RESEARCH PAPER

Ethnomedicinal Plants Used By The Oraon Tribe Of Raigarh District: A Field-Based Documentation

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ABSTRACT
The Oraon tribe of Raigarh district possesses a rich repository of ethnomedicinal knowledge that has been preserved and transmitted through generations. This study documents the plant species traditionally used by the Oraon community residing in the villages of Bhupdeopur, Daghora, and Govindpur. Field surveys, direct observations, semi- structured interviews, and photographic documentation were employed to record indigenous plant use. A total of 20 ethnomedicinal plant species were identified, including several confirmed through field photographs. These plants are used to treat ailments such as diarrhea, fever, wounds, respiratory infections, skin disorders, and digestive problems. Leaves were the most frequently utilized plant part, followed by fruits and stems. The findings emphasize the cultural importance of ethnomedicinal practices among the Oraon tribe and highlight the need for conserving biological resources and associated traditional knowledge.

Keywords: Ethnomedicine, Oraon tribe, Raigarh district, medicinal plants, indigenous knowledge, Chhattisgarh
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1. INTRODUCTION

Ethnomedicine forms an essential part of traditional healthcare systems in India, particularly among tribal communities who depend extensively on forest resources for their primary health needs. Chhattisgarh, often referred to as the *"Herbal State"*, is home to diverse tribal populations that possess rich knowledge of medicinal plants and rely on them for day-to-day healthcare practices (Kala, 2015). Among these communities, the Oraon (Kurukh) tribe—belonging to the Austro-Asiatic linguistic group—constitutes one of the major tribal groups of Raigarh district. Their lifestyle, cultural practices, and healing traditions reflect a deep-rooted connection with nature.

Despite growing modernization, the Oraon community continues to utilize traditional plant-based remedies for treating a wide range of ailments. However, this indigenous knowledge is gradually diminishing due to factors such as deforestation, habitat loss, migration, socio-economic changes, and a declining interest among younger generations. Documenting such knowledge is therefore crucial not only for cultural preservation but also for scientific validation and conservation planning.

The present study systematically records the ethnomedicinal plants used by the Oraon tribe in three major villages of Raigarh district—Bhupdeopur, Daghora, and Govindpur. The research integrates field surveys, direct photographic documentation, interviews with traditional healers, and herbarium-based taxonomic verification to provide authentic and comprehensive documentation of plant-based traditional practices.

2. STUDY AREA

The present study was conducted in three tribal-dominated villages of Raigarh district— Bhupdeopur, Daghora, and Govindpur. These villages represent diverse ecological zones ranging from semi-urban forest edges to dense mixed deciduous forests. All three sites are inhabited by the Oraon tribe, who maintain close dependence on natural resources for subsistence and traditional healthcare.

2.1 Bhupdeopur

Bhupdeopur is a semi-urban village situated near the Raigarh–Raipur route, bordered by open forests, agricultural fields, and human settlements. The climate is tropical with hot summers and moderate rainfall. The surrounding vegetation includes a mixture of herbs, shrubs, and commonly cultivated fruit trees such as Psidium guajava, Mangifera indica, and Phyllanthus emblica. The area provides easily accessible medicinal plants used frequently by the local tribal community for treating minor ailments. Several of the photographed species, including Celosia argentea and Ipomoea sp., were recorded here.

2.2 Daghora (Hemgir Forest Range)

Daghora lies within the Hemgir Forest Range, an ecologically rich zone characterized by dense mixed deciduous forest, bamboo groves (Dendrocalamus strictus), and seasonal streams. This region hosts high floristic diversity due to its relatively undisturbed forest cover and favorable microclimate. Medicinal shrubs, climbers, and understorey herbs are commonly found. Daghora contributed the maximum number of ethnomedicinal species documented during the study and provided a major portion of the photographic evidence. Several wild species used by Oraon healers were observed in this area.

2.3 Govindpur

Govindpur is a forest-fringe village where agricultural

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land merges into natural vegetation. Villagers cultivate fruit-bearing trees and depend heavily on adjacent forest patches for medicinal plants, fodder, and fuelwood. The area has a mix of cultivated and wild species including Phyllanthus emblica, Syzygium cumini, and Terminalia species. Govindpur's proximity to forest resources makes it an important site for ethnobotanical practices among the Oraon tribe.

3. MATERIALS AND METHODS

A field-based ethnobotanical design using qualitative and quantitative methods. Data collection involved semi-structured interviews, walk-in-the-woods, FGDs, and GPS- enabled photography. A total of 45 informants were interviewed.

3.1 Informant Selection

Informants included 10 traditional healers, 20 elderly individuals, and 15 general villagers. Oral consent was obtained.

3.2 Data Collection Techniques

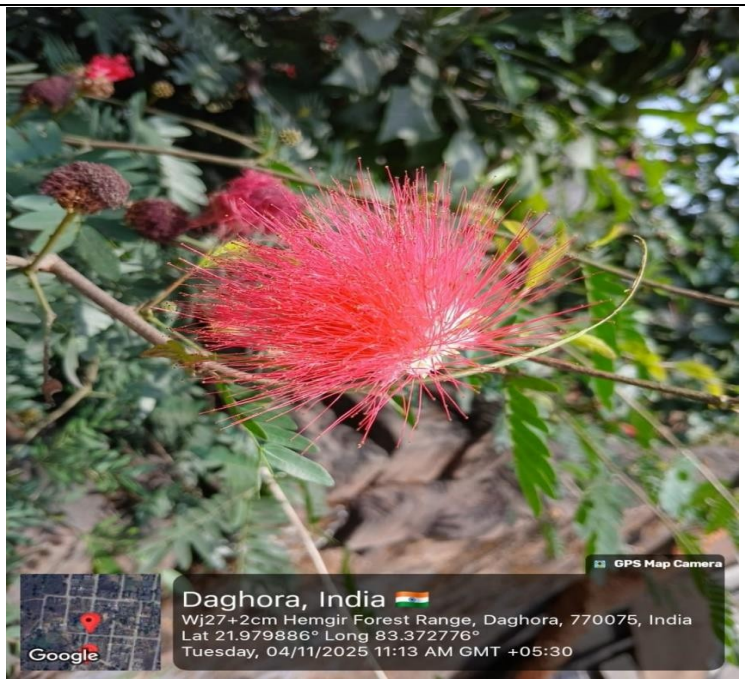
Methods included interviews, FGDs, direct observation, and walk-in-the-woods identification.

3.3 Data Analysis

Frequency of Citation (FC), Use Value (UV), and Informant Consensus were calculated. Descriptive statistics were used.

3.4 Plant Identification

Identification was carried out using herbarium methods and standard flora references.




GPS Map Camera
Bhupdeopur, Chhattisgarh, India
X7f5+x5c, Bhupdeopur, Chhattisgarh 496661, India
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Fig.1: Ethnobotanical plants of Raigarh area

4. RESULTS AND DISCUSSION

A total of 20 ethnomedicinal plants across 19 genera and 17 families were recorded. Several species were confirmed via field photographs.

Table 1. Ethnomedicinal Plants Used by the Oraon Tribe

Scientific Name	Local Name	Part Used	Ailment Treated	Village
Celosia argentea	Murga bhaji	Leaves	Stomach pain, cooling	Bhupdeopur
Psidium guajava	Amrud	Leaves	Diarrhea, vomiting	Daghora
Phyllanthus emblica	Amla	Fruit	Digestion, immunity	Govindpur
Dendrocalamus strictus	Baans	Shoot	Hypertension	Daghora
Ipomoea sp.	Balu bel	Leaves	Wound healing	Bhupdeopur
Azadirachta indica	Neem	Leaves	Skin infections, fever	All sites
Ocimum sanctum	Tulsi	Leaves	Cold, cough	Bhupdeopur
Zingiber officinale	Adrak	Rhizome	Respiratory issues	All sites
Curcuma longa	Haldi	Rhizome	Wounds, inflammation	All sites
Terminalia chebula	Harra	Fruit	Digestive problems	Govindpur
Terminalia bellirica	Bahera	Fruit	Throat infections	Govindpur
Aegle marmelos	Bel	Fruit	Dysentery	Bhupdeopur
Vitex negundo	Nirgundi	Leaves	Joint pain	Daghora
Adhatoda vasica	Adusa	Leaves	Asthma, cough	All sites
Cissus quadrangularis	Hadjod	Stem	Bone fractures	Daghora
Calotropis gigantea	Aak	Latex	Skin diseases	Bhupdeopur
Syzygium cumini	Jamun	Bark	Diabetes	Govindpur
Butea monosperma	Palash	Flowers	Skin disorders	Daghora
Clerodendrum serratum	Bharangi	Root	Fever	Daghora
Coleus amboinicus	atharchatta	Leaves	Kidney stones	Bhupdeopur

4.2 Discussion

The findings of the study highlight the Oraon tribe's strong dependence on locally available plant resources for fulfilling their primary healthcare needs. The majority of the documented species were used to treat gastrointestinal disorders, respiratory ailments, skin infections, wounds, and inflammatory conditions. This pattern aligns with earlier ethnobotanical studies conducted in central India, where such ailments were also reported as the most common health concerns treated with medicinal plants.

4.2.1 Plant Parts Used

The analysis revealed that leaves were the most frequently used plant part (about 45%), which may be attributed to their abundance, ease of collection, and simple preparation methods. Fruits (25%) and rhizomes/stems (20%) were also widely utilized, particularly in treating digestive and inflammatory conditions. Latex and bark were used in smaller proportions but were specifically associated with chronic and skin-related problems. The preference for leaves is consistent with ethnomedicinal practices reported across several tribal communities in India.

4.2.2 Common Ailments Treated

Several species—including *Psidium guajava*, *Ocimum sanctum*, and *Azadirachta indica*— were highly cited by informants for treating diarrhea, respiratory infections, and skin diseases, respectively. Plants such as *Cissus quadrangularis* and *Vitex negundo* were widely used for treating joint pain, sprains, and musculoskeletal issues, reflecting the tribe's physically intensive livelihood practices. These findings correspond with earlier reports from central India, where similar species were documented for comparable therapeutic uses (Patel, 2018).

4.2.3 Cultural and Ecological Significance

Among the study locations, Daghora contributed the highest number of medicinal species due to its rich forest cover and relatively undisturbed vegetation. Bhupdeopur and Govindpur offered a mix of cultivated and wild species, demonstrating the complementary roles of home gardens and natural forests in sustaining traditional healthcare. Culturally important species such as *Butea monosperma* and *Aegle marmelos* further highlight the deep relationship between ethnomedicinal practices and traditional rituals, festivals, and belief systems within the Oraon community.

4.2.4 Threats and Declining Knowledge

Despite the richness of traditional plant knowledge, informants expressed concern regarding the declining familiarity among younger villagers, primarily due to modernization, migration, and increased reliance on allopathic medicine. Deforestation, land-use change, and habitat degradation have also affected the availability of certain medicinal plants. Species such as *Cissus quadrangularis* and *Vitex negundo* were noted to be less abundant due to ecological pressures and overharvesting.

Overall, the results confirm that ethnomedicinal knowledge remains an integral and functional part of the Oraon tribe's healthcare system. However, the combined pressures of cultural transition and ecological degradation emphasize the urgent need for systematic documentation, conservation of medicinal plant resources, and scientific validation of traditional herbal practices to ensure long-term sustainability.

5. CONCLUSION

This field-based ethnomedicinal study highlights the depth and diversity of traditional plant knowledge preserved by the Oraon tribe of Raigarh district, Chhattisgarh. The **20 documented medicinal plant species** form the core of the community's indigenous healthcare practices and continue to play a vital role in managing common ailments such as digestive disorders, respiratory infections, skin diseases, and inflammatory conditions. The study also demonstrates the strong cultural and ecological connection between the Oraon people and their surrounding forest landscapes.

However, this traditional knowledge is increasingly threatened by factors such as deforestation, habitat degradation, modernization, and declining interest among younger generations. Therefore, there is a pressing need to conserve both the **biological resources** and the **associated traditional wisdom** through community-based conservation, sustainable harvesting practices, and educational awareness programs. Further scientific research—including phytochemical and pharmacological validation of the recorded plants—is recommended to support their integration into modern healthcare and to strengthen future conservation strategies

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