



A Review Study on Some Wild Medicinal Plant in Jaunpur and Their Ethanobotanical Uses

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ABSTRACT

In India, traditional healthcare systems heavily rely on medicinal plants. Local people in Uttar Pradesh's Jaunpur district use a variety of wild plants for ethnomedical uses. According to studies, this area uses more than 60 plant species for traditional medicine (Singh, 2025). These plants are used to treat respiratory issues, digestive issues, fever, and skin conditions (Singh et al., 2023). *Azadirachta indica*, *Ocimum sanctum*, and *Withania somnifera* are common therapeutic herbs with established pharmacological significance (Kirtikar & Basu, 1999). This review underscores the need for conservation and scientific confirmation of medicinal plants, as well as the significance of maintaining indigenous knowledge.

KEYWORDS

Ethnobotany, Medicinal Plants, Jaunpur, Traditional Knowledge, Herbal Medicine

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1. Introduction

The scientific study of people's interactions with plants, particularly their traditional applications, is known as ethnobotany (Jain, 1967). Plant-based medical systems like Ayurveda, Unani, and Siddha have a long history in India (WHO, 2013).

Medicinal plants are commonly used in rural areas like Jaunpur because they are readily available and reasonably priced (Singh, 2025). For primary healthcare, about 37% of rural communities use plant-based medications (Singh et al., 2023). Plant parts like leaves, roots, bark, and seeds are used by traditional healers (Vaidyas) to make medicines (Nadkarni, 2002).

Because they aid in the preservation of traditional knowledge, aid in the development of new drugs, and promote biodiversity protection, ethnobotanical research are crucial (Fabricant & Farnsworth, 2001).

Study Area: Jaunpur District

Jaunpur district is situated between latitudes 25°24'–26°12' N and longitudes 82°–83° E in eastern Uttar Pradesh (Singh, 2023). With an average annual rainfall of roughly 987 mm, the district has a tropical monsoon climate (Singh, 2023).

A variety of plants, including trees, shrubs, and medicinal herbs, are supported by the rich alluvial soil and river systems like the Gomti and Sai (Kumar & Singh, 2022).

Methodology

The secondary data used in this review was gathered from books, journals, and ethnobotanical surveys. A number of published studies on Jaunpur's and the surrounding areas' medicinal plants were examined (Singh, 2025).

Procedures involved:

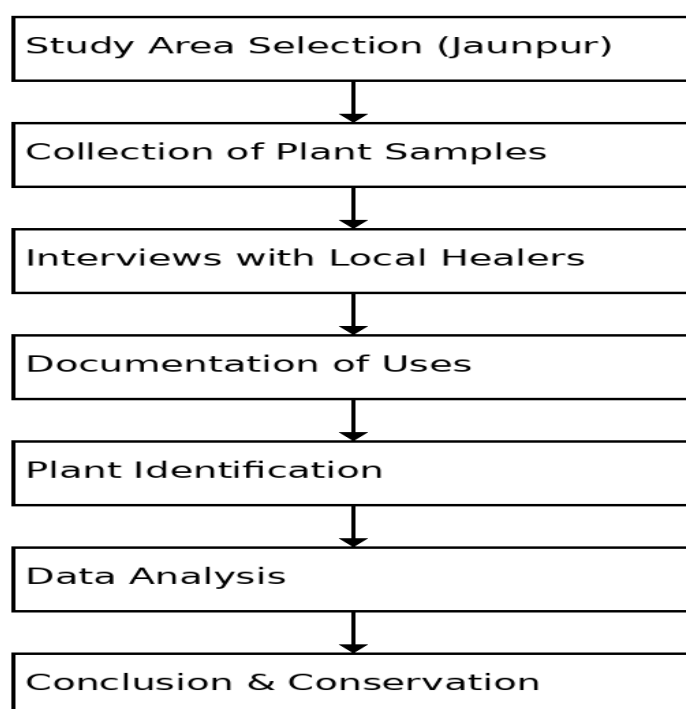
- A collection of literature
- identification of plants
- Ethnobotanical usage documentation

Comparative evaluation

Interviews with regional healers and rural people were part of field-based ethnobotanical research (Jain & Rao, 1977).

The ethnomedical significance of plants in the Jaunpur district has been reported in a number of research. According to a study by Singh (2025), indigenous communities employ 64 different species of medicinal plants. In a similar vein, Singh (2023) found 71 plant species in the area that belong to 42 families. Due to financial limitations, another study found that rural populations rely significantly on herbal medicines (Kumar & Singh, 2022).

Similar patterns of using plants to treat common ailments are also found in ethnobotanical studies carried out in different districts of Uttar Pradesh (Kumar et al., 2022). Because of their therapeutic qualities, medicinal herbs including ashwagandha, tulsi, and neem are commonly used (Chopra et al., 1956).










Important Wild Medicinal Plants of Jaunpur

Botanical Name	Local Name	Uses
<i>Azadirachta indica</i>	Neem	Skin diseases (Chopra et al., 1956)
<i>Ocimum sanctum</i>	Tulsi	Cold, cough (Sharma, 2005)
<i>Withania somnifera</i>	Ashwagandha	Weakness (Kirtikar & Basu, 1999)
<i>Phyllanthus amarus</i>	Bhumiamla	Liver disorders (Nadkarni, 2002)
<i>Tinospora cordifolia</i>	Giloy	Immunity booster (WHO, 2013)

Botanical Name	Local Name	Uses
<i>Aloe vera</i>	Ghritkumari	Skin care (Kumar et al., 2022)
<i>Syzygiumcumini</i>	Jamun	Diabetes (Chopra et al., 1956)

SELECTED MEDICINAL PLANTS AND THEIR COMMON USES

<p>1. Azadirachta indica (Neem)</p>  <p>Uses: Antibacterial, antifungal, antiseptic, skin diseases, dental care, detoxification, anti-inflammatory.</p>	<p>2. Ocimum sanctum (Tulsi)</p>  <p>Uses: Used in cough, cold, fever, asthma, immunity booster, stress relief, antimicrobial, digestive disorders.</p>	<p>3. Withania somnifera (Ashwagandha)</p>  <p>Uses: Adaptogen, reduces stress and anxiety, boosts immunity, improves strength and stamina, useful in arthritis and general weakness.</p>	<p>4. Phyllanthus amarus (Bhumi Amla)</p>  <p>Uses: Beneficial in liver disorders, jaundice, hepatitis, kidney stones, urinary problems, as an anti-viral and antioxidant.</p>
<p>5. Tinospora cordifolia (Giloy)</p>  <p>Uses: Boosts immunity, used in fever, diabetes, arthritis, digestive problems, detoxification.</p>	<p>6. Aloe vera (Aloe)</p>  <p>Uses: Helpful in skin care, burns, wounds, hair care, digestive disorders, constipation, and as a moisturizer.</p>	<p>7. Syzygium cumini (Jamun)</p>  <p>Uses: Useful in diabetes, improves digestion, treats diarrhea, rich in antioxidants, good for heart health.</p>	

Wild Medicinal Plants Used Ethnobotanically in Jaunpur

The traditional knowledge of local populations about the use of plants for cultural, nutritional, and medical purposes is known as ethnobotanical knowledge. Due to their accessibility, cost, and perceived safety, rural inhabitants in Uttar Pradesh's Jaunpur district heavily rely on wild medicinal herbs for primary healthcare (Singh, 2025; Kumar & Singh, 2022). These plant-based cures are passed down orally from generation to generation and have their roots in indigenous knowledge systems (Jain, 1967). Depending on the type of illness and available plant parts, medicinal plants are utilized in a variety of ways, including decoctions, infusions, powders, pastes, and juices (Nadkarni, 2002). Leaves, roots, bark, seeds, fruits, and entire plants are the most often utilized plant parts (Fabricant & Farnsworth, 2001).

1. Application in the Management of Fever and Infectious Illnesses

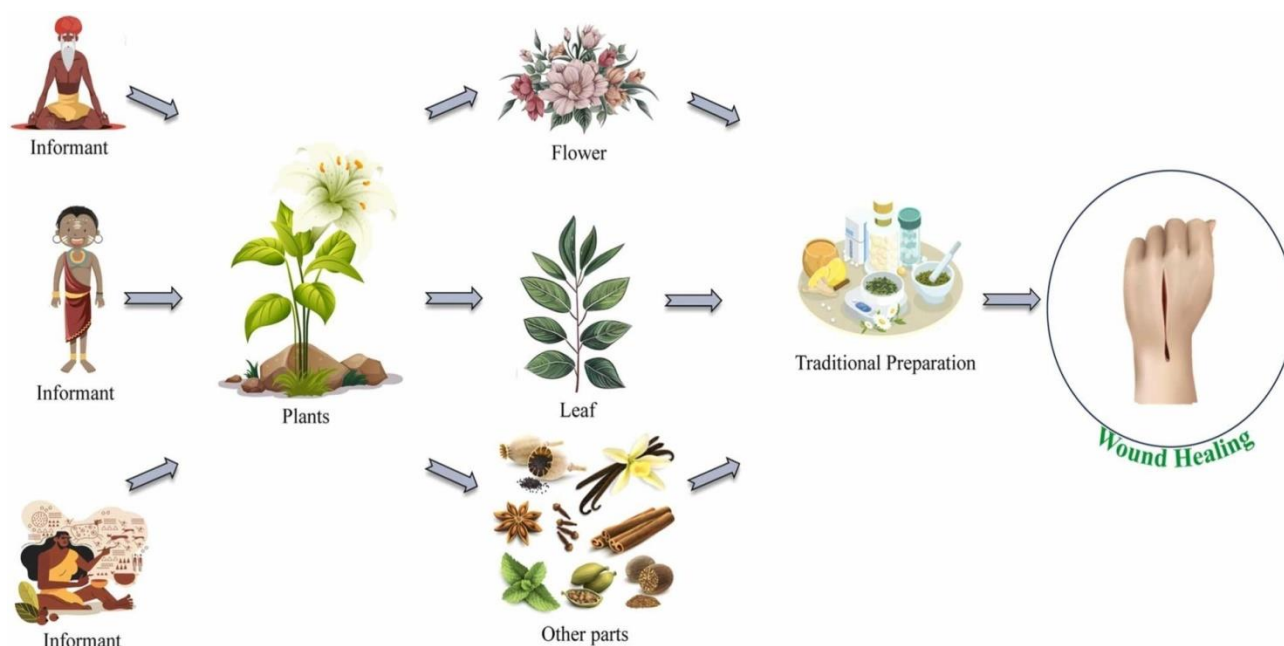
In Jaunpur, one of the most prevalent illnesses treated using medicinal herbs is fever. Because of their antibacterial and antipyretic qualities, plants including *Ocimum sanctum* (tulsi), *Tinosporacordifolia* (giloy), and *Azadirachta indica* (neem) are utilized extensively (Sharma, 2005; Chopra et al., 1956). A decoction that lowers fever and strengthens immunity is made by boiling tulsi leaves in water. Giloy stem extract is used to treat infections and persistent fever, particularly during seasonal shifts (WHO, 2013). Neem leaves are administered topically or ingested in modest amounts because to their antiviral and antibacterial qualities (Chopra et al., 1956).

Alkaloids, flavonoids, and terpenoids are among the bioactive substances found in these plants that contribute to their therapeutic benefits (Fabricant & Farnsworth, 2001).

2. Management of Wound Healing and Skin Conditions

In Jaunpur, plant-based treatments are frequently used to treat skin conditions such as eczema, boils, rashes, and wounds. Aloe vera, *Calotropis procera*, and *Azadirachta indica* (neem) are commonly used to treat dermatological problems (Kirtikar & Basu, 1999).

Because of its potent antibacterial properties, neem paste is applied directly to afflicted areas to cure infections (Chopra et al., 1956). Because of its calming and restorative qualities, aloe vera gel is frequently applied to burns, wounds, and skin irritation (Kumar et al., 2022). Due to its antibacterial properties, *Calotropis procera* latex is carefully applied to wounds (Nadkarni, 2002). These plants are said to be helpful because they contain antibacterial and anti-inflammatory chemicals that speed up healing (Fabricant & Farnsworth, 2001).



3. Management of Digestive Conditions

Medicinal plants are frequently used to treat digestive issues such as diarrhea, constipation, indigestion, and liver ailments. Jaunpur makes extensive use of species such as *Zingiber officinale* (ginger), *Cassia fistula*, and *Phyllanthus amarus* (Nadkarni, 2002).

Because of its hepatoprotective qualities, *Phyllanthus amarus* is used to treat liver conditions, such as jaundice (Kirtikar & Basu, 1999). Constipation is relieved by the pulp of *Cassia fistula*, which functions as a natural laxative (Chopra et al., 1956). Ginger is used to lessen nausea and enhance digestion (Sharma, 2005).

These plants aid in enhancing gastrointestinal health and controlling digestive enzymes (WHO, 2013).

4. Management of Respiratory Conditions

Many medicinal plants are used to treat respiratory conditions such as bronchitis, asthma, colds, and coughs. For respiratory treatment, *Ocimum sanctum*, *Adhatodavasicum*, and *Zingiber officinale* are frequently utilized (Sharma, 2005).

Tea made from tulsi leaves is used to treat colds and coughs. Herbal syrups for bronchitis and asthma are made from *Adhatodavasicum* leaves (Nadkarni, 2002). Because of its expectorant and anti-inflammatory qualities, ginger is employed (WHO, 2013).

According to Fabricant and Farnsworth (2001), these herbs aid in enhancing lung function and cleaning respiratory pathways.

5. Diabetes Treatment

Many herbs have long been used to regulate blood sugar levels, and diabetes is a rising health concern. Common uses include *Momordica charantia* (bitter melon), *Azadirachta indica*, and *Syzygium cumini* (jamun) (Kirtikar&Basu, 1999).

To control blood sugar levels, jamun seeds are dried, ground into a powder, and eaten (Chopra et al., 1956). Due to its hypoglycemic properties, bitter melon juice is also frequently used (Kumar & Singh, 2022).

These plants have substances that lower blood sugar and increase insulin action (WHO, 2013).

6. Utilization in Women's and Reproductive Health

Postpartum care, fertility problems, and menstruation abnormalities are all treated with some botanicals. *Ashwagandha* (*Withania somnifera*) and *Asparagus racemosus* (*Shatavari*) are frequently utilized (Sharma, 2005).

Ashwagandha is utilized as a general tonic and stress reliever, whereas *Shatavari* is used to enhance lactation and reproductive health in women (Kirtikar&Basu, 1999). According to Nadkarni (2002), these herbs help maintain hormonal balance and enhance general health.

7. Use for Inflammation and Pain Reduction

Due to their analgesic and anti-inflammatory qualities, plants like *Ricinus communis* (castor) and *Curcuma longa* (turmeric) are frequently utilized (Chopra et al., 1956).

Castor oil is used to reduce joint pain and inflammation, while turmeric paste is given to wounds and irritated areas (Sharma, 2005). Turmeric's key ingredient, curcumin, is well known for its potent anti-inflammatory properties (WHO, 2013).

8. Method of Administration and Preparation

Conventional techniques for preparation consist of:

- Decoction (Kadha): Boiling plant parts in water
- Infusion: Immersion of plant materials
- Paste: Grinding up new plant material
- Powder: Grinding and drying

Age, health, and disease severity all affect dosage (Jain &Rao, 1977). Typically, remedies are applied physically or given orally.

9. Socio-Cultural Importance of Ethnobotanical Knowledge

The cultural and spiritual life of rural communities is intimately associated with ethnobotanical practices. Numerous plants are utilized in religious rites and are regarded as sacred (Jain, 1967). Vaidyas, or traditional healers, are essential to the preservation of this expertise, although urbanization and modernization are gradually eroding it (Fabricant & Farnsworth, 2001).

Discussion

According to the assessment, Jaunpur is home to a wide variety of ethnobotanically valuable medicinal plants. The majority of treatments for common illnesses are plant-based (Singh, 2025). However, these resources are under danger due to environmental deterioration and the growing loss of traditional knowledge (Fabricant & Farnsworth, 2001).

Strategies for Conservation

- Herbal garden promotion (WHO, 2013)
- Harvesting methods that are sustainable (Kumar et al., 2022)
- Indigenous knowledge documentation (Jain &Rao, 1977)
- Programs for government conservation

Conclusion

The current review study on Jaunpur district's wild medicinal plants demonstrates the area's rich floral variety and substantial ethnobotanical significance. Numerous plant species (about 60–70 species from more than 40 families) that are traditionally utilized by local populations to cure common illnesses like fever, skin conditions, digestive issues, respiratory issues, and diabetes have been reported by a number of field-based investigations.

The results unequivocally show that indigenous knowledge is essential to primary healthcare systems, particularly in rural areas where people still rely on herbal medicines because of their accessibility, price, and cultural acceptability. Elderly villagers and traditional healers are important guardians of this information, which has been passed down verbally through the generations.

Additionally, the study highlights the fact that various plant components, including leaves, roots, bark, fruits, and stems, are frequently employed in medicinal formulations, with leaves being the most popular component. In addition to their medicinal properties, these plants may be used in pharmacological studies and drug development.

But the study also highlights serious issues such habitat destruction, overuse of plant resources, loss of biodiversity, and the slow deterioration of traditional knowledge as a result of modernity. Many important medicinal plants and related ethnobotanical knowledge may be lost in the future if they are not adequately maintained.

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