

ETHNOMEDICINAL PLANTS OF DISTRICT SAMBA OF JAMMU AND KASHMIR STATE - LIST-I

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The paper puts on record 35 species representing 32 genera belonging to 22 families of following plants of district Samba of Jammu and Kashmir State. The main focus is on ethnomedicinal value of the plants of this district. Each species is followed by the name of the family, vernacular/local name and traditional medicinal use.

Keywords : Ethnomedicinal plants of district Samba, J&K.

Introduction

Samba is a new district of Jammu and Kashmir State. Earlier this area was falling under district Jammu of this State. Samba is contiguous with district Jammu on west, Udhapur district on the north and north-east, Kathua district on the east and Punjab province of West Pakistan on South. It lies between 75° 11' N longitude and 32° 56' E latitude. Total population of the district is 2.86 lakh as per the census 2001. The area is mainly divided into two belts namely the outer plains on the south and the Shivaliks on north. The national highway passes through the middle of the district. Basanter and Devek are the source of water particularly in rainy season.

Soil- Jammu and Kashmir has different types of soil. The soil of Samba district is typically like that of Jammu Shivaliks and Jammu plains because of its having some area like Shivaliks and other like that of Jammu plains. The soil is light to heavy with moderate fertility. Moisture is wanting in northern part of Samba but the Southern part of Samba of Tehsil Ramgarh and its adjoining areas contain better moisture in the soil. The district is rich in limestone, quartzites, grit and clay.

Climate- The climate of district Samba is hot in summer and tolerably cold in winter with a exception of a very cold in the vicinity of high snow ranges on some of the northern part of district. The excessive hot summer days are between May and June and rainy season prolongs upto middle of September. Most of the rainy days are in the month of July and August. The dry spell in the area follows from September.

Vegetation- The vegetation of district Samba is of Subtropical type. The dominant species include *Dalbergia sissoo*, *Acacia nilotica*, *A. modesta*, *Lantana camara*, *Justicia adhatoda* and *Mallotus philippensis* etc. The rare

species are *Ficus bengalensis*, *F. religiosa*, *Butea monosperma* and *Withania somnifera* etc. Thorny bushes, evergreen shrubs, climbers and tall grasses. Most of the plants are broad leaved deciduous type.

Today about 80% of the world's population rely predominantly on plants and plants extract of health care¹. In recent years, traditional system of medicines and ethnobotanical studies have become increasingly valuable in development of health care system in different parts of the world². These medicines have less side effects and easily available in remote areas. The use of medicinal wild plants has persisted as a long standing tradition in Indo-Pakistan. Many studies have been conducted on ethnobotany of medicinal plants and other useful plants in different parts of the world and neighboring countries¹⁻¹⁷.

The area of the district Samba was selected for present study because it has a great diversity in its flora. Moreover it looks from the literature that the documentations of the plant wealth of the area was ignored during earlier studies in this regard.

Material and Methods

The area was visited several times for the collection of data during the year of 2008-2009. The local name and traditional uses of plants, with emphasis on medicinal uses were documented by interviewing the local elderly knowledgeable persons including local herbals. Information's were also collected through literature concerning ethnobotany of this area, Questionnaire method was adopted for documentation and the data obtained was checked with the available literature.

Results and Discussion

The present study was conducted in remote villages of district Samba. A total of 35 plant species representing 32

Table 1. Ethnomedicinal plants of district Samba, Jammu and Kashmir, India.

S.No.	Species	Family	Local Name	Traditional Medicinal Use
1.	<i>Acacia nilotica</i> (L.) Delite	Mimosaceae	Kikar	Bark used to treat cough and dysentery, leaves are used to treat ulcer, and small twigs are considered useful to teeth.
2.	<i>Acacia modesta</i> Wall	Mimosaceae	Phulai	Leaves used for treatment of gas trouble and abdominal diseases and twigs are good tonic for teeth.
3.	<i>Achyranthes aspera</i> L.	Amaranthaceae	Puthkanda	Whole plant laxative, stomachic, carminative and useful in treatment of vomiting, heart diseases, dropsy, piles and eruption of skin. Good tonic for teeth.
4.	<i>Aegle marmelos</i> (L.) Correa	Rutceae	Bel Pattri	Gastro-intestinal complaints, heart treatment and blood-pressure regulator.
5.	<i>Agave americana</i> L.	Agavaceae	Sisal	Dysentery, diarrhea fever. Good for liver in jaundice, good for heart and brain.
6.	<i>Albizia lebbeck</i> (L.) Benth.	Mimosaceae	Siris/Sarin	Bark is good for Piles and diarrhea, toothache and strengthens gums.
7.	<i>Aloe barbedensis</i> Mill.	Liliaceae	Kavar gandal	Leaves used for the treatment of gas troubles and abdominal pains and cosmetic purposes.
8.	<i>Asparagus racemosus</i> Willd	Asparagaceae	Shatavari	Dysentery, cough, cut and wounds. As part of many herbal drugs.
9.	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Neem	Leaves, roots, bark, frutis all the parts are used. Good in vomiting, ulcers, toothache, intestinal diseases etc. Antiseptic and useful in jaundice, leprosy, Skin diseases, syphilis etc.
10.	<i>Bauhinia variegata</i> L.	Caesalpinaceae	Kachnar/ Katrair	Bark astringent, fruits and flowers as vegetables having medicinal properties Decoction of dried buds is used for dysentery, diarrhoea, bleeding piles and worms.
11.	<i>Boerhaavia diffusa</i> L.	Nyctaginaceae	Itt Sitt.	Wonder drug for dropsy and gonorrhoea. It is used in asthma, anemia, jaundice, lever disorder, piles, stomach complaints, wounds menstrual complaints.
12.	<i>Buea monosperma</i> Lam.	Papilionaceae	Palash	Mucilage from the plant used to treat asthma, abdominal pains and epilepsy.
13.	<i>Calotropis procera</i> (Willd.)	Asclepiadaceae	Desi AK	Latex used for skin diseases, leaves purgative, wormicidal and antihelminthic. Also used as abortifacient, in asthma, boils, ear complaints, worms in gum and wounds.
14.	<i>Cannabis sativa</i> L.	Cannabaceae	Bhang	Leaves used for medicinal purposes especially for brain and related to mental disorders.
15.	<i>Cassia fistula</i> L.	Caesalpinaceae	Karangal	Roots in skin diseases, leprosy and T.B., leaves against ulcers. Pods against intestinal worms. Also useful in constipation and as an antiviral agent like interferon.
16.	<i>Cassia tora</i> L.	Caesalpinaceae	Hedma	Leaves and seeds used against skin-diseases such as leprosy, ringworm etc. Also for eye complaints, liver complaints blood poisoning and diphtheria, itech, Jaundice etc.

S.No.	Species	Family	Local Name	Traditional Medicinal Use
17.	<i>Datura stramonium</i> L.	Soalnaceae	Ak Dhatura/ Safed	Leaves smoked in pipes cure asthma, cough, bronchitis, pains of tumours and piles. Fresh leaf juice used in mumps and gouts. Roasted leaves cure testicles, eye pain, headaches, nose trouble and boils.
18.	<i>Emblica officinalis</i> L.	Euphorbiaceae	Amla	Fruits are good liver tonic and laative. Used in indigestion, vomiting, diabetes, anaemia, jaundice etc. Rich in Vitamin 'C'. Seed is useful in diarrhoea and exudations of fruits in inflammation of eye. Fruit useful component of Ayurvedic preparation 'Triphala'.
19.	<i>Justia adhatoda</i> L.	Acanthaceae	Brankad	The leaf extract is used for treatment of bronchitis, asthma. Cough and breathlessness and fever.
20.	<i>Lantana camara</i> L.	Verbenaceae	Jari/Phul jari	Flowers useful in malaria fever.
21.	<i>Mallotus philippensis</i> Muell-Arg.	Euphorbiaceae	Kembla/ Kamila	Fruits is used against constipation, skin diseases and ulcer.
22.	<i>Mentha longifolia</i> L.	Lamiaceae	Pudina	Leaves used to ease headaches, sinus, cold, chest congestions, carminative and in digestive troubles.
23.	<i>Mirabilis jalapa</i> L.	Nyctaginaceae	Gulbasi	Diuretic, purgative, used in blisters, boils and piles.
24.	<i>Momordica balsamina</i> L.	Cucurbitaceae	Jangli karela	Useful in stomach complains and against diabetes.
25.	<i>Moringa oleifera</i> Lamk.	Moringaceae	Sohanjana	All parts are used as antifertility, appetier, asthma, ear complaints, epilepsy, intestinal worms, eye complaints, headache, jaundice, inflammation, piles, wounds, menstrual complaints etc.
26.	<i>Ocimum sanctum</i> L.	Lamiaceae	Tulsi	Repel insects, used in cold, headaches, fever, vomiting, blood-pressure, malaria, stomach diseases and as mouth wash.
27.	<i>Punica granatum</i> L.	Pnicaceae	Anar/Dharuni	Juice of fruits used for treating fever, diarrhoea dysentery and blood purifier and in digestive problems.
28.	<i>Ricinus communis</i> L.	Euphorbiaceae	Arind	Leaves heated and used as poultice on wounds and swollen places and in boils.
29.	<i>Solanum nigrum</i> L.	Solanaceae	Kayan Kothi	Shoots boiled in water and used against gastric trouble and ulcer. Also used in jaundice, piles and skin diseases.
30.	<i>Syzygium cumini</i> (L). Skeels	Myrtaceae	Jamun	The bark is astringent and used in decoction, gargles and mouthwash. Useful in diabetes; diarrhoea and ash of leaves for teeth and gums.
31.	<i>Terminalia belerica</i> Roxb.	Combretaceae	Bahera	Dried fruits in stomach disorder, bronchitis, sore throat, for heart and bladder, brain tonci, in piles, leprosy, dropsy and fever. Also in 'Triphala'. Bark in chest pan & congestion by cough.
32.	<i>Terminalia chebula</i> Retz.	Combretaceae	Harrad	Fruits is stomachic, used in asthma. Sore throat, eye diseases, heart and bladder. Also an ingredient of 'Triphala' alongwith Amla and Bahera. Also powder of fruit for gums.

S.No.	Species	Family	Local Name	Traditional Medicinal Use
33.	<i>Tinospora cardifolia</i> (willd.)	Menispermaceae	Gilloy/Glo	Antiperiodic, antipyretic, aphrodisiac, asthma, bone fracture, cough, diarrhoea, diphtheria, dysentery, fever, headache, jaundice, malaria, piles, pulmonary tuberculosis, sex strength, skin diseases, tonic, stomach diseases ec.
34.	<i>Vitex negundo</i> L.	Verbenaceae	Bana	Leaves are used as poultice on wounds and muscles, bone fracture or dislocation etc.
35.	<i>Withania somnifera</i> (L.) Dunal.	Solanaceae	Asgandh	Leaves and roots are used for sound sleep, roots for vitality and eye complaints, asthma, cough etc.

genera and belonging to 22 families have been recorded. These are used by local inhabitants for various diseases. All the species are arranged in the alphabetical order of botanical name followed by name of the family, local name and traditional uses are given in Table 1. Local people use medicinal plants in the health care system. The promising species include *Embllica officinalis*, *Terminalia chebula*, *T. belerica*, *Moringa oleifera*, *Aaderachta indica*, *Achyranthes aspera*, *Datura stramonium*, *Calotropis procera*, *Withania somnifera*, *Asparagus racemosus*, *Ocimum sanctum* and *Mentha longifolia* etc. The results agree with the findings of Kumar and Naqshi⁵, Kapur⁶ and Lewis and Elvin⁸ who reported plants that are traditionally used for curing many diseases.

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1. Setzer MC, Werka J S, Irvine A K, Jacker B R and setzer W N 2006, Biological activity of rainforest plant-extracts from far north Queensland, Australia. In : Willian LAD (ed.) *Biological active Natural Products for 21st century*. Research Signpost, Trivandrum-695023, Kerala, India, 21-46.
2. Ahmed S S 2007, Medicinal wild plants from Lahore-Islamabad Motorway (M-2), Pakistan, *Pak. J. Bot.* 39(2) 355-375.
3. Virjee, Dar G H, Kachroo P and Buth G M 1984, Taxoethnobotanical studies of rural areas in District Rajouri (Jammu). *J. Eco. Tax. Bot.* 5 831-838.
4. Jain S K 1986, Dictionary of Folk-Medicinal and Ethnobotany : Interdisciplinary. *Sci. Reviews* 11(3) 285-292.
5. Kumar G M and Naqshi A R 1990, Ethnobotany of Jammu. h. Banihal. *J. Eco. Tax. Bot.* 14(1) 67-74.
6. Kapur S K 1991, Traditionally important medicinal plants of Dudu Valley - Jammu. *J. Eco. Tax. Bot.* 15(1)

1-10.

7. Cox P A and Balick M 1994, Ethno botanical approach to drug discovery. *Sci. Am.* 270 82-87.
8. Lewis W H and Elvin M P 1995, Medicinal plants as source of new therapeutics. *Annals Missouri Botanical Garden* 82 16-24.
9. O'Connor B B 1995, *Healing traditions : Alternative medicine and the health profession*, University of Pennsylvania, Philadelphia, Pennsylvania.
10. Posey D A and Dugfield G 1996, Beyond Intellectual Property : Towards Traditional Resource Rights for Indigenous Peoples and local Communities, Canada : International Development Reserarch Centre. pp 303.
11. Gpta A K, Vats S K and Lal B 1998, How cheap a mdicinal plant species be? *Curr. Sci.* 74 565-566.
12. Ahad H 1999, Issues regarding medicinal plants of Pakistan. *Udyana today* 6(3) 6-7.
13. Ghimire S K, Shresta K K and Bafrachary D 1999, Eological study of some high attitude medicinal and aromatic plants in the Gyasumado valley, Nanag, Nepal. *Ecoprint* 6 17-23.
14. Krippner S 2003, Modes of Ethomedicinal Healing Paper presented at the Ethomedicinal conference, Munich, Germany.
15. Pandey A K Patra A K and Suhkla P H 2005, Medicine plants in Satpura Platteau of Madhya Pradesh : Current Status and Future prospects. *Indian Forester* 131(7) 857-883.
16. Pushpangdan P and Kumar B 2005, Ethnobotany, CBD, WTO and the Biodiversity Act of India. *Ethnobotany* 17 2-12.
17. Verma A K, Kumar M and Bussmann WR 2007, Medicinal plants in as urban environment : the medicinal flora of Banaras Hindu University, Varanasi, Uttar Pradesh. *J. Ethnobiol. Ethnomed.* 3 35.