

**STUDY ON THE PHYTOTHERAPEUTIC USES OF PLANTS BY THE TRIBAL PEOPLE
OF ALIRAJPUR DISTRICT, M.P., INDIA.**

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ABSTRACT

The objective of the present study was to investigate ethno medicinal importance of some distinctive medicinal plants used by different tribes of Alirajpur. Alirajpur is one of the tribal districts of western Madhya Pradesh. Tribal communities like Bhil, Bhilala and Barela residing in Alirajpur of western Madhya Pradesh are uneducated, socio-economically backward and still depend on medicinal plants for the treatment of various diseases. Data obtained by periodical and seasonal field trips, collection of information from tribal medicine men (Badwa), patients and elderly person in and around study area. The obtained data is cross-checked with more than eight elderly persons who have traditional knowledge of plants and two to five patients who received treatment from Badwa. Present study accounts a total of 93 species, 52 genera and 41 families which are used in different types of diseases. The study also revealed few new plants of medicinal importance that are not accessible in the previous reports. This study highlights the importance and urgent need for protection and documentation of the plants of the study area.

KEYWORDS: Alirajpur, ethno medicinal plants, traditional medicine, tribes.**INTRODUCTION**

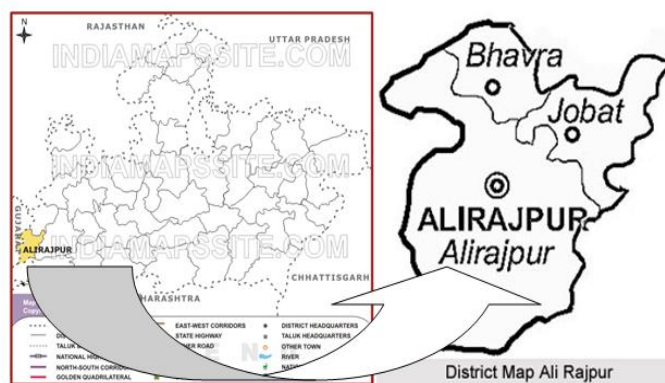
The Madhya Pradesh state in India consists of huge inhabitants of tribal communities belonging to various ethnic groups. Therapeutic plant knowledge gained from tribal would be very useful for pharmacognosists and pharmacologists. Use of plants based drugs and chemicals for curing various disorders and personal wellness is as old as human cultivation.^[1] Ethno botany in the Indian subcontinent may be the earliest in the world and date back to 4000-1500 B.C.^[2] Significant information of medicinal plants is also given in Rig Veda. Medicinal Plants and its parts are excellent sources of medicine even today it is the backbone of pharmaceutical companies. Due to this a significant progress has been made in the field of ethno medicine since last four decades. Many workers have contributed to find out various medicinal plants from different parts of India including Madhya Pradesh.^[3] However, still there are some remote areas which could be served rigorously for the search of new traditional medicines.^[4] Therefore, the present work is designed with an aim of providing identification and formulation of ethno medicinal uses of plants used by the tribes of Alirajpur district of Madhya Pradesh.

METHODOLOGY**Study area**

Alirajpur is predominantly a tribal district of Madhya Pradesh, located in the Western part of Madhya Pradesh

between 22018'N latitude and 74020'E longitude, covers an area of 3182 square kilometers (Fig.1).

The average Rainfall of this district is 850 mm. Temperature ranges from 23⁰ to 40⁰C. 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 dry climate and aridity different topography of the area provides a favorable environment for plant growth.

**Fig.1 District Map of Alirajpur.**

Extensive field trips were conducted in different tribal inhabited areas of Alirajpur district during 2013-2014

and collected the data and various plant species. During field survey, pre prepared questionnaires were used to cross-examine the local residents of the area. Medicinal information was collected by standard method of Jain and Rao.^[6] The collected plant samples were recognized by using flora and others standard literature.^{[3] [4] [5] [6]} 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 collected plant species were arranged in alphabetical order in the department of Botany at Government college, Alirajpur. Scientific names, family, locality, local name, tribal uses and a plant parts used for medical purpose and mode of utilization and dosage were also given.

Enumeration of plants

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

S.NO	Scientific name	Family	Local name	Plant part used	Disease
1	<i>Adansonia digitata</i> L.	Bombacaceae	Khurasani imli;	the dried pulp of the fruit	body cooling and also given as appetizer
2	<i>Adhatoda zeylanica</i> Medik	Acanthaceae	Adusa;	Leaves powder	2-3 times daily in bronchitis.
3	<i>Alstonia scholaris</i> (L.) R.Br.	(Apocynaceae)	Saptaparni	bark decoction	Arthritis
4	<i>Andrographis paniculata</i> wall. Ex. Nees.	Acanthaceae	Kalmegh	Whole plant is boiled in water and the filtrate	malaria.
5	<i>Achyranthes aspera</i> Linn,	Amaranthaceae	Andijhada	Root paste	hydrophobia, fever, anaemia and night blindness
6	<i>Abelmoschus manihot</i> (L.)	Malvaceae	Jangli bhendi	Root extract	Male impotency
7	<i>Aegle marmelos</i> (L.)	Rutaceae	Bela	pulp of ripe fruit	stomach disorders
8	<i>Aloe vera</i> (L)	Liliaceae	Gwarpatha	Leaf paste with turmeric	Eruptions and wound healing
9	<i>Amorphophallus campanulatus</i> Blume	Araceae	Bhabdi	Extract of tuber	Snake bite
10	<i>Anogeissus latifolia</i> (Roxb. Ex DC.)	Combretaceae	Dhawda	Fried gum	spermatorrhoea
11	<i>Asparagus racemosus</i> Willd.	Liliaceae	Satawari	root paste, tonic	Fever, potency and Typhoid
12	<i>Azadirachta indica</i> (Linn.) A	Meliaceae	Neem	Sticks and leaves	Snake bite and skin afflictions
13	<i>Annona squamosa</i> L.	Annonaceae	Sitaphal	Seed powder	abortifacient
14	<i>Argemone mexicana</i> L.	Papaveraceae	Peli kateli	roots	Jaundice.
15	<i>Aristolochia indica</i> L.	Aristolochiaceae	Isharmul	Root decoction	Rheumatism
16	<i>Ailanthus excelsa</i> Roxb	Simaroubaceae	Maharukh	Extract of stem	Tetanus and joint pains
17	<i>Atylosia scarabaeoides</i> (L.) Benth.	Fabaceae	--	Chewing of root	Throat pain
18	<i>Balanites aegyptiaca</i> Delile	Simaroubaceae	Hingry	bark paste	swellings on the face
19	<i>Biophytum sensitivum</i> DC	Oxalidaceae	Lajuri (Lajwanti)	Leaf powder	impotency
20	<i>Boerhavia diffusa</i> Linn	Nyctaginaceae	Purnava	root paste	blood dysentery
21	<i>Bombax ceiba</i> Linn	Bombaceae	Semal	Chewing of roots	impotency
22	<i>Boswellia serrata</i> Roxb. ex Colebr	Burseraceae	<i>Sala, Salai</i>	Leaf paste	Eye infection
23	<i>Buchanania lanzan</i> Spreng	Fabaceae	Achar	Stem bark paste	Rheumatism
24	<i>Butea monosperma</i> (Lamk.)	Fabaceae	Palash	Leaf juice	Scorpion bite, Diabetes and male impotency

25	<i>Caesalpinia bonduc</i> (Linn.)	Caesalpiniaceae	Gattar	Seed powder	Bleeding
26	<i>Calotropis gigantea</i> (Willd)	Asclepiadaceae	Ankda	latex	pain and swellings
27	<i>Calotropis procera</i> (Ait.),	Asclepiadaceae	Akau	Leaves	swelled body parts
28	<i>Careya arborea</i> Roxb	Lecythidaceae	Kumbhi	leaf paste	face swellings
29	<i>Carissa congesta</i> Wt.	Apocynaceae	Karonda	juice of root	Fever
30	<i>Cassia glauca</i> Lamk	Caesalpiniaceae	Kamarsothi	Wood beads	Jaundice
31	<i>Cassia fistula</i> L.,	Caesalpiniaceae	Amaltas	fruit pulp	diabetes
32	<i>Caesalpinia bonduc</i> (L.)	Caesalpiniaceae	Gattar	stem bark	Stomach pain
33	<i>Celastrus paniculatus</i> Willd	Celastraceae	Malkangni	seed oil	Leprosy and bodyache.
34	<i>Centella asiatica</i> (Linn.)	Apiaceae	Brahmi	Whole plant	Jaundice and bleeding
35	<i>Chlorophytum arundinaceum</i> Baker	Liliaceae	Safed musli	Root	aphrodisiac, Diarrhea, Menstrual disorders and Tonic
36	<i>Cissus quadrangularis</i> (Linn.)	Vitaceae	Gathan	Extract of entire plant	Fractures and wound healing
37	<i>Costus speciosus</i> (Koenig). Sm	Zingiberaceae	Kanda	Root paste	Fever
38	<i>Croton oblongifolius</i> Roxb.	Euphorbiaceae	Jangli arandi	Root paste	dysentery and vomiting
39	<i>Crotalaria juncea</i> L.	Fabaceae	Sann	Seed powder	obesity
40	<i>Curculigo orchoides</i> (Gaertn)	Zingiberaceae	Kali musli	Root paste	Impotency
41	<i>Curcuma angustifolia</i> (Roxb)	Zingiberaceae	Haldi	Rhizome paste	Fever
42	<i>Dillenia pentagyna</i> Roxb	Dilleniaceae	Kelia sag	Stem bark	Pregnant women for easy delivery
43	<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae	Tendu, Tenu	Pulp of unripe fruit	Cracked and inflamed soles
44	<i>Diplocyclos palmatus</i> (L.)	Cucurbitaceae	Shivlingi	Seed powder	Male and female sterility.
45	<i>Drimia indica</i> (Roxb.)	Liliaceae	Jangli kanda	leaves	Sun stroke and thermo regulation
46	<i>Elephantos scaber</i> L.	Asteraceae	Gaujihawa	Root powder	Rheumatism
47	<i>Elytraria acaulis</i> (L.f.) Lindau	Acanthaceae	Patthar chata	Roots	Cholera
48	<i>Euphorbia nerifolia</i> L.	Euphorbiaceae	Thuwar	latex	Swellings and Burns
49	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Jangli kela	Seed powder	Dog bite
50	<i>Euphorbia acaulis</i> Roxb	Euphorbiaceae	Khargoni	Root paste	dysentery and in fever
	<i>Eucalyptus umbellata</i> Dum.	Myrtaceae	Lipta	Leaf paste	Arthritis
51	<i>Euphorbia hirta</i> Linn.	Euphorbiaceae	Chotidudhi	Latex	Scorpion bite
52	<i>Euphorbia nerifolia</i> L.	Euphorbiaceae	Thuvar	Stem bark	Arthritis
53	<i>Ficus religiosa</i> Linn	Moraceae	Pipal	Young leaves	Snake bite
54	<i>Ficus hispida</i> L.	Moraceae	Bhui gular	Boiled fruit	Jaundice and Liver disorders
55	<i>Ficus racemosa</i> L.,	Moraceae	Gular	fruit	Diabetes and to prevent abortion
56	<i>Flacourtia indica</i> (Burm. f.)	Flacourtiaceae	Dollar	Root paste	Skin diseases
57	<i>Gloriosa superba</i> Linn.	Liliaceae	Kalihari	root and flower paste	Pregnancy upto four month.
58	<i>Glycyrrhiza glabra</i> (L)	Fabaceae	kubas-susa, mithilakd, Mulethi	Root	Skin disorders, antiulcer, laxative, antidiabetic
59	<i>Gymnema sylvestre</i> (Retz.)	Asclepiadaceae	Gudmar	tuber powder	Diabetes and Menstrual disorders
60	<i>Helicteres isora</i> Linn	Sterculiaceae	Maror phalli	Seed extract	children in dysentery, fits, diabetes
61	<i>Hemidesmus indicus</i> R. Br	Asclepiadaceae	Dudhi	root paste	dysentery
62	<i>Holarrhena pubescens</i> Wall. ex G.	Apocynaceae	Kudhi	fruit paste	stomachache

63	<i>Hymenodictyon exceba</i> (Roxb.)	Rubiaceae	Bhavar sal/ Bhaultan	extract of inner stem bark	relief from addiction to hard drink
64	<i>Hyptis suaveolens</i> (L.) Poit	Lamiaceae	<i>Bantulsi</i>	soaked seeds	Soothing agent.
65	<i>Indigofera tinctoria</i> L., <i>Ipomoea carnea</i> Jacq.	Fabaceae Convolvulaceae	Neel Umarichata	Seed paste Latex	cataract Arthritis
66	<i>Ichnocarpus frutescens</i> (L.)	Apocynaceae	Dudhi	Root paste	Fever
67	<i>Jatropha curcas</i> Linn.	Euphorbiaceae	Ratanjot	Stem	Toothache and gum swelling
68	<i>Lawsonia inermis</i> L.	Lythraceae	Mehandi	Paste of whole plant	Boils Burn, Headache, Piles, Rheumatism, Snake bite
69	<i>Lannea coromandelica</i> (Houtt.) Merr.	Anacardiaceae	Moyan	Stem bark decoction	Rheumatism
70	<i>Leea asiatica</i> (L.) Ridsdale	Leeaceae	Nanli Danhi	Root powder	Arthritis
71	<i>Luffa acutangula</i> (L.) Roxb	Cucurbitaceae	Kadvi turai	Seed powder Fruit juice	Jaundice conjunctivitis
72	<i>Madhuca longifolia</i> (Koenig)	Sapotaceae	Mahua	flowers	male impotency
73	<i>Maytenus emarginata</i> (Willd.)	Celastraceae	<i>Bekal</i>	Leaves	Cough and cold
74	<i>Merremia emarginata</i> (Burm.f.)	Convolvulaceae	<i>Phopshina</i>	Whole plant	Snake bite
75	<i>Moringa oleifera</i> Lamk	(Moringaceae)	Sehajana	Bark	Rheumatism
76	<i>Papaver somniferum</i>	Papaveraceae(Juss)	Poppy	Latex and seeds	Muscle cramps, hypnotic, narcotic, and sedative
77	<i>Physalis minima</i> L.	Solanaceae	Kanfuta	Root paste	Arthritis
78	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Chitawal	Root paste	Gout
79	<i>Ricinus communis</i> L.	Euphorbiaceae	Arandi	Seed oil	Rheumatism
80	<i>Solanum virginianum</i> L	Solanaceae	<i>Bhatkatiya,</i> <i>Phalkatiya</i>	Roots Boiled water	Cough and cold
81	<i>Sapindus emarginatus</i> Vahl	Sapindaceae	Reetha	Fruit pulp	Arthritis
82	<i>Schelcheria oleosa</i> (Lour.) Oken.	Sapindaceae	Kusumda	Seed oil	Arthritis
83	<i>Sida cordata</i> (Burm. f.) Borss.	Malvaceae	Rajbala	Root paste	Gout
84	<i>Soymida febrifuga</i> (Roxb.) A. Juss.	Meliaceae	Rohan	Stem bark	Arthritis
85	<i>Sphaeranthus indicus</i> L	Asteraceae	<i>Gorakhmundi</i>	Fumes of whole plant	Dysentery
86	<i>Terminalia alata</i> Heyne ex Roth	Combretaceae	<i>Saja, Sajad</i>	Gum	Dysentery
87	<i>Tinospora cordifolia</i> (Willd.)	(Menispermaceae)	Giloy	stem decoction	Arthritis
88	<i>Urginea indica</i> (Roxb.) Kunth	(Liliaceae)	Jangali Piyaz	Bulb paste	Joint pains
89	<i>Vicia hirsuta</i> (L.) S. F. Gray	Fabaceae	<i>Churingli</i>	Leaves	indigestion
90	<i>Woodfordia fruticosa</i> (L.)	Lythraceae	Dhawai	Leaf paste	Joint pains, Arthritis
91	<i>Wattakaka volubilis</i> (L.F.) Stapf	Asclepiadaceae	Kadwa dudi	Whole plant	Rheumatism
92	<i>Ziziphus mauritiana</i> (Lamak)	Rhamnaceae	Ber,Beri	Dried fruits decoction	Cold and cough
93	<i>Ziziphus xylopyrus</i> (Retz.) Willd.	Rhamnaceae	<i>Ghont, Ghuter</i>	Dried fruits	Indigestion and cold

CONCLUSION

A huge number of plant varieties occur in vicinity of Alirajpur district. Detection of such knowledge is essential as it will be useful for intellectual property rights. The people of tribal community have vast knowledge regarding different uses of these plants. Other than medicinal uses, the tribes of this vicinity 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. Our information provides a baseline to search for new drug. It is useful to Pharmaceutical Company to discover a new drug. Further work in ethno botanical studies is in progress.

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