

Original Research Article

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TRADITIONAL PHYTOTHERAPY AMONG THE GOND TRIBES OF JANJGIR-CHAMPA, CHHATTISGARH (INDIA)

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ABSTRACT: Chhattisgarh state is well known for its forest resource with rich habitation of medicinal herbs. Since ancient times, plants remained the source of medicine worldwide. During present investigation, 30 plants have been explored for treating different ailments from a tribal belt of Janjgir-Champa, Chhattisgarh. An ethno-medicinal survey was conducted with traditional healers. Total 30 plants with 29 genera distributed among 20 families were identified and preserved, following standard methods. Documentation of plants with their botanical name, local name, family and habit followed by mode of administration and parts used have been provided.

KEYWORDS: Ethno-botanical survey, Herbal medicine, Traditional healers, Janjgir-Champa.

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1. INTRODUCTION

Ethnobotany is the branch of science that deals with the association among floras and human being. Ethnobotanical survey comprehends discussion with local communities, documentation of indigenous therapeutic knowledge, which play many imperative role in human life[22]. Since ancient times, Central India remained a tribal hub and medicinal herbs center as well. Studies on Ethnomedicinal plants were conducted by different workers in Chhattisgarh. Janjgir-Champa is situated in the center of Chhattisgarh between 21.6° to 22.4° in North and 82.3° to 83.2° in East and at 294.4 altitude. The normal rainfall recorded 1478 mm and average rainfall is 1157 mm. The average maximum and minimum temperature ranges between 49 ° to 8 ° respectively. Janjgir-

Champa covers an area of 446674 ha and forest area is 79,439 ha. After a short review, it was found that, In India, many ethnomedicinal studies have been carried out in almost all the parts; Northern[30][24] and North Eastern region[16][19][9][13], South India[18][23][29][20] and Central India [14][15][21][26][27][28][22][10][11][12]. Around Bilaspur district, traditional medicinal Practices among the tribal people of Raigarh (C.G) [5], Sarguja region [2], in Borind Forest of district Korea[1], was assessed. In another study, ethno-medicinal plants of Chhattisgarh was reviewed [6]. Ethnomedicinal survey in Bhupdevpur reserve forest area of district Raigarh [13], Durg and Dantewada [10] was evaluated. To create awareness in women with the use of traditional medicinal plants in Raipur was also carried out, resulted in the possibility of successful integration of traditional medicine into public health sector [11].

2. MATERIALS AND METHODS

The study was carried out in and around Janjgir-Champa, Chhattisgarh in the month of August 2018 to November 2018. Ethno-medicinal data was collected from indigenous community [3] following principle. First-hand data was collected from traditional practitioners (*Gond* tribes- *Baigas*, *Vaidyas*) and uses of locally available plant were tabulated with their drug preparation procedure. Along with the medicinal data, the native older people also share some spiritual facts about herbs. Collected plants were enlisted with their photographs and local name then further identified using previous literatures [4][8][25] and experts.

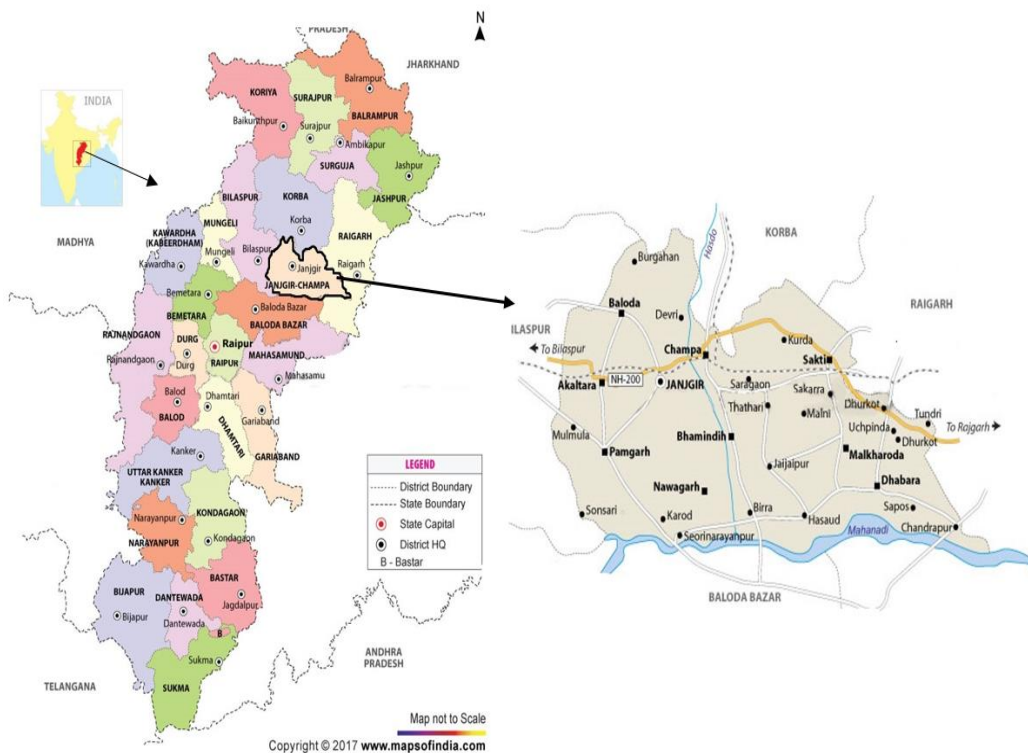


Fig.1: Location Map of Janjgir-Champa, Chhattisgarh (India)

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3. RESULTS AND DISCUSSION

Table 1. List of indigenous plants used for curing various ailments

S. No	Botanical Name	Family/Habit	Local Name	Parts Used	Mode of Administration	Disease
1	<i>Achyranthes aspera</i>	Amaranthaceae/ Herb	Chirchita	leaf, stem	stem is boiled to make decoction	Jaundice, cold and cough.
2	<i>Aegle marmelos</i>	Rutaceae/Tree	Bel	fruit	drink is prepared with its fruit pulp	Digestion
3	<i>Andrographis paniculata</i>	Acanthaceae/ Herb	Bhui neem	leaf	leaf boiled and juice is taken orally	Malaria and fever, diabetes
4	<i>Azardirecta indica</i>	Meliaceae/ Tree	Neem	seed and bark	seed and bark paste is mixed with mustard oil and applied externally	Leprosy
5	<i>Blumea lacera</i>	Asteraceae/ Herb	Kukurmutta	leaf	leaf extract	Applied on cuts and wounds to stop bleeding, also cure ring worms
6	<i>Bryophyllum pinnatum</i>	Crassulaceae/ Herb	Patharchata	leaf	leaf extract	Kidney stone
7	<i>Butea monosperma</i>	Fabaceae/ Tree	Palash	bark and root	bark and root extract	Leucorrhoea
8	<i>Calotropis gigantea</i>	Apocynaceae/ Shrub	Safed aak	flower	flower is powdered and mixed with <i>gur</i>	To increase milk in lactating mother
9	<i>Crotalaria juncea</i>	Fabaceae/Herb	Junjhuni	seed	seed powdered is mixed with mustard oil and massaged	Blood pressure
10	<i>Cuscuta reflexa</i>	Convolvulaceae/ Climber	Amarbel	leaf	boiled in water and take bath	Jaundice
11	<i>Cynodon dactylon</i>	Poaceae/Grass	Dubi	leaf	leaf extract	Cold and cough
12	<i>Datura alba</i>	Solanceae/Herb	Dhatura	leaf	leaf paste is made in warm mustard oil and	Joints pain

					applied on joints	
13	<i>Dioscorea bulbifera</i>	Dioscoreaceae/ Climber	Gurudnaar	stem	boiled in water in glass of water to make it one forth (decoction)	Jaundice
14	<i>Hygrophilla auriculata</i>	Acanthaceae/ Herb	Mokhla kanta	leaves	Poultice of leaves and chewed	Leaf poultice is applied on skin allergy, chewing leaves increases blood level
15	<i>Milletia pinnata</i>	Fabaceae/ Tree	Karan	seed	seed paste is prepared in mustard oil	Itching and skin disease
16	<i>Moringa olifera</i>	Moringaceae/ Tree	Munga	bark	bark extract is taken 2 drops orally	Cold and cough
17	<i>Ocimum sanctum</i>	Lamiaceae/ Shrub	Tulsi	leaf	leaf extract mixed with honey ,taken orally	Cold and cough
18	<i>Oxalis corniculata</i>	Oxalidaceae/ Herb	Changeri	leaf	leaf paste	Burning sensation
19	<i>Phyllanthus embellica</i>	Euphorbeaceae/ Tree	Aawla	fruit	Trifala churn is prepared by adding dry power of Harra (<i>Terminalia chebula</i>), Bahera (<i>T. bellerica</i>) and Awla	Digestive track disorder
20	<i>Phyllanthus niruri</i>	Euphorbeaceae/ Herb	Bal aawla	root	boiled in water in glass of water to make it one forth (decoction)	Jaundice
21	<i>Picrorhiza kurroa</i>	Plantaginaceae/ Herb	Kutki chirat	leaf, stem	leaf is boiled in water to make decoction	Fever
22	<i>Psidium guajava</i>	Rutaceae/Tree	Amrud	leaf	chewing leaf	Blood pressure control and Diabetes
23	<i>Riccinus communis</i>	Euphorbeaceae/ Shrub	Arand	root	boiled in one glass of water to make it one fourth of it, taken orally	Paralysis

					only on Sunday	
24	<i>Senna tora</i>	Fabaceae/Herb	Charota	leaf	tender leaves are cooked and eaten by local inhabitants	Anaemia
25	<i>Solanum xanthocarpum</i>	Solanaceae/Herb	Chaskatiya	flower	flower extract is given orally to infants	Cold and cough
26	<i>Syzygium cumini</i>	Myrtaceae/Tree	Jamun	seed and bark	1. Seed powder mixed with methi powder and taken half teaspoon empty stomach, early morning. 2. Bark extract is orally taken in indigestion.	Diabetes
27	<i>Terminalia arjuna</i>	Combretaceae/Tree	Kuaha	bark	decoction of bark is taken orally	Heart disease
28	<i>Trigonella sp.</i>	Fabaceae/Herb	Methi	seed	powdered seed is taken half a teaspoon	Obesity
29	<i>Tamarindus indicus</i>	Fabaceae/Tree	Imli	leaf and seed	leaf juice is taken during indigestion, and seed powder is given during nose bleeding	Nose bleeding and indigestion
30	<i>Ziziphus jojoba</i>	Rhamnaceae/Shrub	Ber	seed	seed powder is taken one teaspoon empty stomach	Dysentery

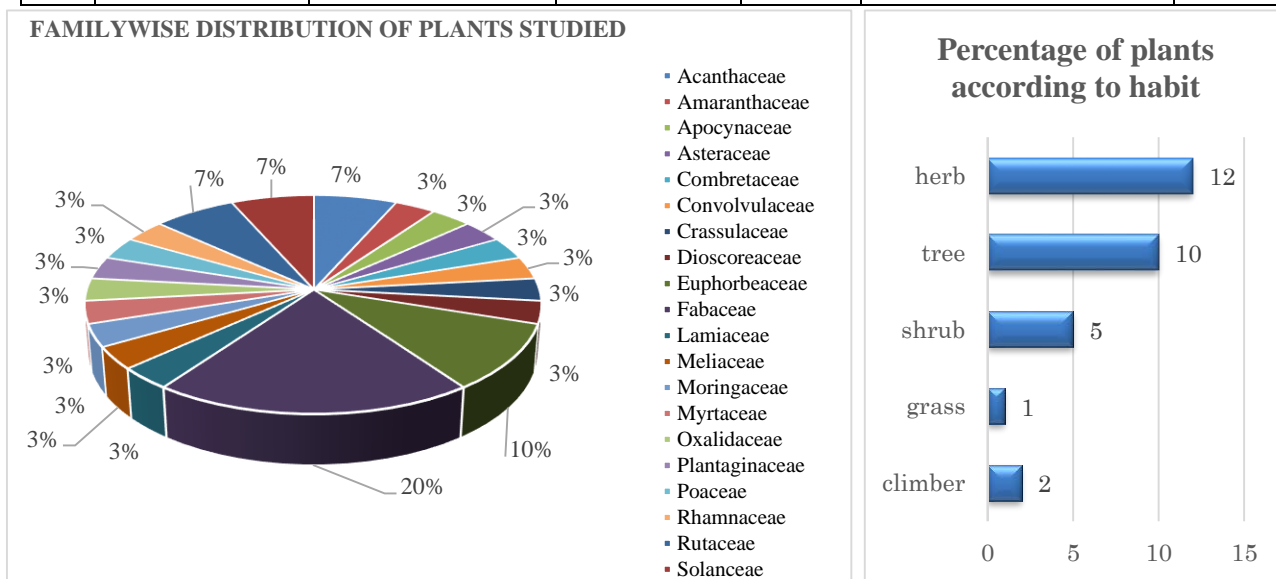


Fig.2: (A) Distribution of plant families (B) Distribution of plants according to habit

Traditional medicinal practices gets transferred from great ancestors through oral tradition instead of documentation. In present ethno-medicinal assessment, a total of 30 species were enumerated, arranged in order; botanical name, family, habit, local name, plant part used, mode of administration/drug preparation method opt by gond tribes for curing type of illness/disorder like skin disease, kidney stone, paralysis, diabetes, cardiac disease, anemia, blood pressure, cuts and wounds etc. More than one plant was found to be proficient of treating different ailments. Plant species were distributed among 20 families and 29 genera. Dominating family was fabaceae showing 20% distribution followed by Euphorbiaceae (Fig.2a). Herbs were mostly used for medicinal purpose in comparison to trees and shrubs (Fig.2b) may be due to the easy availability and phenology. The major form of application was decoction and extract, which is easy to prepare. Based on the above studies, usage of medicinal plants to treat specific ailments may be different in different indigenous community and geographical locations of Chhattisgarh.

4. CONCLUSION

Each and every plant contain some or the other medicinal property. Plants reported in this study are abundantly available in and around the study area and do not face any risk, thus maintaining the balance of nature without exploiting much of it. By collecting information with indigenous community in treatment of diseases ranging from simple health problems like fever, skin disease, cuts and wounds, allergy etc., to chronic diseases like kidney stone, paralysis, diabetes, cardiac disease, anemia etc., reveals that plant contain different active ingredients which circuitously enhance social well-being. In the interview with traditional practitioner (*Vaidyraj*), discloses multiple ailment can be cured by a single plant, therefore the knowledge of some selected medicinal herbs are more beneficial for them and this traditional information has to be recognized before it gets extinct. On the other hand, present study entice the consideration of ethno-botanists and pharmacologist for further analysis in the study area in the pursuit of innovative drugs.

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CONFLICT OF INTEREST

The author declare no conflicts of interest.

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