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Root of healing: Exploring indigenous wisdom, medicinal plants of Saran District, Bihar

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Abstract- Indigenous knowledge of medicinal plants plays a crucial role in healthcare, especially in region with limited access to modern medicine. Saran district in Bihar, India is rich in biodiversity and traditional medicinal plants in Saran district, highlighting their traditional uses, preparation methods, and conservation practices. Through ethnobotanical surveys and interviews with local healers and community members, valuable insights into the medicinal flora of the region were gathered. The study underscores the importance of preserving and integrating indigenous knowledge into contemporary healthcare systems for sustainable and culturally relevant healthcare solutions.

Key words: Saran district, Bihar, India, medicinal plants, indigenous knowledge, therapeutic uses, and local biodiversity.

INTRODUCTION

The use of medicinal plants is deeply rooted in the cultural and traditional practices of indigenous communities worldwide.[1,6] In Saran district, Bihar, where modern healthcare infrastructure may be scarce, traditional knowledge of medicinal plants serves as a vital resource for healthcare needs, this paper aims to explore and document the indigenous knowledge of medicinal plants in Saran district shedding light on their traditional uses, preparation methods and conservation efforts.

MATERIALS & METHODS

Study Area

Saran district is situated between 25°36' and 26°13' north latitude and 84°24' and 85°15' east longitude in the southern post of the Saran Division North Bihar. The Ganga River provides the Southern boundary of the district, beyond which lie the district of Bhojpur and Patna. To the North of Saran lie the districts of Siwan and Gopalganj. The district is shaped like a triangle.

Methodology

Ethnobotanical surveys were conducted in various villages across Saran district to gather information on the indigenous knowledge of medicinal plants, local healers, traditional medicine practitioners, Baidyas, knowledgeable persons and community members were interviewed using structural questionnaires and open-ended discussion. Plant specimens were collected, identified and catalogued for further analysis.

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Fig - Geographical map of Saran District

Tabel 1- List of some commonly encountered species of medicinal plant used by the indigenous communities of Saran District

S.N.	Botanical name	Common Name	Family	Uses
1.	*Asparagus racemosus*	Satavar	Liliaceae	Asthma, Cough & Cold, Diarrhoea, Fever, Headache, Piles, Urinary disorder, etc.
2.	*Azadirachta indica*	Neem	Maliaceae	Blood-purifier, Chicken pox, Eczema, Anti-microbial, Arthritis, Toothache, Malaria, Heart problem, etc.
3.	*Aegle marmelos*	Bel	Rutaceae	
4.	*Aloe vera*	Ghritkumari	Liliaceae	Cosmetics, Gastric, Burns, Cut & wound, Headache, etc.
5.	*Argemone mexicana*	Poppy	Papaveraceae	Tumours, Wart, Skin diseases, Inflammations, Rheumatism, Jaundice, Leprosy, Microbial infections, Malaria, etc.
6.	*Adhatoda vasica*	Adusa, Bakas	Acanthaceae	Headache, Cough and cold, Whooping cough, fever, Asthma, Jaundice, Chronic bronchitis, etc.
7.	*Boerhavia diffusa*	Punarnava	Nyctaginaceae	Inflammation, Jaundice, Asthma, Rheumatism, Nephrological disorder, Anaemia, Gynaecological disorder, etc.
8.	*Bacopa monnieri*	Brahmi	Rutaceae	Memory improvement, Insomnia, Anti-anxiety, Epilepsy etc.
9.	*Bauhinia veriegata*	Kachnar	Caesalpiniaceae	Dropsy, Pain, Rheumatism, Convulsions, Delirium, Septicaemia, etc
10.	*Chenopodium album*	Bathua sag	Chenopodiaceae	Intestinal ulcer, Piles, Throat & Eye trouble, Diuretic, Spleen enlargement, Stomach trouble, etc.
11.	*Cannabis sativa*	Bhang	Cannabenaceae	Rheumatism, Epilepsy, Asthma, Skin burns, Pain, Management of sexually transmitted diseases, , Gynaecological disorder, etc.
12.	*Carica papaya*	Papita	Caricaceae	Liver enlargement, Piles, Heart problem, Skin problem, cosmetics, etc
13.	*Cassia fistula*	Amaltas	Fabaceae	Cough & cold, Ring-worm, Leprosy, etc

14.	*Coleus aromatics*	Patharchur	Liliaceae	Malarial fever, Hepatopathy, renal & vesical calculi, Cough & cold, Chronic asthma, convulsion, Epilepsy, etc
15.	*Dhatura strumonium*	Dhatura	Solanaceae	Asthma, Arthritis, Eye problem, Headache, etc.
16.	*Delonix regia*	Gulmohar	Fabaceae	Skin disease, colouring
17.	*Dulbergia sissoo*	Shisham	Fabaceae	Burning sensation, Toothache, Skin disease, etc
18.	*Eclipa alba*	Bhrigraj	Asteraceae	Asthma, Bronchitis, Fever, Gastric and hepatic disorders, Jaundice, Ulcers, etc.
19.	*Euphorbia hirta*	Dudhi	Euphorbiaceae	Cough & cold, Anti-asthmatic etc,
20.	*Embblica officinalis*	Anwla	Euphorbiaceae	Cough & cold, Diabetes, Constipation, Arthritis, Hair problem, Eye & Skin problem, Fever, etc.
21.	*Ficus glomerata*	Gular	Moraceae	Diabetes, Asthma, Urinary problem, Piles, etc
22.	*Ficus religiosa*	Peepal	Moraceae	Jaundice, Cough & cold, Eczema, Toothache, Cut & wound, Earache, etc
23.	*Mimosa pudica*	Chui Mui, Shame plant, Touch me not	Fabaceae	Constipation. Dysentery, Tumour, Blood disorder, Cough and cold, Urogenital infections, Insomnia, etc.
24.	*Madhuca latifolia*	Mahua	Sapotaceae	Anti-bacterial, Pain-killer, Wine/liquor, etc
25.	*Murraya koenigii*	Rutaceae	Meetha neem, Kari patta	Piles, Inflammation, Itching, Fresh cut, Dysentery, Oedema, etc.
26.	*Nyctanthes arbortritis*	Nyctaginaceae	Harsingar	Sciatica pain, nervous pain, Diabetes, Fracture, etc.
27.	*Papaver somniferum*	Papaveraceae	Pasta, Opium	Anti-inflammatory, Antidiabetic, Analgesic, Lung infection, etc.
28.	*Pongamia pinnata*	Fabaceae	Karanj	Anti-parasitic, Malaria, Leukoderma, etc
29.	*Solanum nigram*	Solanaceae	Makoi	Bacterial infection, Cough and cold, Indigestion, Anti-inflammatory, Jaundice, etc
30.	*Terminalia arjuna*	Combretaceae	Arjun	Congestive heart failure, Hyper-tension, Dyslipidaemia, etc

Traditional Practices and Preparation Method: -

The Indigenous communities of Saran district employ various traditional practices and preparation methods to harness and therapeutic benefits of medicinal plants. These include decoctions, poultices, infusions, and oil prepared using specific plant parts such as leaves, roots, bark, and fruits. Additionally, certain rituals and ceremonies are associated with the collection and preparation of medicinal plants, emphasizing the spiritual connection between humans and nature.[7-11]

Conservation, Challenges and Strategies: -

Despite the cultural significance and ecological importance of medicinal plants, Saran district faces numerous conservation challenges, including habitat loss, overexploitation, urbanization, and climax change. To address these challenges, community-based conservation initiatives, awareness, campaigns, and sustainable harvesting practices are essential. Engaging local communities in conservation efforts and promoting the cultivation of medicinal plants in home gardens or community forest can contribute to their sustainable management and preservation for further generation.

Integration into Modern Healthcare System:-

The integration of indigenous knowledge of medicinal plants into modern healthcare systems holds immense potential for improving healthcare access and promoting holistic well-being, collaborative efforts between traditional healers, healthcare practitioners and policymakers can facilitate the incorporation of traditional remedies into primary healthcare services, ensuring culturally sensitive and sustainable healthcare solutions for the people of Saran district.

CONCLUSION

The indigenous knowledge of medicinal plants in Saran district represents a valuable repository of traditional wisdom and healthcare practices. Documenting and preserving this knowledge is essential for promoting cultural continuity, biodiversity conservation, and sustainable healthcare development. By recognizing the importance of indige`123xnous knowledge system and integrating them into contemporary healthcare frameworks, we can faster resilience equity and community empowerment in healthcare delivery.

REFERENCES

1. **Haines H. H. 1921-25.** Botany of Bihar and Orissa, (6 vols) rep.end 1961 (3vols) pub Botanical Survey of India.
2. **Jain S. K. & Rao R. R. 1977.** A Handbook of field and Herbarium Technique. Today and Tomorrow Publication, New Delhi, India.
3. **Singh A. and Singh P. K. 2009.** An Ethnobotanical study of medicinal plant in Chandauli district of U.P., India. *Journal of Ethnopharmacology*. **121(2):**324-329
4. **Jain S. K. Tarafdar C. R.** Medicinal plant beverages used in traditional medicine.
5. **Kapoor L. D. 1990.** Hand book of Ayurvedic medicinal plants CRC Press, Boca Raton,1990
6. **Bhattacharya P. K. & Sarkar K. 1998.** Flora of West Champaran District, Bihar. Botanical Survey of India, Calcutta.
7. **Verma S. K. 1981.** Flora of Bhagalpur (Dicotyledons). Today and Tomorrow Publishers, New Delhi.
8. **Singh M. P. 1986.** Flora of Patna (Dicotyledons). International Books and Periodical Suppliers, Delhi.
9. **Mukherjee P. 2011.** Studies on Weed Diversity in Pakur district of Jharkhand: Recent Studies in Biodiversity and Traditional Knowledge in India.
10. **Michel T. Murray N. D.** The Healing Power of Herbs.
11. **Prajapati V., Tripathi A. K., Khanuja S. P. S., Kumar S. 2008.** Anti-insect Screening of Medicinal Plants from Kukarail forest, Lucknow, India, *Pharmaceutical Biology.* **41(3):** 166-170

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