



# A comprehensive study of ethnomedicinal plants of Their Conservation Reserve, Jammu & Kashmir, India, used by local communities

Harshdev Singh, Pallavi Nautiyal, Kumud Bhushan, Dharam Chand Attri, Vijay Laxmi Trivedi

## Correspondence

Harshdev Singh<sup>\*1</sup>, Pallavi Nautiyal<sup>3</sup>, Kumud Bhushan<sup>1</sup>, Dharam Chand Attri<sup>\*\*1,2</sup>, Vijay Laxmi Trivedi<sup>\*\*\*3</sup>

<sup>1</sup>Department of Botany, Central University of Jammu, Rahya-Suchani (Bagla), Samba-181143, Jammu, Jammu and Kashmir, India.

<sup>2</sup>Department of Environment, Sustainability and Climate Change, Islamic University of Science & Technology, Kashmir, Jammu & Kashmir, India.

<sup>3</sup>High Altitude Plant Physiology Research Centre (HAPPRC), H.N.B. Garhwal University, Uttarakhand, India.

\*Corresponding Author: harshdevsingh91@gmail.com

\*\* Co-Corresponding Author: dcattri13@gmail.com

\*\*\* Co-Corresponding Author: vijaylaxmitrivedi@gmail.com

**Ethnobotany Research and Applications 34:52 (2026)** - <http://dx.doi.org/10.32859/era.34.52.1-22>

Manuscript received: 25/02/2026 - Revised manuscript received: 23/05/2026 - Published: 24/05/2026

## Research

### Abstract

**Background:** Plants have been integral to human healthcare since antiquity, functioning as the primary source of therapeutically active substances employed in both traditional and contemporary medicine. Nearly 85% of the global population relies on traditional plant-based remedies, valued for their safety and cost-effectiveness. This study constitutes the first ethnobotanical survey of Their Conservation Reserve, District Kathua, Jammu and Kashmir (J&K), India. It aims to systematically document the ethnomedicinal repertoire of local communities, particularly the Gujjar, Bakarwal, and Dogra communities.

**Methods:** Data were elicited from 293 informants (171 men, 122 women, aged 22-94 years) through semi-structured interviews. Quantitative ethnobotanical metrics, such as Fidelity Level (FL), Use Value (UV), and Informant Consensus Factor (FIC), were employed to evaluate the medicinal importance of plants.

**Results:** A total of 91 plant species from 51 families and 85 genera were catalogued. Fabaceae was the most frequently cited family, followed by Asteraceae, Moraceae, and Euphorbiaceae. Leaves emerged as the predominantly utilized plant part (38%), with oral administration being the predominant mode. A total of 76 species (83.51%) were obtained from wild sources, whereas 15 species (16.48%) were collected from both wild and cultivated environments. *Justicia adhatoda* L. exhibited the highest UV (3.06), followed by *Azadirachta indica* A. Juss. (2.20). The highest FIC was observed for gastrointestinal ailments (FIC = 0.89). Some community-level variation in ethnomedicinal knowledge and plant-use practices was observed between the semi-nomadic and sedentary groups.

**Conclusions:** The study highlights extensive ethnomedicinal knowledge within local communities, suggesting possible knowledge transmission and therapeutic correlations. These findings accentuate the need for pharmacological validation and the conservation of indigenous medicinal practices.

**Keywords:** Ethnobotany, Their Conservation Reserve, Dogra, Gujjar, Bakarwal, Medicinal plant.