

Ethnomedicinally important plants of Pachmarhi region, Madhya Pradesh, India

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Abstract: The present study was conducted in the Pachmarhi region of Madhya Pradesh, India to document the ethnomedicinal uses of plants. A total of 88 species belonging to 80 genera and 51 families was recorded. Plant species commonly used by local people for food, fodder, medicine and in other fields of their lives were enumerated. A list of plant species along with their local names, plant parts used and mode of application was documented. Ethnomedicinally important families were Fabaceae with 12 species followed by Acanthaceae, Euphorbiaceae and Liliaceae with 4 species each. These plant species are utilized by local people against various ailments such as cuts and wounds, fever, joints pain, constipation, diarrhoea, eye disorders, skin problems, cough and cold, antidote for poisonous insects, stomach disorders, urinary troubles, liver complaints, digestive problems, jaundice, asthma, bronchitis, etc. The present study indicates conservation value of the area and the documentation will help the park managers, foresters and policy makers to develop a suitable strategy and action plan for overall development of the area.

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Introduction

From ancient time various plant species have been used by human being as a source of food, shelter, medicine, fiber, gum, resin, oil, etc. Several wild plants are used as food by tribals and other local communities living in that particular region. It has been observed that the traditional knowledge on wild plants is declining day by day. Natural products as medicines, although ignored in the past, are gaining popularity in the modern era. On the global level, the current faith on traditional system of medicine is going high, with a majority of world's population still dependent on medicinal plants for their day to day healthcare needs. It is estimated that about 64 percent of the global population remain dependent on traditional medicines (Sindiga, 1994). Herbal medicines are assumed to be of great importance in the primary healthcare of individuals (Sheldon *et al.*, 1997) and these are comparatively safer than synthetic drugs. Plant-based traditional knowledge has become a recognized tool in search for new sources of drugs and nutraceuticals (Ghosh, 2003; Sharma and Mujundar, 2003).

Pachmarhi, a hill station in Madhya Pradesh, India, is widely known as "Satpura ki Rani" (Queen of Satpura), situated at a height of 1000 m asl in the valley of the Satpura range in Hoshangabad district. The Pachmarhi Biosphere Reserve (PBR), one of the 15 biosphere reserves of India lies between 22°11' to 22° 50' N longitude and 77° 47' to 78°52' E latitude. It covers 4985.72 km² spread in three districts of

Madhya Pradesh namely Hoshangabad, Betul and Chhindwara. The entire forest area, exquisite waterfalls and rich biodiversity makes this place a great destination for both religious-minded people and the researchers.

Floristic survey in this state has been undertaken by earlier workers such as Jain 1962; Bhalla *et al.*, 1986; Jain, 1988; Jayson, 1991; Jain and Patole, 2001; Jain and Vairale 2007; Dubey *et al.*, 2008 a & b; Wagh and Jain, 2010; Dahare and Jain, 2010; Kala, 2010 & 2011 etc. However, Pachmarhi region is relatively unexplored and little work has been done in context of ethnobotany. Keeping in view the importance of medicinal flora, this study was undertaken to document ethnomedicinal knowledge about the wild plants of this region.

Materials and Methods

In order to assess the indigenous medicinal plants, survey was carried out in the forest areas of the Pachmarhi near Jatashankar, Handikho, Priyadarshini point, Bade-Mahadevji, Pandav Caves, Apsara vihar, Bee fall, and Rajat Prapat and their adjacent areas during the year 2010 - 2011. The information on medicinal uses of the indigenous plants has been described after gathering it from local people, experienced aged rural folks, traditional herbal medicine practitioners, local herbal drug dealers and from the available literature. The main tribal groups in this region are Gond, Bhil, Baiga, Korku, Bhadia and Mariya who commonly communicate through Hindi.

Bagheli and Bundeli. A structured questionnaire was used to collect information on local name of the plants, plant parts used and mode of administration for curing diseases. Recorded plant species were identified with the help of Herbarium of the Botanical Survey of India, Northern Circle, Dehradun (BSD), local floras and previous works of Hooker, 1875, Kirtikar and Basu, 1999, Dubey *et al.*, 2008 a & b. The voucher specimens have been deposited in the Patanjali Yogpeeth, Haridwar.

Result and Discussion

The present communication documented 88 plant species belonging to 51 families under 80 genera that are being traditionally used in the area. The herbal remedies are commonly effective against cuts and wounds, fever, joints pain, headache, constipation, diarrhoea, eye disorders, skin ailments, cough and cold, antidote for poisonous insects, stomach disorders, urinary troubles, liver complaints, digestive problems, jaundice, asthma, bronchitis, inflammations and anemia, piles, mental disorder, abdominal pain and bone fracture, paralysis, epilepsy, impotency, general weakness etc. In general, *Boswellia serrata*, *Ampelocissus tomentosa* and *Mussenda glabra* are used for the treatment of jaundice, *Antidesma bunius*, *Bauhinia semla*, *Begonia grandis*, *Dendrocalamus strictus* and *Glossogyne bidens* are used for the treatment of snake bite. *Buchnanian lanzan*, *Cochlospermum religiosum* and *Asparagus gonocladus* are used to cure general debility. (Table 1). Among all the species, 38 species (43%) of herbs followed by trees with 24 species (27%), shrubs and climbers with 12 species (14%, Figure 1) were recorded. Of the total, leaves and roots of 24 species (27%) whole plant of 22 species (25%), bark of 12 species (14%) and seeds of 3 species (3%, Figure 2) are used. The tribal and other inhabitants of the area have sound knowledge about the uses of medicinal plants available in the region. In the present study, a brief account on ethnomedicinal uses of documented plant species has been verified by Vaidhyas, knowledgeable persons and experienced informant of the area, even then further exploration on pharmaceuticals, therapeutic as well as safety features like toxicity studies are very much required for human benefit and sustaining the knowledge of tribal communities. Indigenous people have great knowledge of ethnomedicinal uses of the plants

(Malik *et al.*, 2011).

Conclusion

The present study provides information on ethnomedicinal uses of plant species in Pachmarhi region. The traditional healers are the main source of knowledge on medicinal plants. The occurrence of a

number of economically important species has enhanced the conservation as well as socio-economic values of the area particularly in view of religious aspect of the area. Furthermore, the over-exploitation of species for fuel, fodder, medicine, wild edibles and house building may lead to decline of these species from the area. Conservation and cultivation of these plants species will help to maintain the ecological balance, traditional knowledge as well as livelihood security of local inhabitants. There is lot to be done in this promising field with the active participation of local people so that economically as well as medicinally important plants could be re-energized for the benefit of our future generations. Finally, this communication will attract the ethno botanists, phytochemists and pharmacologists for further critical investigation of medicinal plants present in Pachmarhi region.

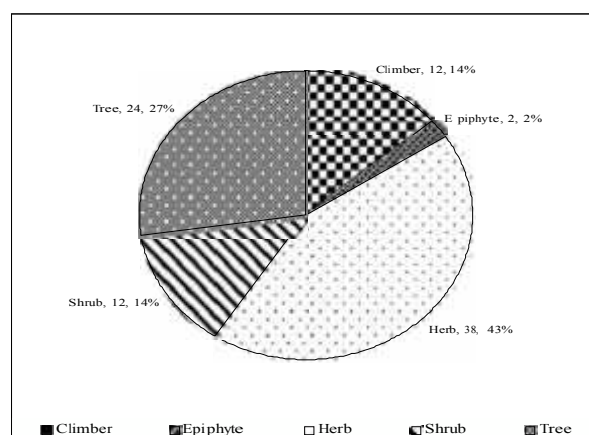


Figure 1. Habit pattern of different plant species recorded under study area

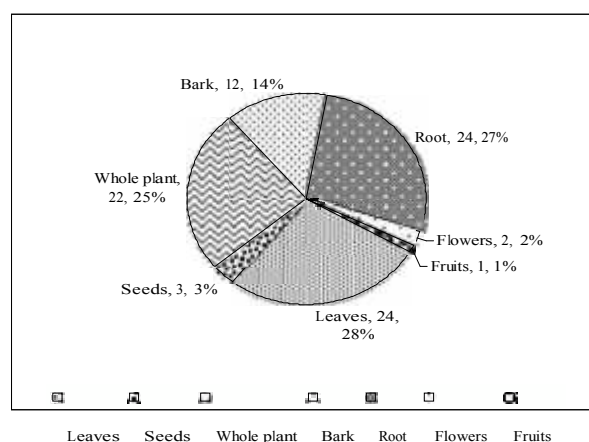


Figure 2. Plant part's used pattern of different plant species recorded under study

Table 1. MEDICINAL USES

N O.	BOTANOCAL NAME	FAMILY	HABI T	LOCAL NAME	PARTS USE	MEDICINAL USES
1.	<i>Acacia leucophloea</i> (Roxb.) Willd.	Mimosaceae	T	Swet babool	Bark	Bark and fruit are used to treat cough, inflammation, wounds, skin disease, leukoderma, diarrhoea, dental caries, stomatis and fever.
2.	<i>Acalypha racemosa</i> Wall. ex Bail.	Euphorbiaceae	H	Visha karappan	Whole plant	Whole plant is used in erysipelas and haemorrhage.
3.	<i>Achyranthus bidentata</i> Blume	Amaranthaceae	H	Lajjeera	Root	The root juice is used in the treatment of toothache and pyorrhea. Its juice is also used to treat indigestion and asthma.
4.	<i>Adiantum caudatum</i> Linn.	Adiantaceae	H	Morshikha	Leaves	Leaves are used to cure cough, fever and diabetes. And externally used in skin diseases.
5.	<i>Albizia procera</i> (Roxb.) Benth.	Mimosaceae	T	Sirish	Leaves, bark	Its leaves are poultice on to ulcers and bark is used in pregnancy and stomachache.
6.	<i>Alhagi pseudalhagi</i> (Bieb.) Desv.	Fabaceae	H	Dhanvayasa	Whole plant	Whole plant smoked with black datura, tobacco and ajwain seeds in asthma and oil extract from dried leaves used in rheumatism.
7.	<i>Ampelocissus tomentosa</i> (Heyne & Roth) Planch.	Vitaceae	C	Panyibel	Root, leaves	The root paste is applied externally in bone fracture and bandaged for healing. The juice of fresh leaves is given in Jaundice.
8.	<i>Antidesma bunius</i> (Linn.) Spreng.	Euphorbiaceae	T	Amris	Leaves, fruit	The leaves are useful to treat snake bite. Leaves and fruits used for anemia and hypertension. Juice of fruits used for heart disease.
9.	<i>Asparagus gonocladus</i> Baker	Liliaceae	S	Jangali satavar	Root	The roots are useful in nervous disorders, dyspepsia, tumors, scalding of urine, throat infections, tuberculosis, cough bronchitis and general debility.
10.	<i>Asparagus officinalis</i> Linn.	Liliaceae	S	Safed musali	Root	An infusion of roots is used in the treatment of jaundice, liver disease and urinary problems including cystitis, cancer, high blood pressure and schistosomiasis.
11.	<i>Aylosia scarabaeoides</i> (Linn.) Benth.	Fabaceae	H	Van kulthi	Seeds, leaves	The seeds are useful in dropsy, fever, pain, sores, anemia, cholera and dysentery. The leaves mixed with honey are given to women after child births.
12.	<i>Bauhinia vahlii</i> W. & A.	Fabaceae	C	Mahua bel, mahul patta	Root, leaves, fruit	Fruit of its plants is used to treat infertility in women. Seeds are used as a tonic.
13.	<i>Bauhinia semla</i> Wunderlin	Fabaceae	T	Schra, thvar	Leaves, bark	Leaves of its plant is used in abdomen disease. Bark is useful in cholera, sore and snake bite.
14.	<i>Begonia rex</i> Putzevs	Begoniaceae	H		Leaves	Leaf juice is used against mouth ulcer and also used in colic and dysentery.
15.	<i>Begonia grandis</i> ssp. evansiana Irmsch.	Begoniaceae	H		Root, fruits	Decoction of tuberos root and fruit is used in the treatment of traumatic pain, haematemesis, gonorrhoea, post-partum vaginal discharge, amenorrhoea and snake bite.
16.	<i>Begonia socotrana</i> Hook. f.	Begoniaceae	H		Sap	Its sap is used in wounds and skin irritation.
17.	<i>Blepharis mederaspatensis</i> (Linn.) Roth	Acanthaceae	Creeping H	Badi dudhi	Leaves	Leaf paste with white of egg, blach grams and onions is applied in bone fracture. And whole plant is used to treat respiratory problems.
18.	<i>Boswellia serrata</i> Roxb. ex Coleb.	Burseraceae	T	Salai, saliha	Bark, gum and seeds	Bark is used in diarrhoea, jaundice, myositis, fibrositis, tuberculosis, trauma, and osteoarthritis and rheumatoid arthritis.
19.	<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	T	Char, chironji	Bark, fruit and leaves	Decoction of its bark is useful in abdomen disease, cough and bronchitis. Fruit is used to treat nervous debility, cardiac debility, constipation, fever, ulcer, oligospermia and general debility.
20.	<i>Cheilanthes tenuifolia</i> (Burm.) Swartz	Pteridaceae	Fern	Bhutraj	Whole plant	A tea made from whole plant is used for children in stomach troubles.
21.	<i>Chloroxylon swietenia</i> DC.	Rutaceae	T	Dhokra, Girya	Leaves	Dried leaves of its plant applied on wounds to quick healing and the plant is also used in pain and worm infection.
22.	<i>Clematis triloba</i> Heyne ex Roth	Ranunculaceae	C	Belkum, churanhar	Roots and leaves	Roots decoction is given with boiled rice water to the children in worm infection. Leaf paste is applied externally in itching, wounds and boils. And leaves is also used for the treatment of fever, leprosy and blood disorders.
23.	<i>Cleome viscosa</i> Linn.	Capparaceae	S	Peela hurhur, Bramhasurchala	Whole plant	Leaf juice is very useful in nostalgias. Roots are used for the treatment of fever, diarrhoea, worm infection, convulsions, cardiac disorders, dyspepsia, colic and indigestion.
24.	<i>Cochlospermum religiosum</i> (Linn.) Alston	Cochlospermaceae	T	Gabdi, galgal	Leaf, flower, bark and gum	Gum is used for the treatment of coughs, syphilis, asthma, sore throat, tuberculosis, diarrhoea, dysentery, gonorrhoea, leucorrhoea, spermatorrhoea, menorrhagia and general debility.
25.	<i>Crinum defixum</i> Ker.-Gawl.	Amaryllidaceae	H	Chintar	Bulbs and leaves	Bulb of its plant is used in cuts, wounds and bruises.
26.	<i>Crotalaria prostrata</i> Rottl. ex Willd.	Fabaceae	H	Khanjhani	Root	Root of its plant is useful in abdomen diseases.
27.	<i>Crotalaria juncea</i> Linn.	Fabaceae	S	Sana	Whole plant	Leaves are used to treat diarrhoea, scabies and impetigo. Flowers are useful in leucorrhoea. And powder of seeds boiled with milk & given for increase body strength, skin disease, fever and leprosy.
28.	<i>Cryptolepis buchananii</i> Roem. & Schult.	Asclepiadaceae	C	Nagbel	Root, whole plant	Stem of its plant is useful in arthritis, joint & muscular pain and diarrhoea. And also used as a blood purifier.
29.	<i>Curcuma caesia</i> Roxb.	Zingiberaceae	H	Shayam haldi	Rhizome	Rhizome is used in piles, impotency, menstrual disorder, epilepsy, leprosy, cuts and wounds.
30.	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Long grass	Lathi bans	Tender shoots	Tender shoots in used for the treatment of fever, cough, paralysis, asthma and snake bite.
31.	<i>Dendrothoe falcata</i> (Linn. f.) Ettingsh.	Loranthaceae	Epiphyte	Banda, bandha	Leaves, Whole plant	Whole plant is useful in pulmonary tuberculosis, asthma, coughs, toxemia, vesical calculi, epilepsy, menstrual disorders, swelling, rheumatism, diarrhoea and strangury.
32.	<i>Desmodium triflorum</i> (Linn.) DC.	Fabaceae	H	Chiptit, Shalparni prajati	Leaves	Leaves of its plant are useful in coughs, itching, wounds and ulcers.
33.	<i>Dioscorea pentaphylla</i> Linn.	Dioscoreaceae	C	Bhalu kand, Musal kand	Tuberos root	Tuberos root is used general weakness.
34.	<i>Dodonaea viscosa</i> (Linn.) Jacq.	Sapindaceae	S	Aliar	Leaves	Its leaves are used for the treatment of fever, diarrhoea, strangury, diabetes, spermatorrhoea and constipation. Leaf paste is applied on gout, rheumatism, wounds, burns, boils and eczema.
35.	<i>Dryopteris cochlaata</i> (D. Don) C. Chr.	Dryopteridaceae	H	hathjodi	Rhizome	Rhizome is useful in cardiac disease and nerve disorders.
36.	<i>Enicostemma axillare</i> (Lam.) A. Raynal	Gentianaceae	H	Naridamdami, majak	Whole plant	Whole plant is useful in dyspepsia, diabetes, jaundice, toxemia, worm infection, abdominal ulcers, hernia, swelling intermittent fever, malaria, pruritus and leprosy.
37.	<i>Erythrina suberosa</i> Roxb.	Fabaceae	T	Hadua, Gandhipala s, Bahru	Bark, leaf, flower	Bark is used in anemia, swelling, rheumatism, dysmenorrhoea and male genital disorders. Fresh leaf paste is apply on cuts, wounds and boils.
38.	<i>Evolvulus alsinoides</i> (Linn.) Linn.	Convolvulaceae	H	Nedi sankhapushpi	Whole plant	Juice of whole plant is used for the treatment of mental disorders, increase memory power, sexual debility, insanity, epilepsy, asthma, bronchitis and typhoid fever.
39.	<i>Ficus arnottiana</i> (Miq.) Miq.	Moraceae	T	Parash papal	Bark	Bark is used to treat skin diseases, pruritus, wounds, ulcers, diabetes, burning sensation, diarrhoea, uterine disorders and inflammation.
40.	<i>Ficus tinctoria</i> G. Forst.	Moraceae	T	Udumbar	Root, bark, leaf	Bark decoction in given in urinary and abdomen disorders. And leaf juice is very useful in worm infection.
41.	<i>Fimbristylis dichotoma</i> (Linn.) Vahl	Poaceae	H	Hathi pav	Rhizome	Its rhizome is used for the treatment of skin disease.
42.	<i>Flemingia nana</i> Roxb.	Fabaceae	S	Bara salpan	Tuber	Tuber juice of this plant along with tuber of <i>Staphania japonica</i> is used to treat asthma. Powder of the root is used in the treatment of menstrual irregularities and general weakness.
43.	<i>Glochidion lanceolarium</i> (Roxb.) Voight	Euphorbiaceae	T		Bark	Bark decoction is used in abdomen disorders.
44.	<i>Gloriosa superba</i> Linn.	Liliaceae	C	Kalihari	Rhizome	Rhizome are useful in asthma, fever, dyspepsia, cancer, worm infection, ulcers, piles and skin diseases.
45.	<i>Glossogyne bidens</i> (Retz.) Alston	Asteraceae	H	Munda	Whole plant, Root	Juice of whole plant is given in intestinal worm infection. Root is chewed in toothache and also used in snake bite & scorpion stings.
46.	<i>Glycine max</i> (Linn.) Merr.	Fabaceae	H	Soyabean	Seeds	Seeds are very useful in muscular disease, colic, fatigue, malnutrition, tuberculosis, general weakness, diarrhoea and sexual debility.
47.	<i>Gomphocarpus physocarpus</i> E. Mey.	Asclepiadaceae	S	Balloon plant	Leaves,	Roots are used to treat stomachache. Dried leaf

48.	<i>Grewia asiatica</i> Linn.	ac	Tiliaceae	S T	Phalsa	Roots	used to treat warts.
49.	<i>Hardwickia binata</i> Roxb.	Fabaceae		T	Anjan	Leaves, Bark	Leaf paste of its plant is used in headache and boils. And it is also used in gynecological disorders.
50.	<i>Hedychium coronarium</i> Koenig ex Retz.	Zingiberaceae		H	Gulbakavi	Flowers	Juice of its flower is used for the treatment of eye disease.
51.	<i>Hybanthus enneaspermus</i> (Linn.) F. Muell.	Violaceae		H	Ratan purush	Whole plant	The roots of its plant are used for the treatment of urinary affection & bowel complaint of children. Fruit is used to treat scorpion stings.
52.	<i>Hydrangea macrophylla</i> (Thunb.) Ser.	Saxifragaceae		S	Hydrangea	Bark	Bark is used for the treatment for bladder problems, kidney stones and inflamed or enlarged prostate glands.
53.	<i>Impatiens balsamina</i> Linn.	Balsaminaceae		H	Gulmehndi	Roots	Extract of roots is used for the treatment of irritation of the gastro-intestinal canal.
54.	<i>Indigofera tinctoria</i> Ali.	Fabaceae		H		Whole plant	Decoction of whole plant is used for the treatment of epilepsy and insanity. Take whole plant and boiled with oil and applied on burns.
55.	<i>Ipomoea obscura</i> (Linn.) Ker-Gawl.	Convolvulaceae		C	Vachandha	Whole plant	Whole plant is used for the treatment of cold, dry cough and asthma. And leaves are also used in impotency, leprosy and skin disease.
56.	<i>Ixora pavetta</i> Andr.	Rubiaceae		ST	Khujja	Leaves and Bark	Bark & leaf are used for the treatment of diarrhea, dysentery, urinary disorders, leucorrhoea, ventral disease, skin disease and bronchitis.
57.	<i>Justicia betonica</i> Linn.	Acanthaceae		S	Mokandar	Whole plant	Make poultice of crushed leaves of the plant and applied on abscesses to relief of pain and swelling
58.	<i>Justicia procumbens</i> Linn.	Acanthaceae		H	Parpata	Whole plant	The whole plant is used to treat fever, liver disorders, gout, cough and asthma.
59.	<i>Lagerstroemia parviflora</i> Roxb.	Lythraceae		T	Senja, sendha	Leaves	Decoction of leaves is very useful in diabetes. And also used in constipation & urinary disorders.
60.	<i>Lannea coromandelica</i> (Hout.) Merr.	Anacardiaceae		T	Jhingani, gurja	Leaves and Bark	Decoction of the bark is used for the treatment of diarrhoea, dysentery, sprain, stomatis and gout. Leaf decoction is useful in elephantiasis, pruritus and swelling.
61.	<i>Leucas aspera</i> (Willd.) Link.	Lamiaceae		H	Guma	Whole plant	Whole plant is used for the treatment of fever, bronchitis, skin disease, arthritis and rickets.
62.	<i>Leucas zeylanica</i> R.Br.	Lamiaceae		H	Guma prajati	Whole plant	Whole plant is used for the treatment of rickets, skin disease and mental disorders.
63.	<i>Lonicera japonica</i> Thunb.	Caprifoliaceae		C		Flower	Flower of its plant is used to treat fever, inflammation, skin infection, wounds, boils and scars.
64.	<i>Madhuca longifolia</i> (Koen.) Macbr.	Sapotaceae		T	Jalmadhuk	Bark, flower	Decoction of bark is used in curing bleeding gums and ulcers. Flowers used in curing coughs and bronchitis.
65.	<i>Manilkara hexandra</i> (Roxb.) Dubard	Sapotaceae		T	Khirmi, khinni	Bark, fruit, seeds	Decoction of the bark is given in dysentery, dyspepsia, worms, diarrhea, fever and colic. Fruit is used to treat insanity, epilepsy, leucorrhoea, lumbago, backache, spermatorrhoea, sexual debility and premature ejaculation.
66.	<i>Marsdenia tenacissima</i> (Roxb.) Moon	Asclepiadaceae		C	Chinahr, Murva	Tuber	Tuber is used for the treatment of liver disorders.
67.	<i>Melochia corchorifolia</i> Linn.	Malvaceae		H	Ticoria	Leaves	Leaves are used to treat against toxic effects.
68.	<i>Mussaenda glabra</i> Vahl	Rubiaceae		S	Bedina	Whole plant	Whole plant in used for the treatment of cough, bronchitis, fever, inflammation, wound, ulcers, jaundice, leucoderma and pruritis.
69.	<i>Nyctanthes arbor-tristis</i> Linn.	Oleaceae		S	Harsingar	Leaf, flower, seeds	Leaves are very useful in sciatica, inflammation, lumbago, rheumatism, gout, piles, diabetes, dyspepsia, chronic fever, cough, asthma, bronchitis and constipation. Paste of leaf is applied in eczema, scabies, itching & wounds. Flower is also used in rheumatism and gout.
70.	<i>Pavonia odorata</i> Willd.	Malvaceae		H	Sugandhbala	Leaves	Leaf juice given in 2 spoonfuls twice a day to treat gonorrhoea.
71.	<i>Phoenix acaulis</i> Roxb.	Arecaceae		T	Bhuikhajur	Root	Root of its plant is used for the treatment of gynecological disorders.
72.	<i>Phyllanthus maderaspatensis</i> Linn.	Euphorbiaceae		H	Hajarmani	Leaves and seeds	Leaves are used for the treatment of ophthalmic, liver affections, cough, earache, headache, blindness, cough, earache, sores, ulcers and stomachache.
73.	<i>Physalis minima</i> Linn. var. <i>indica</i> C.B. Clarke	Solanaceae		H	Chirpoti, Rashbhari	Whole plant, fruits	Whole plant is used for the treatment of filaria, burning sensation, colic, ulcers, urinary disorders, cough, bronchitis, pruritus and erysipelas.
74.	<i>Plesmonium margaritifera</i> (Roxb.) Schott	Araceae		H	Jatakushi	Tuber	Tuber of its plant is used to treat arthritis.
75.	<i>Sida acuta</i> Burm. f. emend. K. Schum.	Malvaceae		H	Bariyari	Whole plant	Whole plant is used for the treatment of stomachache, chronic bowel complaints, male genital problems and scorpion sting.
76.	<i>Smilax lanceifolia</i> Linn.	Smilacaceae		C	Chopchini	Rhizome	Rhizome is used in syphilis, rheumatism, sciatica, neuralgia, swelling, paralysis, skin disease, psoriasis, scrofula, leprosy, epilepsy, insanity, leucorrhoea, menorrhagia & seminal weakness.
77.	<i>Smilax lancifolia</i> Roxb.	Smilacaceae		C	Chobakhini	Root	The juice of fresh root is taken internally in the treatment of rheumatism.
78.	<i>Sterculia urens</i> Roxb.	Sterculiaceae		T	Kullu, Khadia	Bark, Gum	Bark & gum of its plant is used for the treatment of abdomen disease, cardiac disease, bone fracture and constipation.
79.	<i>Terminalia paniculata</i> Roth	Combretaceae		T	Asvakarn	Bark	Bark is very useful in cough, bronchitis, diabetes, cardiac debility, skin disease and wounds.
80.	<i>Thunbergia alata</i> Bojer ex Sims.	Acanthaceae		C	Kaknasa bhed	Leaf, flower, root	Whole plant is used to treat cellulites, back pain, joint pain, eye inflammation, haemorrhoids, skin disease and rectal cancer.
81.	<i>Tonningia axillaris</i> (Linn.) Kuntze	Commelinaceae		H	Kanna	Whole plant	Decoction of whole plant is used for the treatment of swelling, rheumatism and joint pain.
82.	<i>Trichodesma indicum</i> (Linn.) Lehm.	Boraginaceae		H	Andhaphuli	Whole plant	Whole plant is used to treat inflammation, dyspepsia, diarrhoea, dysentery, spruce, calculi, rheumatism, piles, dysmenorrhoea, leprosy, skin disease and sores.
83.	<i>Uraria picta</i> (Jacq.) Desv. ex DC.	Fabaceae		H	Prispanri, pithvan	Whole plant, roots	Decoction of root and whole plant is given internally in heart trouble, cough, asthma, rheumatism, gout, fracture, swelling, obesity, dysmenorrhoea and skin disease.
84.	<i>Urginea indica</i> (Roxb.) Kunth	Liliaceae		H	Jangali pyaj, kadari	Bulbs	Tuber of its plant is very useful in asthma, cough, bronchitis, calculi, urticaria, scabies, arthritis, cardiac disease, cancer and scorpion sting.
85.	<i>Vanda tessellate</i> (Roxb.) Hook. Ex G. Don	Orchidaceae		Epiphyte	Banda, silingi	Whole plant	Whole plant is used in male genital disease, bronchitis, ear ache and arthritis.
86.	<i>Vitex negundo</i> Linn.	Verbenaceae		T	Megud	Leaves, root, oil	Root and leaves are used for the treatment of inflammation, arthritis, rheumatism, toothache, sprain, gout, sciatica, dyspepsia, colic, scrophulla, asthma, bronchitis, haemorrhoids, leprosy, syphilis, amenorrhoea and dysmenorrhoea.
87.	<i>Wrightia tinctoria</i> R. Br.	Apocynaceae		T	Meetha indrajau, diudhi	Leaf, Seeds, Bark	Leaves are useful in odontalgia, cough and blood pressure. Bark in used for the treatment of colic, dyspepsia, dysentery, diarrhoea, diabetes, leprosy, psoriasis, piles, worm infection, leucorrhoea and menorrhagia.
88.	<i>Wendlandia henryi</i> (Schult.) Santapau & Merchant	Rubiaceae		T	Tilvan	Leaf, bark	Bark is very useful in abdomen disorders, liver disease, skin disease, sores and wounds.

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