves, roots- dropsy, ophthalmia, dyspepsia
<i>Coccoloba grandis</i> (L.) Voigt. (Cucurbitaceae) IVY GOURD, Kunduri	An annual or preennial herb. Tendril simple. Flowers white	Common on hedges and bushes in the wastelands	Throughout India/ Una	up to 1500 m	flowers, fruits, leaves, roots- constipation, wounds, diabetes
<i>Crataeva religiosa</i> Hook.	A tree. Leaves 3 – foliolate, flowers rather	Almost wild or cultivated	Burma, Sub-Himalayan tract/ Siwalik tract in the east of the Punjab and frequently seen	up to 1600 m	bark, flowers, fruits, leaves-

(Capparidaceae) Barna, Bilari	large, white, turning yellowish		planted at wells, as far as Jhelum, South Multan. Bilaspur, Hamripur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una		stomachache, fever, wounds
<i>Cyperus rotundus</i> Linn. (Cyperaceae) NUT GRASS Motha, Mutha	A perennial herb. Umbels simple or compound. Glumes closely imbricate	Commonly found in temperate grasslands	Temperate grasslands/Kashmir to Shimla, Garhwal, Khasia Hills/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan), Solan (Kunihar), Una	up to 2000 m	rhizomes, roots-wounds, malaria
<i>Cyperus triceps</i> (Rottb.) Endl. (Cyperaceae), Nirbisi	A herb with tufted rhizome; spikelets arranged in umbels	In plains	Throughout India/Kullu, Una	500 – 1500 m	roots- insect bites, wounds, fever, diarrhoea
<i>Dactyloctenium aegyptium</i> (L.) P. Beauv. (Poaceae) Makra, Makri	A perennial grass. Culms erect, geniculate ascending or prostrate, branching from thickened nodes.	Common in hot open waste places and grass fields	Myanmar, Srilanka, Africa, Afghanistan etc., introduced into America/ throughout tropical regions of India/Bilaspur, Hamripur, Kinnaur, Mandi, Una	up to 1900 m	seeds-ulcers, wounds
<i>Datura innoxia</i> Mill.(Solanaceae) LAL DHATURA Sadahadhatura	An under shrub with grayish pubescens. Flowers white, corolla with 10 – teeth. Fruit spiny	Common in waste places, on moist as well as dry rocky slopes	Western Himalaya/Temperate regions of India, Western Ghats/ Solan (Nalagarh, Parwanoo), Kangra, Una	up to 1100 m	leaves, seeds-bronchitis, asthma
<i>Datura metel</i> Linn. (Solanaceae) THORN APPLE Sodahdhatura	An annual herb or shrub. Flowers white. Corolla with 5 – teeth. Fruit spiny	Found along roads and railings	Western Himalaya, South America/ Throughout India/ Kangra, Sirmaur (Nahan, Paonta) Solan (Nalagarh, Parwanoo), Una	< 2500 m	fruits, flowers, seeds, leaves-fever, skin diseases
<i>Dendrocalamus strictus</i> Nees. (Poaceae) MALE BAMBOO Bans Kaban	A perennial bamboo, Culm tall	Widely spread	Nepal, Myanmar, Java/All over India including Assam, Meghalaya /Bilaspur, Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1000 m	leaves- cough, asthma, ulcers
<i>Diospyros embryopteris</i> Pers. (Ebenaceae) GAUB PERSIMMON, Gab	A tree. Male flowers in cymes. Fruits subglobose, covered with red tomentum	Shady wet places and near streams	Ceylon, Siam, Malayan Peninsula/ Very Abundant in Bengal/ Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	500 – 1500 m	bark, fruits, seeds-dysentery, diarrhoea, ulcers
<i>Diospyros melanoxylon</i> Roxb. (Ebenaceae) COROMANDEL EBONY PERSIMMON Tendu, Timburni	A tree. Bark black or dark brown, very thick, corky, deeply fissured vertically, flakes rectangular. Leaves thick, pale green, with soft hair, fruit, yellowish and fleshy with enlarged calyx like brinjal	Common in mixed forests. For good growth, it prefers loamy soil with dominant clay fraction	Sub-Himalayan tract from Ravi to Nepal/ Madhya Pradesh, Maharashtra, Orissa, Uttar Pradesh, Bihar, West Peninsula/ Kangra (Nurpur), Sirmaur (Nahan), Una	up to 1800 m	bark, flowers, leaves-diarrhoea, skin diseases
<i>Diospyros tomentosa</i> Roxb.(Ebenaceae) NEPAL EBONY PERSIMMON Kendu, Tendu	A small tree. Leaves hairy when young. Fruits globose or ovoid, hairy when young, smooth, yellow when ripe	In plain tropical conditions	Plains of India/Una	up to 500 m	seeds stem-urinary infection, wounds
<i>Dodonaea viscosa</i> (L.) Jacq. (Sapindaceae) SANATHA Sinatha	An evergreen shrub. Leaves and young shoots viscid with yellow, resinous dots. Flowers small, yellow. Capsule compressed, membranous	Common in scrub jungles	Most warm countries/Throughout India./Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan), Solan, Una	up to 2000 m	bark, leaves-wounds, swellings, burns
<i>Echinops echinatus</i> DC.(Asteraceae) GLOBE THISTLE Gokru, Utakanta	A herb. Heads white with several projecting spines	Exposed to dry stony places and terraces of cropfields	Afghanistan, Myanmar, Pakistan. India: Throughout sub-tropical regions of India. Kangra (Nurpur), Sirmaur (Nahan), Una.	<1000 m	leaves, roots, whole plant-cough, cold, fever
<i>Eclipta alba</i> Hassk.(Asteraceae) Babri, Bhangra, Mochkand	A small annual herb. Achenes oblong, ribbed, glabrous	Found in rice fields or marshy ground	All warm countries/Throughout India/ Chamba (Dalhousie), Kangra (Nurpur), Shimla, Una	up to 1800 m	leaves, roots-cough, tooth-ache, indigestion
<i>Emblica officinalis</i> Gaertn. (Euphorbiaceae) EMBLIC MYROBALAN Amla, Amlika, Aonla	A tree. Bark greyish brown with irregular flakes. Drooping branches and branchlets resembling compound leaves. Leaflets small and numerous, flowers produced below the leaves	Common in forests, often cultivated in gardens and homeyards	Throughout tropical and subtropical India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1500 m	bark, fruits, roots, seeds-diarrhoea, jaundice, indigestion
<i>Erythrina indica</i> Lam.(Fabaceae) INDIAN CORAL TREE Dadap, Mandara	A tree. Glabrous, inflorescence and young leaves clothed with stellate pubescence	Cultivated or wild in tropical regions	Burma/Topical Regions of India/ Bilaspur, Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	500 – 1500 m	bark, leaves, whole plants-fever, joint pain
<i>Eucalyptus camaldulensis</i> Dehn. (Myrtaceae)	A tree. Flowers bisexual, 1-1.5 cm across, axillary in umbels, to 7 flowered	Along roadsides, generally planted	Throughout India/ Mandi, Shimla, Una	500 – 1500 m	leaves-dysentery
<i>Ficus bengalensis</i>	A tree. Aerial roots and	Common on road	Sub – Himalayan regions/ Throughout India./	up to	bark, flowers,

Linn.( Moraceae) BANYAN Bar, Bargad, Bor	pubescent young parts. Leaves leathery, ovate, obtuse, entire. Figs pubescent, sessile, axillary	sides, near temples	Bilaspur, Chamba (Dalhousie), Hamirpur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	1200 m	fruits, latex, leaves, roots- diarrhoea, dysentery, diabetes
<i>Ficus glomerata</i> Roxb.( Moraceae) Gular, Umar.	A tree. Achenes 1-2 mm long, ovoid, yellowish-brown with red dots	Common in all mixed and the tropical forests, almost always along choungs	Outer Himalaya, Ceylon, Burma/ wild in eastern parts of Punjab, Siwalik tract, Salt Range./Kangra (Nurpur),Sirmaur(Nahan),Solan (Kunihar), Una	up to 1000 m	bark, leaves, latex-diarrhoea, diabetes, piles
<i>Ficus palmata</i> Ferrk. (Moraceae) Anjiri, Bedu	A tree. Leaves thick, pubescent beneath. Figs axillary, tomentose	Grow around the villages in wastelands, fields etc.	Himalayas from Kashmir to Nepal, Westward to Egypt-Abyssinia, Afghanistan /North-West India, U.P., Mount Abu/ Bilaspur, Chamba (Dalhousie),Kangra(Nurpur),Kinnaur Mandi, (Nachan,Suket), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1800 m.	fruits, leaves-constipation, warts
<i>Ficus religiosa</i> Linn.(Moraceae) PEEPUL TREE Pipal, Pipli	A tree. Leaves long petioled, tip narrowed into a linear, tail-like point, young foliage pinkish. Figs axillary, slightly vertically flattened	Commonly planted on village sites as an avenue tree	Pakistan to Bhutan/Punjab, Eastern parts of Siwalik tract/ Bilaspur, Chamba (Dalhousie), Hamirpur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla (Kotgarh), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1500 m	bark, fruits, roots, seeds- ulcers, skin diseases
<i>Flacourtia rhamontchii</i> L. (Flacourtiaceae) GOVERNOR'S PLUM,Bilangra.	A tree. Flowers greenish-yellow, dioecious. Fruit dark brown tored, edible	Frequent in forest, mostly on dry rocky hills	Suliman range/Delhi, to the west, in the Salt range/ Bilaspur, Chamba (Dalhousie), Hamirpur, Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1700 m	bark, fruits, roots- jaundice
<i>Flemingia congesta</i> Roxb. ( Fabaceae) Bara-Salpan, Bhalia	A perennial shrub.Leaves trifoliolate. Racemes about as long as petioles. Flowers white	Tropical and subtropical areas	North-western, Central Himalaya/Warmer parts of India/ Bilaspur, Hamirpur, Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar)	up to 800 m	Pods- skin treatment
<i>Flemingia strobilifera</i> var. <i>fruticulosa</i> Baker. ( Fabaceae) Kussunt	A climber like shrub. Leaves simple with rounded base. Flowers white, concealed within the large folded bracts	In tropical and temperate regions, rarely found in forests	Western Himalaya, Sri lanka, Burma, Java/ Throughout India/Bilaspur, Kangra (Nurpur), Una	1200 – 2700 m	leaves, roots- dysentery, epilepsy, fever
<i>Fumaria parviflora</i> Linn.(Papaveraceae) FINE LEAVED FUMITORY Pitpapa	An annual herb.Corolla pinkish-white. Fruit 2 mm in diameter, globose, 1-seeded nutlet, hard, glabrous	Common weed in fields	Temperate regions of North hemisphere/ Occurs in gardens of temperate region of India/Chamba, Kangra (Nurpur), Sirmaur, Una	up to 2500 m	leaves, seeds, whole plant- indigestion, fever, vomiting
<i>Grewia asiatica</i> L. ( Tiliaceae) Dhamin, Phalsa, Parsuha, Shukri	A tree with soft pubescence. Fowers yellow	Generally cultivated	Sub-Himalayan tract, Burma/Throughout India/especially in Punjab, UP, Rajasthan, Maharashtra/ Una	up to 1000 m	bark, fruits, leaves- fever, indigestion, eczema
<i>Helicteres isora</i> Linn. (Sterculiaceae) EAST INDIAN SCREW TREE Marorphali	A shrub. Fruit follicle and spirally twisted into the shape of a screw	Mostly confined in tropic and subtropics	Siwalik tract, Ceylon/Punjab, throughout central and western India, Jammu, central Peninsula/ Bilaspur, Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	500 – 1500 m.	bark, fruits, roots, seeds, leaves- diarrhoea, dysentery, diabetes
<i>Heteropogon contortus</i> (L.) P. Beauv. (Poaceae) SPEAR GRASS Kher, Kumeria, Parwa, Sura	A glabrous perennial grass. Fertile spikelets long awned; sessile spikelets and contain only stamens	Common in open grasslands	Myanmar, Africa/Bihar, W. Bengal, Meghalaya, Nagaland, Jammu and Kashmir,Delhi,UttarPradesh,Madhya Pradesh, North-East India, Manipur, Orissa, Mizorum, Tamil Nadu, Karnataka./Bilaspur,Chamba, Mandi, Hamirpur, Kinnaur, Shimla, Una	up to 1950 m	roots – burns, wounds
<i>Holarrhena antidyenterica</i> Wall.(Apocynaceae) KURCHI OR CONESSI BARK Kura, Kurchi, Kureya	A tree. Flowers white, in terminal carymbose cymes. Seeds crowned with a tuft of long, silky hairs	Common in open forests and open wastelands	Sub Himalayan tract/Throughout India./Bilaspur, Chamba (Dalhousie), Hamirpur, Kangra (Nurpur), Mandi (Sarkaghat), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1250 m	bark, leaves, roots, seeds- dysentery, diarrhoea
<i>Holoptelia intergifolia</i> Planch (Ulmaceae) THE ENTIRE – LEAVED ELM Kanju, Papri	A tree. Leaves alternate, elliptic, entire. Flowers in fascicles on leafless branches	Common in wastelands, forests and along road sides	Sri lanka, Burma, China/ Throughout India./ Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan, Una	up to 600 m.	bark, fruits, leaves, seeds- diabetes, wounds, piles, vomiting
<i>Hydrocotyle asiatica</i> Linn. (Apiaceae) INDIAN PENNYWORT	A herb. Stem glabrous. Fruit pale yellowish-brown, glabrous	A herb. Stem glabrous. Fruit pale yellowish-brown, glabrous	Tropical and sub-tropical countries/Throughout India, Bengal/ Bilaspur, Chamba (Dalhousie), Hamirpur,Kangra (Nurpur), Kinnaur, Mandi (Nachan), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1000 m	leaves- dysentery
<i>Ichnocarpus frutescens</i> R. Br. (Apocynaceae) BLACK CREEPER Kalidudhi, Siamalata	A perennial climber. Cymes pubescent. Flowers purplish. Corolla tube glabrous, mouth villous	Common in forest areas	Western Himalaya, Nepal, Burma, Ceylon/ Throughout India/ Kangra (Nurpur), Sirmaur (Nahan), Una	<1000 m	leaves, roots, shoots, whole plant- fever, dyspepsis
<i>Impatiens balsamina</i> L.(Balsaminaceae)	A herb. Leaves alternate. Flowers axillary, pink-	Common in moist places, on the	Native of Sout-East Asia, China, Malaya, Nepal/Throughout India./Shimla,Una	up to 1500 m	flowers, leaves, seeds- pins in

BALSAM WEED, JEWEL WEED Gulmendhi	purple, orange, red, spur long. Seeds globose, black, tubercled	borders of rice fields			joint
<i>Imperata cylindrica</i> (L.) P. Beauv. (Poaceae) THATCH GRASS Dabh, Siru, Ulu	A perennial small grass. Leaf blades variable as the culms, narrow at the base	Common in dry hill slopes	Sri Lanka Bengal/ Punjab and Sind, Uttar Pradesh, Madhya Pradesh, West Bengal, N.E. India, Tamil Nadu, Karnataka/ Hamripur, Kullu, Shimla, Una	up to 2300 m	rhizomes, roots
<i>Indigofera pulchella</i> Roxb. (Fabaceae) Hakna, Sakena	A perennial shrub. Pod glabrous brown	On open slopes, walls and in valleys	Throughout the Himalayan tract/ Plains of North India/ Chamba (Dalhousie), Hamripur, Kangra, Kinnaur, Kullu (Siraj), Mandi (Nachan, Suket), Shimla (Chopal, Kotgarh, Rohru), Sirmaur (Nahan, Rajgarh), Solan, Una	1600 – 2800 m	flowers, roots-cough, burns, scalds
<i>Ipomoea carnea</i> Jacq. ssp. <i>fistulosa</i> (Mart. ex Choisy) D. Don. (Convolvulaceae) Walaiti Ak, Pahari	A perennial twinner. Stem hollow. Flowers light pink. Seeds villose with brown, shining hairs	Common along the hedges and border of fields	Native of tropical America, Nepal, Mexico, West Indies, Brazil./Jammu/Una	400 – 1500 m	leaves, latex, whole plant-asthma, epilepsy, dyspepsia
<i>Jasminum multiflorum</i> (Burm. F.) Andrews. (Oleaceae) CHINESE JASMINE Chameli,	A shrub. Calyx with yellow hairs. Flowers white. Berry 1.2-1.5 cm long, ellipsoid, black	Common in miscellaneous forests and in hedges	Burma to China/Throughout India/ Bilaspur, Chamba, Kangra, Kinnaur, Kullu, Mandi, Shimla, Sirmaur	up to 2200 m	bark, flowers, leaves, roots-ulcers
<i>Jatropha curcas</i> Linn. (Euphorbiaceae) PHYSIC NUT Bagbherenda, Jangliarandi	A shrub or tree. Flowers usually monoecious. Fruit ovoid, black., breaking into 3, 2 valved cocci. Seeds ovoid-oblong, brownish-black	Common in waste places, cultivated, specially as a hedge tree round gardens and villages, sometimes found as an escape in rubbishy places	Indigenous to tropical America, West Indies/ Throughout India, Andaman/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1000 m	bark, latex, leaves, seeds-dropsy, paralysis
<i>Limonia crenulata</i> Roxb. (Rutaceae) Beli	A shrub, armed with 1-2.5 cm long thorns. Flowers white, fragrant, in umbelliform racemes. Berry globose, black. Seeds 1-4, embedded in pulp	In hot and moist places	Warmer and moist regions of India/ Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1500 m	fruits, leaves, roots- fever, diarrhoea, ulcer
<i>Mallotus philippinensis</i> Muel. (Euphorbiaceae) THE MONKEY FACE TREE Kamala, Rohini, Sindur	A tree. In florescence rusty-pubescent. Flowers yellowish, dioecious. Seed subglobose, black, wrinkled	Grows in miscellaneous and Sal forests	Burma, Singapore, Andaman Islands, Sind Southwards to Ceylon, China, Malay Island, Australia/Throughout India/Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla (Kotgarh), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1800 m	bark, flowers, leaves, roots, seeds, whole plant – constipation, wounds, ulcers
<i>Mangifera indica</i> Linn. (Anacardiaceae) MANGO Am	A tree. Flowers yellowish-green. Drupe fleshy, compressed, ovoid, oblique; stone fibrous, compressed	Common tree all over India, cultivated for its delicious fruits	Tropical Himalaya/Throughout warmer parts of India/Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1300 m	bark, flowers, fruits, kernel, leaves, roots, seeds- asthma
<i>Melia azedarach</i> Linn. (Meliaceae) BASTARD CEDAR Bakain, Drek	A tree. Drupe 1.2-1.6 cm long, ovoid or oblong, yellow and wrinkled when ripe, stone 5-seeded	Cultivated along roadsides	Sub-Himalayas tracts/ Commonly cultivated in India/Bilaspur, Hamripur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 2000 m	bark, fruits, leaves, seeds-malaria, skin diseases, indigestion, headache
<i>Mentha piperita</i> Linn. (Lamiaceae) PEPPERMINT Gamathipudina, Paparaminta	A perennial herb	Common in marshy places and near water courses	Europe, Asia, North America/ throughout tropics of India/Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	below 1300 m	whole plant – stomach disorders
<i>Michelia champaca</i> Linn. (Magnoliaceae) CHAMPAK Champa	A tree. Leaves ovate-lanceolate. Flowers solitary, axillary, pale or orange, very fragrant	Commonly planted or wild.	Wild in Nepal, Burma/ Cultivated throughout India/ Bilaspur, Chamba (Bhatia, Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan), Sirmaur (Nahan), Solan (Kunihar)	up to 1500 m	bark, fruits, flowers, leaves, roots, seeds-indigestion, nausea, fever
<i>Momordica dioica</i> Roxb. ex Willd. (Cucurbitaceae) Kaksa	A prennial climber. Leaves entire or lobed. Flowers yellow	Wild as well as cultivated, grows on hedges or trees	Himalaya to Sri Lanka/ Throughout India/ Shimla, Una	up to 1500 m.	fruits, roots-piles, urinary infection
<i>Moringa pterygosperma</i> Gaertn. (Moringaceae) DRUMSTICK TREE Sainjna, Shajna	A tree. Capsule 15-40cm long, pendulous. Seeds 3-angled, angles winged	Cultivated in villages	Western Himalaya, Eastern Punjab/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan), Solan (Kunihar), Una	< 1000 m	bark, leaves, roots, seeds-headache, diabetes, skin diseases, swellings
<i>Mucuna pruriens</i> (L.) DC. (Fabaceae) COMMON COWITCH Goncha, Kaunch,	An annual herb. Flowers purple. Pod curved upwards at the tip, densely clothed with	Common along the river banks	Tropical regions of Africa, America/All over India/ Bilaspur, Kangra (Bharwain, Dehra, Jwalamukhi, Nurpur), Mandi (Sarkaghat), Shimla (Tattapani), Sirmaur (Nahan), Solan	up to 1500 m	leaves, roots, seeds- snake bite, intestinal disorder, fever,

Kiwach	rusty, persistant irritating bristles		(Nauni-Khaltoo)		joint pain
<i>Murraya Koenigii</i> Spreng. (Rutaceae) CURRY LEAF TREE Barsanga, Gandhela, Kathnim, Kurry Patta	A shrub. Flowers white. Fruit-berry, black, wrinkled. Seeds oblong, plano-convex, punctate, glabrous	Common on hill slopes in forests	Srilanka, China, Laos, Java, Combodia/ Throughout India in warmer regions, Andamans/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Kullu (Siraj), Mandi (Nachan), Shimla (Kotgarh), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	800 – 1450 m	bark, fruits, leaves, roots- dysentery, renal pain
<i>Nerium indicum</i> Mill. (Apocynaceae) INDIAN OLEANDER Kaner	A shrub. Leaves narrowly lanceolate. Flowers red or pink, fragrant	Open hill sides, common in foot hills, along the bank of rivers	Baluchistan, Afganistan./Himalayas., Central India/Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1950 m	bark, leaves, roots, whole plant-skin diseases, earache, diabetes
<i>Nyctanthes arbortristis</i> Linn. (Oleaceae) SORROWFUL TREE Harsinghar, Seoli	A shrub. Flowers-sweet, white-corolla tube yellow. Seeds-orbicular, flattened	Cultivated throughout country	Sub-Himalayan, Burma and Ceylon/ West Bengal, Bihar, Assam, Central India, Andhra Pradesh, Tamil Nadu/ Hamripur, Kangra, Kinnaur, Mandi, Sirmaur, Solan, Una	up to 1500 m	bark, flowers, leaves, roots, seeds- fever
<i>Opuntia dillenii</i> Haw. (Cactaceae) PRICKLY PEAR Hathhathoria	A perennial shrub.	Common in wastelands, roadsides and in dry localities	Mexico, South America/Throughout India / Bilaspur, Hamripur, Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1500 m.	fruits, stems- cough, ophthalmia
<i>Oroxylum indicum</i> Vent. (Bignoniaceae) Arlu, Soona, Ullu	A tree. Leaves large, long-pointed, glabrous, flowers dark-red. Corolla fleshy, bell-shaped	Scrub forests and roadsides	Burma, Ceylon, Malaya, Malacca, China/ Throughout India/ Bilaspur, Chamba, Hamripur, Kangra (Nurpur), Kinnaur, Kullu (Siraj), Mandi (Nachan), Shimla (Kotgarh), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1200 m.	bark, fruits, leaves, roots- dysentery, diarrhoea, indigestion
<i>Ougeinia oojainensis</i> Roxb. Hotch. (Fabaceae) SANDAN Panana, Panjan, Sandan	A tree or shrub. Leaves trifoliate. Flowes white or rosy. Pod linear, smooth with distinct joints	Common in dry rocky slopes as shrub, but grows into a full tree when growing on good soil	Throughout outer Himalayas, Bhutan/ Central India, Deccan/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan), Sirmaur (Nahan), Solan(Kunihar), Una	300 – 1500 m	bark, flowers- diarrhoea, dysentery
<i>Paspalidium flavidum</i> (Retz.) A. Camus. (Poaceae) Baunr, Dhanera, Sanka	An annual perennial grass. Culms up to 1 m tall, erect or decumbent-ascending; nodes glabrous. Grain elliptic	In plains, hilly tracts and along water courses.	Tropical Asia, Australia/ Throughout India/ Hamripur, Mandi, Una	up to 1000 m	Leaves- antiseptic
<i>Paspalum scrobiculatum</i> L. (Poaceae) KODO MILLET, Kodo, kodra	Annual or perennial grass	Cultivated or wild	Srilanka, Singapore/ Tropical and sub-tropical parts of India/ Assam, Madras/ Hamripur, Kangra, Una	up to 2000 m	roots, seeds, stems- diabetes
<i>Phoenix sylvestris</i> Roxb. (Arecaceae) Wild Date Palm Khajur, Khajuri	A tree. Stem rough with the prominent scars of fallen petioles, no root suckers	Common in village boundaries and areas	Burma/Throughout India/ Bilaspur, Kangra (Nurpur), Solan (Kunihar), Una	up to 1500 m	fruits, leaves, roots- respiratory disease, fever
<i>Pinus roxburghii</i> Sargent. (Pinaceae) THREE LEAVED PINE, Chir Chil, Chir, Sarala	A perennial tree. Branches whorled, dimorphic. Seeds winged	Generally found in open forests, seldom cultivated in Indian gardens	Kashmir to Bhutan/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Kullu (Siraj), Mandi (Nachan, Suket), Shimla (Chopal, Kotgarh, Rohru), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1000 m	seeds- wounds, skin problems
<i>Pistacia integerrima</i> Stewart. (Anacardiaceae) Kakarasingi	A Tree. Leaves pinnae. Petals absent. Stamens large deep red.	Common along roadsides and riverbanks.	Western Himalayas/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Mandi (Nachan, Suket), Shimla (Kotgarh), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	600 – 1800 m	fruits, leaves, seeds- asthma, dysentery
<i>Pistacia khinjuk</i> Stew. ex Brandis. (Anacardiaceae) Kakar, Kakrasingi, Karkatsringi, Kakru	A tree, dioecious; flowers in lateral panicles	Cultivated in plains	Himalayas/ It is found from Indus to Kumaon, occur in Kashmir, Punjab/ Bilaspur, Chamba, Hamripur, Kangra, Kinnaur, Kullu, Mandi, Shimla, Sirmaur, Solan	350 – 2400 m	bark, fruits, leaves- antiseptic, respiratory problems
<i>Plumbago zeylanica</i> Linn. (Plumbaginaceae) WHITE FLOWERED LEADWORT Chita, Chitra, Chitarak	A perennial Shrub. Branches angular, striated. Leaf petiole with dilated amplexicaule base. Inflorescence rachis glandular. Flowers white. Calyx covered with stalked glands	Fairly common in wastelands and roadsides	Cultivated in Indian gardens/ Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Mandi, Shimla, Sirmaur, Una	up to 1200 m	leaves, roots- black-water fever
<i>Polygala arvensis</i> Willd. (Polygalaceae) Meradu, Miragu	An annual herb. Leaves obovate, linear-oblong, mucronate, Flowers yellow in axillary dense racemes. Capsules elliptic-oblong, emarginated, glabrous. Seed silky hairy	Abundant in khoai and grasslands	Throughout plains of India, Nicobar/ Bilaspur, Chamba, Hamripur, Kinnaur, Mandi, Shimla, Una	up to 1500 m	leaves, roots- asthma, bronchitis, fever
<i>Polygala crotalarioides</i> Buch-Ham. ex DC.	A perennial herb. Leaves obovate-elliptic, obtuse.	Grows in cervices of rocks	Temperate Himalaya/ Throughout India / Chamba, Hamripur, Lahul & Spiti, Shimla,	1200– 2200 m	roots- cough

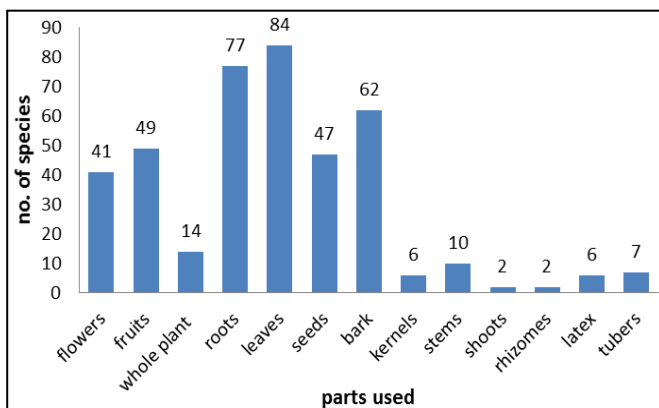


(Polygalaceae)	Flowers pink or purple. Capsules orbicular, glabrous, wings ciliate. Seeds oblong, pilose, stropioler appendages 1/3 as long as the seed		Solan		
<i>Premna latifolia</i> Roxb. (Verbenaceae) Bakar, Basota	A tree. Leaves 16-11 x 2.5-5 cm, elliptic-oblong, base rounded to obtuse-cuneate	Common in low valleys	Deccan Peninsula, Eastern India/ Bilaspur, Hamripur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1500 m	bark, leaves, roots- ddropsy
<i>Prunus cerasoides</i> D. Don. (Rosaceae) HIMALAYAN WILD CHERRY Paddam	A tree. Flowers rose – red or white	Planted by waysides resting	Indigenous to the temperate Himalayan region/ Kashmir to Bhutan, Akai and Khasi hills in Assam, Manipur/ Bilaspur, Chamba, Hamripur, Kangra, Kullu, Shimla, Sirmaur, Solan, Una	900 – 2300 m	bark, fruits, whole plant
<i>Psidium guajava</i> Linn. (Myrtaceae) COMMON GUAVA Amrud, Safed Safari	A tree. Stem smooth with peeling bark. Leaves 16-11 x 2.5-5 cm, elliptic-oblong, base rounded to obtuse-cuneate	Commonly cultivated in and around villages, and sometimes half wild in village bushes	Mexico to Columbia, Peru/ throughout India/ Bilaspur, Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nahan), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 800 m	bark, flowers, fruits, leaves, roots, seeds- diarrhoea
<i>Pueraria tuberosa</i> DC. (Fabaceae) INDIAN KUDZU Bilaikand, Sural, Tirra	A perennial climbing shrub or herb. Pods flat, style persistent, densely clothed with long bristles, brown-hairy, 3-6 seeded	Prominent in exposed and eroded areas, covering the ground bushes and even large trees	Western Himalayas, Nepal/Throughout India/ Hamripur, Kangra (Bajjnath-Uniyal and Chauhan, 375), Mandi (Karsog), Sirmaur (Nahan, Rajgarh), Solan (Nalagarh, Niharhand, Prithipur, Saloi), Una	up to 1200 m	roots, tubers- constipation, congestion, digestion
<i>Punica granatum</i> Linn. (Lythraceae) POMEGRANATE Anar	A shrub or a tree. Petals wrinkled red. Fruits woody, tipped with persistent calyx. Seeds angular, red or pink; testa thick fleshy, juicy	Common on dry slopes.	Native of Iran, Afghanistan, Baluchistan/ Cultivated throughout India/ Bilaspur, Chamba, Kangra, Kullu, Mandi (Gumma, Seri and Drang areas of Jogindernagar), Shimla, Sirmaur, Solan (SolanGiripul)	<1800 m	bark, fruits, flowers, roots, seeds- diarrhoea, dysentery, bronchitis
<i>Putranjiva roxburghii</i> Wall. (Euphorbiaceae) Jiaputa, Juti, Putijia	A tree. Dark green foliage, branchlets and petiole pubescent	Generally cultivated	Burma/ Throughout India./Kangra (Nurpur), Sirmaur (Nahan), Una	<600 m	leaves, roots, seeds- cold, fever
<i>Randia dumetorum</i> (Retz.) Poir. (Rubiaceae) COMMON EMETIC NUT Maniphah	A shrub or a tree, branches armed with strong, straight decussate, axillary thorns. Flowers yellowish-green. Berry globose or ovoid, tipped with persistent calyx-lobes	Common in tropical and sub-tropical places	Java, Eastern tropical Africa, South China, Sumatara/ Throughout India/Hamripur, Kangra, Mandi (Sarkaghat), Sirmaur (Nahan - Paonta range), Solan (Nalagarh), Una	500 – 1500 m	fruits, seeds- vomiting
<i>Ranunculus arvensis</i> L. (Ranunculaceae) CORN BUTTER CUP	An annual weed. Leaves variable. Flowers yellow. Achenes 5 – 10, usually clothed with hook spines	Diffuse weed in wheat fields and common in marshy places	Afghanistan, Asia Minor, Europe, Western Siberia/ Common in plains North-Western Punjab/Chamba, Kangra, Kinnaur, Kullu, Shimla, Una	1200– 2000 m	whole plant- fever, gout, asthma
<i>Ricinus communis</i> Linn. (Euphorbiaceae) CASTOR OIL PLANT Erandi	A perennial shrub. Leaves peltate, large, palmately lobed, and serrate. Flowers large in terminal, subpanicked racemes, monoecious	Frequently met with in wastelands, usually near habitations throughout	Throughout the Tropics, indigenous to Africa/ Throughout India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan, Una	up to 2000 m	bark, flowers, leaves, roots, stem, seeds- constipation, joint pains, stomach ache
<i>Rivea hypocrateriformis</i> (Desr.) Choisy. (Convolvulaceae) MIDNAPORE CREEPER Phang	A shrub	Widely distributed in tropical regions.	North-western India/Una	up to 500 m	roots, leaves- diarrhoea, dysentery
<i>Salix acmophylla</i> Boiss. (Salicaceae) Bada, Bed	A small tree. Rough bark, hairy young branches and leaves. Leaves are linear-lanceolate, entire, green or yellowish – green beneath	Occur roadside	Throughout Himalayas to Afghanistan, Baluchistan, Westward to Syria/ North-western India, from U.P. to Punjab/Chamba, Hamripur, Lahaul & Spiti	450 – 1700 m	bark- fever, skin diseases, ulcers
<i>Salvia plebeia</i> R. Br. (Lamiaceae)	An annual herb. Flowers small, white or blue. Nutlets 1 mm long, ovoid, yellowish brown, smooth	Common along the water channels	China, Australia, Malay Islands/ Throughout India/ Chamba, Kullu, Mandi, Una	up to 1500 m	leaves, roots, seeds- diarrhoea, hemorrhoids, menorrhagia
<i>Sapindus mukorossi</i> Gaertn. (Sapindaceae) CHINESE SOAP BERRY Reetha, Thali	A tree. Flowers, numerous, small, purple. Drupe yellow, smooth, globose	Frequently met with along roadsides and near villages	Bonim Islands, China, Japan/ Assam, cultivated in many parts of India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra, Kinnaur, Mandi (Nahan), Kullu (Siraj), Shimla, Sirmaur (Nahan, Rajgarh), Solan (Kunihar)	up to 1500 m	fruits, kernel- skin and hair treatment
<i>Sida rhombifolia</i> Linn. (Malvaceae) Barela, Bhiunli Sahadevi	An annual or perennial shrub. Corolla 6-7 mm long, orange-yellow. Fruit stellate hairy. Seeds pubescent near hilum	In tropic and temperate regions	Tropical and Subtropical Ceylon/ Tropical and subtropical India/Bilaspur, Mandi (Jogindernagar), Shimla (Lower parts of Shimla), Sirmaur (Nahan, Paonta - Majra), Solan (Kunihar, Nalagarh)	up to 1800 m	leaves, roots, stems- headache, swelling, burns

<i>Solanum indicum</i> Linn.(Solanaceae) POISON-BERRY Barhanta, BIRTHATTA	A perennial shrub. Flowers white to bluish – violet. Fruits yellow	Common in rubbishy places, deserted toungyas, savannahs, along riverbanks etc.	China, Malaya to Philippines/Grows in warmer parts of India/Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Shimla, Sirmaur (Nahan), Solan (Kunihar), Una	up to 1600 m	fruits, leaves, roots, stems-cough, colic, nasal ulcers
<i>Solanum xanthocarpum</i> Schard & Wendl. (Solanaceae) YELLOW-BERRIED NIGHT SHADE,Kateli	A perennial herb. Flowers blue. Fruits yellow. Berries globose, smooth, yellow or whitish with green streaks	Common in wastelands, open moist fields, river beds, slopes and along cultivated fields	Distributed throughout Australia, Malaya, Polynesia, South-East Asia/ Common throughout India/ Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 2200 m	flowers, fruits, roots, stems-asthma, cold, cough, piles, snake bites
<i>Sorghum halepense</i> (L.) Bor. (Poaceae) JOHNSON GRASS, WILD SORGHUM	A perennial grass. Leaf blades 0.5-2 cm wide (rarely more); culms slender; panicle up to 25 cm long	Common in tropical parts	Bangladesh, Sri Lanka/ Tropical parts of India, Punjab, West Bengal, Uttar Pradesh, Madhya Pradesh, Nagaland, Bihar, Orissa/ Bilaspur, Chamba, Kinnaur	800 – 1800 m	seeds-demulcent and diuretic
<i>Stephania glabra</i> (Roxb.) Miers. (Menispermaceae)	A climber	Common in tropical and temperate regions	Tropical and temperate Himalaya/ Assam, Tamil Nadu, Western Ghats / Hamripur, Shimla	up to 2000 m	stems, tubers-asthma, intestinal disorder
<i>Syzgium cumini</i> (L.) Skeels.(Myrtaceae) Jambol, Jambul	A tree. Fruits 2-2.5 cm long, obovoid-oblong or subglobose, black with juicy pulp, calyx persistent. Seed -1	Wastelands, near streams in the forests and in damp places and swamps	China, Australia, Srilanka/ Throughout India/ Chamba, Hamripur, Mandi, Sirmaur, Una	up to 1800 m	bark, fruits, leaves, seeds-diabetes
<i>Terminalia bellirica</i> Roxb.(Combretaceae) BELLIRIC MYROBALAN	A tree. Flowers in spike, greenish-yellow, upper ones male, lower ones hermaphrodite	Found in deciduous forests, but not in arid regions.	Pakistan, Srilanka, Indo Malaysia, Malacca/ throughout greater parts of India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1500 m	bark, fruits, kernel, seeds-diarrhoea, constipation
<i>Terminalia chebula</i> Retz.(Combretaceae) Black myrobalan Harra	A tree. Flowers in spike, all hermaphrodites. Fruits non-winged, only ribbed when dry	Sporadic in warm valleys	Ceylon, Burma, India: Throughout India, occasional in Karnataka, Karla, Tamil Nadu, Andhra Pradesh, U.P., West Bengal/ Hamripur, Kangra, Mandi, Una	up to 1500 m	bark, fruits - asthma, diarrhoea, constipation
<i>Thevetia neriifolia</i> Juss.(Apocynaceae) THE EXILE Pila Kaner, Zard Kunel	A shrub with milky latex and linear – lanceolate leaves. Flowers yellow. Drupes angular	Commonly cultivated as an ornamental plant in gardens	Native to tropical America/ Bilaspur, Kangra (Daulatpur, Gagret, Mubarakpur), Mandi, Sirmaur (Nahan, Paonta), Solan (Nalagarh), Una	400 – 1200 m.	bark, kernel, leaves, roots, seeds-intermittent fever, constipation
<i>Tinospora cordifolia</i> (Willd.) Miers. (Menispermaceae) Giloy, Gulancha Tinospora	A climbing shrub. Flowers green – yellowish, green. Drupes-smooth, red	Common in hedges	Burma, Ceylon/ Tropical regions of India/ Chamba, Hamripur, Kangra, Mandi, Sirmaur (Paonta), Una	up to 300 m	fruits, leaves, roots, stems-fever, gonorrhoea
<i>Trapa natans</i> L. var. <i>bispinosa</i> (Roxb.) Makino.(Trapaceae) WATER CHEST NUT, Singhara	An aquatic herb. Leaves crowded, rhomboid, dentate, petiole base modified into a spongy float. Fruits oblong with 2 – spines, edible	Common in hotter places, along water courses	Throughout the hotter parts of India/ Bilaspur, Sirmaur	up to 2000 m	fruits, kernel, stems-dysentery, diarrhoea
<i>Trichodesma indicum</i> (L.) R. Br. ( Baraginaceae) Chhotakulpha, Ratmandi, Sal-Knota	An annual herb. Leaves oblong, elliptic or lanceolate, sessile. Flowers pale blue, turning to pink and ultimately to white	A weed in wastelands, common on dry sandy places and on rocks	Baluchistan, Ceylon, Afghanistan, Persia/ Throughout India/ Chamba, Kangra, Kinnaur, Mandi, Shimla, Una	up to 2000 m	roots, whole plant- dysentery, swelling of joints
<i>Trichodesma zeylanicum</i> (Burm. F.) R. Br. ( Boraginaceae) Hetenuria, Jalasirasa	A herb. Flowers pale – blue.	A herb. Flowers pale – blue	Deccan Peninsula, Ceylon/Throughout India. Una	up to 500 m	flowers, leaves, roots- wounds
<i>Uraria picta</i> Desv. (Fabaceae) Dabra	A perennial shrub	Occasional in Forests	Tropical Africa, Malay islands/Throughout India/ Bilaspur, Hamripur, Kangra, Shimla (Tattapani), Sirmaur (Nahan), Solan (Kunihar, Nalagarh),Una(Jwar forest)	up to 2000 m	fruits, leaves, roots- cough, fever
<i>Urginea indica</i> (Roxb.) Kunth. (Liliaceae) Indian squill Ban Piyaz, Jangli Piyaz	A herb. Bulbs like onion, white	Wild grows on sandy shores	Western Himalaya.Bihar, Konkan, Coromandal coast /Bilaspur, Hamripur, Kangra, Mandi, Sirmaur, Solan (Herbal garden at Nauni)	up to 2000 m	rhizome- cough, respiratory disorders
<i>Vallis solanacea</i> (Roth.) O. Kuntze. ( Apocynaceae) DUDHIBEL, RAMSAR Ramsar	A shrub. Pubescent inflor. Flowers white, fragrant, in drooping cymes. Seeds 0.8-1 cm long, ovate, beaked, warted, light brown; crown with white silky hairs	Often cultivated	Tropical Himalaya/ Grows in Karnataka/ Kangra, Mandi, Sirmaur, Una	up to 1800 m	bark, flowers, fruits, latex-cuts, skin diseases
<i>Vanda roxburghii</i> R.Br.(Orchidaceae) Banda, Nai, Rasna	An epiphytic orchid	Generally grows on Mango tree as a epiphyte	Bengal, Uttar Pradesh, South India/ Kangra (Nurpur), Sirmaur (Nahan), Solan (Kunihar), Una	up to 1500 m	leaves, roots-fever, ear-ache

<i>Vetiveria zizanioides</i> (Linn.) Nash. (Poaceae) KHAS-KHAS, Bena	A perennial grass	Found on the river banks and in rich marshy soils	Burma, Malay regions, West Indies, Brazil/ throughout the plains in lower hills of India/ Hamripur, Kangra, Mandi, Sirmaur (Paonta Sahib), Solan (Nalagarh), Una	up to 1200 m	roots –skin disease, indigestion
<i>Vitex negundo</i> Linn. (Verbenaceae) NIGANDI, INDIAN PRIVET Nisinda, Sambhalu, Shambalu, Shivari	A shrub or a tree. Leaflets crenate – serrate or subpinnatifid. Fruits 3.5-4 mm long, black, succulent, endocarp bony	Common in home gardens, often found as escape	Tropical regions, Afghanistan to Bhutan, China, South Eastern Asia/Throughout India/ Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Shimla, Sirmaur (Nahan,Rajgarh),Solan(Kunihar),Una	up to 1300 m	flowers, fruits, leaves, roots-headache, skin diseases
<i>Withania somnifera</i> Dunal. (Solanaceae) Asgandth, Punir	A shrub. Flowers in subsessile; fruit-berry, globose, yellow or red	Common as weed of waste places, roadsides	Baluchistan, Ceylon/drier parts of India. Bilaspur, Chamba (Dalhousie), Kangra (Nurpur), Sirmaur (Nahan), Solan, Una	up to 1200 m	whole plant-dropsy, cough,hiccup, painful swellings, sore eyes
<i>Woodfordia floribunda</i> Salisb. (Lythraceae) Red bell bush Dawi, Dhai, Dhaula	A perennial shrub. Flowers red. Flowers many in few-flowered cymes from the axils of fallen leaves	Common in forest edges and wastelands	Baluchistan./Throughout India/Bilaspur, Chamba (Dalhousie), Hamripur, Kangra (Nurpur), Kinnaur, Mandi (Nachan, Suket), Sirmaur (Nahan, Rajgarh), Solan (Kunihar), Una	up to 1800 m	bark, flowers, fruits, leaves-diarrhoea, dysentery, fever
<i>Ziziphus oenoplia</i> (L.) Mill. (Rhamnaceae) JACKAL JUJUBE Makai	A shrub. Flowers grown to yellowish – green. Fruits green – black on maturity	A common hedge plant	Tropical Asia, Australia/Throughout hotter parts of India/Una	up to 1000 m	bark, roots-stomach -ache

Different plant part(s), such as leaves, roots, flowers, seeds, fruits, bark, latex, tubers, kernel, stems, shoots, rhizomes and whole plant were used by the native communities (Figure 1).



**Fig 1:** Part(s) of the medicinal plants used by local inhabitants

The most important medicinal plant families were Fabaceae (*Flemingia strobilifera* var. *fruticulosa*, *Pueraria tuberosa*, *Acacia nilotica* spp. *indica*, *Albizia lebbeck*, *Bauhinia purpurea*, *Bauhinia racemosa*, *Bauhinia variegata*, *Butea monosperma*, *Erythrina indica*, *Flemingia congesta*, *Indigofera pulchella*, *Mucuna pruriens*, *Ougeinia oojainensis*, *Urania picta*, *Abrus precatorius*) with 15 species followed by Poaceae (*Bambusa arundinacea*, *Imperata cylindrica*, *Arundo donax*, *Dactyloctenium aegyptium*, *Dendrocalamus strictus*, *Heteropogon contortus*, *Paspalidium flavidum*, *Paspalum scrobiculatum*, *Sorghum halepense*, *Vetiveria zizanioides*) with 10 number of species, Apocynaceae (*Nerium indicum*, *Carissa opaca*, *Holarrhena antidysenterica*, *Vallisneria spiralis*, *Ichnocarpus frutescens*) and Euphorbiaceae (*Putranjiva roxburghii*, *Emblica officinalis*, *Mallotus philippinensis*, *Ricinus communis*, *Jatropha curcas*) with 5 species, Asteraceae (*Cichorium intybus*, *Echinops echinatus*, *Eclipta alba*), Cucurbitaceae (*Citrullus lanatus*, *Coccinia grandis*, *Momordica dioica*, *Bryonia laciniata*), Moraceae (*Ficus bengalensis*, *Ficus glomerata*, *Ficus palmata*, *Ficus religiosa*) with 4 species, Anacardiaceae (*Mangifera indica*, *Pistacia integerrima*, *Pistacia khinjuk*), Combretaceae (*Anogeissus latifolia*, *Terminalia bellirica*, *Terminalia chebula*), Ebenaceae (*Diospyros embryopteris*, *Diospyros*

*melanoxylon*, *Diospyros tomentosa*), Menispermaceae (*Tinospora cordifolia*, *Cissampelos pareira* var. *hirsute*, *Stephania glabra*), Meliaceae (*Azadirachta indica*, *Cedrela toona*, *Melia azedarach*), Myrtaceae (*Eucalyptus camaldulensis*, *Psidium guajava*, *Syzygium cumini*), Rubiaceae (*Aegle marmelos*, *Anthocephalus cdamba*, *Randia dumetorum*) and Verbenaceae (*Clerodendrum serratum*, *Premna latifolia*, *Vitex negundo*) with 3 species each, which is followed by the families with 2 & 1 species each. Highest consumption of plant species was to cure abdominal problems (60.74%), respiratory problems (33.33%) followed by external injuries (22.9%) and after that 20% plant species were utilized for other ailments (Table 2.)

**Table 2:** Number of plant species utilized for various ailments.

Ailments/diseases	No. of plant species used
Diarrhoea, Dysentery, Constipation, Indigestion, Intestinal Disorders, Colic, Dyspepsia	82
Cough, Cold, Asthma, Bronchitis, Respiratory Disorders, Chest Infection	45
External injuries (Wounds, Cuts, Burns, Scalds, Boils)	31
Skin Diseases, Eczema, Scabies, Leprosy	17
Ulcers	14
Swellings, Joint Pain	12
Piles, Renal Pain	9
Headache, Toothache, Earache	8
Sore Eyes, Ophthalmia	6
Dropsy	4
Malaria	4
Insect, Snake Bite	4
Improve Fertility	2
Urinary infection	2
Paralysis	1
Opium Poisoning	1

**Conclusion:** Utilization of medicinal plants plays a vital role in the lives of inhabitants of rural area. Remote areas of developing countries are mostly deprived of health and transport facilities, particularly due to insufficient spending in the health sector. This makes them to depend for the most part on what they get from the plants. Forests are the only source for them to get vegetables, fruits and medicines. Plant

derived products not only a resource to treat the ailments for the people but very often exhibit a significant market value by supplying raw material to pharmaceutical companies. There is a necessity to assemble the information from the local inhabitant, so that we can conserve the immense traditions of our country before it wiped out in the light of modernization and urbanization. Herbal products are the symbols of purity and safety rather than synthetic drugs, which may become fatal sometimes with adverse effects. This is very essential to intensify our traditional knowledge and to come back to nature.

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