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FROM SACRED RITUALS TO HOUSEHOLD REMEDIES: THE ETHNOBOTANICAL ROLES OF DIVERSE SPECIES IN GIRWAH TEHSIL, UDAIPUR RAJASTHAN INDIA

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ABSTRACT

This study documents the ethnobotanical knowledge prevalent in Girwah Tehsil of Udaipur district, Rajasthan, focusing on the traditional uses of a curated plant species. Through field surveys and interviews with local communities and Vaidyas (traditional healers), the research catalogs the application of these species in sacred rituals, household remedies, and daily practical uses. The findings reveal a rich, nuanced understanding of local flora, underscoring its critical role in cultural heritage and primary healthcare. This documentation aims to preserve this vulnerable knowledge system and promote the sustainable conservation of local plant resources.

Keywords : Ethnobotanical, sacred, healthcare, catalogs.

Introduction

Girwah Tehsil, situated in the culturally and ecologically rich region of Udaipur, Rajasthan, is home to a diverse mix of tribal and non-tribal communities whose lives are deeply intertwined with the local plant life. The traditional knowledge surrounding the use of flora for medicine, food, and rituals is a priceless, yet largely unrecorded, intangible heritage. This paper investigates the ethnobotanical significance of 40 plant species found in or cultivated within Girwah Tehsil, systematically categorizing their uses to highlight the synergy between cultural practices and biodiversity.

The ethnobotanical study of Rajasthan's flora is well-established in scientific literature, with several key works providing foundational knowledge. Early comprehensive studies include Bhandari's (1995) floristic documentation of the Indian Desert and Singh and Shetty's (1993) systematic survey of Rajasthan's flora, which established crucial taxonomic frameworks for subsequent research. Chopra *et al.* (1965) further contributed to this foundation through their extensive compilation of Indian medicinal plants. Building upon these works, Kapoor and colleagues have extensively documented the traditional medicinal applications of Rajasthan's flora, with particular focus on folk

remedies and conservation challenges (Kapoor, 2010, 2012; Kapoor *et al.*, 2003, 2005, 2008, 2010a, 2010b). Their research has been complemented by ethnomedicinal studies from specific regions (Katewa & Sharma, 2001) and analytical reviews of medicinal plant usage (Sharma & Kumar, 2011). Concurrently, researchers have highlighted significant conservation concerns regarding medicinal plant resources in the region (Kapoor & Ranga, 2005, 2008; Nautiyal *et al.*, 2002), emphasizing the urgent need for preserving both botanical diversity and associated traditional knowledge.

Materials and Methods

Study Area: Girwah Tehsil, Udaipur District, Rajasthan, India. Girwa tehsil consists of 220 revenue villages which are organized in 60 grampanchayats. The population of the tehsil is 289,070. The area of the tehsil encompasses two panchayat samities - Girwa and Kurawar. Until 2012, Girwa tehsil included the area of present-day Badgaon tehsil as well. As part of administrative reorganization in 2012, Badgaon tehsil was carved out of Girwa tehsil. 52 villages of Girwa tehsil that are in the vicinity of the city of the Udaipur urban area are subject to the jurisdiction urban planning policies of the Udaipur Urban Improvement

Trust. The annual average rainfall in Girwa tehsil is 608 mm, with an average of 32 rainy days per year.

Data Collection: Conducted between Aug 2024- Aug 2025 through:

- **Field Surveys:** Plant specimens were observed and collected from home gardens, farmland boundaries, and forested areas.

- **Structured Interviews:** Over 50 informants, including elderly community members, traditional healers, and farmers, were interviewed.
- **Questionnaires:** Semi-structured questionnaires were used to gather consistent data on plant uses, local names, parts used, and preparation methods.

Plant Identification: Plant species were identified using standard floras and verified with the help of botanical experts.



Fig. 1 : Community Ethnobotanical Questionnaire for Girwah Tehsil: Documenting Local Plant Wisdom

Results and Discussion

The data collected was organized into three primary use-categories. Table 1 provides a

consolidated overview of the medicinal applications, while the subsequent sections elaborate on ritual and practical uses.

Table 1: Ethnobotanical Uses of Documented Plant Species in Girwah Tehsil

SN	Botanical Name	Local Name	Family	Part(s) Used	Traditional Uses
1	<i>Schefflera actinophylla</i>	Umbrella Tree	Araliaceae	Leaves, Bark	Ornamental, shade plant; rarely used in traditional medicine
2	<i>Kalanchoe pinnata</i>	Patharchatta	Crassulaceae	Leaves	Kidney stones, wounds, burns, inflammation
3	<i>Lawsonia inermis</i>	Mehendi	Lythraceae	Leaves, Bark	Body art, hair dye, skin diseases, headaches
4	<i>Philodendron spp.</i>	-	Araceae	Leaves	Ornamental; occasionally used for minor skin irritations
5	<i>Morus alba</i>	Shehtoot	Moraceae	Leaves, Fruits	Diabetes, sore throat, antioxidant, nutritive fruit
6	<i>Litchi chinensis</i>	Litchi	Sapindaceae	Fruit, Seed	Nutritive fruit; seeds used for skin ailments
7	<i>Cinnamomum tamala</i>	Tejpat	Lauraceae	Leaves	Digestive issues, diabetes, flavoring agent
8	<i>Ocimum tenuiflorum</i>	Tulsi	Lamiaceae	Leaves, Seeds	Cough, cold, fever, religious rituals, purifier
9	<i>Ficus elastica</i>	Rubber Plant	Moraceae	Latex, Leaves	Ornamental; latex rarely used for skin warts
10	<i>Codiaeum variegatum</i>	Croton	Euphorbiaceae	Leaves	Ornamental; leaf paste for skin infections
11	<i>Pentalinon luteum</i>	-	Apocynaceae	Whole plant	Ornamental; limited traditional use

12	<i>Buxus sempervirens</i>	Boxwood	Buxaceae	Leaves, Wood	Ornamental, wood for carving; medicinal use rare
13	<i>Vitis vinifera</i>	Angoor	Vitaceae	Fruits, Leaves	Anemia, digestion, nutritive fruit
14	<i>Callistemon</i>	Bottlebrush	Myrtaceae	Flowers, Leaves	Ornamental; leaves occasionally used for cough
15	<i>Passiflora caerulea</i>	Passion Flower	Passifloraceae	Flowers, Leaves	Anxiety, insomnia, ornamental
16	<i>Euphorbia pulcherrima</i>	Poinsettia	Euphorbiaceae	Leaves, Latex	Ornamental; latex used for skin infections
17	<i>Cephalandra indica</i>	Kanduri	Cucurbitaceae	Leaves, Fruits	Diabetes, skin diseases, antioxidant
18	<i>Dracaena fragrans</i>	-	Asparagaceae	Leaves	Ornamental; air purifier
19	<i>Mangifera indica</i>	Aam	Anacardiaceae	Fruit, Leaves, Bark	Nutritive fruit; leaves and bark for diarrhea
20	<i>Persea americana</i>	Avocado	Lauraceae	Fruit, Leaves	Nutritive fruit; leaves for digestion
21	<i>Manilkara zapota</i>	Chikoo	Sapotaceae	Fruit, Bark	Nutritive fruit; bark for diarrhea, fever
22	<i>Pennisetum setaceum</i>	Fountain Grass	Poaceae	Whole plant	Fodder, ornamental
23	<i>Citrus reticulata</i>	Narangi	Rutaceae	Fruit, Peel	Nutritive fruit; peel for digestion
24	<i>Syzygium samarangense</i>	Jamrukh	Myrtaceae	Fruit, Bark	Nutritive fruit; bark for skin irritation
25	<i>Ixora coccinea</i>	Rukmini	Rubiaceae	Flowers, Leaves	Religious rituals, ornamental, skin diseases
26	<i>Cinnamomum verum</i>	Dalchini	Lauraceae	Bark	Cough, cold, blood sugar regulation, spice
27	<i>Punica granatum</i>	Anaar	Lythraceae	Fruit, Rind	Nutritive fruit; rind for dysentery, rituals
28	<i>Lagerstroemia speciosa</i>	Jarul	Lythraceae	Leaves, Bark	Diabetes, urinary problems, ornamental
29	<i>Cassia fistula</i>	Amaltas	Fabaceae	Fruit Pulp	Constipation, laxative, fever
30	<i>Delonix regia</i>	Gulmohar	Fabaceae	Flowers, Bark	Ornamental; bark for fever
31	<i>Trachyspermum ammi</i>	Ajwain	Apiaceae	Seeds	Indigestion, gas, colic, respiratory issues
32	<i>Lindenbergia indica</i>	-	Orobanchaceae	Whole plant	Skin diseases, wounds, anti-inflammatory
33	<i>Lepidagathis cristata</i>	-	Acanthaceae	Leaves, Roots	Skin ailments, fever, anti-inflammatory
34	<i>Curcuma longa</i>	Haldi	Zingiberaceae	Rhizome	Wounds, inflammation, antiseptic, rituals
35	<i>Basella alba</i>	Poi	Basellaceae	Leaves, Stems	Nutritive vegetable, cooling agent
36	<i>Justicia adhatoda</i>	Adusa	Acanthaceae	Leaves	Asthma, bronchitis, cough, respiratory issues
37	<i>Arachis hypogaea</i>	Moongphali	Fabaceae	Seeds	Nutritive food, oil extraction
38	<i>Tradescantia spathacea</i>	-	Commelinaceae	Leaves	Ornamental; leaf paste for skin burns
39	<i>Thunbergia erecta</i>	-	Acanthaceae	Leaves, Flowers	Ornamental; limited medicinal use
40	<i>Murraya paniculata</i>	Kamini	Rutaceae	Leaves, Roots	Ornamental, rituals, diarrhea, pain relief

Sacred and Ritual Plants

The cultural fabric of Girwah Tehsil is interwoven with specific plants used in worship and rituals.

- ***Ocimum tenuiflorum* (Tulsi):** The most sacred plant, found in virtually every household courtyard. The plant is worshipped daily, and its leaves are essential in offerings (*prasad*) to deities. It is believed to purify the environment and protect the home.
- ***Ficus* spp.:** Often planted near homes and temples, considered a symbol of prosperity and is sometimes associated with *Vat Vriksha*.
- ***Punica granatum* (Pomegranate):** The fruit is offered to deities during worship, especially to Goddess Durga, symbolizing fertility and abundance.
- ***Ixora coccinea*:** The vibrant red flowers are strung into garlands and offered in temples and during household prayers.

- ***Murraya paniculata*:** The fragrant flowers of Kamini are used in making garlands for religious ceremonies and are also associated with marital bliss.
- ***Buxus sempervirens*:** Clippings of this shrub are sometimes used in religious festivals and for decorating altars.

Household and Practical Uses

Beyond medicine and ritual, plants serve numerous practical functions in daily life, as detailed in Table 2.

Table 2: Practical and Material Uses of Documented Plants

S.N.	Botanical Name	Local Name	Use Category	Specific Use
1	<i>Lawsonia inermis</i>	Mehendi	Cosmetic / Art	Leaves ground into paste for temporary body art (henna) on hands and feet.
2	<i>Basella alba</i>	Poi, Velabharta	Food	Leaves and stems cooked as a nutritious leafy vegetable.
3	<i>Arachis hypogaea</i>	Moongphali	Food	Seeds consumed raw, roasted, or pressed for cooking oil.
4	<i>Mangifera indica</i>	Aam	Food, Timber	Fruit consumed; wood used for furniture and fuel.
5	<i>Persea americana</i>	Avocado	Food	Fruit valued for its nutritional content.
6	<i>Citrus reticulata</i>	Narangi	Food	Fruit consumed fresh or as juice.
7	<i>Litchi chinensis</i>	Litchi	Food	Sweet fruit consumed in season.
8	<i>Pennisetum setaceum</i>	Fountain Grass	Fodder / Ornamental	Used as animal fodder; also cultivated as an ornamental grass.
9	<i>Ficus elastica</i>	Rubber Plant	Material	Previously a source of rubber; now primarily ornamental.
10	<i>Delonix regia</i>	Gulmohar	Shade / Ornamental	Planted for its dense shade and vibrant flowers.
11	<i>Dracaena fragrans</i>	-	Ornamental	Grown indoors and outdoors for its foliage and believed air-purifying qualities.
12	<i>Codiaeum variegatum</i>	Croton	Ornamental	Cultivated in gardens for its brightly colored leaves.

Conservation Challenges and Conclusion

The ethnobotanical knowledge in Girwah Tehsil faces significant threats from urbanization, the diminishing number of traditional knowledge holders, and the allure of modern medicine. Common species like *Kalanchoe pinnata* and *Justicia adhatoda* are still widely known, but knowledge of lesser-known species like *Lepidagathis cristata* and *Cephalandra indica* is rapidly declining.

This study successfully documents the profound and practical relationships between the people of Girwah Tehsil and their local flora. These plants profiled are not merely biological entities but are integral to the region's cultural identity, health, and daily sustenance. We recommend:

1. **Continued Documentation:** Expanding this research to cover more species and neighboring regions.
2. **Community Engagement:** Involving local youth in knowledge-preservation projects.
3. **Cultivation Initiatives:** Promoting the home-gardening of medicinal and ritual plants to ensure their availability and conservation.

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