



Wild and some threatened medicinal plants used by Tribals of Sidhi district (Madhya Pradesh), India

Suresh Prasad Saket

State Forest Research Institute, Jabalpur, Madhya Pradesh, India

Abstract

The present paper on "*Wild medicinal plants used by tribals of Sidhi District Madhya Pradesh*". Sidhi region is very interior part and rich in plant biodiversity because of its variety of geology, land shapes like sandy, valley and hill areas. Sidhi is well known for its natural beauty, historical importance and rich cultural roots. This region located in a state between 24.2071° N latitude, 81.7787° E longitude. There are varieties of climate and altitudinal variations compiled with varied ecological habitants. A total 81 important wild medicinal plant listed which are useful for the several drastic human diseases. We can richness of species, genera and families at a place.

Keywords: threatened medicinal plants, Sidhi district, tribal people

Introduction

Sidhi District is one of the tribal districts of Madhya Pradesh state of India. The town of Sidhi is the district headquarters and the part of Rewa Division. It makes the North-Eastern boundary and this region located in a state between 24.2071° N latitude, 81.7787° E longitude. Sidhi is well known for its natural beauty, historical importance and rich cultural roots. The rich house of the wild medicinal plants with luxurious and variety of diversity. This region covered forest, reservoirs and hill areas. The Varchar Aashram is small place view very good at Rampur village. Total area of this region 10,536 km². Madhya Pradesh is variable niche of growing healing herbs, which are being used in Indian system of medicine like Ayurveda, Siddha and Unani. Madhya Pradesh has got 1, 35, 164 sq km of forest which accounts for 30, 48% of total geographical area of the state.

Ethnobotany is the study of the relationship between plants and people. The relationship between plants and human cultures is not limited to the use of plants for food, clothing and shelter but also includes their use for religious ceremonies, ornamental and health care ^[11].

Out of the total 4, 20,000 flowering plants reported from the world ^[2]. Tribal communities like Bhil, Gond, Baiga and Bediya inhabit it. All these tribal communities use plants for curing various disorders. Although ethnobotanically this region is under exploration, but still vast area remains untouched due to the displacement of the original population. A perusal of literature revealed that some work has been done on ethnomedicinal plants of Madhya Pradesh viz. ^[8,9] and ^[1].

Materials and Methods

The Field work was undertaken in the tribal villages (Rampur, Dhokhad, Khokhra and Kushmi) and its surrounding areas of Sidhi District carried out by self. There were more than 50-75 informants between the ages of 45-75. This information was given to register ethnomedicinal knowledge possessed by tribal people especially the elders (above 45 of age). The main

tribal groups in his region are Saket, Gond (Adivasi), Bhil, Baiga and Kaul who commonly communicate through Hindi and Bagheli. The recorded plant species were compared with the help of standard literature ^[5, 4, 23].

Identification

The collected fresh specimens were identified on the spot or in the laboratory with the help of flora of British India ^[3], Flora of Madhya Pradesh Vol. I, II, III ^[12, 13, 14, 15], Flora of Bhopal ^[6], flora of Jabalpur (Oommachan and Shrivastava, ^[7] and flora of Sidhi ^[17] and Upper Gangetic plains and of the Adjacent Siwalik and Sub Himalayan Tracts ^[16]. Herbarium technique will be mostly adopted from ^[21].

Result and Discussion

The present enumerated data was directly collected by traditional tribal healers of the Sidhi district. But important think is that this region is so anterior place of the district. So, no research work done in this area till date. While, highlight of this region is very rich medicinal source as plant wealth with variety of diversity. The author visited in this area and different local practinonars and collected the information about the plants. Total 81 plant species were listed which are used by local tribal people to treatment of several drastic human diseases. In the following text, plant species are arranged with their botanical names followed with the, local name, family habits, parts used and the mode of application. Bark, leaves, fruits, roots, latex and seeds are the most frequently used plants for various ailments, and contribution of other parts is quits low. It was found that the Inflammatory, Asthma, Bronchial, Diarrhea, Dysentery, Scabies, Anti-cancer, Rheumatism, Astringent, Carminative, Purgative, Abdominal disorders, Constipation, Liver problems, Vermifuge, Stomachic, Snake bite, Diabetes, Leucorrhea, Epilepsy, Diuretic, Jaundice, Leprosy, Bone Fracture, Chicken pox, Muscular pain etc..

This side has a great potential and rich floristic diversity to

support variety of forest types with a remarkable biodiversity. The study side has been revealed with the presence of 81 species belonging to 50 Angiospermic families. The Angiospermic families were enlisted such as Acanthaceae, Zingiberaceae, Apiaceae, Crassulaceae, Scrophulariaceae, Lauraceae, Convolvulaceae, Bignoniaceae, Longaniaceae, Gentianaceae, Aspidiaceae, Fabaceae, Araceae, Liliaceae, Moraceae, Rubiaceae, Apocynaceae, Verbenaceae, Asteraceae, Baringtoniaceae, Verbenaceae, Menispermaceae, Asclepiadaceae, Anacardiaceae, Meliaceae, Sapindaceae, Boraginaceae, Euphorbiaceae, Combretaceae, Vitaceae, Solanaceae, Aristolochaceae, Smilacaceae, Dioscoreaceae, Cucurbitaceae, Tiliaceae, Asteraceae, Malvaceae, Mimosaceae, Myrtaceae, Poaceae, Burseraceae, Ulmaceae, Sapotaceae, Sterculiaceae, Oleaceae, Cyperaceae, Adiantaceae, Asclepiadaceae and Cruciferae.

There are valuable data on the use of wild medicinal plants were recorded in different local areas of the state, number of publications such as [18, 19, 20, 22] and [23] were consulted.

This is constant with other general observations reported earlier. In relation to medicinal plant studies by Indian traditional systems of medicine like Sidha and Aurveda [10].

Different types of preparation mode from medicinally

important plants included decoction, juice, powder, paste, oil and whole plant extract. Medicinal plants play an important role in providing knowledge to the researchers in the field of ethno-botany and ethno pharmacology. People use several methods to prepare medicines from local herbs and plant materials traditionally. Sometimes they use different parts of the plant and sometimes whole plants. Here the women of the study area were found to be more familiar with the use of such medicinal plants to cure reproductive health related disease (Table 1).

In the data revealed that some important critically endangered and endangered plants viz., *Curcuma augustifolia*, *Artocarpus lakoocha*, *Peucedanum nagpureense*, *Peucedanum dhana*, *Semipervium densiflorum*, *Litsea glutinosa*, *Argyrea speciosa*, *Oroxylum indicum*, *Hymenodictyon orixens*, *Strychnos nuxvomica*, *Swertia augustifolia*, *Acorus calamus*, *Dryopteris sparsa*, *Chlorophytum borvilanum*, *Gardenia jasminoides*, *Gloriosa superb*, *Rauwolfia serpentine*, *Vernonia anthelmintica*, *Pterocarpus marsupium*, *Cissus quadrangularis*, *Smilax zeylanica*, *Cissus repanda*, *Dioscorea pentaphylla*, *Gmelina arborea*, *Cissampelos pareira*, *Lepidum sativum*, *Vetivera zizanioides*, *Fimbristylis juniformis* and *Citrullus colosynthesis*.

Table 1: Wild medicinally important Plant species enumeration of district sidhi (M.P.), India

S.N.	Botanical Name	Local Name	Family	Habit	Part Use	Ethno-Medicinal Uses
1	<i>Curcuma caesia</i>	Kali Haldi	Zingiberaceae	H	Rhizome	Commonly used to treat pimples and black heads & also used for the treatment of Inflammatory and leprosy.
2	<i>Peucedanum nagpureense</i> Prain.	Tejraj	Apiaceae	H	Leaf, roots	Sexual diseases
3	<i>Semipervium densiflorum</i> Wall.	Chitawar	Crassulaceae	C	Leaf	The leaves are useful the skin diseases.
4	<i>Vitex negundo</i>	Nirgundi Kand	Scrophulariaceae	H	Root, leaf	Root and leafs are used in skin diseases.
5	<i>Adhatoda zeylanica</i> Medik.	Adusa	Acanthaceae	S	Whole part	The decoctions of leaves are given to cure asthma and other bronchial troubles.
6	<i>Peucedanum dhana</i> Buch.	Bhograj	Apiaceae	H	Roots	The tuberous root is pasted and made small pills and given 2 tablets morning and evening for 21 days to enhance sexual power, vigor and vitality.
7	<i>Listea glutinosa</i> (Lour.) Robins.	Menda	Lauraceae	T	Root, leaf	Leaves decoction are used for the Diarrhea, dysentery, scabies.
8	<i>Argyrea speciosa</i> Sw.	Vidhara	Convolvulaceae	C	Leaf, root	The root and leaf used in Anticancer, Rheumatism.
9	<i>Oroxylum indicum</i> (L.) Vent.	SonaPatha	Bignoniaceae	T	Root, bark, fruits, seed	The root bark is used in stomatic problem. A seed paste is applied to treat boils and wounds.
10	<i>Strychnos nuxvomica</i> L.	Kochila	Longaniaceae	T	Bark, leaf, seed	Muscle relaxant
11	<i>Swertia augustifolia</i> L.	Chirayta	Gentianaceae	H	Leaf	This plants used as fever, abdominal disorders, nausea, indigestion, constipation and liver.
12	<i>Dryopteris sparsa</i> O. Ktze.	Jatasankri	Aspidiaceae	H	Leaf	This plant used by local people in snakebite, swelling and ulcers.
13	<i>Mucuna pruriens</i> (L.)D.C.	Jungli Kewach	Fabaceae	C	Root, leaf, seed	To make herbal drug used in male infertility.
14	<i>Acorus calamus</i> L.	Bach	Araceae	H	Rhizome	The decoction of rhizome use as Stomachic, tonic & anti-flatulent.
15	<i>Centella rotundifolia</i> Roxb.	Brahmi	Apiaceae	H	Whole part	Leaf used as Skin diseases, brain tonic.
16	<i>Allium leptophyllum</i> L.	Van Lahsun	Liliaceae	H	Bulb, seed	The leaves and bulbs are applied to insect bites, cuts & wounds, while the seed are used to treat kidney & liver diseases.

S.N.	Botanical Name	Local Name	Family	Habit	Part Use	Ethno-Medicinal Uses
17	<i>Chlorophytum borvilanum</i> Roxb.	Safed Musli	Liliaceae	H	Root	Diabetes, leucorrhoea, general weakness.
18	<i>Artocarpus lakoocha</i> Roxb.	Badhar	Moraceae	T	Bark, fruits	This plants used in digestive problem, liver problem and skin diseases.
19	<i>Gardenia jasminoides</i> Ellis	Gandhraj	Rubiaceae	T	Leaf	Leaves are used to treat skin diseases.
20	<i>Gloriosa superba</i> Linn.	Kalihari	Liliaceae	C	Root, rhizome	<i>Gloriosa superba</i> is used to rheumatism, inflammation, ulcer, skin diseases, leprosy, snake bite, purgative, infertility, abdominal pain, cancer and piles .
21	<i>Rauwolfia serpentina</i> (Linn.) Benth.	Sarpghandha	Apocynaceae	S	Root, seed	A decoction of the root (3 g) and black pepper is given to expel intestinal worms in children.
22	<i>Clerodendrum serratum</i> L.	Bharangi	Verbenaceae	S	Root, leaf	Herb used in treating asthma, fever and other inflammatory conditions.
23	<i>Andrographis paniculata</i> Ness.	Kalmegh	Acathaceae	H	Leaves and roots	Kalmegh has been used for liver complaints fever and weakness.
24	<i>Vernonia anthelmintica</i> L.	Somraj	Asteraceae	H	Seed	The plant used as roundworm and threadworm infestation, cough.
25	<i>Careya arborea</i> Roxb.	Kumbhi	Baringtoniaceae	T	Bark, leaf	Stem bark use in skin disease and epileptic fits.
26	<i>Gmelina arborea</i> Roxb.	Khamer	Verbenaceae	T	Root , stem bark, leaf	Root and stem bark used to treat Stomachic pain & Piles & leaf juice used in wash ulcer.
27	<i>Tinospora cardifolia</i> (L.) Merr.	Giloy	Menispermaceae	C	Stem, root leaf	Dry stem constitutes drug, which is used as tonic in diarrhea and chronic dysentery.
28	<i>Gymnema sylvestris</i> (Retz.)	Gudmar	Asclepiadaceae	C	Whole part	The leaves of the plant are used in diabetics.
29	<i>Amorphophallus campanulatus</i> (Roxb.)Bl.	Suran	Araceae	H	Corm, seed	Asthma and antiemetic.
30	<i>Pterocarpus marsupium</i> Roxb.	Beeja	Fabaceae	T	Leaf, stem, gum	Bruised leaves are applied on skin diseases, Sores and boils.
31	<i>Semecarpus anacardium</i> L.f.	Bhilma	Anacardiaceae	T	Seed, fruits	Diarrhea, dyspepsia, sciatica, paralysis, epilepsy, rheumatic and worms
32	<i>Hymenodictyon orixens</i> Mobb.	Bhudkud	Rubiaceae	T	Leaves stem.	Leaves are used to produce the milk in women.
33	<i>Soymeda febrifuga</i> A. Juss.	Rohina	Meliaceae	T	Bark	Bark used in the treatment of diarrhea, dysentery and fever and also as a general tonic.
34	<i>Sapindus laurifolius</i> Vahl.	Reetha	Sapindaceae	T	Fruits	The seeds are used to treat Joint pain.
35	<i>Cordia dichotoma</i> Forst.f.	Lasoda	Boraginaceae	T	Fruit, bark	The bark is used for the treatment of Jaundice.
36	<i>Coloclasla</i> sp.	Lakshmad Kand	Araceae	H	Root	Tuber is used to treatment constipation, stomatitis, cancer, and weakness.
37	<i>Zingiber purgureum</i> Roscoe.	Van adrak	Zingigeraceae	H	Rhizome	Rhizome is used to treat indigestion and inflammation.
38	<i>Asparagus racemosus</i> Willd	Satawar	Liliaceae	S	Root	Juice of fresh roots given orally in dysentery.
39	<i>Euphorbia ligularia</i> Roxb.	Sehud	Euphorbiaceae	S	Latex	It is used to treatment of skin diseases.
40	<i>Terminalia chebula</i> Retz.	Harra	Combretaceae	T	Fruit, stem, bark	Harra is used for the treatment of anorexia , cough, hiccough, Jaundice, renal epilepsy, fever & leprosy.
41	<i>Cissus quadrangularis</i> L.	Hadjod	Vitaceae	C	Whole part	It is used to treat bone fracture.
42	<i>Withania somnifera</i> (L.) Dunal.	Ashwagandha	Solanaceae	S	Root, leaf	Ashwagandha is used for arthritis, anxiety, trouble sleeping tumors, tuberculosis and asthma.
43	<i>Aristolochia indica</i> L.	Ishwarmul	Aristolochaceae	C	Root, rhizome	The roots extract leprosy and antidote.
44	<i>Ficus racemosa</i> L.	Umar	Moraceae	T	Bark	The decoction prepared form the bark of the tree is used in the treatment of syphilis.
45	<i>Smilax zeylanica</i> L.	Ramdatun	Smilacaceae	C	Bark, Seed	The plant is used to treat insanity, colic, diarrhea, syphilis, gonorrhoea, leucorrhoea, arthritis, fever, skin disease and weakness.

S.N.	Botanical Name	Local Name	Family	Habit	Part Use	Ethno-Medicinal Uses
46	<i>Curcuma aromatica</i> Sallsb.	Van Haldi	Zingiberaceae	H	Rhizome	It is used to treat gastrointestinal & upper respiratory disorders, skin inflammation & infection.
47	<i>Dioscorea pentaphylla</i> L.	Suar kand	Dioscoreaceae	C		Tubers are used in Jaundice, dysentery, Madness, abdominal pain & bone fracture.
48	<i>Cissampelos pareira</i> L.	Padin	Menispermaceae	C	Root, bark, leaf	The root of the plants is used in snakebite. And also used to treat diarrhea & urinary.
49	<i>Cissus repanda</i> Vahl.	Parsutiha	Vitaceae	C	Root	The root powder used in bone fracture.
50	<i>Citrullus colosynthesis</i> (L.)	Indraman	Cucurbitaceae	C	Fruit, roots	This plant used to treatment of diabetic patient.
51	<i>Curcuma angustifolia</i> Dalzell.	Tikhur	Zingiberaceae	H	Leaf, roots	Skin diseases, cough, bronchitis, leucoderma, dysentery, diarrhea & colitis
52	<i>Grewia hirsuta</i> Vahl.	Gudsakri	Tiliaceae	H	Root	It is used for the Cardiac disorders, diarrhea & decoction.
53	<i>Eclipta prostrata</i> L.	Bhringraj	Asteraceae	T	Whole part	Bhringraj is an important Ayurveda herb, widely used in hair fall treatment, liver disorders, skin diseases etc.
54	<i>Feronia limonia</i> (L.) Swingle.	Kaitha	Rutaceae	T	Fruits	It is used to treat stomach diseases.
55	<i>Buchanania lanzan</i> Spreng.	Char	Anacardiaceae	T	Seed	It is used to treat urinary disorder
56	<i>Ocimum canum</i> Sims.	Mumri	Lamiaceae	H	Whole part	It is used to treat constipation & Jaundice.
57	<i>Dioplocyclos palmatus</i> L.	Sivlingi	Cucurbitaceae	C	Leaves, fruits	The leaves are used in inflammation and constipation.
58	<i>Abutilon indicum</i> (L.) Sw.	Kanghi	Malvaceae	S	Root, seed, bark, leaf	Hypothermic, CNS active, analgesic, aphrodisiac
59	<i>Acacia catechu</i> (L.f.) Willd.	Khair	Mimosea	T	Bark, leaf	Wood extract used in diarrhea, Swelling of the nose and throat.
60	<i>Syzygium cumini</i> (L.)	Jamun	Myrtaceae	T	Bud, leaf	Seed powder is useful in diarrhea, dysentery & diabetes.
61	<i>Vetivera zizanioides</i> (L.) Nash.	Khas	Poaceae	H	Whole part	The oil of the plant used in skin diseases or ringworm.
62	<i>Phyllanthus emblica</i> L.	Amla	Euphorbiaceae	T	Root, bark, leaf, fruits	Fruits are used in digestion and as tonic. It is considered to be a good blood purifier.
63	<i>Boswellia serrata</i> Roxb.	Salai	Burseraceae	T	Leaf, Gum & Roots	Gum used as tonic. Root pasties allied externally in small pox & chicken pox.
64	<i>Datura metel</i> L.	Kamdut	Solanaceae	S	Whole part	Leaves are made into bidi and are smoked in asthma & bronchitis.
65	<i>Carissa carandas</i> L.	Karonda	Apocynaceae	S	Fruit, Leaf	It is used to treatment of stomach problem.
66	<i>Murraya koenigii</i> (L.) Spreng.	Meethi neem	Rutaceae	T	Bark, root, leaf	The leaves of the curry tree are used as anti diabetic.
67	<i>Solanum virginianum</i> L.	Bhakatiya	Solanaceae	H	Fruits	This herb is used in treatment of epilepsy, hair fall, bronchial asthma, skin problems.
68	<i>Holoptelea integrifolia</i> Roxb.	Chilbil	Ulmaceae	T	Leaf	Leafs are used in scabies. This plant also used in Rheumatism and leprosy.
69	<i>Dalbergia paniculata</i> Roxb.	Dhovin	Fabaceae	T	Root	Root extract used in snakebite.
70	<i>Ficus benghalensis</i> L.	Bargad	Moraceae	T	Bark, leaf, fruit, latex	The latex used in skin disease and astringent.
71	<i>Aegle marmelos</i> (L.) Correa.	Bel	Rutaceae	T	Root, stem, leaf, fruit	Fruits are used in dysentery & diarrhea. Bark decoction used orally in intermittent fever.
72	<i>Phyllanthus amarus</i> Schum.Thoun.	Bhui amla	Euphorbiaceae	H	Whole part	The plant used in pilea, jaundice, fever and anticancer.
73	<i>Madhuca longifolia</i> Macbr.	Mahua	Sapotaceae	T	Bark, fruit, seed	It is used to treatment of Rheumatism, fever & leucoderma.
74	<i>Helicteres isora</i> L.	Marodphalli	Sterculiaceae	T	Root, bark, fruits	Powder of ripe fruits & stem bark is employed in dysentery & diarrhea. Leaf juice is beneficial in stomach affections.
75	<i>Nyctanthes orbor-tristis</i> L.	Harsingar	Oleaceae	S	Leaf	The young fruits are pounded in water, and given in relieving cough.
76	<i>Fimbristylis juniformis</i> Kunth.	Hathipaw	Cyperaceae	H	Leaf	This plant used in antiviral and antibacterial infections.

S.N.	Botanical Name	Local Name	Family	Habit	Part Use	Ethno-Medicinal Uses
77	<i>Acacia nilotica</i> (L.) Willd.	Babul	Mimosaceae	T	Gum	The twig of the plant is used as natural tooth brush. The extract of fresh bark is used as tonic & gum is powerful tonic after delivery.
78	<i>Mitragyna parvifolia</i> (Roxb.)	Kaima	Rubiaceae	T	Fruits	Bark of the tree is used in fever and cold. Paste of the bark is applied in muscular pains.
79	<i>Adiantum philippense</i> L.	Hansraj	Adiantaceae	H	Leaf	Juice of leaves used to treat dysentery diseases, ulcers, burning sensations etc.
80	<i>Calotropis procera</i> Linn.	Madar	Asclepiadaceae	S	Whole part	The latex of plants is applied to remove thorn from the body. It is also used for the asthma & cough.
81	<i>Lepidum sativum</i> L.	Chandrasur	Brassicaceae	H	Leaf	Leaves are used in snake bite.

Legends: H = Herbs, S = Shrubs, T = Trees, C = Climbers

Conclusion

It is a fact that plants and human beings are closely related to each other. So, there is always a hunt for rich ethnomedicinal plant for ethno botanical studies of medicinal plants. Further, this research has placed on records the local uses of medicinally important plants which were interviewed among 50-75 local people of this region. The traditional healers are the main source of knowledge on medicinal plants and the outcome of result compare to another earlier literature. Finally, to conclude, this research article will attract the attention of ethno botanists, phytochemists and pharmacologists of this region for further critical investigation of medicinal plants. It is necessary to evolve effective conservation strategies of plants so that they can be conserved and used sustainable in the interest of humanity. In this point of view, botanical gardens have important role in conservation. Basic knowledge about the threatened, endemic, medicinal species is very much essential for their conservation.

Acknowledgements

The authors are thankful and grateful to the tribals people of this region specially vaidya Mr. Ramlal Saket and local people for the providing valuable informations.

References

- Arjariya A, Chaurasia K. Ethno botanical remedies of some gastrointestinal problems from Chhatarpur District (M.P.) Muzaffernagar. J. of Nature Conservation. 2008; 20(1):47-52.
- Govaerts R. How many species of seed plants are there Taxon, 2001; 50:1085-1090.
- Hooker JD. The flora of British India. A sketch of the flora of British India. In the imperial Gazette, London, 1872-1897, 1(7):1904.
- Jain SK, Rao R. A handbook of field and herbarium methods, Today and Tomorrow Pub., New Delhi, 1976; 1-182.
- Kirtikar KR, Basu BD. Indian Medicinal plants. International book Distributors, Dehradun, India. 1975; 4:2793.
- Oommachan M. Flora of Bhopal. J.K. Jain Bro. Pub., Bhopal. 1977; 475.
- Oommachan M, Srivastava JL. Flora of Jabalpur", Sci. Pub. Jodhpur. 1996; 1:354.
- Pandey AK, Bisaria AK. Rational utilization of important medicinal Plants: A tool for conservation. Indian Forester, 1997; 124(4):197-206.
- Rai MK, Pandey AK, Acharya D, et al. Ethno-medicinal plants used by Gond tribe of Bhanadehi, district Chhindwara, Madhya Pradesh. J. Non-Timber Forest Products. 2000; 7 (3/4):237-240.
- Kirtikar KR, Basu BD. Indian medicinal plants. International book distributors, Fefradun. 2001; 2793.
- Schultes RE. Ethnobotany and technology in the Northwest Amazon: A partnership. In Sustainable harvest and marketing of rain forest products, Eds. Plotkin and Famolare, Island Press, CA. 1992; 45-76.
- Verma DM, Balakrishnan NP, Dixit RD. Flora of Madhya Pradesh. Bot. Surv. Of India, Calcutta, 1993; 1.
- Mudgal V, Khanna KK, Hajra PK. Flora of Madhya Pradesh. Bot. Surv. Of India, Calcutta. 1997; 2.
- Singh NP, Khanna KK, Mudgal V, Dixit RD. Flora of Madhya Pradesh. Bot. Surv. Of India, Calcutta. 1998; 3.
- Khanna KK, Kumar A, Dixit RD, Singh NP. Supplement to the flora of Madhya Pradesh. Bot. Surv. of India, Calcutta, 2001.
- J Duthie F. Upper Gangetic plains and of the Adjacent Siwalik and Sub Himalayan Tracts. Reprinted Edition, Bot. Surv. of India, Calcutta. 1903-29; 1-2.
- Sengupta G, Ramlal. Flora of Sidhi District, M.P. Bull. Bot. Surv. of India. 1977; 1:182-188.
- Dubey BK, Bahadur F. A study of the tribal people and tribal areas of Madhya Pradesh. Tribal Research and Development Institute, Bhopal, 1966.
- Jain SK. Contribution to Indian Ethnobotany", Scientific Publishers, Jodhpur, 1991.
- Kirtikar KR, Basu BD. Indian Medicinal plants. 1 to 8, Reprinted in 1994 by Bishen Singh Mahendra Pal Singh Publ., Dehradun, India, 1935
- Santapau H, Jain SK. Critical notes on the Identify and Nomenclature of some Indian Plants. Bot. Sur. of India, 1961; 3:11- 21.
- Saini VK, Charmkar SP. Herbal Plants Used To Cure Various Ailments by the Inhabitants of Jabalpur, Madhya Pradesh. South Asia Journal of Multidisciplinary Studies. 2016; 2(3):59-67.
- Saini VK, Saket SP. Ethno medicinal value of some plants in central India with special emphasis to Jabalpur region. Life Science bulletin. 2014; 10(2):282-284.
- Saket SP, Saini VK. A Comprehensive floristic study of Jabalpur district with special emphasis to dominant family. International Journal of Science and Research, 2016, 5(11):90-92.