Medicinal Plants in Bhupdeopur Forest, Raigarh Chhattisgarh in Central India

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Abstract: The present paper reviews plants traditionally used by tribals in the Bhupdeopur forest range of Raigarh district, C.G. India. The main aim of the present study is to focus on the diversity of medicinal plants for further utility and conservation A survey on medicinal plant diversity was conducted in the Bhupeopur forest Raigarh district, C.G. India through the period of 2009 to 2011. In present study seven tribes Gond, Oraon, Kamwer, Dhanwar, Sanwara, Bhaina and Khadiya have been considered for Ethnobotanical studies. After fields survey and interview with the tribal people of the surveyed area, observed medicinal plant were listed followed by botanical name vernacular name, family, habit, part used and uses with the help of available literature. Total of 122 medicinal plants species belonging to 49 families were recorded which indicate the heterogeneous floristic composition in the Bhupdeopur forest.

Keywords: Medicinal plants; medicinal use; Biodiversity; floristic composition.

Introduction

The forest ecosystems are vital in terms of tree species growing. Tropical forests are highly diverse due to species interaction and niche variation, which is a results of favourable climatic (Ojo and Ola- Adams, 1996) and edaphic conditions. The study of vegetation wealth and the component floristic elements found within a region has assumed great relevance in biodiversity studies.

Medicinal plants are the plants with potential capacity for treatment of varied diseases and are using by people from past (Rawat and Choudhary, 1998). Man has been utilizing plants for medicinal purpose since long ago. Significant importance towards health and for economical value, sustainable utility, conservation their floral assessment and documentation is essential, India is a rich diversity centre for medicinal and aromatic plants. Around 45,000 plants species nearly 15,000 plants are used for their specific medical value (Pei, 2001). Due to less side effect and rich potential herbal medicines are under highly demand in the world.

The distribution pattern of medicinal plants depending of their genetic makeup, related en-

vironment (Soil, Temperature, water etc) and geographical situation seasonal variation in plant composition and their biomass was studied by (Singh, 1967) and forest vegetation study was carried by (Singh and Singh, 1987).

Medicinal plants and their utilization is increasing day by day. Highly demand rate of medicinal plant their cultivation conservation and export are important segment toward medicinal plants fields. Plants are used as medicine by tribal and rural people since past. Around 80% populations over the world use medicinal plants to cure different health related problems (Kamboj, 2000).

Destruction of natural habitat by human activity or by nature, over exploitation, continuous excess utilization etc causes threats to biological species. Diversity of the species is the most striking feature of life, which plays role in complexity and intactness of natural ecosystem (Mohammad et al., 2000). Biodiversity is represented by whole remarkably group of the species for sustain utilization and conservation of medicinal plants, the documentation is needful aspects synthetic drugs leading increase disease and disorders day by day.

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India is also one among the 12 mega biodiversity centres in the world including around 47,000 plant species. India is well known as rich centre of plants diversity among the world .Medicinal plants utility trends have been increased due to their much efficacy, safe mode for utilization and less side effect various parts of the Medicinal plants are used for different purpose and are also a source of economic growth to local peoples (Samant et al., 1997). The present research is carried out in Bhupdeopur Reserve forest Raigarh (Chattisgarh) to explore the diversity as no systematic documentation of medicinal plants of this area have been made so far. ethnobotanical study of the selected study area was done following survey of study area in which questionnaire was filled by the tribal and personal interviews were organized. Identification and collection of plants specimen preparation of herbarium, taking digital photographs of plants, identification of plants was done with the help of flora (present study was carried out during the year 2009-2011 adopting the methods of workers like Jain (1987-1988) and Jain & Singh (1997).

The ethnobotanical knowledge was gathered from Baigas, Baidyas knowledgeable persons, experienced people, medicine men and heads and local inhabitants of the village, who have knowledge of plants for health and livelihood security. The first hand information was recorded during the field visits to the study area. In field visit information was collected average of two months for each village. Field work was done as per planned schedule of field visit (Table6). Information collected through questionnaire and personal interview on the spot was the basic sourced of the knowledge in the present study. Some ethnobotanical studies were made by Ayyanar and Ignacimuthu (2005), Bala Krishnan et al. (2009), Patel (2012). This paper is an attempt to document the medicinal plants distributed in Bhupdeopur Reserve forest wild-

Material and methods

Present research was conducted to examine plant diversity in Bhupdeopur Reserve forest

Raigarh district, C.G. India. The study area is divided in to 4 circles named Naharpali; Kerajhar, Dalari and Khairpur each circle is further divided in to at least 4 beats total 20 beats are there which contain 16 villages. Where present study was conducted. The study site is spread at about 8 to 25 km. of North west of Raigarh City. The area comes under Raigarh forest range of Raigarh forest division within Raigarh and Kharsia administrative block. The total area of the forest is 4451.6 ha. In which 4300.4 ha. Area is reserved forest and 151.2 ha area is protected area. Survey was made for collection of plants (Trees, Shrubs and herbs), their identification followed by Botanical name, family Habitat, Parts used, uses etc.

The forest was periodically visited for collection of plants. The plants were freshly collected and their digital photographs were also taken and have been identified in the laboratory by literatures including flora / Encyclopaedia like De, L.C. (2005). Hooker (1875), Sharma R (2003), Trivedi P. C. (2006) and Pullaih T. (2006), further Confirmation was made with the help of experts of the fields. Plants species were also confirmed by comparing with authentic specimens housed in the Central Institute of Medicinal and Aromatic Plant Lucknow and BSI central national herbarium Kolkata.

Result and discussion

On the basis of field survey on medicinal plants it is resulted that 122 species under 49 families showed their presence in the Bhupdeopur forest which were collected identified and listed.

Recorded medicinal plants showed different habit (Herb shrub and /Trees). The plants are arranged following their Botanical name. Family Habit, parts used, use and Propagation shown in. Table 1 and Table 2 indicating summary of Medicinal plants in/ Bhupdeopur Reserve forest. (Propagation Method of different Medicinal plants are cited in Table 3, Many of the observed Medicinal plants are commonly cultivated in the country.

CNIC	te 1. Buillinary of medicina	l plants in the, Bhupdeopu	r forest Raiga	rh district. C.	G. India	
<u>S.NC</u>	- A dilliny	Total Plant Sp	ecies Herb	Shrub	Tree	
2.	Fabaceae	16	04	03	09	
3.	Araceae	02	02			
3. 4.	Amaranthaceae	02	. 02			
5.	Acanthaceae	03	01	02		
6.	Alangiaceae	01			01	
7.	Myrtaceae	03			03	
8.	Asteraceae	03	03		0.5	
	Liliaceae	04	02	02		
9.	Papaveraceae	02	01	01		
10	Meliaceae	02			02	
11	Nyctagianaceae	02	01 ·	01	02	
12	Anacardiaceae	03			03	
13	Caesalpiniaceae	04	01	01	02	
14	Asclepiadaceae	03	-02	01	02	
15	Vitaceae	01	01	O1		
16	Rutaceae	02	01		02	
17	Zingiberaceae	02	02		02	
18	Hypoxidaceae	01	01			
19	Convolvulaceae	03	03			
20	Poaceae	01	01			
21	Apiaceae	02	02			
22	Solanaceae	03	03	1		
23	Dioscoriaceae	02	02			
24	Euphorbiaceae	07			0.5	
25	Moraceae	04	05		02	
26	Verbenaceae	03	01	0.1	04	
27	Sterculiaceae	02		01	01	
28	Malvaceae	02	01	01		
29	Apocynaceae	02	01	01		
30	Oleaceae	01		0.1	02	
31	Lythraceae	02		01		
32	Sapotaceae	01		02		
33	Rubiaceae				01	
34	Lamiaceae	05			05	
35	Oxalidaceae	03	03			
36	Plumbaginaceae	01	.01	•		
37	Myrtaceae	01	Q1.			
38	Punicaceae	03			03	
39	Dipterocarpaceae	01			01	
40	Combretaceae	01			. 01	
41		04	01 .		03	
42	Menispermaceae	01		. 01		
	Graminae	01	01			
43 44	Rhamnaceae	02			02	
	Celastraceae	01	01			
45	Polipodiaceae	01	01			
46	Ebenaceae	02	01		01	
47	Moringaceae	01			01	
48	Crassulaceae	02	02			
19	Cyperaceae	01	01			
Γotal		122	55	18	49	1

S.I	No. Botanical Name	Cinacuia	r Family	Habi	it Part used	district, C.G. in Central Ir	ndia. Propagation
1	Abrus precatorius, Linn.	Ratti	Fabaceae	Herb		Snake bite	Seed
2	Acacia catechu (L.F.)	Katha	Fabaceae	climb Tree	er Bark Heart-		
3	Willd. Acacia nitotica(L)	Babool	Fabaceae	Tree	wood	. toothache	Seed ,
	willd.		1 abaccae	tree	Leaves pods flower Whole plant		Seed
4	Acorus calamus Linn.	Bach	Araceae	Herb	Rhizome	diarrhoea, fever, worms. Abdominal disorder, piles, ev.	e Rhizome
5	Achyranthes aspera	Latii				element cough skin problems delayed delivery	
	Linn.	Latjira	Amaranthac e	ea Herb	Root, Leaves Flowers	Eye aliments, (Conjunctivitis, Swollen eyes, Cataract) cough, skin, problem (Itching) stomach	Seed
6	Adhatoda vasica Linn	. Adusa	Acanthaceae	Shrub	Leaves	pain, normal delivery Fever, Headache, eyre disorder cough, toothache, asthma, diar-	Sand
					whole plant Root	rhoea, urinary problems leucor- rhoea piles eczema epilepsy, Jaundice regulation of menstrual cycle	Seed
7	Alangium salvifolium (L.F.) Wang.	Thelkajani	Alangiaceae	Tree	Root Fruits	easy delivery Scorpion bite, asthma, constipa- tion, fever, snake bite, diarrhea	Seed
	Albizia lehbek Benth	Siris	Fabaccae	т	Seeds Leaves	Wounds Arthritis	
		Sins	rabaccae	Tree	Flowers Seeds Bark Root	Migraine, male impotency, pilcs, hydrocoel, cut & wound, scor- pion bite,(antidote) toothache	, Seed
	Aloe vera Linn.	Ghritkumari	Liliaceae	Shrub	Stalk Leaves	Eye ailments, Asthma, Burns, · Headache, Fracture, Cuts &	Leaf
0	Aegle marmelos(L) Core.	Bel	Rutaceae	Tree	Root Leaves	Wounds Headache, cough, cataract, chest pain, piles, dysentery, stomach	Seed
ı	Amaranthus virdis	Chaulai	A		Fruits	pain, mouth ulcer, fever, weak- ness	
2	(Hook) Amorphophyllus	Bhaji	Amaranthacas		Leaves	Blood purification, Eye Ailments	Seed
3	paeonifolius Dennst.		Araceae	Herb	Rhizome	Piles	Rhizome
	D.C.	Akarkara	Asteraceae	Herb	Root Whole plant	Headache, toothache, fever, stomach problems, paralysis, Menstrual problems, facial pa- ralysis, heart disease	Seed
	Andrographis paniculata Nees.	Bhuileem	Acarthaceae	Herb	Leaves Roots Whole plant	Worms,(Antihelmentic) joint pain, Stomach pain,	Seed
	Asparagus racemosus Willd.	Satawar	Liliaceae	Herb Climber	Fresh root Whole plant Leaves	Malaria, jaundice Headache Cough, asthma, diarrhoea, impo- tency urinary disorders, weak-	Seed
	Argemone maxicana (L.)	Pilikateri I	Papaveraceae		Root	ness, piles fever, Wounds, anti-toxic Asthma	Seed
	()				Whole plant Yellow milk oil	Cough, urinary disorders, ab- dominal pain, ulcers, Jaundice	
	Azadirachta indica A. N Juss.	Neem M	Meliaceae	Tree	Leaves Bark	Male Impotency Ring worm White discharge, vomiting, malaria, heart ailments, eczema,	Seed

18	D				Fruits	Medicinal Plants in E	Rhupdeopur
10	Bauhinia retusa Rox	b. Gobi	Legumino	sea Tre	e Flowers	Itching, headache, Diarrhoea Paralysis	
19	Bauhinia variegata				Bark	diarysis	Seed
	Linn.	Kachnar	Fabaceae	Her	b Bark	Stomatitis intestinal worm,	
	Dinn.				Buds	diarrhoca, piles, constipations	Seed
20	Blepharispermum					wound, (antiseptic)	
20	subsessile (D.C.)	Rasna Jac	li Sterculiace	eae Herl	Seeds	Wound (antiseptic)	
21	Roanhanin ditt				fruits	Dysuria, Delivery Problem	Seed
-,	Boerhavia diffusa Lii	ın. Punarva	Nyctagina	cea Herl	Root	Kidney stone, arthritis	
22	Pughania I B		e		leaves	returney storie, artiffitis	Seed
	Buchania lazan Roxb	. Char	Anacardia	cea Tree	Bark	Jaundice,	
			е		Fruit	Nasal bleeding, hydrocele, oe-	Seed
23	D				Flowers	dema, Dysuria	
دے	Butea monosperma	Palas	Fabaceae	Tree		Eve disarders Cot	
	(Lamk) Taub.				Gum	Eye disorders, Cataract,	Seed
					Seed	Nightblindness, epilepsy, Diar-	
2.4					occa	rhoea, wound, Abdominal work	n,
24	Cassia occidentalis L	Kasmard	Caesalpine	ace Shmi	b Leaves	eczema, arthritis	
			ae	are ome	Whole plant	Eye disorders, ear problems,	Seed
					Root		
					Seed	fever epilepsy,	
					Decu	Male Impotency, weakness,	
25	Cassia tora Linn.	Chakravad	a Caesalpinia	se Herh	Seed	scorpion bite, eczema.	
			ae	11010	Leaves	Migrain cough	Seed
						Ring worm, Diarrhoea, wound,	
					Whole plant Root		
						eczema, fever,	
					Flowers	diabetes,	
26	Calotropis procera	Aak	Asclepiadac	an Church	D 1	urinary disorders	
	Aiton.		e	ca Sili ub		Cough & cold, eye aliments	Seed
			· ·		Yellow	joint pain(Arthritis)	
					leaves	earache toothache	
7	Cassia fistula Linn	Amaltas	Fabaceae	~	White flower		
		rinarias	rabaceae	Tree	Root	Itching ,fever, Tonsil,	Seed
8	Chlorophytum	Safed Musl	. A #0.000		pods	Easy delivery .	
	tuberosum Baker	Saled Musi	Araceae	Herb	Root	Male Impotency, Tuberculosis	Seed
9	Clerodendrum serratur	n Rharanai	\$7 and	~ .			
	(L.) Moon.	Ditarangi	Verbenaceae	Shrub	Root	Fever, headache, asthama, Swell-	Seed
					Seed	ing, eye problem, worm, boils	Seed
0	Celastrus paniculatus				leaves	wound	
	(Willd.)	Kujur	Celastraceae	Shrub	Root	Epilepsy, headache	Seed
	(Willd.)				Oil	Joint pain, rheumatism, cough,	seed
					Bark	tuberculosis, chest pain, Abor-	
	Cisous mudum 1 .				Seed	tion	
	Cissus quadrangularis (L.) Wall	Hadjod	Vitaceae	Herb	Stem	Fracture	
2						, ruoturo	Seed
	Citrullus colocynthis	Indrayan	Rutaceae	Tree	Fruit	Stomach nois	
	(L.) Schrad.				Roots	Stomach pain, swelling, scorpion	Seed
	Citrus aurantrifolium	Van Nimbu	Rutaceae	Tree	Fruits	bite, snakebite (antidote)	
	(L.)				Root	Headache, fever, malaria, insect	Sced
	Burm. F.				1001	bite, Diarrhoea, Cholera, obesity,	
						worm, jaundice, vomiting, ab-	
	0 . 1					dominal pain, eye disorders.	
	Crotalaria sericea	Bansan	Leguminosea	Shurb	Whole plant	Itching.	
	Retz.		S	Situlo	whole plant	Jaundice	Seed
	Colocasia esculenta	Kochai	Araceae	Herb	Corm	AL.	
	(L.) Schott.			11010		Alopecia, Constipation, weak-	Corm
					Leaves	ness, Leaves are used as vegeta-	
	Convolvulus	Shankhanush	Convolvulace	Hark	W/hal	ble	
	microphytius Sieb.ex	pi	ae	riero	Whole plant	Epilepsy, improving memory	Seed
	Spreng					power, headache vomiting, dia-	
	Costus speciosus Retz. 1	Keokandh	Costaceae	harb	D	betes, sun stroke, hypertension	
	Committee			herb	Root	Headache, weakness	Tuber
	Gaertn		Hypoxidacaea	nerb	Root/Rhizome	Sexual disorders, joint pain (Ar-	Seed
						thritis), piles jaundice, asthma	
(Curcuma amada Roxb J	angli Hald:	Zin ail.			vomiting, diarrhoea	
	Januar Kond J	mgn rididi .	Lingiberaceas		Rhizome	lounding as in it is	Rhizome
			3		Root	cold, piles, stomach pain, diar-	MIZOINE
					Branches	rhoea, urinary disorders, hydro-	

	1111	. J. Med. Arom.	Plante								
	40	Cuscuta refle	xa Roxb. Amar	hal					Madini line	1 1 1 1 1	1
			Amai	oei Co ae	nvolvula	ce Herl	b/ Who	le plant	Respiratore di	nts in Bhupdeo	our Fores.
	41	Cynodon dacty	vlon Linn. Doob <u>s</u>		ccae	Herb	ber	c plant	lem, (Conjunctivitis, Seyes) stomach problen itching, ulcers, wound Headache, epilepsy, ning, mouth problem.	eye prob-Seed Swelling of n, piles, asal bleed-Seed	
	42	<i>Centella asitica</i> Urban	r (L) Brahmi	Apia	ceae	Herb	Whole Leaves	plant	piles, malaria, eczema, problem, (pain, excessi formation) For memory powers,(er memory) Insom	fever, eye ve pus	
							,		nia,(Sleeplessness) Anx	TP	
4	13	Dalhergia sins	D .					•	hair(Checks hairfall) dys chicken pox, Cures B.P.	sentery,	
		Dalbergia sissoc	Roxb Shisham	Fabac	eae	Tree	T		VA1112		
4		<i>Dhatura</i> Strumonium Linn	Dhatura 1.	Solana		Herb	Leaves Oil Extract Seeds		Eye aliments, leucorrheo Skin disorders, (itching, sensation, helps heal ulce	burning	
45	5 /	Diosanus					leaves b	ranch- 6	Headache, Male impoten Eye problems,(Pain in eye esthma, arthritis		
	Ĺ	Dioscorea pentap Linn.	hylla Dukarkan	d Diosco	riaceac I	Jank	whole pl	ant	artinitis		,
46	L	Dioscorea deamoi Coxb.				climber			iles, Dysentery	Tuber	
47	D	oxo. Diospyros melano. oxb		Ebenace			Roots &	leaves P	ainful menses & excessiv	e Tuber	
48	D	iospyros Montan				ree	Fruits & Leaves	D	ysentery, Bad Breath	Seed	
49	K	oxb ryopteris filixmas		Ebenace		erb 1	Bark Fruit	В	odyache	Seed	
50	L.	nhlica officinalis		Polypod	iaceae H	erb I	eaves	Ar	thelmintic		
	Ga	ertn.	Amla	Euphorb.	iacea Tr		Rhizome ruits			Rhizome	
e 1							eed eaves	-01	abetes, eye aliments, for lastipation, (antidiarrhoeal	hair, Seed	
51	Era	inthemum Ichellum L.	Putus	Acanthaa	00- 01			Fni	nritis, fever, Itching lepsy, digestive		
52	Eup	phorbia hirta Lin	n. Dudhi	Acanthac			hole plan	rev	er, boil colic antiacther	atic Sand	
53				Euphorbia	acea Hei	b Le	eaf	COU	gh, dysentery	ine, seed	
23	Eup	horbia nerrifolia	L. Sehund	e Euphorbia		Ro	oot	anti	k secretion, dysentery, co asthmatic	ough, Seed	
				e	cea Her	_	aves	Cou	gh, Intestinal warmen		
						Ro Mi		Toot	nache Piles Illoon F	Seed dis-	
54	Euph	norbia thymifalia	Choti Danie			Jui		or de,			
	Linn.		- Dadin			Wh	ole plant	Diah	Stee diam!		
	Linn.	ulus alsinoides	Shankpushpi	Convolvula	ce Herb		ole plant	Asthr	etes, diarrhoea, na	Seed	
6	Ficus	benghalensis		ie			Jilaiti	Provil	osy (Brain tonic), for im- ng memory power, head-	Seed	
ı	Linn.	glomerata Roxb		Aoraceae	Tree	Bark	k, Prop	aciic,	vomiting, diabetes tes, Toothache		
			Gular N	1oraceae	Tree		y latex			Seed	
, _{[*}	icus ,	racemosa L.	Dumar M	loraceae	Tree	Fruit Milk	S		asthma, Urinary problem derma, diabetes. ery, ulcer, fever,		
F_{l}	icus r	eligiosa Linn.				fresh Fruits	3	Stomac	h pain, eucorrhoea	Seed	
		grosu Cinn.	Peepal M	oraceae	Tree	Bark Roots	(Milk)	Cut & v Eczema	vounds, cough & cold,	Seed	
						Leave: Seeds		earache.			
Ga	<i>rdeni</i> xb.	a turgida	Thandla Rul	piaceae	Tree	Fruits		Leucorri Male im	, stomach pain, swelling		
1200			11.41	MACCAR	fina -	-	Flowers		Hate DOV		

Whole plant

Herb

						in the state of th	<i>впираеор</i>
	62 Gloriosa superba	Linn. Jhagda	phool Lilicacea	Cli	mber Roots,	improves lactation, dry coug ulcer, jaundice Epilepsy, painful menses & I	Ex- Seed
(63 Gmelina arborea F	Roxb Ghamgl	nar Verbenace	eae Tre	Leaves Flowers e Soft leaves	cessive blood discharge, snal bite Cut & wound	+
					roots fruits Bark	Worms Weakness, For scorpions, and snakes (andote)	Seed
6	4 Hemidesmus indicu (Linn)	s Anantmo	ool Asclepiada e	acea Her clim		ulcer, stomach pain. Asthma, bronchitis, burning, diarrhoea, dysentery, Leucoderma	Seed
6	5 Helicterus isora Lir	ın Aaithi	Sterculiace	ae Shru	Bark, fruits, seeds, leave stem, roots		Seed
67	L.	sis Gudhal	Malvacae	Shru	fruits b Roots Flowers Leaves	Cough & cold, stomach pain, male Impotency,	Seed
68	antidysenterica Well.	Koriya	Apocynace	ae Tree	Bark Flowers	swelling, ulcer Diarrhoea, toothache, piles, dia betes, dysentery, urinary disor- ders	a- Seed
	L.	rum Chameli	Oleaceae		b / Leaves er Roots flowers oil	Headache, ear problems, intest nal worms, ulcer, mouth diseases &fever facial paralysis, wound, stomac	
69	Kalanchoe laciniata (L.) D.C.	Pusudi	Crassulacea	e Herb	Whole Plant	iting, Snake Bite, (Antidote) cough, burn, Diarrhoea, Analge	
70	Lannea grandis Dennst.Engler Lawsonia inermis Lin	Modga	Anacardiace e	a Tree	Bark	sic, Piles	Seed
		in. Menendi	Lythraceae	Shrub	Leaves Seeds	Jaundice, headache, stomatitis, eye disorder,	Seed
72 73	Madhuca latifolia Gmel.	Mahua	Sapotaceae	Tree	Bark, flowers, fruits, leaf	Diarrhoea burns , Wound (antibacterial)	Seed
74	Mangifera indica Lim		Anacardiacea e	Tree	Ripen fruits leaves seed	Cough & cold, diabetes, vomit- ing, dysentery, (Anti dysenteric worms	Seed
/4	Melia azadirachta L.	Mahaneem	Meliaceae	Tree	Flower bark fruits sceds leaves	Headache, stomatitis, internal worm, fevers, eye problems, piles Stone in urinary Bladder, wound, itching, swell-	Seed
75	Mimōsa pudica Linn.	Lajwanti	Fabaceae	Herb	Root Leaves	ing Cough, swelling wound, diabetes, bleeding, diarrhoea Jaundice, excessive urination	Seed
76	Moringa oleifera, Lamk.	Munga	Fabaceae	Tree	Leaves Bark Root	indigestion, piles BP, Anaemia, Sore Eyes, boils/Wounds, Headache Iutestinal Worms, Cough, Asth-	Seed
77 78	Mitagyna parviflora L Mucuna pruriens Baker non DC	r Kewanch	Rubiaceae Leguminoseae	Tree Climber	Bark roots Seeds & leaves	ma, Gum Problems, Abortion Fever Cuts & wound	Seed Seed
79	Mycrotyloma uniflorum L.	Kulthi	Leguminosace	Climber	Seeds	Worms Kidney stone	Seed
80	Linn.	Harsringar	Nyctaginacea e	Shrub	Stem		Seed
81	Oscimum basilicum Linn	Vantulsa		Herb	Leaves Roots, Sceds	Ciddings C. L. C. C.	Seed

=	nt. J	. N	led.	Arom.	Plants

	82	Osmium amer Sims.	icanum J.	angli Tulci						Medicinal Plan	to in D	2	
		Sims.		angn ruisi	Lamracea	ae	Herb	Leaf wh	iole	Medicinal Plan	0	Seed Seed	r Fo
	83	0.								dystroying bacteria and sect,(Antibacterial) stim	in-		
	84	Osimum sanctu	m Linn. T	ulsi	Lamiacca		77 .			Skin disorders	ulant		
	04	Oxalis cornicul	ata L. K	hattibuti	Oxalidace		Herb	Leaves		Cold, cough, bronchitis			
						ac I	Herb	Whole pl	lant	Headache		Seed	
								leaves		Gum problems, tooth po	wdor	Seed	
										stornach problems, piles	diar.		
	85	Panaamia -:								moea, rever,	aiai-		
		Pangamia pinna L.	ita Mers Ka	ranj	Fabaceae	Т	ree	C 1		wound			
	86	Peucedanum				,	ice	Seed		Skin disease, (Leucoderr	na)	Seed	
		nagpurense CB	Cloub Tej	raj ,	Apiaceae	Н	lerb	Leaves		rarasiticide	.,,	Seed	
	87	Plumbago zeylar	ica I Ch					Leaves		Sexual disorders		Seed	
		g. =sylun	ica L. Chi		Plumbagen	aca H	erb	Whole pla	ant	Nagaliti u		3000	
				e				Bark		Nasal bleeding, itching, p	iles,	Seed	
										easy delivery, gastric			
	00									Problems, arthritis fever,			
	88	Phyllanthus nirur	i Bhu	iamla E						skin problems, wounds			
	89	Hook.		P	uphorbiac			Whole plan	nt *	Dysentery, jaundice			
	07	phylanthus frater	nus Chh	oti Amla E	unhorb:-					, somery, jaundice		Seed	
		Webster	•	e e	-phorotace	ea He		Leaves	1	Malaria: abdominat			
	90	D:		C				Whole plan	nt E	Malaria; abdominal pain voronchitis, diabetes, syphi	vound,	Seed	
	20	Psorelia corylifoli	a L. Bakı	ichi Fa	baceae	OI.		driedfruit	d	mailloca, liver related neal	.1		
	91				vaccae	Shr	ub]	Leaves seed	ds I	Diarrhoea bronchial asthma	olems		
	'	Psidium guajava L	inn. Amro	ood M	yrtaceae	т		root	ja	nundice; piles; tooth infect	1, .	Seed	
					yrtaceae	Tre		Leaves	Jo	oint pain; toothache mouth	1011		
								ruit	C	er, cough; dysentery	ıuı-	Seed	
9	2	Diana						oot	he	eart ailment			
		Pterocarpus marsu Roxb.	pium Bija	Ste	rculiaceae	Tue		eeds					
9		^D ueraria tuberosa			- variaceae	Tree	· W	vood	di	abetes diarrhoea dysentery	, ,		
	-	Roxb.ex.Willd)	Vidar	ikand Fab	ceae	Cran	T					Seed	
	T	D.C				/	-bet 1	uber fruits	Pi	les,	T	uber	
						Clim	her	eaves flower		ntrols excessive bleeding i	in	ubei	
							.001		1110	ilstrual cycle manliness no	0-		
									ten	icy			
94	P	unica granatum L.	A							zema			
		O D.	Anar	Puni	caceae	Tree	Le	aves	Ev	thache			
								iits	hea	e disorders, ear disorders, dache, heart	Se	eed	
							roc	ot	Dro	hlem const			
0.5							pee	el	rho	blem, cough, asthma, diar-	-		
95	Re	andia dumetorum	Morba	Rubi		_	buc		pile	ea, jaundice, worm, vomiti s, antidote, ulcer	ing,		
06		nn.		Kubi.	aceae	Tree	See	eds fruits	Con	igh & cold min.			
96	Ri	cinus communis L.	Arand	Funh	orbin -	r				igh & cold, migraine	Se	ed	
				Eubu	orbiacae 7	ree		ds (Oil)		disorders, stomach disor-			
							Lea		ders	intestinal worm, jaundice	- See	ed	
97	D.	16							coug	th, piles, regulation of men			
1	RO.	ulfia serpentina	Sarpagai	ndha Apocy	macees T	Last			outua	Cycle, anti toxic			
	Del	nth.ex Kurz.		pocj	naccae H	ierb	Roo	t	RIOO	d pressure, malaria ulasa		•	
98	P.,.1	ia on Tron							SHAK	one joint paint fever	See	d	
	Lin	pia cordifolia	Manjita	Rubia	ceae r	0071-	17 .		uysei	ilery			
9					Li Li	eaves	Herb	,	Scorp	pion bite (antidote)	C		
	5110	rea robusta Gaertn	. Sal	Dipter) т.	ree	р.				Seed	1	
00	Som	icarpus		carpac		ce	Resi	n	Dysei	ntery	C		
- 0	ana	carpus cardium Linn.	Bhelwa	Anacar	diacea Tr	200	D				Seed	1	
01	Spek	ania an 110		e	11			, Bark	Tuber	culosis	Cont		
	(I)	ania, grandiflora Poir.	Agastiya	Fabace	ae Tre	20	seed		Hydro	cele	Seed		
	(2.)	. 011.			110		Leave	es I	Epilep	sy, Migraine, cold. con-	Seed		
							flowe	3	supau	on	Deed		
							Bark	e	eye pi	oblems , Fever,			
)2	Sida	cordifolia Linn.	n .					S	stomac	ch pain / Abdominal pain			
		agona Linn.	Bariyari	Malvace	eae Her	rb 1	Root	1	CHCOIL	noea			
							Root leaves	A	Arthrit	is ,induces Labour pain,	Seed		
								L	Jyseill	ery conjunctivitie Boile	Door		
3	Sphar	eranthus Indicus					whole	D'ettile &	e turno	ors, Bronchitis Facial			
	1	indicus	Mundi	Asterace	ae Shri	uh t	Whole	l)s	araiys	is he, Eye problems, worms,			
	et al.												

_	a of Med. Aloni, Plai						
	L.				D	Medicinal Plants in	Bhupdeopur For
10					Fruit	Arthritis, Heart ailments Di	ar-
10-	omitte mucrophytti	a Ramdato	on Liliaceace	Ch.	Root leave	es rhoea, piles,	
	L.		on Dinaceace		ub/C Leaves	Leukorrhea	Seed
10:	5 Solanum nigrum L.	Makoi	Solomon		ber Root		Seed
		1-141(0)	Solanacae	Shr		Eye disorder,	G 1
					Leaves	Ear pain mouth problems	Seed
					Whole plan	nt , ty, heart problem,	idi-
106	Spilanthus oleirace	a, Akarkara				Kidney problem, vomiting	
	L.	a, Akaikara	Asteraceae	Hur	b Flower	Tooth problem, Paralysis	
107	Syzygium cumini	Inserve				room problem, Paralysis	Seed
	L.	Jamun	Myrtaceae	Tree	Seed	Loose motions cataract, Ear	
					leaves	problem Combiti	Seed
					fruits	problem, Syphilis, vomiting, e	eye
						disorders, Piles, Jaundice, tool	th
108	Tamarindus indica					problems, diabetes, Liver swe	11-
	Linn.	Imli	Caesalpinia	ica Tree	Leaves seed	ing.	
109			e		bark		Seed
.07	Terninalia arjuna Roxb.	Kahua	Combretace	eae Tree	Bark	scabies	
	NOXU.				Heart wood	Jaundice, Body ache, dysenter	y, Seed
					leaves	Parity Diabetes, Heanach	ie,
110	T				icaves	Stomach pain, vomiting fever	
110	Terminalia bellirica	Baheda	Combretace	ae Tree	Fruit	leucorrhoea, Earache.	
111	(Gaertn.) Roxb.			ac 1100	Bark	Cough cold, fever, chest pain,	Seed
111	Terminalia chebula	Harra	Combretace	ae Trae		Dysentery, Eve ailments	
	(Gaertn) Retz.			ac 11cc	Fruit	Vomiting, Fever, Diarrhoea	Seed
112	an I					Cough, Jaundice Tooth ailment	S,
112	Tephrosea purpurea	Sarponkh	Fabaceae	Herb	D D 1	migraine, Giddiness, Piles	
	(L.) Pers.			11010	Root, Bark	Toothache and Pyorrhoea Ston	1- Seed
112					leaves Whol	le ach pain, piles, Jaundice	
113	Tinospora cordifalia	Giloy	Menisper	Charle	plant		
	(Willd.) Hook. F &		maceae	Shrub	1	Eye problems, vomiting, Jaun-	Seed
	Thoms.		muccac	creepe	r	dice, piles, fever, urinary disor-	
114	Thevelia peruviana	Kaner	Angormona	T		ders, Arthritis.	
	(Pers.) Schum.		Apocynaceae	ree	Flower	Headache, Eye disorder, piles,	Seed
					Root	syphilis, paralysis, snake bite,	Secu
115	Vetiveria zizanioides	Birni	Cusui		leaves	Joint pain, itching	
	L.	Diffil	Graminae	Herb	Leaves	Snakebite(Antidote)	Cood
116	Vitex nigundo L.	Nirgundi	17.1			· · · · · · · · · · · · · · · · · · ·	Seed
	J J.	rangunai	Verbenaceae	Shrub	Root, leaves	Itching, Joint pain, Cuts &	C
					whole plant	wounds Swelling, Arthritis, feve	Seed
						, Headache	
						Earache, weakness, for easy	
17	Wendlandia exserta	True:				delivery malaria	
	D.C	Tilai	Rubiaceae	Tree	Fruits	Piles.	
						· nos.	Seed
	<i>Withnania somnifera</i> (L Dunal,	.) Ashwagandh	Solanacae	Herb	Root	Illegr outhuitie	
					Leaves	Ulcer, arthritis, cough, stimulant	Seed
	Woodfordia fruiticosa Salisb.	Dhawai	Lythraceae	Shrub	Flowers stem,	To aver	
	JulioU.				Bark Flowers	To cure irregular menses, piles	Seed
					Leaves	Diarrhoea, Nasal bleeding, jaun-	
20 2	V 1 :				Leaves	dice Dysentery, Tooth ailments	
	Keromphis	Mainphal I	Rubiacae	Tree	Emit	skin disease	
S	pinosa(Thunb) Keay			1100	Fruit	Migraine, asthma	Seed
21 2	Zizyphus Jujube Milles.	Ber I	Rhamnaceae	Tree	Seed	Cough vomiting, infertility pain	
			- Intercate	1100	Leaves fruit	Rile disease & Canal	
						one disease & Cough, stomach	Seed
2 Z	izyphus nummularia Burm.f.) Wight &Arn	Jangli Ber R	Chamnaccae	Tree	Bark	Bile disease & Cough, stomach pain Dysentery	Seed

Maximum plants recorded in the family fabaceae which was most dominant family among the rest. Whereas 16 families showed minimum species composition (one each) during the study period order of the plants based on their Habits were Herb > Tree > Shrub .Top five Families with rich composition of Medicinal plants species were fabaceae (16) >

Euphorbiaceae (07) > Rubiaceae Liliaceae, Caesalpiniaceae, Combretaceae, Moraceae (04)> Acanthaceae, Myrtaceae, Asteraceae, Anacardiaceae, Asclepiadaceae, Convolvulaceae, Solanaceae, Berbenaceae, Lamiaceae, (03) Where as other families showed intermediate member of plants sp.