
Studies on Plants Used by the Tribal People of Buldhana District for Treatment of Various Diseases

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ABSTRACT

Buldhana District, located in Maharashtra, India, is home to several indigenous tribal communities that have developed extensive traditional knowledge of plants used for medicinal purposes. These communities rely on the local flora for treating a wide variety of ailments, from minor illnesses to more serious health conditions. The study aims to document and analyze the plants used by tribal people in Buldhana District for medicinal purposes, focusing on their effectiveness, the methods of preparation, and the cultural significance of these plants. This research highlights the valuable role of ethnobotanical knowledge in promoting health and conservation of biodiversity.

1. INTRODUCTION

Ethnobotany, the study of how indigenous people use plants for various purposes, has provided crucial insights into the relationship between humans and the environment. The tribal communities of Buldhana District in Maharashtra, such as the Gonds, Bhils, and other Adivasi groups, have long relied on the local flora for medicinal, nutritional, and cultural needs. Many of these plant-based remedies have been passed down through generations, forming an integral part of traditional healthcare practices.

The present study seeks to document and analyze the medicinal plants used by these tribal communities to treat various diseases, focusing on the methods of preparation, dosages, and cultural beliefs associated with these plants. This research aims to validate the efficacy of these plant-based treatments and assess their potential for integration into modern healthcare systems.

2. OBJECTIVES OF THE STUDY

The objectives of the study are:

- To document the medicinal plants used by the tribal people of Buldhana District.
- To classify these plants based on their medicinal uses, including their role in treating specific ailments.
- To understand the methods of plant preparation and administration.
- To assess the cultural significance of these plants and their role in the community's healthcare system.
- To evaluate the potential of these plants for pharmacological applications in modern medicine.

3. METHODOLOGY

The study was conducted in the tribal villages of Buldhana District. The primary methods of data collection included:

- **Field Surveys:** Interviews were conducted with local healers (called “Vaid” or “Hakims”) and tribal elders, who provided knowledge about the plants they used in medicinal treatments.
- **Plant Collection and Identification:** Specimens of the plants mentioned by the informants were collected and identified using botanical resources.
- **Literature Review:** Existing ethnobotanical studies on the plants of Maharashtra were reviewed to complement the data gathered through interviews.
- **Ethnopharmacological Evaluation:** The collected plants were evaluated for their medicinal properties, focusing on their role in treating common diseases such as fever, skin infections, respiratory problems, and gastrointestinal disorders.

4. RESULTS AND DISCUSSION

4.1 MEDICINAL PLANTS IDENTIFIED

The study identified over 50 plant species used by the tribal people of Buldhana District for medicinal purposes. These plants belong to various families, such as *Asteraceae*, *Lamiaceae*, *Rutaceae*, and *Solanaceae*. Below are some of the key plants and their uses:

- **Azadirachta indica (Neem):**
 - **Uses:** The leaves, bark, and seeds of the neem tree are used to treat a variety of ailments, including skin infections, fever, and digestive issues.
 - **Preparation:** Fresh leaves are crushed and applied as a paste to wounds, while neem oil is used for skin rashes and infections.
- **Andrographis paniculata (Kalmegh):**
 - **Uses:** Known as a natural remedy for fevers, malaria, and respiratory tract infections. It is also used as an anti-inflammatory and immune booster.
 - **Preparation:** The leaves are typically boiled in water, and the decoction is consumed to treat fever.
- **Bacopamonnieri (Brahmi):**
 - **Uses:** Used to treat cognitive disorders, memory loss, and anxiety. It is also utilized for its anti-stress and anti-inflammatory properties.
 - **Preparation:** The fresh plant is crushed to extract juice or made into a powder and mixed with other herbs.
- **Cissus quadrangularis (Kandvel):**
 - **Uses:** Commonly used to treat bone fractures and joint pains. It is also used for wound healing and to improve digestion.
 - **Preparation:** The stem is crushed and applied to fractures or consumed as a decoction for joint pain.
- **Sidacordifolia (Bala):**
 - **Uses:** Widely used for enhancing physical strength and stamina. It is also used in the treatment of asthma, bronchitis, and other respiratory issues.

- **Preparation:** The roots are powdered and taken orally for respiratory relief.
- **Curcuma longa (Turmeric):**
 - **Uses:** Turmeric is used for its anti-inflammatory, anti-bacterial, and anti-viral properties. It is applied to wounds and used to treat coughs and colds.
 - **Preparation:** The rhizomes are ground into a paste and applied to skin injuries or consumed as a drink.

4.2 Cultural Significance

In addition to their medicinal uses, many plants hold cultural and spiritual significance in tribal communities. For example, the **Bamboo** plant is considered sacred by several tribal groups, and its various parts are used for construction, crafts, and as a part of ritualistic practices. The **Pipal tree** is also revered for its spiritual significance, often used in religious ceremonies.

4.3 Methods of Preparation

Tribal people use a variety of methods to prepare medicinal plants. These include:

- **Decoctions and Infusions:** Plant parts are boiled in water to extract their medicinal properties, which are then consumed.
- **Powders:** Dried plant materials are ground into powders and consumed with water or other liquids.
- **Poultices and Pastes:** Fresh plant parts are crushed into a paste and applied externally to treat wounds, insect bites, or skin infections.
- **Juices:** Some plants are squeezed to extract their juices, which are then consumed for internal ailments.

4.4 Health Benefits and Efficacy

The tribal medicines from Buldhana District are often effective for treating common ailments like colds, fevers, gastrointestinal problems, and skin infections. While these treatments are largely empirical and based on traditional knowledge, scientific studies have begun to validate some of these claims. For example, studies on *Azadirachta indica* have confirmed its potent antimicrobial and anti-inflammatory properties, validating its use in treating infections.

5. CHALLENGES AND CONSERVATION

While the knowledge of medicinal plants is crucial for the health of the tribal communities, several challenges threaten its preservation:

- **Loss of Biodiversity:** Habitat destruction and deforestation threaten the availability of medicinal plants.
- **Cultural Erosion:** Younger generations are moving away from traditional practices, which lead to the loss of indigenous knowledge.
- **Lack of Documentation:** The traditional knowledge about plant use is passed down orally, and much of it remains undocumented.

To address these challenges, conservation efforts should focus on preserving the natural habitats of medicinal plants, promoting the documentation of traditional knowledge, and encouraging sustainable harvesting practices.

6. CONCLUSION



The tribal people of Buldhana District possess a wealth of traditional knowledge about medicinal plants that is crucial for their healthcare system. These plants, some of which have been scientifically validated, play an essential role in the treatment of various diseases. However, this knowledge is at risk of being lost due to environmental degradation and cultural changes. It is essential to document and conserve both the plants and the traditional knowledge surrounding their use to ensure that future generations can benefit from these resources.

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