

Factors determining ethnomedicinal plants choice in Pushparajgarh Tehsil of Madhya Pradesh, India

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Supplementary Data

Supplementary Table S1 — A list of medicinal plants reported during the study and their GPS coordinates.

Sl. No	Botanical name	Family	Local name	Habitus	Latitude	Longitude
1	<i>Parathenium hysterophorus</i>	Asteraceae	Gajarghass	Shrub	22°48'24.63"	81°44'24.63"
2	<i>Cassia tora</i>	Leguminosae	Chakoda	Herb	22°48'26.14"	81°44'54.94"
3	<i>Azadirachta indica</i>	Meliaceae	Neem	Tree	22°46'05.26"	81°44'40.51"
4	<i>Cissampelos pareira</i>	Meniperaceae	Padin	Climber	22°46'14.44"	81°44'23.92"
5	<i>Vernonia anthelmintica</i>	Asteraceae	Banjit	Shrub	22°45'54.96"	81°44'49.95"
6	<i>Tinospora cordifolia</i>	Meniperaceae	Giloy	Climber	22°45'52.87"	81°44'48.10"
7	<i>Tinospora cordifolia</i>	Meniperaceae	Giloy	Climber	22°41'26.83"	81°44'23.77"
8	<i>Vernonia anthelmintica</i>	Asteraceae	Banjit	Shrub	22°41'27.85"	81°44'22.88"
9	<i>Schefflera vinso</i>	Araceae	Dev Shemhal	Tree	22°41'28.28"	81°44'29.29"
10	<i>Cassia tora</i>	Laguminosae	Chakoda	Herb	22°41'48.53"	81°43'42.57"
11	<i>Rubia cordifolia</i>	Rubiaceae.	Manjistha	Climber	22°41'46.18"	81°43'44.74"
12	<i>Andrographis paniculata</i>	Acanthaceae	Kalmegh/ Chireta	Climber	22°41'28.46"	81°44'23.87"
13	<i>Ocimum sanctum</i>	Lamiaceae	Tulsi	Herb	22°41'27.11"	81°44'23.32"
14	<i>Thespesia lamps</i>	Malvaceae	Charmuhi	Shurb	22°41'09.27"	81°44'49.37"
15	<i>Rubia cordifolia</i>	Rubiaceae	Manjistha	Climber	22°41'46.95"	81°43'41.97"
16	<i>Justiacia adhatoda</i>	Acanthaceae	Bhuleem	herb	22°46'40.34"	81°32'52.50"
17	<i>Citrullus colocynthis</i>	Cucurbitaceae	Indrawan	Climber	22°40'38.22	81°22'55.47
18	<i>Thespesia lamps</i>	Malvaceae	Charmuhi	Shurb	22°55'58.55"	81°35'50.32"
19	<i>Cissampelos parriera</i>	Meniperaceae	Padin	Climber	22°55'58.78"	81°35'49.94"
20	<i>Mangifera indica</i> L.	Anacardiaceae	Aam	Tree	22°56'84.40"	81°13'99.70"
21	<i>Tamarindus indica</i> L.	Leguminosae	Imli	Tree	22°58'31.55"	81°16'79.32"
22	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Jamun	Tree	22°59'91.33"	81°17'44.94"
23	<i>Ficus racemosa</i> L.	Moraceae	Gular /Dumar	Tree	22°59'71.34"	81°16'83.50"
24	<i>Psidium guajava</i> L.	Myrtaceae	Amrud	Tree	22°00'38.22	81°22'91.47
25	<i>Ficus religiosa</i> L.	Moraceae	Pipal	Tree	22°59'61.55"	81°19'20.32"
26	<i>Terminalia chebula</i> Retz.	Combretaceae	Harra	Tree	22°58'64.78"	81°35'59.94"
27	<i>Terminalia bellirica</i> (Gaertn.)Roxb.	Combretaceae	Bahera	Tree	22°56'70.34"	81°18'52.50"
28	<i>Calotropis gigantea</i> (L.) Dryand.	Apocynaceae	Saphed Akowan	Shrub	22°56'38.22	81°18'56.47
29	<i>Calotropis procera</i> (Aiton) Dryand.	Apocynaceae	Akowan	Shrub	22°46'92.9"	81°32'61.6"
30	<i>Martynia annual</i> L.	Martyniaceae	Bakhnaki	Herb	22°46'92.4"	81°32'79.3"
31	<i>Cassia fistula</i> L.	Leguminosae	Dhanbaher	Tree	22°46'74.2"	81°33'10.01"
32	<i>Aegle marmelos</i> (L.) Corrêa	Rutaceae	Bel	Tree	22°46'69.60"	81°33'12.20"
33	<i>Semicarpus anacardium</i> L.	Anacardiaceae	Bhelwa	Tree	22°46'69.71"	81°33'13.30"
34	<i>Achyranthes aspera</i> L.	Amaranthaceae	Chirchita	Herb	22°46'70.10"	81°33'54.00"
35	<i>Pyrus communis</i> L.	Rosaceae	Naspati	Tree	22°46'71.90"	81°33'50.15"
36	<i>Datura metel</i> L.	Solanaceae	Datura	Herb	22°46'96.20"	81°32'47.20"
37	<i>Gmelina arborea</i> Roxb.	Lamiaceae	Khamhar	Tree	22°46'71.50"	81°32'28.90"

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Supplementary Table S1 — A list of medicinal plants reported during the study and their GPS coordinates. (Contd.)

Sl. No	Botanical name	Family	Local name	Habitus	Latitude	Longitude
38	<i>Cissampelos pareira</i> L.	Menispermaceae	Padhin	Climber	22°46'93.60"	81°33'57.70"
39	<i>Ficus benghalensis</i> L.	Moraceae	Bar/ Bargad	Tree	22°46'00.91"	81°32'75.46"
40	<i>Schleichera oleosa</i> (Lour.) Merr.	Sapindaceae	Kosum	Tree	22°45'93.60"	81°44'66.16"
41	<i>Shorea robusta</i> Gaertn.	Dipterocarpaceae	Sarai/Sal	Tree	22°45'09.90"	81°44'67.46"
42	<i>Pinus roxburghii</i> Sarg.	Pinaceae	Pinus	Tree	22°45'09.30"	81°44'67.05"
43	<i>Phyllanthus emblica</i>	Phyllanthaceae	Amla	Tree	22°45'10.38"	81°44'65.44"
44	<i>Desmodium oojainense</i> (Roxb.) H. Ohashi	Leguminosae	Tinsa	Tree	22°45'10.60"	81°44'65.16"
45	<i>Cassia fistula</i> L.	Leguminosae	Dhanbahr	Tree	22°45'10.56"	81°45'65.65"
46	<i>Calotropis procera</i> (Aiton) Dryand.	Apocynaceae	Akowan	Shrub	22°46'92.90"	81°32'61.46"
47	<i>Martynia annua</i> L.	Martyniaceae	Bakhnaxhi	Herb	22°46'92.40"	81°32'79.46"
48	<i>Cassia fistula</i> L.	Leguminosae	Dhanbahr	Tree	22°46'73.20"	81°33'00.46"
49	<i>Aegle marmelos</i> (L.) Corrêa	Rutaceae	Bel	Tree	22°46'69.60"	81°33'05.40"
50	<i>Semicarpus anacardium</i> L.	Anacardiaceae	Bhelwa	Tree	22°46'69.60"	81°33'05.46"
51	<i>Achyranthes aspera</i> L.	Amaranthaceae	Chirchita	Herb	22°46'73.10"	81°33'05.55"
52	<i>Pyrus communis</i> L.	Rosaceae	Naspati	Tree	22°46'71.60"	81°33'05.65"
53	<i>Cissampelos pareira</i> L.	Menispermaceae	Padhin	Climber	22°46'93.30"	81°33'05.70"
54	<i>Ficus benghalensis</i> L.	Moraceae	Bar/ Bargad	Tree	22°46'93.33"	81°32'75.70"
55	<i>Datura metel</i> L.	Solanaceae	Datura	Herb	22°46'96.20"	81°32'47.70"
56	<i>Gmelina arborea</i> Roxb.	Lamiaceae	Khamhar	Tree	22°46'71.50"	81°33'28.90"
57	<i>Buchanania cochinchinensis</i> (Lour.) M.R.Almeida	Anacardiaceae	Char	Tree	22°44'57.20"	81°44'61.80"
58	<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae	Tendu	Tree	22°44'57.60"	81°44'61.70"
59	<i>Mallotus philippensis</i> (Lam.) Müll.Arg.	Euphorbiaceae	Sinduri	Tree	22°44'52.60"	81°44'59.50"
60	<i>Bauhinia semla</i> Wunderlin	Leguminosae	Thawar	Tree	22°44'52.60"	81°44'59.30"
61	<i>Acorus calamus</i> L.	Acoraceae	Bach	Herb	22°44'47.70"	81°44'54.60"
62	<i>Achyranthes aspera</i> L.	Amaranthaceae	Chirchita	Herb	22°44'52.90"	81°44'59.30"
63	<i>Curculigo orchioides</i> Gaertn.	Hypoxidaceae	Kalimushli	Herb	22°44'50.80"	81°44'58.50"
64	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Chitrak	Herb	22°44'50.40"	81°44'57.90"
65	<i>Shorea robusta</i> Gaertn.	Dipterocarpaceae	Sarai/Sal	Tree	22°44'58.70"	81°44'61.90"
66	<i>Cynoglossum lanceolatum</i> Forssk.	Boraginaceae	Kamraj	Herb	22°44'59.10"	81°44'62.60"
67	<i>Sida acuta</i> Burmf.	Malvaceae	Khareta	Herb	22°44'60.90"	81°44'63.20"
68	<i>Albizia lebbek</i> (L.) Benth.	Leguminosae	Janglishirih	Tree	22°44'61.20"	81°44'63.40"
69	<i>Terminalia tomentosa</i> Wight & Arn.	Combretaceae	Saja	Tree	22°44'62.30"	81°44'64.90"
70	<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall. ex Guillem. & Perr.	Combretaceae	Dhawa	Tree	22°44'63.10"	81°44'65.45"
71	<i>Cassia fistula</i> L.	Leguminosae	Dhanbahar	Tree	22°44'63.20"	81°44'65.50"
72	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Jamun	Tree	22°44'65.20"	81°44'67.01"
73	<i>Terminalia chebula</i> Retz.	Combretaceae	Harra	Tree	22°44'63.50"	81°44'65.80"
74	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Bahera	Tree	22°44'68.30"	81°44'70.30"
75	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Amla	Tree	22°44'65.90"	81°44'67.60"
76	<i>Diospyros montana</i> Roxb.	Ebenaceae	Vistendu	Tree	22°44'68.80"	81°44'69.10"
77	<i>Ziziphus jujuba</i> Mill.	Rhamnaceae	Ber	Tree	22°44'61.90"	81°44'69.70"
78	<i>Terminalia tomentosa</i> Wight & Arn.	Combretaceae	Saja	Tree	22°44'70.40"	81°44'69.60"
79	<i>Desmodium oojainense</i> (Roxb.) H. Ohashi	Leguminosae	Tinsa	Tree	22°44'49.40"	81°44'22.20"
80	<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	Char	Tree	22°44'49.70"	81°44'22.10"
81	<i>Smilax purhampuy</i> Ruiz	Smilacaceae	Ramdatun	Climber	22°44'50.20"	81°44'21.70"
82	<i>Cyperus scariosus</i> R.Br.	Cyperaceae	Nagarmotha	Herb	22°44'46.40"	81°44'30.60"
83	<i>Thalictrum foliolosum</i> DC.	Ranunculaceae	Mamira	Herb	22°44'48.10"	81°44'23.20"
84	<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Khirsali/ Hersingar	Shrub	22°44'49.30"	81°44'21.60"
85	<i>Colocasia esculenta</i> (L.) Schott	Araceae	Kochhibaji	Herb	22°44'47.40"	81°44'47.30"
86	<i>Hedychium coronarium</i> J.Koenig	Zingiberaceae	Gulbakawali	Herb	22°44'47.90"	81°44'47.50"
87	<i>Careya arborea</i> Roxb.	Lecythidaceae	Jangali Amarud	Tree	22°44'48.10"	81°44'44.80"
88	<i>Chlorophytum borivilianum</i> Santapau & R.R.Fern.	Asparagaceae	Safed musli	Herb	22°44'48.80"	81°44'44.30"
89	<i>Schleichera trijuga</i> Willd.	Sapindaceae	Kosum	Tree	22°44'49.08"	81°44'37.30"
90	<i>Curcuma angustifolia</i> Roxb	Zingiberaceae	Tikhur	Herb	22°44'49.28"	81°44'33.10"

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Supplementary Table S1 — A list of medicinal plants reported during the study and their GPS coordinates. (Contd.)

Sl. No	Botanical name	Family	Local name	Habitus	Latitude	Longitude
91	<i>Ficus religiosa</i> L.	Moraceae	Pipal	Tree	22°44'49.10"	81°44'32.10"
92	<i>Woodfordia fruticosa</i> (L.) Kurz	Lythraceae	Surteli	Shrub	22°44'48.70"	81°44'31.60"
93	<i>Cassine glauca</i> (Rottb.) Kuntze	Celastraceae	Jamrasi	Tree	22°44'48.50"	81°44'43.50"
94	<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	Rubiaceae	Mahuwakandar	Tree	22°44'49.10"	81°44'41.70"
95	<i>Arisaema triphyllum</i> (L.) Schott	Araceae	Jangalimakka	Herb	22°44'48.60"	81°44'53.07"
96	<i>Pteris</i> sp.	Pteridophyta	Teris	Herb	22°44'46.20"	81°44'52.20"
97	<i>Carissa carandas</i> L.	Apocynaceae	Kronnda	Shrub	22°44'46.70"	81°44'51.10"
98	<i>Rubia cordifolia</i> L.	Rubiaceae	Manjista	Climber	22°44'47.30"	81°44'56.06"
99	<i>Cordia macleodii</i> Hook. f. & Thomson	Boraginaceae	Dahiman	Tree	22°44'50.60"	81°44'39.50"
100	<i>Indigofera tinctoria</i> L.	Leguminosae	Nil	Shrub	22°44'49.50"	81°44'30.40"
101	<i>Cordia macleodii</i> Hook. f. & Thomson	Boraginaceae	Dahiman	Tree	22°44'47.08"	81°44'50.30"
102	<i>Cordia macleodii</i> Hook. f. & Thomson	Boraginaceae	Dahiman	Tree	22°44'48.80"	81°44'39.50"
103	<i>Phyllanthus niruri</i> L.	Phyllanthaceae	Bhumi Awala	Herb	22°44'47.70"	81°44'39.50"
104	<i>Bacopa monnieri</i> (L.) Wettst.	Plantaginaceae	Brahmi	Herb	22°44'47.70"	81°44'47.60"
105	<i>Casearia esculenta</i> Roxb.	Salicaceae	Bhedi	Tree	22°44'50.40"	81°44'58.10"
106	<i>Cheilocostus speciosus</i> (J.Koenig) C.D.Specht	Costaceae	Kevkand	Herb	22°44'43.90"	81°44'59.50"
107	<i>Persicaria maculosa</i> Gray	Polygonaceae	Nandhi Bhaji	Herb	22°44'46.40"	81°44'54.20"
108	<i>Marsdenia tenacissima</i> (Roxb.) Moon	Apocynaceae	Dhudiya Bel	Climber	22°44'50.80"	81°44'58.30"

Supplementary Table S2 — A list of anti-malarial plants used by the traditional healers of the Pushparajgarh Tehsil (Anuppur, M.P, India) [10].

Sl. No.	Botanical name with the Voucher number	Local name	Family	Part used	Habit	Habitat	Collection time	Preparation	AMI	Other reported use(s)
1	<i>Andrographis paniculata</i> (Burm. F) Wall. Ex Nees (AM/DOB/001)	Chiraeta/ Kalmegh	Acanthaceae	AP	H	W,FA	Rainy & winter seasons	HI	0.338	Used in snake bite, common cold and bronchitis
2	<i>Azadirachta indica</i> (L.) A. Juss.(AM/DOB/011)	Neem	Meliaceae	R, L	T	W, FA, UC	Throughout the year	HI, D	0.107	Used in yellow fever and dengue
3	<i>Caesalpinia bonduc</i> (L.) Roxb.(AM/DOB/007)	Gattaran	Caesalpiniaceae	AP	S	W, RD	Rainy & winter seasons	M	0.059	Used as antibacterial, antiviral, antidiabetic, anti-inflammatory, antiallergic, antitumor
4	<i>Cassia tora</i> L. (AM/DOB/014)	Chakoda/ Chakramard	Caesalpiniaceae	R, SD	H	W, WL	Rainy & winter seasons	HI	0.059	Used against leprosy, ringworm, cataract and other eye disorders, liver disorders, bronchial infection, cardiovascular disease, piles, psoriasis, Alzheimer's disease, cancer, diabetes
5	<i>Cissampelo spariera</i> L. (AM/DOB/010)	Padhin	Menispermaceae	R, L	C	W,FA	Throughout the year	HI	0.118	Used against cough, heart trouble, rheumatism, jaundice, snake bites, skin infections fevers
6	<i>Citrullus colocynthis</i> (L.) Schrad (AM/DOB/013)	Indrawan	Cucurbitaceae	R	C	W, FA	Summer & rainy seasons	HI	0.048	Used in ulcers, asthma, bronchitis, jaundice, enlargement of spleen, tuberculosis, glands of the neck

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Supplementary Table S2 — A list of anti-malarial plants used by the traditional healers of the Pushparajgarh Tehsil (Anuppur, M.P, India) [10]. (Contd.)

Sl. No.	Botanical name with the Voucher number	Local name	Family	Part used	Habit	Habitat	Collection time	Preparation	AMI	Other reported use(s)
7	<i>Datura metel</i> L. (AM/DOB/009)	Dhatura	Solanaceae	SD	S	W, RD	Rainy & winter seasons	HI, D	0.029	Immunomodulator, antihistaminic, smooth muscle relaxants. Useful in headache, asthma, fever, madness, epilepsy, burns, allergy
8	<i>Holarrhena antidysenterica</i> L. (AM/DOB/006)	Kurraiya/ Karayan	Apocyanaceae	B	T	W, FA	Winter season	HI	0.118	Useful in amoebiasis, diarrhea, blood disorders, skin disorder, fever, jaundice, anemia and diabetes
9	<i>Justicia adhatoda</i> L. (AM/DOB/012)	Bhuleem	Acanthaceae	R, L	H	W, FA	Throughout the year	HI	0.078	Used in cold, cough, chronic bronchitis and asthma, heart troubles, fever, vomiting, loss of memory, leucoderma, jaundice, tumors, mouth troubles, sore-eye and gonorrhea
10	<i>Ocimum tenuiflorum</i> L. (AM/DOB/002)	Tulsi	Lamiaceae	L	H	W, FA, UC	Throughout the year	HI, D	0.100	Anticancerous, antioxidant, antifungal and anti-inflammatory, radio-protective, gastro-protective, antidiabetic, cardioprotective
11	<i>Parthenium hysterophorus</i> L. (AM/DOB/016)	Gajarghas	Asteraceae	R, F	H	W, WL	Throughout the year	HI	0.048	Used in wounds, ulcerated sores, fever, anemia, heart problems
12	<i>Rubia cordifolia</i> L. (AM/DOB/017)	Manjistha	Rubiaceae	R	C	W, FA	Rainy & winter season	HI	0.104	Used in skin diseases, cancer, blood purifying, bleeding gum
13	<i>Schefflera vinosa</i> (Cham & Schtdl.) Frodin & Fiaschi (AM/DOB/018)	Devsemal	Araliaceae	ST	C	W, FA	Winter season	HI	0.029	Antibacterial, antioxidant, anti-inflammatory
14	<i>Solanum xanthocarpum</i> Schrad & Wendl. (AM/DOB/015)	Kanteli/ Chotikatheri	Solanaceae	R, SD	S	RD	Throughout the year	CI	0.040	Anti-inflammatory, antiallergic, antitumor, antimicrobials
15	<i>Thalictrum foliolosum</i> DC (AM/DOB/003)	Mamira/ Pilijari/ Guriani	Ranunculaceae	R	H	W, FA	Winter season	CI	0.092	Anti-tumor, antiparasitic, and antileishmanial
16	<i>Thespesia lampas</i> (Cav.) Dalzell & A. Gibson (AM/DOB/008)	Charmuhi	Malvaceae	R	S	W, FA	Rainy & winter seasons	CI	0.070	Antimicrobial, antioxidant, anti-lipoxygenase, anti-hyperlipidaemic, and anthelmintic

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Supplementary Table S2 — A list of anti-malarial plants used by the traditional healers of the Pushparajgarh Tehsil (Anuppur, M.P, India) [10]. (Contd.)

Sl. No.	Botanical name with the Voucher number	Local name	Family	Part used	Habit	Habitat	Collection time	Preparation	AMI	Other reported use(s)
17	<i>Tinospora cordifolia</i> (Thunb.) Miers (AM/DOB/005)	Giloy/ Guruchh	Menispermaceae	L	C	W, FA	Throughout the year	HI	0.078	Antiarthritic, antioxidant, antiallergic, anti-stress, anti-leprotic, hepatoprotective, and anti-neoplastic
18	<i>Vernonia anthelmintica</i> L. (AM/DOB/019)	Banjit	Asteraceae	R	H	W, FA	Winter season	HI	0.048	Antipyretic, detoxifying, antibacterial, wound-healer, antihemorrhagic, antalgic, antispasmodic, hemorrhoids
19	<i>Vitex negundo</i> L. (AM/DOB/004)	Nirgundi	Lamiaceae	L	S	W, FA, UC	Throughout the year	HI	0.185	Analgesic, anti-inflammatory, antioxidant, insecticidal, antimicrobial, anticancer, galactogogue, tonic, febrifuge, expectorant and diuretic; Used against headache, skin related diseases, swelling, asthma, pains, reproductive problems

T- tree, S- shrub, H- herb, C- climber, R- root, L- leaves, SD- seed, F- flower, B- bark, ST-stem, AP- all parts, W-wild, FA- forest area, UC- under cultivation, RD- road-side, WL – waste land, HI- hot infusion, CI- cold infusion, D- decoction, M- maceration, AMI- anti-malarial index.