A SURVEY OF TRADITIONAL MEDICINAL PLANTS IN ALIRAJPUR DISTRICT

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Abstract: Alirajpur is known as one of the tribal district of the 51 districts of Madhya Pradesh state in India. According to the 2011 census Alirajpur district has a population of 728,677. Majority of populations belong to tribal community. Bhil, Bhilala Barela and Patelia are the main tribals of study area and totally dependent on medicinal plants for their daily health care need. The present paper evaluates few important plants used for medicine by the tribal community of Alirajpur district of western Madhya Pradesh. Information was obtained by regular and seasonal field trips from tribal medicine men (Badwa), patients and elderly person in and around study area. The obtained data is cross-checked with senior persons and patients who have traditional knowledge of plants. Present investigation revealed that tribal are regularly using 60 species of plants belonging to 45 families to cure various diseases. The investigation also disclosed 14 new ethno medicinal uses of plants that are not available in the earlier literature. This research will help to find out new pilot compounds for welfare of mankind.

Keyword: Alirajpur, Barwahs, ethno medicinal plants, traditional medicine

Introduction: Ethno botany in the Indian subcontinent may be the earliest in the world and date back to 4000-1500 B.C. [1]. India is good sources of medicinal plants. It has approximately 7500 medicinal plant species are found. Important information of medicinal plants is also given in Rig Veda. Ethno botany in the Indian subcontinent may be the earliest in the world and date back to 4000-1500 B.C.

Medications based on these plants often have insignificant side effects. Besides comparatively high cost of synthetic medicines, traditional herbal medicines have become an affordable choice for the poor people in these areas. Earlier literature on ethno medicine indicates that different researchers have contributed from different parts of India including Madhya Pradesh [2], [3]. But still there are some isolated areas which could be served rigorously for the search of new traditional medicines [4]. The present work is an extension of our earlier work that published in Life sciences international journal. This work is designed with an objective of providing additional information on identification of medicinal plants and formulation of ethno medicinal uses of plants present in Alirajpur district of Madhya Pradesh.

Methodology:

Study area: Alirajpur is predominantly a tribal District and was created out of Jhabua District in 2008. It is predominantly a tribal district of Madhya Pradesh, located in the Western part of Madhya Pradesh. Alirajpur district lying between 22018'N

latitude and 74020'E longitude, covers an area of 3182 square kilometers (Fig.1). Their major part is covered with dense forest in which various tribal like Bhil, Bhilala and Patliya are living in majority. Bhilala are the main inhabitants of different villages of the district. The dryness of the climate and aridity different topography of the area

Provide a favorable ground to grow the plants. Field survey was conducted in different tribal inhibited areas of Alirajpur district during 2012-2013. Extensive field trips were organized for collecting the plant species and data. The method adopted for collection of data was about medicinal uses of plants in the treatment of various diseases. During field survey, pre prepared questionnaires were used to cross-examine the local inhabitants of the area. Ethno botanical information was collected by standard method of Jain and Rao [5]. A questionnaire was prepared to gather data for this purpose, the collected plant specimens were identified by using flora and others standard literature [6], [7]. Information on plants used for other than medicinal purpose is also given. Information on diseases, plant part used, and formulation etc. collected from tribal localities have been described.

Results and Discussion: The current investigation includes information on the 60 variety of plant species belonging to 45 families. The collected plant species are arranged in alphabetical order. Scientific names, family, locality, local name, tribal uses and a plant parts used for medical purpose and mode of utilization and dosage were also specified.

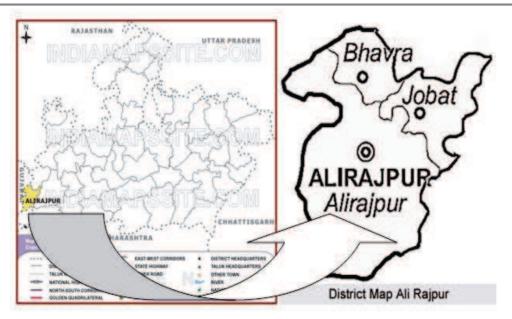


Fig.1District Map of Alirajpur.

Enumeration of plants: Analysis of the data from our field survey revealed that Root and Leaves are mostly used for various disease fallowed by Fruits, Seeds Bark and whole plant (Table-1). The number of plant species used by the tribe for curing some of the important and common diseases, shown in the count are digestive problem, cough, uterus displacement, arthritis, tuberculosis, scorpion bite, pneumonia, increase sexual vigor, male impotency, menorrhea, increase memory, abortion, diabetes and impotency. The present testimonial certificates 60 plants species belonging to 45 Families are traditionally valued. The plants used are found growing and are available in the surrounding area and in many cases are immediately available as therapeutic.

Conclusion: A huge number of plant diversity occurs in different localities of Alirajpur district. Present study also reveals that tribes of this district mostly

depend on plants for medicinal purpose. It may be due expensive modern health or due to faith in medicine men 'Badwa. Looking to the intellectual property rights of indigenous people, identification of such knowledge is necessary. We also found that people of "Bheel' community possesses huge knowledge of medicinal plants in this locality. Besides medicinal uses, the tribes of the district also have a vast knowledge about the other uses of plants. But many people are not aware about their importance. Few species like Terminalia and Dioscorea are facing threats due to diverse reasons and require urgent attention for their conservation.

For this reason there is need to spread attentiveness among native people about this flora and to lend a hand them for cultivation and conservation to meet their own medicinal needs.

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Table.1.Medicinal flora of Alirajpur District, Madhya Pradesh, India

		Table.i.Medicinal flora o	7 Milajpui Disti		IIIuia
No	Scientific name	Family	Local name	Plant part used	Disease
1	Abelmoschus manihot (L.)	Malvaceae	Jangli bhendi	Root extract	Male impotency
2	Achyranthes aspera Linn,	Amaranthaceae	Andijhada	Root paste	hydrophobia, fever, anaemia and night blindness
3	Adansonia digitata L.	Bombacaceae	Khurasani imli;	the dried pulp of the fruit	body cooling and also given as appetizer
4	Adiantum philippense Linn	Adiantaceae	Kajaria/ Kali- jhant	Fronds, fresh leaves.	Stomachic and diuretic, dysentery.
5	Adhatoda zeylanica Medik	Acanthaceae	Adusa;	Leaves powder	2-3 times daily in bronchitis.
6	Aegle marmelos (L.)	Rutaceae	Bela	1.pulp of ripe fruit 2. Leaf extract	1.stomach disorders 2. Fever and wound healing
7	Ailanthus excelsa Roxb	Simaroubaceae	Maharukh	Extract of stem	Tetanus and joint pains
8	Aloe vera (L)	Liliaceae		Leaf gel	Smooth gel is applied on pimples and blemishes
9	Aloe barbadensis miller	Asphodelaceae (Liliaceae)	Gwarpatha	Leaf extract	eruptions
10	Amorphophallus campanulatus Blume	Araceae	Bhabdi	Extract of tuber	Snake bite
11	Anisomeles indica (L)	Lamiaceae	Kuschor	decoction of leaves	Crushed leaves applied to neck of bullock to cure inflammation caused by cart pulling. Leaf juice is given for fever and whooping cough of children.
12	Andrographis paniculata wall. Ex. Nees.	Acanthaceae	Bhuinimadi	Fresh leaf decoction twice a day	leucorrhoea
13	Annona squamosa L.	Annonaceae	Sitaphal	Seed powder	inducing abortion
14	Argemone mexicana L.	Papaveraceae	Peli kateli	roots	Jaundice.
15	Asparagus racemosus Willd.	Liliaceae	Satawari	Roots (Rhizomes) and leaves.	Internally for infertility, loss of libido, threatened miscarriage, menopausal problems.
16	Bauhinia malabarica Nees	Caesalpiniaceae	Dharsinghar	stem bark paste	blood dysentery and loose motions
17	Biophytum sensitivum.	Oxalidaceae	Lajuri (Lajwanti)	1.leaf powder 2. decoction of root	inflammation, arthritis, wounds, tumors and burns, gonorrhea
18	Boerhavia diffusa Linn.	Nyctaginaceae	Jhinjuri	root paste	blood dysentery, Pain reliever, rejuvenation
19	Borassus flabellifer (Linn.)	Palmae	Tari (Tar)	pulp of heartwood	inducing abortion
20	Careya arborea Roxb.	Lecythidaceae	Kumbhi	leaf paste	Swellings
21	Cardiospermum halicacabum L.,	Sapindaceae,	<i>Poptiya,</i> Khamba	Paste of seed	swelling on the body
22	Carissa opaca Stapf ex Haines	Apocynaceae	Karonda	root bark	Fever, Asthama,
23	Celtis australis Linn.	Ulmaceae	Ankor	whole plant paste	Leprocy
24	Cheilanthes farinosa Kaulf.	Adiantaceae	Sonapali	root paste	eczema and stomachache
25	Celosia argentea L.,	Amaranthaceae	<i>Safedmurga</i> , Harod	seed powder	Burning sensation of urethra during urination.
26	Cissus trifolia (L.) Domin	Vitaceae	Tulangri	bark paste	Throat infection
27	Centella asiatica	Apiaceae	Brahmi	Whole plant	Jaundice and bleeding

	(Linn.)				
28	Cissus quadrangularis (Linn.)	Vitaceae	Gathan	Extract of entire plant	Fractures and wond healing
29	Cocculus hirsutus (L.) Diels	Menispermaceae	Veshyang, Sorva	Fresh leaf juice	Leucorrhoea.
30	Dillenia pentagyna Roxb.	Dilleniaceae	Kelia sag	stem bark	Women for easy delivery,
31	Desmodium gangeticum DC.	Fabaceae	Sisri	root paste	dysentery
32	Diospyros melanoxylon, Roxb	Ebenaceae,	<i>Tendu,</i> Padola	Unripe fruit	dysentery
33	Echinops echinatus, Roxb	Asteraceae	Oontkato, Phoolmal	Root powder	Headache
34	Enicostema axillare (Lam.)	Gentianaceae	<i>Dedpaliya,</i> Deojhiri	Leaf is chewed	Malaria
35	Flacourtia indica (Burm. f.) Merr.	Flacourtiaceae	Dollar	root paste	Skin disorders
36	Gloriosa superba Linn.	Liliaceae	Kalihari	1.root and flower paste 2. aqueous extract of bulb	Pregnancy upto four month. 2. arrow poisoning
37	Grewia rhamnifolia Heyne	Tiliaceae	Shyamus	Leaves	Male potency
38	Habenaria commelinifolia Wall	Orchidaceae	Ankra	tuber paste	Snake bite
39	Ichnocarpus frutescens (L.) R. Br.	Apocynaceae	Dudhi	root paste, extract of whole plant	Fever, rheumatism, asthma, cholera
40	Jatropha curcas Linn. (Euphorbiaceae	Ratanjot	Stem,seeds,oil	Skin diseases, Toothache and gum swelling
41	Luffa acutangula (L.) Roxb	Cucurbitaceae	Kadvi turai	mature fruit ,Seed powder Fruit juice	Cold, pains, Jaundice Conjunctivitis, mothers use it to increase milk flow.
42	Momordica charantia. Linn.	Cucurbitaceae	Bankarela	juice of the fruits	Diabetes, inflammation, enhances libido, promotes milk flow
43	Mitragyna parvifolia (Roxb.)	Rubiaceae	Kalmi	leaf decoction	Headache, fever, malaria, diarrhea, cough, muscular pains
44	Merremia emarginata (Burm.f.)	Convolvulaceae,	Sarsundari, Karah	Juice of leaves	Hair growth
45	Phyllanthus amarus Schumach. & Thonn.,	Euphorbiaceae,	<i>Bhuianwala,</i> Nanpur	Dried leaf powder	Jaundice
46	Phyllanthus maderaspatensis L.,	Euphorbiaceae,	<i>Miriyakhand</i> , Mandar	Fresh leaf extract	Insecticide
47	Plumbago zeylanica L.,	Plumbaginaceae,	Chitawal, Chitrak, Bakhtgarh	Root paste	Headache and skin diseases
48	Pueraria tuberose (Roxb) D. C.	Fabaceae)	Gajua	tubers	promotes milk flow
49	Solanum virginianum L	Solanaceae,	Bhuiringani, Kachla	Seed powder	toothache
50	Solanum incanum Linn.	Solanaceae	Katti	seed powder	toothache
51	Shuteria hirsute Baker	Fabaceae	Siwaria	seed powder	Eye inflammation
52	Soymida febrifuga (Roxb.) A. Juss.	Meliaceae,	<i>Rohan,</i> Harod	Stem bark	Blood clotting
53	Syzygium cumini (L.) Skeels	Myrtaceae,	<i>Jamun</i> , Aamkhut	Stem bark	Diarrhoea.

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54	Tinospora cordifolia (Willd.)	(Menispermaceae	Giloy	stem decoction	Arthritis
55	Tridax procumbens L.,	Asteraceae,	<i>Satdiya,</i> Petlawat	Juice of fresh leaves	To prevent bleeding and Antibiotic
56	Urginea indica (Roxb.) Kunth	(Liliaceae	Jangali Piyaz	Bulb paste	Joint pains
57	Wattakaka volubilis (L.F.) Stapf,	Asclepiadaceae,	<i>Kadwadudi,</i> Sehajgaon	Whole plant	rheumatic and joints pain
58	Withania somnifera (L.) Dunal,	Solanaceae,	Asgandh,	Whole plant and especially root	Rejuvenation and energy tonic
59	Woodfordia fruticosa (L.)	Lytharaceae	Dhawai	Leaf paste	Joint pains, Arthritis
60	Ziziphus maurutiana(Lamak)	Rhamnaceae	Jhar Ber,Beri	1.Dried fruits decoction 2. Paste of leaves	1.Cold and cough 2.Scorpion bite

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