

TRADITIONAL AND INDIGENOUS USES OF MEDICINAL PLANTS BY LOCAL TRIBES IN SURGUJA CHHATTISGARH WITH SPECIAL REFERENCE TO UDAIPUR AND LAKHANPUR BLOCK

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ABSTRACT

Surguja has a great wealth of medicinal plants and traditional medicinal knowledge. Medicinal plants have played an important role in primary health care system among the local people of Surguja region. The present research is a study of the traditional knowledge of medicinal plants and its use by local people of not only Surguja but whole Chhattisgarh Region. Due to its single geographical location and different climatic condition, it has rich biodiversity and variety of plant species. Medicinal plants are the principal health care resources among the most of community in India. Local people of this region basically depend upon medicinal plants for their foremost health care system.

Their primary cure of diseases is based upon deep observation of scenery and their understanding of traditional knowledge of medical practices. Local people in this region, especially tribal people and women heavily use these traditionally available medicinal plants for health and consider that these are easily available, less expensive and have no side effects as compare to modern medicine. The present research focuses on the indigenous knowledge of different medicinal plants used in the Chhattisgarh Surguja region. Ethnomedicinal uses of various medicinal plant species along with botanical name, part used and mode of treatment are given in this study.

KEYWORDS: Medicinal Plants, Traditional Knowledge, Deforestation, Ethnomedicinal.

INTRODUCTION

The objective of the current work is to provide the information and documentation of medicinal plant used by tribal of the various villages of Lakhanpur and Udaipur block Surguja of Chhattisgarh state. Local healers have information and understanding on a wide

range of medicinal plants that are used to cure the common ailment. In particular, they highlight cure pertinent for skin diseases, stomach disorders, respiratory infections, fever, piles, itching, etc. among others. The Indian Surguja Region is one of the richest reservoirs of natural diversity in the country and is considered as a 'storehouse' of the valuable medicinal plant variety. The population of the Surguja Region consumes the biodiversity in various forms, i.e., medicine, food, fuel, fodder, timber. Medicinal plants have played a fundamental role in the healing of diseases. The local people of this district have been using these resources for various ailments in their daily life since time immemorial. The Surguja have a great wealth of medicinal plants and traditional medicinal information. Medicinal plants have played an important role in primary health care system among the local people of Surguja area. As the local people are settled far from the town area, they cannot take modern health care facilities so they are totally reliant on traditional medicinal practices for their primary health care. Local people of this region are incompletely or completely dependent on forest resources for medicine, food, and fuel and medicinal species are progressively diminishing due to anthropogenic activities. The Central Surguja Region covers the new district provides admirable opportunities for studying the Traditional Knowledge Systems.

Chhattisgarh has a rich diversity of herbs, medicinal and fragrant plant species. The ancient documentation of 67 medicinal plants in Hindu culture is found in the "Rigveda," which is thought to have been written between 4,500 and 1,600 BC. Collection and trade of medicinal plants in India was previously done in our ancient Literatures. The trade of non-timber jungle products is mentioned in the 3,000 years old Ramayan. Similarly, the Urikshayarved provides wonderful information about plants and their medicinal properties. The Charak and the Sushruta Samhitas were written between 700-200 BC, and surround accounts of the finding of medicinal plants. There is significant economic profit in the development of indigenous medicines (Choudhary et al. 2011).

MATERIAL AND METHOD

Study area

Surguja is a district in the northern division of the state of Chhattisgarh in India. The district headquarter is Ambikapur. The present work was carried out in different villages of Lakhanpur and Udaipur block of Surguja on phytotherapeutic drugs in the healthcare systems of tribes. Following are representing the study sites i.e. Bharatpur, Lakhanpur, Gorta,

Ganeshpur, Kenwri, Kosga, Beldagi, Hansdand, Andhala, Kunni, Bhadwahi, Lakhmangarh, Maheshpur, Mohanpur, Bishunpur etc villages.

Climate of Surguja.

1	Minimum Temperature	20° C (Summer), 8° C (Winter)
2	Maximum Temperature	42° C (Summer), 32° C (Winter)
3	Best Time to Visit	October to March.

Summer season begins during the end week of March and lasts until June. Temperatures during this season usually range between 20°C to 40°C. During rainy season monsoon hits the city during July and lasts until September. Temperatures during the Winter season usually range between 32°C to 8° C.

Tribal community

Survival of ethnobotanical information was apparent in the abundant economic important data gathered in this study, from published and unpublished sources from historic and modern times, and from interviews with living elders belong to Kanwar, Baigas, Gond and Uraon etc. tribes of the study region.

Data collection

The study area is very important for ethnobotanical studies showing the dominance of different tribal communities like Uraon, Kanwar, Gond, Baigas etc. The questionnaires were devised to identify the indigenous knowledge of plant-based remedies from restricted people. Information was gathered through semi-structural interviews that were held with selected knowledgeable elders. At the end of each interview, plant specimens were collected, dried, identified and conserved. Samples of recorded herbs, shrubs and trees were identified with the help of local floras and preceding literature and the extensive studies were conducted with the tribal people and village medicine-men the knowledgeable people, village men, Baidyas, Guniyas, Birth attendants, traditional Bonesetters, traditional ophthalmologists Mathpujaris etc. The local name, parts used and medicinal importance were recorded. The botanical name of each plant is followed by a local name, family, used plant part, ethnomedicinal importance, habitat and study sites.

RESULTS

The present study details about the information on traditional practices of 40 medicinal plants of Surguja district. In the ethnobotanical and ethnomedicinal survey 40 plants species were

reported representing with leading families i.e. Fabaceae, Malvaceae, Euphorbiaceae, Asteraceae etc. Research information and ethnobotanical data were gathered and organized extant Surguja C.G. and assembled it into a database for investigation. The representing plants are mostly used to cure skin disorders, diarrhea, jaundice, cough, wounds, piles, urinary troubles, antiseptic and antidote to snakebite and pus formation. The diversity and indigenous uses of the medicinal plants are presented in table 2.

Table 1: Socio-economic survey of district Surguja for tribal knowledge of home remedy, investigated during the year 2018.

S. No.	Name of Village	Total no of family studied	Percentage of the family having awareness in home remedies	Percentage of the family having belief in home remedies	Percentage of family having source of knowledge of home remedies
1.	Bharatpur	08	78.06	78.06	10.45
2.	Gorta	06	60.55	60.55	12.09
3.	Kewri	04	88.00	88.00	08.67
4.	Beldagi	10	44.30	44.30	11.23
5.	Kosga	05	54.40	54.40	07.12
6.	Ganeshpur	03	70.87	70.87	06.78
7.	Kunni	03	90.00	90.00	12.56
8.	Andhala	04	40.55	40.55	07.33
9.	Hansdand	05	63.33	63.33	05.77
10.	Kuwerpur	04	55.65	55.65	10.22
11.	Jhirmitti	04	39.89	39.89	10.00
12.	Jaamdih	03	54.45	54.45	05.67
13.	Bhadwahi	03	87.34	87.34	09.87
14.	Laxmngarh	06	89.90	89.90	06.02
15.	Bishunpur	04	78.00	78.00	10.10
16.	Pendrkh	06	67.77	67.77	07.33
17.	Dawa	03	73.54	73.54	06.37
18.	Devtikra	07	62.87	62.87	09.92
19.	Mohanpur	05	50.77	50.77	06.78
20.	Maheshpur	09	80.60	80.60	12.22
Avg%			66.54	66.54	8.82

Table 2: Medicinal plants used by the tribals of Lakhanpur and Udaipur block district Surguja for health security, investigated during the year 2018.

s.no.	Botanical name	Common name	Family	Plant Habit	Part Used	Disease name	Name of healers
1.	<i>Mimosa pudica</i> Linn.	Lajwanti	Fabaceae	Shrub	Whole plant	Snakebite	Ram Sai
2.	<i>Boswellia serrata</i> Roxb	Saliha	Burseraceae	Tree	Bark	Scorpion Sting	Somaru

3.	<i>Cassia obtusifolia</i> Linn.	Bada Charota	Fabaceae	Shrub	Seed	Snake bite	Barahil
4.	<i>Andrographis paniculata</i>	Bhui neem	Acanthaceae	Herb	Whole plant	Malaria	Brahil
5.	<i>Mycrotyloma uniflorum</i>	Kulthi	Leguminosae	Climber	Seed, Whole plant	Kidney stone	Laxman
6.	<i>Moringa oleifera</i> Lem	Munga, Sahjal	Morangaceae	Tree	Whole plant, leaves	Diabetes	Brahil
7.	<i>Soymida febrifuda</i> Rox	Rohina	Malvaceae	Tree	Bark	Snake bite	Somaru
8.	<i>Aloe Rbarbadensis</i> Mill.	Ghritkumari	Asphodelaceae	Herb	Leaves pulp	Eczema	Jokhan ram
9.	<i>Vachellia nilotica</i>	Babul, Kikar	Fabaceae	tree	Root, bark	Diarrhea	Laxman
10	<i>Asparagus racemosus</i>	Shatavari	Liliaceae	Climber	Root	Weakness	Laxman
11	<i>Syzygium cumini</i>	Jamun	Myrtaceae	tree	Leaves, Bark	Diabetes	Somaru
12	<i>Ficus benghalensis</i>	Bargat	Moraceae	Tree	Upper Root	Weakness	Gopal
13	<i>Madhuca indica</i>	Mahua	Sapotaceae	Tree	Root	Cooking and adulteration	Gopal
14	<i>Centella asiatica</i>	Beng saag bramh buti	Plantaginaceae	Shrub	Whole plant	Increase hungriness	Gopal
15	<i>Terminalia chebula</i>	Harra	Combretaceae	Tree	Fruits	Cough and digestive.	Somaru
16	<i>Terminalia bellirica</i>	Bahera	Combretaceae	Tree	Leaf, Tubers	blood pressure balance	Gopal
17	<i>iCissus quadrangularis</i> ii. <i>Tinospora cordifolia</i>	Hadjod	Vitaceae	Climber	Leves	Bone fracture	Somaru
18	<i>Pongamia pinnata</i>	Karanj	Fabaceae	Tree	Oil, Bark	Etching, Constipation	Budhram
19	<i>Psidium guajava</i>	Amrud	Myrtaceae	Tree	Bud sap	Eye infection	Budhram
20	<i>Mimosa pudica</i>	Tulsi	Lamiaceae	Shrub	Leaves	Cold and Cough	Budhram
21	<i>Mallotus Philipines</i>	Rohini	Euphorbiaceae	Tree	Bark	Pain relief	Budhram
22	<i>Euphorbia hitra</i>	Milky grass	Poaceae	Herbs	Leaves	Blood pressure	Maansai
23	<i>Hibiscus rosa sinensis</i>	Aduwal, Gurhal	Malvaceae	Shrubs	flower	Liver disease	Raghu
24	<i>Phyllanthus nirguri</i>	Bhumi Amla	Euphorbiaceae	Tree	Fruits, leaves	Ulcers, Dysentery	Raghu
25	<i>Cynodon dactylon</i>	Dub Grass	Poaceae	Herbs	Leaves, root	Fever	Basant

26	<i>Piper longuum</i>	Pipli	Piperaceae	Climber	seed	Intestine gas	Basant
27	<i>Solanum xanthocarpum</i>	Kantkaari, Rengani	Solanaceae	Shrubs	Root,fruits	Respiratory problems	Ramroop
28	<i>Terminalia arjuna</i>	Arjun	Combretaceae	Tree	bark	Angina	Kaosal
29	<i>Vitex negundo</i>	Sindhuar, Nirgundi	Lamiaceae	Shrubs	Seed	Insomnia, Brain tonic	Kaosal
30	<i>Ziziphus jujuba</i>	Ber	Rhamnaceae	Tree	Insomnia	Fruit,Bark	Kaosal
31	<i>Bambusa vulgaris</i>	Baans	Poaceae	Tree	Bamboo juice	Wounds and ulcers	Devkripa
32	<i>Aegle marmelos</i>	Bel	Rutaceae	Tree	Leaves, Flower	Piles, Diarrhea	Basant
33	<i>Bombex malabaricum</i>	Semal	Bombacaceae	Tree	Bark	Dysentery	Barahil
34	<i>Butea monosperma</i>	Palas	Fabaceae	Tree	Flower	Repair Kidneys	kaosal
35	<i>Coleus aromaticus</i>	Patharchur	Lemiaceae	Herb	Tuberous root	Hypertension,asthama	Laal sai
36	<i>Zingiber cassumunar,</i>	Rroxb. Vansonthi	Zingiberaceae	Herb	Rhizome	Muscle pain	Laalsai
37	<i>Smilax macrophylla,</i>	Ramdatoon	Liliaceae	Climber	Leaves,Stem	Pyorrhea	Ramroop
38	<i>Saraca indica</i>	Ashok	Fabaceae	Tree	Stem bark,Seeds	Menstrual irregularities	Ramroop
39	<i>Bassia latifolia</i>	Dori	Sapotaceae	Tree	Bark	Muscle pain	Munna
40	<i>Achiranthas aspera</i>	Chirchitta	Amaranthaceae	Herb	seed	Snake-bites	Laalsai

DISCUSSION

The present study indicated different villages Lakhanpur and Udaipur block (Table 1), Surguja region of Chhattisgarh is rich in biodiversity and people of Uraon tribe have a rich knowledge of using plants and plant yield for the treatment of many diseases like skin diseases, stomach disorders, respiratory infections, fever, piles, Muscle pain etc. People use these traditionally available medicinal plants for health and believe that these are easily available, less expensive and have no side effects as compare to modern medication. The similar works investigated by previous workers like kanungo (2014), Chatterjee (2014), Hingora and Sharma (2016), Sinha (2017), Sandey and Sharma (2016) etc. for ethnobotanical uses of plants in Chhattisgarh.

CONCLUSION

From this study it could be concluded that Lakhanpur and Udaipur villages (Table 1) possess diverse vegetation. Different parts of plants are used in curing different diseases. Such

information should be spread among other societies living in urban area and villages, because they are easily available and less expensive. The raw data received in the survey were tabulated and shown here as Tables 2. It represents 40 important medicinal plants and their botanical name, common name, family, the habit of the plant.

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